### UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

## FORM 20-F

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REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934 ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2017 OR TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to OR SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 Date of event requiring this shell company report Commission File Number 001-37847 **MOTIF BIO PLC** (Exact name of Registrant as specified in its charter and translation of Registrant's name into English) United Kingdom (Jurisdiction of incorporation or organization) 125 Park Avenue 25th Floor New York, New York 10017 United States (Address of principal executive offices) Graham Lumsden, CEO Motif Bio plc 125 Park Avenue 25th Floor York, New York 10017 United States Tel: (609) 608-0032 (Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person) Securities registered or to be registered pursuant to Section 12(b) of the Act. Title of each class Name of each exchange on which registered American Depositary Shares each representing 20 Ordinary Shares The NASDAO Stock Market LLC The NASDAQ Stock Market LLC Warrants to purchas American Depositary Shares each representing 20 Ordinary Shares Ordinary shares, par value £0.01 per share The NASDAQ Stock Market LLC\* \* Not for trading, but only in connection with the registration of the American Depositary Shares. Securities registered or to be registered pursuant to Section 12(g) of the Act. None Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act. None Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report. Ordinary shares, par value £0.01 per share: 263,519,128 as of December 31, 2017 Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. □ Yes ⊠ No If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. ☐ Yes ⊠ No Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ĭ Yes □ No Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). (\*) ĭ Yes □ No (\*) This requirement does not apply to the registrant in respect of this filing. Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or an emerging growth company. See definition of "accelerated filer," "large accelerated filer" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one): Accelerated filer □ Large accelerated filer  $\square$ Non-accelerated filer ⊠ Emerging Growth Company If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards  $\dagger$  provided pursuant to Section 13(a) of the Exchange Act.  $\Box$ 

†The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

Other 🗆

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

□ Item 17 □ Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

□ Yes ⊠ No

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### INTRODUCTION

Unless otherwise indicated or the context otherwise requires, all references in this annual report on Form 20-F (this "Annual Report") to "Motif", "the company", "our company", "the group", "we", "us" and "our" refer to Motif Bio plc, together with Motif BioSciences, Inc., its consolidated subsidiary.

The trademarks, service marks and trade names referred to in this Annual Report are the property of their respective owners. Solely for convenience, the trademarks and trade names in this Annual Report may be referred to without the ® and TM symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend to use or display other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Our audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB, and in accordance with IFRS as endorsed for use in the European Union. Our consolidated financial statements are presented in U.S. Dollars. All references in this Annual Report to "\$", "U.S. dollars," and "dollars" mean U.S. dollars and all references to "£" and "pounds" mean pounds sterling, unless otherwise noted. Throughout this Annual Report, references to ADSs mean ADSs or ordinary shares represented by ADSs, as the case may be.

### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains forward looking statements that involve substantial risks and uncertainties. The forward looking statements are contained principally in the sections of this Annual Report titled "Item 3.D. Risk Factors," "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects." All statements, other than statements of historical facts, contained in this Annual Report, including statements regarding our future results of operations and financial position, business strategy, prospective products, product approvals, research and development costs, timing and likelihood of success, plans and objectives of management for future operations, and future results of current and anticipated products, are forward looking statements. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward looking statements. The words "anticipate," "assume," "believe," "contemplate," "continue," "could," "estimate," "expect," "goal," "intend," "may," "might," "objective," "plan," "potential," "predict," "project," "positioned," "seek," "should," "target," "will," "would," or the negative of these terms or other similar expressions are intended to identify forward looking statements, although not all forward looking statements contain these identifying words. These forward looking statements are based on current expectations, estimates, forecasts and projections about our business and the industry in which we operate and management's beliefs and assumptions, are not guarantees of future performance or development and involve known and unknown risks, uncertainties and other factors. These forward looking statements include statements regarding:

- the timing, progress and results of clinical trials for our product candidates, including statements regarding the timing of initiation and completion of clinical trials, dosing of subjects and the period during which the results of the clinical trials will become available;
- the timing, scope or likelihood of regulatory filings and approvals for our product candidates;
- our ability to successfully commercialize our product candidates;
- potential benefits of the clinical development and commercial experience of our management team;
- our ability to effectively market any product candidates that receive regulatory approval with a small, focused sale force;
- potential development and commercial synergies from having multiple product candidates for related indications;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our expectation regarding the safety and efficacy of our product candidates;
- the potential clinical utility and benefits of our product candidates;

- · our ability to advance our product candidates through various stages of development, especially through pivotal safety and efficacy trials;
- our estimates regarding the potential market opportunity for our product candidates;
- our strategy to in-license, acquire and develop new product candidates and our ability to execute that strategy;
- developments and projections relating to our competitors or our industry;
- our ability to become profitable;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to secure additional financing when needed on acceptable terms;
- the impact of government laws and regulations in the United States and foreign countries;
- the impact of Brexit on our business and operations;
- the implementation of our business model, strategic plans for our business, product candidates and technology;
- our intellectual property position;
- our ability to attract or retain key employees, advisors or consultants; and
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act.

Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward looking statements we make. As a result, any or all of our forward looking statements in this Annual Report may turn out to be inaccurate. We have included important factors in the cautionary statements included in this Annual Report, particularly in the section of this Annual Report titled "Item 3.D. Risk Factors," that we believe could cause actual results or events to differ materially from the forward looking statements that we make. We may not actually achieve the plans, intentions or expectations disclosed in our forward looking statements, and you should not place undue reliance on our forward looking statements. Moreover, we operate in a highly competitive and rapidly changing environment in which new risks often emerge. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward looking statements we may make. Our forward looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this Annual Report and the documents that we reference in this Annual Report and have filed as exhibits to this Annual Report completely and with the understanding that our actual future results may be materially different from what we expect. The forward looking statements contained in this Annual Report are made as of the date of this Annual Report, and we do not assume any obligation to update any forward looking statements except as required by applicable law.

### PART I

## Item 1. Identity of Directors, Senior Management and Advisers.

Not applicable.

### Item 2. Offer Statistics and Expected Timetable.

Not applicable.

## Item 3. Key Information.

### A. Selected Financial Data

The following tables set forth a summary of our consolidated financial data. We have derived the consolidated statement of comprehensive loss data and the consolidated statement of financial position data from our audited consolidated financial statements. Our historical results presented below are not necessarily indicative of financial results to be achieved in future periods.

All operations are continuing and we have not paid any dividends in the periods presented.

You should read this data together with the audited consolidated financial statements and related notes appearing elsewhere in this Annual Report and the section in this Annual Report titled "Item 5. Operating and Financial Review and Prospects."

Our audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), and in accordance with IFRS as endorsed for use in the European Union, and are presented in U.S. dollars except where otherwise indicated.

### **Statement of Comprehensive Loss:**

	Year ended December 31,						
		2017		2016		2015	2014
			(in t	housands, except sh	are a	nd per share data)	
Consolidated Statement of Comprehensive Loss							
Operating expenses:							
General and administrative	\$	(8,542)	\$	(4,912)	\$	(3,577)	\$ (1,096)
Research and development		(29,475)		(34,794)		(4,681)	
Gains on settlement of contract disputes				83		5	 360
Total operating expenses	\$	(38,017)	\$	(39,623)	\$	(8,253)	\$ (736)
Operating loss		(38,017)		(39,623)		(8,253)	(736)
Other income (expense), net							
Interest income		134		70		15	_
Interest expense		(275)		(383)		(268)	(449)
Loss from revaluation of derivative liabilities		(6,392)		(136)		_	_
Net foreign exchange losses		(238)		(251)		(10)	_
Total other expense, net	\$	(6,771)	\$	(700)	\$	(263)	\$ (449)
Loss before income taxes		(44,788)		(40,323)		(8,516)	(1,185)
Income tax		(22)		(1)		(1)	(1)
Net loss	\$	(44,810)	\$	(40,324)	\$	(8,517)	\$ (1,186)
Total comprehensive loss	\$	(44,810)	\$	(40,324)	\$	(8,517)	\$ (1,186)
Net loss attributable to ordinary shareholders, basic and diluted	\$	(44,810)	\$	(40,324)	\$	(8,517)	\$ (1,186)
Net loss per share attributable to ordinary shareholders, basic and diluted(1)	\$	(0.19)	\$	(0.35)	\$	(0.14)	\$ (0.03)
Weighted average shares used in computing net loss per share attributable to ordinary shareholders, basic and diluted		231,530,091		116,558,191		61,225,922	36,726,342

<sup>(1)</sup> In accordance with IAS 33 "Earnings per share", shares are not diluted when the entity has reported a loss for the period.

### **Summary Statement of Financial Position:**

	As of December 31,					
	2017		2016		2015	
	 (in	thousa	nds, except share d	ata)		
Summary Statement of Financial Position						
Cash and cash equivalents	\$ 22,651	\$	21,830	\$	28,594	
Total assets	29,188		28,426		34,958	
Total liabilities	38,096		18,617		5,235	
Total shareholders' (deficit) equity	(8,908)		9,809		29,723	
Share capital	3,589		2,728		1,645	
Number of ordinary shares in issue	263,519,128		195,741,528		108,601,496	

#### B. Capitalization and Indebtedness

Not applicable.

### C. Reasons for the Offer and Use of Proceeds

Not applicable.

#### D. Risk Factors

Our business faces significant risks. You should carefully consider all of the information set forth in this Annual Report and in our other filings with the United States Securities and Exchange Commission, or the SEC, including the following risk factors which we face and which are faced by our industry. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. This report also contains forward-looking statements that involve risks and uncertainties. Our results could materially differ from those anticipated in these forward-looking statements, as a result of certain factors including the risks described below and elsewhere in this Annual Report and our other SEC filings. See "Cautionary Note Regarding Forward-Looking Statements" above.

### Risks Related To Our Being A Development-Stage Company

We Are A Development-Stage Biopharmaceutical Company And Have A Limited Operating History On Which To Assess Our Business, Have Incurred Significant Losses Over The Last Several Years, And Anticipate That We Will Continue To Incur Losses For The Foreseeable Future.

We are a development-stage biopharmaceutical company with a limited operating history. We have not yet demonstrated an ability to obtain regulatory approval or manufacture and commercialize a product candidate. Consequently, we have no meaningful commercial operations upon which to evaluate our business and predictions about our future success or viability may not be as accurate as they could be if we had a history of successfully developing and commercializing pharmaceutical products.

Since inception, we have incurred significant operating losses. Our net loss was \$44.8 million, \$40.3 million and \$8.5 million for the fiscal years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, we had an accumulated deficit of \$103.3 million. We have devoted substantially all of our financial resources to identifying, attempting to in-license or otherwise acquire rights to our product candidates, including conducting clinical trials and providing general and administrative support for these operations to build our business infrastructure.

To date, we have financed our operations primarily through proceeds received from our initial offering in the United Kingdom, initial offering in the United States and our follow-on offerings in the United Kingdom, and the issuance of convertible promissory notes and senior debt. The amount of our future net losses will depend, in part, on the rate of our future expenditures and our ability to obtain funding through equity or debt financings, strategic collaborations or grants.

We have prepared cash flow forecasts extending for at least 12 months from the date of this Annual Report. These forecasts assume no sales and the continuation of costs associated with drug discovery and development. We acknowledge that substantial uncertainty remains over our ability to have the resources to fully support the iclaprim trials and that additional funding will be needed through public markets, private financing, and/or partnering opportunities within the next 12 months. In the event that we do not have adequate access to capital on a timely basis, on favorable terms, or if at all, this could have a material and negative impact on our business and results of operations.

To become and remain profitable, we must develop and eventually commercialize one or more of our product candidates with significant market potential. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. It may be several years, if ever, before we receive regulatory approval and have a product candidate approved for commercialization. Even if we obtain regulatory approval to market a product candidate, our future revenue will depend upon the size of any markets in which our product candidates may receive approval and our ability to achieve market acceptance and adequate market share for our product candidates in those markets. Further, because the potential markets in which our product candidates may ultimately receive regulatory approval are small, we may never become profitable despite obtaining such market share and acceptance of our product candidates.

We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. We anticipate that our expenses will increase substantially if and as we:

- continue research and nonclinical and clinical development of our product candidates, including advancing our programs from preclinical development into clinical trials and increasing the number and size of our current clinical trials and preclinical studies;
- seek to identify, assess, in-license, acquire and develop additional product candidates;
- · change or add manufacturers or suppliers;
- seek regulatory approvals for our product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain regulatory approval;
- make up-front, milestone or other payments under any of our license agreements;
- seek to maintain, protect, defend, enforce and expand our intellectual property portfolio;
- seek to attract and retain skilled personnel;
- create additional infrastructure to support our operations as a U.S. and U.K. listed company and our product development and planned future commercialization efforts; and
- experience any delays or encounter issues with any of the above, including, but not limited to, failed preclinical studies or clinical trials, obtaining complex results, safety issues or other regulatory challenges that may require either longer follow-up of existing preclinical studies or clinical trials or limitation of additional preclinical studies or clinical trials in order to pursue regulatory approval.

Further, the net losses we incur may fluctuate significantly from quarter-to-quarter and year-to-year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. Moreover, if we incur substantial losses, we could be liquidated, and the value of our shares might be significantly reduced or the shares might be of no value.

## We Have Never Generated Any Revenue From Product Sales And May Never Be Profitable.

We have no products approved for commercialization and have never generated any revenue from product sales. We will not generate revenue from product sales unless and until we successfully complete the development of, obtain regulatory approval for and commercialize one or more of our product candidates. Our ability to generate future revenue from product sales depends heavily on our success in many areas, including, but not limited to:

- completing research, preclinical or clinical development, as applicable, of our product candidates, including successfully completing clinical trials of our product candidates;
- integrating product candidates that we in-license or acquire, as well as completing research, formulation and process development, and
  preclinical or clinical development, as applicable, of those product candidates, including successfully completing clinical trials of those
  product candidates;
- obtaining regulatory approval of our product candidates;

- incurring additional costs as we advance our product candidates;
- developing a sustainable and scalable manufacturing process for our product candidates, if approved;
- maintaining supply and manufacturing relationships with third-parties that can conduct the manufacturing process development and provide
  adequate, in amount and quality, products to support clinical development and the market demand for our product candidates, if approved;
- developing a commercial organization and launching and commercializing product candidates for which we obtain regulatory approval, either directly or with a collaborator or distributor;
- obtaining market acceptance of our product candidates as viable treatment options;
- addressing any competing technological and market developments;
- identifying, assessing, in-licensing, acquiring and/or developing new product candidates;
- · negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;
- maintaining, protecting, enforcing and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how;
- attracting, hiring and retaining qualified personnel.

Given the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. Our expenses could increase beyond expectations if we are required by the FDA or the EMA, or any comparable foreign regulatory agency, to perform nonclinical and preclinical studies or clinical trials in addition to those that we currently anticipate.

Even if one or more of the product candidates that we develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate. Further, our revenue will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval, the accepted price for the product, the ability to obtain coverage and adequate reimbursement, and whether we own the commercial rights for that territory. If the number of our addressable patients is not as significant as we estimate, the indication approved by regulatory authorities is narrower than we expect, or the treatment population is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of our product candidates. If we are not able to generate sufficient revenue from the sale of any approved products, we may never become profitable. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to successfully execute any of the foregoing would decrease the value of our company and could impair our ability to raise capital, expand our business or continue our operations. A decline in the value of our company could cause you to lose all or part of your investment.

### The terms of our credit facility place restrictions on our operating and financial flexibility.

On November 14, 2017, we and our subsidiary entered into a loan and security agreement with Hercules Capital, Inc. and certain of its affiliates (collectively, "Hercules") for a term loan of up to \$20 million. We refer to this loan and security agreement as the Hercules Loan Agreement. The Hercules Loan Agreement is secured by substantially all of our property and that of our subsidiary, other than intellectual property. As of December 31, 2017, we had \$15 million in outstanding borrowings under the Hercules Loan Agreement.

The Hercules Loan Agreement subjects our subsidiary to various affirmative and restrictive covenants, including, but not limited to, financial reporting obligations, and certain limitations on indebtedness, liens (including a negative pledge on intellectual property), investments, distributions (including dividends), collateral, transfers, mergers or acquisitions, taxes, corporate changes, and deposit accounts. In addition, we are subject to certain restrictive covenants in connection with our grant of a guarantee of the obligations of our subsidiary and the pledge of our equity in our subsidiary. Compliance with these covenants may limit our flexibility in operating our business and our ability to take actions that might be advantageous to us and our shareholders.

Additionally, we may be required to repay the entire amount of outstanding indebtedness under the term loan in cash if we fail to stay in compliance with our covenants or suffer some other event of default under the Hercules Loan Agreement. Under the Hercules

Loan Agreement, an event of default will occur if, among other things: we fail to make payments under the Hercules Loan Agreement; we breach any of our covenants under the Hercules Loan Agreement, subject to specified cure periods with respect to certain breaches; there occurs an event that could reasonably be expected to have a material adverse effect on (i) our business, operations, properties, assets or financial condition, (ii) our ability to perform or satisfy our obligations under the Hercules Loan Agreement as they become due or Hercules's ability to enforce its rights or remedies with respect to our obligations under the Hercules Loan Agreement, or (iii) the collateral or liens securing our obligations under the Hercules Loan Agreement; we or our assets become subject to certain legal proceedings, such as bankruptcy proceedings; we are unable to pay our debts as they become due; or we default on contracts with third-parties, which would permit Hercules to accelerate the maturity of such indebtedness or that could have a material adverse effect on us. We may not have enough available cash or be able to raise additional funds through equity or debt financings to repay such indebtedness at the time any such event of default occurs. In that case, we may be required to delay, limit, reduce or terminate our clinical development efforts or grant to others rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. Hercules could also exercise its rights as collateral agent to take possession and dispose of the collateral securing the term loan for its benefit, which collateral includes all of our property other than our intellectual property. Our business, financial condition and results of operations could be substantially harmed as a result of any of these events.

We Will Need Substantial Additional Funding Before We Can Expect To Complete The Development Of Our Product Candidates And Become Profitable From Sales Of Our Approved Products, If Any.

We are currently advancing our product candidates through preclinical and clinical development. Development of our product candidates is expensive, and we expect our research and development expenses to increase in connection with our ongoing activities, particularly as we continue our ongoing trials and initiate new trials of iclaprim and our other product candidates. We expect that we will require additional capital to obtain regulatory approval for, and to commercialize, our product candidates.

As of December 31, 2017 and 2016, our cash and cash equivalents were \$22.7 million and \$21.8 million, respectively. Our future funding requirements will depend on many factors, including, but not limited to:

- the scope, rate of progress, results and cost of our clinical trials, nonclinical testing, formulation, process development and other related activities;
- the cost of manufacturing clinical supplies and establishing commercial supplies of our product candidates, if approved, and any products that we may develop;
- the number and characteristics of product candidates that we pursue, including any additional product candidates we may in-license or acquire;
- the cost of filing, prosecuting, defending and enforcing our patent claims and other intellectual property rights;
- the cost of defending potential intellectual property disputes, including patent infringement actions brought by third-parties against us or our product candidates;
- the cost, timing and outcomes of regulatory approvals;
- the cost and timing impact of, and our ability to successfully resolve, any regulatory enforcement actions that may be brought against us or any of our suppliers, contract manufacturers, contract research organizations, clinical investigators, or other related entities, including responding to any adverse inspectional findings (FDA Form 483s), clinical holds, warning letters or untitled letters or other administrative or judicial actions against us or any related entities;
- the cost and timing of establishing sales, marketing and distribution capabilities; and
- the terms and timing of any collaborative, licensing and other arrangements that we may establish, including any required milestone and royalty payments thereunder.

Any additional fundraising efforts may divert our management from their day-to-day activities, which may compromise our ability to develop and commercialize our product candidates, if approved. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. Moreover, the terms of any financing may adversely affect the holdings or the rights of our shareholders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of the ADSs, the ADS warrants and our ordinary shares to decline.

If we are unable to obtain funding on a timely basis, we will be required to significantly curtail, delay or discontinue one or more of our research or development programs or the commercialization of any product candidates, if approved, or be unable to expand our operations or otherwise capitalize on our business opportunities, as desired.

The accompanying consolidated financial statements have been prepared on a basis which assumes we will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitments in the normal course of business. However, we have recorded losses since inception. As of December 31, 2017, we held unrestricted cash and cash equivalents of \$22.7 million. We will need substantial additional funding to advance iclaprim through regulatory approval, commence commercial operations for iclaprim, begin our INSPIRE Phase 3 clinical trial and to continue operations. Our present capital resources are not sufficient to fund our planned operations for the next twelve months from the date of this Annual Report, and therefore, there exists substantial doubt about our ability to continue as a going concern.

## Raising Additional Capital May Cause Dilution To Our Shareholders, Restrict Our Operations Or Require Us To Relinquish Rights To Our Intellectual Property Or Future Revenue Streams.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity offerings, debt financings, grants, and license and development agreements in connection with any collaborations. Besides the funds provided for under the Hercules Loan Agreement, we do not have any committed external source of funds. In the event we seek additional funds, we may raise additional capital through the sale of equity and/or convertible debt securities. In such an event, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a holder of our ordinary shares or the ADSs. Additional debt financing, if available, could result in increased fixed payment obligations and may involve agreements that include restrictive covenants, such as limitations on our ability to incur additional debt, make capital expenditures, acquire, sell or license intellectual property rights or declare dividends, and other operating restrictions that could hurt our ability to conduct our business.

Further, if we raise additional funds through collaborations, strategic alliances, or marketing, distribution or licensing arrangements with third-parties, we may have to relinquish valuable rights to our intellectual property or future revenue streams. If we are unable to raise additional funds when needed, we will be required to delay, limit, reduce or terminate our product development or future commercialization efforts, or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

## We May Not Be Successful In Executing Our Growth Strategy Or Our Growth Strategy May Not Deliver The Anticipated Results.

We plan to source new product candidates that are complementary to our existing product candidates by in-licensing or acquiring them from other companies or academic institutions. If we are unable to identify, in-license or acquire and integrate product candidates in accordance with this strategy, our ability to pursue our growth strategy would be compromised.

Research programs and business development efforts to identify new product candidates require substantial technical, financial and human resources. We may focus our efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful. Our research programs, business development efforts or licensing attempts may fail to yield additional complementary or successful product candidates for clinical development and commercialization for a number of reasons, including, but not limited to, the following:

- our research or business development methodology or search criteria and process may be unsuccessful in identifying potential product candidates with a high probability of success for development progression;
- we may not be able or willing to assemble sufficient resources or expertise to in-license, acquire or discover additional product candidates;
- for product candidates we seek to in-license or acquire, we may not be able to agree to acceptable terms with the licensor or owner of those product candidates;
- our product candidates may not succeed in preclinical studies or clinical trials;
- · we may not succeed in formulation or process development;
- our product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive regulatory approval;

- competitors may develop alternatives that render our product candidates obsolete or less attractive;
- product candidates that we develop may be covered by third-parties' patents or other exclusive rights;
- product candidates that we develop may not allow us to leverage our expertise and our development and commercial infrastructure as currently
  expected;
- the market for a product candidate may change during our program so that such a product may become unreasonable to continue to develop;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- a product candidate may not be accepted as safe and effective by patients, the medical community or third-party payors.

If any of these events occurs, we may not be successful in executing our growth strategy or our growth strategy may not deliver the anticipated results.

# We May Expend Our Limited Resources To Pursue A Particular Product Candidate Or Indication And Fail To Capitalize On Product Candidates Or Indications That May Be More Profitable Or For Which There Is A Greater Likelihood Of Success.

We have limited financial and managerial resources. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

## If We Acquire Other Businesses Or In-license Or Acquire Other Product Candidates And Are Unable To Integrate Them Successfully, Our Financial Performance Could Suffer.

If we are presented with appropriate opportunities, we may acquire other businesses. We have had limited experience integrating other businesses or product candidates, or in-licensing or acquiring other product candidates. The integration process following any future transactions may produce unforeseen operating difficulties and expenditures, and may absorb significant management attention that would otherwise be directed to the ongoing development of our business. Also, in any future in-licensing or acquisition transactions, we may issue ordinary shares (including in the form of ADSs) that would result in dilution to existing shareholders, incur debt, assume contingent liabilities or create additional expenses related to amortizing intangible assets, any of which might harm our financial results and cause our share price to decline. Any financing we might need for future transactions may be available to us only on terms that restrict our business or impose costs that reduce our net income.

## We Are Highly Dependent On Our Key Personnel, As Well As Our Ability To Recruit, Retain And Motivate Additional Qualified Personnel.

We are highly dependent on Graham Lumsden, our Chief Executive Officer and David Huang, our Chief Medical Officer. Any member of management or employee can terminate his or her relationship with us at any time. Although we have included non-compete provisions in their respective employment agreements, such arrangements might not be sufficient for the purpose of preventing such key personnel from entering into agreements with any of our competitors. The inability to recruit and retain qualified personnel, or the loss of Graham Lumsden or David Huang could result in competitive harm as we could experience delays in reaching our in-licensing, acquisition, development and commercialization objectives.

We also depend substantially on highly qualified managerial, sales and technical personnel who are difficult to hire and retain. As a result, competition for skilled personnel is intense and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for individuals with similar skill sets. In addition, failure to succeed in preclinical studies or clinical trials may make it more challenging to recruit and retain qualified personnel. Recruiting and retaining other qualified employees, consultants and advisors for our business, including scientific and technical personnel, will be critical to our success.

### We Expect To Expand Our Organization, And We May Experience Difficulties In Managing This Growth, Which Could Disrupt Our Operations.

As of the date of this Annual Report, we had 7 full-time employees. As our development, commercialization, in-licensing and acquisition plans and strategies develop, and as we advance the preclinical and clinical development of our product candidates, we expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of managerial, operational, sales, marketing, financial, legal and other resources. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities, and continue to recruit and train additional qualified personnel. Our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. Due to our limited financial resources, we may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the in-licensing, acquisition and development of additional product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate or grow revenue could be reduced and we may not be able to implement our business strategy.

If We Fail To Maintain An Effective System Of Internal Control Over Financial Reporting, We May Not Be Able To Accurately Report Our Financial Results Or Prevent Fraud. As A Result, Shareholders Could Lose Confidence In Our Financial And Other Public Reporting, Which Would Harm Our Business And The Trading Price Of The ADSs, The ADS Warrants and Our Ordinary Shares.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us, as and when required, conducted in connection with Section 404 of the Sarbanes-Oxley Act, or Section 404, or any subsequent testing by our independent registered public accounting firm, as and when required, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Ineffective internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of the ADSs, the ADS Warrants and our ordinary shares.

Pursuant to Section 404, we are required to furnish a report by our management on our internal control over financial reporting. However, as an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm until we are no longer an emerging growth company. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude within the prescribed timeframe that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

As of December 31, 2017 and 2016, our Chief Executive Officer and Chief Financial Officer assessed the effectiveness of our internal control over financial reporting. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control* — *Integrated Framework (2013)*. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. In connection with this assessment, we identified the following material weaknesses in internal control over financial reporting as of December 31, 2017 and 2016. These material weaknesses are in the process of being remediated.

We did not maintain an effective control environment as we did not maintain effective internal controls to ensure processing and reporting of valid transactions is complete, accurate, and timely and did not maintain a sufficient complement of resources with an appropriate level of accounting knowledge, experience, and training commensurate with their structure and financial reporting requirements to allow for appropriate monitoring, presentation and disclosure, and internal control over financial reporting.

Specifically, we have not designed and implemented a sufficient level of formal accounting policies and procedures that define how transactions across the business cycles should be initiated, recorded, processed, authorized, approved and appropriately reported, including presentation and disclosure, within the financial statements. Additionally, the limited personnel resulted in our inability to

consistently establish appropriate authorities and responsibilities in pursuit of our financial reporting objectives, as demonstrated by, amongst other things, our insufficient segregation of duties in their finance and accounting functions.

These control deficiencies resulted in the misclassification of derivative liabilities in the statement of financial position as of December 31, 2016. In addition, these control deficiencies resulted in immaterial audit adjustments to increase our trade and other payables as of December 31, 2016. In connection with our 2017 interim consolidated financial statements, these control deficiencies resulted in adjustments to stock-based compensation expense and certain accrued liabilities. Although these control deficiencies did not result in an adjustment as of December 31, 2017, a material misstatement to the annual or interim consolidated financial statements may not be prevented or detected until the control deficiencies are remediated. Accordingly, our management has determined that these control deficiencies constitute material weaknesses.

In an effort to remediate the identified material weaknesses and to enhance our overall control environment, we have implemented and are planning additional substantial changes in our internal control over financial reporting. The remediation efforts include the hiring of experienced personnel and establishing seamless financial reporting processes. Refer to Item 15 of this annual report on Form 20-F for further information on our remediation activities. We cannot assure you that the measures we have taken to date, and actions we may take in the future, will be sufficient to remediate the control deficiencies that led to our material weaknesses in our internal control over financial reporting or that they will prevent potential future material weaknesses.

### Our Business And Operations Would Suffer In The Event Of System Failures.

Our computer systems, as well as those of our clinical research organizations, or CROs, and other contractors and consultants, are vulnerable to damage from cyber-security threats, including computer viruses and unauthorized access, natural disasters, including hurricanes, terrorism, war and telecommunication and electrical failures. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our product development programs. For example, the loss of preclinical study or clinical trial data from completed, ongoing or planned preclinical studies or clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of personal, confidential or proprietary information, we could incur liability and the further development of our product candidates could be delayed.

## The Vote By The U.K. Electorate In Favor Of A U.K. Exit From The EU Could Adversely Impact Our Business, Results Of Operations And Financial Condition.

In a remain-or-leave referendum held in the United Kingdom on June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the EU (referred to as "Brexit"). On March 29, 2017, the U.K. government delivered to the European Council notice of its intention to leave the EU and, in the absence of an executed withdrawal agreement with the EU, the effective date of the United Kingdom's withdrawal from the EU will be March 29, 2019. On December 15, 2017, The European Council confirmed that sufficient progress had been made to move to the second phase of negotiations related to transition (the 'implementation period') and the framework for the future relationship between the United Kingdom and the EU. This process of negotiation will likely determine the future terms of the United Kingdom's relationship with the EU, as well as whether the U.K. will be able to continue to benefit from the EU's free trade and similar arrangements. For now, the U.K. remains a member of the EU and all rights and obligations derived from EU law continue to apply.

Brexit could impair our ability to transact business in EU countries. Brexit has already and could continue to adversely affect European and/or worldwide economic and market conditions and could continue to contribute to instability in the global financial markets. The long-term effects of Brexit will depend in part on any agreements the United Kingdom makes to retain access to EU markets following the United Kingdom's withdrawal from the EU.

In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the United Kingdom determines which EU laws to replicate or replace. If the United Kingdom were to significantly alter its regulations affecting the pharmaceutical industry, we could face significant new costs. It may also be time-consuming and expensive for us to alter our internal operations to comply with new regulations. Altered regulations could also add time and expense to the process by which our product candidates receive regulatory approval in the United Kingdom and EU. Similarly, it is unclear at this time what Brexit's impact will have on our intellectual property rights and the process for obtaining and defending such rights. It is possible that certain intellectual property rights, such as trademarks or design registrations, granted by the EU will cease being enforceable in the U.K. absent special arrangements to the contrary. It is indicated and anticipated that arrangements will be put in place to ensure continued protection. With regard to existing patent rights, the effect of Brexit should be minimal considering enforceable patent rights are specific to the U.K., whether arising out of the European Patent Office or directly through the U.K. patent office. The U.K.'s participation in the EU's Unified Patent Court is still uncertain.

Any of these effects of Brexit, and others we cannot anticipate, could adversely affect our business, business opportunities, results of operations, financial condition and cash flows.

## Risks Related To The Development And Preclinical And Clinical Testing Of Our Product Candidates

We Depend Entirely On The Success Of A Limited Number Of Product Candidates, Which Are Still In Preclinical Or Clinical Development. If We Do Not Obtain Regulatory Approval For And Successfully Commercialize One Or More Of Our Product Candidates Or We Experience Significant Delays In Doing So, We May Never Become Profitable.

We currently have no products approved for sale and may never be able to obtain regulatory approval for, or commercialize, any products. We have invested, and expect to continue to invest, a significant portion of our efforts and financial resources in the development of a limited number of product candidates, which are still in preclinical or clinical development. Our ability to generate product revenues, which we do not expect will occur for at least the next several years, if ever, will depend heavily on our successful development and eventual commercialization, if approved, of one or more of our product candidates. We are not permitted to market or promote any of our product candidates in particular countries or regions before we receive regulatory approval from the U.S. Food and Drug Administration ("FDA"), European Medicines Agency ("EMA") or any required comparable regulatory agency, and we may never receive such regulatory approval for any of our product candidates. The success of iclaprim and our other product candidates will depend on several additional factors, including, but not limited to, the following:

- successfully completing formulation and process development activities;
- the success of our contract manufacturers, suppliers, clinical research organization partners and other related entities in meeting all regulatory requirements;
- successfully completing clinical trials that demonstrate the efficacy and safety of our product candidates;
- acceptance of our product candidates by patients and the medical community;
- a continued acceptable safety profile following approval;
- obtaining and maintaining healthcare coverage and adequate reimbursement; and
- · competing effectively with other therapies, including with respect to the sales and marketing of our product candidates, if approved.

Many of these factors are wholly or partially beyond our control, including clinical development, the regulatory submission process, potential threats to our intellectual property rights and changes in the competitive landscape. If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully complete clinical trials or eventually commercialize our product candidates, if approved.

Clinical Trials Are Very Expensive, Time Consuming And Difficult To Design And Implement And Involve Uncertain Outcomes. Furthermore, Results Of Earlier Preclinical Studies And Clinical Trials May Not Be Predictive Of Results Of Future Preclinical Studies Or Clinical Trials.

To obtain the requisite regulatory approvals to market and sell any of our product candidates, we must demonstrate through extensive preclinical studies and clinical trials that our products are safe and effective in humans. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and earlier clinical trials may not be predictive of the results of later-stage clinical trials. For example, the results generated to date in preclinical studies or clinical trials for our product candidates do not ensure that later preclinical studies or clinical trials will demonstrate similar results. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. Companies in the biopharmaceutical industry may suffer setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier clinical trials. We may experience delays in our ongoing or future preclinical studies or clinical trials, and we do not know whether future preclinical studies or clinical trials will begin on time, need to be redesigned, enroll an adequate number of subjects or patients on time or be completed on schedule, if at all. Clinical trials may be delayed, suspended or terminated for a variety of reasons, including delay or failure to:

- obtain authorization from regulators and/or institutional review boards ("IRBs") to commence a clinical trial at a prospective clinical trial site;
- reach agreements on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- recruit and enroll a sufficient number of patients in clinical trials to ensure adequate statistical power to detect statistically significant treatment effects:
- obtain patient consents that adequately address all clinical risks;
- address any noncompliance with documentation or other regulatory requirements or safety concerns that arise during the course of a clinical trial;
- have patients complete clinical trials or return for post-treatment follow-up;
- have contract manufacturers, suppliers, clinical research organization partners and other related entities or other third-parties comply with regulatory requirements, adhere to the trial protocol or meet contractual obligations in a timely manner or at all;
- identify a sufficient number of clinical trial sites and initiate them within the planned timelines; and
- manufacture sufficient quantities of the product candidate in accordance with current Good Manufacturing Practice ("cGMP") requirements to complete clinical trials.

Positive or timely results from preclinical or early stage clinical trials do not ensure positive or timely results in late stage clinical trials or regulatory approval by the FDA, EMA or any comparable foreign regulatory agency. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates. Preclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain regulatory approval for the product candidates. The FDA, EMA and any comparable foreign regulatory agency have substantial discretion in the approval process and in determining when or whether regulatory approval will be obtained for any of our product candidates. Even if we believe the data collected from clinical trials of our product candidates are promising, such data may not be sufficient to support approval by the FDA, EMA or any comparable foreign regulatory agency.

In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in clinical trial procedures set forth in protocols, differences in the size and type of the patient populations, adherence to the administration regimen and other clinical trial protocols, and the rate of dropout among clinical trial participants. In the case of our late stage clinical product candidates, results may differ in general on the basis of the larger number of clinical trial sites and additional countries involved in Phase 3 clinical trials. Different countries have different standards of care and different levels of access to care for patients, which in part drives the heterogeneity of the patient populations that enroll in our studies.

# The Regulatory Approval Process Of The FDA, EMA Or Any Comparable Foreign Regulatory Agency May Be Lengthy, Time Consuming And Unpredictable.

Our future success depends upon our ability to develop, obtain regulatory approval for and then commercialize one or more of our product candidates. Although some of our employees have prior experience with submitting marketing applications to the FDA, EMA or any comparable foreign regulatory agency, we, as a company, have not submitted such applications for our product candidates. We cannot be certain that any of our product candidates will be successful in clinical trials or receive regulatory approval. Applications for any of our product candidates could fail to receive regulatory approval for many reasons, including, but not limited to, the following:

- the FDA, EMA or any comparable foreign regulatory agency may disagree with the design or implementation of our clinical trials or our interpretation of data from nonclinical trials or clinical trials;
- the population studied in the clinical program may not be sufficiently broad or representative to assure safety in the full population for which we seek approval, including reliance on foreign clinical data;

- the data collected from clinical trials of our product candidates may not be sufficient to support a finding that has statistical significance or clinical meaningfulness or support the submission of a new drug application, or NDA, or other submission, or to obtain regulatory approval in the United States or elsewhere;
- we may be unable to demonstrate to the FDA, EMA or any comparable foreign regulatory agency that a product candidate's risk-benefit ratio for
  its proposed indication is acceptable;
- the FDA, EMA or any comparable foreign regulatory agency may fail to approve the manufacturing processes, test procedures and specifications or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA, EMA or any comparable foreign regulatory agency may significantly change in a manner rendering our clinical data insufficient for approval.

Any of our current or future product candidates could take a significantly longer time to gain regulatory approval than expected or may never gain regulatory approval. This could delay or eliminate any potential product revenue by delaying or terminating the potential commercialization of our product candidates

We generally plan to seek regulatory approval to commercialize our product candidates in the United States, the EU and other key global markets. To obtain regulatory approval in other countries, we must comply with numerous and varying regulatory requirements of such other countries regarding safety, efficacy, chemistry, manufacturing and controls, clinical trials, commercial sales, pricing and distribution of our product candidates. Even if we are successful in obtaining approval in one jurisdiction, we cannot ensure that we will obtain approval in any other jurisdictions. Failure to obtain marketing authorization for our product candidates will result in our being unable to market and sell such products. If we fail to obtain approval in any jurisdiction, the geographic market for our product candidates could be limited. Similarly, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates.

If Serious Adverse, Undesirable Or Unacceptable Side Effects Are Identified During The Development Of Our Product Candidates Or Following Regulatory Approval, If Any, We May Need To Abandon Our Development Of Such Product Candidates.

If our product candidates are associated with serious adverse, undesirable or unacceptable side effects, we may need to abandon their development or limit development to certain uses or sub-populations in which such side effects are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many compounds that initially showed promise in preclinical or early stage testing have later been found to cause side effects that restricted their use and prevented further development of the compound for larger indications.

Discovery of previously unknown problems, or increased focus on a known problem, with an approved product may result in restrictions on its permissible uses, including withdrawal of the medicine from the market.

Additionally, if one or more of our product candidates receives regulatory approval, and we or others later identify undesirable side effects caused by such product(s), a number of potentially significant negative consequences could result, including, but not limited to:

- withdrawal by regulatory authorities of approvals of such product;
- seizure of the product by regulatory authorities;
- recall of the product;
- · restrictions on the marketing of the product;
- requirement by regulatory authorities of additional warnings on the label, such as a black box warning;
- requirement that we create and implement a Risk Evaluation and Mitigation Strategy (REMS), that may include a medication guide outlining the risks of such side effects for distribution to patients, or a restricted distribution system; commitment to expensive additional safety studies prior to launch as a prerequisite of approval by regulatory authorities of such product;

- commitment to expensive post-marketing studies as a prerequisite of approval by regulatory authorities of such product;
- initiation of legal action against us claiming to hold us liable for harm caused to patients; and
- harm to our reputation and resulting harm to physician or patient acceptance of our products.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, financial condition, and results of operations.

We May Find It Difficult To Enroll Patients In Our Clinical Trials Given The Limited Number Of Patients Who Have The Diseases For The Treatment Of Which Our Product Candidates Are Being Studied. Difficulty In Enrolling Patients In Our Clinical Trials Could Delay Or Prevent Clinical Trials Of Our Product Candidates.

Successful and timely completion of clinical trials will require that we enroll a sufficient number of patient candidates. Clinical trials may be subject to delays as a result of patient enrollment taking longer than anticipated or patient withdrawal. Patient enrollment depends on many factors, including the size and nature of the patient population, eligibility criteria for the clinical trial, the proximity of patients to clinical sites, the design of the clinical protocol, the availability of competing clinical trials, the availability of new drugs approved for the indication the clinical trial is investigating, and clinicians' and patients' perceptions as to the safety and potential advantages of the product candidate being studied in relation to other available therapies.

Because we are focused on addressing serious Gram-positive infections encountered in hospitals, there are limited patient pools from which to draw in order to complete our clinical trials in a timely and cost-effective manner. Delays in the completion of any clinical trial of our product candidates will increase our costs, slow down our product candidate development and approval process, and delay or potentially jeopardize our ability to commence product sales and generate revenue. In addition, many of the factors that may lead to a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

We May Become Exposed To Costly And Damaging Liability Claims, Either When Testing Our Product Candidates In The Clinic Or At The Commercial Stage, And Our Product Liability Insurance May Not Cover All Damages From Such Claims.

We are exposed to potential product liability and professional indemnity risks that are inherent in the research, development, manufacturing, marketing, and use of pharmaceutical products. We currently have no products that have been approved for commercial sale. However, the current and future use of product candidates by us in clinical trials, and the sale of any approved products in the future, may expose us to liability claims. These claims might be made by patients that use the product, healthcare providers, pharmaceutical companies, or others selling such products. Any claims against us, regardless of their merit, could be difficult and costly to defend, and could compromise the market acceptance of our product candidates or any prospects for commercialization of our product candidates, if approved.

Although the clinical trial process is designed to identify and assess potential side effects, it is always possible that a drug, even after regulatory approval, may exhibit unforeseen side effects. If any of our product candidates were to cause adverse side effects during clinical trials or after approval of the product candidate, we may be exposed to substantial liabilities. Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use our product candidates.

We purchase liability insurance in connection with our clinical trials. It is possible that our liabilities could exceed our insurance coverage. We intend to expand our insurance coverage to include the sale of commercial products if we obtain regulatory approval for any of our product candidates. However, we may not be able to maintain insurance coverage at a reasonable cost or obtain insurance coverage that will be adequate to satisfy any liability that may arise. If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may not be sufficient to cover such claims and our business operations could be impaired.

## Risks Related To Commercialization Of Our Product Candidates

We Have Never Commercialized A Product Candidate And We May Lack The Necessary Expertise, Personnel And Resources To Successfully Commercialize Any Of Our Products That Receive Regulatory Approval On Our Own Or Together With Suitable Partners.

We have never commercialized a product candidate. Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, in-licensing or acquiring our product candidates, identifying potential product candidates and undertaking preclinical studies and clinical trials of our product candidates. We currently have no sales force or marketing or

distribution capabilities. To achieve commercial success of our product candidates, if approved, we will have to develop our own sales, marketing and supply capabilities, outsource these activities to a third-party or complete a partnering transaction.

Factors that may affect our ability to commercialize our product candidates on our own include recruiting and retaining adequate numbers of effective sales and marketing personnel, obtaining access to or persuading adequate numbers of physicians to prescribe our product candidates and other unforeseen costs associated with creating an independent sales and marketing organization. Developing a sales and marketing organization requires significant investment, is time consuming and could delay the launch of our product candidates. We may not be able to build an effective sales and marketing organization in the United States or other key global markets. If we are unable to build our own distribution and marketing capabilities or to find suitable partners for the commercialization of our product candidates, we may not generate revenues from them.

If We Are Successful In Commercializing Iclaprim, We May Be Subject To Claims From F. Hoffman-La Roche Ltd. And Hoffmann-La Roche Inc. In Connection With Payments On The Net Sales Of Iclaprim For Certain Countries.

Pursuant to the terms of the merger agreement we entered into with Nuprim on December 31, 2014, we agreed to assume Nuprim's obligations under certain agreements. We do not believe that the Sale and Purchase Agreement, dated June 1, 2001, by and between F. Hoffman-La Roche Ltd. and Hoffmann-La Roche Inc., together the Hoffmann-La Roche Seller, and Arpida Ltd., the Hoffman-La Roche/Arpida Agreement, was assigned to Nuprim or the party for which it was a successor in interest with regards to the iclaprim assets and therefore we do not have obligations under such agreement.

The Hoffmann-La Roche/Arpida Agreement provides that the Hoffmann-La Roche Seller will be entitled to receive a royalty of 1 to 5% of net sales of a Drug (as defined in such agreement), such amount depending on various factors (e.g., the final drug composition, timing of commercialization, country of sales). While we do not believe we are a successor to such agreement and it is unlikely our iclaprim product would fit the factors requiring payment under such agreement, if it were determined that we are a successor in interest to the Hoffman-La Roche/Arpida Agreement and our iclaprim product is determined to fit the criteria of being a Drug as defined in such agreement, we could have a payment obligation of 1 to 5% of net sales of our iclaprim product for certain countries for a period of ten years from first commercial sale in such country.

We Operate In A Highly Competitive And Rapidly Changing Industry, Which May Result In Our Competitors Discovering, Developing Or Commercializing Competing Products Before Or More Successfully Than We Do, Or Our Entering A Market In Which A Competitor Has Commercialized An Established Competing Product, And We May Not Be Successful In Competing With Them.

The development and commercialization of new drug products is highly competitive and subject to significant and rapid technological change. Our success is highly dependent upon our ability to in-license, acquire, develop and obtain regulatory approval for new and innovative drug products on a cost-effective basis and to market them successfully. In doing so, we face and will continue to face intense competition from a variety of businesses, including large, fully integrated, well-established pharmaceutical companies who already possess a large share of the market, specialty pharmaceutical companies and biopharmaceutical companies, academic institutions, government agencies and other private and public research institutions in the United States and other jurisdictions.

We are currently aware of various companies that are marketing existing antibiotics or may introduce new products that compete with our product candidates such as Allergan, Melinta, Nabriva, Merck & Co., Inc., and Paratek. We anticipate this competition to increase in the future as new companies enter the novel antibiotics market. In addition, the healthcare industry is characterized by rapid technological change, and new product introductions or other technological advancements could make some or all of our products obsolete.

The highly competitive nature of and rapid technological changes in the biotechnology and pharmaceutical industries, as well as ongoing changes in the regulatory environment, could render our product candidates or our technology obsolete or non-competitive. Our competitors may, among other things:

- have similar or better product candidates or technologies;
- possess greater financial and human resources as well as supporting clinical data;
- develop and commercialize products that are safer, more effective, effective in a broader range of indications, less expensive, or more convenient or easier to administer;
- obtain regulatory approval more quickly under changing regulatory requirements;
- establish superior proprietary positions;

- have access to greater manufacturing capacity;
- seek patent protection that competes with our product candidates;
- implement more effective approaches to sales and marketing; or
- enter into more advantageous collaborative arrangements for research, development, manufacturing and marketing of products.

The Successful Commercialization Of Our Product Candidates Will Depend In Part On The Extent To Which Governmental Authorities And Health Insurers Establish Adequate Coverage And Reimbursement Levels And Pricing Policies.

The successful commercialization of our product candidates, if approved, will depend, in part, on the extent to which coverage and reimbursement for our products or procedures using our products will be available from government and health administration authorities, private health insurers and other third-party payors. To manage healthcare costs, many governments and third-party payors increasingly scrutinize the pricing of new technologies and require greater levels of evidence of favorable clinical outcomes and cost-effectiveness before extending coverage and adequate reimbursement to such new technologies. In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the Medicare Modernization Act, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly under a new Part D and introduced a new reimbursement methodology based on average sale prices for physician-administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost-reduction initiatives and other provisions of this legislation could decrease the coverage and reimbursement that we receive for any approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors. Moreover, it is possible that the pharmaceutical industry or regulators may evaluate and/or develop an alternative pricing reference to replace Average Wholesale Price ("AWP") or Wholesale Acquisition Cost ("WAC"), which are the pricing references used for many pharmacy benefit managers, pharmaceutical purchase agreements, retail network contracts, specialty payor agreements and other contracts with third party payors in connection with the reimbursement of drug payments. In addition, many state Medicaid fee-for-service programs ("FFS Medicaid") are expected to establish pharmacy network payments on the basis of Actual Acquisition Cost ("AAC") due to regulatory changes that became effective April 1, 2017. This move to an AAC basis in FFS Medicaid could have an impact in reimbursement practices in other commercial and government segments. In light of such challenges to prices and increasing levels of evidence of the benefits and clinical outcomes of new technologies, we cannot be sure that coverage will be available for any product candidate that we commercialize, and, if available, that the reimbursement rates will be adequate. If we are unable to obtain adequate levels of coverage and reimbursement for our product candidates, our ability to generate revenue will be compromised.

Our potential customers, including hospitals, physicians and other healthcare providers that purchase certain injectable drugs administered during a procedure, such as our product candidates, generally rely on third-party payors to pay for all or part of the costs and fees associated with the drug and the procedures administering the drug. These third-party payors may pay separately for the drug or may bundle or otherwise include the costs of the drug in the payment for the procedure. We are unable to predict at this time whether our product candidates, if approved, will be eligible for such separate payments. To the extent there is no separate payment for our product candidates, there may be further uncertainty as to the adequacy of reimbursement amounts. Nor can we predict at this time the adequacy of payments, whether made separately for the drug and procedure or with a bundled or otherwise aggregate payment amount for the drug and procedure. In addition, obtaining and maintaining adequate coverage and reimbursement status is time consuming and costly.

There is often pressure to renegotiate pricing and reimbursement levels, including, in particular, in connection with changes to Medicare. Third-party payors continue to demand discounted fee structures, and the trend toward consolidation among third-party payors tends to increase their bargaining power over price structures. If third-party payors reduce their rates for our products, then our revenue and profitability may decline and our operating margins will be reduced. Because some third-party payors rely on all or portions of Medicare payment systems to determine payment rates, changes to government healthcare programs that reduce payments under these programs may negatively impact payments from third-party payors. Our inability to maintain suitable financial arrangements with third-party payors could have a material adverse impact on our business.

Because each third-party payor individually approves coverage and reimbursement levels, obtaining coverage and adequate reimbursement is a time consuming, costly and sometimes unpredictable process. We may be required to provide scientific and clinical support, medical necessity or both for the use of any product to each third-party payor separately with no assurance that approval would be obtained, and we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness, medical necessity or both of our products. This process could delay the market acceptance of any product and could have a negative effect on our future revenues and operating results.

Third-party payors may deny coverage and reimbursement status altogether of a given drug product, or cover the product, but may also establish prices at levels that are too low to enable us to realize an appropriate return on our investment in product development or impose coverage restrictions and/or limits that could affect our ability to successfully commercialize our products and impact our profitability, results of operations, financial condition and future success. Because the rules and regulations regarding coverage and reimbursement change frequently, in some cases on short notice, even when there is favorable coverage and reimbursement, future changes may occur that adversely impact such favorable coverage and reimbursement status. Further, the net reimbursement for drug products may be subject to additional reductions if there are changes to laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States.

Additionally, the reimbursement process is complex and can involve lengthy delays. Third party payors may disallow, in whole or in part, providers' requests for reimbursement based on determinations that certain amounts are not reimbursable under plan coverage, that the drugs provided were not medically necessary, or that additional supporting documentation is necessary. Retroactive adjustments may change amounts realized from third party payors. Delays and uncertainties in the reimbursement process may adversely affect market acceptance and utilization of our candidate products, resulting in reduced revenues.

The unavailability or inadequacy of third-party coverage and reimbursement could negatively affect the market acceptance of our product candidates and the future revenues we may expect to receive from those products. In addition, we are unable to predict what additional legislation or regulation relating to the healthcare industry or third-party coverage and reimbursement may be enacted in the future, or what effect such legislation or regulation would have on our business.

### Our Products May Not Gain Market Acceptance, In Which Case We May Not Be Able To Generate Product Revenues.

Even if the FDA, EMA or any comparable foreign regulatory agency approves the marketing of any product candidates that we develop, physicians, healthcare providers, patients or the medical community may not accept or use them. Efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may not be successful. If iclaprim or any other product candidate that we develop does not achieve an adequate level of acceptance, we may not generate significant product revenues or any profits from operations. The degree of market acceptance of iclaprim or any of our product candidates that are approved for commercial sale will depend on a variety of factors, including, but not limited to:

- whether clinicians and potential patients perceive our product candidates to have better or broader efficacy, safety and tolerability profile, and
  ease of use compared with our competitors;
- the timing of market introduction;
- the number of competing products;
- our ability to provide acceptable evidence of safety and efficacy;
- the prevalence and severity of any side effects;
- relative convenience and ease of administration;
- cost-effectiveness;
- patient diagnostics and screening infrastructure in each market;
- marketing and distribution support; and
- availability of coverage, reimbursement and adequate payment from health maintenance organizations and other third-party payors, both public and private.

In addition, the potential market opportunity for iclaprim, or any other product candidate we may develop is difficult to estimate precisely. Our estimates of the potential market opportunity are predicated on several key assumptions such as industry knowledge and publications, third-party research reports and other surveys. While we believe that our internal assumptions are reasonable, these assumptions may be inaccurate. If any of the assumptions proves to be inaccurate, then the actual market for iclaprim or our other product candidates could be smaller than our estimates of the potential market opportunity. If the actual market for iclaprim or our other product candidates is smaller than we expect, or if the products fail to achieve an adequate level of acceptance by physicians, healthcare

payors and patients, our product revenue may be limited, and we may be unable to achieve or maintain profitability. Further, if we are unable to convince a significant number of physicians of the value of our product candidates, we may be unable to achieve a sufficient market share to make our products, if approved, profitable.

### Bacteria Might Develop Resistance To Iclaprim, Which Would Decrease Its Efficacy And Commercial Viability.

Resistance to antibiotics is primarily caused by the genetic mutation of bacteria resulting from sub-optimal exposure to antibiotics where the drug does not kill all of the bacteria. While antibiotics have been developed to treat many of the most common infections, the extent and duration of their use worldwide has resulted in new mutated strains of bacteria resistant to current treatments. If physicians, rightly or wrongly, associate bacterial resistance issues with iclaprim, physicians might not prescribe iclaprim. If bacteria develop resistance to iclaprim, its efficacy would decline, which would negatively affect our potential to generate revenues from its commercialization.

## Risks Related To Our Reliance On Third-parties

We Rely On Third-parties To Conduct Our Nonclinical And Clinical Trials And If These Third-parties Perform In An Unsatisfactory Manner, Our Business Could Be Substantially Harmed.

We have relied upon and plan to continue to rely upon third-party CROs to conduct and monitor and manage data for our ongoing nonclinical and clinical programs, and may not have all of the necessary contractual relationships in place to do so. Once we have established contractual relationships with such third-party CROs, we will have only limited control over their actual performance of these activities. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol, legal, regulatory, environmental and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities.

We and our CROs and other vendors are required to comply with current Good Manufacturing Practices, or cGMP, current Good Clinical Practices, or cGCP, and Good Laboratory Practice, or GLP, and recently-changing regulations governing clinical trial subject informed consent, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the EU and any comparable foreign regulatory agency for all of our product candidates in nonclinical and clinical development. Regulatory authorities enforce these regulations through periodic inspections of study sponsors, principal investigators, trial sites and other contractors. If we or any of our CROs or vendors fail to comply with applicable regulations, the data generated in our nonclinical and clinical trials may be deemed unreliable and the FDA, EMA or any comparable foreign regulatory agency may require us to perform additional nonclinical and clinical trials before approving our marketing applications. The FDA has been reforming its clinical trial inspections process and procedures in ways that could result in more frequent and/or more rigorous inspections of CROs. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that all of our clinical trials comply with cGCP regulations. In addition, our clinical trials must be conducted with products produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

Our business involves the controlled use of hazardous materials, chemicals, biologicals and radioactive compounds. Substantially all such use is outsourced to third-party CRO manufacturers and clinical sites. Although we believe that our third-party CROs safety procedures for handling and disposing of such materials comply with industry standards, there will always be a risk of accidental contamination or injury. By law, radioactive materials may only be disposed of at certain approved facilities. If liable for an accident, or if it suffers an extended facility shutdown, we or our CROs could incur significant costs, damages or penalties.

Except for remedies available to us under our agreements with our CROs, we cannot control whether or not they devote sufficient time and resources to our ongoing nonclinical and clinical programs. If our CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. Our CROs may also generate higher costs than anticipated. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenue could be delayed.

If any of our relationships with these third-party CROs are terminated, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. If we are able to replace a CRO, switching or adding additional CROs involves additional cost and requires management time and focus and there is a natural transition period when a new CRO commences work. As a result, delays could occur, which could hurt our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter similar challenges or delays in the future.

### The Failure Of Our Suppliers To Supply Us With The Agreed Upon Drug Substance Or Drug Product Could Hurt Our Business.

We do not currently, and do not expect to in the future, independently conduct manufacturing activities for our product candidates. We expect to rely on third-party suppliers for the drug substance and drug product for our product candidates. The failure of these suppliers to perform as contracted, or the need to identify new suppliers, could result in a delay in the development of our product candidates. A delay in the development of our product candidates or having to enter into a new agreement with a different third-party on less favorable terms than we have with our current suppliers could hurt our business.

We And Our Collaborators And Contract Manufacturers Are Subject To Significant Regulation With Respect To Manufacturing Our Product Candidates. The Manufacturing Facilities On Which We Rely May Not Continue To Meet Regulatory Requirements Or May Not Be Able To Meet Supply Demands.

All entities involved in the preparation of therapeutics for clinical trials or commercial sale, including our existing contract manufacturers for our product candidates, are subject to extensive regulation. A finished therapeutic product and the active pharmaceutical ingredient ("API") for such product (whether investigational or approved for commercial sale) must be manufactured in accordance with cGMP. These regulations govern manufacturing processes and procedures, including record keeping, and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of contaminants or to inadvertent changes in the properties or stability of our product candidates that may not be detectable in final product testing. We, our collaborators or our contract manufacturers must supply all necessary documentation in support of an NDA or foreign equivalent on a timely basis and must adhere to GLP and cGMP regulations enforced by the FDA and other regulatory agencies through their facilities inspection program. Some of our contract manufacturers have never produced a commercially approved pharmaceutical product and therefore have not obtained the requisite regulatory authority approvals to do so. The facilities and quality systems of some or all of our collaborators and third-party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of our product candidates or any of our other potential products. In addition, the regulatory authorities may, at any time, audit or inspect a manufacturing facility involved with the preparation of our product candidates or our other potential products or the associated quality systems for compliance with the regulations applicable to the activities being conducted. Although we oversee the contract manufacturers, we cannot control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements. If these facilities do not pass a pre-approval plant inspection, regulatory approval of the products may not be granted or may be substantially delayed until any violations are corrected to the satisfaction of the regulatory authority, if ever.

The regulatory authorities also may, at any time before or following approval of a product for sale, inspect the manufacturing facilities of our collaborators and third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulations occurs independent of such an inspection or audit, approval may be delayed or denied, and we or the relevant regulatory authority may require remedial measures that may be costly and/or time consuming for us or a third party to implement, and that may include the temporary or permanent suspension of a clinical trial or commercial sales or the temporary or permanent closure of a facility.

If we, our collaborators or any of our third-party manufacturers fail to maintain regulatory compliance, the FDA or another applicable regulatory authority could impose regulatory sanctions including, among other things, refusal to approve a pending application our product candidates, withdrawal of an approval or suspension of production, civil or criminal prosecution, or prosecution under the False Claims Act (with the potential for qui tam suits by relators for perceived violation) in connection with any sales of our drug to the U.S. government or related healthcare programs.

Additionally, if the supply from one approved manufacturer is interrupted, an alternative manufacturer would need to be qualified through an NDA supplement or equivalent foreign regulatory filing, which could result in further delay. The regulatory agencies may also require additional studies if a new manufacturer is relied upon for commercial production. Switching manufacturers may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

These factors could cause us to incur higher costs and could cause the delay or termination of clinical trials, regulatory submissions, required approvals or commercialization of our product candidates. Furthermore, if our suppliers fail to meet contractual requirements and we are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our clinical trials may be delayed, or we could lose potential revenue.

Our Reliance On Third-parties Requires Us To Share Our Trade Secrets And Other Proprietary Confidential Information, Which Increases The Possibility That A Competitor Will Discover Them Or That Our Trade Secrets Will Be Misappropriated Or Disclosed.

Because we rely on third parties to develop and manufacture our product candidates, we must, at times, share trade secrets and other proprietary confidential information with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, collaborative research agreements, consulting agreements or

other similar agreements with our collaborators, advisors, employees, and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, such as trade secrets. Despite the contractual provisions employed when working with third-parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure of our proprietary confidential information could impair our competitive position and may harm our business.

### Risks Related To Our Intellectual Property

If We Or Any Of Our Future Licensors Are Unable To Obtain And Maintain Effective IP Rights For Our Technologies, Product Candidates Or Any Future Product Candidates, Or If The Scope Of The IP Rights Obtained Is Not Sufficiently Broad, We May Not Be Able To Compete Effectively In Our Markets.

We expect to rely upon a combination of marketing exclusivity, data exclusivity, patents, trade secret protection and contractual confidentiality obligation to protect the intellectual property related to our technologies and product candidates. Our success depends in large part on our and our eventual licensors', if any, ability to obtain and maintain intellectual property protection in the United States and in other countries with respect to our proprietary technology and product candidates.

The "composition of matter" patent covering iclaprim expired on December 2, 2016. Iclaprim has been designated as a Qualified Infectious Disease Product ("QIDP") by the FDA. This designation qualifies iclaprim for five years of marketing exclusivity to be added to the five years of exclusivity already provided by the Food, Drug, and Cosmetic Act for a New Chemical Entity. This therefore will provide 10 years of market exclusivity from the date of approval. As part of this QIDP designation, FDA's review of our drug application, when submitted, will also be expedited. In addition, we have filed additional patents around the new formulation of iclaprim. We have filed and will continue to file patent applications in the United States and abroad related to our novel and inventive technologies and products that are important to our business. This process is expensive and time consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost, in a timely manner or in all jurisdictions. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain any issued patents, covering technology that we license from third-parties. Therefore, any issued patents and our patent applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain and involves complex legal and factual questions for which legal principles are evolving or remain unsolved. Any patent applications that we own, or in-license, may fail to result in issued patents with claims that cover our product candidates in the United States or in foreign countries. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions remain confidential for a period of time after filing, and some remain so until issued. Therefore, we cannot be certain that we were the first to file any patent application related to our product candidates, or whether we were the first to make the inventions claimed in our owned patents or pending patent applications, nor can we know whether those from whom we license patents were the first to make the inventions claimed or were the first to file. As a result, the issuance, scope, validity, enforceability and commercial value of any patent rights we obtain are highly uncertain. There is no assurance that all potentially relevant prior art relating to any patents we obtain and any pending patent applications have been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application, or affect the scope of any claims issuing from a pending patent application. Even if patents do successfully issue, and even if such patents cover our product candidates, third-parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed, found unenforceable or invalidated, which could allow third-parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. Furthermore, even if they are unchallenged, any patents we obtain and any pending patent applications may not adequately protect our intellectual property, provide exclusivity for our product candidates, prevent others from designing around our claims or provide us with a competitive advantage. Any of these outcomes could impair our ability to prevent competition from thirdparties.

We cannot offer any assurances about which, if any, patents will issue and in which jurisdictions, the breadth of any such patent, or whether any issued patents will be found invalid and unenforceable or will be challenged by third-parties. Any successful opposition to these patents or any other patents owned by or licensed to us after patent issuance could deprive us of rights necessary for the successful commercialization of any product candidates that we may develop. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product candidate under patent protection could be reduced.

### We May Not Have Sufficient Patent Terms To Effectively Protect Our Products And Business.

Patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is first filed in the United States as a non-provisional patent application. Although various extensions or term adjustments may be available, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such product candidates are commercialized. As a result, any patent portfolio that we may own or license may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours or otherwise provide us with a competitive advantage. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be open to competition from generic medications.

While patent term extensions in the United States and under supplementary protection certificates in the EU may be available to extend the patent exclusivity term for our product candidates based on the time spent in regulatory review before the FDA or EMA, respectively, we cannot provide any assurances that any such patent term extension will be obtained and, if so, for how long.

# Patent Policy And Rule Changes Could Increase The Uncertainties And Costs Surrounding The Prosecution Of Our Patent Applications And The Enforcement Or Defense Of Our Issued Patents.

Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. The laws of foreign countries may not protect our rights to the same extent as the laws of the United States, and vice versa. Assuming the other requirements for patentability are met, in the United States prior to March 15, 2013, the first to invent the claimed invention is entitled to the patent, while outside the United States, the first to file a patent application is entitled to the patent. After March 15, 2013, under the Leahy-Smith America Invents Act, or the AIA, enacted on September 16, 2011, the United States has moved to a first inventor to file system. The AIA also includes a number of significant changes that affect the way patent applications will be prosecuted and may also affect patent litigation. The effects of these changes are currently unclear as the U.S. Patent and Trademark Office, or the USPTO, is still implementing various regulations, the courts have yet to address many of these provisions and the applicability of the act and any new regulation's effect on specific patent applications discussed herein have not been determined and would need to be reviewed. In general, the AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. In addition, recent U.S. Supreme Court rulings have narrowed the scope of patent-eligible subject matter and of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on future actions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents

# Third-party Claims Of Intellectual Property Infringement May Expose Us To Substantial Liability Or Prevent Or Delay Our Development And Commercialization Efforts.

Our commercial success depends in part on our ability to develop, manufacture, market and sell our product candidates, if approved, and use our proprietary technology without alleged or actual infringement, misappropriation or other violation of the patents and proprietary rights of third-parties. There have been many lawsuits and other proceedings involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and reexamination proceedings before the USPTO and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third-parties, exist in the fields in which we are developing product candidates. Some claimants may have substantially greater resources than we do and may be able to sustain the costs of complex intellectual property litigation to a greater degree and for longer periods of time than we could. In addition, patent holding companies that focus solely on extracting royalties and settlements by enforcing patent rights may target us. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the intellectual property rights of third-parties.

Third-parties may assert that we are employing their proprietary technology without authorization. There may be third party patents or patent applications with claims to compositions, formulations, methods of manufacture or methods of treatment related to the use or manufacture of our product candidates. We cannot be sure that we know of each and every patent and pending application in the United States and abroad that is relevant or necessary to the commercialization of our product candidates. Because patent applications can take many years to publish or issue, there may be currently pending patent applications that may later result in issued patents upon which our product candidates may infringe. In addition, third-parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any compositions formed during the manufacturing process or any final product

itself, the holders of any such patents may be able to block our ability to commercialize such a product candidate unless we obtained a license under the applicable patents, or until such patents expire or are finally determined to be invalid or unenforceable. Similarly, if any third-party patents were held by a court of competent jurisdiction to cover aspects of our compositions, formulations, or methods of treatment, prevention, manufacture or use, the holders of any such patents may be able to block our ability to develop and commercialize the applicable product candidate unless we obtained a license or until such patent expires or is finally determined to be invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms, or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates, if approved. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our allegedly infringing products or processes or obtain one or more licenses from third-parties, which may be impossible or require substantial time and monetary expenditure.

## Additional Competitors Could Enter The Market With Generic Versions Of Our Products, Which May Result In A Decline In Sales Of Affected Products.

Under the Hatch-Waxman Act, in the United States, a pharmaceutical manufacturer may file an abbreviated new drug application (ANDA), seeking approval of a generic copy of an approved innovator product. Under the Hatch-Waxman Act, a manufacturer may also submit an NDA under Section 505(b) (2) that references the FDA's prior approval of the innovator product. A 505(b)(2) NDA product may be for a new or improved version of the original innovator product. Hatch-Waxman also provides for certain periods of regulatory exclusivity, which require the FDA to delay FDA approval, or, in some circumstances, FDA filing and reviewing, of an ANDA or 505(b)(2) NDA. These include, subject to certain exceptions, the periods during which an FDA-approved drug is subject to New Chemical Entity exclusivity, new clinical study exclusivity, pediatric exclusivity, Orphan Drug exclusivity and/or QIDP exclusivity. In addition to the benefits of regulatory exclusivity, an innovator NDA holder may have patents claiming the active ingredient, product formulation or an approved use of the drug, which would be listed with the product in the FDA publication, "Approved Drug Products with Therapeutic Equivalence Evaluations," known as the "Orange Book." If there are patents listed in the Orange Book, an ANDA or 505(b)(2) applicant that seeks to market its product before expiration of the patents must include in the ANDA what is known as a "Paragraph IV certification," challenging the validity or enforceability of, or claiming non-infringement of, the listed patent or patents. Notice of the certification must be given to the innovator, too, and if within 45 days of receiving notice the innovator sues to protect its patents, approval of the ANDA or 505(b)(2) NDA is stayed for 30 months, or as lengthened or shortened by the court.

Accordingly, if any of our product candidates are approved, competitors could file ANDAs for generic versions of our product candidates, or 505(b) (2) NDAs that reference our product candidates, respectively. If there are patents listed for our product candidates in the Orange Book, those ANDAs and 505(b)(2) NDAs would be required to include a certification as to each listed patent indicating whether the ANDA applicant does or does not intend to challenge the listed patent(s). We cannot predict whether any patents issuing from our pending patent applications will be eligible for listing in the Orange Book, how any generic competitor would address such patents, whether we would sue on any such patents or the outcome of any such suit.

We believe that approval of iclaprim for marketing in the United States and the EU would be the first regulatory approval of this drug substance in either jurisdiction. As such, iclaprim should be entitled to five years of regulatory exclusivity in the United States as a New Chemical Entity, beginning from the date of marketing approval ("NCE Exclusivity"). Iclaprim also received QIDP designation from the FDA for both ABSSSI and HABP in July 2015, pursuant to the Generating Antibiotic Incentives Now Act ("GAIN Act") enacted under Title VIII of the FDA Safety and Innovation Act ("FDASIA") in 2012. The QIDP designation grants iclaprim, if approved for one of the QIDP-designated indications, an additional five years of market exclusivity added sequentially to the NCE Exclusivity, or any applicable 3-year exclusivity period, for a total of up to 10 years exclusivity from the date of marketing approval, and also makes iclaprim's NDA eligible to receive Fast Track designation and Priority Review. The FDA could disagree with our characterization of iclaprim as being entitled to NCE Exclusivity, rescind the QIDP designation, or third-parties could successfully challenge the iclaprim NCE Exclusivity or QIDP determinations, which could shorten or eliminate the relevant exclusivity periods and subject iclaprim to an earlier generic competition. Such generic competition would likely cause sales of iclaprim to decline rapidly and materially, and if so we may have to write off a portion or all of the intangible assets associated with the affected product and our ability to generate revenue could be compromised.

We may not be successful in securing or maintaining proprietary patent protection for products and technologies we develop or license. Moreover, in late 2016 the FDA amended its regulations governing the listing of patents and patent Use Codes in the Orange Book in ways that have not yet been fully interpreted by the agency or the courts. These new regulations contain more stringent requirements for Use Code listings, penalties for "untimely" listing of patent information, and also introduced a new process whereby generic competitors or others may challenge the appropriateness of patent information including Use Codes submitted by NDA sponsors. If any patents that are granted and listed in the Orange Book are successfully challenged by way of the regulatory process or by way of a Paragraph IV certification and subsequent litigation, the affected product could immediately face generic competition and its sales would likely decline rapidly and materially. Should sales decline, we may have to write off a portion or all of the intangible assets associated with the affected product and our ability to generate revenue could be compromised.

# Although We Are Not Currently Involved In Any Litigation, We May Be Involved In Lawsuits To Protect Or Enforce Our Patents Or The Patents Of Our Licensors, Which Could Be Expensive, Time Consuming And Unsuccessful.

Competitors may infringe upon our patents or the patents of our licensors. Although we are not currently involved in any litigation, if we or one of our licensing partners were to initiate legal proceedings against a third-party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid and/or unenforceable, or request declaratory judgment that there is no infringement. They could also challenge the patent being enforced against them in an administrative proceeding before the USPTO, European Patent Office or other relevant national or regional government body. In patent litigation in the United States, defendant counterclaims alleging invalidity, noninfringement and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or lack of written description. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld material relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable. An infringement litigation defendant may also instigate an Inter Partes Review of the patent at issue before the USPTO, concurrent with the infringement suit. The Inter Partes Review could result in a stay of the infringement litigation, which could significantly extend the cost and time to resolve the matter, and could also result in the USPTO declaring some or all of the patent claims to be invalid. Such an invalidity ruling by the USPTO could materially compromise our ability to enforce some or all of the patent claims against a competitor in a timely manner.

Interference or derivation proceedings provoked by third-parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms, or at all. Our defense of litigation or interference/derivation proceedings may fail and, even if successful, may result in substantial costs, and distract our management and other employees.

In addition, the uncertainties associated with litigation and/or administrative proceedings before any patent offices could compromise our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third-parties or enter into development partnerships that would help us bring our product candidates to market, if approved.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could hurt the market price of the ADSs and our ordinary shares.

## Failure To Secure Or Maintain Adequate Protection For Our Trademarks Could Adversely Affect Our Business.

We have filed a United States, Canadian and International (Madrid Protocol) trademark application designating Australia, China, European Community, India, Israel, Japan, Mexico and Turkey for the marks, "Motif Bio" and "Motif BioSciences". A proposed product name for iclaprim was submitted to the FDA in April 2017. If the United States or any foreign trademark offices raise any objections, we may be unable to overcome such objections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third-parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. If opposition or cancellation proceedings are filed against our trademarks, our trademarks may not survive such proceedings.

Furthermore, third-parties may allege in the future, that a trademark, trade name or trade dress, or a United States Adopted Name (USAN) or International Nonproprietary Name (INN) that we elect to use for our product candidates may cause confusion in the marketplace and/or not be acceptable to the relevant regulatory agencies. We evaluate such potential allegations in the course of our business, and such evaluations may cause us to change our commercialization or branding strategy for our product candidates, which

may require us to incur additional costs. Moreover, any name we propose to use with our product candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names, or implied product claims suggested by a trade name that the FDA, may deem to be misleading. If the FDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third-parties and be acceptable to the FDA.

At times, competitors may adopt trademarks, trade names or trade dress similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. Over the long term, if we are unable to establish name recognition based on our trademarks, trade names and/or trade dress, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks (including trade names and trade dress), domain names or copyrights may be ineffective and could result in substantial costs and diversion of resources.

In addition, there could be potential domain name, trade name, trade dress or trademark infringement claims brought by owners of other registered trademarks alleging that the use of a corporate name or logo, product names or other signs by which we distinguish our products and services are infringing their trademark rights. The outcome of such claims is uncertain and may adversely affect our freedom to use our corporate name or other relevant signs. If litigation arises in this area, it may lead to significant costs and diversion of management and employee attention.

We May Be Subject To Claims That Our Employees, Consultants Or Independent Contractors Have Wrongfully Used Or Disclosed Confidential Information Of Third-Parties Or That Our Employees Have Wrongfully Used Or Disclosed Alleged Trade Secrets Of Their Former Employers.

We may employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for us, and we are not currently subject to any claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third-parties, we may in the future be subject to such claims. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

## We May Be Subject To Claims Challenging The Inventorship Of Our Patents And Other Intellectual Property.

Although we are not currently experiencing any claims challenging the inventorship of our patent applications or ownership of our intellectual property, we may in the future be subject to claims that former employees, collaborators or other third-parties have an interest in our patent applications, patents or other intellectual property as an inventor or co-inventor. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

## We May Not Be Able To Protect Our Intellectual Property Rights Throughout The World.

Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Further, licensing partners may not prosecute patents in certain jurisdictions in which we may obtain commercial rights, thereby precluding the possibility of later obtaining patent protection in these countries. Consequently, we may not be able to prevent third-parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert

our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third-parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

### Risks Related To Government And Regulation

Even If One Or More Of Our Product Candidates Obtains Regulatory Approval, We Will Be Subject To Ongoing Obligations And Continued Regulatory Requirements, Which May Result In Significant Additional Expense.

If regulatory approval is obtained for any of our product candidates, the product will remain subject to continual regulatory oversight. Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the product candidate. In addition, if the FDA, the EMA or any comparable foreign regulatory authority approves any of our product candidates, we will be subject to ongoing regulatory obligations and oversight by regulatory authorities, including with respect to the manufacturing processes, labeling, packing, distribution, adverse event reporting, storage, advertising and marketing restrictions, and recordkeeping and, potentially, other post-marketing obligations, all of which may result in significant expense and limit our ability to commercialize such products. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and cGCPs for any clinical trials that we conduct post-regulatory approval.

In addition, approved products, manufacturers and manufacturers' facilities, as well as suppliers, contract manufacturers and their facilities, are subject to continual review and periodic inspections. Later discovery of new or previously unknown problems with a product, including adverse events of unanticipated type, severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product;
- withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, disgorgement of profits or revenues, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us;
- suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

If any of these events occurs, our ability to sell such product may be impaired, and we may incur substantial additional expense to comply with regulatory requirements. The policies of the FDA, the EMA or any comparable foreign regulatory agency may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any regulatory approval that we may have obtained, which would compromise our ability to achieve or sustain profitability.

Our facilities are also subject to other health laws and regulations, at the federal, state and local government levels. These laws and regulations require compliance with various licensing, certification and other requirements, including those relating to the qualifications of personnel, laboratory certification, the adequacy of care in clinical trials, required governance structures, facility licensure or certification, environmental protection, and maintenance and protection of records. We may be subject to regulatory fines, penalties or other sanctions if our operations or facilities are found to not comply with applicable laws and regulations. Further, these laws and regulations are subject to change. New regulations could be adopted, which could force us to change our operational approach or lead to a finding by regulators that our facilities do not meet legal requirements. We believe that we currently operate our facilities in material compliance with all applicable licensing laws and regulations, but there is a risk that one or more government agencies could take a contrary position. Such occurrences, regardless of their outcome, could impact our ability to operate.

We are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control and disposal of hazardous or potentially hazardous substances. Some of these laws require us to obtain licenses or permits to conduct our operations. We have policies and procedures in place to ensure compliance with these laws and to minimize the risk of occupational exposure to hazardous materials. We do not expect the operations of our products to produce significant quantities of hazardous or toxic waste or radiation that would require the use of extraordinary disposal practices. Although the costs to comply with these applicable laws and regulations have not been material, we cannot predict the impact on our business of new or amended laws or regulations or any changes in the way existing and future laws and regulations are interpreted or enforced, nor can we ensure we will be able to obtain or maintain any required licenses or permits.

Enacted And Future Legislation, as Well as Regulatory Policy Changes, May Increase The Difficulty And Cost For Us To Obtain Regulatory Approval Of And Commercialize Our Product Candidates, And May Affect The Prices We May Set.

In the United States and the EU, there have been a number of legislative, regulatory and proposed changes regarding the healthcare system. These changes could prevent or delay regulatory approval of our product candidates, restrict or regulate post-approval activities, provide advantages to subsequent competitors, expedite the entry of competing generic versions of our products and affect our ability to sell profitably any products for which we obtain regulatory approval and begin to commercialize.

As a result of legislative proposals and the trend toward managed healthcare in the United States, third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement of new drugs. In the United States, the Medicare Modernization Act changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly under a new Part D and introduced a new reimbursement methodology based on average sale prices for physician-administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost-reduction initiatives and other provisions of this legislation could decrease the coverage and reimbursement that we receive for any approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow the Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, PPACA, a sweeping law intended, among other things, to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on the health industry, and impose additional health policy reforms. PPACA, among other things: increased the statutory minimum Medicaid rebates a manufacturer must pay under the Medicaid Drug Rebate Program; addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; and established a new Medicare Part D coverage gap discount program in which manufacturers must provide 50% point-of-sale discounts on negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturer's outpatient drugs to be covered under Part D and implemented payment system reforms, including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models. Further, PPACA imposed a significant annual nondeductible fee on entities that manufacture or import specified branded prescription drug products and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs. We expect that additional healthcare reform measures will likely be adopted in the future, any of which may increase our regulatory burdens and operating costs and limit the amounts that federal, state and foreign governments will reimburse for healthcare products and services, which could result in reduced dema

Moreover, other legislative changes have also been proposed and adopted in the United States since PPACA was enacted. On August 2, 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021 was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect on April 1, 2013 and will stay in effect through 2024 unless additional Congressional action is taken. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could compromise the ability of patients and third-party payors to purchase our product candidates.

Moreover, since January 2017, Congress and the Trump Administration have been engaged in various efforts to repeal or materially modify various aspects of PPACA; the results and effects of such ongoing efforts remain to be seen but could affect our business operations and prospects in unknown ways. It is unclear how PPACA and other laws ultimately will be implemented. Some of the provisions of PPACA have yet to be fully implemented, while certain provisions have been subject to judicial and Congressional challenges. Thus, while the full impact of PPACA, or any law replacing elements of it, on our business remains unclear, if we ever obtain regulatory approval and commercialization of one or more of our product candidates, these laws may result in reductions in healthcare funding, which could have a material adverse effect on our customers and accordingly, our financial operations. Similarly, an inability of Congress to enact timely budgeting and appropriations legislation may result in interruptions of governmental funding, of undetermined duration, which could impact reimbursement under federal health programs. We cannot be sure whether additional legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates may be.

In the EU, proposed new clinical trial regulations will centralize clinical trial approval, which eliminates redundancy, but in some cases, this may extend timelines for clinical trial approvals due to potentially longer wait times. In the U.S., regulatory changes to the rules governing clinical trial research, including the informed consent requirements, are now being implemented. Proposals to require specific consents for use of data in research, among other measures, may increase the costs and timelines for our product development efforts. Austerity measures in certain European nations may also affect the prices we are able to seek if our products are approved, as discussed below.

Both in the United States and in the EU, legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We do not know whether additional legislative changes will be enacted, whether the regulations, guidance or interpretations will be changed, or what the impact of such changes on the regulatory approvals of our product candidates, if any, may be.

In the United States, significant political pressure has been placed on the cost of drug products and both Congress and regulatory agencies have been evaluating and implementing measures designed to lower drug prices and expedite the entry of generic competition. The ultimate impact of such efforts remains to be seen but could materially adversely affect the business prospects of the company and our drug product candidates.

Our Relationships With Customers, Consultants And Payors Will Be Subject To Applicable Fraud And Abuse, Privacy And Security, Transparency And Other Healthcare Laws And Regulations, Which, If Violated, Could Expose Us To Criminal Sanctions, Civil Penalties, Exclusion From Government Healthcare Programs, Contractual Damages, Reputational Harm And Diminished Profits And Future Earnings.

Healthcare providers, suppliers, physicians, non-physician practitioners and other allied healthcare professionals, and others play a primary role in the recommendation and prescription of any products for which we may in the future obtain regulatory approval and commercialize. Our current and future arrangements with third party payors, consultants, customers, physicians, non-physician practitioners and other allied healthcare professionals, and others may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations, including, but not limited to, federal and state laws and regulations in the United States, that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain regulatory approval. Potentially applicable healthcare laws and regulations include, but are not limited to, the following:

• Provisions in Title XI of the Social Security Act, commonly referred to as the "Anti-Kickback Statute," 42 U.S.C. § 1320a-7b(b), prohibit the knowing and willful offer, payment, solicitation or receipt of remuneration, directly or indirectly, in return for the referral of patients or arranging for the referral of patients, or in return for the recommendation, arrangement, purchase, lease or order of items or services that are covered, in whole or in part, by a federal healthcare program such as Medicare or Medicaid. The definition of "remuneration" has been broadly interpreted to include anything of value such as gifts, discounts, rebates, waiver of payments, the opportunity to generate business or providing anything at more or less than its fair market value, as applicable. Many states have adopted similar prohibitions against kickbacks and other practices that are intended to influence the purchase, lease or ordering of healthcare items and services reimbursed by a governmental health program or state Medicaid. Some of these state prohibitions apply to remuneration for referrals of healthcare items or services reimbursed by any payor, including private payors. Both parties to a prohibited arrangement are equally liable. Thus, even where the business did not currently accept Medicare, Medicaid Tricare, or other forms of federally funded reimbursement such as grants, we could still be subject to the Anti-Kickback Statute (and applicable state anti-kickback laws) to the extent we have referral or financial relationships with other parties that do participate in those programs. The Anti-Kickback Statute is a federal second degree felony punishable by up to five years' imprisonment, and claims filed in violation of its provisions may result in civil monetary penalty statute or additional liability under the false claims act and exclusion statutes.

- The federal government is authorized to impose criminal, civil and administrative penalties on any person or entity that files a false claim for payment from the Medicare or Medicaid programs. False claims filed with private insurers can also lead to criminal and civil penalties under state law as well as treble damages for any overpayments or prohibited payments from federal programs. While the criminal statutes are generally reserved for instances of fraudulent intent, the government applies criminal, civil and administrative penalty statutes to a range of circumstances. Under the "qui tam" provisions of the Federal False Claims Act, 31 U.S.C. §§ 3729-2722, private parties ("relators" or "whistleblowers") may bring actions against providers on behalf of the federal government. Such private parties are entitled to share in any amounts recovered by the government through trial or settlement. Qui tam cases are sealed by the court at the time of filing. The only parties privy to the information contained in the complaint are the relator, the federal government and the presiding court. In recent years, the number of suits brought by private individuals has increased dramatically. Both direct enforcement activity by the government and whistleblower lawsuits under the Federal False Claims Act have increased significantly in recent years and have increased the risk of healthcare companies like us having to defend a false claims action, repay claims paid by the government, pay fines or be excluded from the Medicare and Medicaid programs. In addition, under the PPACA, providers must report and refund the overpayments before the later of 60 days after the overpayment was identified or the date any corresponding cost report is due, if applicable. Any overpayment that is retained after this deadline is considered an obligation subject to an action under the Federal False Claims Act. A number of states have enacted false claims acts that are applicable to claims submitted to state Medicaid programs and are similar to the Federal False Claims Act. Section 6031 of the Deficit Reduction Act of 2005 as amended, or DRA, amended federal law to encourage these types of state laws, along with a corresponding increase in state initiated false claims enforcement efforts. Currently, most states and the District of Columbia have some form of state false claims act. The OIG has reviewed various state false claims acts and on numerous occasions has determined that some state false claims acts satisfy the DRA standards. Several states were given a grace period to amend their false claims acts to come into compliance with recent amendments to the Federal False Claims Act. We anticipate this figure will continue to increase.
- The Civil Monetary Penalty statute, 42 U.S.C. § 1320a-7a, imposes significant monetary penalties that may be assessed against each instance of certain violations, including the presentment of a false claim, the provision of anything of value to a beneficiary that is likely to induce that individual to order or receive a particular item or service, contracting with an individual or entity that has been excluded from federal program participation, or failure to return an identified overpayment. Each day of a continued violation constitutes a separate instance for which another penalty may be assessed. The Civil Monetary Penalty statute authorizes penalties for violations of the Anti-Kickback Statute and False Claims Act, so that the penalties are cumulative with treble damages, fines, and other liability.
- The Exclusion statute, 42 U.S.C. § 1320a-7, requires the exclusion of entities and individuals who have been convicted of federal-program related crimes or health care felony fraud or controlled substance charges. Among other things, it permits the exclusion of those that have been convicted of any form of fraud, the anti-kickback statute, for obstructing an investigation or audit, misdemeanor controlled substance charges, and those whose health care license has been revoked or suspended. If the Company were to be excluded, its candidate products would be ineligible for reimbursement from any federal programs, including Medicare and Medicaid, and no other entity participating in those programs would be permitted to enter into contracts with the Company. In order to preserve access to beneficial drugs, the government may elect to exclude officers and key employees of manufacturers, rather than excluding the organization. Such enforcement actions would prohibit the Company from engaging those individuals, which could adversely affect operations, and could result in significant reputational harm.
- The Privacy Rule or the Security Rule of the Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, impose various obligations with respect to safeguarding the privacy, security and transmission of individually identifiable health information, and may implicate certain aspects of our business relationships. HITECH significantly expanded the scope of the privacy and security requirements under HIPAA and increased penalties for violations. Currently, violations of the HIPAA privacy, security and breach notification standards may result in civil penalties ranging from \$100 to \$50,000 per violation, subject to a cap of \$1.5 million in the aggregate for violations of the same standard in a single calendar year. The amount of penalty that may be assessed depends, in part, upon the culpability of the applicable covered entity or business associate in committing the violation. Some penalties for certain violations that were not due to "willful neglect" may be waived by the Secretary of HHS in whole or in part, to the extent that the payment of the penalty would be excessive relative to the violation. HITECH also authorized state attorney generals to file suit on behalf of residents of their states. Applicable courts may award damages, costs and attorneys' fees related to violations of HIPAA in such cases. HITECH also mandates that the Secretary of HHS conduct periodic compliance audits of a cross-section of HIPAA covered entities and business associates. Every covered entity and business associate is subject to being audited, regardless of the entity's compliance record. States may impose more protective privacy restrictions in laws related to health information and may afford individuals a private right of action with respect to the violation of such laws. Both state and federal laws are subject to modification or enhancement of privacy protection at any time.

- The criminal healthcare fraud provisions of 18 U.S.C. §§ 1347, 1349, impose criminal liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme or artifice to defraud any healthcare benefit program, including private third-party payors, or to obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of, or payment for, healthcare benefits, items or services or for attempting or conspiring to do the same.
- The federal Physician Payments Sunshine Act under PPACA and its implementing regulations, requires certain manufacturers of drugs, devices, biologics and medical supplies to annually report to the Centers for Medicare & Medicaid Services information related to payments and other transfers of value made by such manufacturers to physicians and teaching hospitals, and ownership and investment interests held by physicians or their immediate family members.
- Analogous laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements, research,
  distribution and claims involving healthcare items or services reimbursed by state governmental and non-governmental third-party payors,
  including private insurers. State laws may require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance
  guidelines and the relevant compliance guidance promulgated by the federal government, and states may require manufacturers to report
  information related to payments to physicians and other healthcare providers or marketing expenditures and other restrictions on drug manufacturer
  marketing practices.
- Sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs, patient assistance programs, and other business arrangements. Medicare Advantage and Medicaid managed care plan regulations prohibit certain forms of marketing to enrollees that are designed to discriminate against beneficiaries on the basis of their health conditions or history. These regulations may require modifications to marketing materials, and coordination with health plan or governmental regulators.
- We may have relationships with physicians or their immediate family members, including employment or independent contracting agreements for medical directorships or other professional services; joint ventures; royalties; compensation for seminar presentations or other educational services; payment of tuition, travel, and meal expenses for seminars to promote our candidate products; provision of recruiting arrangements with individual physicians and/or physician groups; loans to physicians; space or equipment leases; and various forms of physician practice support or assistance. These and other financial relationships with physicians may create financial and legal compliance risks under federal and state anti-kickback statutes, the federal Stark Law, 42 U.S.C. § 1395nn, and other state referral prohibitions as well as other legal and regulatory risks. The government has recently increased its enforcement efforts based on financial relationships with physicians, resulting in several significant and widely-publicized settlements. These investigations could have a material adverse financial impact on our operations and result in reputational harm.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available under the U.S. federal Anti-Kickback Statute and analogous state laws, it is possible that some of our current and future business activities could be subject to challenge under one or more of such laws. In addition, recent healthcare reform legislation has strengthened these laws. For example, PPACA, among other things, amends the intent requirement of the U.S. federal Anti-Kickback Statute and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them in order to be in violation. Moreover, PPACA provides that the government may assert that a claim including items or services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act.

Efforts to ensure that our business arrangements with third-parties will comply with applicable healthcare laws and regulations will involve substantial costs in order to comply with the Federal Sentencing Guidelines and comments as well as other federal guidance and memoranda describing the requirements of an effective compliance program. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations, agency guidance or case law involving applicable healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to, without limitation, significant civil, criminal and administrative penalties, damages, fines, exclusion from U.S. government funded healthcare programs, such as Medicare and Medicaid, imprisonment, disgorgement, enhanced government reporting and oversight, contractual damages, reputational harm, diminished profits and future earnings and/or the curtailment or restructuring of our operations. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses, result in reputational harm, or divert our management's attention from the operations of our business. If any of the physicians or other providers or entities with whom we expect to do business

are found to be not in compliance with applicable laws, they may be subject to similar penalties, including, without limitation, criminal, civil or administrative sanctions, including exclusions from government-funded healthcare programs.

We Are Subject To U.S. And Certain Foreign Export And Import Controls, Sanctions, Embargoes, Anti-Corruption Laws And Anti-Money Laundering Laws And Regulations. Compliance With These Legal Standards Could Impair Our Ability To Compete In Domestic And International Markets. We Can Face Criminal Liability And Other Serious Consequences For Violations Which Can Harm Our Business.

We are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors and other partners from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We may engage third-parties for clinical trials outside of the United States, to sell our products abroad once we enter a commercialization phase and/or to obtain necessary permits, licenses, patent registrations and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors and other partners, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

### Risks Related To The Ownership Of The ADSs, The ADS Warrants And Our Ordinary Shares

The Market Price Of The ADSs, The ADS Warrants And Our Ordinary Shares Is Likely To Be Volatile And May Continue to Fluctuate Due To Factors Beyond Our Control.

The trading price of our ADSs and ordinary shares has fluctuated, and is likely to continue to fluctuate, substantially. The trading price of our securities depends on a number of factors, including those described in this "Risk Factors" section, many of which are beyond our control and may not be related to our operating performance.

Our ADSs were sold in an initial offering on the NASDAQ Capital Market in November of 2016 at an offering price of \$6.98 per ADS and ADS Warrant combination. During the period beginning on November 23, 2016 and ending on March 1, 2018, the price per ADS has ranged from as low as \$5.25 to as high as \$13.75 and the price per ADS Warrant ranged from as low as \$0.89 to as high as \$9.94. During the same period, our ordinary share prices have ranged from as low as £0.22 to as high as £0.52. The market price of our securities may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- positive or negative results of testing and clinical trials by us, strategic partners or competitors;
- delays in in-licensing or acquiring additional complementary product candidates;
- any delay in the commencement, enrollment and the ultimate completion of clinical trials;
- technological innovations or commercial product introductions by us or competitors;
- failure to successfully develop and commercialize any of our product candidates, if approved;
- · changes in government regulations;
- developments concerning proprietary rights, including patents and litigation matters;
- public concern relating to the commercial value or safety of any of our product candidates;
- financing or other corporate transactions, or inability to obtain additional funding;

- failure to meet or exceed expectations of the investment community;
- announcements of significant licenses, acquisitions, strategic partnerships or joint ventures by us or our competitors;
- publication of research reports or comments by securities or industry analysts;
- general market conditions in the pharmaceutical industry or in the economy as a whole;
- · actual or anticipated fluctuations in our operating results;
- our cash position;
- changes in financial estimates or recommendations by securities analysts;
- potential acquisitions;
- the trading volume of ADSs on NASDAQ;
- sales of our ADSs or ordinary shares by us, our executive officers and directors or our shareholders in the future;
- · the impact on the financial markets or otherwise of the expected withdrawal of the United Kingdom from the European Union; and
- general economic and market conditions and overall fluctuations in the United States equity markets.

The share price of publicly traded emerging biopharmaceutical and drug discovery and development companies has been highly volatile and is likely to remain highly volatile in the future. In addition, the stock market in general has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of individual companies. Broad market and industry factors may hurt the market price of companies' stock, including ADSs, regardless of actual operating performance. Investors may lose some or all of their investment. Our ordinary shares have been, and continue to be, quoted on London's AIM. Continued quotation in this market could contribute to volatility in the ADS and ADS Warrant price.

Future Sales, Or The Possibility Of Future Sales, Of A Substantial Number Of The ADSs, The ADS Warrants Or Our Ordinary Shares Could Adversely Affect The Market Price Of The ADSs, The ADS Warrants Or Our Ordinary Shares.

Future sales of a substantial number of the ADSs, the ADS Warrants or our ordinary shares, or the perception that such sales will occur, could cause a decline in the market price of the ADSs, the ADS Warrants and/or our ordinary shares. As of December 31, 2017, we had 263,519,128 ordinary shares outstanding, including 25,589,020 ordinary shares represented by ADSs.

If Securities Or Industry Analysts Do Not Publish Research, Or Publish Inaccurate Or Unfavorable Research, About Our Business, The Market Price and Trading Volume Of The ADSs, The ADS Warrants And/Or Our Ordinary Shares Could Decline.

The trading market for the ADSs, the ADS Warrants and our ordinary shares will depend in part on the research and reports that securities or industry analysts publish about us or our business. If no or too few securities or industry analysts maintain coverage of our company, the trading price for the ADSs, the ADS Warrants and our ordinary shares would likely be negatively affected. If one or more of the analysts who cover us downgrade the ADSs, the ADS Warrants and/or our ordinary shares or publish inaccurate or unfavorable research about our business, the price of the ADSs, the ADS Warrants and/or our ordinary shares would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for the ADSs, the ADS Warrants and/or our ordinary shares could decrease, which might cause the price of the ADSs, the ADS Warrants and/or our ordinary shares and trading volume to decline.

We Incur Significant Costs As A Result Of Being A Public Company In The United States And The United Kingdom, And Our Management Is Required To Devote Substantial Time To Compliance Initiatives As Well As To Compliance With Ongoing U.S. and U.K. Reporting Requirements.

As a publicly traded company in the United States and United Kingdom, we incur significant accounting, legal and other expenses. We also incur costs associated with corporate governance requirements of the SEC, the NASDAQ Capital Market, Section 404 and other provisions of the Sarbanes-Oxley Act, as well as provisions of English law, including the Companies Act. These rules

and regulations increase our legal and financial compliance costs, including costs such as investor relations, stock exchange listing fees and shareholder reporting, and make some activities more time consuming and costly. The implementation and testing of such processes and systems may require us to hire outside consultants and incur other significant costs. Changing laws, regulations and standards, in the United States or the United Kingdom, relating to corporate governance and public disclosure and other matters, may be implemented in the future, which may increase our legal and financial compliance costs, make some activities more time consuming and divert management's time and attention to compliance activities. These laws, rules and regulations could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees, if any, or as executive officers.

Certain Shareholders Have The Ability To Exert Significant Influence With Respect To Corporate Activities And Their Interests May Not Coincide With Yours

As of March 1, 2018, the Amphion Group and Invesco Asset Management Limited beneficially own approximately 14.07% and 27.77% of our outstanding ordinary shares, respectively. As a result, they may be able to strongly influence the outcome of certain matters requiring shareholder approval, including mergers and other transactions. Their interests may not always coincide with your interests or the interests of our other shareholders. The concentrated holdings of our ordinary shares may prevent or discourage unsolicited acquisition proposals or offers that you may feel are in your best interests as one of our shareholders. Moreover, this concentration of share ownership may also adversely affect the trading price of our ordinary shares and ADSs if investors perceive a disadvantage in owning shares of a company with a significant shareholder.

The Dual Listing Of Our Ordinary Shares On AIM And The ADSs And ADS Warrants On The NASDAQ Capital Market May Adversely Affect The Liquidity And Value Of The ADSs, The ADS Warrants And/Or the Ordinary Shares.

Our ADSs and ADS Warrants are traded on the NASDAQ Capital Market, and our ordinary shares are listed on AIM. The dual listing of our ordinary shares on AIM and the ADSs and ADS Warrants on The NASDAQ Capital Market may dilute the liquidity of these securities in one or both markets. The price of the ADSs and ADS Warrants could also be adversely affected by trading in our ordinary shares on AIM, and vice versa.

Although our ordinary shares remain listed on AIM, we may decide at some point in the future to propose to our ordinary shareholders to delist our ordinary shares from AIM, and our ordinary shareholders may approve such delisting. We cannot predict the effect such delisting of our ordinary shares on AIM would have on the market price of the ADSs and ADS Warrants on the NASDAQ Capital Market.

Fluctuations In The Exchange Rate Between The U.S. Dollar And The Pound Sterling May Increase The Risk Of Holding The ADSs, The ADS Warrants And The Ordinary Shares.

Our share price is quoted on AIM in pence sterling, while the ADSs and ADS Warrants trade on the NASDAQ Capital Market in U.S. dollars. Fluctuations in the exchange rate between the U.S. dollar and the pound sterling may result in temporary differences between the value of the ADSs and ADS Warrants and the value of our ordinary shares, which may result in heavy trading by investors seeking to exploit such differences. In addition, as a result of fluctuations in the exchange rate between the U.S. dollar and the pound sterling, including those caused by Brexit, the U.S. dollar equivalent of the proceeds that a holder of the ADSs and ADS Warrants would receive upon a sale in the United Kingdom of any shares withdrawn from the depositary and the U.S. dollar equivalent of any cash dividends paid in pound sterling on our shares represented by the ADSs and ADS Warrants could also decline.

We Have Never Paid Cash Dividends, Do Not Expect To Pay Dividends In The Foreseeable Future And Our Ability To Pay Dividends, Or Repurchase Or Redeem The ADSs And Ordinary Shares, Is Limited By Law and Restricted By Our Covenants And/Or Terms Under the Hercules Loan Agreement.

We have not paid any dividends since our inception and do not anticipate paying any dividends on the ADSs and ordinary shares in the foreseeable future. Even if future operations lead to significant levels of distributable profits, we currently intend that any earnings will be reinvested in our business and that dividends will not be paid until we have an established revenue stream to support continuing dividends. Any proposal to pay future dividends to shareholders will be at the discretion of our board of directors after taking into account various factors our board of directors deems relevant, including, but not limited to, our business prospects, capital requirements, financial performance and new product development. Our ability to pay dividends is also restricted by the terms of the Hercules Loan Agreement. See "—The terms of our credit facility place restrictions on our operating and financial flexibility."

We Are A Foreign Private Issuer And, As A Result, We Are Not Subject To U.S. Proxy Rules And Are Subject To Exchange Act Reporting Obligations Under The Securities Exchange Act of 1934, As Amended, That, To Some Extent, Are More Lenient And Less Frequent Than Those Of A U.S. Domestic Public Company.

We report under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as a non-U.S. company with foreign private issuer status. Because we qualify as a foreign private issuer under the Exchange Act and although we are subject to English laws and regulations with regard to such matters, we are exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including: (1) the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations with respect to a security registered under the Exchange Act; (2) the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and (3) the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K upon the occurrence of specified significant events. In addition, foreign private issuers are not required to file their annual report on Form 20-F until four months after the end of each financial year, while U.S. domestic issuers that are accelerated filers are required to file their annual report on Form 10-K within 75 days after the end of each fiscal year. Foreign private issuers are also exempt from the Regulation Fair Disclosure, aimed at preventing issuers from making selective disclosures of material information. As a result of the above, you may not have the same protections afforded to shareholders of companies that are not foreign private issuers.

# As A Foreign Private Issuer And As Permitted By The Listing Requirements Of NASDAQ, We Rely On Certain Home Country Governance Practices Rather Than The Corporate Governance Requirements Of NASDAQ.

We continue to be a foreign private issuer as of the date of this filing. As a result, in accordance with NASDAQ Listing Rule 5615(a)(3), we comply with home country governance requirements and certain exemptions thereunder rather than complying with certain of the corporate governance requirements of NASDAQ.

English law does not require that a majority of our board of directors consist of independent directors or that our board committees consist of entirely independent directors. Our board of directors and board committees, therefore, may include fewer independent directors than would be required if we were subject to NASDAQ Listing Rule 5605(b)(1). In addition, we are not subject to NASDAQ Listing Rule 5605(b)(2), which requires that independent directors must regularly have scheduled meetings at which only independent directors are present.

Our Articles of Association ("Articles") provide that at any meeting of shareholders, a shareholder may designate another person to attend, speak and vote at the meeting on their behalf by proxy, but no such proxy shall be voted or acted upon at any subsequent meeting, unless the proxy expressly provides for this. English law does not require shareholder approval for the issuance of securities in connection with the establishment of or amendments to equity-based compensation plans for employees. To this extent, our practice varies from the requirements of NASDAQ Listing Rule 5635, which generally requires an issuer to obtain shareholder approval for the issuance of securities in connection with such events.

For an overview of our corporate governance principles, see "Item 10. Additional Information." As a result of the above, you may not have the same protections afforded to shareholders of companies that are not foreign private issuers.

We May Lose Our Foreign Private Issuer Status, Which Would Then Require Us To Comply With The Exchange Act's Domestic Reporting Regime And Cause Us To Incur Significant Legal, Accounting And Other Expenses.

We are a foreign private issuer and therefore we are not required to comply with all of the periodic disclosure and current reporting requirements of the Exchange Act applicable to U.S. domestic issuers. Losing our status as a foreign private issuer would require us to comply with all of the periodic disclosure and current reporting requirements of the Exchange Act applicable to U.S. domestic issuers, including preparing our consolidated financial statements in accordance with accounting standards generally accepted in the United States. In order to maintain our current status as a foreign private issuer, a majority of our ordinary shares must continue to be either directly or indirectly owned of record by non-residents of the United States. If a majority of our ordinary shares are instead held by U.S. residents then in order to maintain our foreign private issuer status, (i) a majority of our executive officers or directors must not be U.S. citizens or residents, (ii) more than 50% of our assets must not be located in the United States and (iii) our business must be administered principally outside the United States. As of the date of this Annual Report, more than 50% of our assets are located in the United States and our business is administered principally in the United States. If we lost this status, we would be required to comply with the Exchange Act reporting and other requirements applicable to U.S. domestic issuers, which are more detailed and extensive than the requirements for foreign private issuers. We may also be required to make changes in our corporate governance practices in accordance with various SEC and stock exchange rules. The regulatory and compliance costs to us under U.S. securities laws if we are required to comply with the reporting requirements applicable to a U.S. domestic issuer may be significantly higher than the cost we would incur as a foreign private issuer. As a result, we expect that a loss of foreign private issuer status would increase our legal and financial compliance co

to comply with the rules and regulations applicable to U.S. domestic issuers, it would make it more difficult and expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified members of our board of directors.

#### ADS Holders Are Not Shareholders And Do Not Have Shareholder Rights.

The Bank of New York Mellon, as depositary, has registered and delivered the ADSs on our behalf. Each ADS represents a specific number of underlying ordinary shares. The ADS holders are not treated as shareholders and do not have the rights of shareholders. The depositary is the holder of the shares underlying the ADSs. Holders of the ADSs have ADS holder rights. A deposit agreement among us, the depositary and the ADS holders, and the beneficial owners of ADSs, sets out ADS holder rights as well as the rights and obligations of the depositary. New York law governs the deposit agreement and the ADSs. Our shareholders have shareholder rights prescribed by English law. English law governs such shareholder rights. The ADS holders do not have the same voting rights as our shareholders. Shareholders are entitled to our notices of general meetings and to attend and vote at our general meetings of shareholders. At a general meeting, every shareholder present (in person or by proxy, attorney or representative) and entitled to vote has one vote on a show of hands. Every shareholder present (in person or by proxy, attorney or representative) and entitled to vote has one vote on a poll. This is subject to any other rights or restrictions which may be attached to any shares. The ADS holders may instruct the depositary to vote the ordinary share on a poll. This is subject to any other rights or restrictions which may be attached to any shares. The ADS holders may instruct the depositary to vote the ordinary share on a poll. This is subject to any other rights or restrictions which may be attached to any shares. The ADS holders may instruct the depositary to vote the ordinary share on a poll ordinary share or the right and the ADS holders may not know about the meeting far enough in advance to withdraw the ordinary shares. If we ask for the ADS holders' instructions, the depositary will notify the ADS holders of the upcoming vote and arrange to deliver our voting materials and form of notice to them. The depositary will try,

#### The ADS Holders Do Not Have The Same Rights To Receive Dividends Or Other Distributions As Our Shareholders.

Subject to any special rights or restrictions attached to a share, the directors may determine that a dividend will be payable on a share and fix the amount, the time for payment and the method for payment (although we have never declared or paid any cash dividends on our ordinary shares and we do not anticipate paying any cash dividends in the foreseeable future). Dividends and other distributions payable to our shareholders with respect to our ordinary shares generally will be payable directly to them. Any dividends or distributions payable with respect to ordinary shares will be paid to the depositary, which has agreed to pay to the ADS holders the cash dividends or other distributions it or the custodian receives on shares or other deposited securities, after deducting its fees and expenses. The ADS holders will receive these distributions in proportion to the number of ordinary shares their ADSs represent. However, the depositary may decide that it is unlawful or impractical to make a distribution available to any holders of ADSs. We have no obligation to take any other action to permit the distribution of the ADSs, ordinary shares, rights or anything else to holders of the ADSs. This means that you may not receive the distributions we make on our ordinary shares or any value from them if it is illegal or impractical to make them available to you. These restrictions may have a material adverse effect on the value of your ADSs.

# There Are Circumstances Where It May Be Unlawful Or Impractical To Make Distributions To The Holders Of The ADSs.

The deposit agreement with the depositary allows the depositary to distribute foreign currency only to those ADS holders to whom it is possible to do so. If a distribution is payable by us in English pounds sterling, the depositary will hold the foreign currency it cannot convert for the account of the ADS holders who have not been paid. It will not invest the foreign currency and it will not be liable for any interest. If the exchange rates fluctuate during a time when the depositary cannot convert the foreign currency, the ADS holders may lose some of the value of the distribution.

The depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to any ADS holders. This means that the ADS holders may not receive the distributions we make on our shares or any value for them if it is illegal or impractical for the depository to make such distributions available to them.

# You May Be Subject To Limitations On Transfer Of Your ADSs.

Your ADSs are transferable on the books of the depositary. However, the depositary may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary deems it advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason in accordance with the terms of the deposit agreement.

#### Your Rights As A Shareholder Are Governed By English Law And Differ From The Rights Of Shareholders Under U.S. Law.

We are a public limited company incorporated under the laws of England and Wales. Therefore, the rights of holders of ADSs are governed by English law and by our Articles. These rights differ from the typical rights of shareholders in U.S. corporations. In certain cases, facts that, under U.S. law, would entitle a shareholder in a U.S. corporation to claim damages may not give rise to a cause of action under English law entitling a shareholder in an English company to claim damages. For example, the rights of shareholders to bring proceedings against us or against our directors or officers in relation to public statements are more limited under English law than under the civil liability provisions of the U.S. securities laws.

You may have difficulties enforcing, in actions brought in courts in jurisdictions located outside the United States, judgments obtained in the U.S. courts under the U.S. securities laws. In particular, if you sought to bring proceedings in England based on U.S. securities laws, the English court might consider that:

- it did not have jurisdiction;
- it was not the appropriate forum for such proceedings;
- applying English conflict of laws rules, U.S. laws (including U.S. securities laws) did not apply to the relationship between you and us or our directors and officers; or
- the U.S. securities laws were of a penal nature or violated English public policy and should not be enforced by the English court.

For further information with respect to your rights as a holder of the ADSs, see the sections of this Annual Report titled "Item 10. Additional Information" and "Item 16.G. Differences in Corporate Law Between England and the State of Delaware".

# You May Be Unable To Recover Any of Your Investment in the ADS Warrants.

The value of the ADS Warrants depends on the value of the ADSs or the Ordinary Shares, as applicable, which will depend on factors related and unrelated to the success of our commercialization and product development activities, and cannot be predicted at this time. The ADS Warrants have an exercise period of five years from the date of issue.

If the price of the ADS does not increase to an amount sufficiently above the exercise price of the ADS Warrants during the exercise period of the ADS Warrants, you may be unable to recover any of your investment in the ADS Warrants. There can be no assurance that any of the factors that could impact the trading price of the ADSs and ordinary shares will result in the trading price increasing to an amount that will exceed the exercise price or the price required for you to achieve a positive return on your investment in the ADS Warrants.

Anti-Takeover Provisions In Our Articles And Under English Law Could Make An Acquisition Of Us More Difficult, Limit Attempts By Our Shareholders To Replace Or Remove Our Current Directors And Management Team, And Limit The Market Price Of The ADSs, The ADS Warrants And Our Ordinary Shares.

Our Articles contain provisions that may delay or prevent a change of control, discourage bids at a premium over the market price of the ADSs, the ADS Warrants and our ordinary shares and adversely affect the market price of these securities and the voting and other rights of the holders of such securities. These provisions include:

- dividing our board of directors into three classes, with each class serving a staggered three-year term;
- permitting our board of directors to issue preference shares without shareholder approval, with such rights, preferences and privileges as they
  may designate;
- provisions which allow our board of directors to adopt a shareholder rights plan upon such terms and conditions as it deems expedient and in our best interests;
- establishing an advance notice procedure for shareholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors; and
- the ability of our board of directors to fill vacancies on our board in certain circumstances.

These provisions do not make us immune from takeovers. However, these provisions will apply even if the offer may be considered beneficial by some shareholders. In addition, these provisions may frustrate or prevent any attempts by our shareholders to replace or remove our current management team by making it more difficult for shareholders to replace members of our board of directors, which is responsible for appointing the members of our management.

# We Are An "Emerging Growth Company," And We Cannot Be Certain If The Reduced Reporting Requirements Applicable To "Emerging Growth Companies" Will Make The ADSs And ADS Warrants Less Attractive To Investors.

We are an "emerging growth company," as defined in the JOBS Act. For as long as we continue to be an "emerging growth company," we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including not being required to comply with the auditor attestation requirements of Section 404, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We could be an "emerging growth company" for up to five fiscal years after we completed our initial offering in the United States, although circumstances could cause us to lose that status earlier, including if the market value of our ordinary shares (including those represented by ADSs) held by non-affiliates exceeds \$700 million as of any June 30 before that time, in which case we would no longer be an "emerging growth company" as of the following December 31, our fiscal year end. We cannot predict if investors will find the ADSs or ADS Warrants less attractive because we may rely on these exemptions. If some investors find the ADSs or ADS Warrants less attractive as a result, there may be a less active trading market for the ADSs or ADS Warrants and the price of the ADSs or ADS Warrants may be more volatile.

# We Believe That We Are Treated As A U.S. Domestic Corporation For U.S. Federal Income Tax Purposes.

As discussed more fully under "Item 10.E. Material U.S. Federal Income Tax Considerations," we believe that, pursuant to Section 7874 of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), even though we are organized as a U.K. public limited company, the Company is treated as a U.S. domestic corporation for all purposes of the Code. The Company is therefore subject to tax as if it were a U.S. domestic corporation for U.S. federal income tax purposes. As a result, the Company is subject to U.S. federal income tax on substantially all its income.

In addition, if the Company pays dividends to a Non-U.S. Holder, as defined in the discussion under the heading "Item 10.E. Material U.S. Federal Income Tax Considerations," it will be required to withhold U.S. income tax at the rate of 21%, or such lower rate as may be provided in an applicable income tax treaty. Each investor should consult its own tax adviser regarding the U.S. federal income tax position of the Company and the tax consequences of holding the ADSs, ADS Warrants or ordinary shares.

# The Effect Of Comprehensive U.S. Tax Reform Legislation On The Company, Whether Adverse Or Favorable, Is Uncertain.

On December 22, 2017, President Trump signed into law H.R. 1, "An Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018" (informally titled the "Tax Cuts and Jobs Act"). Among a number of significant changes to the U.S. federal income tax rules, the Tax Cuts and Jobs Act reduces the marginal U.S. corporate income tax rate from 35% to 21%, limits the deduction for net interest expense, shifts the United States toward a more territorial tax system, and imposes new taxes to combat erosion of the U.S. federal income tax base. The effect of the Tax Cuts and Jobs Act on the Company and its affiliates, whether adverse or favorable, is uncertain, and may not become evident for some period of time. You are urged to consult your tax adviser regarding the implications of the Tax Cuts and Jobs Act of holding the ADSs, ADS Warrants or ordinary shares.

#### Item 4. Information on the Company.

# A. History And Development Of The Company

Motif Bio Limited was incorporated in England and Wales on November 20, 2014 with company registration number 09320890. On April 1, 2015, Motif Bio Limited was re-registered as a public company limited by shares and changed its name to Motif Bio plc. The Company's registered office is at: 201 Temple Chambers, 3-7 Temple Avenue, London EC4Y 0DT, U.K. The Company's telephone number at its registered office is 44 (0) 20 7583 8304. The Company's country of domicile is the United Kingdom and the Company is subject to English law.

Motif BioSciences Inc. was incorporated in the State of Delaware on December 2, 2003. The registered agent for Motif Biosciences Inc. in the United States is Corporate Services Company, with an address at 251 Little Falls Drive, Wilmington, Delaware, 19808. On April 1, 2015, Motif BioSciences Inc. became a wholly-owned subsidiary of the Company by way of a group reorganization by plan of merger. Therefore, Motif BioSciences Inc. is considered to be the predecessor of the Company prior to the reorganization. The principal place of business is 125 Park Avenue, 25th Floor, New York, NY, 10017, United States of America. The phone number for such principal place of business is (609) 608-0032.

The Company is a clinical stage biopharmaceutical company which specializes in developing novel antibiotics designed to be effective against serious and life-threatening infections caused by multi-drug resistant bacteria. Originally founded as a population genetics company, since 2009 we have focused on drug discovery and development. On April 1, 2015, Motif BioSciences Inc. acquired the assets owned by Nuprim related to iclaprim through its merger with Nuprim.

In connection with the completion of our initial public offering on AIM on April 2, 2015, we completed a corporate reorganization and reclassification of our shares whereby:

- on February 18, 2015, Motif Bio plc incorporated a Delaware subsidiary, Motif Acquisition Sub, Inc.
- on March 27, 2015, Motif BioSciences Inc., Motif Bio plc, and Motif Acquisition Sub, Inc. entered into a merger agreement where, just prior to the Company's admission to AIM, Motif Acquisition Sub, Inc. would merge with and into Motif BioSciences Inc. and Motif BioSciences Inc. would continue as the surviving entity and become a wholly owned subsidiary of Motif Bio plc. On April 1, 2015, the merger transaction was completed. Prior to the merger Motif BioSciences Inc. completed a reverse stock split to increase the share price of Motif BioSciences Inc. so that it was closer to the Motif Bio plc admission price. The former Motif BioSciences Inc. stockholders were issued 36,726,242 ordinary shares in Motif Bio plc in a share-for-share exchange for their common stock in Motif BioSciences Inc., so that the former Motif BioSciences Inc. stockholders owned an equivalent number of ordinary shares in Motif Bio plc as the number of shares of common stock that they had previously owned in Motif BioSciences Inc. All outstanding, unexercised, and vested stock options to purchase shares of common stock in Motif BioSciences Inc. were converted into options to purchase ordinary shares in Motif Bio plc.

In connection with and subsequent to the completion of our initial offering on NASDAQ on November 23, 2016, we completed the following financing activities:

- On November 23, 2016, we issued 22,863,428 ordinary shares together with 11,431,714 warrants over ordinary shares at a price of £0.28 per share/warrant combination. In addition, we issued 2,438,491 American Depositary Shares ("ADS") and 1,219,246 warrants over ADS at a price of \$6.98 per ADS/Warrant combination in an underwritten U.S. offering.
- On June 23, 2017, we raised \$23.7 million of net proceeds, after deducting \$1.7 million of issuance costs, from a placement in the United Kingdom of 66,666,667 new ordinary shares at £0.30 per share.
- On November 14, 2017, we entered into a loan and security agreement with Hercules for a term loan of up to \$20 million. As of December 31, 2017, we had \$15 million in outstanding borrowings under the Hercules Loan Agreement.

The audited consolidated financial statements included in this Annual Report include the accounts of Motif Bio plc and its wholly-owned subsidiary, Motif BioSciences Inc. (collectively, the "Group"). The transaction has been accounted for as a group reorganization and the financial statements are presented as if Motif Bio plc has always owned Motif BioSciences Inc. The comparative financial information presented in the audited consolidated financial statements therefore represent the results and capital structure of Motif Biosciences Inc.

#### B. Business Overview

We are a clinical stage biopharmaceutical company engaged in the research, development and commercialization of novel antibiotics designed to be effective against serious and life-threatening infections in hospitalized patients caused by multi-drug resistant bacteria. The discovery of new antibiotics has not kept pace with the increasing incidence of resistant, difficult-to-treat bacteria. One of the biggest threats of antibiotic resistance is from methicillin resistant *Staphylococcus aureus* ("MRSA"), a leading cause of hospital-acquired infections and a growing cause of infections in healthy people in the general community. In 2013, the Centers for Disease Control and Prevention ("CDC") reported that at least two million people became infected with antibiotic-resistant bacteria and at least 23,000 Americans died as a direct result of these infections. Our lead product candidate, iclaprim, is being developed for the treatment of acute bacterial skin and skin structure infections ("ABSSSI") and hospital-acquired bacterial pneumonia ("HABP"), including ventilator-associated bacterial pneumonia ("VABP"), infections that are often caused by MRSA. Iclaprim is also being developed to treat lung infections caused by *Staphylococcus aureus* in patients with cystic fibrosis. On October 4, 2017, we announced topline findings from a second global Phase 3 study (REVIVE-2) with an IV formulation of iclaprim, for the treatment of ABSSSI. The pre-specified FDA primary endpoint of non-inferiority of early clinical response (ECR) of iclaprim at the early time point (ETP) was met.

Iclaprim is a novel diaminopyrimidine antibiotic that inhibits an essential bacterial enzyme called "dihydrofolate reductase" ("DHFR"). Diaminopyrimidines are a class of chemical compounds that inhibit different enzymes in the production of tetrahydrofolate, a form of folic acid, which is required for the production of bacterial DNA and RNA. The inhibition of DHFR represents a differentiated and under-utilized mechanism of action compared with other antibiotics. We acquired iclaprim from Nuprim Inc. ("Nuprim"), following the completion of our merger with Nuprim on April 1, 2015. Arpida AG ("Arpida"), one of the previous owners of iclaprim, completed a comprehensive development program for iclaprim, including two Phase 3 trials in complicated skin and skin structure infections ("cSSSI"). Iclaprim is a targeted "Gram-positive" antibiotic that is rapidly bactericidal and highly potent against MRSA and other Gram-positive bacteria *in vitro*. Vancomycin, a standard of care antibiotic in hospitalized patients with infections caused by Gram-positive bacteria, is associated with nephrotoxicity (i.e., damage to the kidneys caused by exposure to a toxic chemical, toxin or medication), including vancomycin-associated acute kidney injury (VA-AKI). Therapeutic drug monitoring (TDM) and dosage adjustment in patients with renal impairment is required with vancomycin. In contrast to vancomycin, iclaprim is minimally excreted via the kidneys (<2% of the administered dose was recovered in the urine) and neither TDM nor dosage adjustment has been required in clinical studies with iclaprim in more than 1,400 patients and healthy volunteers. No nephrotoxicity was seen with iclaprim in the REVIVE Phase 3 clinical trials. "Gram-positive" or "Gram-negative" refer to how bacteria react to the Gram stain test based on the outer casing of the bacteria, and the bacterial cell wall structure. Each type of bacteria may be associated with different diseases. Iclaprim has also demonstrated a low propensity for resistance development *in vitr* 

We believe that iclaprim is an attractive potential candidate for use as a first-line empiric monotherapy, the initial therapy administered prior to the identification of the pathogen, in severely ill patients who are hospitalized with ABSSSI and have comorbidities, or also suffer from other health issues, such as renal impairment or diabetes. Renal impairment affects up to an estimated 936,000 of the approximately 3.6 million patients hospitalized with ABSSSI annually in the United States.

Positive topline data from REVIVE-1 and REVIVE-2 were announced on April 18, 2017 and October 4, 2017, respectively. We believe that the successful completion of the REVIVE-1 and REVIVE-2 Phase 3 trials satisfies both FDA and EMA requirements for regulatory submission for an IV formulation of iclaprim for the treatment of ABSSSI. On September 15, 2017, we also announced that the FDA granted Orphan Drug Designation to iclaprim for the treatment of *Staphylococcus aureus* lung infections in patients with cystic fibrosis. This designation grants special status to a drug or biologic under development to treat a rare disease or condition and qualifies the sponsor of the product for various development incentives, including tax credits for qualified clinical testing, waiver of user fees and potentially up to seven years of market exclusivity for the given indication, if approved.

REVIVE-1 is a double-blinded, active-controlled, global, multicenter trial, in 598 patients with ABSSSI that compares the safety and efficacy of an 80mg intravenous dose of iclaprim with a 15mg/kg intravenous dose of vancomycin. Treatments were administered every 12 hours for 5 to 14 days. Iclaprim achieved the primary endpoint of non-inferiority (10% margin) compared to vancomycin for early clinical response (ECR) at the early time point ("ETP"), 48 to 72 hours after the start of administration of the study drug, in the intent-to-treat ("ITT") patient population.

		Iclaprim	Vancomycin	% Difference
Time point	Endpoint	N=298	N=300	(95% CI)
ETP	Early Clinical Response (ECR)*	241 (80.9)%	243 (81.0)%	-0.13
				(-6.42, 6.17)

<sup>\* &</sup>gt;20% reduction of lesion area at 48-72 hours

The goal of non-inferiority studies, according to the FDA, "is to show that the difference between the new and active control treatment is small — small enough to allow the known effectiveness of the active control, based on its performance in past studies and the assumed effectiveness of the active control in the current study, to support the conclusion that the new test drug is also effective."

In an analysis of a pre-specified secondary endpoint, 65.4% of patients receiving iclaprim demonstrated resolution or near resolution at end of therapy (EOT), compared to 62.3% of patients receiving vancomycin (treatment difference: 3.10%, 95% CI: -4.59% to 10.80%). In another pre-specified secondary endpoint analysis, using a modified clinical cure TOC endpoint defined by a  $\geq 90\%$  reduction in lesion size at TOC, no increase in lesion size since ETP and no requirement for additional antibiotics, clinical cure was seen in 76.2% of patients receiving iclaprim and 80.0% of patients receiving vancomycin (treatment difference: -3.83%, 95% CI: -10.45% to 2.80%). Based on the standard definition of clinical cure (excluding lesion size criteria and no increase in lesion size since ETP) as defined above, 83.2% of patients in the iclaprim group and 87.3% of patients in the vancomycin group achieved clinical cure at TOC. The treatment difference was -4.11%; the lower bound of the 95% CI was -9.78% and the upper bound was 1.56%.

Iclaprim was generally well tolerated in the study, with most adverse events categorized as mild.

	Iclaprim	Vancomycin
	N=293	N=297
TEAEs (Treatment Emergent Adverse Events)	151 (51.5)%	128 (43.1)%
Study drug related TEAEs	57 (19.5)%	53 (17.8)%
TEAEs leading to discontinuation of study drug	8 (2.7)%	13 (4.4)%
TEAE-related SAEs (Serious AEs)	9 (3.1)%	14 (4.7)%
Deaths	0 (0.0)%	2 (0.7)%

REVIVE-2 is also a double-blinded, active-controlled, global, multicenter trial, in 600 patients with ABSSSI that compared iclaprim to vancomycin with an identical study design to REVIVE-1, but conducted at different clinical sites. Iclaprim achieved the primary endpoint of non-inferiority (10% margin) compared to vancomycin of ECR at the ETP, 48 to 72 hours after the start of administration of the study drug, in the intent-to-treat (ITT) patient population.

		Iclaprim	Vancomycin	% Difference
Time point	Endpoint	N=295	N=305	(95% CI)
ETP	Early Clinical Response (ECR)*	231 (78.3%)	234 (76.7%)	1.58
				(-5.10, 8.26)

<sup>\* &</sup>gt;20% reduction of lesion area at 48-72 hours

In an analysis of a pre-specified secondary endpoint, 54.6% of patients receiving iclaprim demonstrated resolution or near resolution at end of therapy (EOT), compared to 55.1% of patients receiving vancomycin (treatment difference: -0.51%, 95% CI: -8.47% to 7.46%). In another pre-specified secondary endpoint analysis, using a modified clinical cure TOC endpoint defined by a  $\geq 90\%$  reduction in lesion size at TOC, no increase in lesion size since ETP and no requirement for additional antibiotics, clinical cure was seen in 71.5% of patients receiving iclaprim and 70.5% of patients receiving vancomycin (treatment difference: 1.03%, 95% CI: -6.23% to 8.29%). Based on the standard definition of clinical cure (excluding lesion size criteria and no increase in lesion size since ETP) as defined above, 78.0% of patients in the iclaprim group and 78.0% of patients in the vancomycin group achieved clinical cure at TOC. The treatment difference was -0.08%; the lower bound of the 95% CI was -6.74% and the upper bound was 6.59%.

Iclaprim was well tolerated in this second study as well, with most adverse events categorized as mild.

	Iclaprim N=299	Vancomycin N=302
TEAEs (Treatment Emergent Adverse Events)	140 (46.8%)	133 (44.0%)
Study drug related TEAEs	42 (14.0%)	39 (12.9%)
TEAEs leading to discontinuation of study drug	16 (5.4%)	17 (5.6%)
TEAE-related SAEs (Serious AEs)	16 (5.4%)	14 (4.6)%
Deaths	0 (0.0)%	1 (0.3)%

We believe that the data from the two REVIVE trials will satisfy the requirements to submit a New Drug Application (NDA) in the United States and a Marketing Authorization Application (MAA) in Europe to obtain marketing approval for an IV formulation of iclaprim in the treatment of ABSSSI caused by Gram-positive pathogens, including resistant strains such as MRSA. Submission of a New Drug Application (NDA) for iclaprim for the treatment of ABSSSI is anticipated in the first half of 2018. If approved, we believe that iclaprim can become a valuable addition to the formulary of life-saving antibiotics used by hospital physicians.

Our INSPIRE (Iclaprim for NoSocomial PneumonIa gRam-positivE pathogens) Phase 3 clinical trial with iclaprim in patients with HABP, including patients with VABP, is planned to start in 2018. This could further expand iclaprim's addressable market to include another serious unmet medical need. Approximately 1.4 million patients are hospitalized annually in the United States with HABP, including patients with VABP. We believe that iclaprim is well suited for use as a first-line empiric therapy for patients with HABP, including patients with VABP, caused by Gram-positive bacteria, based on data from a Phase 2 clinical trial, which support the efficacy of iclaprim in this patient population. Additionally, in a Phase 1 healthy volunteer trial, concentrations of iclaprim at the site of infection in the lungs were considerably higher than concentrations in serum.

In July 2015, the FDA, designated the IV formulation of iclaprim as a Qualified Infectious Disease Product (QIDP) for ABSSSI and HABP. QIDP status grants iclaprim regulatory Fast Track designation, Priority Review and, if approved, a five-year extension to an applicable statutory market exclusivity period in the United States, which in the case of a New Chemical Entity would result in 10 years of market exclusivity from the date of approval. If approved by the European Medicines Agency, or EMA, we expect that iclaprim will qualify for eight years of data exclusivity and an additional two years of market exclusivity in the EU. If approved by the Pharmaceuticals and Medical Devices Agency (PDMA) in Japan, we expect that iclaprim will qualify for eight years of data exclusivity (which may be extended to ten years for orphan or pediatric indications) and an additional two years of market exclusivity in Japan.

In addition to our clinical programs, we have a preclinical development program underway to identify a formulation of iclaprim suitable for adolescent and pediatric patients. Formulation and other preclinical activities for these programs are underway.

On September 15, 2017, we announced that the FDA granted Orphan Drug Designation to iclaprim for the treatment of *Staphylococcus aureus* lung infections in patients with cystic fibrosis.

#### Our Strategy

Our goal is to help physicians to treat hospitalized patients with serious and life-threatening infections by building a leading, fully integrated biopharmaceutical company dedicated to the development and commercialization of novel antibiotics, designed to be effective against multi-drug resistant bacteria. We are pursuing the following strategies:

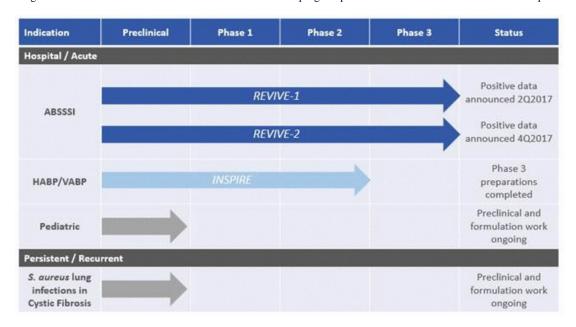
- Focus on developing novel antibiotics designed to be effective against serious and life-threatening infections caused by multi-drug resistant bacteria. We are developing antibiotic treatments designed to be effective against the most common and serious life-threatening infections in hospitalized patients such as ABSSSI and HABP, including VABP, caused by Gram-positive pathogens, including resistant strains such as MRSA. These infections, which have become increasingly prevalent in hospitalized patients and more recently in healthy people in the general community (who then require hospitalization), have a high unmet need for innovative treatment options.
- Rapidly advance our lead product candidate, iclaprim, through Phase 3 clinical trials. Our two REVIVE Phase 3 clinical trials are designed to obtain marketing approval for an IV formulation of iclaprim for the treatment of ABSSSI. Positive top-line data from REVIVE-1 and REVIVE-2 were announced on April 18, 2017 and October 4, 2017, respectively. We plan to evaluate iclaprim in our INSPIRE Phase 3 clinical trial of iclaprim in HABP patients, including VABP. Subject to the availability of funding, we expect to initiate dosing of the first patients in our INSPIRE trial in 2018.
- Commercialize iclaprim in the United States. If approved, we intend to commercialize iclaprim in the United States, either by building sales, marketing and market access teams ourselves, partnering with a contract selling organization or identifying a strategic partner with capabilities in the hospital market. We are seeking proven commercialization partners in other key global

markets. We believe that our ability to execute this strategy is enhanced by our focus on the hospital setting and the significant prior commercial experience of key members of our management team and board of directors, who were involved in the launch and/or commercialization of several blockbuster (annual revenues of at least \$1 billion) pharmaceutical products prior to joining our company.

- Expand indications of product candidates within our franchise. We intend to leverage opportunities to develop internal product candidates for additional indications, including potentially an oral DHFRi. We believe that this approach will enable us to maximize our commercial potential by utilizing our existing resources and expertise.
- Expand our portfolio through acquisition and disciplined in-licensing. We plan to source new product candidates through acquisition or in-licensing. Our management team intends to mitigate the potential risks of this strategy by adhering to our disciplined criteria of focusing on in-licensing or acquisition of products that are already commercially available or that have clinical data that we believe suggest a high probability of success for development progression and an attractive potential return on investment.

#### **Our Product Development Pipeline**

The following table summarizes the indications for which we are developing our product candidates and the status of development.



# **Background**

# Antibiotic Market And Scientific Overview

Bacteria are broadly classified as Gram-positive or Gram-negative. Gram-positive bacteria possess a single membrane and a thick cell wall and turn dark-blue or violet when subjected to a laboratory staining method known as a Gram stain. Based on our analysis of data from industry sources(1), we estimate that approximately 80% of all ABSSSI cases are caused by Gram-positive bacteria. Gram-positive bacteria can also cause other serious illnesses, including pediatric and adult osteomyelitis, community acquired bacterial pneumonia (CABP) and HABP, including VABP, bacteremia and diabetic foot infections. Among Gram-positive bacteria, MRSA and

<sup>(1)</sup> Singer, A. J., & Talan, D. A. (2014). Management of Skin Abscesses in the Era of Methicillin-Resistant Staphylococcus aureus. New England Journal of Medicine, 370(11), 1039-1047. doi:10.1056/nejmra1212788

vancomycin-resistant enterococci (VRE) are often the most problematic in terms of their occurrence and impact on the clinical outcomes of hospitalized patients.

Antibiotics that treat bacterial infections can be classified as broad spectrum or narrow spectrum. Antibiotics that are active against both Grampositive and Gram-negative bacteria are referred to as broad spectrum. Those that are active against either Gram-positive or Gram-negative bacteria, but not both, are referred to as narrow spectrum. Antibiotics that are active against a select subset of Gram-positive or Gram-negative bacteria can be referred to as "targeted" antibiotics.

Since the introduction of antibiotics in the 1940s, numerous antibiotic classes have been discovered and developed for therapeutic use. The worldwide antibiotic market has been valued at over \$40 billion and is expected to grow. Two Gram-positive hospital antibiotics, Cubicin (daptomycin) and Zyvox (linezolid), achieved peak global sales in excess of \$1 billion over the 2010 to 2015 time horizon.

The development of new antibiotic classes and new antibiotics within a class is important because of the ability of bacteria to develop resistance to existing mechanisms of action of currently approved antibiotics. However, the pace of discovery and development of new antibiotic classes has slowed considerably in the past few decades. The CDC estimates that the pathogens responsible for more than 70% of U.S. hospital infections are resistant to at least one of the antibiotics most commonly used to treat them.

Antibiotic resistance is primarily caused by genetic mutations in bacteria selected by exposure to antibiotics where the drug does not kill all of the bacteria. In addition to mutated bacteria being resistant to the drug used for treatment, many bacterial strains can also be cross-resistant, meaning that the use of a particular treatment to address one kind of bacteria can result in resistance to other types of antibiotics. As a result, the effectiveness of many antibiotics has declined, limiting physicians' options to treat serious infections and creating a global health issue. In 2013, the CDC reported that at least two million people became infected with antibiotic-resistant bacteria and at least 23,000 Americans died as a direct result of these infections. Antibiotic resistance also contributes heavily to healthcare system costs. The CDC has noted that while the total economic cost of antibiotic resistance to the U.S. economy has been difficult to calculate, estimates have ranged as high as \$20 billion in excess direct healthcare costs, with additional costs to society for lost productivity as high as \$35 billion a year (based on a study completed in 2008). One of the biggest threats of antibiotic resistance is from MRSA, a leading cause of hospital-acquired infections and a growing cause of infections in healthy people in the general community.

In addition to resistance issues, current antibiotic therapies also have other limitations, including serious side effects. These side effects may include: drug-drug interactions (DDIs), severe allergic reaction, decreased blood pressure, decreased platelets, pain and inflammation at the site of injection, muscle, renal and other toxicities, optic and peripheral neuropathies. Some of these side effects may be significant enough to require that therapy be discontinued or not used. As a result, some treatments require clinicians to closely monitor drug levels, response to treatment as measured by blood and other parameters, increasing the expense and inconvenience of treatment. Further, many of the existing antibiotics used to treat serious infections are difficult or inconvenient to administer. We believe that there is a need for new antibiotics that have improved potency and pharmacokinetics, effectiveness against resistant bacterial strains and improved side effect profiles.

Currently, the most widely prescribed antibiotic in the United States for treating hospitalized patients with Gram-positive infections suspected to be caused by MRSA, including ABSSI, is vancomycin, which is available in generic versions. It is estimated that vancomycin had a 74% share of patient days of antibiotic therapy for hospitalized Gram-positive infections due to MRSA for the 3-year period ending 2015. It has been reported that the length of treatment associated with vancomycin for hospitalized skin and soft tissue infections due to MRSA is approximately 13 days, and the length of hospitalization is approximately 19 days (including intensive care unit ("ICU") days and additional complications)(2).

Renal impairment is a predictor of higher hospital costs and longer length of hospital stay in hospitalized patients with MRSA surgical site infections.

It has been estimated that the cost of treating hospitalized ABSSSI patients due to MRSA with vancomycin in patients with renal impairment can be up to \$28,000 per patient (approximately 19% higher than the cost of treating ABSSSI due to MRSA with vancomycin in patients without renal impairment). (2),(3) In patients hospitalized for skin infections, vancomycin-associated acute kidney

<sup>(2)</sup> Nisha P. Shah, Prabashni Reddy, Joseph A. Paladino, Peggy S. McKinnon, Michael E. Klepser & Chris L. Pashos (2004) Direct medical costs associated with using vancomycin in methicillin-resistant Staphylococcus aureus infections: an economic model, Current Medical Research and Opinion, 20:6, 779-700

<sup>(3)</sup> CID 2003:36 (1 March) Engemann et. al.

injury (VA-AKI) has been estimated to result in incremental costs to the hospital of up to \$17,000 per patient, due to prolonged length of stay in hospital, nephrologist consultations and acute dialysis(4).

We believe there is a need for new Gram-positive antibiotics to be used in the hospital to address:

- the increase in MRSA infections that are resistant or not clinically responsive to treatment with vancomycin
- the risk of adverse effects such as nephrotoxicity associated with vancomycin, including VA-AKI, and
- the health care resources required to administer vancomycin including the requirement for therapeutic monitoring and dose adjustment.

# Acute Bacterial Skin And Skin Structure Infections (ABSSSI)

ABSSSI are skin and skin structure infections with a lesion size of at least 75 cm<sup>2</sup> (lesion size measured by the area of redness, edema or induration), and includes cellulitis/erysipelas, wound infections and major cutaneous abscesses. In the United States, an estimated 3.6 million patients are hospitalized annually with ABSSSI, and up to 26% of these patients, or approximately 936,000 patients are co-morbid with renal impairment. Common Gram-positive bacteria that may cause ABSSSI include *Staphylococcus aureus*, including MRSA, and beta-hemnolytic streptococci such as *Streptococcus pyogenes*.

# ABSSSI Versus cSSSI

The terms "skin and skin structure infection" (SSSI) and "skin and soft tissue infection" (SSTI) were coined to describe infectious processes such as cellulitis, erysipelas, cutaneous abscesses, and infected wounds, ulcers, or burns. The designation of more severe SSSI included a lowercase "c" (cSSSI) for "complicated" skin and skin structure infection and typically implied a need for inpatient management, surgical procedures, or a significant underlying comorbidity such as diabetes or systemic immunosuppression that complicates response to therapy.

In 2013, the FDA issued guidance that standardized the nomenclature to be used in the evaluation of new antimicrobial treatments for cSSSI, which are now referred to as ABSSSI (major cutaneous abscesses, cellulitis/erysipelas, and wound infections). The rationale for developing this terminology was to provide a consistent means of identifying infections for which a reliable drug treatment effect can be estimated.

#### Hospital Acquired Bacterial Pneumonia (HABP) And Ventilator Associated Bacterial Pneumonia (VABP)

HABP refers to any pneumonia contracted by a patient in a hospital at least 48 hours after being admitted. VABP is pneumonia that develops 48 hours or longer after mechanical ventilation is given by means of an endotracheal tube or tracheostomy. Symptoms and signs include malaise, fever, chills, rigor, cough, dyspnea, and chest pain, but in ventilated patients, pneumonia usually manifests as worsening oxygenation and increased tracheal secretions. HABP, including VABP, is a serious and life-threatening infection associated with a mortality rate of 20% to 50%, affecting approximately 680,000 patients annually in the United States, which can lead to increased hospital costs by an average of approximately \$40,000 per patient. One of the common causative organisms of HABP, including VABP, is *Staphylococcus aureus*, including MRSA.

# Limitations Of Currently Available Treatment Options

When confronted with a new patient suffering from a serious and life-threatening infection, a physician may be required to quickly initiate first-line empiric antibiotic treatment to stabilize the patient prior to definitively diagnosing the particular bacterial infection. Currently available antibiotics for serious and life-threatening infections suffer from significant limitations, including:

• Safety, Tolerability and Suitability of Use. Many current antibiotics are associated with adverse events, including drug-drug interactions (DDIs), allergic reactions, renal toxicity and high rates of vomiting and nausea. Adverse events are one of the leading reasons why patients stop treatment and fail therapy. Vancomycin, for example, is associated with infusion reactions and can cause kidney damage or renal toxicity, loss of balance, or vestibular toxicity, and loss of hearing, or oto-toxicity, in certain patients. VA-AKI has been reported in approximately 10% of patients hospitalized with ABSSSI and treated with vancomycin. In addition, adjusting the dosage of vancomycin requires frequent therapeutic drug monitoring to ensure safe administration. Linezolid is associated with bone marrow suppression and is contraindicated for use in patients taking monoamine oxidase inhibitors, a class of drugs used as anti-depressants, and should not be used without careful observation in people taking selective serotonin reuptake inhibitors, a class of drugs commonly used as anti-depressants, among other uses.

<sup>(4)</sup> Lodise et. al. 2017 Motif Analyst Day Presentation

Linezolid also has a label warning for patients with diabetes since it has been associated with hypoglycemia in patients receiving insulin or oral hypoglycemic agents, such as metformin. Daptomycin has been associated with the development of antibiotic resistance during the course of therapy, a reduction of efficacy in patients with moderate renal insufficiency and a side effect profile that includes muscle damage. Ceftaroline has been associated with increased adverse events in patients with renal impairment and dosage adjustment is required in patients with moderate to severe renal impairment. *In vivo* potency at the prescribed dose of standard of care antibiotics can be limited by restrictions around the amount of drug delivered stemming from safety concerns surrounding some currently available treatments.

- Spectrum of Coverage, Resistance Profile and Potency. Currently available treatments, such as vancomycin, linezolid and daptomycin, are beginning to show signs of bacterial resistance. For example, there have been reports of resistance developing during treatment with daptomycin and concerns about an increasing frequency of strains of Staphylococcus aureus with reduced susceptibility to vancomycin "vancomycin intermediate" and "vancomycin resistant" strains (VISA and VRSA). Broad spectrum antibiotics, including tetracyclines, macrolides, fluoroquinolones and cephalosporins, are considered to have activity against Gram-positive and Gram-negative bacteria. In ABSSSI cases, 84% of infections are caused by Staphylococcus aureus, including MRSA and a targeted Gram-positive antibiotic is a better choice as fewer non-causal organisms are exposed to the antibiotic mechanism and there is less selection pressure to develop resistant strains of bacteria.
- Cidality and Speed of Effect. Antibiotics are either bactericidal or bacteriostatic. Bactericidal antibiotics kill the bacterial pathogen directly, which is particularly important for patients with weakened immune systems that cannot effectively eradicate the infecting bacteria on their own. Numerous currently available treatment options, including linezolid are bacteriostatic, which means that although they stop bacteria from multiplying, the patient's own immune system must be strong enough to kill the static bacteria itself. Currently available bactericidal treatment options, such as vancomycin act relatively slow and may extend the period in hospitals for patients with severe infections.

#### Market Research

In early 2016 we commissioned BAL Pharma Consulting, LLC, for whom one of our retained consultants acts as principal, to conduct an on-line survey of treatment practices for hospitalized MRSA skin infection and HABP patients. A total of 45 respondents participated in the 20-minute on-line survey which was conducted from April to May 2016. Of the 45 participants, 15 were infectious disease clinicians, 15 were hospital pharmacy directors, ten were hospitalists or critical care clinicians, and five were emergency room clinicians. The participants each had between three and 35 years of practice since their residency and more than 70% of them came from a hospital-based practice (with an average size of 475 beds), with 80% of these participants being affiliated with a hospital that belonged to an integrated delivery network or healthcare system and 70% sitting on hospital pharmacy and therapeutic formulary review committees.

Participants in the survey were asked to provide information regarding their experiences for the last 20 patients they treated for MRSA skin infections and HABP. The results indicated that the majority of patients treated or consulted by these respondents for suspected or proven MRSA with mild renal impairment received vancomycin (on average 14 of 20 patients). A majority of patients treated or consulted for suspected or proven MRSA skin infections with moderate to severe renal impairment also received vancomycin (on average 12 of 20 patients). The results from the survey also found that on average approximately 32% of MRSA skin infection patients with moderate or severe renal impairment also required a change of dose or therapy due to actual/risk of nephrotoxicity from vancomycin, and that nearly 70% of the respondents identified patients with MRSA skin infections who develop nephrotoxicity due to vancomycin or other agents as being candidates for iclaprim.

Participants were also asked to predict their use of iclaprim (if on formulary) for their next 20 patients treated for MRSA skin infections and HABP. Respondents on average indicated that they would expect to treat approximately eight of their next 20 MRSA skin infection patients with moderate to severe renal impairment with iclaprim, approximately six of their next 20 MRSA skin infection patients with mild renal impairment with iclaprim, and approximately four of their next 20 patients with suspected or proven MRSA skin infections with iclaprim. Respondents also estimated that on average more than 35% of skin infection patients have moderate to severe renal impairment, and many expect the percentage of skin infection patients with moderate to severe renal impairment to modestly increase in the future.

Investors are cautioned not to place undue reliance on the future predictions made by participants in this survey with respect to their future use of iclaprim or the future increase in the percentage of skin infection patients with moderate to severe renal impairment, as such predictions constitute forward-looking statements. See "Cautionary Note Regarding Forward-Looking Statements." Such predictions are based only on the current expectations of the participants in the survey, based on information that was known to the participants at the time they completed the survey. These predictions are subject to numerous risks, uncertainties and other factors which may cause their actual future use of iclaprim or the future percentage of skin infection patients with moderate to severe renal impairment to differ from their earlier predictions.

#### Generating Antibiotics Incentives Now (GAIN) Act

In July 2012, the Generating Antibiotic Incentives Now Act, or GAIN Act, was enacted as part of the Food and Drug Administration Safety and Innovation Act. Under the GAIN provisions, the FDA may designate a product as a "qualified infectious disease product," or QIDP. In order to receive this designation, a drug must be an antibacterial or antifungal drug for human use intended to treat serious or life-threatening infections, including those caused by either (1) an antibacterial or antifungal resistant pathogen, including novel or emerging infectious pathogens, or (2) a so-called "qualifying pathogen" found on a list of potentially dangerous, drug-resistant organisms to be established and maintained by the FDA under the new law. 21 U.S.C. § 355f(g). A sponsor must request designation before submitting a marketing application. 21 U.S.C. § 355f(d). The FDA has designated iclaprim as a QIDP for ABSSSI and HABP

Drugs that fall under the GAIN provisions may be eligible to receive Fast Track status and undergo an expedited regulatory review process with FDA. 21 U.S.C. 356(b). In addition, QIDP-designated products that are approved under section 505(b) after the enactment of the GAIN Act receive an additional five years' exclusivity, 21 U.S.C. § 355f(a). The extra five years of market protection is in addition to any existing exclusivity, including that which may be applicable under the Hatch Waxman Act (five years or three years), orphan drug (seven years), or pediatric exclusivity (six months) 21 U.S.C. § 355f(a)-(b). The additional five-year exclusivity does not apply to supplements to a 505(b) application; a subsequent application filed by the same sponsor for a change that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device. or strength; or a product that does not meet the definition of a qualified infectious disease product. 21 U.S.C. § 355f(c).

#### Non-inferiority Testing

Effective standards of care have been developed in many clinical settings, and it is increasingly more difficult to develop new therapies with higher efficacy than the standard of care. Accordingly, the goal of many studies is to determine if novel therapies have non-inferior efficacies to the ones currently in use. For non-inferiority studies, according to FDA Guidance, "the goal is to demonstrate that the test drug has an effect by showing that its effect is sufficiently close to the effect of an active control. There is no placebo arm in the study; therefore, the effect of the active control is not measured in the study but must be assumed. The goal of the study is to show that the effect of the test drug (T) is not inferior to the effect of the active control (C) by a specified amount, called the NI margin, or M."

# **Iclaprim**

#### Overview

Iclaprim is a diaminopyrimidine that inhibits DHFR, an essential bacterial enzyme. This represents an under-utilized mechanism of action compared to recently approved antibiotics. Iclaprim was designed to be more potent than, and effective against bacteria that have developed resistance to, trimethoprim (TMP), the only other antibiotic with the DHFRi mechanism of action. Unlike TMP, iclaprim need not be used in combination with a sulfonamide to show activity against a range of Gram-positive bacteria. Iclaprim is rapidly bactericidal, highly potent against Gram-positive bacteria including MRSA and has shown a low propensity for resistance development *in vitro*.

Iclaprim was originally discovered by F. Hoffman-La Roche AG. In 2001, iclaprim was sold to Arpida. A comprehensive development program was completed by Arpida including the Phase 2 and 3 trials described below. In 2008, Arpida submitted applications to the FDA and the EMA for approval to market the compound. In January 2009, Arpida received a Complete Response Letter (CRL) from the FDA requesting an additional study or studies to demonstrate effectiveness of iclaprim. No safety concerns were raised by the agency in the CRL. Subsequently, the application with the EMA was withdrawn and development was discontinued. On December 31, 2014, Motif BioSciences Inc. entered into a merger agreement with Nuprim Inc. in order to acquire the assets owned by Nuprim Inc. related to iclaprim, subject to the completion of an initial public offering on AIM. The initial public offering on AIM was completed on April 2, 2015. The merger with Nuprim Inc. and the corporate reorganization occurred on April 1, 2015, when it was substantially certain that the initial public offering would close the next day. We concluded that iclaprim could be returned rapidly to late stage clinical testing with improvements to the original development program.

# Key Attributes Of Iclaprim

We believe that iclaprim, if approved, may be well suited for use as a first-line empiric monotherapy in patients with ABSSSI who are comorbid with renal impairment for the following reasons:

• iclaprim achieved high cure rates against the common Gram-positive causal organisms, including MRSA, in patients with cSSSI in completed Phase 2 and 3 trials;

- iclaprim exhibited safety and tolerability comparable to vancomycin and linezolid in over 1,400 patients and healthy volunteers in completed Phase 1, 2 and 3 trials;
  - iclaprim is minimally excreted via the kidneys (<2% of the administered dose was recovered in urine) and no therapeutic drug monitoring or dosage adjustment has been required in renally impaired patients; no nephrotoxicity with iclaprim was observed in the REVIVE Phase 3 clinical trials
- no symptomatic hypoglycemia has been reported in iclaprim-treated patients with diabetes mellitus receiving insulin or oral hypoglycemic agents;
- unlike many standard of care antibiotics, iclaprim is administered as a fixed dose rather than a weight-based dose (the iclaprim fixed dose may help reduce the resources required in hospitals since dosage adjustment by health care professionals is avoided and overall hospital treatment costs may be lower, especially in patients with renal impairment);
  - iclaprim has demonstrated no clinically significant drug-drug interactions (DDIs) with selective serotonin reuptake inhibitors (SSRIs), or vasopressors; and
- no myopathy or rhabdomyolysis has been reported in iclaprim-treated patients who received recent prior or concomitant therapy with an HMG-CoA reductase inhibitor or in whom elevations in CPK occur during treatment.

We also believe that iclaprim, if approved, will be as a first-line empiric therapy for patients with HABP, including patients with VABP, for the following reasons:

- iclaprim achieved comparable cure rates against the common Gram-positive causal organisms, including MRSA, in patients with HABP, including patients with VABP, in a completed Phase 2 trial;
- iclaprim has demonstrated high and sustained concentrations in epithelial lining fluid (ELF) and alveolar macrophages (AM) which were 20-40 times the plasma concentration, respectively, throughout an entire 7-hour sampling period; and
- iclaprim has demonstrated no clinically significant DDIs with commonly used antibiotics in patients with combined Gram-positive and Gram-negative infections.

# Clinical Development Plans

Prior to the initiation of REVIVE, our global Phase 3 program in ABSSSI, Arpida completed two Phase 3 clinical trials (ASSIST-1 and 2) for the treatment of cSSSI, in which 500 patients in total received iclaprim. In these trials iclaprim was compared to linezolid, a standard of care antibiotic. The primary efficacy endpoint for each of these trials was the non-inferiority of iclaprim compared to linezolid based on a pre-determined non- inferiority margin. Non- inferiority comparisons of drugs are the standard for most antibiotic drug development, and non-inferiority margins are used in the statistical analysis comparing two treatment arms in a study to distinguish the degree of potential difference between antibiotics being evaluated.

Arpida's two Phase 3 clinical trials of iclaprim (ASSIST-1 and 2) were designed to show non-inferiority with a margin of -12.5% and based on Arpida's analysis of the data, met the pre-specified endpoint of clinical cure. The FDA requested an advisory committee meeting to discuss the approval of iclaprim for cSSSI. The advisory committee evaluated the efficacy of the two Phase 3 ASSIST trials using a non-inferiority margin of -10%. Iclaprim did not achieve the non-inferiority margin of -10% in one of the two trials and was not approved by the FDA.

The FDA indicated in a Complete Response Letter (CRL) that they could not approve the application for iclaprim in its current form and that additional clinical data would be required to demonstrate effectiveness for the treatment of cSSSI within an acceptable non-inferiority margin in order to gain approval.

In response to the CRL received by Arpida, we designed our Phase 3 clinical trials for iclaprim to demonstrate effectiveness using a non-inferiority margin of -10% for the FDA's primary endpoint of ECR at ETP and have modified the dosage and administration of iclaprim to improve safety and efficacy.

On April 14, 2015, the FDA agreed to our proposed Phase 3 clinical development program for the treatment of ABSSSI with iclaprim. The Phase 3 program is designed to obtain marketing approval for an IV formulation of iclaprim for the treatment of ABSSSI caused by Gram-positive pathogens, including resistant strains such as MRSA.

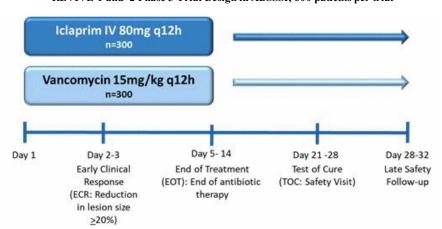
Acute Bacterial Skin And Skin Structure Infections (ABSSSI)

We have conducted two Phase 3 global trials with input from the FDA and the Dutch Health Authorities, the lead rapporteur for Arpida's MAA for iclaprim, to study iclaprim compared to vancomycin for the treatment of ABSSSI. These two global, 600-patient, randomized, double-blind Phase 3 trials had two arms and assigned patients to receive either iclaprim or vancomycin. The primary endpoint of these trials was early clinical response (ECR) of at least 20% reduction in lesion size at the early time point (ETP), 48-72 hours after start of study drug administration. Several secondary endpoints, including clinical cure at test of cure (TOC) one to two weeks after antibiotic treatment ends and clinical cure at end of therapy (EOT) were also measured. Vancomycin, the most used standard of care treatment for Gram-positive hospitalized infections caused by MRSA, was the comparator in the REVIVE-1 and -2 trials. A sample size (Intention To Treat [ITT]) of 1,198 subjects has been studied to demonstrate safety and efficacy with a non-inferiority margin of -10% for the primary endpoint. A fixed dose of 80 mg of iclaprim, based on modelling and simulation of pharmacokinetic (PK) data from previous Phase 3 clinical trials of cSSSI, optimized the potential clinical efficacy and safety outcomes for the REVIVE-1 and -2 studies. Iclaprim may be an important addition to the armamentarium of antibiotics needed to combat antimicrobial resistance.

Positive topline data from REVIVE-1 and REVIVE-2 were announced on April 18, 2017 and October 4, 2017, respectively. In both trials, iclaprim achieved the primary endpoint of non-inferiority (-10%) versus vancomycin for ECR at the ETP. Given its differentiated mechanism, potency, spectrum, safety and efficacy, iclaprim, if approved, could provide a valuable new antibiotic treatment option to offset the rising problem of bacterial resistance and address unmet needs in ABSSSI patients with renal impairment. Iclaprim was well tolerated in the study, with most adverse events categorized as mild.

We believe that the successful completion of these two pivotal Phase 3 trials satisfy both FDA and EMA requirements for regulatory submission for an IV formulation of iclaprim in the treatment of ABSSSI. Submission of a New Drug Application (NDA) for iclaprim for the treatment of ABSSSI is anticipated in the first half of 2018.

The diagram below summarizes the design of our REVIVE Phase 3 program.



REVIVE-1 and -2 Phase 3 Trial Design in ABSSSI; 600 patients per trial

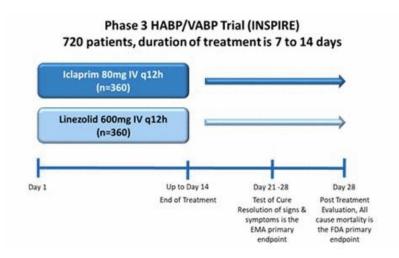
Hospital Acquired Bacterial Pneumonia (HABP), Including Ventilator Associated Bacterial Pneumonia (VABP)

We have designed a double-blind, randomized, comparator controlled international study to determine the efficacy and safety of iclaprim for the treatment of patients with HABP, including VABP. We have completed preparations for our global INSPIRE Phase 3 clinical trial of iclaprim for HABP, including VABP. Subject to the availability of funding, we plan to start dosing patients in 2018. Linezolid will be the comparator in the INSPIRE trial. The duration of treatment of both iclaprim and linezolid will be 7 to 14 days. A sample size of 720 subjects is expected to be studied with a non-inferiority margin of -10%. The primary endpoint for the study is expected to be all cause mortality at Day 28. A key secondary endpoint is clinical cure at one to two weeks after antibiotic treatment ends. We believe that the successful completion of this pivotal Phase 3 trial would satisfy both FDA and EMA requirements for regulatory approval.

The INSPIRE Phase 3 clinical trial with iclaprim in patients with HABP, including patients with VABP, will be initiated, if and when, additional funding is available. This could further expand iclaprim's addressable market to include another serious unmet medical need. There are approximately 1.4 million patients hospitalized annually in the United States with HABP, including patients

with VABP. It is estimated that Gram-positive pathogens are causative pathogens in 40% of patients with HABP/VABP. We believe that iclaprim is well suited for use as a first-line empiric therapy for patients with HABP, including patients with VABP, caused by Gram-positive bacteria, based on data from a Phase 2 clinical trial, which support the efficacy of iclaprim in this patient population. Additionally, in a Phase 1 healthy volunteer trial, concentrations of iclaprim at the site of infection in the lungs were considerably higher than concentrations in plasma.

The diagram below summarizes the design of our INSPIRE Phase 3 program.



# Clinical Experience

Prior to our acquisition of iclaprim from Nuprim, Arpida had completed a total of two Phase 3, two Phase 2, and 14 Phase 1 clinical trials, in which more than 600 patients have been dosed with iclaprim.

Acute Bacterial Skin And Skin Structure Infections (ABSSSI)

#### Phase 3 Clinical Trials

Two parallel Phase 3 studies, ASSIST-1 and ASSIST-2, were conducted by Arpida in patients with cSSI. Both were evaluator-blinded, randomized, multicenter studies designed to compare the efficacy and safety of IV iclaprim to linezolid in the treatment of patients with cSSI known or suspected to be caused by susceptible pathogens. The primary objective of the studies was to compare the clinical cure rates at the test-of-cure visit (7-14 days after the end treatment). The trials were designed to demonstrate non-inferiority to linezolid with a lower bound on the 95% confidence interval of –12.5%.

ASSIST-1. In December 2006, Arpida reported positive results from a Phase 3 clinical trial, called ASSIST-1, of iclaprim for the treatment of cSSSI. The trial was designed to compare iclaprim to linezolid, a standard of care treatment for cSSSI. This international, randomized, double-blind trial enrolled 497 subjects with cSSSI. Subjects were assigned (1:1) to receive IV iclaprim (0.8 mg/kg) or IV linezolid (600mg) for 10 to 14 days and were evaluated during treatment. The test-of-cure visit took place 7-14 days after the end of treatment. Treatment was generally well tolerated. Based on Arpida's analysis of the data, the primary endpoint, statistical non-inferiority in the clinical cure rate at the test-of-cure visit, was reached. The overall clinical cure rates for the Intent-To-Treat (ITT) population of 497 subjects, were 83.1% and 88.7% for iclaprim and linezolid, respectively (treatment difference and 95% CI: -5.6% [-11.7% to 0.6%]). The incidence of any possible drug-related adverse events was lower in the iclaprim arm compared to the linezolid arm (16.4% versus 20.2%, respectively).

ASSIST-2. In July 2007, Arpida reported positive results from a Phase 3 clinical trial, called ASSIST-2, of iclaprim for the treatment of cSSSI. This randomized, blinded, comparator controlled trial enrolled 494 subjects internationally. The trial was designed to compare IV iclaprim to linezolid. The primary efficacy endpoint, statistical non-inferiority in the clinical cure rate at the test-of-cure visit, was achieved based on Arpida's analysis of the data. The overall clinical cure rates were 81.3% and 81.9% for iclaprim and linezolid, respectively (treatment difference and 95% CI: -0.6% [-7.7% to 6.5%]). The microbiological eradication rates for methicillin-susceptible MSSA bacteria were 82.2% and 83.4% for iclaprim and linezolid, respectively, and for MRSA 74.3% and 75.0%, respectively. The incidence of drug-related adverse events was lower in the iclaprim arm compared to the linezolid arm (27.9% versus 34.6%, respectively).

Efficacy Results. For the combined dataset, the clinical cure rates were similar between the iclaprim and linezolid arms for the Intent to Treat (ITT) population (82.2% and 85.3% in the iclaprim and linezolid arms, respectively; treatment difference and 95% confidence interval (CI) (-3.1% [-7.9% to 1.6%]).

Regulatory Review of ASSIST-1 and ASSIST-2. Based on Arpida's analysis of the data, for ASSIST-1, the lower bound of the 95% confidence interval was within the prespecified -12.5% non-inferiority margin but just outside of the -10% non-inferiority margin at -11.7%. For ASSIST-2, the lower bound of the 95% confidence interval was within both the pre-specified -12.5% and -10% non-inferiority margin at -7.7%, which demonstrates non-inferiority of iclaprim to linezolid for the treatment of cSSSI. While the ASSIST-1 and ASSIST-2 trials met the originally agreed standards for non-inferiority of -12.5%, after trial completion, the FDA determined that a -10% non-inferiority margin was required. As a result of the changed endpoints, in January 2009, Arpida received a CRL from the FDA requesting an additional study or studies to demonstrate the effectiveness of iclaprim. We believe that had the new guidance been in place prior to the commencement of the trials, Arpida would have enrolled a greater number of patients in the trials to power the trials for the required non-inferiority margins.

Safety Results. Overall, iclaprim was found to exhibit a safety and tolerability profile in the Phase 3 ASSIST trials comparable to that demonstrated by linezolid. The FDA has not, however, made any determination regarding the safety and efficacy of iclaprim. Adverse events were comparable among patients treated with iclaprim as compared to linezolid. There were 22 serious adverse events (SAEs) experienced by 20 (4%) of the iclaprim-treated patients with the most frequent events characterized as effecting the infections and infestation, cardiac, renal and urinary system organ classes. There were 21 SAEs experienced by 16 (3.3%) of the linezolid-treated patients with the most frequent events characterized as effecting the infections and infestations, vascular, and gastrointestinal system organ classes. The table below describes the combined adverse events reported for at least 5% of patients in either treatment group.

ASSIST 1 & 2 Combined Adverse Events Reported for at Least 5% of Patients in Either Treatment Group

Phase 3 cSSSI Combined Safety Population	Iclaprim	Linezolid
Number of Patients	(n=500)	(N=491)
Alanine aminotransferase (ALT) increased	33 (6.6)%	31 (6.3)%
Aspartate aminotransferase (AST) increased	32 (6.4)%	26 (5.3)%
Nausea	30 (6.0)%	39 (7.9)%
Diarrhea	29 (5.8)%	22 (4.5)%
Constipation	27 (5.4)%	19 (3.9)%
Pyrexia	26 (5.2)%	10 (2.0)%
Headache	30 (6.0)%	28 (5.7)%
QT prolongation	4 (0.8)%	2 (0.4)%

Six deaths were reported during the ASSIST-1 study (five in the iclaprim group and one in the linezolid group). Two deaths were recorded in ASSIST-2 (one in the iclaprim group and one in the linezolid group). The investigators found all deaths to be unrelated to iclaprim and instead attributable to serious underlying diseases. Four of the six deaths occurred well beyond five half-lives of the drug (3-12 days after the last dose of iclaprim). The causes of the six deaths in the iclaprim group were sepsis or septic shock (two patients), alcoholic cardiomyopathy (one patient), acute cardiac failure (one patient), acute renal failure (one patient), and colon cancer (one patient). The deaths were not ever proven to be directly related to iclaprim.

With respect to cardiac effects, results from the Phase 3 clinical trials indicated that the incidence of QTc prolongation (a measure of the delay in the depolarization and repolarization of the heart's ventricles) in the iclaprim treatment arms was similar to that observed in the linezolid treatment arms. No cases of QTc prolongation or other treatment-related cardiac effects classified as treatment-related adverse effect were reported in these studies. Iclaprim treatment was associated with a mean increase of the QTc interval of about 5 to 6 milliseconds greater than that observed with linezolid, which is not considered to be a QTc-prolonging drug.

In addition, in a separate analysis, in the subset of patients with renal impairment, iclaprim compared favorably to linezolid.

	Mild 90> CrCI>60 (N=270)		Moderate/Severe 60> CrCl>15 (N=144)		
	ICL (N=135)	LZD (N=135)	ICL (N=71)	LZD (N=73)	
Age, years, mean (SD)	54.2 (11.6)	50.6 (13.0)	66.6 (10.8)	65.2 (11.3)	
Endocrinologic, metabolic	29 (21.5)%	34 (25.2)%	31 (43.7)%	24 (32.9)%	
≥1 AE, N (%)	61 (45.2)%	75 (55.6)%	41 (57.7)%	43 (58.9)%	
≥1 SAE, n (%)	6 (4.4)%	4 (3.0)%	7 (9.9)%	5 (6.8)%	
≥1 drug-related AE, n (%)	26 (19.3)%	36 (26.7)%	14 (19.7)%	21 (28.8)%	
≥1 AE, leading to discontinuation, n(%)	3 (2.2)%	2 (1.5)%	6 (8.5)%	3 (4.1)%	
Hypoglycemia	3 (2.2)%	6 (4.4)%	0	5 (6.8)%	
QTc prolongation	0	0	3 (4.2)%	3 (4.1)%	

#### Phase 2 Clinical Trials

Phase 2 cSSSI Trial. In December 2003, Arpida completed a Phase 2 clinical trial of iclaprim, for the treatment of cSSSI. This randomized, double-blind comparator controlled trial enrolled 87 hospitalized patients with cSSSI and compared the safety and efficacy of two doses of iclaprim with a standard of care agent, vancomycin. Patients were treated with either iclaprim 0.8 mg/kg or iclaprim 1.6 mg/kg or vancomycin 1g. All drugs were administered by IV infusion two or three times daily for 10 days and patients were examined for clinical and microbiological responses at the conclusion of therapy and 20 days after therapy. The primary endpoint was clinical cure (7 to 14 days after end of therapy) and secondary endpoints included tolerability and microbiological responses at the test of cure visit.

Iclaprim demonstrated high clinical and microbiological response rates when compared with vancomycin. Iclaprim was also shown to exhibit a safety and tolerability profile comparable to that demonstrated by vancomycin and linezolid in clinical trials. The FDA has not, however, made any determination regarding the safety and efficacy of iclaprim.

Outcomes in evaluable patients demonstrated a clinical cure rate of 92.9% (26/28 patients) with iclaprim 0.8 mg/kg, 90.3% (28/31 patients) with iclaprim 1.6 mg/kg and 92.9% (26/28 patients) with vancomycin. Microbiological success (Gram-positive eradication rate) was 89.7% and 80.0% with iclaprim 0.8 mg/kg and iclaprim 1.6 mg/kg, respectively, and compared favorably with vancomycin 72.0%. Iclaprim was well tolerated and adverse events were infrequent and similar across all study arms. There were no trends in any lab abnormalities in patients receiving iclaprim.

Phase 2 cSSSI trial versus vancomycin: 87 patients

	Iclaprim 0.8mg/kg Q12h	Iclaprim 1.6mg/kg Q8h	Vancomycin 1g Q12h
ITT Population (N=)	28	31	28
Clinical Cure	26	28	26
% Clinical Cure	92.9%	90.3%	92.9%
Gram-positive eradication rate	89.7%	80.0%	72.0%
S. aureus eradication rate	80.0%	72.2%	58.8%

Phase 2 HABP, including VABP, Trial. In a similar study, a double-blind, randomized (1:1:1), dose ranging Phase 2 proof of concept study, patients with HABP, including VABP, treated with iclaprim, also showed comparable efficacy to vancomycin in that population, with end of treatment cure rates in the Intent-To-Treat (ITT) population of 73.9% and 62.5% for 0.8mg/kg and 1.2 mg/kg iclaprim, respectively, compared to 52.2% for vancomycin 1g, all doses administered two or three times daily. Patients treated with iclaprim also experienced fewer deaths within 28 days than patients treated with vancomycin.

#### Phase 2 HABP, including VABP trial versus vancomycin: 70 patients

	Iclaprim 0.8mg/kg Q12h	Iclaprim 1.2mg/kg Q8h	Vancomycin 1g Q12h
ITT Population (N=)	23	24	23
Clinical Cure	17	15	12
% Clinical Cure	73.9%	62.5%	52.2%
Fatalities within 28 days	2	3	5
% Death rate	8.7%	12.5%	21.7%

#### Phase 1 Clinical Trials

The effects of iclaprim have been studied in 14 Phase 1 clinical trials conducted in Europe in which iclaprim was administered to 247 patients.

Single Ascending Dose/Multiple Dose Studies. Iclaprim given as a single IV infusion diluted with normal saline at doses up to 3.2 mg/kg exhibited a safety and tolerability profile comparable to that demonstrated by vancomycin and linezolid in clinical trials. The FDA has not, however, made any determination regarding the safety and efficacy of iclaprim. In Phase 1 and Phase 2 studies, repeated doses of 60 or 120 mg of iclaprim administered twice daily for 10 days to healthy volunteers, as well as doses of 0.8 mg/kg twice daily and 1.6 mg/kg twice daily administered to patients for up to 10 days, exhibited safety and tolerability results compared to vancomycin and linezolid. No treatment-related abnormalities in laboratory parameters were observed in any of the treated subjects. No serious adverse events (SAEs) were reported in Phase 1 studies with IV iclaprim.

Formal QT/QTc Studies. Dose-dependent transient prolongation of the corrected QT interval (QTc) was observed, which was rapidly reversible upon discontinuation of the infusion of iclaprim. Dosing with iclaprim at 0.8 mg/kg and 1.6 mg/kg infused over 30- and 60-minute intervals, respectively, were assessed to be safe for clinical application. At the end of the infusion, when maximum plasma levels were achieved, the mean maximum time-matched, placebo-corrected QTc increase following 0.8 mg/kg infused for 30 minutes (the dose regimen in the ASSIST Phase 3 cSSSI studies) was about 10 msec. This declined rapidly thereafter and no gender-dependent differences or clinical signs and symptoms of arrhythmia related to treatment were observed.

Iclaprim concentrations in plasma, epithelial lining fluid, and alveolar macrophages in healthy volunteers. In a Phase 1 clinical trial, a validated microbiological assay was used to measure concentrations of iclaprim in plasma, alveolar macrophages (AM) and epithelial lining fluid (ELF) after a single 1.6 mg/kg intravenous infusion over 60 minutes of iclaprim among 24 healthy male volunteers. Iclaprim concentrations in ELF and AM exceeded serum concentrations by between approximately 20 and 40 times. Furthermore, iclaprim exceeded the MIC90 for Streptococcus pneumoniae and methicillin-resistant Staphylococcus aureus throughout the seven-hour sampling period. In contrast to linezolid and vancomycin, antibiotics approved for HABP including VABP caused by Gram-positive pathogens, iclaprim achieves high and sustained concentrations in ELF and AM.

# Antibiotic Concentrations in Epithelial Lining Fluid (ELF) and Alveolar Macrophages (AM) Compared with Serum Levels

		Epithelial lining fluid	Alveolar macrophages	Serum	ELF/serum	AM/serum
Antibiotic	Dose	(mg/L)	(mg/L)	(mg/L)	concentration	concentration
Iclaprim	1.6mg/kg IV, single dose	40.9	67.7	1.8	22.7	37.6
Linezolid	600mg q12h IV, 9 doses	622.8	27.2	190.0	3.3	0.1
Vancomycin	1g q12h IV, 9 doses	92	926	367	0.3	2.5

# Preclinical Development

We commissioned JMI Laboratories to conduct a worldwide microbiological survey to determine the activity of iclaprim and other antibiotics against Gram-positive clinical isolates of MSSA and MRSA and beta-hemolytic Streptococci spp. (including *S. pyogenes*, *S. agalactiae*). The 2012-2014 isolates were from patients with SSSI and HABP. *S. aureus* is the most common Gram-positive bacterial cause of both ABSSSI and HABP, including VABP. These microbiological data demonstrate that iclaprim is generally

16 fold more potent than TMP, for *S. aureus*, the only other approved DHFRi antibiotic. These data also demonstrate that iclaprim is potent compared to other approved antibiotics for the treatment of ABSSSI and HABP.

Comparison of the Activity (MIC $_{50/90}$  µg/mL) of Iclaprim and Other Anti-infectives against Clinical Isolates (2012-2014) from US, Europe, Latin America, and Asia Pacific Associated with ABSSSI and HABP

	S. aureus	MRSA	MSSA	Beta- hemolytic streptococcus
	(n=1,178)	(n=582)	(n=596)	(n=199)
Iclaprim	0.06/0.12	0.06/0.5	0.06/0.12	0.06/0.25
Vancomycin	1/1	1/1	1/1	0.5/0.25
Daptomycin	0.25/0.5	0.25/0.5	0.25/0.5	0.12/0.25
Linezolid	1/1	1/1	1/1	1/1

We also commissioned IHMA Laboratories to conduct a microbiological survey from US and Europe to determine the activity of iclaprim and other antibiotics against Gram-positive clinical isolates of MSSA and MRSA and beta-hemolytic Streptococci spp. (including *S. pyogenes, S. agalactiae*). The 2015-2016 isolates were from patients with SSSI. *S. aureus* is the most common Gram-positive bacterial cause of SSSI. These microbiological data demonstrate that iclaprim is potent compared to other approved antibiotics for the treatment of SSSI.

 $Comparison of the \ Activity \ (MIC_{50/90} \ \mu g/mL) \ of \ I claprim \ and \ Other \ Anti-infectives \ against \ Clinical \ I solates \ (2015-2016) \ from \ US \ and \ Europe \ Associated \ with \ SSSI$ 

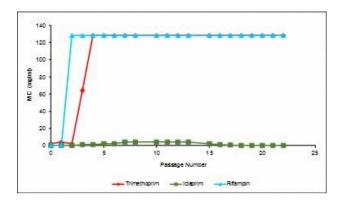
	S. aureus (n=618)	MRSA (n=314)	MSSA (n=304)	Beta- hemolytic streptococcus (n=259)
Iclaprim	0.03/0.12	0.03/0.12	0.06/0.06	0.03/0.12
Vancomycin	1/1	1/1	1/1	_
Daptomycin	0.25/0.5	0.25/0.5	0.25/0.5	_
Linezolid	1/2	1/2	1/2	1/1

Additionally, iclaprim was compared with other antibiotics against 20 isolates of MRSA and MSSA. The MIC and MBC of iclaprim was found to be essentially identical against these isolates, with no difference between MRSA and MSSA.

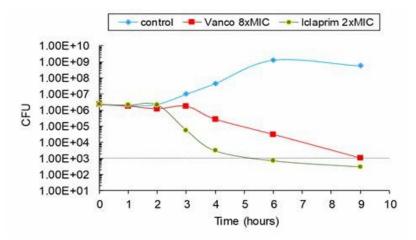
	Median MIC (μg/mL)	MIC range (μg/mL)	Median MBC (µg/mL)	MBC range (μg/mL)
Iclaprim	0.09	0.06-0.125	0.10	0.06-0.125
Vancomycin	1.62	1-2	1.74	1-4
Teicoplanin	1.07	0.5-2	1.41	0.5-8
Linezolid	3.73	2-4	>32	>32

Abbreviations: n = number of isolates; ICL = iclaprim; LIN = linezolid; MIC<sub>90/50</sub> = minimum concentration required to inhibit 90%/50% of isolates; TMP = trimethoprim; VAN = vancomycin; MBC = minimum bactericidal concentration

As illustrated in the figure below, serial passage studies were conducted to determine the propensity for bacteria, TMP-sensitive and —resistant, to develop resistance to iclaprim. Bacteria were passaged in the presence of sub-inhibitory concentrations of antibiotics with different mechanism of actions. Thirty *S. aureus* strains were tested. Even after 20 passages, *S. aureus* remained fully susceptible to iclaprim. In contrast, resistance to TMP and rifampin was observed as early as after three passages. In addition, even after 20 passages, no stable mutations in DHFR genes were observed among isolates tested. These data suggest that iclaprim has a low propensity for resistance development.



As illustrated in the figure below, iclaprim demonstrated rapidly bactericidal activity *in vitro*, achieving 99.9% kill against MRSA within four to six hours of iclaprim 2x minimum inhibitory concentrations (MIC), versus eight to ten hours for vancomycin 8xMIC:



# Microbiology

Iclaprim exhibits activity against a wide range of Gram-positive and a select range of Gram-negative isolates as well as several intracellular bacteria. It is rapidly bactericidal against Gram-positive clinical isolates and exerts a significant sub-MIC, post-antibiotic-effect (PAE) aligned with the PK profile of iclaprim after clinical administration that would generally cover an entire 12-hour dosing interval. No synergistic action with antibiotics other than sulfonamides was demonstrated, nor was there any observed antagonism with other antibiotic classes. Human plasma did not significantly affect the MICs of iclaprim against MSSA. The activity of iclaprim was not influenced by the mode of administration in *in vivo* rodent infection models.

- Iclaprim exhibited potent activity against Gram-positive clinical isolates of many genera of staphylococci (including MSSA and MRSA), streptococci (including Streptococcus pyogenes, Streptococcus agalactiae, Streptococcus pneumoniae) and enterococci (e.g., Enterococcus faecalis) and was also active against bacterial isolates clinically resistant to antibiotics in use. Overall, iclaprim has antibacterial activity against Gram-positive causative pathogens of ABSSSI (including MRSA) and of HABP, including VABP.
- Iclaprim exhibits select activity against a variety of Gram-negative isolates including *Haemophilus influenzae*, *Moraxella catarrhalis*, *Legionella pneumophila* and *Neisseria gonorrhoea*. Against Enterobacteriaceae, iclaprim exhibits only modest activity and is generally inactive against nonfermenters including *Pseudomonas aeruginosa*, and *Stenotrophomonas maltophila*.

- Iclaprim also exhibits potent activity against several intracellular bacteria including *Chlamydia pneumoniae*, *Chlamydia trachomatis*, and *Listeria monocytogenes*. Furthermore, in a cellular *Pneumocystis jirovecii* infection model, iclaprim compared favorably with TMP/sulfamethoxazole (SMX), the current empirical prophylaxis and treatment for *P. jirovecii* pneumonia.
- Iclaprim was rapidly bactericidal against Gram-positive clinical isolates and exhibited a significant post-antibiotic sub-microbial MIC effect.
- Even when iclaprim concentrations are below the MIC, it generally covers an entire 12-hour dosing interval, which is in line with the PK profile after clinical administration.
- Based on *in vitro* data, the propensity for resistance development is predicted to be low.
- · Iclaprim showed synergistic action with sulfonamides and no antagonism with other antibiotic classes.
- Human plasma did not significantly affect the MICs of iclaprim against MSSA or MRSA.
- Iclaprim was active when administered by both IV and oral routes in in vivo rodent infection models.

#### Mechanism Of Action

X-ray crystallography studies have been undertaken to determine the binding properties of iclaprim and its enantiomers in *S. aureus* TMP-susceptible and TMP-resistant DHFRs. These studies demonstrate that iclaprim has additional binding affinity to the DHFRs, as compared with TMP. These interactions form the structural basis of the increased affinity of iclaprim for DHFR and result in sufficient overall binding affinity to also inhibit the TMP-resistant (TMP-R) F98Y mutant enzyme. These interactions occur in a highly conserved region of the bacterial enzyme that is important for substrate binding. Considering the highly conserved nature of the bacterial DHFR active site, we believe similar binding is likely to occur with streptococcal DHFR.

Enzymatic studies demonstrate that iclaprim potently inhibits bacterial DHFR as reflected in its inhibitory activity against Gram-positive bacterial strains, which include Gram-positive pathogens implicated in ABSSSI infection (i.e., *S. aureus*, *S. pyogenes* and *S. agalactiae*). Importantly, iclaprim does not exhibit any significant activity against human DHFR at concentrations 4-5 orders of magnitude higher than those needed to inhibit microbial DHFR.

#### Safety Pharmacology

Assessment of general behavior, locomotor activity, cardiovascular system, respiratory parameters, and the *in vitro* activity on cardiac ion channels in animal models treated with iclaprim did not reveal any major safety issues.

# Pharmacokinetics

There were no major differences in the PK profile between IV or oral administration, gender or the duration of treatment in the species studied. These results are in good agreement with human data. Toxicokinetic studies showed that PK parameters did not change following repeat-dose administration, and no accumulation of iclaprim was seen. Overall, the quantitative differences observed were consistent with the known interspecies differences in the activities of the metabolizing enzymes. Metabolism in animal models was similar to that observed in humans, with all major human metabolites also being major metabolites in these species.

#### **Toxicology**

In acute toxicity studies, the median lethal dose (LD50) of iclaprim per IV route ranged from 75 mg/kg in mice to 150 mg/kg in rats. Repeated-dose toxicity studies in rats showed histopathological changes at the injection sites at dosing regimens of  $\geq$ 10 mg/kg/day.

Repeated-dose toxicity studies in marmoset and mini-pig resulted in no observed adverse effect levels (NOAELs) of 30 mg/kg/day and 20 mg/kg, respectively.

Reproductive toxicity studies did not reveal adverse effects on embryo-fetal survival or growth in rats receiving 20 mg/kg/day iclaprim; however, since a small number of fetuses showed the major abnormality of bent scapula, a clear NOAEL for embryo-fetal development was not established. In a Segment II study in mini-pigs by IV administration, no fetal NOAEL could be established and maternal toxicity was observed in all groups treated with iclaprim. Iclaprim was not mutagenic or clastogenic in genotoxicity studies.

#### **Pediatric Indications**

We intend to study iclaprim for the treatment of pediatric patients with serious and life threatening indications in adequate and well-controlled comparator controlled studies of Gram-positive infections in pediatric patients ranging in age from birth through 18 years. Preclinical studies and a pediatric IV formulation work is ongoing.

In September 2017, the FDA granted iclaprim Orphan Drug Designation for the treatment of *S. aureus* lung infections in patients with cystic fibrosis. In October 2017, preclinical data for iclaprim were presented at IDWeek 2017 demonstrating the therapeutic potential of iclaprim in MRSA lung infections. In an *in vivo* model mimicking the pathophysiology observed in patients with cystic fibrosis (CF), rats received either iclaprim, vancomycin or placebo. Iclaprim achieved a statistically significantly higher reduction of bacterial CFU (colony forming units) compared to vancomycin (80mg/kg iclaprim vs vancomycin, p=0.0002; 60mg/kg iclaprim vs vancomycin, p=0.05).

The iclaprim-treated rats demonstrated 100% survival (33/33), while the vancomycin group demonstrated 91.7% survival (22/24) and the control group showed 48.3% survival (14/29).

## **Development Pipeline**

In addition to our clinical programs, we have a preclinical development program underway to identify a formulation of iclaprim suitable for adolescent and pediatric patients. We are also developing IV and oral formulations of MTF-101, a diaminopyrimidine that may be suitable for testing in clinical trials to demonstrate safety and efficacy in patients with osteomyelitis and patients with prosthetic joint infections.

#### **Additional Portfolio Plans**

We intend to build a portfolio of novel antibiotics by licensing preclinical and/or clinical stage programs from academic centers and pharmaceutical companies specializing in antibacterial research. Several programs are under review, including compounds designed to be effective against Gram-positive and Gram-negative bacteria.

# **Commercialization Strategy**

If approved, we intend to commercialize iclaprim, our lead product candidate, in the United States, either by building sales, marketing and market access teams ourselves, or partnering with a contract selling organization, or identifying a hospital-focused strategic partner. We are seeking proven commercialization partners in other key global markets. We believe that our ability to execute this strategy is enhanced by our focus on the hospital setting and the significant prior commercial experience of key members of our management team. Prior to joining us, members of our management team and board of directors were involved in the launch or commercialization of several blockbuster (annual revenues of at least \$1 billion) pharmaceutical products.

# Intellectual Property and Regulatory Exclusivity

Iclaprim has been designated by FDA as a QIDP for ABSSSI and HABP. Under the GAIN Act, if approved for marketing by the FDA, iclaprim would benefit from a five-year extension to an NCE (New Chemical Entity) exclusivity period of five years, if NCE exclusivity is granted for iclaprim, for a potential total of 10 years of market exclusivity, starting on the date of marketing approval. During this period of exclusivity, FDA is not permitted to accept any ANDA or Section 505(b)(2) NDA filing for a drug product containing iclaprim until at least the ninth year after marketing approval, and any FDA approval would be further delayed by the time it takes FDA to review the application, as well as by a patent litigation stay as described below. We have filed and plan to file patent applications covering iclaprim which, once issued in the United States, may be eligible to be listed in the FDA publication, "Approved Drug Products with Therapeutic Equivalence Evaluations," known as the "Orange Book." If there are patents listed in the Orange Book, a generic or 505(b) (2) applicant that seeks to market its product before expiration of the patents must include what is known as a "Paragraph IV certification," challenging the validity or enforceability of, or claiming non-infringement of, the listed patent or patents. Notice of the certification must be given to us as well, and we would intend to sue the generic challenger within the proscribed 45-day period after receiving notice of the certification for infringement of our listed patent or patents. Upon initiation of our infringement law suit, approval of the ANDA or 505(b)(2) application would be stayed for a further 30 months, or until 7.5 years after approval of the NDA, unless lengthened or shortened by the court. In Europe, the generation of additional data in our Phase 3 clinical trials is expected to result in eight years of data exclusivity (which may be extended to 10 years for orphan or pediatric indications) and an additional two years of market exclusivity.

NCE-type exclusivity periods are expected to be granted for iclaprim in other key markets. We have exclusive access to the complete U.S. and European data packages for iclaprim, generated to support the original regulatory submissions in 2008. In addition to providing critical input into our clinical and regulatory strategy development, we believe the existing data will provide supportive

information to future regulatory reviews. Having access to this existing data will avoid the need for us to complete an entire development program starting from scratch, representing a considerable advantage in terms of time and cost compared to more traditional drug development programs.

We are building a patent estate to provide additional protection for iclaprim and MTF-101. We own a provisional patent application covering the fixed dose of iclaprim being used in our Phase 3 trials, which has been filed. This patent application is designed to protect a number of proprietary categories, including kits comprising a dosage form and instructions for administration, dosing regimens, and the use of a dosage for treatment of infection. Other patent applications have been and are expected to be filed that are designed to protect our proprietary technologies, including processes for manufacturing the iclaprim and MTF-101 active pharmaceutical ingredient and therapeutic formulations, their use in pharmaceutical preparations and methods of treating disease with iclaprim or MTF-101.

# Competition

The biopharmaceutical and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. We face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions. Any product candidates that we successfully develop and commercialize will compete with existing products and new products that may become available in the future. Many of our competitors, alone or with their strategic partners, have greater experience than we do in conducting preclinical studies and clinical trials, and obtaining FDA, EMA and other regulatory approvals, and have substantially greater financial, technical and other resources than we do, such as larger research and development, clinical, marketing and manufacturing organizations. As a result, these companies may obtain regulatory approval for competing products more rapidly than we are able and may be more effective in selling and marketing their products. Companies that complete clinical trials, obtain required regulatory authority approvals and commence commercial sale of their drugs before their competitors may achieve a significant competitive advantage, and our commercial opportunity could be reduced or eliminated if competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Drugs resulting from our research and development efforts or from our joint efforts with collaboration partners therefore may not be commercially competitive with our competitors' existing products or products under development.

We are not aware of any other company currently with a DHFRi in clinical development for antibacterial use. Other companies are developing antibiotics that are not DHFR's and that work differently from our compounds. For example, Durata Therapeutics, Inc. developed and gained approval for dalbavancin and The Medicines Company developed and gained approval for oritavancin. Both antibiotics are glycopeptides, the same class as vancomycin, one of the most commonly prescribed antibiotics and both antibiotics were required by the FDA to conduct additional studies around the same time as Arpida received the CRL for iclaprim. Other classes of antibiotics in late stage development include tetracyclines (Tetraphase, Paratek), cephalosporins (Basilea, Merck), quinolones (Melinta), oxazolidinones (Melinta, Merck), carbapenems (Melinta, Merck), pleuromutilins (Nabriva) and aminoglycosides (Achaogen). To avert the pending antibiotic crisis, several classes with different mechanisms will likely be needed and it is our belief that our product will assist in diversifying the antibiotic products available on the market.

# **Government Regulation**

## **Product Approval Process**

The clinical testing, manufacturing, labeling, storage, distribution, record keeping, advertising, promotion, import, export and marketing, among other things, of our product candidates are subject to extensive regulation by governmental authorities in the United States and other countries. The FDA under the Federal Food, Drug, and Cosmetic Act regulates pharmaceutical products in the United States. Failure to comply with applicable FDA requirements at any time during the product development process, approval process, or after approval, may subject a company to a range of administrative and judicial enforcement actions, which could include refusal to approve pending applications, withdrawal of an approval, a clinical hold, untitled or warning letters, product recalls, products seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement, or civil or criminal penalties.

The steps required before a drug may be approved for marketing in the United States generally include:

- the completion of preclinical laboratory tests and animal tests conducted under Good Laboratory Practices, or GLPs, and other applicable regulations;
- the submission to the FDA of an IND application for human clinical testing, which must be reviewed by the FDA and become effective before human clinical trials commence:

- approval by an independent IRB prior to initiation of a clinical trial at a particular study site, and ongoing oversight of the trial by the IRB;
- the successful performance of adequate and well-controlled human clinical trials conducted in accordance with Good Clinical Practices to establish the safety and efficacy of the product candidate for each proposed indication;
- analysis of clinical trial data and preparation of submission to the FDA of an NDA;
- the submission to the FDA of an NDA;
- the FDA's acceptance of the NDA;
- satisfactory completion of an FDA inspection of the manufacturing facilities at which the product is made to assess compliance with cGMPs to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- if clinical investigators are investigated satisfactory completion of FDA inspections of their clinical trial sites under GCP;
- satisfactory completion of FDA inspections of clinical trial sites and GLP toxicology studies; and
- the FDA's review and approval of an NDA prior to any commercial marketing or sale of the drug in the United States.

The testing and approval process requires substantial time, effort and financial resources, and the receipt and timing of any approval is uncertain.

Preclinical studies include laboratory evaluations of the product candidate, as well as animal studies to assess the potential safety and efficacy of the product candidate. The results of the preclinical studies, together with manufacturing information, analytical data and a proposed clinical trial protocol, are submitted to the FDA as part of the IND, which must become effective before clinical trials may be commenced. The IND will become effective automatically 30 days after receipt by the FDA, unless the FDA raises concerns or questions about the conduct of the clinical trials as outlined in the IND prior to that time and places the IND on clinical hold. In this case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can proceed. A clinical hold may occur at any time during the life of an IND, due to safety concerns or non-compliance, and may affect one or more specific studies or all studies conducted under the IND.

Clinical trials involve the administration of the product candidates to (depending on the phase, explained below) healthy volunteers or patients with the disease to be treated under the supervision of a qualified principal investigator. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, the parameters to be used in monitoring safety, and the efficacy criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Further, each clinical trial must be reviewed and approved by an independent institutional review board, or IRB, either centrally or individually at each institution at which the clinical trial will be conducted. The IRB will consider, among other things, ethical factors, the safety of human subjects and the possible liability of the institution. Progress reports detailing the status of the clinical trials must be submitted to the FDA annually. Sponsors must also report to the FDA serious and unexpected adverse reactions, any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigation brochure, or any findings from other studies or animal or *in vitro* testing that suggest a significant risk in humans exposed to the drug. There are also requirements governing the reporting of ongoing clinical trials and clinical trial results to public registries (e.g., ClinicalTrials.gov).

Clinical trials are typically conducted in three sequential phases prior to approval, but the phases may overlap or be combined. These phases generally include the following:

- Phase 1. Phase 1 clinical trials represent the initial introduction of a product candidate into human subjects, frequently healthy volunteers. In Phase 1, the product candidate is usually tested for safety, including adverse effects, dosage tolerance, absorption, distribution, metabolism, excretion and pharmacodynamics.
- Phase 2. Phase 2 clinical trials usually involve studies in a limited patient population to: (1) evaluate the efficacy of the product candidate for specific indications; (2) determine dosage tolerance and optimal dosage; and (3) identify possible adverse effects and safety risks.

Phase 3.

Phase 3 clinical trials are conducted to further demonstrate clinical efficacy, optimal dosage and safety within an expanded patient population, often at geographically dispersed clinical trial sites, and to provide sufficient data for the statistically valid evidence of safety and efficacy.

Concurrent with clinical studies, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the product and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

Phase 4 clinical trials, whether conducted voluntarily or mandated by the FDA, are often conducted after approval to gain additional experience from the treatment of patients in the intended therapeutic indication and to document a clinical benefit in the case of drugs approved under accelerated approval regulations, or when otherwise requested by the FDA in the form of post-market requirements or commitments. Failure to promptly conduct any required Phase 4 clinical trials could result in withdrawal of approval.

Clinical trials are inherently uncertain and any phase may not be successfully completed. A clinical trial may be suspended or terminated by the FDA, IRB or sponsor at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides ongoing oversight and safety reviews to determine whether or not a clinical trial may move forward at designated check points based on access to certain data from the clinical trial. We may also suspend or terminate a clinical trial based on evolving business objectives and/or competitive climate.

Sponsors have the opportunity to meet with the FDA at certain points during the development of a new drug to share information about the data gathered to date and for the FDA to provide advice on the next phase of development. These meetings may be held prior to the submission of an IND, at the end of Phase 2 and/or before an NDA is submitted. Meetings may be requested at other times as well.

The results of preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information on the manufacture, composition and quality of the product, proposed labeling and other relevant information are submitted to the FDA in the form of an NDA requesting approval to market the product. In most cases the NDA must be accompanied by a significant user fee payment. The FDA has substantial discretion in the approval process and may refuse to accept any application, for example if the NDA is not sufficiently complete, or decide that the data are insufficient for approval and require additional preclinical, clinical or other studies.

In addition, under the Pediatric Research Equity Act, or PREA, an NDA or supplement to an NDA must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. In 2012, the FDASIA amended the FDCA to require that a sponsor who is planning to submit such an application submit an initial Pediatric Study Plan (PSP) within sixty days of an end-of-phase 2 meeting or as may be agreed between the sponsor and the FDA. The FDA and the sponsor must reach agreement on the PSP. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan drug designation has been granted. However, if only one indication for a product has orphan drug designation, a pediatric assessment may still be required for any applications to market that same product for the non-orphan indication(s).

Once the NDA submission has been submitted, the FDA has 60 days after submission of the NDA to conduct an initial review to determine whether it is sufficient to accept for filing. NDAs receive either a standard or priority review. Under the Prescription Drug User Fee Act, the FDA sets a goal date by which it plans to complete its review. For a standard review, this is typically 10 months from the 60-day filing date after submission of the NDA application. The review process is often extended by FDA requests for additional information or clarification. Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facility complies with cGMPs and may also inspect clinical trial sites for integrity of data supporting safety and efficacy. The FDA may also convene an advisory committee of external experts to provide input on certain review issues relating to risk, benefit and interpretation of clinical trial data. The FDA is not bound by the recommendations of an advisory committee, but generally follows such recommendations in making its decisions. The FDA may delay approval of an NDA if applicable regulatory criteria are not satisfied and/or the FDA requires additional testing or information. The FDA may require post-marketing testing and surveillance to monitor safety or efficacy of a product.

Priority Review is granted where there is evidence that the proposed product would be a significant improvement in the safety or effectiveness of the treatment, diagnosis, or prevention of a serious condition. Priority review designation does not change the scientific or medical standard for approval or the quality of evidence necessary to support approval. Also, FDA has a Fast Track program

that is intended to expedite or facilitate the process for reviewing new drugs that meet certain criteria. Specifically, new drugs are eligible for Fast Track designation if they are intended to treat a serious or life-threatening disease or condition for which there is no effective treatment and demonstrate the potential to address unmet medical needs for the condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a new drug or biologic may request the FDA to designate the drug or biologic as a Fast Track product concurrently with, or at any time after, submission of an IND, and the FDA must determine if the product candidate qualifies for Fast Track designation within 60 days of receipt of the sponsor's request. The FDA may initiate review of sections of a Fast Track drug's NDA before the application is complete. This rolling review is available if the applicant provides, and the FDA approves, a schedule for the submission of each portion of the NDA and the applicant pays applicable user fees. However, the FDA's time period goal for reviewing an application does not begin until the last section of the application is submitted. Additionally, the Fast Track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical study process.

Before approving an NDA, the FDA will often inspect the facilities at which the product is manufactured, FDA will not approve the product unless it finds adequate assurance (through inspection or otherwise) that the manufacturing facility complies with cGMPs FDA may also inspect clinical trial sites for integrity of data supporting safety and efficacy. The FDA may also convene an advisory committee of external experts to provide input on certain review issues relating to risk, benefit and interpretation of clinical trial data. The FDA is not bound by the recommendations of an advisory committee, but generally follows such recommendations in making its decisions. The FDA may delay approval of an NDA if applicable regulatory criteria are not satisfied and/or the FDA requires additional testing or information. The FDA may require post-marketing testing and surveillance to monitor safety or efficacy of a product.

After the FDA evaluates the NDA and evaluates manufacturing facilities where the drug product and/or its API will be produced, it may issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter generally outlines the deficiencies in the NDA submission and may require substantial additional clinical testing, such as an additional pivotal Phase 3 clinical trial(s), clinical data, and/or other significant, expensive and time consuming requirements related to clinical trials, preclinical studies or manufacturing. Even if such additional information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval.

The FDA may approve the NDA with a Risk Evaluation and Mitigation Strategies, or REMS, plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling, development of adequate controls and specifications, or a commitment to conduct one or more post-market studies or clinical trials. Such post-market testing may include Phase 4 clinical trials and surveillance to further assess and monitor the product's safety and effectiveness after commercialization.

# Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval and may require additional clinical trials and NDA submissions. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments and list their drug products with the FDA and state agencies and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained, or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated type, severity or frequency, with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information, imposition of post-market studies or clinical trials to assess new safety risks, or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, but are not limited to:

• restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;

- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA, as well as the Department of Justice, strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA, DOJ and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability. Although recent court decisions and FDA Guidance suggest that certain off-label communications (e.g., truthful and non-misleading speech) may be protected under the First Amendment, the scope of any such protection is unclear and there are still significant risks in this area as it is unclear how these court decisions will impact the FDA's enforcement practices, and there is likely to be substantial disagreement and difference of opinion regarding whether any particular statement is truthful and not misleading.

Moreover, the federal Drug Supply Chain Security Act (DSCSA) imposes obligations on manufacturers of pharmaceutical products, among others, related to product tracking and tracing. Among the requirements of DSCSA, manufacturers will be required to provide certain information regarding the drug product to individuals and entities to which product ownership is transferred, label drug product with a product identifier, and keep certain records regarding the drug product. Further, under DSCSA manufacturers will have drug product investigation, quarantine, disposition, and notification responsibilities related to counterfeit, diverted, stolen, and intentionally adulterated products, as well as products that are the subject of fraudulent transactions or which are otherwise unfit for distribution such that they would be reasonably likely to result in serious health consequences or death.

# Foreign Regulation

In order to market any product outside of the United States, we would need to comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we would need to obtain the necessary approvals by the comparable foreign regulatory authorities before we can commence clinical trials or marketing of the product in foreign countries and jurisdictions. Although many of the issues discussed above with respect to the United States apply similarly in the context of the EU, the approval process varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. Furthermore, in light of the recent Brexit vote, it is unclear at this time what impact Brexit could have on the pharmaceutical industry and the process for approving product candidates in the United Kingdom. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

# Other Healthcare Laws

In addition to FDA restrictions on the marketing of pharmaceutical products, federal and state healthcare laws restrict certain business practices in the biopharmaceutical industry. Although we currently do not have any products on the market, we may be subject, and once our product candidates are approved and we begin commercialization, will be subject to additional healthcare laws and regulations enforced by the federal government and by authorities in the states and foreign jurisdictions in which we conduct our business. These laws include, but are not limited to, anti-kickback, false claims, data privacy and security, and transparency statutes and regulations.

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, purchasing, leasing, arranging for, ordering or recommending any good, facility, item or service for which payment is made, in whole or in part, under Medicare, Medicaid or any other federal healthcare program. The term "remuneration" has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payment, ownership interests and providing anything at more or less than its fair market value, as applicable. The federal Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand, and prescribers, purchasers and formulary managers on the other. It has also been interpreted to prohibit certain Patient Assistance Programs and marketing arrangements of manufacturers. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution, the exceptions and safe harbors are drawn narrowly, and our future practices may not in all

cases meet all of the criteria for a statutory exception or safe harbor protection. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable regulatory safe harbor does not make the conduct *per se* illegal under the federal Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare program covered business, the statute has been violated. The U.S. Department of Health and Human Services Office of Inspector General has consistently maintained the position that an arrangement may violate the Anti-Kickback Statute if any sole purpose of the arrangement is prohibited.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, PPACA, amended the intent requirement under the Anti-Kickback Statute and criminal healthcare fraud statutes (discussed below) such that a person or entity no longer needs to have actual knowledge of the statute or the specific intent to violate it in order to have committed a violation. In addition, PPACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act (discussed below). Furthermore, many states have adopted anti-kickback laws similar to the federal Anti-Kickback Statute. Some of these state anti-kickback laws are more extensive than the federal law, including state kickback prohibitions that apply to items and services reimbursed by commercial or private third-party payors and/or cash-giving patients. Due to the breadth of these federal and state anti-kickback laws, and the potential for additional legal or regulatory change in this area, it is possible that our current and future sales and marketing practices and/or our future relationships with physicians might be challenged under these laws, which could cause harm to us.

The civil monetary penalties statute imposes penalties against any person or entity who, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. The statute also prohibits manufacturers or suppliers from providing inducements to federal program beneficiaries. The federal exclusion statute permits the government to exclude the organization, its managing executives, or both from federal program participation if they have violated the anti-kickback statute, presented false claims, or committed other health care statutory violations. If the organization is excluded, none of its products is eligible for federal reimbursement and other health organizations are prohibited from entering into contractual relationships with the organization for health items or services.

The federal false claims laws and criminal health care fraud statutes prohibit, among other things, any person or entity from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment or approval to the federal government or knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes "any request or demand" for money or property presented to the U.S. government. Multiple pharmaceutical and other healthcare companies have been subject to enforcement under these laws for, among other things, allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product or for administering Patient Assistance Programs that were not based upon individualized assessments of need. Financial relationships between manufacturers and physicians or other prescribing professionals, distributors, or pharmacies may result in false claims enforcement for causing those entities to file claims that are deemed false due to impermissible kickbacks. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of the product for unapproved, and thus noncovered, uses.

The Health Insurance Portability and Accountability Act of 1996, or HIPAA, created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, including private third-party payors, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of, or payment for, healthcare benefits, items or services.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's security standards directly applicable to business associates—independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also created four new tiers of civil monetary penalties, and newly empowered state attorney generals with the authority to enforce HIPAA. In January 2013, the Office for Civil Rights of the U.S. Department of Health and Human Services issued the Final Omnibus Rule under HIPAA pursuant to HITECH that makes significant changes to the privacy, security, and breach notification requirements and penalties. The Final Omnibus Rule generally took effect in September 2013 and enhances certain privacy and security protections, and strengthens the government's ability to enforce HIPAA. It imposes significant operational requirements to perform risk analyses, conduct regular training, and adhere to defined administrative, technical, and physical

safeguards of protected data. The Final Omnibus Rule also enhanced requirements for both covered entities and business associates regarding notification of breaches of unsecured protected health information. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways. These state laws may be more restrictive than HIPAA by expanding the scope of covered entities, the types of protected information, the prohibited conduct, or the remedies available to governmental or private litigants. State laws often are not preempted by HIPAA, thus complicating compliance efforts.

Additionally, PPACA also included the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually information related to certain payments or other transfers of value made or distributed to physicians and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually certain ownership and investment interests held by physicians and their immediate family members. Failure to comply with required reporting requirements could subject applicable manufacturers and others to substantial civil money penalties.

Also, many states have similar healthcare statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Certain states require pharmaceutical companies to implement a comprehensive compliance program that includes a limit or outright ban on expenditures for, or payments to, individual medical or health professionals and/or require pharmaceutical companies to track and report gifts and other payments made to physicians and other healthcare providers.

Because we intend to commercialize products that could be reimbursed under federal and other governmental healthcare programs, we plan to develop a comprehensive compliance program that establishes internal controls to facilitate adherence to the state and federal rules and healthcare program requirements. Although compliance programs and adherence thereto may mitigate the risk of violation of and subsequent investigation and prosecution for violations of the above laws, the risks cannot be entirely eliminated. If our operations are found to be in violation of any of the healthcare laws or regulations described above or any other laws that apply to us, we may be subject to penalties, including potentially significant criminal, civil and/or administrative penalties, damages, fines, disgorgement, individual imprisonment, exclusion of products from reimbursement under government programs, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings and/or the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products will be sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, fraud and abuse and conflict of interest laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

#### Pharmaceutical Coverage, Pricing And Reimbursement

In both domestic and foreign markets, our sales of any future approved products, if and when commercialized, will depend in part on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors include government authorities, managed care providers, private health insurers and other organizations. Patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Patients are unlikely to use our products, if approved, unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products. Sales of our products will therefore depend substantially, both domestically and abroad, on the extent to which the costs of our products will be paid by third-party payors. These third-party payors are increasingly focused on containing healthcare costs by challenging the price, imposing coverage restrictions or limits and examining the cost-effectiveness of medical products and services.

In addition, significant uncertainty exists as to the coverage and reimbursement status of newly approved healthcare product candidates. The market for our product candidates for which we may receive regulatory approval will depend significantly on access to third-party payors' drug formularies, or lists of medications for which third-party payors provide coverage and reimbursement. The industry competition to be included in such formularies often leads to downward pricing pressures on pharmaceutical companies. Also, third-party payors may refuse to include a particular branded drug in their formularies or otherwise restrict patient access to a branded drug when a less costly generic equivalent or other alternative is available. Furthermore, third-party payor reimbursement to providers for our product candidates may be subject to a bundled payment that also includes the procedure administering our products. To the extent there is no separate payment for our product candidates, there may be further uncertainty as to the adequacy of reimbursement amounts. Because each third-party payor individually approves coverage and reimbursement levels, obtaining coverage and adequate reimbursement is a time consuming, costly and sometimes unpredictable process. We may be required to provide scientific and clinical support for the use of any product to each third-party payor separately with no assurance that approval would be obtained, and we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness and/or medical necessity of our products. This process could delay the market acceptance of any product and could have a negative effect on our future revenues and operating results. We cannot be certain that our product candidates will be considered cost-effective or medically necessary. Because

coverage and reimbursement determinations are made on a payor-by-payor basis, obtaining acceptable coverage and reimbursement from one payor does not guarantee the Company will obtain similar acceptable coverage or reimbursement from another payor. A payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. If we are unable to obtain adequate coverage of, and adequate reimbursement and payment levels for, our product candidates from third-party payors, physicians may limit how much or under what circumstances they will prescribe or administer them and patients may decline to purchase them. This in turn could affect our ability to successfully commercialize our products and impact our profitability, results of operations, financial condition and future success. The majority of iclaprim usage is expected to be in the hospital, due to its intravenous formulation. Hence, hospitals, Integrated Delivery Networks, and healthcare systems will need to add iclaprim to their hospital formularies in order for hospital based clinicians to have access.

Furthermore, in many foreign countries, particularly the countries of the EU, the pricing of prescription drugs is subject to government control. In some non-U.S. jurisdictions, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the EU provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. We may face competition for our product candidates from lower-priced products in foreign countries that have placed price controls on pharmaceutical products. In addition, there may be importation of foreign products that compete with our own products, which could negatively impact our profitability.

#### Healthcare Reform

In the United States and foreign jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system that could affect our future business and operations if and when we begin to directly commercialize our products.

In particular, there have been and continue to be a number of initiatives at the U.S. federal and state level that seek to reduce healthcare costs. Initiatives to reduce the federal deficit and to reform healthcare delivery are increasing cost-containment efforts. We anticipate that Congress, state legislatures and the private sector will continue to review and assess alternative controls on healthcare spending through limitations on the growth of private health insurance premiums and Medicare and Medicaid spending, the creation of large insurance purchasing groups, price controls on pharmaceuticals and other fundamental changes to the healthcare delivery system. Any proposed or actual changes could limit or eliminate our spending on development projects and affect our ultimate profitability.

In March 2010, PPACA was signed into law. PPACA has substantially changed the way healthcare is financed by both governmental and private insurers. PPACA, among other things: established an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs; revised the methodology by which rebates owed by manufacturers for covered outpatient drugs under the Medicaid Drug Rebate Program are calculated; increased the statutory minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program; addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted, or injected; extended the Medicaid Drug Rebate Program to prescriptions of individuals enrolled in Medicaid managed care organizations; required manufacturers to offer 50% point-of-sale discounts on negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and implemented payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models.

In the future, there may continue to be additional proposals relating to the reform of the U.S. healthcare system, some of which could further limit the prices we will be able to charge for our product candidates, or the amounts of reimbursement available for our product candidates. If future legislation were to impose direct governmental price controls and/or access restrictions, it could have a significant adverse impact on our business. Managed care organizations, as well as Medicaid and other government agencies, continue to seek price discounts. Some states have implemented, and other states are considering, measures to reduce costs of the Medicaid program, and some states are considering implementing measures that would apply to broader segments of their populations that are not Medicaid-eligible. Due to the volatility in the current economic and market dynamics, we are unable to predict the impact of any unforeseen or unknown legislative, regulatory, payor or policy actions, which may include cost containment and healthcare reform measures. Such policy actions could have a material adverse impact on our profitability.

# C. Organizational Structure.

As described above under the heading "Item 4.A. History And Development Of The Company", in connection with the corporate reorganization, Motif Bio plc became the holding company for Motif BioSciences, Inc. Information about Motif Bio plc's ownership position in Motif BioSciences Inc. is included in the table below.

	Country of	Percentage	Percentage	Method used to account for
Company name	incorporation	shareholding	voting power	investment
Motif BioSciences Inc	Delaware, U.S.	100%	100%	Consolidation

# D. Property, Plants and Equipment.

We do not own or lease any material office space, manufacturing facilities or equipment and do not have any current plans to construct or acquire any facilities.

# Item 4A. Unresolved Staff Comments.

Not applicable.

#### Item 5. Operating and Financial Review and Prospects.

You should read the following discussion and analysis of our financial condition and results of operations together with our audited consolidated financial statements and the related notes appearing elsewhere in this Annual Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report, including information with respect to our plans and strategy for our business and its related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this Annual Report, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

All amounts included herein with respect to the years ended December 31, 2017, 2016 and 2015 are derived from our audited consolidated financial statements included elsewhere in this Annual Report. The audited consolidated financial statements as of December 31, 2017 and 2016 and for the years ended December 31, 2017, 2016 and 2015 have been prepared in accordance with IFRS as issued by the IASB, and in accordance with IFRS as endorsed for use in the European Union. As permitted by the rules of the SEC for foreign private issuers, we do not reconcile our financial statements to U.S. generally accepted accounting principles.

#### Overview

We are a clinical stage biopharmaceutical company engaged in the research, development and commercialization of novel antibiotics designed to be effective against serious and life-threatening infections in hospitalized patients caused by multi-drug resistant bacteria. The discovery of new antibiotics has not kept pace with the increasing incidence of resistant, difficult-to-treat bacteria. One of the biggest threats of antibiotic resistance is from methicillin resistant *Staphylococcus aureus* ("MRSA"), a leading cause of hospital-acquired infections and a growing cause of infections in healthy people in the general community. In 2013, the Centers for Disease Control and Prevention reported that at least two million people became infected with antibiotic-resistant bacteria and at least 23,000 Americans died as a direct result of these infections. Our lead product candidate, iclaprim, is being developed for the treatment of ABSSSI, HABP including VABP, and bacterial pneumonia caused by *Staphylococcus aureus* in patients with cystic fibrosis, infections which are often caused by MRSA.

Iclaprim is a novel diaminopyrimidine antibiotic that inhibits an essential bacterial enzyme called "dihydrofolate reductase" ("DHFR"). Diaminopyrimidines are a class of chemical compounds that inhibit different enzymes in the production of tetrahydrofolate, a form of folic acid, which is required for the production of bacterial DNA and RNA. The inhibition of DHFR represents a differentiated and under-utilized mechanism of action compared with other antibiotics. We acquired iclaprim from Nuprim Inc. ("Nuprim"), following the completion of our merger with Nuprim on April 1, 2015. Arpida AG, or Arpida, one of the previous owners of iclaprim, completed a comprehensive development program for iclaprim, including two Phase 3 trials in complicated skin and skin structure infections. Iclaprim has been administered to more than 1,300 patients and healthy volunteers in Phase 1, 2 and 3 clinical trials. Iclaprim is a targeted "Gram-positive" antibiotic that is rapidly bactericidal and highly potent against MRSA and other Gram-positive bacteria *in vitro*. Vancomycin, a standard of care antibiotic in hospitalized patients with Gram-positive infections, is associated with nephrotoxicity (i.e., damage to the kidneys caused by exposure to a toxic chemical, toxin or medication), including vancomycin-associated acute kidney injury (VA-AKI). Therapeutic drug monitoring (TDM) and dosage adjustment in patients with renal impairment is required with vancomycin. In contrast to vancomycin, iclaprim is minimally excreted via the kidneys (<2% of the administered dose was recovered in the urine) and neither TDM nor dosage adjustment has been required in clinical studies with iclaprim in more than 1,400 patients and healthy volunteers. No nephrotoxicity was observed in patients treated with iclaprim in the REVIVE Phase 3 clinical trials. "Gram-positive" or "Gram-negative" refer to how bacteria react to the Gram stain test based on the outer casing of the bacteria, and the bacteria's cell wall structure. Each type of bacteria may be asso

We believe that iclaprim, if approved, is an attractive potential candidate for use as a first-line empiric monotherapy, the initial therapy administered in severely ill patients who are hospitalized with ABSSSI and have comorbidities, or also suffer from other health issues, such as renal impairment or diabetes. Renal impairment affects up to an estimated 936,000 of the approximately 3.6 million patients hospitalized with ABSSSI annually in the United States.

Based on our current plans, we do not expect to generate significant revenue unless and until we obtain marketing approval for, and commercialize, iclaprim. We do not expect to obtain marketing approval before the end of 2018, if at all. Accordingly, we will need to obtain additional funding in connection with our continuing operations, including our plans to conduct our INSPIRE Phase 3 clinical trial of iclaprim in HABP patients, including those with VABP. Adequate additional financing may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization effort.

We expect to continue to incur significant expenses and increasing operating losses for at least the next several years. We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we continue the development of

and seek marketing approval for iclaprim and, possibly, other product candidates and continue our research activities. Our expenses will increase if we suffer any delays in our Phase 3 clinical programs for iclaprim. If we obtain marketing approval for iclaprim or any other product candidate that we develop, we expect to incur significant commercialization expenses related to product sales, marketing, distribution and manufacturing.

As of November 18, 2016, our American Depositary Receipts are publicly traded on the Nasdaq Capital Market. As a result, we are now incurring additional costs associated with operating as a public company in the United States.

## Acquisition Of Nuprim Assets

Originally founded as a population genetics company, we have, since 2009, focused on drug discovery and development. In late 2013, we decided to focus exclusively on antibiotics and continued to work on an investigative medicinal chemistry program. On April 1, 2015, Motif BioSciences Inc. acquired the assets owned by Nuprim related to iclaprim through its merger with Nuprim. Therefore, the expenses of developing iclaprim are consolidated in our financial statements from the date of acquisition of the assets.

#### Group Reorganization And Subsequent Financing Activities

On February 18, 2015, we incorporated a Delaware subsidiary, Motif Acquisition Sub, Inc. On March 27, 2015, Motif BioSciences Inc., Motif Bio plc, and Motif Acquisition Sub, Inc. entered into an agreement where, just prior to our admission to AIM, Motif Acquisition Sub, Inc. was merged with and into Motif BioSciences Inc. and Motif BioSciences Inc. continued as the surviving entity and became our wholly owned subsidiary. The former Motif BioSciences Inc. stockholders were issued 36,726,242 of our ordinary shares in a share-for-share exchange for their common stock in Motif BioSciences Inc. stockholders owned an equivalent number of our ordinary shares as the number of shares of common stock that they had previously owned in Motif BioSciences Inc. All outstanding, unexercised, and vested stock options to purchase shares of common stock in Motif BioSciences Inc. were converted into options to purchase our ordinary shares.

This was a common control transaction and therefore outside the scope of IFRS 3. The transaction has therefore been accounted for as a group reorganization and our audited consolidated financial statements are presented as if we have always owned Motif BioSciences Inc. The financial information for the year ended December 31, 2014 presented in the audited consolidated financial statements therefore represent the results and capital structure of Motif Biosciences Inc.

On April 2, 2015, we were admitted to AIM and issued 14,186,140 ordinary shares at a price of £0.20 per share.

On July 22, 2015, we completed a subsequent placing of 44,000,000 ordinary shares at a price of £0.50 per share.

On November 23, 2016, we completed the offering of 2,438,491 American Depositary Shares ("ADS") and 1,219,246 warrants over ADS at a price of US \$6.98 per ADS/Warrant combination closed on November 23, 2016, and since that time the ADSs and ADSs Warrants have been trading on the NASDAQ Capital Market.

On November 23, 2016, we issued 22,863,428 ordinary shares together with 11,431,714 warrants over ordinary shares at a price of £0.28 per share/warrant combination.

On June 23, 2017, we raised \$23.7 million of net proceeds, after deducting \$1.7 million of issuance costs, from a placement in the United Kingdom of 66,666,667 new ordinary shares at of £0.30 per share.

On November 14, 2017, we entered into a loan and security agreement with Hercules for a term loan of up to \$20 million. As of December 31, 2017, we had \$15 million in outstanding borrowings under the Hercules Loan Agreement.

#### A. Operating Results

The following discussion sets forth certain components of our statements of operations as well as factors that impact those items.

During the preparation of the interim financial statements for the six months ended June 30, 2017, we identified and corrected a prior period error whereby stock based compensation expense was understated primarily due to recognizing expense only when an award vested, not over the required service period using a graded vesting approach as required under IFRS 2. We assessed the materiality of the out-of-period adjustments on all impacted periods and determined that they were not material to any of the periods and that a restatement of previously issued financial statements was not required. We concluded that the cumulative adjustment to correct the error should be recorded in the year ended December 31, 2017.

The expense in fiscal years 2016 and 2015 was understated by \$802,282 and \$291,696, respectively. The out-of-period correction increased General and Administrative expense by \$762,836 and Research and Development expense by \$362,941 for the year ended December 31, 2017. None of these adjustments had an impact on our cash flows.

#### Revenues

To date we have not generated any revenues from product sales and we do not expect to recognize any revenue from the sale of products, even if approved, before 2019. Our success depends primarily on the successful development and regulatory approval of our product candidates and our ability to finance operations. If our development efforts result in clinical success and regulatory approval or we enter into collaboration agreements with third-parties for our product candidates, we may generate revenue from those product candidates. Our ability to generate product revenue and become profitable depends upon our ability to obtain regulatory approval for and to successfully commercialize our product candidates.

# General and Administrative Expenses

General and administrative expenses include personnel costs, costs for outside professional services and other allocated expenses. Personnel costs consist of salaries, bonuses, benefits, travel and share-based compensation. Outside professional services consist of legal, accounting and audit services, commercial evaluation and strategy services, and other professional services. We expect general and administrative expenses to increase in the near future with the expansion of our staff and management team to include new personnel responsible for finance, legal, information technology and later, sales and business development functions. We also expect to incur additional general and administrative costs as a result of operating as a U.S. public company, including expenses related to compliance with the rules and regulations of the SEC and those of any national securities exchange on which our securities are traded, additional insurance expense, investor relations activities and other administrative and professional services. We also expect to incur additional expenses related to in-licenses, acquisitions or similar transactions that we may pursue as part of our strategy, including legal, accounting and audit services and other consulting fees.

# Research and Development Expenses

Our research and development expenses consist primarily of costs incurred in connection with the development of our product candidates, including:

- personnel-related costs, such as salaries, bonuses, benefits, travel and other related expenses, including share-based compensation;
- expenses incurred under our agreements with CROs, clinical sites, contract laboratories, medical institutions and consultants that plan and conduct our preclinical studies and clinical trials, including, in the case of consultants, share-based compensation;
- costs associated with regulatory filings;
- costs of acquiring preclinical assay and clinical trial materials; and
- costs associated with preclinical development, formulation development and process development.

To date, we have expensed all research and development costs as incurred. Clinical development expenses for our product candidates are a significant component of our current research and development expenses as we progress our product candidates into and through clinical trials. Product candidates in later stage clinical development generally have higher research and development costs than those in earlier stages of development, primarily due to increased size and duration of the clinical trials. We recognize costs for each grant project, preclinical study or clinical trial that we conduct based on our evaluation of the progress to completion, using information and data provided to us by our research and development vendors and clinical sites.

If we meet the following conditions, we would be able to capitalize expenditures on drug development activities:

- it is probable that the asset will create future economic benefits;
- the development costs can be measured reliably;
- technical feasibility of completing the intangible asset can be demonstrated;
- there is the intention to complete the asset and use or sell it;
- there is the ability to use or sell the asset; and
- adequate technical, financial, and other resources to complete the development and to use or sell the asset are available.

These conditions are generally met when a filing is made for regulatory approval for commercial production. At this time, we do not meet all conditions and therefore, development costs are recorded as expense in the period in which the cost is incurred.

We expect our research and development expenses to increase over the next few years as a result of our ongoing and anticipated Phase 3 clinical trials and as we prepare for market approval and commercial launch of our current product candidate. The process of conducting the necessary clinical research to obtain regulatory approval of a product candidate is costly and time consuming. We will require additional funding to fund our continuing operations, including our plans to conduct our INSPIRE Phase 3 clinical trial of iclaprim in HABP patients, including those with VABP. The probability that any of our product candidates receives regulatory approval and eventually is able to generate revenue depends on a variety of factors, including the quality of our product candidates, early clinical data, investment in our clinical program, competition, manufacturing capability and commercial viability. As a result of these uncertainties, we are unable to determine the duration and completion costs of our research and development projects or if, when and to what extent we will generate revenue from the commercialization and sale of any of our product candidates, if approved. We may never succeed in achieving regulatory approval for any of our product candidates.

We do not allocate personnel-related research and development costs, including share-based compensation or other indirect costs, to specific programs, as they are deployed across multiple projects under development.

# **Interest Income and Interest Expense**

Interest income is earned based on cash holdings during the period. For the year end December 31, 2016, interest expense was incurred on outstanding notes that were converted to equity securities in December 2016. For the year ended December 31, 2017, interest expense relates to cash interest paid on the Hercules loan and the amortization of deferred financing costs (Note 13).

#### Loss from Revaluation of Derivative Liabilities

In November 2016, we issued warrants that are classified as a liability due to potential variability in the number of shares that may be issued upon exercise if we fail to maintain an effective registration statement. In 2017, we issued additional warrants that were liability classified because of the potential variability in the number of shares that may be issued upon exercise (Note 14). These liabilities are carried at fair value and is remeasured each reporting period using the Black-Scholes option pricing model. Our stock price has a significant impact on the value of the liability and, in general, an increase in our stock price will increase the loss from revaluation of our derivative liabilities and a decrease in our stock price will decrease the liability.

#### Net Foreign Exchange Loss

Items included in consolidated financial statements are measured using the currency of the primary economic environment in which we operate ("the functional currency"). The audited consolidated financial statements are presented in United States Dollars (\$), which is our functional and presentation currency.

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognized in profit or loss. The warrants we issued in November 2016 that are classified as a liability are denominated in Pounds Sterling. As the liability associated with the warrants is remeasured each reporting period this impacts our net foreign exchange loss depending on the change in the exchange rate.

Foreign exchange gains and losses that relate to borrowings are presented in the statement of profit or loss, within finance costs. All other foreign exchange gains and losses are presented in the statement of profit or loss on a net basis within other income or other expenses.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities classified as available-for-sale financial assets are recognized in other comprehensive income.

Historically, our cash and cash equivalents have been held primarily in U.S. dollars and most of our expenses have been U.S. dollar-denominated.

The following table sets forth our results of operations for the years ended December 31, 2017, 2016 and 2015.

Year ended December 31,					
	2017		2016		2015
	(in thousa	ınds, ex	cept share and per sh	are data)	)
\$	(8,542)	\$	(4,912)	\$	(3,577)
	(29,475)		(34,794)		(4,681)
	<u> </u>		83		5
\$	(38,017)	\$	(39,623)	\$	(8,253)
	(38,017)		(39,623)		(8,253)
	134		70		15
	(275)		(383)		(268)
	(6,392)		(136)		_
	(238)		(251)		(10)
\$	(6,771)	\$	(700)	\$	(263)
<u> </u>	(44,788)		(40,323)		(8,516)
	(22)		(1)		(1)
\$	(44,810)	\$	(40,324)	\$	(8,517)
\$	(44,810)	\$	(40,324)	\$	(8,517)
	\$ \$ \$ \$	\$ (8,542) (29,475) \$ (38,017) (38,017) (38,017) 134 (275) (6,392) (238) \$ (6,771) (44,788) (22) \$ (44,810)	\$ (8,542) \$ (29,475)  \$ (38,017) \$ (38,017)  134 (275) (6,392) (238) \$ (6,771) \$ (44,788) (22) \$ (44,810) \$	\$\ (8,542) \\$ (4,912) \\ (29,475) \\$ (34,794) \\ \tag{38,017} \\$ (39,623) \\ (275) \\$ (38,017) \\$ (39,623) \\ (38,017) \\$ (39,623) \\ (38,017) \\$ (39,623) \\ (38,017) \\$ (39,623) \\ (40,323) \\$ (6,392) \\$ (136) \\ (238) \\$ (251) \\ (44,788) \\$ (40,323) \\ (22) \\$ (44,810) \\$ (440,324)	\$\ (8,542) \\$ (4,912) \\$ (29,475) (34,794)

# Comparison of the year ended December 31, 2017 and December 31, 2016

# General and Administrative Expense

General and administrative expenses increased by \$3.6 million, to \$8.5 million, in the year ended December 31, 2017 from \$4.9 million in the year ended December 31, 2016. Employee compensation and benefits and non-cash stock-based compensation increased by \$0.7 million and \$0.6 million, respectively. The remaining portion of the increase was primarily attributable to an increase in legal, professional and advisory fees due to the: (i) increasing costs associated with being a public company in the United Kingdom and in the United States; (ii) the costs associated with 2017 financing activities; and (iii) increased costs of outside professional services, including commercial evaluation and strategy services, investor relations and other consulting services.

# Research and Development Expense

Research and development expenses decreased by \$5.3 million to \$29.5 million in the year ended December 31, 2017 from \$34.8 million in the year ended December 31, 2016. This decrease was primarily attributable to the completion of the Phase 3 clinical trial program for iclaprim in 2017. For the year ended December 31, 2017, \$22.1 million was spent in relation to contract research organization direct and indirect expenses. This represented a decrease of \$8.3 million from similar costs incurred in 2016. This decrease was partially offset by a \$2.3 million increase in costs relating to other clinical operating activities, chemistry, manufacturing and control (CMC) requirements and other non-clinical development activities.

#### Interest Income

Interest income increased by \$0.06 million to approximately \$0.13 million in the year ended December 31, 2017 from approximately \$0.07 million in the year ended December 31, 2016. This increase was primarily attributable to an increase in the average daily cash balance retained in interest bearing accounts during the year.

# Interest Expense

Interest expense decreased by \$0.1 million to \$0.3 million in the year ended December 31, 2017 from approximately \$0.4 million in the year ended December 31, 2016. This decrease was primarily attributable to the conversion of outstanding convertible notes to ordinary shares in December 2016, partially offset by interest on the Hercules loan drawn in November 2017 as well as the amortization of deferred financing costs from the Hercules loan.

#### Loss from Revaluation of Derivative Liabilities

In November 2016, we issued warrants that are classified as a liability due to potential variability in the number of shares that may be issued upon exercise if we fail to maintain an effective registration statement. We issued additional warrants in 2017 that are classified as a liability. These liabilities are carried at fair value and is remeasured each reporting period using the Black-Scholes option pricing model. The increase in the fair value of the total warrant liability from December 31, 2016 to December 31, 2017 was primarily attributable to an increase in our stock price and the additional warrants issued during 2017

# Net Foreign Exchange Loss

The net foreign exchange loss for the year ended December 31, 2017 was \$238,289, as compared to a loss of \$250,926 in the year ended December 31, 2016. In both periods the loss recognized relates to the re-measurement of our Sterling denominated cash deposits to US dollars at the closing US dollar to Sterling exchange rate as well as the gains and losses resulting from the settlement of transactions denominated in foreign currency. Sterling denominated cash deposits totaled £342,338 and £14,424 at December 31, 2017 and 2016, respectively.

# Comparison of the year ended December 31, 2016 and December 31, 2015

# General and Administrative Expense

General and administrative expenses increased by \$1.3 million, to \$4.9 million, in the year ended December 31, 2016 from \$3.6 million in the year ended December 31, 2015. This increase was primarily attributable to an increase in legal and other professional fees, including: (i) the costs associated with being a public company in the United Kingdom and in the United States; (ii) the costs associated with the filing of a registration statement on Form F-1 with the U.S. Securities and Exchange Commission relating to the U.S. offering of American Depositary Shares; and (iii) increases in the costs of outside professional services, including commercial evaluation and strategy services, investor relations and other consulting services.

#### Research and Development Expense

Research and development expenses increased by \$30.1 million to \$34.8 million in the year ended December 31, 2016 from \$4.7 million in the year ended December 31, 2015. This increase was primarily attributable to costs incurred for iclaprim clinical development. For the year ended December 31, 2016, \$30.4 million was spent in relation to contract research organization expenses, \$2.2 million in relation to clinical operations and \$2.1 million in relation to chemistry and manufacturing development and other non-clinical development.

# Loss from Revaluation of Derivative Liabilities

In November 2016, we issued warrants that are classified as a liability due to a potential variability in the number of shares that may be issued upon exercise if we fail to maintain an effective registration statement. These liabilities are carried at fair value and is remeasured each reporting period using the Black-Scholes option pricing model. The increase in the fair value of the warrant liabilities from issuance to December 31, 2016 was primarily attributable to an increase in our stock price.

# Net Foreign Exchange Loss

The net foreign exchange loss for the year ended December 31, 2016 was \$250,926, as compared to a loss of \$9,644 in the year ended December 31, 2015. In both periods the loss recognized relates to the re-measurement of our Sterling denominated cash deposits

to US dollars at the closing US dollar to Sterling exchange rate as well as the gains and losses resulting from the settlement of transactions denominated in foreign currency. Sterling denominated cash deposits totaled £14,424 and £1,774,741 at December 31, 2016 and 2015, respectively.

# **B.** Liquidity and Capital Resources

At December 31, 2017 and 2016, we had cash and cash equivalents of approximately \$22.7 million and \$21.8 million, respectively. We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval for and commercialize our current or any future product candidates. We anticipate that we will continue to generate losses for the foreseeable future, and we expect our losses to increase as we continue the development of and seek regulatory approvals for our product candidates and begin to commercialize any approved products. We are subject to all of the risks applicable to the development of new products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may harm our business.

Our operations have been financed primarily by net proceeds from the issuance of ADSs on the NASDAQ Capital Market, the issuance of ordinary shares on AIM, the net proceeds of our Hercules Loan Agreement entered into in November 2017 and the issuance of convertible promissory notes to related parties. Our primary uses of capital are, and we expect will continue, at least in the short term, to be, third-party expenses associated with the planning and conduct of preclinical and clinical trials, costs of process development services and manufacturing and commercialization of our product candidates, and compensation-related expenses. We also expect our cash needs to increase to fund potential in-licenses, acquisitions or similar transactions as we pursue our strategy.

Cash used to fund operating expenses is affected by the timing of when we pay expenses, as reflected in the change in our outstanding accounts payable and accrued expenses.

Our future funding requirements will depend on many factors, including the following:

- the scope, rate of progress, results and cost of our preclinical studies and clinical trials and other related activities;
- the cost of formulation, development, manufacturing of clinical supplies and establishing commercial supplies of our product candidates and any other product candidates that we may develop, in-license or acquire;
- the cost, timing and outcomes of pursuing regulatory approvals;
- the cost and timing of establishing administrative, sales, marketing and distribution capabilities;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish, including any required milestone and royalty payments thereunder; and
- the emergence of competing technologies and their achieving commercial success before we do or other adverse market developments.

We expect to continue to incur losses. Our ability to achieve and maintain profitability depends upon the successful development, regulatory approval and commercialization of our product candidates and achieving a level of revenues adequate to support our cost structure. We may never achieve profitability, and unless and until we do, we will continue to need to raise additional capital. We will be required to raise additional capital within the next year to continue the development and commercialization of current product candidates and to continue to fund operations at the current cash expenditure levels, including our plans to conduct our INSPIRE Phase 3 clinical trial of iclaprim in HABP patients, including those with VABP. If we need to raise additional capital to fund our operations and complete our ongoing and planned clinical trials, funding may not be available to us on acceptable terms, or at all.

We will need to raise additional capital through equity or debt financings to continue to fund our operations and meet our capital funding needs. If we are unable to raise additional capital when required or on acceptable terms, we may have to (i) significantly delay, scale back or discontinue the development and/or commercialization of one or more product candidates; (ii) seek collaborators for product candidates at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; or (iii) relinquish or otherwise dispose of rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves on unfavorable terms.

We believe that the progression and successful completion of the REVIVE-1 and REVIVE-2, global Phase 3 clinical trials in patients with ABSSSI may continue to provide the basis for increased investor interest in us and, hence, potentially provide greater opportunities to raise additional capital. A summary of our iclaprim milestones are listed below.

- On April 18, 2017, we announced positive topline results from REVIVE-1. Iclaprim achieved the primary endpoint of non-inferiority of early clinical response at the early time point after start of study drug administration. Iclaprim was well tolerated in the study, with most adverse events categorized as mild.
- On October 4, 2017, we announced positive topline results from REVIVE-2. Iclaprim achieved the primary endpoint of non-inferiority of early clinical response at the early time point after start of study drug administration. Iclaprim was well tolerated in the study, with most adverse events categorized as mild.
- On September 15, 2017, we also announced that the FDA granted Orphan Drug Designation to iclaprim for the treatment of *Staphylococcus aureus* lung infections in patients with cystic fibrosis. This designation grants special status to a drug or biologic under development to treat a rare disease or condition and qualifies the sponsor of the product for various development incentives, including tax credits for qualified clinical testing, waiver of user fees and potentially up to seven years of market exclusivity for the given indication, if approved.

In addition, on April 3, 2018, we announced the initiation of a rolling submission of a New Drug Application (NDA) to the U.S. Food & Drug Administration (FDA) for iclaprim. We commenced the submission before the end of the first quarter of 2018. We are expecting to complete and submit the full NDA during the second quarter of 2018. We also announced that we received correspondence from the FDA that a small business waiver has been granted for the NDA application fee which is typically due upon submission of an NDA under the Prescription Drug User Fee Act (PDUFA). As a result, we did not have to pay a \$2.4 million application fee for this NDA submission.

We believe that the ongoing developments continues to provide the basis for increased investor interest in us. A summary of our financing activities are listed below.

On June 23, 2017, we raised \$23.7 million of net proceeds, after deducting \$1.7 million of issuance costs from a placement in the United Kingdom of 66,666,667 new ordinary shares at £0.30 per share.

On November 14, 2017, we and our subsidiary entered into a loan and security agreement with Hercules Capital, Inc. and certain of its affiliates (collectively, "Hercules") for a term loan of up to \$20 million. We refer to this loan and security agreement as the Hercules Loan Agreement. In connection with the Hercules Loan Agreement, we issued Hercules a warrant to purchase up to 73,452 ADSs at an exercise price of \$9.53 per ADS, representing 3.5% warrant coverage of the total loan facility. The warrant may be exercised on a cashless basis, and is immediately exercisable through November 14, 2022. The number of ADSs for which the warrant is exercisable and the associated exercise price are subject to certain proportional adjustments as set forth in the warrant. We also agreed to file a resale registration statement to facilitate the resale of ADSs issuable under the warrant. Hercules has the right, in its discretion, to participate in any subsequent financing, such as an equity offering, in an amount up to \$1 million.

The first tranche of \$15 million was drawn immediately, with the remaining \$5 million available upon the achievement of certain milestones anticipated in 2018, or at the Hercules's discretion. The terms of the Hercules Loan Agreement include an initial interest-only period of 15 months, extendable to 21 months on the achievement of certain milestones, a 30-month capital and interest repayment period thereafter, and a floating interest rate of at least 10% tied to the US prime rate. The Hercules Loan Agreement is secured by substantially all of our property and that of our subsidiary, other than intellectual property.

The Hercules Loan Agreement subjects our subsidiary to various affirmative and restrictive covenants, including, but not limited to, financial reporting obligations, and certain limitations on indebtedness, liens (including a negative pledge on intellectual property), investments, distributions (including dividends), collateral, transfers, mergers or acquisitions, taxes, corporate changes, and deposit accounts. In addition, we are subject to certain restrictive covenants in connection with our grant of a guarantee of the obligations of our subsidiary and the pledge of our equity in our subsidiary. Compliance with these covenants may limit our flexibility in operating our business and our ability to take actions that might be advantageous to us and our shareholders.

Additionally, we may be required to repay the entire amount of outstanding indebtedness under the term loan in cash if we fail to stay in compliance with our covenants or suffer some other event of default under the Hercules Loan Agreement. Under the Hercules Loan Agreement, an event of default will occur if, among other things: we fail to make payments under the Hercules Loan Agreement; we breach any of our covenants under the Hercules Loan Agreement, subject to specified cure periods with respect to certain breaches; there occurs an event that could reasonably be expected to have a material adverse effect on (i) our business, operations, properties, assets or financial condition, (ii) our ability to perform or satisfy our obligations under the Hercules Loan Agreement as they become due or Hercules's ability to enforce its rights or remedies with respect to our obligations under the Hercules Loan Agreement, or (iii) the collateral or liens securing our obligations under the Hercules Loan Agreement; we or our assets become subject to certain legal proceedings, such as bankruptcy proceedings; we are unable to pay our debts as they become due; or we default on contracts with third-parties which would permit Hercules to accelerate the maturity of such indebtedness or that could have a material adverse effect on us. The sale of additional equity would result in additional dilution to our shareholders. The incurrence of debt financing would result in

debt service obligations and the instruments governing such debt could provide for operating and financing covenants that would restrict our operations and impact our ability to conduct our business. If we are not able to secure adequate additional funding, we may be forced to make reductions in spending, extend payment terms with suppliers, sell assets where possible or suspend or curtail planned programs. In addition, lack of funding would limit any strategic initiatives to in-license or acquire additional product candidates or programs.

Cash Flows For Years Ended December 31, 2017, 2016 and 2015

2015
a)
(7,998)
36,599
(11)
28,590

#### Operating Activities

Net cash used in operating activities was \$37.4 million for the year ended December 31, 2017, which reflects an operating loss of \$38.0 million, primarily from the continuation of the clinical development of iclaprim and the commencement of commercialization activities.

Net cash used in operating activities was \$27.9 million for the year ended December 31, 2016, which reflects an operating loss of \$39.6 million, primarily from the continuation of the clinical development of iclaprim, offset by an \$11.3 million increase in trade payables.

Net cash used in operating activities was \$8.0 million for the year ended December 31, 2015, reflecting the commencement of clinical development of iclaprim.

#### **Financing Activities**

Net cash provided by financing activities amounts to \$38.5 million for the year ended December 31, 2017. This includes \$23.7 million of net proceeds from the June 2017 equity issuance of 66,666,667 new ordinary shares at £0.30 per share and \$14.4 million of net proceeds from a term loan borrowing under the November 2017 Hercules Loan Agreement.

Net cash provided by financing activities amounted to \$21.4 million in the year ended December 31, 2016, resulting from our November 2016 offering as described further below.

On November 18, 2016, we announced the pricing of our underwritten U.S. offering and European placement, which were concurrently conducted, of 71,633,248 ordinary shares, comprised of 22,863,428 ordinary shares plus 2,438,491 ADSs (representing 48,769,820 ordinary shares at a 20 to 1 ratio). We offered 48,769,820 ordinary shares in a U.S. firm commitment offering in the form of 2,438,491 American Depositary Shares or ADSs, together with warrants to purchase 1,219,246 ADS Warrants. Each ADS represents 20 of our ordinary shares and was sold together with 0.5 of an ADS Warrant in a fixed combination. Each full ADS Warrant is exercisable for one ADS at an exercise price of \$8.03 per ADS, exercisable from the date of issuance until five years thereafter. In Europe, we offered in a concurrent placement on a best efforts basis 22,863,428 ordinary shares, together with warrants to purchase 11,431,714 ordinary shares. Each ordinary share was sold together with 0.5 of an Ordinary Share Warrant in a fixed combination. Each full Ordinary Share Warrant is exercisable for one ordinary share at an exercise price of £0.32 (\$0.40), exercisable from the date of issuance until five years thereafter. The offering price of the ADSs and ADS Warrants in the U.S. offering was \$6.98 per ADS and ADS Warrant combination, and the offering price of our ordinary shares and Ordinary Share Warrants in the European placement was £0.28 (\$0.35) per ordinary share and Ordinary Share Warrant combination.

Net cash provided by financing activities was \$36.6 million for the year ended December 31, 2015, resulting from (i) the issuance of promissory notes; (ii) our initial public offering on AIM, pursuant to which we issued 14,186,140 of our ordinary shares at a price of £0.20 (\$0.30) per share; and (iii) our follow on offering on AIM, pursuant to which we issued 44,000,000 of our ordinary shares at a price of £0.50 (\$0.79) per share.

On December 22, 2016, we announced that, at our General Meeting, our shareholders authorized our directors to (i) allot relevant securities up to an aggregate nominal value of £313,938.23 in connection with the exercise of various share options, warrants

and convertible securities granted by the Company between April 1, 2015 and December 22, 2016, and (ii) allot relevant securities for purposes other than those identified in (i) above, up to an aggregate nominal amount of £270,965.62. Our shareholders further authorized our directors to disapply statutory preemptive rights, but only with respect to the two aforementioned allotments.

On April 28, 2017, we announced the appointment of Peel Hunt LLP as nominated adviser and joint corporate broker with immediate effect.

On June 22, 2017, we announced that, at our General Meeting, our shareholders authorized our directors to (i) allot 66,666,667 ordinary shares related to the conditional placing of such shares on June 2, 2017 and (ii) allot shares up to an aggregate nominal amount of £876,262.58 with preemptive rights under section 560 of the Companies Act 2006 ("Act") or £394,318.16 without preemptive rights under section 570 of the Act.

# Critical Accounting Policies And Significant Judgments And Estimates

A description of our principal accounting policies, critical accounting estimates and key judgments is set out in Note 2 ("Significant accounting policies") to our audited consolidated financial statements included by reference into this annual report.

#### **Recent Accounting Pronouncements**

For a discussion of the new standards and interpretations not yet adopted by us, see Note 2 ("Significant accounting policies—New standards and interpretations not yet adopted") to our consolidated audited financial statements which appear elsewhere in this Annual Report.

#### C. Research and Development

For a discussion of our research and development activities, see "Item 4.B. Business Overview" and "Item 5.A. Operating Results."

#### D. Trend Information

For a discussion of trends, see "Item 4.B. Business Overview," "Item 5.A. Operating Results" and "Item 5.B. Liquidity and Capital Resources."

#### E. Off-Balance Sheet Arrangements

We do not have variable interests in variable interest entities or any off-balance sheet arrangements.

# F. Tabular Disclosure of Contractual Obligations

The following table discloses aggregate information about material contractual obligations and periods in which payments were due as of December 31, 2017. Future events could cause actual payments to differ from these estimates.

At December 31, 2017 (in thousands)	< 1 year \$	Between 1 and 3 years \$	Between 3 and 5 years	Over 5 years \$	Total
Term loan principal and related payments(1)	1,521	12,456	5,288	_	19,265
Milestone payments	500	_	_	_	500
Total	2,021	12,456	5,288		19,765

<sup>(1)</sup> The amounts include payments under the term loan agreement with Hercules Capital, Inc. for interest, principal and end or term charges.

The table above does not include trade and other payables of \$10.9 million and derivative liability of \$12.6 million as of December 31, 2017. The timing of payments under our agreement with an independent contract research organization for clinical trials and with vendors for preclinical studies and other services and products for operating purposes are probable, estimable and expected to be fulfilled in 2018. The term loan obligations included principal of \$15.0 million, interest expense over the full term of the loan of \$3.9 million and an end of facility charge of \$0.4 million. The obligations do not include the remaining capacity and associated interest remaining under the credit facility.

As a result of our merger with Nuprim, we became a successor party to certain agreements related to iclaprim to the extent such agreements were properly assigned to Nuprim and its assignors, including the Sale and Purchase Agreement, dated September 13, 2013 by and between Acino Pharma AG, or Acino, and the Life Sciences Management Group, or LSM Group.

Under the Sale and Purchase Agreement, by and between Acino and LSM Group, we acquired the rights to purchase up to 613 kg of iclaprim active pharmaceutical ingredient, or API, which was manufactured mostly in 2008. We have already purchased 100 kg, which was returned to, and reprocessed by, the original API manufacturer during October 2015. This reprocessed material was used to manufacture the clinical trial supplies for the REVIVE Phase 3 program. This agreement also provides that upon completion of any Phase 3 clinical study for iclaprim, we must pay to Acino an additional consideration of \$0.5 million.

It is possible that it could be determined that we are a successor in interest to the Sale and Purchase Agreement, by and between F. Hoffman-LaRoche Ltd. And Hofmann-LaRoche Inc., together the La Roche Seller, and Arpida Ltd. dated June 1, 2011, the Hoffman-La Roche/Arpida Agreement; however, we do not believe we are a successor in interest to such agreement. Further, no rights in such agreement are necessary for us to complete our development and commercialization of our iclaprim product. In the event that it is determined that we are a successor in interest to such agreement, depending on various factors (the final drug composition, timing of our commercialization, country of sales) we may have a payment obligation of 1-5% of net sales of our iclaprim product for certain countries for a period of 10 years from the first commercial sale in such country(ies).

#### G. Safe Harbor.

This Annual Report contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act and as defined in the Private Securities Litigation Reform Act of 1995. See "Cautionary Note Regarding Forward-Looking Statements."

#### Item 6. Directors, Senior Management and Employees.

#### A. Directors and Senior Management.

The following table sets forth information regarding our executive officers and directors, including their ages, as of March 31, 2018. Unless otherwise indicated, the current business addresses for our executive officers and non-employee directors is 125 Park Avenue 25th Floor, New York, NY 10017, United States.

Name	Age	Position
Executive Officers		
Graham George Lumsden	58	Chief Executive Officer and Executive Director
Jonathan Gold (1)	45	Chief Financial Officer and Executive Director
David Huang	43	Chief Medical Officer
Non-Employee Directors		
Richard Cecil Eversfield Morgan(3)	73	Non-Executive Chairman
Robert Bertoldi	63	Non-Executive Director
Charlotta Ginman(2)	52	Non-Executive Director
Zaki Hosny(3)	69	Non-Executive Director
Mary Lake Polan (4)	74	Non-Executive Director
Bruce Andrew Williams(2)(3)	63	Non-Executive Director
Dr. Craig T. Albanese(2)(4)	56	Non-Executive Director

- (1) Effective February 2, 2018, Jonathan Gold assumed an executive role as Chief Financial Officer and is considered an Executive Director as of that date.
- (2) Member of the Audit Committee.
- (3) Member of the Remuneration Committee.
- (4) Member of the Nomination Committee.

#### **Executive Officers**

Dr. Graham Lumsden has served as our Chief Executive Officer and Executive Director since May 2013. Prior to joining the Company, Dr. Lumsden was a senior executive at Merck & Co., Inc. (NYSE: MRK) (from 1985 to 2011), where he held various commercial worldwide leadership positions, with global responsibility for osteoporosis and then contraceptives. He also served as Chief Executive Officer of TieMed LLC (from 2012 to 2014), and as a principal of Carnethy Consulting LLC (from 2012 to 2014). Dr. Lumsden is a member of the Royal College of Veterinary Surgeons (MRCVS). He obtained a postgraduate diploma in marketing from the Chartered Institute of Marketing in London, United Kingdom in 1998, and his BVM&S in veterinary medicine and surgery from the Royal (Dick) School of Veterinary Studies in Edinburgh, Scotland in 1982.

Jonathan Gold was a co-founder of the Company and had served as a non-executive director since 2004. Effective February 2, 2018, Mr. Gold assumed an executive role as Chief Financial Officer. Mr. Gold is a managing director of JEG Capital LLC, a family office and asset manager (since August 2012). Previously he was a portfolio manager for the Federated Kaufmann Funds (from 2004 to 2012). Prior to that, Mr. Gold was a partner at Amphion Capital Partners LLC (the predecessor to Amphion Innovations plc) (from 1996 to 2004) and Wolfensohn Partners (originally affiliates of James D. Wolfensohn Inc.) (from 1995 to 2004), where he was active in financing and growing early stage life sciences and information technology companies. Early in his career, Mr. Gold was a financial analyst for Prudential's Realty Group (from 1995 to 1996), which managed over \$10 billion in equity and mortgage real estate investments. Mr. Gold received his Bachelor of Science and MBA in Finance from New York University's Stern School of Business. We believe that Mr. Gold is qualified to serve on our board of directors because of his extensive background in finance.

*Dr. David Huang* has served as our Chief Medical Officer since October 2014. Prior to joining the Company, Dr. Huang served as a clinical consultant for several start-up companies developing anti-infectives and as an attending physician in emergency medicine at the Veterans Affairs Medical Center in Houston, which he continues to do. Prior to his clinical consultant role, Dr. Huang served as the former Chief Medical Officer at ContraFect Corporation (NASDAQ: CFRX) (from 2011 to 2014), where he had responsibility for the development of biologic anti-infectives, including bacteriophage lysins and monoclonal antibodies. Dr. Huang also led drug development groups in anti-infectives at Pfizer Inc. (NYSE: PFE) (from 2008 to 2011) and Boehringer Ingelheim (from 2005 to 2008). Dr. Huang has 15 years of clinical, academic and research experience in medicine and in the subspecialty of infectious diseases. He served as a faculty member at Baylor College of Medicine and is currently an adjunct Assistant Professor at Rutgers New Jersey Medical School (since 2009). He is well versed in the design, execution and close out of Phase 1-3 clinical trials for both antibacterial and antiviral agents. Dr. Huang completed his medical school at the University of Texas at Houston Medical School, and completed his

internship and residency in internal medicine at the University of Texas at Southwestern and fellowship in infectious diseases at Baylor College of Medicine. He is board certified in both internal medicine and infectious diseases.

#### **Non-Employee Directors**

Richard Cecil Eversfield Morgan has served as the Non-Executive Chairman of our board of directors since 2004. He is also Chief Executive Officer of Amphion Innovations plc (the successor firm to Amphion Capital Partners LLC, which Mr. Morgan co-founded), a position he has held since 2005. Over the course of his career, Mr. Morgan has been directly involved in the start-up and development of more than 35 companies in the biopharma, healthcare, and IT industries, including Celgene Corporation (NASDAQ: CELG) (from 1987 to 2016) and Sequus Pharmaceuticals, Inc. He was also the managing general partner of Amphion Partners LLC (formerly known as Wolfensohn Partners, LP), a position which he retains, although the partnership is no longer active. Before joining Wolfensohn, Mr. Morgan spent 15 years with Schroders plc, a British merchant bank, as a member of the board and head of the Schroder Strategy Group, which he founded. Mr. Morgan currently serves as Chairman of four other Amphion Partner Companies (Axcess International Inc. (since May 2004), FireStar Software, Inc. (since June 2005), PrivateMarkets, Inc. (since 2007) and WellGen, Inc. (since November 2007) and is also a director of DataTern, Inc. (since 2008). He graduated with a B. Engineering First Class Honors from the University of Auckland, New Zealand. In 1982 he completed the Advanced Management Program at Harvard Business School. We believe that Mr. Morgan is qualified to serve on our board of directors because of his extensive experience in the healthcare and biotechnology industries as well as his extensive background in finance.

Robert Bertoldi has served as an executive director of the Company since November 2014. During 2017, Mr. Bertoldi transitioned to and currently is considered to be a non-executive director. He is also President and Chief Financial Officer of Amphion Innovations plc (since July 2014). Mr. Bertoldi was a founder President and Chief Financial Officer of Amphion Capital Partners LLC (the predecessor to Amphion Innovations plc) (from 1995 to 2004) and VennWorks LLC (from 1999 to 2016). Mr. Bertoldi is also a general partner of Amphion Partners LLC (formerly known as Wolfensohn Partners, LP) (since 1995). Prior to that, he served as Chief Financial Officer for James D. Wolfensohn, Inc. (from 1988 to 1995) and Hambro America Inc. (from 1982 to 1988). He began his career at KPMG and left as a manager in the investment services department. Mr. Bertoldi was a director of Axcess International, Inc. (OTCBB: AXSI.OB) from 2000 to 2013. Mr. Bertoldi received a B.A. in Accounting and Economics from Queens College, New York in 1976 and became a Certified Public Accountant in 1978. He is a member of the AICPA and NYSCPA. We believe that Mr. Bertoldi is qualified to serve on our board of directors because of his extensive background in finance and accounting.

Charlotta Ginman has served as a non-executive director of the Company since April 2015. As a fellow of the Institute of Chartered Accountants in England and Wales, Ms. Ginman is Chair of the Audit Committee. She is a non-executive Director and Chair of the Audit Committee of Polar Capital Technology Trust plc, Pacific Assets Trust plc and Keywords Studios plc. She is also a non-executive Director of Consort Medical plc and Unicom AIM VCT plc. Ms. Ginman has held senior positions in the investment banking and technology/telecom sectors. As three out of Ms. Ginman's six non-executive directorships are with quoted investment companies that involve less time commitment than trading companies, Ms. Ginman is able to devote sufficient time to all of her appointments. Ms. Ginman also holds a MSc. in Economics from the Swedish School of Economics and Business Administration in Helsinki. We believe that Ms. Ginman is qualified to serve on our board of directors because of her substantial experience in financial and operational management gained during her career.

Zaki Hosny has served as a non-executive director of the Company since 2006. Mr. Hosny is an independent consultant to life sciences companies. Mr. Hosny spent most of his career at Merck & Co, Inc. (NYSE: MRK) (from 1998 to 2007) in marketing and general management positions around the world, including management responsibility for the company's business in major markets in Europe. He also held senior marketing positions in the United States and several European countries in general management, marketing roles with worldwide responsibility for cardiovascular and other franchises, and was closely involved in the clinical development of some of the company's major products. Mr. Hosny was Chief Executive Officer of Motif Biosciences, Inc. (from 2006 to 2013) and Deputy Chairman of its Board of Directors (from 2006 to 2013). Mr. Hosny is currently a Senior Advisor to the Albright Stonebridge Group, a strategic consultancy firm based in Washington, DC and a consultant to Harel Consulting of New Jersey, Mettle Consulting Limited of the United Kingdom and Mansfield Consulting LLC. Mr. Hosny is based in Princeton, New Jersey, and is a graduate of Cambridge University with an M.A. in History and Law. We believe that Mr. Hosny is qualified to serve on our board of directors because of his extensive experience in the pharmaceutical and biotechnology industries.

Dr. Mary Lake Polan has served as a non-executive director of the Company since February 2004. Dr. Polan is a Clinical Professor in the Department of Obstetrics, Gynecology, and Reproductive Sciences at Yale University School of Medicine (since 2014). From 2008 to 2014, Dr. Polan served as adjunct professor in the Department of Obstetrics and Gynecology at Columbia University School of Medicine. She served as chair and emeritus professor in the Department of Obstetrics and Gynecology at Stanford Medical School from 1990 to 2006. Dr. Polan specializes in reproductive endocrinology and infertility and hormonal issues related to gynecology patients and menopause. Dr. Polan served on the board of Wyeth (NYSE: WYE) (from 1995 to 2009) prior to its acquisition by Pfizer Inc. and currently serves on the board of Quidel Corp. (NASDAQ: QDEL) (since 1993), and on the boards of several privately held life

sciences companies. She chairs a Scientific Advisory Board on Women's Health for the Proctor and Gamble Company and several other advisory boards of private life sciences companies. She is also Managing Director of Golden Seeds, an angel investing group which invests in women led companies. She received her bachelor's degree from Connecticut College, her Ph.D. in Molecular Biophysics and Biochemistry, her M.D. from Yale University, and completed her residency and Reproductive Endocrine Fellowship at the Department of Obstetrics and Gynecology at the Yale School of Medicine. Dr. Polan received her M.P.H. (Maternal and Child Health Program) from the University of California, Berkeley. As a medical doctor, Dr. Polan brings an important practicing physician perspective in evaluating and overseeing the Company's performance and strategic direction.

Bruce Andrew Williams has served as a non-executive director of the Company since February 2004. Mr. Williams served as the Chief Executive Officer of WellGen, Inc. (from November 2010 to May 2011) and Head of Commercial Operations at Corcept Therapeutics Incorporated (from March 2010 to November 2010). Mr. Williams was Senior Vice President, Sales and Marketing at Genta Incorporated (from February 2001 to March 2005), where he led the negotiation of a licensing and co-development/co-marketing agreement with Aventis for the company's lead product. Mr. Williams was previously Senior Vice President of Sales and Marketing at Celgene Corporation (from June 1996 to February 2001), where he built the company's commercial and distribution infrastructure to support the launch of its first product, Thalomid (thalidomide). Mr. Williams was an executive director of Ortho Biotech Products LP (from July 1989 to June 1996), where he led the marketing of this Johnson & Johnson subsidiary's lead product, Procrit (epoetin alfa), from pre-launch to its fifth year on the market. Mr. Williams currently serves on the boards of Motif, Inc., the Company's subsidiary (since February 2004), and Afaxys, Inc. (since February 2011). Mr. Williams obtained his MBA in finance and accounting from Columbia Business School in 1982, and obtained his BA in biology from Syracuse University in 1976. We believe that Mr. Williams is qualified to serve on our board of directors due to his significant operational experience in the pharmaceutical and biotechnology industries, as well as his marketing background.

Dr. Craig T. Albanese has served as a non-executive director of the Company since May 2017. Dr. Albanese has 25 years of clinical and administrative experience focusing on children and women's health, primarily in the Stanford Children's Hospital, New-York Presbyterian Hospital, Morgan Stanley Children's Hospital and the Sloane Hospital for Women. He is currently Senior Vice President and Chief Operating Officer at New York-Presbyterian/Morgan Stanley Children's Hospital and Sloane Hospital for Women. He has had a distinguished clinical career to date having published 161 peer review articles, contributed 57 book chapters, and risen to Professor of Surgery in Pediatrics, Obstetrics and Gynecology. He has combined his clinical career with success in hospital administrative positions where he has had a pivotal role in setting up networks of physicians, support, and educational services across a number of hospitals and medical institutions to provide integrated clinical and support services for increasing numbers of patients in a very cost effective way. After receiving his medical degree from SUNY-Health Science Center in Brooklyn, Dr. Albanese was a resident, and later, chief resident in general surgery at Mount Sinai Medical Center. Following his residency, he completed pediatric general surgery and critical care/research fellowships at Children's Hospital of Pittsburgh. He also holds a Master's in Business Administration from the Leavey School of Business at Santa Clara University. As a medical doctor and a hospital executive, Dr. Albanese brings important physician and hospital administration perspective in evaluating and overseeing our performance and strategic direction.

# **Family Relationships**

There are no family relationships among any of our executive officers or directors.

# Arrangements with Major Shareholders, Customers, Supplies or Others.

There are no arrangements or understandings with any major shareholder, customer, supplier or other, pursuant to which any person referred to above was selected as a director or member of senior management.

#### B. Compensation.

The following discussion provides the amount of compensation paid, and benefits in kind granted, by us to our current directors and executive officers for services provided in all capacities to us for the year ended December 31, 2017. For additional detail regarding the compensation offered to our directors and executive officers, please see "Item 7.B. Related Party Transactions — Agreements with Directors, Executive Officers and Others."

Name	Salaries and Fees (\$)	Bonuses (\$)	Social Security (\$)	Total (\$)
Executive Officers:				
Graham Lumsden(1)  Chief Executive Officer and Director	425,000	127,500	15,499	567,999
Robert Dickey(2)  Chief Financial Officer	307,693	_	12,348	320,041
David Huang(1)  Chief Medical Officer	400,000	142,000	14,919	556,919
Non-Employee Directors:				
Richard Cecil Eversfield Morgan(3) Non-Executive Chairman	113,500	_	_	113,500
Dr. Craig T. Albanese Non-Executive Director	38,333	_	_	38,333
Robert Bertoldi(4) Non-Executive Director	125,000	_	9,563	134,563
Charlotta Ginman(5) Non-Executive Director	67,279	_	_	67,279
Jonathan Gold(6) Non-Executive Director	194,004	_	_	194,004
Zaki Hosny Non-Executive Director	63,000	_	_	63,000
Mary Lake Polan Non-Executive Director	60,000	_	_	60,000
Bruce Andrew Williams Non-Executive Director	64,000	_	_	64,000

<sup>(1)</sup> On February 28, 2018, Dr. Lumsden and Dr. Huang were awarded cash bonuses of \$127,500 and \$142,000, respectively, for services provided in 2017. A portion, or \$42,500 and \$42,000, respectively, are contingent upon achieving certain operational milestones in 2018. Dr. Lumsden received a separate supplemental bonus of \$50,000 that is also contingent upon operational milestones in the first half of 2018. In addition to the compensation listed above, Dr. Lumsden and Dr. Huang both received \$7,950 in employer provided 401k pension contributions during 2017.

- (2) Mr. Dickey, our former Chief Financial Officer, resigned from the Company effective February 2, 2017.
- (3) Mr. Morgan was awarded a bonus of £100,000 pounds sterling by the Board of Directors in March 2017 for services provided in 2016.
- (4) Mr. Bertoldi received \$6,075 in employer provided 401k pension contributions during 2017.
- (5) Ms. Ginman's compensation for 2017 was £52,195 or US \$67,279 based on an average exchange rate of 1.289 for the period.
- (6) Mr. Gold received \$194,004 in 2017 for services provided under a consulting agreement with the Company.

#### Basic salary

Basic salaries for Executive Directors are reviewed annually having regard to individual performance and market practice.

# Annual Bonuses

Each calendar year, a bonus may be awarded at the discretion of the board of directors having considered the recommendations of the remuneration committee to reward the executives' contribution to the achievement of our strategic and financial targets and personal performance objectives.

# Longer term incentives

In order to further incentivize the Executive Directors and align their interests with shareholders, we granted share options. See "Outstanding Equity Awards, Grants and Option Exercise" below for information regarding the share options that are held by our directors and executive officers.

# Outstanding Equity Awards, Grants and Option Exercise

The table below sets out information on outstanding options to purchase ordinary shares held by our current directors and executive officers as of December 31, 2017.

	January 1, 2017	Granted	December 31, 2017		Exercise price	Grant date	Expiry date
Richard Morgan Non-Executive Chairman	73,215 6,179 502,950 582,344		73,215 6,179 502,950 582,344	\$ \$ \$	0.70 0.70 0.14	1/1/10 1/1/11 12/4/14	1/1/20 1/1/21 12/4/24
Craig Albanese Non-Executive Director		100,000	100,000	\$	0.44	5/4/17	5/4/27
Robert Bertoldi Non-Executive Director	53,887 251,475 305,362		53,887 251,475 305,362	\$ \$	0.70 0.14	1/1/10 12/4/14	1/1/20 12/4/24
Charlotta Ginman Non-Executive Director	251,475 251,475		251,475 251,475	\$	0.14	12/4/14	12/4/24
Jonathan Gold (2) Non-Executive Director	73,502 5,964 251,475 330,941		73,502 5,964 251,475 330,941	\$ \$ \$	0.70 0.70 0.14	1/1/10 1/11/11 12/4/14	1/1/20 1/11/21 12/4/24
Zaki Hosny Non-Executive Director	53,888 14,370 2,587 107,774 251,475 430,094		53,888 14,370 2,587 107,774 251,475 430,094	\$ \$ \$ \$	0.70 0.70 0.70 0.14 0.14	6/18/09 1/1/10 1/1/11 1/30/13 12/4/14	6/18/19 1/1/20 1/1/21 1/30/23 12/4/24
Graham Lumsden (2) Chief Executive Officer and Executive Director	574,800 2,874,000 — 3,448,800	1,000,000 700,000 1,700,000	574,800 2,874,000 1,000,000 700,000 5,148,800	\$ \$ \$ \$	0.14 0.14 0.33 0.33	5/25/13 12/4/14 2/7/17 2/7/17	5/25/23 12/4/24 2/7/27 2/7/27
Mary Lake Polan Non-Executive Director	67,036 5,461 251,474 323,971		67,036 5,461 251,474 323,971	\$ \$ \$	0.70 0.70 0.14	1/1/10 1/1/11 12/4/14	1/1/20 1/1/21 12/4/24
Bruce Williams Non-Executive Director	67,252 28,740 71,850 2,802 251,474 422,118		67,252 28,740 71,850 2,802 251,474 422,118	\$ \$ \$ \$	0.70 0.70 0.70 0.70 0.70 0.14	1/1/10 1/16/10 11/15/10 1/1/11 12/4/14	1/1/20 1/16/20 1/16/20 1/1/21 12/4/24
Robert Dickey IV (1) Chief Financial Officer		1,500,000 600,000 2,100,000	1,500,000 600,000 2,100,000	\$	0.31 0.33	1/17/17 2/7/17	1/17/27 2/7/27
David Huang (2) Chief Medical Officer	718,500 100,000 —————————————————————————————	1,000,000 1,000,000	718,500 100,000 1,000,000 1,818,500	\$ \$ \$	0.14 0.73 0.33	12/4/14 6/02/15 2/7/17	12/4/24 6/02/25 2/7/27

- (1) Mr. Dickey, our former Chief Financial Officer, resigned from the Company effective February 2, 2018. Equity awards outstanding as of December 31, 2017 were forfeited.
- (2) On February 28, 2018, Dr. Lumsden was awarded an option to purchase 3,000,000 ordinary shares at £0.361 per share. The award vests over a four-year period, 2,000,000 of which are based on meeting certain performance targets. Mr. Gold was awarded an option to purchase 1,000,000 ordinary shares at £0.361 per share. A portion of the award, 750,000 options, vests over a four-year period and are based on meeting certain performance targets. The remaining options will vest over a 12-month period beginning at the end of his interim assignment. Dr. Huang was awarded an option to purchase 750,000 ordinary shares at £0.361 per share. The award vests over a four-year period.

# **Share Option Plan**

On December 4, 2014, Motif, Inc. adopted the Motif BioSciences, Inc. Share Option Plan. Upon our admission to AIM, we adopted Motif Inc.'s Share Option Plan and assumed all stock options that had been granted by Motif BioSciences, Inc. under the Share Option Plan, which are now exercisable for our ordinary shares. Participation in the Share Option Plan is limited to our employees. Options may be granted to non-employees (consultants and directors) by way of a sub-plan, governed by the same rules of the Share Option Plan unless the context otherwise provides. The Share Option Plan has the following key terms:

- the number of shares that may be allocated on any day shall not, when added to the aggregate number of shares allocated under the Share Option Plan in the previous ten years and any other employees' share option scheme adopted by the Company, exceed the number of shares that represents 10% of the ordinary share capital of the Company in issue immediately prior to that day;
- the maximum total number of shares that may be issued under the Share Option Plan is 18,000,000 and such share options shall consist of authorized but unissued or reacquired shares or any combination thereof;
- the exercise price for each share option will not be less than the nominal value of the relevant shares if the share options are to be satisfied by a new issue of shares by the Company. The exercise price is to be established by the board of directors; however, must not be less than the fair market value at the effective date of grant of the share option, as judged by the board of directors if the Company's shares are not listed on a securities exchange, or by reference to a closing price, if the Company's shares are listed on a securities exchange;
- the share options may be exercised at such time or times, or upon such event or events and subject to such terms, conditions, performance criteria and restrictions as determined by the board and set out in the share option agreements evidencing the share options. However, no share option shall be exercisable after the expiration of ten years after the effective date of grant;
- subject to earlier termination of a share option as otherwise provided by the Share Option Plan, an option shall terminate upon the option holder's termination of service to the Company, whether as employee, director or consultant. A share

option terminated in this way must be exercised within three months after the date on which the share option holder's service to the Company terminated:

- upon a change of control of the Company, the board may provide for acceleration of the exercisability and/or vesting in connection with any share options acquired pursuant to the change of control. The board also has the absolute discretion to determine that any share options outstanding immediately prior to a change of control shall be cancelled in return for payment. The entity acquiring the Company may assume or continue the Company's rights and obligations in relation to each share option that has been granted; and
- the board may amend, suspend or terminate the Share Option Plan at any time.

#### **Limitations On Liability And Indemnification Matters**

To the extent permitted by the United Kingdom Companies Act 2006, we are empowered to indemnify our directors against any liability they incur by reason of their directorship. We maintain directors' and officers' insurance to insure such persons against certain liabilities.

#### C. Board Practices.

Our board of directors consists of nine members at December 31, 2017, including at that time, a non-executive chairman, an executive director and seven non-executive directors. The following table sets forth the names of our directors and the years of their initial appointment as directors.

Name	Current Position	Year of Initial Appointment
Richard Cecil Eversfield Morgan(1)	Non-Executive Chairman	2004
Graham Lumsden	Executive Director	2013
Charlotta Ginman(2)	Non-Executive Director	2015
Jonathan Gold	Non-Executive Director	2004
Zaki Hosny(1)	Non-Executive Director	2006
Mary Lake Polan(3)	Non-Executive Director	2004
Bruce Williams(1)(2)	Non-Executive Director	2004
Robert Bertoldi	Non-Executive Director	2014
Dr. Craig T. Albanese(2)(3)	Non-Executive Director	2017

<sup>(1)</sup> Member of Remuneration Committee.

Our board of directors meets regularly, generally every two months with two meetings per year in person and four meetings per year telephonically. Its direct responsibilities include setting annual budgets, reviewing trading performance, approving significant capital expenditure, ensuring adequate funding, setting and monitoring strategy, and reporting to shareholders. The non-executive directors have a particular responsibility to ensure that the strategies proposed by the executive directors are fully considered.

As an AIM-listed company, we are subject to the continuing requirements of the AIM Rules for Companies as published by the London Stock Exchange plc. Our board also adheres to the principles of the Quoted Companies Alliance's Corporate Governance Code for Small and Mid-Size Quoted Companies in such respects as it considers appropriate for our size and the nature of our business.

Our board is responsible to our shareholders for our proper management and setting our overall direction and strategy, reviewing scientific, operational and financial performance, and advising on management appointments. All key operational and investment decisions are subject to board approval.

There is a clear separation of the roles of chief executive officer and non-executive chairman. The chairman is responsible for overseeing the running of our board, ensuring that no individual or group dominates our board's decision-making and ensuring that the non-executive directors are properly briefed on matters. The chief executive officer has the responsibility for implementing the strategy of our board and managing our day-to-day business activities.

All of our directors are subject to election by shareholders at the first annual general meeting after their appointment to our board. Following this initial appointment by the shareholders, the directors are subject to retirement by rotation. At each annual general

<sup>(2)</sup> Member of Audit Committee.

<sup>(3)</sup> Member of Nomination Committee.

meeting of the Company, one-third of the directors or, if their number is not three or a multiple of three, then the number nearest to one-third shall retire from office by rotation. A director who retires at a general meeting shall be eligible for reappointment if such director is willing to be re-elected. In addition, a non-executive director who would not otherwise be required to retire at an annual general meeting will retire if he has been in office for a continuous period of nine years or more at the date of the meeting. Such non-executive director will not be taken into account when determining the directors required to retire by rotation.

The Sarbanes-Oxley Act of 2002, as well as related rules subsequently implemented by the SEC, requires foreign private issuers, including our company, to comply with various corporate governance practices. In addition, NASDAQ rules provide that foreign private issuers may follow home country practice in lieu of the NASDAQ corporate governance requirements, subject to certain exceptions and except to the extent that such exemptions would be contrary to U.S. federal securities laws.

The home country practices we will follow so long as we qualify as a foreign private issuer in lieu of NASDAQ rules are described below:

- We do not follow NASDAQ's quorum requirements applicable to meetings of shareholders. Such quorum requirements are not required under English law. In accordance with generally accepted business practice, our Articles provide alternative quorum requirements that are generally applicable to meetings of shareholders.
- We do not follow NASDAQ's requirement that our board of directors consist of a majority of "independent" directors (as defined by NASDAQ rules), or that our board committees are comprised of entirely independent directors; although our audit committee consists of entirely independent directors (as required by Rule 10A-3 of the Exchange Act).
- We do not follow NASDAQ's requirements that non-management directors meet on a regular basis without management present. Our board of
  directors may choose to meet in executive session at their discretion.
- We do not follow NASDAQ's requirements to seek shareholder approval for the implementation of certain equity compensation plans and issuances of ordinary shares under such plans. In accordance with English law, we are not required to seek shareholder approval to allot ordinary shares in connection with applicable employee equity compensation plans.

We intend to take all actions necessary for us to maintain compliance as a foreign private issuer under the applicable corporate governance requirements of the Sarbanes-Oxley Act of 2002, the rules adopted by the SEC and NASDAQ's listing standards.

Because we are a foreign private issuer, our directors and senior management are not subject to short-swing profit and insider trading reporting obligations under Section 16 of the Exchange Act. They will, however, be subject to the obligations to report changes in share ownership under Section 13 of the Exchange Act and related SEC rules.

# Director Independence

Based upon information requested from and provided by each director concerning their background, employment and affiliations, including family relationships, our board of directors has determined that each of Charlotta Ginman, Mary Lake Polan, Dr. Craig Albanese and Bruce Williams, representing four of our nine directors, is independent under the applicable rules and regulations of NASDAQ. In making such determinations, the board of directors considered the relationships that each such non-employee director has with us and all other facts and circumstances the board of directors deemed relevant in determining their independence.

# **Director Service Agreements**

#### Role of the Board in Risk Oversight

Our board of directors is primarily responsible for the oversight of our risk management activities and has delegated to the audit committee the responsibility to assist our board in this task. While our board oversees our risk management, our management is responsible for day-to-day risk management processes. Our board of directors expects our management to consider risk and risk management in each business decision, to proactively develop and monitor risk management strategies and processes for day-to-day activities and to effectively implement risk management strategies adopted by the board of directors. We believe this division of responsibilities is the most effective approach for addressing the risks we face.

#### Corporate Governance Practices

#### **Board Committees**

The standing committees of our board of directors consist of an audit committee, a remuneration committee and a nomination committee. Each committee operates under a charter. Copies of each committee's charter are posted on the Investors section of our website, which is located at <a href="https://www.motifbio.com">www.motifbio.com</a>.

#### Audit Committee

Currently, the members of our audit committee are Charlotta Ginman (Chair), Craig T. Albanese and Bruce Williams. The audit committee meets at least three times a year. The audit committee met six times in 2017.

Our board of directors has determined that Ms. Ginman, Dr. Albanese and Mr. Williams are independent under Rule 10A-3 of the Exchange Act and the applicable listing requirements of NASDAQ. Each audit committee member satisfies the other listing requirements of NASDAQ for audit committee membership. Our board of directors has also determined that Charlotta Ginman qualifies as an "audit committee financial expert," as such term is defined by the SEC, and that Ms. Ginman has the requisite level of financial sophistication required by the continued listing standards of NASDAQ.

The audit committee advises the board of directors on the appointment of external auditors and on their remuneration (both for audit and non-audit work) and discusses the nature, scope, and results of the audit with the auditors. The audit committee reviews the extent of the non-audit services provided by the auditors and reviews with them their independence and objectivity. The Chairman of the audit committee reports the outcome of the audit committee meetings to the board of directors and the board of directors receives the minutes of the meetings.

#### Remuneration Committee

The current members of our remuneration committee are Zaki Hosny (Chair), Richard Morgan, and Bruce Williams. The remuneration committee met eleven times in 2017. Our board of directors has determined that Mr. Williams is independent under the applicable listing requirements of NASDAQ. The remuneration committee is responsible for making recommendations to our board of directors, within agreed terms of reference, on our framework of executive remuneration and cost. The committee determines the contract terms, remuneration, and other benefits for each of our executive directors, including performance related bonus schemes and pension rights.

#### Nomination Committee

As of the date of this Annual Report, Mary Lake Polan and Dr. Craig Albanese are the members of our nomination committee. Our board of directors determined that Ms. Polan and Dr. Albanese are independent under the applicable listing requirements of NASDAQ. Ms. Polan is the chair of the committee. The nomination committee met one time in 2017. The nomination committee monitors the size and composition of the board of directors and the other committees and is responsible for identifying suitable candidates to join our board of directors. Dr. Craig Albanese was appointed to the nomination committee on April 9, 2018.

# Code Of Business Conduct And Ethics

We have adopted a Code of Business Conduct and Ethics, or the Code of Conduct, that is applicable to all of our employees, executive officers and directors. A copy of the Code of Conduct is available on our website at www.motifbio.com.

# D. Employees.

As of December 31, 2017, we had eight employees, seven based in the United States and one based in the United Kingdom. We consider our labor relations to be good.

# E. Share Ownership.

For information regarding the share ownership of our directors and executive officers, see "Item 6.B. Compensation" and "Item 7.A. Major Shareholders."

#### Item 7. Major Shareholders and Related Party Transactions

# A. Major shareholders. -

The following table presents information relating to the beneficial ownership of our ordinary shares as of March 1, 2018.

The number of ordinary shares beneficially owned by each entity, person, executive officer or director is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any ordinary shares over which the individual has sole or shared voting power or investment power as well as any ordinary shares that the individual has the right to acquire within 60 days of March 1, 2018 through the exercise of any option or other right. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all ordinary shares held by that person.

Ordinary shares that a person has the right to acquire within 60 days of March 1, 2018 are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all executive officers and directors as a group. The percentage of beneficial ownership of our ordinary shares is based on an aggregate of 264,097,872 shares outstanding as of March 1, 2018. As of March 1, 2018, we believe approximately 18.7% of our ordinary shares, are held by 34 record holders in the United States. None of our major shareholders have different voting rights than other shareholders.

Unless otherwise indicated, the current business address for each executive officer and director named below is 125 Park Avenue 25th Floor, New York, NY 10017, United States.

	Ordinary Shares Beneficially Owned			
Name of Beneficial Owner	Total	Percent (%)		
5% Shareholders				
Invesco Asset Management Limited(1)	76,373,260	27.77%		
Amphion Group(2)	37,150,645	14.07%		
Bank of America Merrill Lynch(3)	18,674,188	7.07%		
Sand Grove Capital Management LLP(4)	13,257,448	5.02%		
Executive Officers and Directors				
Graham George Lumsden(5)	3,964,742	1.48%		
Robert Bertoldi(6)	37,517,258	14.19%		
David Huang(7)	1,162,250	*		
Richard Cecil Eversfield Morgan(8)	37,923,905	14.36%		
Charlotta Ginman(9)	376,475	*		
Jonathan Gold(10)	479,549	*		
Zaki Hosny(11)	645,644	*		
Mary Lake Polan(12)	336,971	*		
Bruce Andrew Williams(13)	527,468	*		
Craig Albanese(14)	22,917	*		
All Current Executive Officers and Directors as a Group (10 persons)(15)	45,806,534	16.85%		

<sup>\*</sup> Indicates beneficial ownership of less than 1% of the total outstanding ordinary shares.

- (1) Invesco Asset Management Limited as agent for and on behalf of its discretionary managed clients. The number includes 65,465,260 shares and warrants to exercise 10,908,000 shares. The principal address of Invesco Asset Management is Perpetual Park, Perpetual Park Drive, Henley-on-Thames, R69 1HH, United Kingdom.
- (2) This number includes 37,150,645 shares held by Amphion Innovations plc (of which 36,371,625 shares are pledged as collateral under a loan facility). The maturity date of the loan under which shares held by Amphion Innovations plc are pledged is December 15, 2018. The principal address of the Amphion Group is Fort Anne, Douglas, Isle of Man, IM1 5PD.
- (3) This information is based on information contained in a TR-1 Notification sent to us on January 12, 2018 by Bank of America Corporation disclosing an indirect voting interest in our ordinary shares. The principal address of Bank of America Merrill Lynch is 2 King Edward Street, London, EC1A 1HQ, United Kingdom.
- (4) This information is based on information contained in a TR-1 Notification sent to us on October 5, 2017 by Sand Grove Capital Management LLP disclosing a cash-settlement equity contract for difference. The principal address of Sand Grove Capital Management LLP is 35 Dover Street, 4th Floor, London W1S 4NQ.
- (5) This number consists of 3,964,742 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018.
- (6) This number includes 305,362 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018, and also includes the ordinary shares beneficially owned by the Amphion Group, of which Mr. Bertoldi may be deemed to be a beneficial owner.
- (7) This number represents 1,162,250 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018.
- (8) This number includes 582,344 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018, and also includes the ordinary shares beneficially owned by the Amphion Group, of which Mr. Morgan may be deemed to be a beneficial owner.

- (9) This number includes 251,475 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018.
- (10) This number includes 330,941 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018.
- (11) This number includes 430,094 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018.
- (12) This number includes 323,971 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018.
- (13) This number includes 422,118 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018.
- (14) This number includes 22,917 ordinary shares that are issuable pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1,2018.
- (15) This number includes 7,796,214 ordinary shares that are issuable to our officers and directors pursuant to share options that are currently exercisable or will become exercisable within 60 days of March 1, 2018 and also includes 37,150,645 ordinary shares that are beneficially owned by the Amphion Group, of which Mr. Bertoldi and/or Mr. Morgan may be deemed to be a beneficial owner.

# B. Related Party Transactions.

Since January 1, 2017, we have engaged in the following transactions with our directors, executive officers and holders of 5% or more of our ordinary shares, and affiliates of our directors, executive officers and holders of more than 5% of our ordinary shares. We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, in transactions with unrelated third-parties.

# Transactions with Amphion Innovations plc and Amphion Innovations US, Inc.

At December 31, 2017, Amphion Innovations plc and its wholly owned subsidiary, Amphion Innovations US, Inc., or collectively, the Amphion Group owned 14.10% of the issued ordinary shares in Motif Bio plc. In addition, the Amphion Group previously provided funding for the activities of Motif BioSciences Inc. through the issue of convertible interest bearing loan notes, which were converted to shares in December 2016. Richard Morgan and Robert Bertoldi were directors of both the Company and Amphion Innovations plc in the period. Transactions between us and the Amphion Group are disclosed below:

# Advisory And Consultancy Agreement With Amphion Innovations US, Inc. And Shared Office Space

On April 1, 2015, the Group entered into an Advisory and Consultancy Agreement with Amphion Innovations US, Inc. The consideration for the services is \$120,000 per annum. The agreement was amended in December 2016 so that either party may terminate the agreement at any time, for any reason, upon giving the other party ninety-days advance written notice. The Group paid \$120,000 to Amphion Innovations US, Inc. during each year ending December 31, 2017 and 2016 in accordance with the terms of the agreement. As of the date of this annual report, the agreement continues to be in force.

# Consultancy Agreement With Amphion Innovations plc

On April 1, 2015, the Group entered into a Consultancy Agreement with Amphion Innovations plc for the services of Robert Bertoldi, an employee of Amphion Innovations plc. The consideration for his services was \$5,000 per month. On November 1, 2015, the consideration was increased to \$180,000 per annum. On July 1, 2016, the consideration decreased to US \$75,000 per annum. The agreement was for an initial period of 12 months and would automatically renew each year on the anniversary date unless either party notifies the other by giving ninety-days written notice prior to expiration. The agreement was amended in December 2016 so that either party may terminate the agreement at any time, for any reason, upon giving the other party ninety days advance written notice. In July 2017, the Group amended the consulting agreement with Amphion Innovations plc to increase the annual consideration to \$125,000 to better reflect Robert Bertoldi's time commitment to the Group with an effective date of January 1, 2017.

#### Consultancy Agreement With Amphion Innovations US, Inc.

On September 7, 2016, the Group entered into a Consultancy Agreement with Amphion Innovations US, Inc., pursuant to which Amphion Innovations US, Inc. will provide consultancy services in relation to the Group's obligations as a NASDAQ listed company. The consideration for the services was \$15,500 per month. The agreement was for an initial period of 12 months, after which the agreement will terminate automatically unless renewed by the parties by mutual agreement. The agreement was not extended past the initial term. The Group paid \$170,500 and \$19,633 during the years ended December 31, 2017 and 2016 in accordance with the terms of the agreement.

# Agreements with Directors, Executive Officers and Others

# Service Agreement with Graham Lumsden

On April 1, 2015, we entered into a service agreement with Graham Lumsden pursuant to which Dr. Lumsden is employed as our Chief Executive Officer on a full-time basis. Under the terms of the agreement Dr. Lumsden received an initial gross annual salary of \$360,000. In February 2016, our board of directors increased Dr. Lumsden's gross annual salary to \$425,000. Effective January 1, 2018, Dr. Lumsden's annual salary was increased to \$446,250. Dr. Lumsden is eligible to participate in the Company's discretionary annual bonus program in an amount to be determined by the board of directors in its absolute discretion. The agreement contains customary confidentiality, non-competition and non-solicitation provisions

Dr. Lumsden is employed by us on a permanent contract and his employment will continue until terminated by either party giving notice to the other as follows:

- for the first two years of the employment, Dr. Lumsden's employment can be terminated by one party giving the other three months' notice of termination of the agreement; and
- thereafter Dr. Lumsden's employment can be terminated by one party giving the other six months' notice. In addition, we may terminate Dr. Lumsden's employment without notice in certain circumstances by making a payment to Dr. Lumsden in lieu of notice, which payment will be equal to the portion of his annual salary due him for the duration of the notice period. The agreement also contains garden leave provisions which can be utilized in event that Dr. Lumsden's employment is terminated by us.

# Employment Agreements with Robert Dickey IV and Dr. David Huang

Employment Agreement with Robert Dickey IV

On January 16, 2017, our subsidiary, Motif BioSciences Inc., entered into an employment agreement with Mr. Dickey, our former Chief Financial Officer. Under the terms of the agreement, Mr. Dickey received a base salary of \$320,000 per year, subject to upward or downward adjustment from time to time in the Company's discretion. He was also granted a stock option award of 1,500,000 shares that vest over four years. The employment agreement contains customary confidentiality, non-competition and non-solicitation provisions.

# Employment Agreement with David Huang

On May 1, 2015, our subsidiary, Motif BioSciences Inc., entered into an employment agreement with Dr. Huang, our Chief Medical Officer. Under the terms of the agreement, Dr. Huang received a base salary of \$300,000 per year, subject to upward or downward adjustment from time to time in the Company's discretion. Effective January 1, 2016, our board of directors increased Dr. Huang's base salary to \$400,000. Effective January 1, 2018, Dr. Huang's base salary was increased to \$420,000. Dr. Huang is eligible to participate in the Company's discretionary annual bonus program in an amount to be determined by the board of directors. He is also eligible to participate in any and all group health, disability insurance, life insurance, incentive, savings, retirement, and other benefit plans which are made generally available to similarly-situated employees of the Company. The employment agreement contains customary confidentiality, non-competition and non-solicitation provisions.

# Payments To Be Made Upon Termination Of Employment

The employment agreement with and Dr. Huang provide that employment will be considered "at will" in nature and, accordingly, either the Company or the employee may terminate employment agreements and employee's employment at any time and for any reason, with or without cause or prior notice. The employment agreement also provide that if the employee's employment with the Company is terminated by the Company without "Cause" or by the employee with "Good Reason" (subject to a notice and cure

period provided for in the agreement) prior to or upon the second anniversary of the effective date of the employment agreement, the employee will be entitled to receive upon such termination: (i) any accrued but unused vacation pay; (ii) any earned but unpaid annual salary; and (iii) subject to the employee's execution of a general release of the Company, an amount equal to three months of his then-current annual salary.

Under the employment agreement, if Dr. Huang's employment with the Company is terminated by the Company without Cause following the second anniversary of the effective date of the employment agreement, the employee will be entitled to receive upon such termination: (i) any accrued but unused vacation pay; (ii) any earned but unpaid annual salary; and (iii) subject to the employee's execution of a general release of the Company, an amount equal to three months of his then-current annual salary plus one additional month of his then-current annual salary for each full year of employment with the Company, up to a maximum of nine additional months above the three-month initial entitlement, which will be paid in twelve substantially equal monthly installments commencing with the first regular payroll of the Company following his execution of the general release.

The term "Cause" means: (a) any act or omission of employee that, in connection with his employment with the Company, amounts to or constitutes a breach of a fiduciary duty, gross negligence, willful misconduct, or material misconduct, or that amounts to or constitutes fraud, embezzlement, or misappropriation; (b) employee's breach of any term(s) of the employment agreement; (c) employee's violation of any policy(ies) established, adopted, or maintained by the Company; (d) any act or omission of employee that, in the Company's sole discretion, is demonstrably and materially injurious to the Company; (e) any act or omission of employee that causes the Company to suffer or endure public disgrace, disrepute, or economic harm; or (f) employee's misappropriation of corporate assets or corporate opportunities.

The term "Good Reason" means the occurrence of either of the following events without the consent of the employee: (a) a material breach of the employment agreement by the Company; or (b) a material reduction in employee's responsibility, authority, or duties relative to employee's responsibility, authority, or duties in effect immediately prior to such reduction, except for any change in title or reporting relationship (such title or reporting change will not constitute Good Reason); provided, however, that "Good Reason" will not be deemed to exist for purposes of the agreement unless employee has first provided written notice of such reason to the Company no later than 30 days after the event or occurrence constituting Good Reason first arises, with such notice affording the Company 30 days, from the date of the Company's receipt of such notice to cure the deficiency, and further provided that the Company has failed to cure such deficiency within the time frame prescribed in such written notice.

#### Consultancy Agreement for Peter Meyers

On January 16, 2017, we entered into a consulting agreement with Peter Meyers, our former Chief Financial Officer. Under the agreement, Mr. Meyers will provide services for a three-month period to facilitate the transition of his prior duties as the Chief Financial Officer to our new Chief Financial Officer. He will be paid \$30,000 for the first month of services and \$10,000 for the second and third month of services. Additionally, provided the consulting services are performed, the vesting on 740,934 of the stock options granted on April 21, 2016 will be accelerated as of May 1, 2017. Mr. Meyers has until December 31, 2018 to exercise such options.

#### Consultancy Agreement for Robert Dickey IV

On February 2, 2018, Robert Dickey IV resigned as our Chief Financial Officer. As of the same date, we entered into a consulting agreement with Mr. Dickey for a period of five months to facilitate the transition of duties as Chief Financial Officer. Compensation to be paid to Mr. Dickey under the agreement is \$26,666 per month.

#### Consultancy Agreement With Jonathan Gold

On April 13, 2016, we entered into a consultancy agreement with Jonathan Gold, a member of our board of directors. Under the terms of this agreement, Mr. Gold received a fixed fee of \$10,000 per month for strategic financial expert advice and guidance. The term of this agreement was six months, commencing January 1, 2016. The term of the agreement would automatically renew each month following the initial term, provided that each party provided its mutual agreement to renew in a signed writing, no later than 30 days prior to the expiration of the term. This agreement was not extended beyond the initial term.

On April 7, 2017, the Group entered into a new consultancy agreement with Jonathan Gold, a member of the Group's Board of Directors. Under the terms of this agreement, Mr. Gold received a fixed fee of \$16,167 per month for strategic financial expert advice and guidance. The term of this agreement was twelve months, commencing January 1, 2017. The term of the agreement would automatically renew each month following the initial term, as long as either party did not provide notice to the other party of its election not to continue to renew the agreement with at least 30-days advance notice. In connection with Mr. Gold assuming the executive role as Chief Financial Officer of February 2, 2018, this agreement was suspended as of December 31, 2017.

#### Non-Executive Directors' Letters Of Appointment

With the exception of Robert Bertoldi whose services are to be provided by Amphion Innovations plc as described above, each of our non-executive directors, being Richard Morgan, Charlotta Ginman, Jonathan Gold, Zaki Hosny, Mary Lake Polan and Bruce Williams, entered into a letter of appointment with us on April 1, 2015, pursuant to which they each agreed to act as non-executive directors. Jonathan Gold performed services for us under a consultancy agreement in 2016 and 2017, as described above. Effective February 2, 2018, Mr. Gold assumed an executive role as Chief Financial Officer.

The non-executive directors have agreed to act for a period of three years from the date of our admission to AIM (subject to re-election by our shareholders as required by our Articles), however, the appointment can be terminated prior to the end of this three-year period by either party giving one month's prior written notice of termination to the other. We also have the right to terminate the appointment without notice in certain specified circumstances. At the end of the initial three-year appointment term, the parties may agree, by mutual consent, to renew the appointment for a further term.

Effective January 1, 2016, Richard Morgan receives a fee of US \$107,000 per annum for his participation as our non-executive Chairman and US \$6,500 per annum for his participation on the Remuneration Committee. Each of the other non-executive directors, except Jonathan Gold and Robert Bertoldi, receives a fee of US \$50,000 per annum for their services as a non-executive director. The Audit Committee chair and member receives US \$15,000 and US \$7,500, respectively. The Remuneration Committee chair and member receives US \$12,500 and US\$ 6,500, respectively. The Nominating Committee chair and member receives US \$10,000 and US \$5,000, respectively.

#### Transactions With Key Management Personnel

From April 2015 through January 2016 we paid Zaki Hosny, one of our non-executive directors, \$195,000 as a settlement for salary owed to him for his service as our Chief Executive Officer from 2006 to 2013. For additional information regarding transactions with key management personnel, see "Item 6.B. Compensation."

# Policies And Procedures For Related Party Transactions

The members of the board who are not conflicted by the particular related party transaction under review have the primary responsibility for reviewing and approving or disapproving related party transactions, which are transactions between us and related persons in which we or a related person has or will have a direct or indirect material interest. For purposes of this policy, a related person will be defined as a director, executive officer, nominee for director and/or any greater than 5% beneficial owner of our ordinary shares, in each case since the beginning of the most recently completed year, and their immediate family members.

# C. Interests of Experts and Counsel.

Not applicable.

# Item 8. Financial Information

# A. Consolidated Statements and Other Financial Information.

See Item 18. Financial Statements.

# **Legal Proceedings**

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

# **Dividend Distribution Policy**

Subject to the rights attached to any ordinary share, all dividends and other distributions, including any surplus in the event of a liquidation, are to be apportioned and paid pro rata according to the amounts paid up on the ordinary shares, or otherwise in accordance with the terms concerning entitlement to dividends on which shares were issued. Any dividend unclaimed for 12 years from the date on which it became payable shall revert to the Company. The board may, where authorized by shareholders at an annual general meeting, offer scrip dividends to shareholders, whereby shareholders can opt to receive an allotment of new ordinary shares in lieu of any dividend declared by the board.

# B. Significant Changes.

There have been no significant changes since December 31, 2017.

# Item 9. The Offer and Listing.

# A. Offer and Listing Details.

Our ordinary shares are currently listed on the AIM Market of the London Stock Exchange, or AIM, under the symbol "MTFB." Prior to the U.S. offering, neither the ADSs nor the ADS Warrants were listed on any stock exchange. The ADSs and ADS Warrants are now listed on The NASDAQ Capital Market under the symbols "MTFB" and "MTFBW," respectively. The following tables set forth for the periods indicated the reported high and low sale prices per ADS and ADS Warrants, as applicable, in U.S. dollars, and per ordinary share in pounds sterling.

# Nasdaq Capital Market

	Per ADS	8
	High	Low
	US \$	US \$
Annual		
2016 (beginning November 23, 2016)	6.40	5.25
2017	13.75	5.36
Quarterly		
Fourth Quarter 2016	6.40	5.25
First Quarter 2017	6.69	5.36
Second Quarter 2017	11.00	6.09
Third Quarter 2017	9.71	6.84
Fourth Quarter 2017	13.75	8.08
Month Ended:		
September 2017	9.71	6.84
October 2017	13.75	9.59
November 2017	10.80	8.08
December 2017	10.81	8.46
January 2018	11.52	10.01
February 2018	11.50	9.25
March 2018 (through March 1, 2018)	9.65	9.33

	Per ADS Wa	ırrant
	High	Low
Annual		
2016 (beginning November 23, 2016)	1.50	0.89
2017	9.94	1.12
Quarterly		
Fourth Quarter 2016	1.50	0.89
First Quarter 2017	1.55	1.12
Second Quarter 2017	4.18	1.41
Third Quarter 2017	4.90	1.50
Fourth Quarter 2017	9.94	2.49
Month Ended:		
September 2017	4.90	1.70
October 2017	9.94	3.30
November 2017	4.60	3.00
December 2017	4.57	2.49
January 2018	4.79	3.83
February 2018	5.00	4.28
March 2018 (through March 1, 2018)	4.24	4.20
03		

# AIM Market of the London Stock Exchange

Period	High	Low
	£	£
Annual		
2015 (beginning April 2, 2015)	.76	.25
2016	.67	.21
2017	.52	.23
Quarterly		
First Quarter 2016	.47	.36
Second Quarter 2016	.56	.38
Third Quarter 2016	.67	.42
Fourth Quarter 2016	.53	.21
First Quarter 2017	.28	.23
Second Quarter 2017	.45	.25
Third Quarter 2017	.36	.25
Fourth Quarter 2017	.52	.30
Month Ended		
September 2017	.36	.26
October 2017	.52	.35
November 2017	.41	.30
December 2017	.41	.32
January 2018	.44	.36
February 2018	.38	.33
March 2018 (through March 1, 2018)	.36	.35

On March 1, 2018 the closing price of the ADSs on NASDAQ was \$9.45 per ADS, and the last reported closing price of the ordinary shares on AIM was £.36 per share.

# B. Plan of Distribution.

Not applicable.

# C. Markets.

Our ordinary shares are currently listed on the AIM Market of the London Stock Exchange, or AIM, under the symbol "MTFB." Prior to the U.S. offering, neither the ADSs nor the ADS Warrants were listed on any stock exchange. The ADSs and ADS Warrants are now listed on The NASDAQ Capital Market under the symbols "MTFB" and "MTFBW," respectively.

# D. Selling Shareholders.

Not applicable.

# E. Dilution.

Not applicable.

# F. Expenses of the Issue.

Not applicable.

#### Item 10. Additional Information.

#### A. Share Capital.

Not applicable.

#### B. Memorandum and Articles of Association.

The information called for by this item has been reported previously in our prospectus dated November 17, 2016, filed with the SEC pursuant to Rule 424(b)(4), under the headings "Description of Share Capital and Articles of Association" and "Description of American Depositary Shares", and is incorporated by reference into this Annual Report.

#### C. Material Contracts.

#### Potential Milestone Payments

We are party to a number of material contracts, some of which may require milestone and royalty payments upon the occurrence of certain future events. Pursuant to the terms of the merger agreement we entered into with Nuprim on December 31, 2014, we agreed to assume Nuprim's obligations under certain agreements. We do not believe that the Sale and Purchase Agreement, dated June 1, 2001, by and between F. Hoffman-La Roche Ltd. and Hoffmann-La Roche Inc., together the Hoffmann-La Roche Seller, and Arpida Ltd., the Hoffman-La Roche/Arpida Agreement, was assigned to Nuprim or the party for which it was a successor in interest with regards to the iclaprim assets and therefore we do not have obligations under such agreement.

The Hoffmann-La Roche/Arpida Agreement provides that the Hoffmann-La Roche Seller will be entitled to receive a royalty of 1 to 5% of net sales of a Drug (as defined in such agreement), such amount depending on various factors (e.g., the final drug composition, timing of commercialization, country of sales). While we do not believe we are a successor to such agreement and it is unlikely our iclaprim product would fit the factors requiring payment under such agreement, if it were determined that we are a successor in interest to the Hoffman-La Roche/Arpida Agreement and our iclaprim product is determined to fit the criteria of being a Drug as defined in such agreement, we could have a payment obligation of 1 to 5% of net sales of our iclaprim product for certain countries for a period of ten years from first commercial sale in such country. In addition, pursuant to a Sale and Purchase Agreement with Acino Pharma AG (Acino), we are obligated to pay Acino \$500,000 upon completion of any iclaprim Phase 3 clinical study.

#### Ongoing Obligations Related to Our Initial Offering in the United States

In connection with our initial offering in the United States, we agreed to pay to H.C. Wainwright & Co., LLC ("Wainwright"), a cash fee equal to 5% of the gross proceeds from any exercise of the ADS Warrants issued as part of such offering, provided that such fee shall be 2% of gross proceeds in connection with any exercise of the ADS Warrants by Invesco.

We also agreed to pay Wainwright a tail fee equal to the cash compensation percentage paid in connection with our initial offering in the United States, if any investor introduced to us by Wainwright with whom we have had an in person meeting or conference call arranged during the term of its engagement provides us with further capital in any public or private offering in the United States of our equity securities (excluding debt securities, even if convertible into equity securities) during the twelve-month period following the expiration or termination of the term of Wainwright's engagement, subject to certain limitation and exclusions.

# D. Exchange Controls.

There are no governmental laws, decrees, regulations or other legislation in the United Kingdom that may affect the import or export of capital, including the availability of cash and cash equivalents for use by us, or that may affect the remittance of dividends, interest, or other payments by us to non-resident holders of our ordinary shares or ADSs, other than withholding tax requirements. There is no limitation imposed by English law or our Articles on the right of non-residents to hold or vote ordinary shares.

#### E. Taxation.

The following summary contains a description of the material U.K. tax consequences and U.S. federal income tax consequences of the acquisition, ownership and disposition of ordinary shares, ADSs or Warrants, but it does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase ordinary shares, ADSs or Warrants. The summary is based upon the tax laws of England and regulations thereunder and on the tax laws of the United States and regulations thereunder as of the date hereof, which are subject to change.

#### Material U.K. Tax Considerations

The comments set out below are based on current U.K. tax law as applied in England and HM Revenue & Customs, or HMRC, practice (which may not be binding on HMRC) as of the date of this Annual Report, both of which are subject to change, possibly with retrospective effect. They are intended as a general guide and (unless otherwise stated) apply only to our shareholders resident and, in the case of an individual, domiciled for tax purposes in the United Kingdom and to whom "split year" treatment does not apply (except insofar as express reference is made to the treatment of non-U.K. residents), who hold ADSs, ordinary shares or Warrants as an investment and who are the absolute beneficial owners thereof. The discussion does not address all possible tax consequences relating to an investment in ADSs, ordinary shares or Warrants. Certain categories of shareholders, including those carrying on certain financial activities (including dealers in securities, collective investment schemes and insurance companies), those subject to specific tax regimes or benefitting from certain reliefs or exemptions (such as pension funds and charities), those connected with us, those that own (or are deemed to own) 5% or more of our shares and/or voting power (either alone or together with connected persons) and those for whom the ADSs, ordinary shares or Warrants are employment-related securities may be subject to special rules and this summary does not apply to such shareholders and any general statements made in this disclosure do not take them into account. This summary does not address any inheritance tax considerations.

Any reference in this summary to shareholders are to holders of ADSs or ordinary shares in the Company (but not to holders of Warrants). Any references in this summary to warrantholders are to holders of ADS Warrants. This summary is for general information only and is not intended to be, nor should it be considered to be, legal or tax advice to any particular investor. It does not address all of the tax considerations that may be relevant to specific investors in light of their particular circumstances or to investors subject to special treatment under U.K. tax law. In particular:

POTENTIAL INVESTORS SHOULD SATISFY THEMSELVES PRIOR TO INVESTING AS TO THE OVERALL TAX CONSEQUENCES, INCLUDING, SPECIFICALLY, THE CONSEQUENCES UNDER U.K. TAX LAW AND HMRC PRACTICE OF THE ACQUISITION, OWNERSHIP AND DISPOSAL OF THE SHARES, ADS OR WARRANTS IN THEIR OWN PARTICULAR CIRCUMSTANCES BY CONSULTING THEIR OWN TAX ADVISORS.

# **Taxation Of Dividends**

We will not be required to withhold amounts on account of U.K. tax at source when paying a dividend.

The Finance Act 2016 includes legislation pursuant to which a U.K. resident individual shareholder will no longer be entitled to a tax credit on dividends paid after April 5, 2016 nor be taxed on a grossed-up amount of those dividends. Instead, a dividend allowance of £5,000 per tax year will apply regardless of the tax rate band of the individual shareholder (reduced to £2,000 for dividends received for the tax year 2018-2019 and subsequent years). Dividends falling within this allowance will not be subject to income tax. If an individual shareholder receives dividends in excess of this allowance in a tax year, the excess will be taxed at the following rates:

- Individual shareholders liable to income tax at no more than the basic rate—7.5% (the "dividend ordinary rate");
- Individual shareholders liable to income tax at the higher rate—32.5% (the "dividend higher rate"); and
- Individual shareholders liable to income tax at the additional rate—38.1% (the "dividend additional rate").

The annual dividend allowance available to individuals will not be available to U.K. resident trustees of a discretionary trust. From April 6, 2016, U.K. resident trustees of a discretionary trust in receipt of dividends are liable to income tax at a rate of 38.1%, which mirrors the dividend additional rate (the first £1,000 is taxed at a reduced rate of 7.5%).

Although shareholders who are within the charge to corporation tax would strictly be subject to corporation tax on dividends paid by us (subject to special rules for such shareholders that are "small" companies), generally such dividends will fall within an exempt class and will not be subject to corporation tax (provided certain conditions are met and anti-avoidance rules are satisfied). However,

each shareholder's position will depend on its own individual circumstances and shareholders within the charge to corporation tax should consult their own professional advisers.

U.K. pension funds and charities are generally exempt from tax on dividends that they receive.

Non-U.K. resident shareholders may be subject to foreign taxation on dividend income under local law. Shareholders who are not resident for tax purposes in the United Kingdom should obtain their own tax advice concerning tax liabilities on dividends received from us.

# Taxation Of Capital Gains On Disposals Of ADSs, Ordinary Shares or Warrants

#### U.K. Shareholders and Warrantholders

Shareholders or warrantholders who are resident in the United Kingdom, and individual shareholders or warrantholders who are temporarily non-resident and subsequently resume residence in the United Kingdom within a certain time, may, depending on their circumstances and the availability of applicable exemptions or reliefs (including, for example, the annual exempt amount for individuals and indexation allowance for corporate shareholders or warrantholders (with effect from January 1, 2018, the indexation allowance is restricted to the retail price index for December 2017)), be liable to U.K. taxation on chargeable gains in respect of gains arising from a sale or other disposal (or deemed disposal) of their ADSs, ordinary shares or Warrants.

Any gains or losses in respect of currency fluctuations over the period of holding the ordinary shares, ADSs or Warrants would also be brought into account on the disposal.

#### Non-U.K. Shareholders and Warrantholders

An individual holder who is not a U.K. resident shareholder or warrantholder will not be liable to U.K. capital gains tax on chargeable gains realized on the disposal of his or her ADSs, ordinary shares or Warrants unless such shareholder or warrantholder carries on (whether solely or in partnership) a trade, profession or vocation in the United Kingdom through a branch or agency in the United Kingdom to which the ordinary shares, ADSs or Warrants are attributable. In these circumstances, such shareholder or warrantholder may, depending on his or her individual circumstances, be chargeable to U.K. capital gains tax on chargeable gains arising from a disposal of his or her ADSs, ordinary shares or Warrants.

A corporate holder of ordinary shares, ADSs or Warrants who is not a U.K. resident shareholder or warrantholder will not be liable for U.K. corporation tax in England on chargeable gains realized on the disposal of its ADSs, ordinary shares or Warrants unless it carries on a trade in the United Kingdom through a permanent establishment to which the ADSs, ordinary shares or Warrants are attributable. In these circumstances, a disposal of ADSs, ordinary shares or Warrants by such shareholder or warrantholder may give rise to a chargeable gain or an allowable loss for the purposes of U.K. corporation tax in England.

# Stamp Duty And Stamp Duty Reserve Tax (SDRT)

The statements in this section entitled "Stamp Duty and Stamp Duty Reserve Tax (SDRT)" are intended as a general guide to the current U.K. stamp duty and SDRT position in England. The discussion below relates to shareholders wherever resident, but investors should note that certain categories of person are not liable to stamp duty or SDRT and others may be liable at a higher rate or may, although not primarily liable for tax, be required to notify and account for SDRT under the Stamp Duty Reserve Tax Regulations 1986. Investors who are uncertain with regard to their stamp duty or SDRT position should consult their own advisers.

#### General

No stamp duty or SDRT will arise on the issue of ordinary shares in registered form by the Company or on the issue of ADSs by the Depository Trust Company, or DTC.

Stamp duty will not arise on the grant or issue of ADS Warrants, provided that the instrument or agreement giving rise to such grant or issue is not executed in England and Wales and does not relate to any property situated, or to any matter or thing done or to be done in England and Wales.

Any liability for stamp duty arising in respect of the grant or issue of Warrants will be the responsibility of the relevant warrantholder.

Neither U.K. stamp duty nor SDRT should arise on transfers of ordinary shares (including instruments transferring ordinary shares and agreements to transfer ordinary shares) on the basis that the ordinary shares are admitted to trading on AIM, provided the following requirements are (and continue to be) met:

- the ordinary shares are admitted to trading on AIM, but are not listed on any market (with the term "listed" being construed in accordance with section 99A of the Finance Act 1986), and this has been certified to Euroclear; and
- AIM continues to be accepted as a "recognised growth market" as construed in accordance with section 99A of the Finance Act 1986).

In the event that either of the above requirements is not met, stamp duty or SDRT will apply to transfers of, or agreements to transfer, ordinary shares. Where applicable, the purchaser normally pays the stamp duty or SDRT.

No stamp duty will be payable on a transfer of ADSs or ADS Warrants, provided that any instrument of transfer is not executed in England and Wales and does not relate to any property situated, or to any matter or thing done or to be done in England and Wales.

Except in relation to depositary receipt systems and clearance services (to which the special rules outlined below apply), an agreement to transfer ADSs or ADS Warrants should be outside the scope of SDRT (on the basis that ADSs are interests in depositary receipts for SDRT purposes and on the basis that ADS Warrants are issued by a body corporate not incorporated in the United Kingdom and are not registered in a register kept in the United Kingdom by or on behalf of the body corporate by which they are issued and are not paired with shares issued by a body corporate incorporated in the United Kingdom).

If a duly stamped transfer completing an agreement to transfer is produced within six years of the date on which the agreement is made (or, if the agreement is conditional, the date on which the agreement becomes unconditional), any SDRT already paid is generally repayable, normally with interest, and any SDRT charge yet to be paid is cancelled.

Any cancellation of an ADS in return for the relevant shareholder's receipt of the underlying ordinary shares should not give rise to any charge to stamp duty or SDRT.

# Depositary Receipt Systems And Clearance Services

Following the European Court of Justice decision in C-569/07 HSBC Holdings Plc, Vidacos Nominees Limited v. The Commissioners of Her Majesty's Revenue & Customs and the First-tier Tax Tribunal decision in HSBC Holdings Plc and The Bank of New York Mellon Corporation v. The Commissioners of Her Majesty's Revenue & Customs, HMRC has confirmed that a charge to 1.5% SDRT is no longer payable when new shares are issued to a clearance service (such as, in our understanding, DTC) or depositary receipt system.

HMRC remains of the view that where shares or securities are transferred (a) to, or to a nominee or an agent for, a person whose business is or includes the provision of clearance services or (b) to, or to a nominee or an agent for, a person whose business is or includes issuing depositary receipts, stamp duty or SDRT will generally be payable at the higher rate of 1.5% of the amount or value of the consideration given or, in certain circumstances, the value of the relevant shares or securities unless the transfer is an integral part of a raising of capital.

There is an exception from the 1.5% charge for the transfer of ordinary shares to the DTC on the basis that the ordinary shares are admitted to trading on AIM, provided that the requirements set out in the bullet points above are (and continue to be) met. There is also an exception from the 1.5% charge on the transfer to, or to a nominee or agent for, a clearance service where the clearance service has made and maintained an election under Section 97A(1) of the Finance Act 1986 which has been approved by HMRC and which applies to the relevant shares or securities. In these circumstances, SDRT at the rate of 0.5% of the amount or value of the consideration payable for the transfer will arise on any transfer of ADSs, ordinary shares or Warrants into such an account and on subsequent agreements to transfer the relevant shares or securities within that account. It is our understanding that DTC has not made an election under Section 97A(1) of the Finance Act of 1986 in respect of the ordinary shares, ADSs or Warrants, and that therefore transfers or agreements to transfer ordinary shares, ADSs or ADS Warrants held in book entry (i.e., electronic) form within the facilities of DTC should not be subject to U.K. stamp duty or SDRT at the rate of 0.5%.

Any liability for stamp duty or SDRT which does arise in respect of a transfer into a clearance service or depositary receipt system, or in respect of a transfer within such a service, will strictly be accountable by the clearance service or depositary receipt system operator or their nominee, as the case may be, but will, in practice, be payable by the participants in the clearance service or depositary receipt system.

#### The Proposed Financial Transactions Tax (FTT)

On February 14, 2013, the European Commission published a proposal, or the Commission's Proposal, for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia, or, collectively, the participating Member States.

The Commission's Proposal had very broad scope and, if introduced, could have applied to certain dealings in ADSs or ordinary shares (including secondary market transactions) in certain circumstances.

Although the Commission's Proposal has failed to obtain unanimous support from all EU Member States, the participating Member States remain committed to implement an FTT through enhanced co-operation, without the support of the remaining Member States. As of the date of this Annual Report, the FTT proposal remains subject to negotiation between the participating Member States, and the scope of any such tax is uncertain. Additional EU Member States may decide to participate.

Prospective holders of ADSs or ordinary shares are advised to seek their own professional advice in relation to the FTT.

#### Reporting Obligations

Investors who hold ADSs indirectly through a broker or other financial institution should note that such broker or other financial institution may be required to provide certain information (including with regard to the relevant investor's identity and his or her investment) to a tax authority in the relevant investor's jurisdiction of residence for the purpose of such information being shared with tax authorities in other relevant jurisdictions, under one or more of the following regimes for the exchange of information:

- Sections 1471 to 1474 of the U.S. Internal Revenue Code of 1986 and any associated regulations, or the Foreign Accounting Tax Compliance Act, or the FATCA;
- any agreements between the United States and other jurisdictions for the purpose of improving international tax compliance and implementing FATCA;
- Council Directive on Administrative Co-operation 2011/16/EU, or the DAC;
- the Multilateral Competent Authority Agreement on Automatic Exchange of Financial Account Information and the OECD Common Reporting Standard, or the CRS; and
- any other applicable legislation (including legislation implementing FATCA, the DAC and/or the CRS in any jurisdiction) or any other intergovernmental agreement, convention, treaty, or any official interpretation or official guidance relating thereto, that provides for, or is intended to secure, the exchange of information related to taxation.

# Material U.S. Federal Income Tax Considerations

The following is a description of the material U.S. federal income tax consequences to the U.S. Holders and Non-U.S. Holders (each defined below) of owning and disposing of the ADSs or ordinary shares or Warrants acquired in this offering, but it does not purport to be a comprehensive description of all tax considerations that may be relevant to a particular person's decision to acquire the ADSs or ordinary shares or Warrants. This discussion applies only to U.S. Holders and Non-U.S. Holders that hold ADSs or ordinary shares or Warrants as capital assets purposes (generally property held for investment) within the meaning of Section 1221 of the Code. In addition, it does not describe all of the tax consequences that may be relevant in light of the U.S. Holder's or Non-U.S. Holder's particular circumstances, including alternative minimum tax consequences, any state or local tax considerations, any U.S. federal gift, estate or generation-skipping transfer tax consequences and tax consequences applicable to U.S. Holders or Non-U.S. Holders subject to special rules, such as:

- certain financial institutions;
- brokers;
- dealers or traders in securities who use a mark-to-market method of tax accounting;
- real estate investment trusts;

- · insurance companies;
- persons holding ordinary shares as part of a hedging transaction, straddle, wash sale, conversion transaction or integrated transaction or persons
  entering into a constructive sale with respect to the ordinary shares;
- regulated investment companies;
- persons whose functional currency for U.S. federal income tax purposes is not the U.S. dollar;
- entities classified as partnerships or other pass-through entities for U.S. federal income tax purposes, including persons that will hold our ordinary shares through such an entity;
- tax-exempt entities, including an "individual retirement account" or "Roth IRA;"
- persons that own or are deemed to own ten percent or more of our voting stock;
- persons that are U.S. expatriates;
- persons who acquired our ordinary shares pursuant to the exercise of an employee stock option or otherwise as compensation; or
- persons holding shares in connection with a trade or business conducted outside of the United States.

This discussion is based on the Code, administrative pronouncements, judicial decisions, and final, temporary and proposed Treasury regulations, all as of the date hereof, any of which is subject to change, possibly with retroactive effect. Moreover, we can provide no assurance that the tax consequences contained in this discussion will not be challenged by the Internal Revenue Service (IRS) or will be sustained by a court if challenged.

A "U.S. Holder" is a holder who, for U.S. federal income tax purposes, is a beneficial owner of ADSs or ordinary shares or Warrants who is:

- an individual who is a citizen or resident of the United States.;
- a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia;
- an estate whose income is includible in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust if (1) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or (2) the trust has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

A "Non-U.S. Holder" is a beneficial owner of the ADSs or ordinary shares or Warrants, other than a U.S. Holder or an entity classified as a partnership or other fiscally transparent entity for U.S. federal income tax purposes.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds our ordinary shares, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partnerships holding ADSs or ordinary shares or Warrants and partners in such partnerships should consult their tax advisers as to their particular U.S. federal income tax consequences of holding and disposing of the ADSs or ordinary shares or Warrants.

U.S. Holders and Non-U.S. Holders should consult their tax advisers concerning the U.S. federal, state, local and foreign tax consequences of owning and disposing of the ADSs or ordinary shares or Warrants in their particular circumstances.

# Treatment Of The Company As A Domestic Corporation For US Federal Income Tax Purposes

Even though the Company is organized as an English public company, it should be treated as a domestic corporation for U.S. federal income tax purposes pursuant to Section 7874 of the Code. As such, the Company should generally be subject to U.S. federal income tax as if it were organized under the laws of the United States or a state thereof. The Company's status as a domestic corporation

for U.S. federal income tax purposes also has implications for all shareholders. The remaining discussion contained in "Item 10.E. Material U.S. Federal Income Tax Considerations" assumes that the Company will be treated as a domestic corporation pursuant to Section 7874 of the Code.

#### ADSs

A U.S. Holder or a Non-U.S. Holder of ADSs generally will be treated, for U.S. federal income tax purposes, as the owner of the underlying ordinary shares that are represented by such ADSs. Accordingly, deposits or withdrawals of ordinary shares for ADSs will not be subject to U.S. federal income tax.

#### U.S. Holders

#### Distributions

As noted above, the Company does not anticipate making distributions on the ADSs and ordinary shares in the foreseeable future. In the event the Company does make distributions, any such distributions will be treated as U.S.-source dividends includible in the gross income of a U.S. Holder as ordinary income to the extent of the Company's current and accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent the amount of a distribution exceeds the Company's current and accumulated earnings and profits, the distribution will be treated first as a non-taxable return of capital to the extent of a U.S. Holder's adjusted tax basis in the ADSs or ordinary shares and thereafter as gain from the sale of such shares. Subject to applicable limitations and requirements, dividends received on the ADSs or ordinary shares generally should be eligible for the "dividends received deduction" available to corporate shareholders. A dividend paid by the Company to a non-corporate U.S. Holder generally will be eligible for preferential rates if certain holding period requirements are met.

The U.S. dollar value of any distribution made by the Company in foreign currency will be calculated by reference to the exchange rate in effect on the date of the U.S. Holder's actual or constructive receipt of such distribution, regardless of whether the foreign currency is in fact converted into U.S. dollars. If the foreign currency is converted into U.S. dollars on the date of receipt, the U.S. Holder generally will not recognize foreign currency gain or loss on such conversion. If the foreign currency is not converted into U.S. dollars on the date of receipt, such U.S. Holder will have a basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any gain or loss on a subsequent conversion or other taxable disposition of the foreign currency generally will be U.S.-source ordinary income or loss to such U.S. Holder.

# Sale Or Other Taxable Disposition Of Ordinary Shares

A U.S. Holder will recognize gain or loss for U.S. federal income tax purposes upon a sale or other taxable disposition of its ADSs or ordinary shares in an amount equal to the difference between the amount realized from such sale or disposition and the U.S. Holder's adjusted tax basis in the ADSs or ordinary shares. A U.S. Holder's adjusted tax basis in the ordinary shares generally will be the U.S. Holder's cost for the shares. Any such gain or loss generally will be U.S.-source capital gain or loss and will be long-term capital gain or loss if, on the date of sale or disposition, such U.S. Holder held the ADSs or ordinary shares for more than one year. Long-term capital gains derived by non-corporate U.S. Holders are eligible for taxation at reduced rates. The deductibility of capital losses is subject to significant limitations.

# Exercise, Expiration and Disposition of Warrants

A U.S. Holder will not recognize gain or loss upon exercise of a Warrant (except with respect to any cash received in lieu of a fractional ordinary share or ADS). A U.S. Holder will have a tax basis in the ADSs received upon the exercise of a Warrant equal to the sum of its tax basis in the Warrant and the aggregate cash exercise price paid in respect of such exercise, less any amount attributable to any fractional ordinary share or ADS. The holding period of the ordinary shares or ADSs received upon the exercise of a Warrant will commence on the day after the Warrant is exercised. If a Warrant expires without being exercised, a U.S. Holder will recognize a capital loss in an amount equal to its tax basis in the Warrant.

Upon the sale, exchange or redemption of a Warrant, a U.S. Holder will recognize a gain or loss equal to the difference between the amount realized on the sale, exchange or redemption of the Warrant and the U.S. Holder's tax basis in such Warrant. Such gain or loss will be long-term capital gain or loss if, at the time of such sale, exchange, or redemption, the Warrant has been held for more than one year. Long-term capital gains of individuals (as well as certain trusts and estates) are subject to U.S. federal income tax at preferential rates. The deductibility of capital losses is subject to significant limitations. A U.S. Holder's gain or loss on the sale, exchange, or redemption of a Warrant will be treated as U.S. source income or loss for U.S. foreign tax credit limitation purposes.

#### Net Investment Income Tax

U.S. Holders that are individuals or estates or trusts that do not fall into a special class of trusts that are exempt from such tax, will be required to pay an additional 3.8% tax on the lesser of (1) the U.S. Holder's "net investment income" for the relevant taxable year and (2) the excess of the U.S. Holder's modified adjusted gross income for the taxable year over a certain threshold (which in the case of individuals will be between \$125,000 and \$250,000, depending on the individual's circumstances). A U.S. Holder's "net investment income" will generally include, among other things, dividends and capital gains. Such tax will apply to dividends and to capital gains from the sale or other taxable disposition of the ordinary shares, unless derived in the ordinary course of the conduct of a trade or business (other than a trade or business that consists of certain passive or trading activities). Potential investors should consult with their own tax advisers regarding the application of the net investment income tax to them as a result of their investment in the ADSs or ordinary shares.

#### Information Reporting And Backup Withholding

Payments of dividends on or proceeds arising from the sale or other taxable disposition of the ADSs or ordinary shares or Warrants generally will be subject to information reporting and backup withholding if a U.S. Holder (i) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on IRS Form W-9), (ii) furnishes an incorrect U.S. taxpayer identification number, (iii) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding or (iv) fails to certify under penalty of perjury that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules generally will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability or will be refunded, if the U.S. Holder furnishes the required information to the IRS in a timely manner.

#### Non-U.S. Holders

#### Distributions

Subject to the discussion under "Foreign Account Tax Compliance Act" below, distributions treated as dividends (see "U.S. Holders Distributions" above) by the Company to Non-U.S. Holders will be subject to U.S. federal withholding tax at a 30% rate, except as may be provided by an applicable income tax treaty. To obtain a reduced rate of U.S. federal withholding under an applicable income tax treaty, a Non-U.S. Holder will be required to certify its entitlement to benefits under the treaty, generally on a properly completed IRS Form W-8BEN or W-8BEN-E (as applicable).

However, dividends that are effectively connected with a Non-U.S. Holder's conduct of a trade or business within the United States and, where required by an income tax treaty, are attributable to a permanent establishment or fixed base of the Non-U.S. Holder, are not subject to the withholding tax described in the previous paragraph, but instead are subject to U.S. federal net income tax at graduated rates, provided the Non-U.S. Holder complies with applicable certification and disclosure requirements, generally by providing a properly completed IRS Form W-8ECI. Non-U.S. Holders that are corporations may also be subject to an additional branch profits tax at a 30% rate, except as may be provided by an applicable income tax treaty.

# Sale Or Other Taxable Disposition

Subject to the discussion under "Foreign Account Tax Compliance Act" below, a Non-U.S. Holder will not be subject to U.S. federal income tax in respect of any gain on a sale or other disposition of the ADSs or ordinary shares or Warrants unless:

- such gain is effectively connected with the conduct of a trade or business in the United States by such Non-U.S. Holder, in which event such Non-U.S. Holder generally will be subject to U.S. federal income tax on such gain in substantially the same manner as a U.S. person (except as provided by an applicable tax treaty) and, if it is treated as a corporation for U.S. federal income tax purposes, may also be subject to a branch profits tax at a rate of 30% (or a lower rate if provided by an applicable tax treaty), subject to certain adjustments;
- such Non-U.S. Holder is an individual who is present in the United States for 183 days or more during the taxable year of such sale, exchange or other disposition and certain other conditions are met, in which event such gain (net of certain U.S. source losses) generally will be subject to U.S. federal income tax at a rate of 30% (except as provided by an applicable tax treaty); or

• the Company is or has been a "United States real property holding corporation" for U.S. federal income tax purposes at any time during the shorter of (x) the five-year period ending on the date of such sale, exchange or other disposition and (y) such Non-U.S. Holder's holding period with respect to such ordinary shares, and certain other conditions are met.

Generally, a corporation is a "United States real property holding corporation" if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business (all as determined for U.S. federal income tax purposes). We believe that we presently are not, and we do not presently anticipate that we will become, a United States real property holding corporation. However, because this determination is made from time to time and is dependent upon a number of factors, some of which are beyond our control, including the value of our assets, there can be no assurance that we will not become a United States real property holding corporation. If we were a United States real property holding corporation during the period described in the third bullet point above, gain recognized by a Non-U.S. Holder generally would be treated as income effectively connected with the conduct of a trade or business in the United States by such Non-U.S. Holder, with the consequences described in the first bullet point above (except that the branch profits tax would not apply), unless such Non-U.S. Holder owned (directly and constructively) five percent or less of our ordinary shares during such period and our ordinary shares are treated as "regularly traded on an established securities market" at any time during the calendar year of such sale, exchange or other disposition.

# Information Reporting And Backup Withholding

Generally, the Company must report annually to the IRS and to Non-U.S. Holders the amount of distributions made to Non-U.S. Holders and the amount of any tax withheld with respect to those payments. Copies of the information returns reporting such distributions and withholding may also be made available to the tax authorities in the country in which a Non-U.S. Holder resides under the provisions of an applicable income tax treaty or tax information exchange agreement.

Non-U.S. Holder will generally not be subject to backup withholding with respect to payments of dividends, provided the Company receives a properly completed statement to the effect that the Non-U.S. Holder is not a U.S. person and the Company does not have actual knowledge or reason to know that the holder is a U.S. person. The requirements for the statement will be met if the Non-U.S. Holder provides its name and address and certifies, under penalties of perjury, that it is not a U.S. person (which certification may generally be made on IRS Form W-8BEN or W-8BEN-E, as applicable) or if a financial institution holding our ordinary shares on behalf of the Non-U.S. Holder certifies, under penalties of perjury, that such statement has been received by it and furnishes the Company or its paying agent with a copy of the statement.

Except as described below under "Foreign Account Tax Compliance Act," the payment of proceeds from a disposition of ADSs or ordinary shares or Warrants to or through a non-U.S. office of a non-U.S. broker will not be subject to information reporting or backup withholding unless the non-U.S. broker has certain types of relationships with the United States. In the case of a payment of proceeds from the disposition of ADSs or ordinary shares or Warrants to or through a non-U.S. office of a broker that is either a U.S. person or such a U.S.-related person, Treasury Regulations require information reporting (but not backup withholding) on the payment unless the broker has documentary evidence in its files that the Non-U.S. Holder is not a U.S. person and the broker has no knowledge to the contrary.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

### Foreign Account Tax Compliance Act

Under the FATCA provisions of the Code and related U.S. Treasury guidance, or FATCA, a withholding tax of 30% will be imposed in certain circumstances on payments of (i) dividends on the ADSs or ordinary shares and (ii) on or after January 1, 2019, gross proceeds from the sale or other disposition of our ordinary shares. In the case of payments made to a "foreign financial institution" (such as a bank, a broker, an investment fund or, in certain cases, a holding company), as a beneficial owner or as an intermediary, this tax generally will be imposed, subject to certain exceptions, unless such institution (i) has agreed to (and does) comply with the requirements of an agreement with the United States, or an "FFI Agreement," or (ii) is required by (and does comply with) applicable foreign law enacted in connection with an intergovernmental agreement between the United States and a foreign jurisdiction, ("IGA"), in either case to, among other things, collect and provide to the U.S. tax authorities or other relevant tax authorities certain information regarding U.S. account holders of such institution and, in either case, such institution provides the withholding agent with a certification as to its FATCA status. In the case of payments made to a foreign entity that is not a financial institution (as a beneficial owner), the tax generally will be imposed, subject to certain exceptions, unless such entity provides the withholding agent with a certification as to its FATCA status and, in certain cases, identifies any "substantial" U.S. owner (generally, any specified U.S. person that directly or indirectly owns more than a specified percentage of such entity). If our ordinary shares are held through a foreign financial institution that has agreed to comply with the requirements of an FFI Agreement or is subject to similar requirements under applicable foreign law enacted in connection with an IGA, such foreign financial institution (or, in certain cases, a person paying amounts to such foreign financial institution) generally will be required, subject to certain exceptions, to withhold tax on payments made to (i) a person (including an individual) that fails to provide any required information or documentation or (ii) a foreign financial institution that has not agreed to comply with the requirements of an FFI Agreement and is not subject to similar requirements under applicable foreign law enacted in connection with an IGA. Each Non-U.S. Holder should consult its own tax advisor regarding the application of FATCA to the ownership and disposition of the ADSs or ordinary shares.

# F. Dividends and Paying Agents.

Not applicable.

# G. Statement by Experts.

Not applicable.

# H. Documents on Display.

We are subject to the information reporting requirements of the Exchange Act applicable to foreign private issuers and under those requirements will file reports with the SEC. Those reports may be inspected without charge at the locations described below. As a foreign private issuer, we are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as United States companies whose securities are registered under the Exchange Act. Nevertheless, we will file with the SEC an Annual Report containing financial statements that have been examined and reported on, with and opinion expressed by an independent registered public accounting firm.

We maintain a corporate website at www.motifbio.com. We intend to post our Annual Report on our website promptly following it being filed with the SEC. Information contained on, or that can be accessed through, our website does not constitute a part of this Annual Report. We have included our website address in this Annual Report solely as an inactive textual reference.

You may also review a copy of this Annual Report, including exhibits and any schedule filed herewith, and obtain copies of such materials at prescribed rates, at the SEC's Public Reference Room in Room 1580, 100 F Street, NE, Washington, D.C. 20549-0102. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The Securities and Exchange Commission maintains a website (www.sec.gov) that contains reports, proxy and information statements and other information regarding registrants, such as Motif Bio, that file electronically with the SEC.

With respect to references made in this Annual Report to any contract or other document of our company, such references are not necessarily complete and you should refer to the exhibits attached or incorporated by reference to this Annual Report for copies of the actual contract or document.

### I. Subsidiary Information.

Not required.

# Item 11. Quantitative and Qualitative Disclosures About Market Risk.

Foreign currency risk

The Group undertakes certain transactions denominated in foreign currencies. Hence, exposures to exchange rate fluctuations arise. Exchange rate exposures are managed by minimizing the balance of foreign currencies to cover expected cash flows during periods where there is strengthening in the value of the foreign currency. The Group holds part of its cash resources in US dollars and British pound sterling. The valuation of the cash fluctuates along with the US dollar/sterling exchange rate. No hedging of this risk is undertaken.

The carrying amounts of foreign currency denominated monetary net assets at the reporting date are as follows:

	2017	2016
	US \$	US \$
Sterling - Cash	461.857	17.795

At December 31, 2017, a change in foreign currency exchange rates is not expected to have a significant impact on the profit or losses of the Group.

Interest rate risk

The Group's exposure to interest rate risk is limited to interest earned on the cash and cash equivalent balance of \$22.7 million and its financing exposures on the Hercules loan, which has an initial interest rate of 10% tied to the U.S. prime rate. A change in interest rates is not expected to have a significant impact on the profit or losses of the Group.

# Capital risk management

The directors define capital as the total equity of the Company. The directors' objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal structure to reduce the cost of capital. In order to maintain an optimal capital structure, the directors may adjust the amount of dividends paid to shareholders, return capital to shareholders, and/or issue new shares to reduce debt.

# Item 12. Description of Securities Other than Equity Securities.

# A. Debt Securities.

Not applicable.

# B. Warrants and Rights.

Not applicable.

# C. Other Securities.

Not applicable.

# D. American Depositary Shares.

The Bank of New York Mellon, as depositary, will register and deliver American Depositary Shares, also referred to as ADSs. Each ADS will represent 20 ordinary shares (or a right to receive 20 shares) deposited with The Bank of New York Mellon, as custodian for the depositary. Each ADS will also represent any other securities, cash or other property which may be held by the depositary. The depositary's office at which the ADSs will be administered is located at 101 Barclay Street, New York, New York 10286. The Bank of New York Mellon's principal executive office is located at 225 Liberty Street, New York, New York 10286.

A deposit agreement among us, the beneficial owners of ADSs and the depositary sets out the ADS holder rights as well as the rights and obligations of the depositary. New York law governs the deposit agreement and the ADSs. A copy of the deposit agreement is incorporated by reference as an exhibit to this Annual Report.

# Fees And Expenses

Persons depositing or withdrawing shares or ADS holders must pay:	For:
\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property
\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
\$.05 (or less) per ADS	Any cash distribution to ADS holders
A fee equivalent to the fee that would be payable if securities distributed to you had been shares and the shares had been deposited for issuance of ADSs	Distribution of securities distributed to holders of deposited securities (including rights) that are distributed by the depositary to ADS holders
\$.05 (or less) per ADS per calendar year	Depositary services
Registration or transfer fees	Transfer and registration of shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw shares
Expenses of the depositary	Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement) converting foreign currency to U.S. dollars
Taxes and other governmental charges the depositary or the custodian has to pay on any ADSs or shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes	As necessary
Any charges incurred by the depositary or its agents for servicing the deposited securities	As necessary
10	06

The depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may collect any of its fees by deduction from any cash distribution payable (or by selling a portion of securities or other property distributable) to ADS holders that are obligated to pay those fees. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. In performing its duties under the deposit agreement, the depositary may use brokers, dealers, foreign currency dealers or other service providers that are owned by or affiliated with the depositary and that may earn or share fees, spreads or commissions.

The depositary may convert currency itself or through any of its affiliates and, in those cases, acts as principal for its own account and not as agent, advisor, broker or fiduciary on behalf of any other person and earns revenue, including, without limitation, transaction spreads, that it will retain for its own account. The revenue is based on, among other things, the difference between the exchange rate assigned to the currency conversion made under the deposit agreement and the rate that the depositary or its affiliate receives when buying or selling foreign currency for its own account. The depositary makes no representation that the exchange rate used or obtained in any currency conversion under the deposit agreement will be the most favorable rate that could be obtained at the time or that the method by which that rate will be determined will be the most favorable to ADS holders, subject to the depositary's obligations under the deposit agreement. The methodology used to determine exchange rates used in currency conversions is available upon request.

# Payment Of Taxes

You will be responsible for any taxes or other governmental charges payable on your ADSs or on the deposited securities represented by any of your ADSs. The depositary may refuse to register any transfer of your ADSs or allow you to withdraw the deposited securities represented by your ADSs until those taxes or other charges are paid. It may apply payments owed to you or sell deposited securities represented by your American Depositary Shares to pay any taxes owed and you will remain liable for any deficiency. If the depositary sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay to ADS holders any proceeds, or send to ADS holders any property, remaining after it has paid the taxes.

### PART II

# Item 13. Defaults, Dividend Arrearages and Delinquencies.

Not applicable.

# Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds.

Not applicable.

### Item 15. Controls and Procedures.

#### Disclosure Controls and Procedures

As of the end of the period covered by this annual report, our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures within the meaning of Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this annual report, our existing disclosure controls and procedures were not effective due to material weaknesses in internal control over financial reporting described below in Management's Annual Report on Internal Control over Financial Reporting.

# Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). As of December 31, 2017, our management assessed the effectiveness of our internal control over financial reporting. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control* — *Integrated Framework (2013)*. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. In connection with this assessment, we identified the following material weaknesses in internal control over financial reporting as of December 31, 2017.

We did not maintain an effective control environment as we did not maintain effective internal controls to ensure processing and reporting of valid transactions is complete, accurate, and timely and did not maintain a sufficient complement of resources with an appropriate level of accounting knowledge, experience, and training commensurate with their structure and financial reporting requirements to allow for appropriate monitoring, presentation and disclosure, and internal control over financial reporting. Specifically, we have not designed and implemented a sufficient level of formal accounting policies and procedures that define how transactions across the business cycles should be initiated, recorded, processed, authorized, approved and appropriately reported, including presentation and disclosure, within the financial statements. Additionally, the limited personnel resulted in our inability to consistently establish appropriate authorities and responsibilities in pursuit of our financial reporting objectives, as demonstrated by, amongst other things, our insufficient segregation of duties in their finance and accounting functions.

These control deficiencies resulted in the misclassification of derivative liabilities in the statement of financial position. In addition, these control deficiencies resulted in immaterial audit adjustments to increase our trade and other payables as of December 31, 2016. Additionally, these control deficiencies could result in a misstatement of account balances or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected. Accordingly, our management has determined that these control deficiencies constitute material weaknesses.

Based on its assessment, our management has concluded that our internal control over financial reporting was not effective as of December 31, 2017.

# Management's Remediation Initiatives

In an effort to remediate the identified material weaknesses and to enhance our overall control environment, we are planning on making substantial changes in our internal control over financial reporting in the ensuing periods. We are a small publicly-traded entity that has had limited resources to build out our finance and accounting functions.

We have initiated, or plan to initiate, the following actions:

- In January 2017, we hired an Accounting Manager with considerable experience in financial roles at biopharmaceutical companies, including
  public companies listed on the NASDAQ Capital Market.
- In March 2017, we retained an accounting and financial reporting advisory firm with significant experience with publicly held companies to assist management in preparing our financial reports.
- In September 2017, we hired a Corporate Controller with considerable financial management and reporting experience at biopharmaceutical companies, including public companies listed on the NASDAQ Capital Market.
- We have implemented a new accounting software package that is maintained on a third-party computer server. We will continue to utilize the accounting software as we augment our policies and procedures as it related to financial reporting.
- We implemented processes to support a more streamlined initiation, processing, authorization and approval of transactions within the payables process.

# Attestation Report of the Registered Public Accounting Firm

This Annual Report does not include an attestation report of the company's registered public accounting firm due a transition period established by rules of the Securities and Exchange commission for emerging growth companies.

### Changes in Internal Control Over Financial Reporting

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the fiscal year ended December 31, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

#### Item 15T. Controls and Procedures.

Not applicable.

### Item 16. Reserved.

# Item 16A. Audit Committees Financial Expert.

Our board of directors has determined that Ms. Ginman, Dr. Albanese and Mr. Williams are independent under Rule 10A-3 of the Exchange Act and the applicable listing requirements of NASDAQ. Each member of our audit committee satisfies the other listing requirements of NASDAQ for audit committee membership. In accordance with our NASDAQ listing, our audit committee members must each be independent under Rule 10A-3 of the Exchange Act. However, as a foreign private issuer, our audit committee members are not subject to the additional independence requirements imposed by NASDAQ. We intend to rely on the phase in rules of the Exchange Act with respect to the independence of our audit committee. These rules permit us to have an audit committee that has one member who is independent upon the effectiveness of our registration statement, a majority of members who are independent within 90 days of effectiveness and all members who are independent within one year of effectiveness. Our board of directors has also determined that Charlotta Ginman qualifies as an "audit committee financial expert," as such term is defined by the SEC, and that Ms. Ginman has the requisite level of financial sophistication required by the continued listing standards of NASDAQ.

#### Item 16B. Code of Business Conduct and Ethics.

We have adopted a Code of Business Conduct and Ethics, or the Code of Conduct, that is applicable to all of our employees, executive officers and directors. A copy of the Code of Conduct is available on our website at www.motifbio.com.

# Item 16C. Principal Accountant Fees and Services.

Our financial statements have been prepared in accordance with IFRS and in conformity with IFRS as adopted by the European Union. PricewaterhouseCoopers LLP (United States) has served as our independent registered public accounting firm for the fiscal years ended December 31, 2017 and 2016 and PricewaterhouseCoopers LLP (United Kingdom) has served as our independent registered public accounting firm for the fiscal year ended December 31, 2015. PricewaterhouseCoopers LLP (United States) was engaged to act as our independent public accounting firm in February 2017. Following the initial offering in the US, it was decided that PricewaterhouseCoopers LLP (United States) would thereby become our Principal Auditor as set forth in the audit standard guidance of the Public Company Accounting Oversight Board (PCAOB). PricewaterhouseCoopers LLP (United Kingdom) remains the auditor under International Standards on Auditing (ISA) for purposes of the group statutory IFRS statements issued for AIM and UK regulatory purposes.

The following table shows the aggregate fees for services rendered by PricewaterhouseCoopers LLP to us, including our subsidiary, in fiscal years ended December 31, 2017 and 2016.

Year Ended December 31,	
2017	2016
US \$	US \$
526,170	871,523
_	_
_	_
_	
526,170	871,523
	2017 US \$ 526,170

"Audit Fees" are the aggregate fees billed for the audit of our annual financial statements, including supporting the filing requirements of the AIM in the U.K. This category also includes services that PricewaterhouseCoopers LLP provides, such as consents and assistance with and review of documents filed with the SEC.

"Audit-Related Fees" are the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit and are not reported under Audit Fees.

"Tax Fees" are the aggregate fees billed for professional services rendered for tax compliance, tax advice and tax planning related services.

"Other Fees" are any additional amounts billed for rendered products and services.

# Audit and Non-Audit Services Pre-Approval Policy

The audit committee has responsibility for appointing, setting compensation of and overseeing the work of the independent registered public accounting firm. In recognition of this responsibility, the audit committee has adopted a policy governing the pre-approval of all audit and permitted non-audit services performed by our independent registered public accounting firm to ensure that the provision of such services does not impair the independent registered public accounting firm's independence from us and our management. Unless a type of service to be provided by our independent registered public accounting firm has received general pre-approval from the audit committee, it requires specific pre-approval by the audit committee. The payment for any proposed services in excess of pre-approved cost levels requires specific pre-approval by the audit committee. The audit committee may not delegate its responsibilities to pre-approve services to the management.

Item 16D. Exemptions from the Listing Standards for Audit Committees.

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers.

Not applicable.

Item 16F. Change in Registrant's Certifying Accountant.

Not applicable.

Item 16G. Corporate Governance.

# Differences In Corporate Law Between England And The State Of Delaware

As a public limited company incorporated under the laws of England and Wales, the rights of our shareholders are governed by applicable English law, including the Companies Act, and not by the law of any U.S. state. As a result, our directors and shareholders are subject to different responsibilities, rights and privileges than are applicable to directors and shareholders of U.S. corporations. We have set below a summary of the differences between the provisions of the Companies Act applicable to us and the Delaware General Corporation Law relating to shareholders' rights and protections. This summary is not intended to be a complete discussion of the respective rights and it is qualified in its entirety by reference to English law, Delaware law and our Articles. Before investing, you should consult your legal advisor regarding the impact of English law on your specific circumstances and reasons for investing. The summary below does not include a description of rights or obligations under the U.S. federal securities laws or NASDAQ listing requirements. You are also urged to carefully read the relevant provisions of the Delaware General Corporation Law and the Companies Act for a more complete understanding of the differences between Delaware and English law.

	England		
Number of Directors	Under Delaware law, a corporation must have at least one director and the number of directors shall be fixed by or in the manner provided in the bylaws, unless specified in the certificate of incorporation.	Under the Companies Act, a public limited company must have at least two directors and the number of directors may be fixed by or in the manner provided in a company's articles of association.	
Removal of Directors	Under Delaware law, directors may be removed from office, with or without cause, by a majority shareholder vote, except (a) in the case of a corporation whose board is classified, shareholders may effect such removal only for cause, unless otherwise provided in the certificate of incorporation, and (b) in the case of a corporation having cumulative voting, if less than the entire board is to be removed, no director may be removed without cause if the votes cast against his or her removal would be sufficient to elect him or her if then cumulatively voted at an election of the entire board of directors, or, if there are classes of directors, at an election of the class of directors of which he or she is a part.	Under the Companies Act, shareholders may remove a director without cause by an ordinary resolution (which is passed by a simple majority of those voting in person or by proxy at a general meeting) irrespective of any provisions of any service contract the director has with the company, provided that 28 clear days' notice of the resolution is given to the company and certain other procedural requirements under the Companies Act are followed (such as allowing the director to make representations against his or her removal at the meeting and/or in writing).	
Vacancies on the Board of Directors	Under Delaware law, vacancies and newly created directorships may be filled by a majority of the directors then in office (even though less than a quorum) or by a sole remaining director unless otherwise provided in the certificate of incorporation or bylaws of the corporation.	Under English law, the procedure by which directors (other than a company's initial directors) are appointed is generally set out in a company's articles of association, provided that where two or more persons are appointed as directors of a public limited company by resolution of the shareholders, resolutions appointing each director must be voted on individually unless a resolution of the shareholders that such resolutions do not have	
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Delaware		England		
		to be voted on individually is first agreed to by the meeting without any vote being given against it.		
Annual General Meeting	Under Delaware law, the annual meeting of shareholders shall be held at such place, on such date and at such time as may be designated from time to time by the board of directors or as provided in the certificate of incorporation or by the bylaws.	Under the Companies Act, a public limited company must hold an annual general meeting within six months following the company's accounting reference date.		
General Meeting	Under Delaware law, special meetings of the shareholders may be called by the board of directors or by such person or persons as may be authorized by the certificate of incorporation or by the bylaws.	Under the Companies Act, a general meeting of the shareholders of a public limited company may be called by the directors. Shareholders holding at least 5% of the paid-up capital of the company (excluding any paid up capital held as treasury shares) carrying voting rights at general meetings can also require the directors to call a general meeting, and, if the directors fail to do so within a certain period, may themselves convene a general meeting.		
Notice of General Meetings	Under Delaware law, written notice of any meeting of the shareholders must be given to each shareholder entitled to vote at the meeting not less than ten nor more than 60 days before the date of the meeting and shall specify the place, date, hour and purpose or purposes of the meeting.	The Companies Act provides that a general meeting (other than an adjourned meeting) must be called by notice of:  • in the case of an annual general meeting, at least 21 clear days; and • in any other case, at least 14 clear days.  The company's articles of association may provide for a longer period of notice and, in addition, certain matters (such as the removal of directors or auditors) require special notice, which is 28 clear days' notice. The shareholders of a company may in all cases consent to a shorter notice period, the proportion of shareholders' consent required being 100% of those entitled to attend and vote in the case of an annual general meeting and, in the case of any other general meeting, a majority in number of the members having a right to attend and vote at the meeting, being a majority who together hold not less than 95% in nominal value of the shares giving a right to attend and vote at the meeting.		
<u>Q</u> uorum	The certificate of incorporation or bylaws may specify the number of shares, the holders of which shall be present or represented by proxy at any meeting in order to constitute a quorum, but in no event shall a quorum consist of less than 1/3 of the shares entitled to vote at the meeting. In the absence of such specification in the certificate of incorporation or bylaws, a majority of the shares entitled to vote, present in person or represented by proxy, shall constitute a quorum at a meeting of shareholders.	Subject to the provisions of a company's Articles of Association, the Companies Act provides that two shareholders present at a meeting (in person or by proxy) shall constitute a quorum.		
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	Delaware	England
Proxy	Under Delaware law, at any meeting of shareholders, a shareholder may designate another person to act for such shareholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period.	Under the Companies Act, at any meeting of shareholders, a shareholder may designate another person to attend, speak and vote at the meeting on their behalf by proxy (or, in the case of a shareholder which is a corporate body, by way of a corporate representative).
Issue of New Shares	Under Delaware law, if the company's certificate of incorporation so provides, the directors have the power to authorize additional stock. The directors may authorize capital stock to be issued for consideration consisting of cash, any tangible or intangible property or any benefit to the company or any combination thereof.	Under the Companies Act, the directors of a company must not exercise any power to allot shares or grant rights to subscribe for, or to convert any security into, shares unless they are authorized to do so by the company's Articles of Association or by an ordinary resolution of the shareholders.  Any authorization given must state the maximum amount of shares that may be allotted under it and specify the date on which it will expire, which must be not more than five years from the date the authorization was given. The authority can be renewed by a further resolution of the shareholders.
Liability of Directors and Officers	Under Delaware law, a corporation's certificate of incorporation may include a provision eliminating or limiting the personal liability of a director to the corporation and its shareholders for monetary damages arising from a breach of fiduciary duty as a director. However, no provision can limit the liability of a director for:  • any breach of the director's duty of loyalty to the corporation or its shareholders; • acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; • willful or negligent payment of unlawful dividends or stock purchases or redemptions; or • any transaction from which the director derives an improper personal benefit.	Under the Companies Act, any provision (whether contained in a company's Articles of Association or any contract or otherwise) that purports to exempt a director of a company (to any extent) from any liability that would otherwise attach to him in connection with any negligence, default, breach of duty or breach of trust in relation to the company is void.  Any provision by which a company directly or indirectly provides an indemnity (to any extent) for a director of the company or of an associated company against any liability attaching to him in connection with any negligence, default, breach of duty or breach of trust in relation to the company of which he or she is a director is also void except as permitted by the Companies Act, which provides exceptions for the company to: (i) purchase and maintain insurance against such liability; (ii) provide a "qualifying third-party indemnity" (being an indemnity against liability incurred by the director to a person other than the company or an associated company. Such indemnity must not cover criminal fines, penalties imposed by regulatory bodies, the defense costs of criminal

proceedings where the director is found guilty, the

by the director for relief); and (iii) provide a "qualifying pension scheme indemnity" (being an indemnity against liability incurred in connection with the company's activities as trustee of an

occupational pension plan).

defense costs of civil proceedings successfully brought against the director by the company or an associated company, and the costs of unsuccessful applications

Delaware England Voting Rights Delaware law provides that, unless otherwise provided Under English law, unless a poll is demanded by the in the certificate of incorporation, each shareholder of shareholders of a company or is required by the record is entitled to one vote for each share of capital Chairman of the meeting or the company's Articles of stock held by such shareholder. Association, shareholders shall vote on all resolutions on a show of hands. Under the Companies Act, a poll may be demanded by: (i) not fewer than five shareholders having the right to vote on the resolution; (ii) any shareholder(s) representing at least 10% of the total voting rights of all the shareholders having the right to vote on the resolution (excluding any voting rights attached to treasury shares); or (iii) any shareholder (s) holding shares in the company conferring a right to vote on the resolution being shares on which an aggregate sum has been paid up equal to not less than 10% of the total sum paid up on all the shares conferring that right. A company's Articles of Association may provide more extensive rights for shareholders to call a poll. Under English law, an ordinary resolution is passed on a show of hands if it is approved by a simple majority (more than 50%) of the votes cast by shareholders present (in person or by proxy) and entitled to vote. If a poll is demanded, an ordinary resolution is passed if it is approved by holders representing a simple majority of the total voting rights of shareholders present (in person or by proxy) who (being entitled to vote) vote on the resolution. Special resolutions require the affirmative vote of not less than 75% of the votes cast by shareholders present (in person or by proxy) at the meeting.

Variation of Class Rights

Delaware
Under Delaware law, the holders of the outstanding
The Companies Act provides the

Under Delaware law, the holders of the outstanding shares of a class shall be entitled to vote as a class upon a proposed amendment, whether or not entitled to vote thereon by the certificate of incorporation, if the amendment would increase or decrease the aggregate number of authorized shares of such class, increase or decrease the par value of the shares of such class, or alter or change the powers, preferences or special rights of the shares of such class so as to affect them adversely.

The Companies Act provides that rights attached to a class of shares may only be varied or abrogated in accordance with provision in the company's articles for the variation or abrogation of those rights or, where the company's articles contain no such provision, if the holders of shares of that class consent to the variation or abrogation. Consent for these purposes means:

- consent in writing from the holders of at least 75% in nominal value of the issued shares of that class (excluding any shares held as treasury shares); or
- a special resolution passed at a separate meeting of the holders of that class sanctioning the variation.

The Companies Act provides that the quorum for a class meeting is not less than two persons holding or representing by proxy at least one-third of the nominal value of the issued shares of that class. Following a variation of class rights, shareholders who amount to not less than 15% of the shareholders of the class in question who did not approve the variation may apply to court to have the variation cancelled. Any application must be made within 21 days of the variation. The court may cancel the variation if it is satisfied having regard to all the circumstances of the case that the variation would unfairly prejudice the shareholders of the class represented by the applicant.

### Shareholder Vote on Certain Transactions

#### Delaware

Generally, under Delaware law, unless the certificate of incorporation provides for the vote of a larger portion of the stock, completion of a merger, consolidation, sale, lease or exchange of all or substantially all of a corporation's assets or dissolution requires:

- the approval of the board of directors; and
- approval by the vote of the holders of a majority of the outstanding stock or, if the certificate of incorporation provides for more or less than one vote per share, a majority of the votes of the outstanding stock of a corporation entitled to vote on the matter.

Under Delaware law, a contract or transaction between the company and one or more of its directors or officers, or between the company and any other organization in which one or more of its directors or officers, are directors or officers, or have a financial interest, shall not be void solely for this reason, or solely because the director or officer participates in the meeting of the board which authorizes the contract or transaction, or solely because any such director's or officer's votes are counted for such purpose, if:

- the material facts as to the director's or officer's
  relationship or interest and as to the contract or
  transaction are disclosed or are known to the board,
  and the board in good faith authorizes the contract
  or transaction by the affirmative votes of a majority
  of the disinterested directors, even though the
  disinterested directors be less than a quorum;
- the material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the shareholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the shareholders; or
- the contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified, by the board of directors, a committee or the shareholders.

#### England

The Companies Act provides for schemes of arrangement, which are arrangements or compromises between a company and any class of shareholders or creditors and used in certain types of reconstructions, amalgamations, capital reorganizations or takeovers. These arrangements require:

- the approval at a shareholders' or creditors'
  meeting convened by order of the court, of a
  majority in number of shareholders or creditors
  representing 75% in value of the capital held by, or
  debt owed to, the class of shareholders or creditors,
  or class thereof present and voting, either in person
  or by proxy; and
- the approval of the court.

Once approved, sanctioned and effective, all shareholders and creditors of the relevant class and the company are bound by the terms of the scheme. The Companies Act also contains certain provisions relating to transactions between a director and the company, including transactions involving the acquisition of substantial non-cash assets from a director or the sale of substantial noncash assets to a director, and loans between a company and a director or certain connected persons of directors. If such transactions meet certain thresholds set out within the Companies Act the approval of shareholders by ordinary resolution will be required.

# Standard of Conduct for Directors

Delaware law does not contain specific provisions setting forth the standard of conduct of a director. The scope of the fiduciary duties of directors is generally determined by the courts of the State of Delaware. In general, directors have a duty to act without self-interest, on a well-informed basis and in a manner they reasonably believe to be in the best interest of the shareholders. Directors of a Delaware corporation owe fiduciary duties of

Under English law, a director owes various statutory and fiduciary duties to the company, including:

- to act in the way he or she considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole;
- to avoid a situation in which he or she has, or can have, a direct or indirect interest

Delaware care and loyalty to the corporation and to its shareholders. The duty of care generally requires that a director act in good faith, with the care that an ordinarily prudent person would exercise under similar circumstances. Under this duty, a director must inform himself or herself of all material information reasonably available regarding a significant transaction. The duty of loyalty requires that a director act in a manner he or she reasonably believes to be in the best interests of the corporation. The director must not use his or her corporate position for personal gain or advantage. In addition, under Delaware law, when the board of directors of a Delaware corporation approves the sale or break-up of a corporation, the company. board of directors may, in certain circumstances, have a duty to obtain the highest value reasonably available to the shareholders.

#### England

- that conflicts, or possibly conflicts, with the interests of the company;
- to act in accordance with the company's constitution and only exercise his or her powers for the purposes for which they are conferred;
- to exercise independent judgment;
- to exercise reasonable care, skill and diligence;
- not to accept benefits from a third-party conferred by reason of his or her being a director or doing (or not doing) anything as a director; and
- a duty to declare any interest that he or she has, whether directly or indirectly, in a proposed or existing transaction or arrangement with the

#### Shareholder Suits

Under Delaware law, a shareholder may initiate a derivative action to enforce a right of a corporation if the corporation fails to enforce the right itself. The complaint must:

- state that the plaintiff was a shareholder at the time of the transaction of which the plaintiff complains or that the plaintiff's shares thereafter devolved on the plaintiff by operation of law; and
- allege with particularity the efforts made by the plaintiff to obtain the action the plaintiff desires from the directors and the reasons for the plaintiff's failure to obtain the action: or
- state the reasons for not making the effort. Additionally, the plaintiff must remain a shareholder through the duration of the derivative

Under English law, generally, the company, rather than its shareholders, is the proper claimant in an action in respect of a wrong done to the company or where there is an irregularity in the company's internal management. Notwithstanding this general position, the Companies Act provides that (i) a court may allow a shareholder to bring a derivative claim (that is, an action in respect of and on behalf of the company) in respect of a cause of action arising from a director's negligence, default, breach of duty or breach of trust, subject to complying with the procedural requirements under the Companies Act and (ii) a shareholder may bring a claim for a court order where the company's affairs have been or are being conducted in a manner that is unfairly prejudicial to some or all of its shareholders

# Other English Law Considerations

## Notification of Voting Rights

A shareholder in a public company incorporated in the United Kingdom whose shares are admitted to trading on AIM is required pursuant to Rule 5 of the Disclosure Guidance and Transparency Rules of the U.K. Financial Conduct Authority to notify us of the percentage of his voting rights if the percentage of voting rights which he holds as a shareholder or through his direct or indirect holding of financial instruments (or a combination of such holdings) reaches, exceeds or falls below 3%, 4%, 5%, and each 1% threshold thereafter up to 100% as a result of an acquisition or disposal of shares or financial instruments.

# Squeeze-Out

Under the Companies Act, if a takeover offer (as defined in Section 974 of the Companies Act) is made for the shares of a company and the offeror were to acquire, or unconditionally contract to acquire: (i) not less than 90% in value of the shares to which the takeover offer relates (the "Takeover Offer Shares"); and (ii) where those shares are voting shares, not less than 90% of the voting rights attached to the Takeover Offer Shares, the offeror could acquire compulsorily the remaining 10% within three months of the last day on which its offer can be accepted. It would do so by sending a notice to outstanding shareholders telling them that it will acquire compulsorily their Takeover Offer Shares and then, six weeks later, it would execute a transfer of the outstanding Takeover Offer Shares in its favor and pay the consideration to the company, which would hold the consideration on trust for outstanding shareholders. The

consideration offered to the shareholders whose Takeover Offer Shares are acquired compulsorily under the Companies Act must, in general, be the same as the consideration that was available under the takeover offer.

#### Sell-Out

The Companies Act also gives minority shareholders a right to be bought out in certain circumstances by an offeror who has made a takeover offer (as defined in Section 974 of the Companies Act). If a takeover offer related to all the shares of a company and, at any time before the end of the period within which the offer could be accepted, the offeror held or had agreed to acquire not less than 90% of the shares to which the offer relates, any holder of the shares to which the offer related who had not accepted the offer could by a written communication to the offeror require it to acquire those shares. The offeror is required to give any shareholder notice of his or her right to be bought out within one month of that right arising. The offeror may impose a time limit on the rights of the minority shareholders to be bought out, but that period cannot end less than three months after the end of the acceptance period. If a shareholder exercises his or her rights, the offeror is bound to acquire those shares on the terms of the offer or on such other terms as may be agreed.

### Disclosure Of Interest In Shares

Pursuant to Part 22 of the Companies Act, a company is empowered by notice in writing to require any person whom the company knows to be, or has reasonable cause to believe to be, interested in the company's shares or at any time during the three years immediately preceding the date on which the notice is issued to have been so interested, within a reasonable time to disclose to the company details of that person's interest and (so far as is within such person's knowledge) details of any other interest that subsists or subsisted in those shares. If a shareholder defaults in supplying the company with the required details in relation to the shares in question (the "Default Shares"), the shareholder shall not be entitled to vote or exercise any other right conferred by membership in relation to general meetings. Where the Default Shares represent 0.25% or more of the issued shares of the class in question, in certain circumstances the directors may direct that:

- (i) any dividend or other money payable in respect of the Default Shares shall be retained by the company without any liability to pay interest on it when such dividend or other money is finally paid to the shareholder; and/or
- (ii) no transfer by the relevant shareholder of shares (other than a transfer approved in accordance with the provisions of the company's Articles of Association) may be registered (unless such shareholder is not in default and the transfer does not relate to Default Shares).

### Dividends

Under English law, before a company can lawfully make a distribution, it must ensure that it has sufficient distributable reserves. A company's distributable reserves are its accumulated, realized profits, so far as not previously utilized by distribution or capitalization, less its accumulated, realized losses, so far as not previously written off in a reduction or reorganization of capital duly made. In addition to having sufficient distributable reserves, a public company will not be permitted to make a distribution if, at the time, the amount of its net assets (that is, the aggregate of the company's assets less the aggregate of its liabilities) is less than the aggregate of its issued and paid-up share capital and undistributable reserves, or if the distribution would result in the amount of its net assets being less than that aggregate.

# Purchase Of Own Shares

Under English law, a public limited company may purchase its own shares only out of the distributable profits of the company or the proceeds of a new issue of shares made for the purpose of financing the purchase, provided that it is not restricted from doing so by its articles. A public limited company may not purchase its own shares if as a result of the purchase there would no longer be any issued shares of the company other than redeemable shares or shares held as treasury shares. Shares must be fully paid in order to be repurchased.

Subject to the above, we may purchase our own shares in the manner prescribed below. We may make a market purchase of our own fully paid shares on a recognized investment exchange pursuant to an ordinary resolution of shareholders. The resolution authorizing the purchase must:

- specify the maximum number of shares authorized to be acquired;
- determine the maximum and minimum prices that may be paid for the shares; and
- a date, not being later than five years after the passing of the resolution, on which the authority to purchase is to expire.

A company may purchase its own fully paid shares otherwise than on a recognized investment exchange pursuant to a purchase contract authorized by ordinary resolution of the holders of its ordinary shares before the purchase takes place. Any authority will not be effective if any shareholder from whom the company proposes to purchase shares votes on the resolution and the resolution would not have been passed if such shareholder had not done so. The resolution authorizing the purchase must specify a date, not being later than five years after the passing of the resolution, on which the authority to purchase is to expire.

# Shareholder Rights

Certain rights granted under the Companies Act, including the right to requisition a general meeting or require a resolution to be put to shareholders at the annual general meeting, are only available to our members. For English law purposes, our members are the persons who are registered as the owners of the legal title to the shares and whose names are recorded in our register of members. In the case of shares held in a settlement system operated by the Depository Trust Company ("DTC"), the registered member will be DTC's nominee, Cede & Co. If a person who holds their ordinary shares in DTC wishes to exercise certain of the rights granted under the Companies Act, they may be required to first take steps to withdraw their ordinary shares from the settlement system operated by DTC and become the registered holder of the shares in our register of members. A withdrawal of shares from DTC may have tax implications, for additional information on the potential tax implications of withdrawing your shares from the settlement system operated by DTC, see "Taxation—Material English Law Tax Considerations."

# U.K. City Code On Takeovers And Mergers

As a U.K. incorporated public company with its registered officer in the United Kingdom, which is admitted to AIM, we are subject to the U.K. City Code on Takeovers and Mergers (the "Takeover Code"), which is issued and administered by the U.K. Panel on Takeovers and Mergers, or the Panel.

The Takeover Code provides a framework within which takeovers of companies subject to it are conducted. In particular, the Takeover Code contains certain rules in respect of mandatory offers. Under Rule 9 of the Takeover Code, if a person:

- acquires an interest in our shares which, when taken together with shares in which he or persons acting in concert with him are interested, carries 30% or more of the voting rights of our shares; or
- who, together with persons acting in concert with him, is interested in shares that in the aggregate carry not less than 30% and not more than 50% of the voting rights in us, acquires additional interests in shares that increase the percentage of shares carrying voting rights in which that person is interested,

the acquirer and depending on the circumstances, its concert parties, would be required (except with the consent of the Panel) to make a cash offer for our outstanding shares at a price not less than the highest price paid for any interests in the shares by the acquirer or its concert parties during the previous 12 months

# Registrar

The registrar for the ordinary shares is Share Registrars Limited. The registrar's address is The Courtyard, 17 West Street, Farnham, GU9 7DR, United Kingdom.

### Item 16H. Mine Safety Disclosure.

Not applicable.

### PART III

# Item 17. Financial Statements.

Not applicable, see Item 18.

# Item 18. Financial Statements.

The financial statements are filed as part of this Annual Report beginning on page F-1.

# Item 19. Exhibits.

The Exhibits listed in the Exhibit Index at the end of this Annual Report are filed as Exhibits to this Annual Report.

# EXHIBIT INDEX

1.1	Memorandum and Articles of Association; incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form F-
	1 (SEC File No. 333-212491).
2.1	Form of Deposit Agreement; incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form F-1 (SEC File
	No. 333-212491).
2.2	Form of American Depositary Receipt (included in Exhibit 2.1).
2.3	Form of Warrant Agent Agreement, between Motif Bio plc and The Bank of New York Mellon, as warrant agent; incorporated by
	reference to Exhibit 4.3 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491)
2.4	Form of Global Warrant to Purchase ADSs (included in Exhibit 2.3).
2.5	Form of Ordinary Share Warrant; incorporated by reference to Exhibit 4.5 to the Registrant's Registration Statement on Form F-1 (SEC
	<u>File No. 333-212491).</u>
4.1	Convertible Note (\$1,471,700) from Motif BioSciences Inc. to Amphion Innovations plc, dated April 2, 2015; incorporated by reference
	to Exhibit 10.1 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.2	Convertible Note (\$2,079,085.63) from Motif BioSciences Inc. to Amphion Innovations US, Inc., dated April 2, 2015; incorporated by
	reference to Exhibit 10.2 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.3	Service Agreement, dated April 1, 2015, by and between Motif Bio Limited and Graham Lumsden; incorporated by reference to
	Exhibit 10.3 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.4	Employment Agreement, effective May 1, 2016, by and between Motif BioSciences Inc. and Pete A. Meyers; incorporated by reference
	to Exhibit 10.4 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.5	Employment Agreement, effective May 1, 2015, by and between Motif BioSciences Inc. and David Huang; incorporated by reference to
	Exhibit 10.5 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.6	Advisory and Consultancy Agreement, dated April 1, 2015, by and between Motif Bio plc and Amphion Innovation US, Inc.:
4.5	incorporated by reference to Exhibit 10.6 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.7	Consultancy Agreement, dated April 1, 2015, by and between Motif Bio plc and Amphion Innovation US, Inc. (for the services of Robert
4.0	Bertoldi); incorporated by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.8	Motif Bio plc Share Option Plan; incorporated by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form F-1 (SEC
4.0	File No. 333-212491).
4.9	Sale and Purchase Agreement, dated June 1, 2001, by and between F. Hoffman-La Roche Ltd., Hoffman-La Roche Inc. and Arpida Ltd.; incorporated by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.10	
4.10	Sale and Purchase Agreement, dated September 13, 2013, by and between Life Sciences Management Group, Inc. and Acino Pharma AG; incorporated by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.11	Amended and Restated Convertible Note (\$1,471,700) from Motif BioSciences Inc. to Amphion Innovations plc, dated September 7,
4.11	2016; incorporated by reference to Exhibit 10.11 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.12	Amended and Restated Convertible Note (\$2,079,085.63) from Motif BioSciences Inc. to Amphion Innovations US, Inc., dated
4.12	September 7, 2016: incorporated by reference to Exhibit 10.12 to the Registrant's Registration Statement on Form F-1 (SEC File
	No. 333-212491).
4.13	Consultancy Agreement, dated September 7, 2016, by and between Motif Bio plc and Amphion Innovations US, Inc.; incorporated by
4.13	reference to Exhibit 10.13 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-212491).
4.14†	Agreement and Plan of Merger, dated as of December 31, 2014, by and among Nuprim, Inc., Nuprim Shareholders, Motif BioSciences
7.17	Inc. and R. Michael Floyd as Nuprim Shareholders' Representative; incorporated by reference to Exhibit 2.1 to the Registrant's
	Registration Statement on Form F-1 (SEC File No. 333-212491).
4.15	Underwriting Agreement, dated as of November 17, 2016, by and between Motif Bio plc and H.C. Wainwright & Co., LLC., incorporated
	by reference to Exhibit 4.15 to the Registrant's Annual Report on Form 20-F (SEC File No. 001-37847).
.4.16	Agreement and Plan of Merger for the Acquisition of Motif, Inc., dated March 27, 2015, by and among Motif BioSciences, Inc., Motif
	Bio plc, Motif Acquisition Sub Inc. and Stephen Austin; incorporated by reference to Exhibit 2.3 to the Registrant's Registration
	Statement on Form F-1 (SEC File No. 333-212491).

4.17	Employment Agreement, effective January 16, 2017, by and between Motif BioSciences Inc. and Robert Dickey IV, incorporated by
	reference to Exhibit 4.17 to the Registrant's Annual Report on Form 20-F (SEC File No. 001-37847).
4.18	Consulting Agreement, effective January 16, 2017, by and between Motif BioSciences Inc. and Pete A. Meyers., incorporated by
	reference to Exhibit 4.18 to the Registrant's Annual Report on Form 20-F (SEC File No. 001-37847).
4.19	Confidential Separation Agreement and Release, effective as of January 13, 2017, by and between Motif BioSciences Inc. and Pete A.
	Meyers., incorporated by reference to Exhibit 4.19 to the Registrant's Annual Report on Form 20-F (SEC File No. 001-37847).
4.20	Independent Contractor Agreement, effective January 1, 2017, by and between Motif BioSciences Inc. and Jonathan E. Gold.,
	incorporated by reference to Exhibit 4.20 to the Registrant's Annual Report on Form 20-F (SEC File No. 001-37847).
4.21	Loan and Security Agreement, dated November 14, 2017, by and among Motif BioSciences Inc., the several banks and other financial
	institutions or entities from time to time parties thereto and Hercules Capital, Inc.
4.22	Warrant Agreement, dated November 14, 2017, between Motif Bio Plc and Hercules Capital, Inc.
4.23	Registration Agreement, dated November 14, 2017, between Motif Bio Plc and Hercules Capital, Inc.
4.24	Stock Pledge Agreement, dated November 14, 2017, between Motif Bio Plc and Hercules Capital, Inc.
4.25	Consulting Agreement, effective February 2, 2018, by and between Motif BioSciences Inc. and Robert Dickey IV
4.26	Confidential Separation Agreement and Release, effective February 2, 2018, by and between Motif BioSciences Inc. and Robert Dickey
	IV.
8.1	List of subsidiaries; incorporated by reference to Exhibit 21.1 to the Registrant's Registration Statement on Form F-1 (SEC File No. 333-
0.1	212491).
12.1	Certificate of Chief Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to \$302 of
12.1	the Sarbanes-Oxlev Act of 2002.
12.2	Certificate of Chief Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to §302 of
12.2	the Sarbanes-Oxley Act of 2002.
13.1	Certificate of Chief Executive Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxlev Act of 2002.
	Certificate of Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to \$900 of the Sarbanes-Oxley Act of 2002.
13.2	
15.1	Consent of Pricewaterhouse Coopers LLP (United States).
15.2	Consent of Pricewaterhouse Coopers LLP (United Kingdom).
15.3	Consent of BAL Pharma Consulting, LLC.
15.4	Consent of JMI Laboratories.
15.5	Consent of IHMA Laboratories.
101.INS**	XBRL Instance Document.
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB**	XBRL Taxonomy Extension Label Linkbase Database.
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document.
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document.

(i) Consolidated Statement of Financial Position at December 31, 2017 and 2016, (ii) Consolidated Statements of Comprehensive Loss for the years ended December 31, 2017, 2016 and 2015 (iii) Consolidated Statements of Changes Equity for the years ended December 31, 2017, 2016 and 2015 (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016 and 2015 and (v) Notes to Consolidated Financial Statements.

<sup>†</sup> Certain schedules, exhibits and annexes have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company will furnish supplemental copies of any omitted schedule, exhibit or annex to the Commission upon request.

<sup>\*\*</sup> Attached as Exhibit 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language):

# **SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

# MOTIF BIO PLC

/s/ Dr. Graham Lumsden

By: Dr. Graham Lumsden Title: Chief Executive Officer (Principal Executive Officer)

Date: April 10, 2018

# Motif Bio plc Index to Consolidated Financial Statements

Consolidated Financial Statements of Motif Bio plc	
Report of Independent Registered Public Accounting Firm — PricewaterhouseCoopers LLP (United States)	F-
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### Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Motif Bio plc,

#### Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of Motif Bio plc and its subsidiary as of December 31, 2017 and December 31, 2016, and the related consolidated statements of comprehensive loss, changes in equity and cash flows for each of the two years in the period ended December 31, 2017, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and December 31, 2016, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2017 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union.

Substantial Doubt About the Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses and negative cash flows as a result of the continuing clinical trials and will require additional financing. These circumstances raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

# Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP Florham Park, New Jersey, United States of America April 10, 2018

We have served as the Company's auditor since 2017.

### Report of Independent Registered Public Accounting Firm

To the board of Directors and Shareholders of Motif Bio plc

In our opinion, the consolidated statements of comprehensive loss, changes in equity and of cash flows present fairly, in all material respects, the results of the operations and cash flows of Motif Bio plc and its subsidiaries for the year ended December 31, 2015, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses and negative cash flows as a result of the continuing clinical trials and will require additional financing. Management's plans in regards to these matters is also set out in Note 1. These circumstances raise substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/PricewaterhouseCoopers LLP Aberdeen, United Kingdom 16 May, 2016

Except with respect to our opinion on the consolidated financial statements insofar as it relates to the matters that raise substantial doubt about the Company's ability to continue as a going concern described in Note 1, as to which the date is 31 October, 2016

Motif Bio plc Consolidated statements of comprehensive loss For the years ended December 31, 2017, 2016 and 2015

		Year ended December 31, 2017	Year ended December 31, 2016	Year ended December 31, 2015
	Note	US \$	US \$	US \$
Continuing operations				
General and administrative expenses	4	(8,541,396)	(4,912,150)	(3,577,180)
Research and development expenses	4	(29,475,293)	(34,794,815)	(4,680,940)
Gains on settlement of contract disputes	4		83,320	5,027
Operating loss		(38,016,689)	(39,623,645)	(8,253,093)
Interest income	4	133,612	69,754	15,028
Interest expense	4	(275,449)	(383,259)	(268,216)
Net foreign exchange losses		(238,289)	(250,926)	(9,644)
Loss from revaluation of derivative liabilities	14	(6,391,551)	(135,939)	
Loss before income taxes		(44,788,366)	(40,324,015)	(8,515,925)
Income tax expense	7	(22,000)	(287)	(774)
Net loss for the year		(44,810,366)	(40,324,302)	(8,516,699)
Total comprehensive loss for the year		(44,810,366)	(40,324,302)	(8,516,699)
Net loss per share	8			
Basic and diluted per share *		\$(0.19)	\$(0.35)	\$(0.14)
Weighted average number of ordinary shares, basic and diluted		231,530,091	116,558,191	61,225,922

st In accordance with IAS 33 "Earnings per share", shares are not diluted where the entity has reported a loss for the period.

 ${\it The notes are an integral part of these consolidated financial statements}.$ 

Motif Bio plc Consolidated statements of financial position As at December 31, 2017 and 2016

	Note	December 31, 2017 US \$	December 31, 2016 US \$
ASSETS			
Non-current assets			
Intangible assets	9	6,195,748	6,195,748
Other non-current assets		23,075	
Total non-current assets		6,218,823	6,195,748
Current assets			
Prepaid expenses and other receivables	10	317,584	401,064
Cash		22,651,475	21,829,632
Total current assets		22,969,059	22,230,696
Total assets		29,187,882	28,426,444
LIABILITIES			
Non-current liabilities			
Term loan, net of deferred financing costs	13	14,057,147	_
Other non-current liabilities	13	22,758	_
Total non-current liabilities	15	14,079,905	
Current liabilities			
Trade and other payables	12	10,889,554	12,319,117
Payable on completion of clinical trial	9	500,000	500,000
Derivative liabilities	14	12,626,299	5,798,058
Total current liabilities		24,015,853	18,617,175
Total liabilities		38,095,758	18,617,175
Net (liabilities) assets		(8,907,876)	9,809,269
EQUITY			
Share capital	17	3,589,201	2,728,199
Share premium	1 /	80,872,838	57,348,694
Group reorganization reserve		9,938,362	9,938,362
Accumulated deficit		(103,308,277)	(60,205,986)
Total (deficit) equity		(8,907,876)	9,809,269
, I v		(0,207,070)	7,007,207

 ${\it The notes are an integral part of these consolidated financial statements}.$ 

The financial statements were approved by the Board of Directors and authorized for issue on April 9, 2018. They were signed on its behalf by:

Director

Richard C.E. Morgan

Motif Bio plc Consolidated statements of changes in equity For the years ended December 31, 2017, 2016 and 2015

	Note	Share capital US \$	Share premium US \$	Group reorganization reserve US \$	Accumulated deficit US \$	Total US \$
Balance at December 31, 2014		1,110	3,964,455	_	(14,884,023)	(10,918,458)
Loss for the year		_	_	_	(8,516,699)	(8,516,699)
Total comprehensive loss for the year					(8,516,699)	(8,516,699)
Conversion of promissory notes		3,573	6,275,213	_		6,278,786
Group reorganization		539,267	(10,239,668)	9,938,362	_	237,961
Issue of share capital	17	1,095,805	41,334,240	´ ´ —	_	42,430,045
Cost of issuance		· · · —	(2,898,693)	_	_	(2,898,693)
Exercise of share options and warrants		5,536	98,733	_	_	104,269
Issue of warrants to acquire assets		· —	· —	_	2,340,373	2,340,373
Share-based payments	16		<u> </u>		665,124	665,124
Balance at December 31, 2015		1,645,291	38,534,280	9,938,362	(20,395,225)	29,722,708
Loss for the year		_	_	_	(40,324,302)	(40,324,302)
Total comprehensive loss for the year			_		(40,324,302)	(40,324,302)
Issue of share capital	17	897,812	18,701,566	_	` _ ` _ `	19,599,378
Cost of issuance	17	· —	(3,370,155)	_	_	(3,370,155)
Conversion of promissory notes	17	177,786	3,373,000	_	_	3,550,786
Exercise of share options and warrants	17	7,310	110,003	_	_	117,313
Share-based payments	16	<u> </u>	<u> </u>		513,541	513,541
Balance at December 31, 2016		2,728,199	57,348,694	9,938,362	(60,205,986)	9,809,269
Loss for the year		_	_	_	(44,810,366)	(44,810,366)
Total comprehensive loss for the year					(44,810,366)	(44,810,366)
Issue of share capital	17	846.667	24,569,634	_	_	25,416,301
Cost of issuance	17	_	(1,734,562)	_	_	(1,734,562)
Exercise of share options and warrants	17	14,335	689,072	_	_	703,407
Share-based payments	16				1,708,075	1,708,075
Balance at December 31, 2017		3,589,201	80,872,838	9,938,362	(103,308,277)	(8,907,876)

The notes are an integral part of these consolidated financial statements.

Motif Bio plc Consolidated statements of cash flows
For the years ended December 31, 2017, 2016 and 2015

	Note	Year ended December 31, 2017 US \$	Year ended December 31, 2016 US \$	Year ended December 31, 2015 US \$
Operating activities				
Operating loss for the year		(38,016,689)	(39,623,645)	(8,253,093)
Adjustments to reconcile net loss to net cash used in activities:				
Share-based payments	16	1,708,075	513,541	325,908
Warrant issued for services performed	14	109,431	_	_
Gain on settlement of contract disputes	4	_	(83,320)	(5,027)
Interest receivable	4	133,612	69,754	15,028
Taxation payable		_	(287)	(774)
Changes in operating assets and liabilities:				
Prepaid expenses and other receivables		60,405	(233,407)	(155,578)
Accounts payable and other accrued liabilities		(1,429,563)	11,415,353	75,852
Net cash used in operating activities		(37,434,729)	(27,942,011)	(7,997,684)
Financing activities				
Proceeds from issuance of promissory notes		_	_	704,210
Proceeds from issuance of term loan	13	15,000,000	_	_
Costs of issuance of term loan	13	(575,970)	_	_
Proceeds from issue of share capital	17	25,416,301	24,995,980	38,660,106
Costs of issuance of share capital	17	(1,734,562)	(3,370,155)	(2,559,477)
Proceeds from exercise of warrants and options	17	419,004	117,313	62,739
Interest paid	4	(70,833)	(314,916)	(268,216)
Net cash provided by financing activities		38,453,940	21,428,222	36,599,362
Net change in cash		1,019,211	(6,513,789)	28,601,678
Cash, beginning of the year		21,829,632	28,594,347	3,281
Effect of foreign exchange rate changes		(197,368)	(250,926)	(10,612)
Cash, end of the year		22,651,475	21,829,632	28,594,347
Non-cash investment activity				
Acquisition of intangible asset with equity issuances		_	_	6,195,748
Non-cash financing activity				
Conversion of notes payable to ordinary shares			3,550,786	
Fair value of warrants issued in conjunction with issuance of share capital		_	5,662,119	_
Fair value of warrants issued in conjunction with issuance of term loan		419,573	_	_
The notes are an integral part of these consolidated financial statements.				
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### Motif Bio plc

### Notes to the Consolidated Financial Statements

#### 1. General information

Motif Bio plc is a clinical stage biopharmaceutical company which specializes in developing and commercializing novel antibiotics designed to be effective against serious and life-threatening infections caused by multi-drug resistant bacteria.

Motif Bio Limited ("the Company") was incorporated in England and Wales on November 20, 2014 with company registration number 09320890. The Company's registered office is at: 201 Temple Chambers, 3-7 Temple Avenue, London EC4Y 0DT, U.K. On April 1, 2015, the Company was re-registered as a public company limited by shares and changed its name to Motif Bio plc. Motif BioSciences Inc. was incorporated in the US State of Delaware on December 2, 2003 and has its registered office at 251 Little Falls Drive, Wilmington, Delaware, 19808. On April 1, 2015, Motif BioSciences Inc. became a wholly owned subsidiary of the Company by way of a group reorganization by plan of merger. The principal place of business is 125 Park Avenue, 25th Floor, New York, NY, 10017, USA. The Company's country of domicile is the U.K.

The consolidated financial statements include the accounts of Motif Bio plc and its wholly owned subsidiary, Motif BioSciences Inc. ("the Group").

The financial statements were approved by the Board of Directors on April 9, 2018.

## Going concern

As of December 31, 2017, the Group had \$22.7 million in cash. Net cash used in operating activities was \$37.4 million for the year ended December 31, 2017. Net loss for the year ended December 31, 2017 was \$44.8 million. The Group expects to incur losses for the next several years as it expands its research, development and clinical trials of iclaprim and prepare for commercialization upon regulatory approval of iclaprim. The Group is unable to predict the extent of any future losses or when the Group will become profitable, if at all.

The Group will be required to raise additional capital within the next year to continue the development and commercialization of current product candidates and to continue to fund operations at the current cash expenditure levels. The Group cannot be certain that additional funding will be available on acceptable terms, or at all. To the extent that the Group raises additional funds by issuing equity securities, its stockholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants that impact the Group's ability to conduct business. If the Group is unable to raise additional capital when required or on acceptable terms, it may have to (i) significantly delay, scale back or discontinue the development and/or commercialization of one or more product candidates; (ii) seek collaborators for product candidates at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; or (iii) relinquish or otherwise dispose of rights to technologies, product candidates or products that the Group would otherwise seek to develop or commercialize itself on unfavorable terms.

These financial statements have been prepared under the assumption that the Group will continue as a going concern. Due to the Group's recurring and expected continuing losses from operations, as well as significant amounts of outstanding payables and accrued expenses, the Group has concluded there is substantial doubt in the Group's ability to continue as a going concern within one year of the issuance of these financial statements without additional capital becoming available. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

# Significant events

On November 15, 2017, the Group entered into a credit agreement (the "Hercules Loan Agreement") with Hercules Capital, Inc. ("Hercules"). Pursuant to the credit agreement, Hercules agreed to loan the Group \$20.0 million in two tranches. The first tranche of \$15.0 million was drawn down at closing, with the remaining \$5.0 million available upon the achievement of certain milestones anticipated in 2018, or at Hercules' discretion. The terms include an initial interest-only period of 15 months, extendable to 21 months on the achievement of certain milestones; a 30-month capital and interest repayment period thereafter; an interest rate of 10% tied to the U.S. prime rate and customary security over all assets of the Group, except for intellectual property where there is a negative pledge. Under the Hercules Loan Agreement, the Group issued Hercules a warrant to purchase up to 73,452 of its American Depositary Shares (ADSs) at an exercise price of \$9.53 per ADS, representing 3.5% warrant coverage of the total loan facility. Hercules also has the right, in its discretion, to participate in any subsequent financing, such as an equity offering, in an amount up to \$1 million.

On June 23, 2017, the Group placed 66,666,667 new ordinary shares at 30 pence per share and received \$23,681,739 of net proceeds.

On November 18, 2016, the Group announced the pricing of the underwritten U.S. offering and European placement, which were concurrently conducted, of 71,633,248 ordinary shares, comprised of 22,863,428 ordinary shares plus 2,438,491 ADSs (representing 48,769,820 ordinary shares at a 20 to 1 ratio). The Group offered 48,769,820 ordinary shares in a U.S. firm commitment offering in the form of 2,438,491 ADSs, together with warrants to purchase 1,219,246 ADS Warrants. Each ADS represents 20 of the Group's ordinary shares and was sold together with 0.5 of an ADS Warrant in a fixed combination. Each full ADS Warrant is exercisable for one ADS at an exercise price of \$8.03 per ADS, exercisable from the date of issuance until five years thereafter. In Europe, the Group offered in a concurrent placement on a best efforts basis 22,863,428 ordinary shares, together with warrants to purchase 11,431,714 ordinary shares. Each ordinary share was sold together with 0.5 of an Ordinary Share Warrant in a fixed combination. Each full Ordinary Share Warrant is exercisable for one ordinary share at an exercise price of £0.32 (\$0.40), exercisable from the date of issuance until five years thereafter. The offering price of the ADSs and ADS Warrants in the U.S. offering was \$6.98 per ADS and ADS Warrant combination, and the offering price of the Group's ordinary shares and Ordinary Share Warrant in the European placement was £0.28 (\$0.35) per ordinary share and Ordinary Share Warrant combination. Net proceeds to the Group following the offering, after deducting underwriting discounts and commissions and offering expenses of approximately \$3.5 million, were approximately \$21.5 million. None of the underwriting discounts and commissions or other offering expenses were paid to directors or officers of the Group or their associates or to persons owning 10 percent or more of any class of the Group's equity securities or to any affiliates of the Group. H.C. Wainwright & Co., LLC was the underwriter for the above described offering.

On September 7, 2016, the Group amended and restated the convertible notes with Amphion Innovations plc and Amphion Innovations US Inc. to provide that any outstanding principal under the notes as of the maturity date will be paid to the holders on the maturity date, at the Group's election, through the issuance of (i) a number of ordinary shares, based on the conversion price set forth in the notes, or (ii) a number of ADSs, which is equal to a number determined by dividing the number of ordinary shares the holder would otherwise be entitled to by the then applicable ADS to ordinary share ratio. The amended and restated convertible promissory notes also provide that except in the event of a default, no interest will accrue or be payable with respect to the amounts due under the notes. In consideration for its agreement to forego interest payments under its convertible promissory notes, the Group issued 409,000 ordinary shares to Amphion Innovations plc. The amended and restated notes also permit the Group or the holders to convert all or any portion of the outstanding principal under the notes into ordinary shares or ADSs (as determined by the Group) at any time prior to the maturity date.

In December 2016, the Group issued 14,510,770 new ordinary shares following the conversion of convertible promissory notes by Amphion Innovations plc and Amphion Innovations US Inc. The notes totaled US \$3,550,786 and were converted in accordance with their terms at US \$0.2447 per share.

Group reorganization and initial public offering

On February 18, 2015, the Company incorporated a Delaware subsidiary, Motif Acquisition Sub, Inc. On December 31, 2014 Motif BioSciences Inc., the Company, and Motif Acquisition Sub, Inc. entered into an agreement where, upon the Company's admission to AIM of the London Stock Exchange on April 2, 2015, Motif Acquisition Sub, Inc. merged with and into Motif BioSciences Inc. and Motif BioSciences Inc. continued as the surviving entity and became a wholly-owned subsidiary of the Company. Prior to the merger, Motif BioSciences Inc. completed a reverse stock split in order to increase the share price of Motif BioSciences Inc. so that the share price was closer to the Company's admission price. The former Motif BioSciences Inc. stockholders were issued 36,726,242 ordinary shares of the Company in a share-for-share exchange for their common stock in Motif BioSciences Inc. so that the former Motif BioSciences Inc. stockholders owned an equivalent number of ordinary shares in the Company as the number of shares of common stock that they had previously owned in Motif BioSciences Inc. All outstanding, unexercised, and vested stock options for shares of common stock in Motif BioSciences Inc. were converted into options for ordinary shares of the Company (Note 16).

This was a common control transaction and therefore outside the scope of IFRS 3—"Business Combinations." The transaction has therefore been accounted for as a group reorganization and the Group is presented as if the Company has always owned Motif BioSciences Inc. The comparatives presented in these financial statements therefore represent the results and capital structure of the Company. The reserve on consolidation represents the difference between the nominal value of the shares of the Company issued to the former stockholders of Motif BioSciences Inc. and the share capital and share premium of Motif BioSciences Inc. at the date of the transaction. As stated, the nominal value of the Company shares was used in the calculation of the reorganization reserve.

On April 2, 2015, the Company was admitted to AIM and issued 14,186,140 ordinary shares at a price of £0.20 per share.

On July 22, 2015, the Company completed a subsequent placing of 44,000,000 ordinary shares at a price of £0.50 per share.

Acquisition of Nuprim Assets

On April 1, 2015, Motif BioSciences Inc. acquired the assets owned by Nuprim Inc. ("Nuprim"), a Maryland corporation, related to iclaprim (the "Nuprim Assets"). Motif BioSciences Inc. issued 1,513,040 (post-reverse stock split) shares of common stock to the shareholders of Nuprim. that were held in escrow until the closing of the reorganization. These shares of common stock in Motif BioSciences Inc. were converted into ordinary shares of the Company upon the Company's admission to AIM on April 2, 2015. Upon admission, 9,805,400 ordinary shares of the Company and 9,432,033 warrants were issued to the former Nuprim shareholders (Note 9).

#### 2. Significant accounting policies

## a. Basis of preparation

The accounting policies set out below have been applied consistently to all periods presented in this financial information.

The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and in conformity with IFRS as adopted by the European Union. This basis of preparation describes how the financial statements have been prepared in accordance with IFRS. The financial statements have been prepared under the historical cost convention. A summary of the more important Group accounting policies is set out below.

The preparation of financial statements in conformity with IFRS requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial information and the reported amounts of revenue and expenses during the period. Although these estimates are based on management's best knowledge of the amount, event or actions, actual results ultimately may differ from those estimates.

a. New and amended standards effective from January 1, 2017

Amendments to IAS 7, Disclosure Initiative, was adopted with an effective date of January 1, 2017. The amendments require disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flow and non-cash changes. The Group believes that the disclosure contained herein adequately satisfy this requirement. The only balance sheet liability for which cash flows are classified as financing activities is the term loan with Hercules Capital, Inc. The cash inflow in the year in respect of the term loan was \$14.4 million, net of issuance costs and non-cash movement of \$0.4 million for the issuance of warrants. The net movement and resulting closing balance is further detailed in Note 13.

There are no other new standards and amendments that have been applied from January 1, 2017, which have had an impact on the Group's financial statements.

New standards and interpretations not yet effective

Certain new accounting standards and interpretations have been published that are not mandatory for the reporting periods covered by these consolidated financial statements and have not been early adopted by the Group.

The new standards potentially relevant to the Group are discussed below.

IFRS 2, Share-based Payments (as amended) — Effective date — January 1, 2018. The Group currently plans to apply IRFS 2 initially on January 1, 2018. IFRS 2 related to the classification and measurement of share-based payment transactions. The amendments are intended to eliminate diversity in practice regarding (i) accounting for cash-settled share-based payment transactions that include a performance condition, (ii) share-based payments in which the manner of settlement is contingent on future events, (iii) share-based payments settled net of tax withholdings, and (iv) modification of share-based payment transactions from cash-settled to equity-settled. Based on the initial assessment, this standard is not expected to have a material impact on the Group.

IFRS 9, Financial Instruments (as revised in 2014) — Effective date — January 1, 2018, with early adoption permitted. The Group currently plans to apply IRFS 9 initially on January 1, 2018. IFRS 9 includes revised guidance on the classification and measurement of financial instruments, a new expected credit loss model for calculating impairment on financial assets, and new general hedge accounting requirements. Based on the initial assessment, this standard is not expected to have a material impact on the Group.

IFRS 15, Revenue from Contracts with Customers — Effective date — January 1, 2018, with early adoption permitted. — IFRS 15 establishes a comprehensive guideline for determining when to recognize revenue and how much revenue to recognize. The Group currently has no revenues, therefore, the adoption of IFRS 15 is not expected to have a material impact on the Group, however, the Group will continue to reassess the potential impact of the adoption of this guidance.

IFRS 16, Leases — Effective date — January 1, 2019 — IFRS 16 will replace IAS 17. It will eliminate the distinction between classification of leases as finance or operating leases for lessees. The adoption of IFRS 16 is not expected to have a significant impact on the Group's net results or net assets, however, the Group will continue to reassess the potential impact of the adoption of this guidance as the effective date becomes closer.

#### Principles of consolidation

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Intercompany transactions, balances, and unrealized gains on transactions between Group companies are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

When the Group ceases to consolidate because of a loss of control, any retained interest in the entity is remeasured to its fair value with the change in carrying amount recognized in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture, or financial asset.

### b. Segment reporting

The chief operating decision-maker is considered to be the Board of Directors of Motif Bio plc. The chief operating decision-maker allocates resources and assesses performance of the business and other activities at the operating segment level. In addition, they review the IFRS consolidated financial statements.

The chief operating decision-maker has determined that Motif has one operating segment to support its strategy for the development and commercialization of pharmaceutical formulations. The Group maintains space and has some activities in the U.K.; however, the finance and most other management functions take place in the U.S.

# c. Foreign currency translation

### (a) Functional and Presentation Currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in United States Dollars (US \$), which is Motif Bio plc's functional and presentation currency.

# (b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year-end exchange rates are generally recognized in profit or loss. They are deferred in equity if they relate to qualifying cash flow hedges and qualifying net investment hedges or are attributable to part of the net investment in a foreign operation.

Foreign exchange gains and losses that relate to borrowings are presented in the statement of profit or loss, within finance costs. All other foreign exchange gains and losses are presented in the statement of profit or loss on a net basis within other income or other expenses.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value are recognized in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities classified as available-for-sale financial assets are recognized in other comprehensive income.

### d. Research and development costs

Expenditure on drug development activities is capitalized only if all of the following conditions are met:

- it is probable that the asset will create future economic benefits;
- the development costs can be measured reliably;
- technical feasibility of completing the intangible asset can be demonstrated;
- there is the intention to complete the asset and use or sell it;
- there is the ability to use or sell the asset; and
- adequate technical, financial, and other resources to complete the development and to use or sell the asset are available.

These conditions are generally met when a filing is made for regulatory approval for commercial production. Otherwise, costs on research activities are recognized as an expense in the period in which they are incurred.

At this time, the Group does not meet all conditions and therefore development costs are recorded as expense in the period in which the cost is incurred.

The Group's preclinical studies and clinical trials have been performed utilizing third-party contract research organizations ("CROs") and other vendors. For preclinical studies, the significant factors used in estimating accruals include the percentage of work completed to date and contract milestones achieved. For clinical trial expenses, the significant factors used in estimating accruals include the number of patients enrolled, duration of enrollment, percentage of work completed to date and contract milestones achieved. The Group monitors patient enrollment levels and related activities to the extent possible through internal reviews, correspondence and status meetings and review of contractual terms. Estimates are dependent on the timeliness and accuracy of data provided by the CROs and other vendors. In this event, the Group could record adjustments to research and development expenses in future periods when the actual activity levels become known.

### e. Intangible assets

Intangible assets acquired separately from a business are initially stated at cost, net of any amortization and any provision for impairment. Where a finite useful life of the acquired intangible asset cannot be determined, the asset is not subject to amortization but is tested for impairment annually or more frequently whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

# f. Impairment of non-financial assets

Assets that have an indefinite useful life are not subject to amortization and are tested annually in the second half of each fiscal year for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

# g. Financial instruments—initial recognition and subsequent measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

a) Financial assets, initial recognition and measurement

All financial assets, such as receivables and deposits, are recognized initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset.

The Group assesses, at each reporting date, whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that has occurred since the initial recognition of the asset (an incurred "loss event"), has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated.

### b) Financial liabilities, initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, and payables, as appropriate. All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Company's financial liabilities include trade and other payables, loans and borrowings and warrants classified as liabilities.

#### c) Subsequent measurement

The measurement of financial liabilities depends on their classification. Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial assets at fair value through profit or loss are subsequently carried at fair value. Loans and receivables are subsequently carried at amortized cost using the effective interest method if the time value of money is significant.

#### h. Financial assets and liabilities

Financial assets and financial liabilities are included in the Group's balance sheet when the Group becomes a party to the contractual provisions of the instrument. Financial assets are derecognized when the rights to receive cash flows from the investments have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership.

### Non-derivative financial instruments

#### Cash and cash equivalents

Cash and cash equivalents include bank balances, demand deposits, and other short-term, highly liquid investments (with less than three months to maturity) that are readily convertible into a known amount of cash and are subject to an insignificant risk of fluctuations in value.

## Financial liabilities and equity

The Group classifies an instrument, or its component parts, on initial recognition as a financial liability or an equity instrument in accordance with the substance of the contractual arrangement and the definitions of a financial liability and an equity instrument.

An instrument is classified as a financial liability when it is either (i) a contractual obligation to deliver cash or another financial asset to another entity; or (ii) a contract that will or may be settled in the Group's own equity instruments and is a non-derivative for which the Group is, or may be, obliged to deliver a variable number of the Group's own equity instruments or a derivative that will, or may be, settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Group's own equity instruments.

Incremental costs directly attributable to the issue of new ordinary shares or options are shown in equity as a deduction, net of tax, from the proceeds.

An equity instrument is defined as any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. An instrument is an equity instrument only if the issuer has an unconditional right to avoid settlement in cash or another financial asset.

### Trade pavables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities.

Trade payables are initially measured at fair value, and are subsequently measured at amortized cost, using the effective interest rate method.

Equity instruments

Equity instruments issued by the Company are recorded at the proceeds received. Direct issuance costs are processed as a deduction on equity.

Derivative financial instruments

The Group does not have a policy of engaging in speculative transactions, nor does it issue or hold financial instruments for trading purposes.

The Group has entered into various financing arrangements with its investors, including convertible loans. These convertible loans each include embedded financial derivative elements (being the right to acquire equity in the Group at a future date for a pre-determined price). Therefore, while the Group does not engage in speculative trading of derivative financial instruments, it may hold such instruments from time to time as part of its financing arrangements. The Group has also entered into financing arrangements that include the issuance of warrants. These warrants may be considered derivative financial instruments based on the terms of the agreements.

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The resulting gain or loss is recognized in the consolidated income statement, as the Group currently does not apply hedge accounting.

# Impairment of financial assets

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a "loss event") and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganization, and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

For loans and receivables category, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced and the amount of the loss is recognized in the consolidated income statement. If a loan or held-to-maturity investment has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group may measure impairment on the basis of an instrument's fair value using an observable market price.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized (such as an improvement in the debtor's credit rating), the reversal of the previously recognized impairment loss is recognized in the consolidated income statement.

# i. Offsetting financial instruments

Financial assets and liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency, or bankruptcy of the Company or the counterparty.

# j. Share-based payment transactions

The fair value of options and warrants granted to employees, directors, and consultants is recognized as an expense, with a corresponding increase in equity, over the period in which the option and warrant holders become unconditionally entitled to the options and warrants unless incremental and directly attributable to an equity transaction in which case it is deducted from equity. The fair value of the options and warrants granted is measured using an option valuation model, taking into account the terms and conditions upon which the options were granted.

### k. Financial income and expenses

Financial income comprises interest receivable on funds invested. Financial expenses comprise interest payable.

Interest income and interest payable are recognized in the income statement as they accrue, using the effective interest method.

### 1. Taxation

Tax on the profit or loss for the year comprises current and deferred tax. Tax is recognized in the income statement except to the extent that it relates to items recognized directly in equity, in which case it is recognized in equity.

Current tax is the expected tax payable on the taxable income for the period, using tax rates enacted or substantively enacted at the balance sheet date and any adjustment to tax payable in respect of previous years.

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: the initial recognition of goodwill; the initial recognition of assets or liabilities that affect neither accounting nor taxable profit other than in a business combination; and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realization or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date.

A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilized.

#### m. Earnings per share

The Company presents basic and diluted earnings per share (EPS) data for its shares. Basic EPS is calculated by dividing the profit or loss attributable to shares of the Company by the weighted average number of shares outstanding during the period. Diluted EPS is determined by adjusting the profit or loss attributable to shareholders and the weighted average number of shares outstanding for the effects of all dilutive potential shares, which comprise share options and warrants granted to employees and non-employees. In periods when the Company has a loss attributable to shareholders, diluted EPS equates to basic EPS.

### n. Borrowings

Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortized cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognized in profit or loss over the period of the borrowings using the effective interest method.

### o. Equity

The Company classifies an instrument, or its component parts, on initial recognition as a financial liability or an equity instrument in accordance with the substance of the contractual arrangement and the definitions of a financial liability and an equity instrument.

An instrument is classified as a financial liability when it is either (i) a contractual obligation to deliver cash or another financial asset to another entity; or (ii) a contract that will, or may be, settled in the Company's own equity instruments and is a non-derivative for which the Company is, or may be, obliged to deliver a variable number of the Company's own equity instruments or a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Company's own equity instruments.

Incremental costs directly attributable to the issue of new ordinary shares or options are shown in equity as a deduction, net of tax, from the proceeds.

An equity instrument is defined as any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. An instrument is an equity instrument only if the issuer has an unconditional right to avoid settlement in cash or another financial asset.

Ordinary Shares

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction from the proceeds

# p. Critical accounting estimates and judgments

In preparing the financial information, the Directors make judgments on how to apply the Group's accounting policies and make estimates about the future. The critical judgments that have been made in arriving at the amounts recognized in the financial information and the key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying value of assets and liabilities in the next financial year, are discussed below:

Acquisition and valuation of the iclaprim assets

The directors, on assessing if the acquisition of the Nuprim iclaprim assets was of a business or of a group of assets, considered:

- the identified elements of the acquired group;
- · the capability of the acquired group to produce outputs; and
- the impact that any missing elements have on a market participant's ability to produce outputs with the acquired group.

As the acquired group was not accompanied by any associated processes and because the acquired assets do not have planned principal activities, or a plan to produce outputs, the Directors considered the acquisition to be of a group of assets, not a business.

The Directors use their judgment to identify the separate intangible assets and then determine a fair value for each based upon the consideration paid, the nature of the asset, industry statistics, future potential, and other relevant factors. Asset acquisitions are measured based on their cost to the acquiring entity, which generally includes transaction costs. An asset's acquisition cost or the consideration transferred by the acquiring entity is assumed to be equal to the fair value of the net assets acquired, unless contrary evidence exists. These fair values are tested for impairment annually.

Research and development expenditures

Research and development expenditures are currently not capitalized because the criteria for capitalization are not met. At each balance sheet date, the Group estimates the level of service performed by the vendors and the associated costs incurred for the services performed.

Although the Group does not expect the estimates to be materially different from amounts actually incurred, the understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in reporting amounts that are too high or too low in any particular period.

Share based payments and fair value of warrants

The Directors have to make judgments when deciding on the variables to apply in arriving at an appropriate valuation of share based compensation and warrants, including appropriate factors for volatility, risk free interest rate, and applicable future performance conditions and exercise patterns.

# 3. Financial risk management

This note explains the Group's exposure to financial risks and how these risks could affect the Group's future financial performance.

# a. Credit risk

Credit risk arises from cash and cash equivalents, deposits with banks and financial institutions, and if a counterparty will default on its contractual obligations resulting in financial loss to the Group.

The credit risk on liquid funds is limited because cash balances are held with bank and financial institutions with credit-ratings assigned by international credit-rating agencies. All deposits are held with banks with S&P ratings of A-2 and AA- for short term deposits.

At December 31, 2017, no current asset receivables were aged over three months. No receivables were impaired.

# b. Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they become due. The principal risk to which the Group is exposed is liquidity risk. See discussion in Note 1 as it relates to the Group's ability to continue as a going concern.

The Group has financed its operations to date using cash raised through the issuance of debt and equity. The Directors acknowledge that uncertainty remains over the ability of the Group to have the resources to fully support advancing iclaprim through regulatory approval and commercialization in the United States and Europe. Subject to the availability of funding, the Group also plans to commence additional phase 3 clinical trials of iclaprim in patients with hospital acquired bacterial pneumonia, including those with ventilator-associated bacterial pneumonia. To fund the additional clinical trial and the commercialization of iclaprim, the Group will need additional funding through public markets, private financing, and/or partnering opportunities.

The Group is heavily dependent on the public markets both in the United States and United Kingdom. A downtum in the public markets, especially in biotech, may make it difficult for the Group to obtain sufficient funds on acceptable terms. A delay obtaining additional funding could lead to a decrease in the Group's prospects for the commercialization of iclaprim.

In the event that the Group does not have adequate capital to maintain or develop its business, additional capital may not be available to the Group on a timely basis, on favorable terms, or at all, which could have a material and negative impact on the Group's business and results of operations.

Contractual maturities of financial liabilities:

At December 31, 2017	< 1 year US \$	Between 1 and 2 years US \$	Between 2 and 5 years US \$	Over 5 years US \$	Total
Trade and other payables	10,889,554				10,889,554
Payable on completion of clinical trial	500,000	_	_	_	500,000
Derivative liabilities	´ —	_	12,626,299	_	12,626,299
Term Loan and other non-current (Note 13)	_	4,699,701	10,730,299	_	15,430,000
	11,389,554	4,699,701	23,356,598		39,445,853
At December 31, 2016	<1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total
At December 31, 2016 Trade and other payables	us s			Over 5 years US \$	Total
Trade and other payables	•	and 2 years	and 5 years	•	Total 12,319,117 500,000
,	US \$ 12,319,117	and 2 years	and 5 years	•	12,319,117
Trade and other payables Payable on completion of clinical trial	US \$ 12,319,117	and 2 years	and 5 years US \$	•	12,319,117 500,000

#### c. Market risk

Foreign currency risk

The Group undertakes certain transactions denominated in foreign currencies. Hence, exposures to exchange rate fluctuations arise. Exchange rate exposures are managed by minimizing the balance of foreign currencies to cover expected cash flows during periods where there is strengthening in the value of the foreign currency. The Group holds part of its cash resources in US dollars and British pounds sterling. The valuation of the cash fluctuates along with the US dollar/sterling exchange rate. No hedging of this risk is undertaken.

The carrying amounts of foreign currency denominated monetary net assets at the reporting date are as follows:

	December 31, 2017	December 31, 2016
	US \$	US \$
Sterling - Cash	461.857	17.795

At December 31, 2017, a change in foreign currency exchange rates is not expected to have a significant impact on the profit or losses of the Group.

Interest rate risk

The Group's exposure to interest rate risk is limited to interest earned on the cash and cash equivalent balance of \$22.7 million and its financing exposures on the Hercules loan, which has an initial interest rate of 10% tied to the U.S. prime rate. A change in interest rates is not expected to have a significant impact on the profit or losses of the Group.

# d. Capital risk management

The Directors define capital as the total equity of the Group. The Directors' objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal structure to reduce the cost of capital. In order to maintain an optimal capital structure, the Directors may adjust the amount of dividends paid to shareholders, return capital to shareholders and issue new shares to reduce debt.

#### 4. Other income and expense items

This note provides a breakdown of the items included in other income, finance income, and costs and an analysis of expenses by nature for the years ended December 31, 2017, 2016 and 2015.

#### a. Other income

	Year ended Dec	Year ended Dec	Year ended Dec
	31, 2017	31, 2016	31, 2015
	US \$	US \$	US \$
Gains on settlement of contract disputes		83,320	5,027

The gain on settlement of contract disputes for the year ended December 31, 2016 relates to a write off of a payable due to a consultant as a result of a settlement with him. The gain on settlement of contract disputes for the year ended December 31, 2015 primarily relates to payables to a Director for amounts owed to him for his services as Chief Executive Officer. These amounts were written off in a settlement agreement.

# b. Breakdown of expenses by nature

	Year ended Dec 31, 2017 US \$	Year ended Dec 31, 2016 US \$	Year ended Dec 31, 2015 US \$
General and administrative expenses	·		
Employee benefits expenses, including share-based payments	2,778,854	1,445,110	1,146,566
Directors' fees	728,798	423,051	380,969
Legal and professional fees	2,762,334	2,073,317	1,444,507
Investor and public relations advisory fees	1,283,012	647,919	292,949
Other expenses	988,398	322,753	312,189
	8,541,396	4,912,150	3,577,180
Research and development costs			
Employee benefits expenses, including share-based payments	1,468,719	677,412	_
Contract research organization expenses	22,066,179	30,445,967	3,055,421
Chemistry and manufacturing development and other non-clinical development	2,933,475	2,145,641	949,466
Other research and development costs	3,006,920	1,525,795	676,053
	29,475,293	34,794,815	4,680,940
	2017	2016	2015
Auditors' Remuneration	US \$	US \$	US \$
Audit Fees	526,170	871,523	73,730
Audit-Related Fees		_	_
Tax Fees	_	_	_
Other Fees	_	_	_
Total	526,170	871,523	73,730

# c. Finance income and costs

	Year ended Dec 31, 2017 US \$	Year ended Dec 31, 2016 US \$	Year ended Dec 31, 2015 US \$
Finance income			
Interest from financial assets	133,612	69,754	15,028
	133,612	69,754	15,028
Finance costs			
Interest expense	(200,000)	(383,259)	(268,216)
Accretion of end of term payment	(22,758)	_	_
Amortization of deferred financing costs	(52,691)		
	(275,449)	(383,259)	(268,216)
Net finance costs	(141,837)	(313,505)	(253,188)

# 5. Employee numbers and costs

The monthly average number of persons employed by the Group (including Executive Directors but excluding Non-executive Directors) and key management personnel during the year, analyzed by category, was as follows:

	Year ended Dec 31, 2017	Year ended Dec 31, 2016	Year ended Dec 31, 2015
Executive Directors	1	2	2
Key management personnel	7	4	2
Total	8	6	4

The aggregate payroll costs of Executive Directors and key management personnel were as follows:

	Year ended Dec 31, 2017 US \$	Year ended Dec 31, 2016 US \$	Year ended Dec 31, 2015 US \$
Short term benefits:			
Wages and salaries	2,287,458	1,527,776	935,081
Social security and other employer costs	252,040	67,410	60,604
Share based payments(1)	1,120,374	119,845	150,881
	3,659,872	1,715,031	1,146,566

(1) The total share based payments does not reflect the out-of-period adjustment recorded in 2017 (Note 16).

# 6. Directors' remuneration

	Salaries and fees US \$	Bonuses US \$	Social Security US \$	2017 Total US \$ (2)	2016 Total US \$	2015 Total US \$
Executive						
Graham Lumsden(1)(2)	425,000	127,500	15,499	567,999	488,510	557,180
Non-executive						
Robert Bertoldi(2)	125,000	_	9,563	134,563	137,783	135,126
Richard Morgan	113,500	_	_	113,500	177,725	217,072
Charlotta Ginman(3)	67,279	_	_	67,279	57,475	32,042
Jonathan Gold	194,004	_	_	194,004	114,094	25,881
Zaki Hosny	63,000	_	_	63,000	57,475	28,756
Mary Lake Polan	60,000	_	_	60,000	54,094	25,881
John Stakes(4)	_	_	_	_	30,869	28,756
Bruce Williams	64,000	_	_	64,000	54,094	25,881
Craig T. Albanese	38,333	_	_	38,333	_	_
Total	1,150,116	127,500	25,062	1,302,678	1,172,119	1,076,575

<sup>(1)</sup> On February 28, 2018, Dr. Lumsden was awarded a cash bonus of \$127,500 for services provided in 2017. A portion, or \$42,500, of the cash bonus is contingent on meeting certain operational milestones in 2018.

The Directors' remuneration included in the table above represents the amount paid and/or awarded to each director during the years ending December 31, 2017 and 2016. The highest paid director's aggregate emolument was \$567,999 for the year ending December 31, 2017. No director exercised share options during the year ending December 31, 2017.

<sup>(2)</sup> Total remuneration for Dr. Lumsden and Mr. Bertoldi exclude employer 401k pension contributions of \$7,950 and \$6,075, respectively, during 2017.

<sup>(3)</sup> Ms. Ginman's remuneration for 2017 was £52,195 or US \$67,279 based on an average exchange rate of 1.289 for the period.

<sup>(4)</sup> Mr. Stakes resigned from the Board of Directors effective July 1, 2016.

Directors of the Company have been awarded rights to subscribe for shares in the Group as set out below.

	January 1, 2017	Granted	December 31, 2017		Exercise price US \$	Grant date	Expiry date
Richard Morgan	73,215	_	73,215	\$	0.70	Jan 1, 2010	Jan 1, 2020
reionara morgan	6,179	_	6,179	\$	0.70	Jan 1, 2011	Jan 1, 2021
	502,950	_	502,950		0.14	Dec 4, 2014	Dec 4, 2024
	582,344		582,344			, ,	, ,
Craig T. Albanese		100,000	100,000	\$	0.44	May 4, 2017	May 4, 2027
		100,000	100,000				
Robert Bertoldi	53,887	_	53,887	\$	0.70	Jan 1, 2010	Jan 1, 2020
Robert Bertoldi	251,475	_	251,475	\$	0.70	Dec 4, 2014	Dec 4, 2024
	305,362		305,362	Ψ	0.14	DCC 4, 2014	Dec 4, 2024
	,						
Charlotta Ginman	251,475		251,475	\$	0.14	Dec 4, 2014	Dec 4, 2024
	251,475	<u> </u>	251,475				
Jonathan Gold	73,502	<u>_</u>	73,502	\$	0.70	Jan 1, 2010	Jan 1, 2020
Johathan Gold	5,964	_	5,964	\$	0.70	Jan 1, 2011	Jan 1, 2021
	251,475	_	251,475	\$	0.14	Dec 4, 2014	Dec 4, 2024
	330,941		330,941	Ψ	0.1	200 1,2011	300 1,2021
Zaki Hosny	53,888	_	53,888	\$	0.70	Jun 18, 2009	Jun 18, 2019
	14,370	_	14,370	\$	0.70	Jan 1, 2010	Jan 1, 2020
	2,587	_	2,587	\$	0.70	Jan 1, 2011	Jan 1, 2021
	107,774	_	107,774	\$	0.14	Jan 30, 2013	Jan 30, 2023
	251,475	<u> </u>	251,475	\$	0.14	Dec 4, 2014	Dec 4, 2024
	430,094		430,094				
Graham Lumsden	574,800	_	574,800	\$	0.14	May 25, 2013	May 25, 2023
Granam Eumsten	2,874,000	_	2,874,000	\$	0.14	Dec 4, 2014	Dec 4, 2024
		1,000,000	1,000,000	\$	0.33	Feb 7, 2017	Feb 7, 2027
	_	700,000	700,000	\$	0.33	Feb 7, 2017	Feb 7, 2027
	3,448,800	1,700,000	5,148,800				
V	( <b>7</b> .02 (		6 <b>7</b> 02 6	Φ.	0.70	1 1 2010	1 2020
Mary Lake Polan	67,036	_	67,036	\$	0.70	Jan 1, 2010	Jan 1, 2020
	5,461	_	5,461	\$	0.70	Jan 1, 2011	Jan 1, 2021
	251,474 323,971	<u>_</u>	251,474 323,971	\$	0.14	Dec 4, 2014	Dec 4, 2024
	323,971		323,971				
Bruce Williams	67,252		67,252	\$	0.70	Jan 1, 2010	Jan 1, 2020
	28,740	_	28,740	\$	0.70	Jan 16, 2010	Jan 16, 2020
	71,850	_	71,850	\$	0.70	Nov 15, 2010	Jan 16, 2020
	2,802	_	2,802	\$	0.70	Jan 1, 2011	Jan 1, 2021
	251,474		251,474	\$	0.14	Dec 4, 2014	Dec 4, 2024
	422,118	<u> </u>	422,118				
			F-20				

# 7. Income tax expense

Recognized in the income statement:

Current tax expense	Year ended Dec 31, 2017 US \$	Year ended Dec 31, 2016 US \$	Year ended Dec 31, 2015 US \$
U.K. corporation taxes			
Overseas taxes	22,000	287	774
	22,000	287	774

The main rate of U.K. corporation tax was reduced from 21% to 19% from April 1, 2015 and has been reflected in these consolidated financial statements.

The tax expense recognized for the years ended December 31, 2017, 2016 and 2015 is lower than the standard rate of corporation tax in the U.K. of 19%. The differences are reconciled below:

	2017	2016	2015
Reconciliation of effective tax rate:	US \$	US \$	US \$
Loss on ordinary activities before taxation	(44,788,366)	(40,324,015)	(8,515,925)
U.K. Corporation tax at 19%	(1,570,723)	(449,929)	(355,889)
Overseas tax at higher rate	(7,669,495)	(12,954,729)	(2,297,873)
Effects of:			
Unrecognized losses	(9,240,218)	(13,404,371)	(2,652,988)
Other adjustments-overseas taxes	22,000	287	774
Total tax charge	22,000	287	774

There is an unrecognized cumulative deferred tax asset of US\$1,783,102, relating to deferred tax on losses generated of US\$10,488,833, in the U.K. during the years ended December 31, 2017 and 2016.

# 8. Loss per share

Basic loss per share is calculated by dividing the loss attributable to equity holders of the Group by the weighted average number of shares in issue during the year. In accordance with IAS 33, where the Group has reported a loss for the period, the shares are anti-dilutive.

	Year ended Dec 31, 2017 US \$	Year ended Dec 31, 2016 US \$	Year ended Dec 31, 2015 US \$
Loss after taxation	(44,810,366)	(40,324,302)	(8,516,699)
Basic and diluted weighted average shares in issue	231,530,091	116,558,191	61,225,922
Basic and diluted loss per share	(0.19)	(0.35)	(0.14)

The following potentially dilutive securities outstanding at December 31, 2017, 2016 and 2015 have been excluded from the computation of diluted weighted average shares outstanding, as they would be antidilutive.

	2017	2016	2015
Convertible promissory notes			14,510,770
Warrants	49,399,947	5,726,364	6,925,962
Share options	17,065,534	6,810,357	7,182,674
	66,465,481	12,536,721	28,619,406
	F-21		

# 9. Intangible assets

As of December 31, 2015	
Cost	6,195,748
Accumulated amortization and impairment	
Net book amount at December 31, 2015	6,195,748
Additions	_
Amortization charge	_
Net book amount at December 31, 2016	6,195,748
	-
As of December 31, 2016	
Cost	6,195,748
Accumulated amortization and impairment	_
Net book amount at December 31, 2016	6,195,748
Additions	<u> </u>
Amortization charge	<del>-</del>
Net book amount at December 31, 2017	6,195,748

The Directors do not believe that the merger between Motif BioSciences Inc. and Nuprim Inc. meets the definition of an acquisition of a business as set out in IFRS 3 and is therefore accounted for as an acquisition of an asset.

The fair value of the assets acquired under the merger arrangement represent the aggregate estimated value of:

- 11,318,439 ordinary shares in Motif Bio plc at the placing price of 20 pence per share;
- 9,432,033 warrants at the placing price of 20 pence per ordinary share; and
- a milestone payment of US \$500,000 to be paid by Motif BioSciences Inc. to Acino Pharma AG upon completion of the first Phase III trial.

The value of the warrants has been estimated using the Black Scholes option pricing model with appropriate factors for volatility and risk-free interest rate. The Directors considered the separable value of the active pharmaceutical ingredients and determined it did not constitute a material component of the fair value of the assets acquired. No discount has been applied to the expected milestone payment of US \$500,000 given management's expectation that the liability will be settled in early 2018.

Details of the purchase consideration and amounts attributed to net assets acquired are as follows:

	US \$
Purchase consideration:	
Ordinary shares in Motif Bio plc	3,355,375
Warrants to subscribe for ordinary shares in Motif Bio plc	2,340,373
Total purchase consideration	5,695,748
Iclaprim assets	6,195,748
Milestone payment	(500,000)
Net assets acquired	5,695,748

As the IPR&D asset is not yet available for commercial use, no amortization has been charged to date.

The Group performs an impairment test over the asset on an annual basis or when a triggering event has occurred. Based on the results of the test, no impairment was recorded in the years ended December 31, 2017 or 2016.

# 10. Prepaid expenses and other receivables

	Dec 31, 2017	Dec 31, 2016
Amounts due within one year	US \$	US \$
Prepayments and other receivables	317,584	401,064
	317,584	401,064

The maximum exposure to credit risk at the end of each reporting period is the fair value of each class of receivables set out above. The Group held no collateral as security. The Directors estimate that the carrying value of receivables approximated their fair value.

# 11. Cash and cash equivalents

	Dec 31, 2017 US \$	Dec 31, 2016 US \$
Cash at bank	22,651,475	21,829,632
	22,651,475	21,829,632

# 12. Trade and other payables

Amounts due within one year	Dec 31, 2017 US \$	Dec 31, 2016 US \$
Amounts due within one year	033	033
Trade payables (1)	6,464,038	734,405
Accrued expenses — Contract research organization	1,293,379	10,854,531
Accrued expenses — Other	3,007,893	727,947
Amounts due to affiliates	_	78
Other payable	124,244	2,156
	10,889,554	12,319,117

<sup>(1)</sup> Trade payables include \$5,704,052 owed to the Group's contract research organization.

The Directors estimate that the carrying value of trade and other payables approximated their fair value. The amounts due to the Group's contract research organization are due in 2018.

#### 13. Interest bearing loans and borrowings

	Dec 31, 2017	Dec 31, 2016
Non-current liabilities	US \$	US \$
Term Loan	15,000,000	_
Deferred financing costs	(942,853)	_
Net non-current liabilities	14,057,147	

On November 15, 2017, the Group entered into a credit agreement (the "Hercules Loan Agreement") for up to \$20 million in debt financing with Hercules Capital, Inc. ("Hercules"). Pursuant to the credit agreement, Hercules agreed to loan the Group \$20.0 million in two tranches. The first tranche of \$15.0 million was drawn down at closing, with the remaining \$5.0 million available upon the achievement of certain milestones anticipated in 2018, or at Hercules's discretion.

These milestones include (i) (x) the FDA has accepted Borrower's new drug application for marketing approval with respect to Borrower's "Iclaprim" product for the treatment of patients with acute bacterial skin and skin structure infection ("ABSSSI") and (y) Borrower has enrolled its first patient in its Phase 3 clinical study of Borrower's "Iclaprim" product for the treatment of hospital-acquired bacterial pneumonia ("HABP"), (ii) Borrower has obtained market approval from the FDA with respect to Borrower's "Iclaprim" product for the treatment of patients with ABSSSI, or (iii) at the discretion of Hercules.

The terms include an initial interest-only period of 15 months, extendable to 21 months on the achievement of certain milestones; a 30-month capital and interest repayment period thereafter; an interest rate of 10% tied to the US prime rate and customary security over all assets of the Group, except for intellectual property where there is a negative pledge. In addition, there is a payment of \$0.4 million due at the end of the term of the loan. Under the credit agreement, the Group issued Hercules a warrant to purchase up to 73,452 of its ADS (each representing 20 ordinary shares) at an exercise price of \$9.53 per ADS, representing 3.5% warrant coverage of the total loan facility. Hercules also has the right, in its discretion, to participate in any subsequent financing, such as an equity offering, in an amount up to \$1 million. In connection with the Hercules Loan Agreement closing, the Group incurred \$0.5 million in fees and issued warrants with a fair value of approximately \$0.4 million. Both items are classified as a direct reduction from the Hercules Loan Agreement balance and will be amortized over the life of the Loan using the effective interest rate method. The Group is also subject to an end of term charge equal to 2.15% of the total loan capacity. The end of term charge is payable upon loan maturity or the date that the Group prepays the outstanding loan balance. For the year ended December 31, 2017, the Group recognized total interest expense of \$275,449, comprised of interest expense of \$200,000, accretion expense related to the deferred financing costs of \$52,691. Under the Hercules Loan Agreement, the Group was required to provide Hercules Capital, Inc. certain informational reports by December 30, 2017. The Group did not provide such information in a timely manner. The Group believes and represents that it has provided all required informational reports and is in compliance with covenant requirements as of December 31, 2017 and as of the date that these financial statements are issued, as we bel

#### 14. Warrants

# Warrant activity

The Group has issued warrants for services performed and in conjunction with various equity financings. The Group's warrants represent ordinary shares or ADS and have either a Pounds Sterling or US Dollar exercise price. The ADS warrants are exercisable to purchase ADS's, which each represent 20 ordinary shares. Depending on the terms of the warrant agreements, the ordinary share or ADS warrants are classified as either equity or a liability. Liability classified warrants are remeasured each reporting period, with changes in fair value recorded in the statements of comprehensive loss. The following is a summary of the Group's warrant activity during the year ended December 31, 2017:

Waighted Average

	Number of Warrants			Exercise Price		
	Ordinary shares	ADS	Ordinary shares		ADS	
Outstanding as of January 1, 2017	23,729,865	1,219,246	£	0.278	\$	8.03
Expired (1)	(416,645)	_	\$	0.56		_
Granted	<u> </u>	133,452		_	\$	8.51
Exercised	(640,353)	(16,344)	£	0.322	\$	8.03
Outstanding as of December 31, 2017	22,672,867	1,336,354	£	0.272	\$	8.08

<sup>(1)</sup> The ordinary warrants that expired in December 2017 had an exercise price denominated in US dollars. All other ordinary warrants have Pounds Sterling exercise prices.

The Group's warrants outstanding and exercisable as of December 31, 2017 were as follows:

	Number Outstanding and			
Type of Warrant Outstanding	Exercisable		Exercise Price	Expiration Date
Ordinary shares (1)	1,367,089	GBP £	0.20	April 2, 2020
Ordinary shares (1)	1,082,384	GBP £	0.50	July 21, 2020
Ordinary shares (2)	10,791,361	GBP £	0.322	November 23, 2021
ADS (2)	1,202,902	US\$	8.03	November 23, 2021
Ordinary shares (1)	9,432,033	GBP ₤	0.20	April 2, 2025
ADS (2)	60,000	US\$	7.26	July 31, 2022
ADS (2)	73,452	US\$	9.53	November 14, 2022

(1) Warrants totaling 11,881,506 of ordinary shares are equity classified.

(2) Warrants totaling 10,791,361 of ordinary shares and 1,336,354 of ADS are liability classified.

# **Liability classified warrants**

#### **ADS** warrants

On November 23, 2016, the Group closed an initial U.S. offering of 2,438,491 ADS and 1,219,246 ADS warrants at a price of US \$6.98 per ADS/Warrant combination. Each ADS represents 20 ordinary shares. The warrants have an exercise price of US \$8.03 per ADS and expire on November 23, 2021. In the event the Group fails to maintain the effectiveness of its Registration Statement and a Restrictive Legend Event has occurred, the warrant shall only be exercisable on a cashless basis. This would result in variability in the number of shares issued and therefore, the warrants were designated as a financial liability carried at fair value through profit and loss. On issuance of the ADS warrants, the Group recorded a derivative liability of US \$3,849,160 using the Black-Scholes model. The Group develops its own assumptions for use in the Black-Scholes option pricing model that do not have observable inputs or available market data to support the fair value. This method of valuation involves using inputs such as the fair value of the Group's common stock, stock price volatility of comparable companies, the contractual term of the warrants, risk free interest rates and dividend yields. The Group has a limited trading history in its common stock, therefore, expected volatility is based on that of reasonably similar publicly traded companies. Due to the nature of these inputs, the valuation of the warrants is considered Level 1 and 2 measurements.

On August 1, 2017, the Group issued to a third party a warrant to purchase up to 60,000 ADSs at an exercise price of \$7.26 per ADS. The warrant vests 5,000 ADS at issuance, with the remaining 55,000 ADS vesting upon satisfaction of various performance conditions related to the Group's stock price and trading volumes. Once vested, the warrant may be exercised on a cashless basis, and expires on July 31, 2022. Exercising on a cashless basis would result in variability in the number of shares issued and therefore, the warrants were designated as a financial liability carried at fair value through profit and loss. On issuance of the ADS warrants, the Group recorded a derivative liability of US \$109,431 using the Black-Scholes model.

At issuance, the following assumptions were used in the Black-Scholes model.

	August 1, 2017
Share price (US \$)	7.26
Exercise price (US \$)	7.26
Expected volatility	70%
Number of periods to exercise	5.0
Risk-free rate	1.80%
Expected dividends	_

On November 14, 2017, in conjunction with the Hercules Loan Agreement, the Group issued Hercules a warrant to purchase up to 73,452 ADSs at an exercise price of \$9.53 per ADS, representing 3.5% warrant coverage of the total loan facility. The warrant may be exercised on a cashless basis, and is immediately exercisable through November 14, 2022. Exercising on a cashless basis would result in variability in the number of shares issued and therefore, the warrants were designated as a financial liability carried at fair value through profit and loss. On issuance of the ADS warrants, the Group recorded a derivative liability of US \$419,573 using the Black-Scholes model.

At issuance, the following assumptions were used in the Black-Scholes model.

	November 14, 2017
Share price (US \$)	9.53
Exercise price (US \$)	9.53
Expected volatility	72%
Number of periods to exercise	5.0
Risk-free rate	2.06%
Expected dividends	_

At December 31, 2017 and 2016, the liability classified ADS warrants had a fair value of US \$8,927,252 and \$3,967,189 using the following weighted-average assumptions in the Black-Scholes model:

	December 31, 2017	December 31, 2016
Share price (US \$)	10.81	6.19
Exercise price (US \$)	7.91	8.03
Expected volatility	74%	70%
Number of periods to exercise	3.82	4.92
Risk-free rate	1.93%	1.91%
Expected dividends	_	_

# **Ordinary warrants**

On November 23, 2016 the Group placed 22,863,428 ordinary shares together with 11,431,714 warrants over ordinary shares at a price of £0.28 per share/warrant combination. The warrants have an exercise price of £0.322 per warrant and expire on November 23, 2021. In the event that the Group fails to maintain the effectiveness of the Registration Statement, the warrant shall only be exercisable on a cashless basis. This would result in variability in the number of shares issued and therefore, the warrants were designated as a financial liability carried at fair value through profit and loss. On issuance of the warrants, the Group recorded a derivative liability of US \$1,812,959 using the Black-Scholes model.

At December 31, 2017 and 2016, the liability classified ordinary warrants had a fair value of US \$3,699,047 and \$1,830,869 using the Black-Scholes model and the following assumptions:

	December 31, 2017	December 31, 2016
Share price (GBP)	0.41	0.25
Exercise price (GBP)	0.322	0.322
Expected volatility	76%	70%
Number of periods to exercise	3.90	4.92
Risk free rate	2.09%	1.91%
Expected dividends	_	_

The following is a summary of the Group's liability classified warrant activity, including both ADS and Ordinary warrants, during the years ended December 31, 2017 and 2016:

	Fair value
Liability classified warrants	 \$
January 1, 2016	_
Issued during the year	\$ 5,662,119
Loss from revaluation of derivative liabilities	135,939
Balance at December 31, 2016	5,798,058
Issued during the year	529,004
Exercised during the year	(284,402)
Impact of foreign exchange	192,088
Loss from revaluation of derivative liabilities	6,391,551
Balance at December 31, 2017	\$ 12,626,299

#### 15. Contingent liabilities

On February 28, 2018, the Group's board of directors awarded Dr. Lumsden a cash bonus of \$127,500 for his performance and contributions during 2017. A portion, or \$42,500, of the cash bonus is contingent upon achieving certain operational milestones in 2018. Dr. Lumsden received a separate supplemental bonus of \$50,000 that is also contingent upon operational milestones in the first half of 2018. Dr. Huang was awarded a cash bonus of \$142,000 for his performance and contributions in 2017. A portion, or \$42,000, of the cash bonus is contingent upon achieving certain operational milestones in 2018.

### 16. Share based payments

Motif BioSciences Inc. issued options and warrants to employees, directors, consultants, and note holders. As part of the merger between Motif Acquisition Sub, Inc. and Motif BioSciences Inc., described in Note 1, each outstanding share option granted by Motif BioSciences Inc. was assumed and converted by Motif Bio plc into options to subscribe for ordinary shares in Motif Bio plc. The number of share options and the exercise prices have been adjusted to reflect the reverse stock split in the capital of Motif BioSciences Inc. on March 13, 2015.

On December 4, 2014, Motif BioSciences Inc. adopted a Share Option Plan (the "Plan") under which options can be granted to employees, consultants, and directors. The share price used for the Plan prior to being traded on AIM was based on management's assessment of the valuation of the Group given the net assets and future potential of the Group at the time of granting.

Motif Bio plc adopted a Share Option Plan (the "New Plan") on April 1, 2015. The New Plan replaces Motif BioSciences Inc.'s previous share plan. There were no changes to the fair value of share options granted under the Plan with the only change being to grant the holders shares in Motif Bio plc rather than Motif BioSciences Inc. upon exercising options. The exercise price for each option will be established at the discretion of the Board provided that the exercise price for each option shall not be less than the nominal value of the relevant shares if the options are to be satisfied by a new issue of shares by the Company and provided that the exercise price per share for an option shall not be less than the fair market value of a share on the effective date of grant of the option. Options will be exercisable at such times or upon such events and subject to such terms, conditions and restrictions as determined by the Board on grant date. However, no option shall be exercisable after the expiration of ten years after the effective date of grant of the option.

	Number of share options	Weighted average exercise price US \$
Outstanding at January 1, 2016	13,427,495	0.33
Granted during the year	3,261,577	0.58
Forfeited during the year	_	<del>-</del>
Exercised during the year	(263,690)	0.14
Expired during the year	(862,200)	0.70
Outstanding at December 31, 2016	15,563,182	0.37
Granted during the year	5,800,000	0.33
Forfeited during the year	(4,153,948)	0.53
Exercised during the year	(143,700)	0.14
Expired during the year	<u> </u>	<u> </u>
Outstanding at December 31, 2017	17,065,534	0.32
Exercisable at December 31, 2017	11,334,173	0.29

The range of exercise prices of the options at December 31, 2017 was US \$0.14 - \$0.91. The weighted average contractual term of options outstanding at December 31, 2017 and 2016 was 7.0 years and 7.3 years, respectively. The weighted average remaining contractual term of options exercisable at December 31, 2017 was 6.1 years.

The fair value of options granted have been valued using the Black Scholes option pricing model. The weighted-average fair value of options granted during the year ended December 31, 2017 was \$0.26. Volatility is based on reported data from selected reasonably similar publicly traded companies for which the historical information is available. The Group does not have sufficient history to estimate the volatility of its share price. The weighted-average assumptions for option grants were as follows:

	Year ended Dec 31, 2017
Share price (US \$)	0.34
Exercise price (US \$)	0.34
Expected volatility	70.86%
Term	10 years
Risk free rate	2.11%
Expected dividends	_

The total expense recognized for the years arising from stock-based payments are as follows:

	Year ended Dec 31, 2017 US \$	Year ended Dec 31, 2016 US \$	Year ended Dec 31, 2015 US \$
General and administrative expense	1,143,496	513,541	325,908
Research and development expense	564,579	_	_
Total share-based payment expense	1,708,075	513,541	325,908

During the preparation of the interim financial statements for the six months ended June 30, 2017, the Group identified and corrected a prior period error whereby stock based compensation expense was understated primarily due to recognizing expense only when an award vested, not over the required service period using a graded vesting approach as required under IFRS 2. The Group assessed the materiality of the out-of-period adjustments on all impacted periods and determined that they were not material to any of the periods and that a restatement of previously issued financial statements was not required. The Group concluded that the cumulative adjustment to correct the error should be recorded in the year ended December 31, 2017.

The expense in fiscal years 2016 and 2015 and 2014 was understated by \$802,282, \$291,696 and \$31,799, respectively. The out-of-period correction increased General and Administrative expense by \$762,836 and Research and Development expense by \$362,941 for the year ended December 31, 2017. None of these adjustments had an impact on the cash resources of the Group.

# 17. Share capital

Allotted, called up and fully paid:	Number	US \$
L. : D	100 (01 40)	1 (45 201
In issue at December 31, 2015	108,601,496	1,645,291
Issued:		
Ordinary shares of 1p each	409,000	5,405
Ordinary shares of 1p each	48,769,820	607,574
Ordinary shares of 1p each	22,863,428	284,833
Ordinary shares of 1p each	119,990	1,509
Ordinary shares of 1p each	467,024	5,801
Ordinary shares of 1p each	14,510,770	177,786
In issue at December 31, 2016	195,741,528	2,728,199
Issued:		
Ordinary shares of 1p each	143,700	1,748
Ordinary shares of 1p each	326,880	4,262
Ordinary shares of 1p each	66,666,667	846,667
Ordinary shares of 1p each	250,000	3,185
Ordinary shares of 1p each	390,353	5,140
In issue at December 31, 2017	263,519,128	3,589,201

On September 9, 2016, Motif Bio plc issued 409,000 ordinary shares to Amphion Innovations plc as part of the terms of the renegotiated convertible promissory notes.

On November 23, 2016, Motif Bio plc issued 2,438,491 ADSs upon the closing of an initial U.S. offering and 1,219,246 warrants over ADS at a price of US \$6.98 per ADS/Warrant combination. Each ADS represents 20 ordinary shares.

On November 23, 2016, Motif Bio plc issued 22,863,428 ordinary shares together with 11,431,714 warrants over ordinary shares at a price of 28 pence per share/warrant combination.

On November 29, 2016, 119,990 ordinary shares were issued upon the exercise of options.

In December 2016, 467,024 ordinary shares were issued upon the exercise of options and warrants.

In December 2016, Motif Bio plc issued 14,510,770 new ordinary shares following the conversion of convertible promissory notes by Amphion Innovations plc and Amphion Innovations US Inc. The notes which totaled US \$3,550,786 were converted in accordance with their terms at US \$0.2447 per share.

In January 2017, 143,700 ordinary shares were issued upon the exercise of options.

In May 2017, 326,880 ordinary shares were issued upon the exercise of warrants.

In June 2017, Motif Bio plc issued 66,666,667 ordinary shares at a price of 30 pence per share.

In July 2017, 250,000 ordinary shares were issued upon the exercise of warrants.

In November 2017, a total of 390,353 ordinary shares were issued upon the exercise of warrants.

Share premium represents the excess over nominal value of the fair value consideration received for equity shares net of expenses of the share issue.

Retained deficit represents accumulated losses.

The group re-organization reserve arose when Motif Bio plc became the parent of the Group. The transaction, falling as it does outside the scope of IFRS 3, has been accounted for as a group re-organization and not a business combination. The re-organization reserve can be derived by calculating the difference between the nominal value of the shares in Motif Bio plc issued to the former shareholders in Motif BioSciences Inc. and the share capital and share premium of Motif BioSciences Inc. at the date of the merger.

# 18. Financial assets and financial liabilities

The Group holds the following financial instruments:

Financial assets		Financial assets at amortized cost US \$
2017		05 \$
Prepaid expenses and other receivables		317,584
Cash and cash equivalents		22,651,475
•		22,969,059
2016		
Prepaid expenses and other receivables		401,064
Cash and cash equivalents		21,829,632
		22,230,696
	F-29	

	Financial liabilities at amortized cost
Financial liabilities	US \$
2017	
Trade and other payables	10,889,554
Payable on completion of clinical trial	500,000
Derivative liabilities	12,626,299
	24,015,853
2016	
Trade and other payables	12,319,117
Payable on completion of clinical trial	500,000
Derivative liabilities	5,798,058
	18,617,175

#### Fair value disclosures

The Group's cash, prepaid expenses and other current assets and trade and other payables are stated at their respective historical carrying amounts, which approximates fair value due to their short-term nature. These are measured at fair value using Level 1 inputs. The Group's derivative liabilities are measured at fair value using Level 1 or 2 inputs. See discussion in Note 14 on the inputs utilized in the Black-Scholes option pricing model and for a rollforward of the derivative liability from December 31, 2016 to December 31, 2017. The Group determined that the book value of the Hercules Loan Agreement (Note 13) approximates its fair value as of December 31, 2017 due the proximity of the transaction date with December 31, 2017 and the interest being tied to the U.S. Prime Rate. There were no transfers between fair value levels during the years ended December 31, 2017 or 2016.

There were no non-recurring fair value measurements for the years ended December 31, 2017 or 2016.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

### 19. Subsidiaries

				Method used	
	Country of	Percentage	Percentage	to account for	
Company name	incorporation	shareholding	voting power	investment	
Motif BioSciences Inc.	Delaware, USA	100%	100%	Consolidation	Ī

The principal activity of Motif BioSciences Inc. is proprietary drug discovery research and development.

# 20. Related party transactions

# Transactions with Amphion Innovations plc and Amphion Innovations US, Inc.

At December 31, 2017, Amphion Innovations plc and its wholly owned subsidiary, Amphion Innovations US, Inc., or collectively, the Amphion Group owned 14.48% of the issued ordinary shares in Motif Bio plc. In addition, the Amphion Group previously provided funding for the activities of Motif BioSciences Inc. through the issue of convertible interest bearing loan notes, which were converted to shares in December 2016. Richard Morgan and Robert Bertoldi were directors of both the Company and Amphion Innovations plc in the period. Transactions between the Group and the Amphion Group are disclosed below:

#### Advisory And Consultancy Agreement With Amphion Innovations US, Inc.

On April 1, 2015, the Group entered into an Advisory and Consultancy Agreement with Amphion Innovations US, Inc. The consideration for the services is \$120,000 per annum. The agreement was amended in December 2016 so that either party may terminate the agreement at any time, for any reason, upon giving the other party ninety-days advance written notice. The Group paid \$120,000 to Amphion Innovations US, Inc. during each year ending December 31, 2017 and 2016 in accordance with the terms of the agreement. As of the date of this annual report, the agreement continues to be in force.

### Consultancy Agreement With Amphion Innovations plc

On April 1, 2015, the Group entered into a Consultancy Agreement with Amphion Innovations plc for the services of Robert Bertoldi, an employee of Amphion Innovations plc. The consideration for his services was \$5,000 per month. On November 1, 2015, the consideration was increased to \$180,000 per annum. On July 1, 2016, the consideration decreased to US \$75,000 per annum. The agreement was for an initial period of 12 months and would automatically renew each year on the anniversary date unless either party notifies the other by giving ninety-days written notice prior to expiration. The agreement was amended in December 2016 so that either party may terminate the agreement at any time, for any reason, upon giving the other party ninety-days advance written notice. In July 2017, the Group amended the consulting agreement with Amphion Innovations plc to increase the annual consideration to \$125,000 to better reflect Robert Bertoldi's time commitment to the Group with and effective date of January 1, 2017. The Group paid Robert Bertoldi \$125,000 and \$127,500 during the years ended December 31, 2017 and 2016 in accordance with the terms of the agreement.

#### Consultancy Agreement With Amphion Innovations US, Inc.

On September 7, 2016, the Group entered into a Consultancy Agreement with Amphion Innovations US, Inc., pursuant to which Amphion Innovations US, Inc. will provide consultancy services in relation to the Group's obligations as a NASDAQ listed company. The consideration for the services was \$15,500 per month. The agreement was for an initial period of 12 months, after which the agreement will terminate automatically unless renewed by the parties by mutual agreement. The agreement was not extended past the initial term. The Group paid \$170,500 and \$19,633 during the years ended December 31, 2017 and 2016 in accordance with the terms of the agreement.

# Consultancy Agreement With Jonathan Gold

On April 13, 2016, the Group entered into a consultancy agreement with Mr. Gold, a member of the Group's Board of Director. Under the terms of this agreement, Mr. Gold received a fixed fee of \$10,000 per month for strategic financial expert advice and guidance. The term of this agreement was six months, commencing January 1, 2016. The term of the agreement would automatically renew each month following the initial term, provided that each party provided its mutual agreement to renew in a signed writing, no later than 30 days prior to the expiration of the term. This agreement was not extended beyond the initial term.

On April 7, 2017, the Group entered into a new consultancy agreement with Mr. Gold. Under the terms of this agreement, Mr. Gold received a fixed fee of \$16,167 per month for strategic financial expert advice and guidance. The term of this agreement was twelve months, commencing January 1, 2017. The term of the agreement would automatically renew each month following the initial term, as long as either party did not provide notice to the other party of its election not to continue to renew the agreement with at least 30-days advance notice. In connection with Mr. Gold assuming the executive role as Chief Financial Officer of February 2, 2018, this agreement was suspended as of December 31, 2017.

### 21. Subsequent events

On January 19, 2018, the Group announced that it had filed a "universal" shelf registration statement on Form F-3 with the SEC, which was declared effective by the SEC on January 31, 2018. The filing of a shelf registration statement, a common practice by NASDAQ-listed companies, is intended to provide the Group with more timely and efficient access to the U.S. capital markets. The shelf registration, which can remain effective for up to three years, will enable the Company to offer, issue and sell, in one or more offerings at any time (as long as the shelf registration statement remains effective), up to an aggregate of \$80 million of ordinary shares, including ADSs, where each ADS represents 20 ordinary shares), preference shares, warrants, subscription rights, debt securities and a combination of such securities, separately or as units. The Group currently has no specific plans to issue securities under this shelf registration. The specifics of any future offering, including the prices and terms of any securities offered by the Group, would be determined at the time of any such offering and would be described in detail in a prospectus supplement filed in connection with such offering.

Effective February 2, 2018, Jonathan Gold assumed the executive role of Chief Financial Officer upon the resignation of Robert Dickey IV, the Group's former Chief Financial Officer.

On April 3, 2018, the Group announced the initiation of a rolling submission of a New Drug Application (NDA) to the U.S. Food & Drug Administration (FDA) for iclaprim. The Group commenced the submission before the end of the first quarter of 2018 and is expecting to complete the submission of the full NDA during the second quarter of 2018. The Group also announced that it received correspondence from the FDA that a small business waiver has been granted for the NDA application fee which is typically due upon submission of an NDA under the Prescription Drug User Fee Act (PDUFA). As a result, the Group did not have to pay a \$2.4 million application fee for this NDA submission.

# LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT is made and dated as of November 14, 2017 and is entered into by and among MOTIF BIOSCIENCES INC., a Delaware corporation, and each of its Qualified Subsidiaries (hereinafter collectively referred to herein as the "Borrower"), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, referred to herein as "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lender (in such capacity, the "Agent").

#### RECITALS

- A. Borrower has requested Lender to make available to Borrower Term Loan Advances in an aggregate principal amount of up to Twenty Million Dollars (\$20,000,000) (the "Maximum Term Loan Amount"); and
  - B. Lender is willing to make the Term Loan on the terms and conditions set forth in this Agreement.

#### AGREEMENT

NOW, THEREFORE, Borrower, Agent and Lender agree as follows:

# SECTION 1. DEFINITIONS AND RULES OF CONSTRUCTION

- 1.1 Unless otherwise defined herein, the following capitalized terms shall have the following meanings:
- "ABSSSI" has the meaning given to it in the definition of "Term B Milestone Event".
- "Account Control Agreement(s)" means any agreement entered into by and among the Agent, Borrower and a third party Bank or other institution (including a Securities Intermediary) in which Borrower maintains a Deposit Account or an account holding Investment Property and which perfects Agent's first priority security interest in the subject account or accounts.
- "ACH Authorization" means the ACH Debit Authorization Agreement in substantially the form of Exhibit H, which account numbers shall be redacted for security purposes if and when filed publicly by the Borrower.
  - "Advance(s)" means a Term Loan Advance.
  - "Advance Date" means the funding date of any Advance.

"Advance Request" means a request for an Advance submitted by Borrower to Agent in substantially the form of Exhibit A, which account numbers shall be redacted for security purposes if and when filed publicly by the Borrower.

"Affiliate" means, with respect to any Person (the "Initial Person"):

- (a) solely for the purposes of the third paragraph of Section 5.6 and all of Section 7.18, any other Person which Controls, is Controlled by, or is under common Control with such Initial Person. As used in this clause (a), "Control" means the direct possession of the power to direct or cause the direction of the management or policies of the Initial Person, whether through the ability to exercise voting power, including the power to elect a majority of the directors or trustees of a corporation or trust, as the case may be. "Controlling" and "Controlled" have meanings correlative thereto, and
- (b) for all other purposes, (i) any Person that directly or indirectly controls, is controlled by, or is under common control with the Initial Person, (ii) any Person directly or indirectly owning, controlling or holding with power to vote ten percent (10%) or more of the outstanding voting securities of the Initial Person, (iii) any Person ten percent (10%) or more of whose outstanding voting securities are directly or indirectly owned, controlled or held by the Initial Person with power to vote such securities, or (iv) any Person related by blood or marriage to any Person described in subsection (i), (ii) or (iii) of this paragraph. As used in this clause (b), the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of the Initial Person, whether through ownership of voting securities, by contract or otherwise.

In no event shall the Agent or any Lender be deemed an Affiliate of the Borrower.

"Agent" has the meaning given to it in the preamble to this Agreement.

"Agreement" means this Loan and Security Agreement, dated as of the Closing Date, as amended, restated, supplemented or otherwise modified from time to time.

"Amortization Date" means February 1, 2019; provided however, that (a) if all of the First Interest Only Extension Conditions are satisfied on or prior to February 1, 2019, the "Amortization Date" shall be May 1, 2019, and (b) if all of the Second Interest Only Extension Conditions are satisfied on or prior to May 1, 2019, the "Amortization Date" shall be August 1, 2019.

"Anti-Corruption Laws" shall mean all laws, rules, and regulations of any jurisdiction applicable to Borrower or any of its Affiliates from time to time concerning or relating to bribery or corruption, including without limitation the United States Foreign Corrupt Practices Act of 1977, as amended, the UK Bribery Act 2010 and other similar legislation in any other jurisdictions.

"Anti-Terrorism Laws" means any laws, rules, regulations or orders relating to terrorism or money laundering, including without limitation Executive Order No. 13224

(effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"Assignee" has the meaning given to it in Section 11.13.

"Barclays Deposit Accounts" means the following Deposit Accounts owned by Guarantor held at Barclays Bank plc under (a) Account Number 55789688 (USD), (b) Account Number 83639922 (USD), (c) Account Number 53790878 (GBP), and (d) Account Number 13248496 (GBP).

"Blocked Person" means any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with which any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

"Borrower Products" means all products, software, service offerings, technical data or technology currently being designed, manufactured or sold by Borrower or which Borrower intends to sell, license, or distribute in the future including any products or service offerings under development, collectively, together with all products, software, service offerings, technical data or technology that have been sold, licensed or distributed by Borrower since its incorporation.

"Business Day" means any day other than Saturday, Sunday and any other day on which banking institutions in the State of California are closed for business.

"Cash" means all cash, cash equivalents and liquid funds.

"Change in Control" means any reorganization, recapitalization, consolidation or merger (or similar transaction or series of related transactions) of Borrower, sale or exchange of outstanding shares (or similar transaction or series of related transactions) of Borrower in which the holders of Borrower's outstanding shares immediately before consummation of such transaction or series of related transactions do not, immediately after consummation of such transaction or series of related transactions, retain shares representing more than fifty percent (50%) of the voting power of the surviving entity of such transaction or series of related transactions (or the parent of such surviving entity if such surviving entity is wholly owned by such parent), in each case without regard to whether Borrower is the surviving entity.

"Claims" has the meaning given to it in Section 11.10.

"Closing Date" means the date of this Agreement.

"Collateral" means the property described in Section 3.

"Confidential Information" has the meaning given to it in Section 11.12.

"Consolidated Group" means Guarantor, Borrower and each Qualified Subsidiary.

"Contingent Obligation" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any Indebtedness, lease, dividend, letter of credit or other obligation of another, including any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

"Copyright License" means any written agreement granting any right to use any Copyright or Copyright registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

"Copyrights" means all copyrights, whether registered or unregistered, held pursuant to the laws of the United States of America, any State thereof, or of any other country.

"Deposit Accounts" means any "deposit accounts," as such term is defined in the UCC, and includes any checking account, savings account, or certificate of deposit.

"Domestic Subsidiary" means any Subsidiary that is not a Foreign Subsidiary.

"Due Diligence Fee" means Twenty-Five Thousand Dollars (\$25,000), which fee has been paid to Lender prior to the Closing Date, and shall be deemed fully earned on such date regardless of the early termination of this Agreement.

"Eligible Foreign Subsidiary" means any Foreign Subsidiary whose execution of a Joinder Agreement would not result in a material adverse tax consequence to Borrower.

"Equity Interests" means, with respect to any Person, the capital stock, partnership or limited liability company interest, or other equity securities or equity ownership interests of such Person.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated thereunder.

"Event of Default" has the meaning given to it in Section 9.

"Excluded Property" means, with respect to a Borrower, (a) rights held under a license that are not assignable by their terms without the consent of the licensor thereof (but only to the extent such restriction on assignment is enforceable under applicable law); (b) vehicles and other assets subject to certificates of title, (c) any leasehold interests of any Borrower in real property; and (d) any equity interests of any Foreign Subsidiary (other than 65% of the voting equity interests and 100% of the non-voting equity interests of any Foreign Subsidiary of (i) any Borrower or (ii) a Domestic Subsidiary of any Borrower); provided, that "Excluded Property" shall not include the right to receive any proceeds arising therefrom, the right to receive any payment of money (including, without limitation, General Intangibles) or any other rights referred to in Sections 9-406, 9-407, 9-408 or 9-409 of the UCC or any proceeds, substitutions or replacements of any Excluded Property (unless such proceeds, substitutions or replacements would otherwise constitute Excluded Property).

"Excluded Taxes" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 11.19, amounts with respect to such U.S. Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) U.S. Taxes attributable to such Recipient's failure to comply with Section 11.19(g), and (d) any withholding Taxes imposed under FATCA.

"Exempt Accounts" means, collectively, (i) accounts used solely to fund payroll or employee benefits, (ii) daily zero balance accounts, and (iii) deposit accounts and securities accounts with, as to all such accounts, an aggregate balance at any time less than \$50,000.

"Facility Charge" means one percent (1.0%) of the Maximum Term Loan Amount, which amounts to Two Hundred Thousand Dollars (\$200,000).

"FATCA" means Sections 1471 through 1474 of the IRC, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the IRC and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among governmental authorities and implementing such Sections of the IRC.

"Foreign Lender" means (a) if Borrower is a U.S. Person, a Recipient that is not a U.S. Person, and (b) if Borrower is not a U.S. Person, a Recipient that is resident or organized under the laws of a jurisdiction other than that in which Borrower is resident for tax purposes.

"FDA" means the U.S. Food and Drug Administration.

"Financial Statements" has the meaning given to it in Section 7.1.

"First Interest Only Extension Conditions" means satisfaction of each of the following events prior to February 1, 2019: (a) no default or Event of Default shall have occurred and then be continuing; and (b) the Term B Loan Advance has been made.

"Foreign Subsidiary" means any Subsidiary other than a Subsidiary organized under the laws of any state within the United States of America.

"Guaranty" means a guaranty agreement in a form reasonably acceptable to Agent, including, without limitation, that certain Deed of Guaranty and Indemnity dated as of the Closing Date made by Holdings in favor of Agent.

"Guarantor" means Holdings.

"Holdings" means Motif Bio Plc, a public limited company organized under the laws of England and Wales with a company number of 09320890.

"IFRS" means the International Financial Reporting Standards, consistently applied, which are in effect from time to time.

"Indebtedness" means indebtedness of any kind, including (a) all indebtedness for borrowed money or the deferred purchase price of property or services (excluding trade credit entered into in the ordinary course of business due within ninety (90) days), including reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, and (d) all Contingent Obligations.

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of the Consolidated Group under any Loan Document and (b) to the extent not otherwise described in (a), Other Taxes.

"Insolvency Proceeding" is any proceeding by or against any Person under in any jurisdiction, including, without limitation, the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other similar relief.

"Intellectual Property" means all of Borrower's Copyrights; Trademarks; Patents; Licenses; trade secrets and inventions; mask works; Borrower's applications therefor and reissues, extensions, or renewals thereof; and Borrower's goodwill associated with any of the foregoing,

together with Borrower's rights to sue for past, present and future infringement of Intellectual Property and the goodwill associated therewith.

"Inventory" means "inventory" as defined in Article 9 of the UCC.

"Investment" means any beneficial ownership (including stock, partnership or limited liability company interests) of or in any Person, or any loan, advance or capital contribution to any Person or the acquisition of any capital asset of another Person.

"IRC" means the Internal Revenue Code of 1986, as amended.

"Joinder Agreements" means for each Qualified Subsidiary, a completed and executed Joinder Agreement in substantially the form attached hereto as Exhibit G.

"Lender" has the meaning given to it in the preamble to this Agreement.

"License" means any Copyright License, Patent License, Trademark License or other license of rights or interests.

"Lien" means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, and any lease in the nature of a security interest.

"Loan" means the Advances made under this Agreement.

"Loan Documents" means this Agreement, the Notes (if any), the ACH Authorization, the Account Control Agreements, the Joinder Agreements, all UCC Financing Statements, the Warrant, the Registration Agreement, any subordination agreement, the Guaranty, the Stock Pledge Agreement and any other documents executed in connection with the Secured Obligations or the transactions contemplated hereby, as the same may from time to time be amended, modified, supplemented or restated.

"Material Adverse Effect" means a material adverse effect upon: (i) the business, operations, properties, assets or financial condition of Borrower and its Subsidiaries taken as a whole; or (ii) the ability of Borrower to perform or pay the Secured Obligations in accordance with the terms of the Loan Documents, or the ability of Agent or Lender to enforce any of its rights or remedies with respect to the Secured Obligations; or (iii) the Collateral or Agent's Liens on the Collateral or the priority of such Liens.

"Maximum Rate" shall have the meaning assigned to such term in Section 2.2.

"Maximum Term Loan Amount" shall have the meaning assigned to such term in the preamble to this Agreement.

"Non-Disclosure Agreement" means that certain Non-Disclosure Agreement by and between Borrower and Agent dated as of August 22, 2017.

"Note(s)" means a promissory note or promissory notes to evidence Lender's Loans substantially in the form of Exhibit B.

"OFAC" is the U.S. Department of Treasury Office of Foreign Assets Control.

"OFAC Lists" are, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"Other Connection Taxes" means, with respect to any Recipient, Taxes imposed on net income as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

"Patent License" means any written agreement granting any right with respect to any invention on which a Patent is in existence or a Patent application is pending, in which agreement Borrower now holds or hereafter acquires any interest.

"Patents" means all letters patent of, or rights corresponding thereto, in the United States of America or in any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto, in the United States of America or any other country.

"Permitted Indebtedness" means: (i) Indebtedness of Borrower in favor of Lender or Agent arising under this Agreement or any other Loan Document; (ii) Indebtedness existing on the Closing Date which is disclosed in Schedule 1A; (iii) Indebtedness of up to Five Hundred Thousand Dollars (\$500,000) outstanding at any time secured by a Lien described in clause (vii) of the defined term "Permitted Liens," provided such Indebtedness does not exceed the cost of the Equipment financed with such Indebtedness; (iv) Indebtedness to trade creditors incurred in the ordinary course of business, including Indebtedness incurred in the ordinary course of business with corporate credit cards; (v) Indebtedness that also constitutes a Permitted Investment; (vi) Subordinated Indebtedness; (vii) reimbursement obligations in connection with letters of credit that are secured by Cash and issued on behalf of the Borrower or a Subsidiary thereof in an amount not to exceed Three Hundred Thousand Dollars (\$300,000) at any time outstanding, (viii) other unsecured Indebtedness in an amount not to exceed One Hundred Thousand Dollars (\$100,000) at any time outstanding, (ix) intercompany Indebtedness (but not, for the avoidance of doubt, owing to Holdings) as long as either (A) each of the Subsidiary obligor and the

Subsidiary obligee under such Indebtedness is a Qualified Subsidiary that has executed a Joinder Agreement, (x) Indebtedness in respect of workers' compensation claims or obligations in respect of health, disability or other employee benefits in the ordinary course of business, (xi) Indebtedness in respect of netting services, overdraft protections and other like services, in each case incurred in the ordinary course of business, (xii) Indebtedness in respect of judgments to the extent not constituting an Event of Default, (xiii) Indebtedness consisting of unpaid insurance premiums (not in excess of one (1) year's premiums) owing to insurance companies and insurance brokers incurred in connection with the financing of insurance premiums in the ordinary course of business, and (xiv) extensions, refinancings and renewals of any items of Permitted Indebtedness, provided that the principal amount is not increased or the terms modified to impose materially more burdensome terms upon Borrower or its Subsidiary, as the case may be.

"Permitted Investment" means: (i) Investments existing on the Closing Date which are disclosed in Schedule 1B; (ii) (a) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one year from the date of acquisition thereof currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Services, (b) commercial paper maturing no more than one year from the date of creation thereof and currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Service, (c) certificates of deposit issued by any bank with assets of at least \$500,000,000 maturing no more than one year from the date of investment therein, and (d) money market accounts; (iii) repurchases of stock from former employees, directors, or consultants of Borrower under the terms of applicable repurchase agreements at the original issuance price of such securities in an aggregate amount not to exceed \$250,000 in any fiscal year, provided that no Event of Default has occurred, is continuing or could exist after giving effect to the repurchases; (iv) Investments accepted in connection with Permitted Transfers; (v) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of Borrower's business; (vi) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business, provided that this subparagraph (vi) shall not apply to Investments of Borrower in any Subsidiary; (vii) Investments consisting of loans not involving the net transfer on a substantially contemporaneous basis of cash proceeds to employees, officers or directors relating to the purchase of capital stock of Borrower pursuant to employee stock purchase plans or other similar agreements approved by Borrower's Board of Directors; (viii) Investments consisting of travel advances in the ordinary course of business; (ix) Investments in newly-formed Domestic Subsidiaries, provided that each such Domestic Subsidiary enters into a Joinder Agreement promptly after its formation by Borrower and execute such other documents as shall be reasonably requested by Agent; (x) Investments in Foreign Subsidiaries approved in advance in writing by Agent; (xi) joint ventures or strategic alliances in the ordinary course of Borrower's business consisting of the nonexclusive licensing of technology, the development of technology or the providing of technical support, provided that any cash Investments by Borrower do not exceed \$100,000 in the aggregate in any fiscal year; and (xii) additional Investments that do not exceed \$250,000 in the aggregate.

"Permitted Liens" means any and all of the following: (i) Liens in favor of Agent or Lender; (ii) Liens existing on the Closing Date which are disclosed in Schedule 1C; (iii) Liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings; provided, that Borrower maintains adequate reserves therefor in accordance with IFRS; (iv) Liens securing claims or demands of materialmen, artisans, mechanics, carriers, warehousemen, landlords and other like Persons arising in the ordinary course of Borrower's business and imposed without action of such parties; provided, that the payment thereof is not yet required; (v) Liens arising from judgments, decrees or attachments in circumstances which do not constitute an Event of Default hereunder; (vi) the following deposits, to the extent made in the ordinary course of business: deposits under worker's compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure statutory obligations (other than Liens arising under ERISA or environmental Liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds; (vii) Liens on Equipment or software or other intellectual property constituting purchase money Liens and Liens in connection with capital leases securing Indebtedness permitted in clause (iii) of "Permitted Indebtedness"; (viii) Liens incurred in connection with Subordinated Indebtedness; (ix) leasehold interests in leases or subleases and licenses granted in the ordinary course of business and not interfering in any material respect with the business of the licensor; (x) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due; (xi) Liens on insurance proceeds securing the payment of financed insurance premiums that are promptly paid on or before the date they become due (provided that such Liens extend only to such insurance proceeds and not to any other property or assets); (xii) statutory and common law rights of set-off and other similar rights as to deposits of cash and securities in favor of banks, other depository institutions and brokerage firms; (xiii) easements, zoning restrictions, rights-of-way and similar encumbrances on real property imposed by law or arising in the ordinary course of business so long as they do not materially impair the value or marketability of the related property; (xiv) (A) Liens on Cash securing obligations permitted under clause (vii) of the definition of Permitted Indebtedness and (B) security deposits in connection with real property leases, the combination of (A) and (B) in an aggregate amount not to exceed One Hundred Thousand Dollars (\$100,000) at any time; and (xv) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clauses (i) through (xi) above; provided, that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced (as may have been reduced by any payment thereon) does not increase.

"Permitted Transfers" means (i) sales of Inventory in the ordinary course of business, (ii) licenses and similar arrangements for the use of Intellectual Property in the ordinary course of business and licenses that could not result in a legal transfer of title of the licensed property but that may be exclusive in the ordinary course of business, or (iii) dispositions of worn-out, obsolete or surplus Equipment at fair market value in the ordinary course of business, and (iv) other Transfers of assets having a fair market value of not more than Two Hundred Fifty Thousand Dollars (\$250,000) in the aggregate in any fiscal year.

"Person" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, other entity or government.

"Preferred Stock" means at any given time any equity security issued by Borrower that has any rights, preferences or privileges senior to Borrower's common stock.

"Prepayment Charge" shall have the meaning assigned to such term in Section 2.4.

"Prime Rate" is the "prime rate" as reported in the Wall Street Journal or any successor publication thereto.

"Qualified Subsidiary" means any direct or indirect Domestic Subsidiary or Eligible Foreign Subsidiary.

"Receivables" means (i) all of Borrower's Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, letters of credit, proceeds of any letter of credit, and Letter of Credit Rights, and (ii) all customer lists, software, and business records related thereto.

"Recipient" means the Agent or any Lender, as applicable.

"Register" is defined in Section 11.20 of this Agreement.

"Registration Agreement" means the Registration Agreement dated as of even date hereof by and between Agent and Holdings, as may be amended, restated, supplemented or otherwise modified from time to time.

"Required Lenders" means at any time, the holders of more than 50% of the sum of the aggregate unpaid principal amount of the Term Loans then outstanding.

"Sanctioned Country" shall mean, at any time, a country or territory which is the subject or target of any Sanctions.

"Sanctioned Person" shall mean, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or by the United Nations Security Council, the European Union or any EU member state, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person controlled by any such Person.

"Sanctions" shall mean economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or (b) the United Nations Security Council, the European Union or Her Majesty's Treasury of the United Kingdom.

"SBA" shall have the meaning assigned to such term in Section 7.15.

"SBIC" shall have the meaning assigned to such term in Section 7.15.

"SBIC Act" shall have the meaning assigned to such term in Section 7.15.

"SEC" means the Securities and Exchange Commission.

"Second Interest Only Extension Conditions" means satisfaction of each of the following events prior to May 1, 2019: (a) no default or Event of Default shall have occurred and then be continuing; and (b) confirmation by Agent and Lender that Borrower has obtained FDA approval for the sale of Borrower's "Idaprim" product for the treatment of patients with ABSSSI.

"Secured Obligations" means Borrower's obligations under this Agreement and any Loan Document (other than the Warrant), including any obligation to pay any amount now owing or later arising (including, without limitation, the End of Term Charge and the Prepayment Charge).

"Securities Act" means the Securities Act of 1933, as amended.

"Stock Pledge Agreement" means the Stock Pledge Agreement dated as of the Closing Date between Holdings and Agent, as the same may from time to time be amended, restated, modified or otherwise supplemented.

"Subordinated Indebtedness" means Indebtedness subordinated to the Secured Obligations in amounts and on terms and conditions satisfactory to Agent in its sole discretion and subject to a subordination agreement in form and substance satisfactory to Agent in its sole discretion.

"Subsequent Financing" means the closing of any Borrower financing which becomes effective after the Closing Date.

"Subsidiary" means (a) an entity, whether corporate, partnership, limited liability company, joint venture or otherwise, in which Borrower owns or controls 50% or more of the outstanding voting securities, (b) a subsidiary as defined in Section 1159 of the Companies Act 2006, or (c) unless the context otherwise requires, a subsidiary undertaking within the meaning of Section 1162 of the Companies Act 2006, including in each case, each entity listed on Schedule 1 hereto. Unless the context otherwise requires, each reference to Subsidiary shall herein be a reference to a Subsidiary of Borrower or Guarantor.

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any governmental authority, including any interest, additions to tax or penalties applicable thereto.

"Term A Loan Advance" shall have the meaning assigned to such term in Section 2.1(a).

"Term B Draw Period" means the period of time commencing upon the occurrence of the Term B Milestone Event and continuing through the earlier to occur of (a) December 15, 2018 or (b) an Event of Default.

"Term B Loan Advance" shall have the meaning assigned to such term in Section 2.1(a).

"Term B Milestone Event" shall mean that: (a) no Event of Default shall have occurred and is continuing, and (b) Agent shall have confirmed in writing to Borrower after the Closing Date but on or prior to the end of the Term B Draw Period, that any one of the following events shall have occurred: (i) (x) the FDA has accepted Borrower's new drug application for marketing approval with respect to Borrower's "Iclaprim" product for the treatment of patients with acute bacterial skin and skin structure infection ("ABSSSI"), and (y) Borrower has enrolled its first (1st) patient in its Phase 3 clinical study of Borrower's "Iclaprim" product for the treatment of hospital-acquired bacterial pneumonia ("HABP"), (ii) Borrower has obtained market approval from the FDA with respect to Borrower's "Iclaprim" product for the treatment of patients with ABSSSI, or (iii) Agent and Lender have determined, in their sole and absolute discretion, to make the Term B Loan Advance.

"Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to the Borrower in a principal amount not to exceed the amount set forth under the heading "Term Commitment" opposite such Lender's name on Schedule 1.1.

"Term Loan Advance" means any Term Loan advanced under this Agreement, including each of the Term A Loan Advance and the Term B Loan Advance.

"Term Loans" means the Loans advanced under this Agreement not to exceed the Maximum Term Loan Amount.

"Term Loan Interest Rate" means for any day a floating per annum rate of interest equal to the greater of either (a) 10.00% and (b) the sum of (i) 10.00% plus (ii) (A) the Prime Rate minus (B) 4.5%.

"Term Loan Maturity Date" means September 1, 2021.

"Trademark License" means any written agreement granting any right to use any Trademark or Trademark registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

"Trademarks" means all trademarks (registered, common law or otherwise) and any applications in connection therewith, including registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States of America, any State thereof or any other country or any political subdivision thereof.

"UCC" means the Uniform Commercial Code as the same is, from time to time, in effect in the State of California; provided, that in the event that, by reason of mandatory

provisions of law, any or all of the attachment, perfection or priority of, or remedies with respect to, Agent's Lien on any Collateral is governed by the Uniform Commercial Code as the same is, from time to time, in effect in a jurisdiction other than the State of California, then the term "UCC" shall mean the Uniform Commercial Code as in effect, from time to time, in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions.

- "U.S. Borrower" means any Borrower that is a U.S. Person.
- "U.S. Person" means any Person that is a "United States Person" as defined in Section 7701(a)(30) of the IRC.
- "Warrant" means the Warrant Agreement dated as of even date hereof by and between Agent and Holdings, as may be amended, restated, supplemented or otherwise modified from time to time.
  - "Withholding Agent" means the Borrower and the Agent.

Unless otherwise specified, all references in this Agreement or any Annex or Schedule hereto to a "Section," "subsection," "Exhibit," "Annex," or "Schedule" shall refer to the corresponding Section, subsection, Exhibit, Annex, or Schedule in or to this Agreement. Unless otherwise specifically provided herein, any accounting term used in this Agreement or the other Loan Documents shall have the meaning customarily given such term in accordance with IFRS, and all financial computations hereunder shall be computed in accordance with IFRS, consistently applied. Unless otherwise defined herein or in the other Loan Documents, terms that are used herein or in the other Loan Documents and defined in the UCC shall have the meanings given to them in the UCC. Any obligations of a person under an operating lease (whether existing on the date hereof or entered into thereafter) that is not required (or would not be required) to be classified and accounted for as a capital lease on a balance sheet of such Person under IFRS as in effect on date hereof shall not be treated as a capital lease solely as a result of the changes in IFRS after the date hereof.

#### **SECTION 2. THE LOAN**

- 2.1 Term Loan.
- (a) Advances. Subject to the terms and conditions of this Agreement, Lender will severally (and not jointly) make in an amount not to exceed its respective Term Commitment, and Borrower agrees to draw, one (1) advance in a principal amount of Fifteen Million Dollars (\$15,000,000.00) on the Closing Date (the "Term A Loan Advance"). Subject to the terms and conditions of this Agreement, during the Term B Draw Period, upon Borrower's written request in accordance with this Agreement, Lender will severally (and not jointly) make in an amount not to exceed its respective Term Commitment, one (1) advance in a principal amount of Five Million Dollars (\$5,000,000.00) (the "Term B Loan Advance"). The Term A Loan Advance and the Term B Loan Advance are hereinafter referred to individually as a "Term Loan Advance" and collectively as the "Term Loan Advances". The aggregate outstanding principal

amount of Term Loan Advances shall not exceed the Term Loan. Proceeds of any Term Loan Advance shall be deposited into an account that is subject to a first priority perfected security interest in favor of Agent perfected by an Account Control Agreement.

- (b) Advance Request. To obtain a Term Loan Advance, Borrower shall complete, sign and deliver to Agent an Advance Request (at least three (3) Business Days before the Advance Date other than the Closing Date, which shall be at least one (1) Business Day). Lender shall fund each Term Loan Advance in the manner requested by the Advance Request provided that each of the conditions precedent to such Term Loan Advance is satisfied as of the requested Advance Date.
- (c) Interest. The principal balance of each Term Loan Advance shall bear interest thereon from such Advance Date at the Term Loan Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed. The Term Loan Interest Rate will float and change on the day the Prime Rate changes from time to time.
- Payment. Borrower will pay interest on each Term Loan Advance on the first Business Day of each month, beginning the first month after the initial Advance Date. Borrower shall repay the aggregate Term Loan principal balance that is outstanding on the day immediately preceding the Amortization Date, in equal monthly installments of principal and interest (mortgage style), based upon an amortization schedule of thirty (30) months, beginning on the Amortization Date and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations) are repaid. The entire Term Loan principal balance and all accrued but unpaid interest hereunder, shall be due and payable on the Term Loan Maturity Date. Borrower shall make all payments under this Agreement without setoff, recoupment or deduction (except, in the case of deduction for Taxes, to the extent required by applicable law) and regardless of any counterclaim or defense. Lender will initiate debit entries to the Borrower's account as authorized on the ACH Authorization (i) on each payment date of all periodic obligations payable to Lender under each Term Advance and (ii) reasonable and documented out-of-pocket legal fees and costs incurred by Agent or Lender in connection with Section 11.11 of this Agreement; provided that, with respect to clause (i) above, in the event that Lender or Agent informs Borrower that Lender will not initiate a debit entry to Borrower's account for a certain amount of the periodic obligations due on a specific payment date, Borrower shall pay to Lender such amount of periodic obligations in full in immediately available funds on such payment date; provided, further, that, with respect to clause (i) above, if Lender or Agent informs Borrower that Lender will not initiate a debit entry as described above later than the date that is three (3) Business Days prior to such payment date, Borrower shall pay to Lender such amount of periodic obligations in full in immediately available funds on the date that is three (3) Business Days after the date on which Lender or Agent notifies Borrower of such; provided, further, that, with respect to clause (ii) above, in the event that Lender or Agent informs Borrower that Lender will not initiate a debit entry to Borrower's account for certain amount of such reasonable and documented out-of-pocket legal fees and costs incurred by Agent or Lender, Borrower shall pay to Lender such amount in full in

immediately available funds within three (3) Business Days. Once repaid, a Term Loan Advance or any portion thereof may not be reborrowed.

- 2.2 Maximum Interest. Notwithstanding any provision in this Agreement or any other Loan Document, it is the parties' intent not to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law that a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of California shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If a court of competent jurisdiction shall finally determine that Borrower has actually paid to Lender an amount of interest in excess of the amount that would have been payable if all of the Secured Obligations had at all times bome interest at the Maximum Rate, then such excess interest actually paid by Borrower shall be applied as follows: first, to the payment of the Secured Obligations consisting of the outstanding principal amount of the Term Loan Advances; second, after all principal is repaid, to the payment of Lender's accrued interest, costs, expenses, professional fees and any other Secured Obligations; and third, after all Secured Obligations are repaid, the excess (if any) shall be refunded to Borrower.
- 2.3 Default Interest. In the event any payment is not paid on the scheduled payment date, an amount equal to five percent (5%) of the past due amount shall be payable on demand. In addition, upon the occurrence and during the continuation of an Event of Default hereunder, all Secured Obligations, including principal, interest, compounded interest, and professional fees, shall bear interest at a rate per annum equal to the rate set forth in Section 2.1(c) plus five percent (5%) per annum. In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 2.1(c) or this Section 2.3, as applicable.
- 2.4 Prepayment. At its option, Borrower may at any time prepay all or a portion of the outstanding Advances by paying the entire principal balance (or such portion thereof), all accrued and unpaid interest thereon, together with a prepayment charge equal to the following percentage of the Advance amount being prepaid: if such Advance amounts are prepaid in any of the first twelve (12) months following the Closing Date, three percent (3%); and thereafter, one percent (1%) (each, a "Prepayment Charge"). Borrower agrees that the Prepayment Charge is a reasonable calculation of Lender's lost profits in view of the difficulties and impracticality of determining actual damages resulting from an early repayment of the Advances. Borrower shall prepay the outstanding amount of all principal and accrued interest through the prepayment date and the Prepayment Charge upon the occurrence of a Change in Control. Notwithstanding the foregoing, Agent and Lender agree to waive the Prepayment Charge if Agent and Lender (in its sole and absolute discretion) agree in writing to refinance the Advances prior to the Term Loan Maturity Date.
- 2.5 End of Term Charge. On the earliest to occur of (i) the Term Loan Maturity Date, (ii) the date that Borrower prepays the outstanding Secured Obligations (other than any inchoate indemnity obligations and any other obligations which, by their

terms, are to survive the termination of this Agreement) in full, or (iii) the date that the Secured Obligations become due and payable, Borrower shall pay Lender a charge equal to 2.15% of the aggregate original principal amount of the Maximum Term Loan Amount, which amounts to Four Hundred Thirty Thousand Dollars (\$430,000). Notwithstanding the required payment date of such charge, it shall be deemed earned by Lender as of the Closing Date.

- 2.6 Notes. If so requested by Lender by written notice to Borrower, then Borrower shall execute and deliver to Lender (and/or, if applicable and if so specified in such notice, to any Person who is an assignee of Lender pursuant to Section 11.13) (promptly after the Borrower's receipt of such notice) a Note or Notes to evidence Lender's Loans.
- 2.7 Pro Rata Treatment. Each payment (including prepayment) on account of any fee and any reduction of the Term Loan Advances shall be made pro rata according to the Term Commitments of the relevant Lender.

# **SECTION 3. SECURITY INTEREST**

- Obligations, Borrower grants to Agent a security interest in all of Borrower's right, title, and interest in, to and under all of Borrower's personal property and other assets including without limitation the following (except as set forth herein) whether now owned or hereafter acquired (collectively, the "Collateral"): (a) Receivables; (b) Equipment; (c) Fixtures; (d) General Intangibles (other than Intellectual Property); (e) Inventory; (f) Investment Property; (g) Deposit Accounts; (h) Cash; (i) Goods; and all other tangible and intangible personal property of Borrower whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrower and wherever located, and any of Borrower's property in the possession or under the control of Agent; and, to the extent not otherwise included, all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing; provided, however, that the Collateral shall include all Accounts and General Intangibles that consist of rights to payment and proceeds from the sale, licensing or disposition of all or any part, or rights in, the Intellectual Property (the "Rights to Payment"). Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall automatically, and effective as of the date of this Agreement, include the Intellectual Property to the extent necessary to permit perfection of Agent's security interest in the Rights to Payment. All Secured Obligations shall also be secured by this Agreement, the Stock Pledge Agreement and any and all other security agreements, mortgages or other collateral granted to Lender by Guarantor as security for the Secured Obligations, now or in the future.
- 3.2 Notwithstanding the broad grant of the security interest set forth in Section 3.1, above, the Collateral shall not include any Excluded Property.

# SECTION 4. CONDITIONS PRECEDENT TO LOAN

The obligations of Lender to make the Loan hereunder are subject to the satisfaction by Borrower of the following conditions:

- 4.1 Initial Advance. On or prior to the Closing Date, Borrower shall have delivered to Agent the following:
- (a) executed copies of the Loan Documents (other than the Warrant, the Registration Agreement and the Guaranty, each of which shall be an original), an Account Control Agreement with respect to Borrower's operating account at Wells Fargo Bank, National Association, a legal opinion of Borrower's counsel, and all other documents and instruments reasonably required by Agent to effectuate the transactions contemplated hereby or to create and perfect the Liens of Agent with respect to all Collateral, in all cases in form and substance reasonably acceptable to Agent;
- (b) (i) certified copy of resolutions of Borrower's board of directors evidencing approval of the Loan and the other transactions evidenced by the Loan Documents; and (ii) certified copy of resolutions of Guarantor's board of directors evidencing approval of the Guaranty, the Warrant, the Registration Agreement, the Stock Pledge Agreement and the other transactions evidenced by the Loan Documents;
- (c) (i) certified copies of the Certificate of Incorporation and the Bylaws, as amended through the Closing Date, of Borrower, and (ii) certified copies of the Articles of Association, as amended through the Closing Date, of Guarantor;
- (d) a certificate of good standing for Borrower from its state of incorporation and similar certificates from all other jurisdictions in which it does business and where the failure to be qualified could have a Material Adverse Effect;
- (e) payment of the Due Diligence Fee, the Facility Charge and reimbursement of Agent's and Lender's current expenses reimbursable pursuant to this Agreement, which amounts may be deducted from the initial Term Loan Advance;
  - (f) all certificates of insurance and copies of each insurance policy required hereunder;
- (g) evidence, in form and substance reasonably satisfactory to Agent, that all Cash of the Consolidated Group, to the extent in excess of Seven Hundred Fifty Thousand (\$750,000) or the United States dollar equivalent of such amount, is held in depository, operating, securities, investment and similar accounts in the name of Borrower, inside the United States and subject to an Account Control Agreement;
  - (h) such other documents as Agent may reasonably request.

- 4.2 All Advances. On each Advance Date:
- (a) Agent shall have received (i) an Advance Request for the relevant Advance as required by Section 2.1(b), each duly executed by Borrower's Chief Executive Officer or Chief Financial Officer, and (ii) any other documents Agent may reasonably request.
- (b) The representations and warranties set forth in this Agreement shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date.
- (c) Borrower shall be in compliance with all the terms and provisions set forth herein and in each other Loan Document on its part to be observed or performed, and at the time of and immediately after such Advance no Event of Default shall have occurred and be continuing.
- (d) Each Advance Request shall be deemed to constitute a representation and warranty by Borrower on the relevant Advance Date as to the matters specified in paragraphs (b) and (c) of this Section 4.2 and as to the matters set forth in the Advance Request.
- 4.3 No Default. As of the Closing Date and each Advance Date, (i) no fact or condition exists that could (or could, with the passage of time, the giving of notice, or both) constitute an Event of Default and (ii) no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

#### SECTION 5. REPRESENTATIONS AND WARRANTIES OF BORROWER

Borrower represents and warrants that:

- 5.1 Corporate Status. Borrower is a corporation duly organized, legally existing and in good standing under the laws of the State of Delaware, and is duly qualified as a foreign corporation in all jurisdictions in which the nature of its business or location of its properties require such qualifications and where the failure to be qualified could reasonably be expected to have a Material Adverse Effect. Borrower's present name, former names (if any), locations, place of formation, tax identification number, organizational identification number and other information are correctly set forth in Exhibit C, as may be updated by Borrower in a written notice (including any Compliance Certificate) provided to Agent after the Closing Date.
- 5.2 Collateral. Borrower owns the Collateral and the Intellectual Property, free of all Liens, except for Permitted Liens. Borrower has the power and authority to grant to Agent a Lien in the Collateral as security for the Secured Obligations.
- 5.3 Consents. Borrower's execution, delivery and performance of this Agreement and all other Loan Documents (i) have been duly authorized by all necessary corporate action of Borrower, (ii) will not result in the creation or imposition of any Lien upon the Collateral, other than Permitted Liens and the Liens created by this Agreement

and the other Loan Documents, (iii) do not violate any provisions of Borrower's Certificate or Articles of Incorporation (as applicable), bylaws, or any, law, regulation, order, injunction, judgment, decree or writ to which Borrower is subject and (iv) except as described on Schedule 5.3, do not violate any contract or agreement or require the consent or approval of any other Person which has not already been obtained. The individual or individuals executing the Loan Documents are duly authorized to do so.

- 5.4 Material Adverse Effect. No event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing. Borrower is not aware of any event likely to occur that is reasonably expected to result in a Material Adverse Effect.
- 5.5 Actions Before Governmental Authorities. There are no actions, suits or proceedings at law or in equity or by or before any governmental authority now pending or, to the knowledge of Borrower, threatened against or affecting Borrower or its property, that is reasonably expected to result in a Material Adverse Effect.
- 5.6 Laws. Neither Borrower nor any of its Subsidiaries is in violation of any law, rule or regulation, or in default with respect to any judgment, writ, injunction or decree of any governmental authority, where such violation or default is reasonably expected to result in a Material Adverse Effect. Borrower is not in default in any manner under any provision of any agreement or instrument evidencing material Indebtedness, or any other material agreement to which it is a party or by which it is bound.

Neither Borrower nor any of its Subsidiaries is an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Neither Borrower nor any of its Subsidiaries is engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower and each of its Subsidiaries has complied in all material respects with the Federal Fair Labor Standards Act. Neither Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. Neither Borrower's nor any of its Subsidiaries' properties or assets has been used by Borrower or such Subsidiary or, to Borrower's Knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than in material compliance with applicable laws. Borrower and each of its Subsidiaries has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted.

None of Borrower, any of its Subsidiaries, or, to the knowledge of Borrower, any of Borrower's or its Subsidiaries' Affiliates or any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, is (i) in violation of any Anti-Terrorism Law, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law, or (iii) is

a Blocked Person. None of Borrower, any of its Subsidiaries, or, to the knowledge of Borrower, any of their Affiliates or agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law. None of the funds to be provided under this Agreement will be used, directly or indirectly, (a) for any activities in violation of any applicable anti-money laundering, economic sanctions and anti-bribery laws and regulations laws and regulations or (b) for any payment to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended.

- 5.7 Information Correct and Current. No information, report, Advance Request, financial statement, exhibit or schedule furnished, by or on behalf of Borrower to Agent in connection with any Loan Document or included therein or delivered pursuant thereto contained, or, when taken as a whole, contains or will contain any material misstatement of fact or, when taken together with all other such information or documents, omitted, omits or will omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were, are or will be made, not materially misleading at the time such statement was made or deemed made. Additionally, any and all financial or business projections provided by Borrower to Agent, whether prior to or after the Closing Date, shall be (i) provided in good faith and based on assumptions, the most current data and information available to Borrower and believed by Borrower to be reasonable at the time such projections were prepared, and (ii) the most current of such projections provided to Borrower's Board of Directors (it being understood that such projections are subject to significant uncertainties and contingencies, many of which are beyond the control of Borrower, that no assurance is given that any particular projections will be realized, and that actual results may differ).
- 5.8 Tax Matters. Except as described on Schedule 5.8 and except those being contested in good faith with adequate reserves under IFRS, (a) Borrower has filed all material federal, state and local tax returns that it is required to file by applicable law, (b) Borrower has duly paid or fully reserved for all taxes or installments thereof (including any interest or penalties) as and when due, which have or may become due pursuant to such returns, and (c) Borrower has paid or fully reserved for any tax assessment received by Borrower for the three (3) years preceding the Closing Date, if any (including any taxes being contested in good faith and by appropriate proceedings).
- 5.9 Intellectual Property Claims. Borrower is the sole owner of, or otherwise has the right to use, the Intellectual Property material to Borrower's business. Except as described on Schedule 5.9, (i) each of the material Copyrights, Trademarks and Patents is valid and enforceable, (ii) no material part of the Intellectual Property has been judged invalid or unenforceable, in whole or in part, and (iii) no claim has been made to Borrower

that any material part of the Intellectual Property violates the rights of any third party. Exhibit D is a true, correct and complete list of each of Borrower's Patents, registered Trademarks, registered Copyrights, and material agreements under which Borrower licenses Intellectual Property from third parties (other than shrink-wrap software licenses), together with application or registration numbers, as applicable, owned by Borrower or any Subsidiary, in each case as of the Closing Date. Borrower is not in material breach of, nor has Borrower failed to perform any material obligations under, any of the foregoing contracts, licenses or agreements and, to Borrower's knowledge, no third party to any such contract, license or agreement is in material breach thereof or has failed to perform any material obligations thereunder.

- 5.10 Intellectual Property. Except as described on Schedule 5.10, Borrower has all material rights with respect to Intellectual Property necessary or material in the operation or conduct of Borrower's business as currently conducted and proposed to be conducted by Borrower. Without limiting the generality of the foregoing, and in the case of Licenses, except for restrictions that are unenforceable under Division 9 of the UCC, Borrower has the right, to the extent required to operate Borrower's business, to freely transfer, license or assign Intellectual Property necessary or material in the operation or conduct of Borrower's business as currently conducted and proposed to be conducted by Borrower, without condition, restriction or payment of any kind (other than license payments in the ordinary course of business) to any third party, and Borrower owns or has the right to use, pursuant to valid licenses, all software development tools, library functions, compilers and all other third-party software and other items that are material to Borrower's business and used in the design, development, promotion, sale, license, manufacture, import, export, use or distribution of Borrower Products except customary covenants in inbound license agreements and equipment leases where Borrower is the licensee or lessee.
- 5.11 Borrower Products. Except as described on Schedule 5.11, no Intellectual Property owned by Borrower or Borrower Product has been or is subject to any actual or, to the knowledge of Borrower, threatened litigation, proceeding (including any proceeding in the United States Patent and Trademark Office or any corresponding foreign office or agency) or outstanding decree, order, judgment, settlement agreement or stipulation that restricts in any manner Borrower's use, transfer or licensing thereof or that may affect the validity, use or enforceability thereof. There is no decree, order, judgment, agreement, stipulation, arbitral award or other provision entered into in connection with any litigation or proceeding that obligates Borrower to grant licenses or ownership interest in any future Intellectual Property related to the operation or conduct of the business of Borrower or Borrower Products. Borrower has not received any written notice or claim, or, to the knowledge of Borrower, oral notice or claim, challenging or questioning Borrower's ownership in any Intellectual Property (or written notice of any claim challenging or questioning the ownership in any licensed Intellectual Property of the owner thereof) or suggesting that any third party has any claim of legal or beneficial ownership with respect thereto nor, to Borrower's knowledge, is there a reasonable basis for any such claim. Neither Borrower's use of its Intellectual Property nor the production and sale of Borrower Products infringes the Intellectual Property or other rights of others.

- 5.12 Financial Accounts. Exhibit E, as may be updated by the Borrower in a written notice provided to Agent after the Closing Date, is a true, correct and complete list of (a) all banks and other financial institutions at which Borrower or any Subsidiary maintains Deposit Accounts and (b) all institutions at which Borrower or any Subsidiary maintains an account holding Investment Property, and such exhibit correctly identifies the name, address and telephone number of each bank or other institution, the name in which the account is held, a description of the purpose of the account, and the complete account number therefor.
- 5.13 Employee Loans. Borrower has no outstanding loans to any employee, officer or director of the Borrower nor has Borrower guaranteed the payment of any loan made to an employee, officer or director of the Borrower by a third party.
- 5.14 Capitalization and Subsidiaries. Borrower's capitalization as of the Closing Date is set forth on Schedule 5.14 annexed hereto. Borrower does not own any stock, partnership interest or other securities of any Person, except for Permitted Investments. Attached as Schedule 5.14, as may be updated by Borrower in a written notice provided after the Closing Date, is a true, correct and complete list of each Subsidiary.
- 5.15 Foreign Subsidiary Voting Rights. No decision or action in any governing document of any Foreign Subsidiary (other than an Eligible Foreign Subsidiary) requires a vote of greater than 50.1% of the Equity Interests or voting rights of such Foreign Subsidiary.
- 5.16 Holdings. Holdings has not engaged in any business activities and does not own any material property or assets other than (A) ownership of the Equity Interests of Borrower, (B) participating in activities and contractual rights incidental to the maintenance of its corporate existence, (C) performance of its obligations under the Loan Documents, (D) subject to Section 7.20, ownership of the Barclays Deposit Accounts, and (E) participating in tax, accounting and other administrative activities and arrangements as the parent of the consolidated group of companies and to adhere with applicable laws.
- 5.17 No Filing or Stamp Taxes. Under the laws of the jurisdiction under whose laws Borrower or Holdings is incorporated or organized, it is not necessary that the Loan Documents be filed, recorded or enrolled with any court or other authority in that jurisdiction or that any stamp, registration, notarial or similar Taxes or fees be paid on or in relation to the Loan Documents or the transactions contemplated by the Loan Documents.

#### SECTION 6. INSURANCE; INDEMNIFICATION

6.1 Coverage. Borrower shall cause to be carried and maintained commercial general liability insurance, on an occurrence form, against risks customarily insured against in Borrower's line of business. Such risks shall include the risks of bodily injury, including death, property damage, personal injury, advertising injury, and contractual liability per the terms of the indemnification agreement found in Section 6.3. Borrower

must maintain a minimum of Two Million Dollars (\$2,000,000) of commercial general liability insurance for each occurrence. Borrower has and agrees to maintain a minimum of Two Million Dollars (\$2,000,000) of directors' and officers' insurance for each occurrence and Five Million Dollars (\$5,000,000) in the aggregate. So long as there are any Secured Obligations outstanding, Borrower shall also cause to be carried and maintained insurance upon the Collateral, insuring against all risks of physical loss or damage howsoever caused, in an amount not less than the full replacement cost of the Collateral, provided that such insurance may be subject to standard exceptions and deductibles.

- 6.2 Certificates. Borrower shall deliver to Agent certificates of insurance that evidence Borrower's compliance with its insurance obligations in Section 6.1 and the obligations contained in this Section 6.2. Borrower's insurance certificate shall state Agent (shown as "Hercules Capital, Inc.", as Agent") is an additional insured for commercial general liability, a loss payee for all risk property damage insurance, subject to the insurer's approval, and a loss payee for property insurance and additional insured for liability insurance for any future insurance that Borrower may acquire from such insurer. Attached to the certificates of insurance will be additional insured endorsements for liability and lender's loss payable endorsements for all risk property damage insurance. All certificates of insurance will provide for a minimum of thirty (30) days advance written notice to Agent of cancellation (other than cancellation for non-payment of premiums, for which ten (10) days' advance written notice shall be sufficient) or any other change adverse to Agent's interests. Any failure of Agent to scrutinize such insurance certificates for compliance is not a waiver of any of Agent's rights, all of which are reserved. Borrower shall provide Agent with copies of each insurance policy, and upon entering or amending any insurance policy required hereunder, Borrower shall provide Agent with copies of such policies and shall promptly deliver to Agent updated insurance certificates with respect to such policies.
- 6.3 Indemnity. Borrower agrees to indemnify and hold Agent, Lender and their officers, directors, employees, agents, in-house attorneys, representatives and shareholders (each, an "Indemnified Person") harmless from and against any and all claims, costs, expenses, damages and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort), including reasonable and documented out-of-pocket attorneys' fees and disbursements and other costs of investigation or defense (including those incurred upon any appeal) (collectively, "Liabilities"), that may be instituted or asserted against or incurred by such Indemnified Person as the result of credit having been extended, suspended or terminated under this Agreement and the other Loan Documents or the administration of such credit, or in connection with or arising out of the transactions contemplated hereunder and thereunder, or any actions or failures to act in connection therewith, or arising out of the disposition or utilization of the Collateral, excluding in all cases Liabilities to the extent resulting solely from any Indemnified Person's gross negligence or willful misconduct. Borrower agrees to pay, and to save Agent and Lender harmless from, any and all liabilities with respect to, or resulting from any delay in paying, any and all excise, sales or other similar taxes (excluding Excluded Taxes) that may be payable or determined to be payable with respect

to any of the Collateral or this Agreement. In no event shall any Indemnified Person be liable on any theory of liability for any special, indirect, consequential or punitive damages (including any loss of profits, business or anticipated savings). This Section 6.3 shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, this Loan Agreement.

#### SECTION 7. COVENANTS OF BORROWER

Borrower agrees as follows:

- 7.1 Financial Reports. Borrower shall furnish to Agent the financial statements and reports listed hereinafter (the "Financial Statements"):
- (a) as soon as practicable (and in any event within 30 days) after the end of each calendar month, unaudited interim and year-to-date financial statements as of the end of such month (prepared on a consolidated and consolidating basis for Holdings and the other members of the Consolidated Group), including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against Borrower) or any other occurrence that could reasonably be expected to have a Material Adverse Effect, all certified by Borrower's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with IFRS, except (i) for the absence of footnotes, (ii) that they are subject to normal year-end adjustments, and (iii) they do not contain certain non-cash items that are customarily included in quarterly and annual financial statements;
- (b) as soon as practicable (and in any event within 45 days) after the end of each calendar quarter, unaudited interim and year-to-date financial statements as of the end of such calendar quarter (prepared on a consolidated and consolidating basis for Holdings and the other members of the Consolidated Group), including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against Borrower) or any other occurrence that could reasonably be expected to have a Material Adverse Effect, certified by Borrower's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with IFRS, except (i) for the absence of footnotes, and (ii) that they are subject to normal year-end adjustments; as well as the most recent capitalization table for Borrower, including the weighted average exercise price of employee stock options;
- (c) as soon as practicable (and in any event within 120 days) after the end of each fiscal year, unqualified audited financial statements as of the end of such year (prepared on a consolidated and consolidating for Holdings and the other members of the Consolidated Group), including balance sheet and related statements of income and cash flows, and setting forth in comparative form the corresponding figures for the preceding fiscal year, certified by a firm of independent certified public accountants selected by Borrower and reasonably acceptable to Agent, accompanied by any management report from such accountants;

- (d) as soon as practicable (and in any event within 30 days) after the end of each month, a Compliance Certificate in the form of Exhibit F:
- (e) as soon as practicable (and in any event within 30 days) after the end of each month, a report showing agings of accounts receivable and accounts payable;
- (f) promptly after the sending or filing thereof, as the case may be, copies of any proxy statements, financial statements or reports that Borrower has made available to holders of its Equity Interests and copies of any regular, periodic and special reports or registration statements that Borrower files with the Securities and Exchange Commission or any governmental authority that may be substituted therefor, or any national securities exchange:
- (g) promptly provide to Agent copies of all minutes, consents and authorizations of the governing body of Borrower that concern (i) strategic initiatives which could reasonably be expected to materially affect the operations of Borrower, or (ii) the solvency of Borrower, provided that in all cases Borrower may exclude confidential compensation information;
- (h) financial and business projections promptly following their approval by Borrower's Board of Directors, and in any event, within 30 days prior to the end of Borrower's fiscal year, as well as budgets, operating plans and other financial information reasonably requested by Agent; and
- (i) immediate notice if Borrower or any Subsidiary has knowledge that Borrower, or any Subsidiary or Affiliate of Borrower, is listed on the OFAC Lists or (a) is convicted on, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering.

Borrower shall not (without the consent of Agent, such consent not to be unreasonably withheld or delayed), make any change in its (a) accounting policies or reporting practices, except as required by IFRS or (b) fiscal years or fiscal quarters. The fiscal year of Borrower shall end on December 31.

The executed Compliance Certificate may be sent via email to Agent at legal@herculestech.com. All Financial Statements required to be delivered pursuant to clauses (a), (b) and (c) shall be sent via e-mail to financial statements@herculestech.com with a copy to legal@herculestech.com provided, that if e-mail is not available or sending such Financial Statements via e-mail is not possible, they shall be faxed to Agent at: (650) 473-9194, attention Account Manager: Motif Biosciences Inc.

7.2 Management Rights. Borrower shall permit any representative that Agent or Lender authorizes, including its attorneys and accountants, to inspect the Collateral and examine and make copies and abstracts of the books of account and records of Borrower at reasonable times and upon reasonable notice during normal business hours; <u>provided</u>, however, that so long as no Event of Default has occurred and is continuing, such

examinations shall be limited to no more often than twice per fiscal year. In addition, any such representative shall have the right to meet with management and officers of Borrower to discuss such books of account and records. In addition, Agent or Lender shall be entitled at reasonable times and intervals to consult with and advise the management and officers of Borrower concerning significant business issues affecting Borrower. Such consultations shall not unreasonably interfere with Borrower's business operations. The parties intend that the rights granted Agent and Lender shall constitute "management rights" within the meaning of 29 C.F.R. Section 2510.3-101(d)(3)(ii), but that any advice, recommendations or participation by Agent or Lender with respect to any business issues shall not be deemed to give Agent or Lender, nor be deemed an exercise by Agent or Lender of, control over Borrower's management or policies.

- 7.3 Further Assurances. Borrower shall from time to time execute, deliver and file, alone or with Agent, any financing statements, security agreements, collateral assignments, notices, control agreements, or other documents to perfect or give the highest priority to Agent's Lien on the Collateral. Borrower shall from time to time procure any instruments or documents as may be reasonably requested by Agent, and take all further action that may be necessary, or that Agent may reasonably request, to perfect and protect the Liens granted hereby and thereby. In addition, and for such purposes only, Borrower hereby authorizes Agent to execute and deliver on behalf of Borrower and to file such financing statements (including an indication that the financing statement covers "all assets or all personal property" of Borrower in accordance with Section 9-504 of the UCC), collateral assignments, notices, control agreements, security agreements and other documents without the signature of Borrower either in Agent's name or in the name of Agent as agent and attorney-in-fact for Borrower. Borrower shall protect and defend Borrower's title to the Collateral and Agent's Lien thereon against all Persons claiming any interest adverse to Borrower or Agent other than Permitted Liens.
- 7.4 Indebtedness. Borrower shall not create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, or permit any Subsidiary so to do, other than Permitted Indebtedness, or prepay any Indebtedness or take any actions which impose on Borrower an obligation to prepay any Indebtedness, except for (a) the conversion of Indebtedness into equity securities and the payment of cash in lieu of fractional shares in connection with such conversion, (b) purchase money Indebtedness pursuant to its then applicable payment schedule, (c) prepayment by any Subsidiary of (i) inter-company Indebtedness owed by such Subsidiary to any Borrower, or (ii) if such Subsidiary is not a Borrower, intercompany Indebtedness owed by such Subsidiary that is not a Borrower or (d) as otherwise permitted hereunder or approved in writing by Agent.
- 7.5 Collateral. Borrower shall at all times keep the Collateral, the Intellectual Property and all other property and assets used in Borrower's business or in which Borrower now or hereafter holds any interest free and clear from any legal process or Liens whatsoever (except for Permitted Liens), and shall give Agent prompt written notice of any legal process affecting the Collateral, the Intellectual Property, such other property and assets, or any Liens thereon, provided however, that the Collateral and such other property

and assets may be subject to Permitted Liens except that there shall be no Liens whatsoever on Intellectual Property. Borrower shall not agree with any Person other than Agent or Lender not to encumber its property. Borrower shall not enter into or suffer to exist or become effective any agreement that prohibits or limits the ability of any Borrower to create, incur, assume or suffer to exist any Lien upon any of its Intellectual Property, whether now owned or hereafter acquired, to secure its obligations under the Loan Documents to which it is a party other than (a) this Agreement and the other Loan Documents, (b) any agreements governing any purchase money Liens or capital lease obligations otherwise permitted hereby (in which case, any prohibition or limitation shall only be effective against the assets financed thereby) and (c) customary restrictions on the assignment of leases, licenses and other agreements. Borrower shall cause its Subsidiaries to protect and defend such Subsidiary's title to its assets from and against all Persons claiming any interest adverse to such Subsidiary, and Borrower shall cause its Subsidiaries at all times to keep such Subsidiary's property and assets free and clear from any legal process or Liens whatsoever (except for Permitted Liens, provided however, that there shall be no Liens whatsoever on Intellectual Property), and shall give Agent prompt written notice of any legal process affecting such Subsidiary's assets.

- 7.6 Investments. Borrower shall not directly or indirectly acquire or own, or make any Investment in or to any Person, or permit any of its Subsidiaries so to do, other than Permitted Investments.
- 7.7 Distributions. Borrower shall not, and shall not allow any Subsidiary to, (a) repurchase or redeem any class of stock or other Equity Interest other than pursuant to employee, director or consultant repurchase plans or other similar agreements, provided, however, in each case the repurchase or redeemption price does not exceed the original consideration paid for such stock or Equity Interest, or (b) declare or pay any cash dividend or make a cash distribution on any class of stock or other Equity Interest, except that a Subsidiary may pay dividends or make distributions to Borrower, or (c) lend money to any employees, officers or directors or guarantee the payment of any such loans granted by a third party in excess of \$100,000 in the aggregate or (d) waive, release or forgive any Indebtedness owed by any employees, officers or directors in excess of \$100,000 in the aggregate.
- 7.8 Transfers. Except for Permitted Transfers, Borrower shall not, and shall not allow any Subsidiary to, voluntarily transfer, sell, lease, license, lend or in any other manner convey any equitable, beneficial or legal interest in any material portion of its assets.
- 7.9 Mergers or Acquisitions. Borrower shall not merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with or into any other business organization (other than mergers or consolidations of (a) a Subsidiary which is not a Borrower into another Subsidiary or into Borrower or (b) a Borrower into another Borrower), or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person.

- 7.10 Taxes. Borrower and its Subsidiaries shall pay when due all material taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against Borrower, Agent, Lender or the Collateral or upon Borrower's ownership, possession, use, operation or disposition thereof or upon Borrower's rents, receipts or earnings arising therefrom. Borrower shall file on or before the due date therefor all personal property tax returns in respect of the Collateral. Notwithstanding the foregoing, Borrower may contest, in good faith and by appropriate proceedings, taxes for which Borrower maintains adequate reserves therefor in accordance with IFRS.
- 7.11 Corporate Changes. Neither Borrower nor any Subsidiary shall change its corporate name, legal form or jurisdiction of formation without twenty (20) days' prior written notice to Agent. Neither Borrower nor any Subsidiary shall suffer a Change in Control. Neither Borrower nor any Subsidiary shall relocate its chief executive office or its principal place of business unless: (i) it has provided prior written notice to Agent; and (ii) such relocation shall be within the continental United States of America. Neither Borrower nor any Qualified Subsidiary shall relocate any item of Collateral (other than (x) sales of Inventory in the ordinary course of business, (y) relocations of Equipment having an aggregate value of up to \$150,000 in any fiscal year, and (z) relocations of Collateral from a location described on Exhibit C to another location described on Exhibit C) unless (i) it has provided prompt written notice to Agent, (ii) such relocation is within the continental United States of America and, (iii) if such relocation is to a third party bailee, it has delivered a bailee agreement in form and substance reasonably acceptable to Agent.
- 7.12 Deposit Accounts. Neither Borrower nor its Subsidiaries shall maintain any Deposit Accounts, or accounts holding Investment Property, except for Exempt Accounts or Deposit Accounts or other accounts with respect to which Agent has an Account Control Agreement or otherwise has obtained a first-priority, valid and enforceable security interest pursuant to such documents, instruments and agreements as are reasonably requested by Agent.
- 7.13 Joinder. Borrower shall notify Agent of each Subsidiary formed subsequent to the Closing Date, and, within 15 days following such formation, shall cause any such Qualified Subsidiary to execute and deliver to Agent a Joinder Agreement.
  - 7.14 Notification of Event of Default. Borrower shall notify Agent immediately of the occurrence of any Event of Default.
- 7.15 SBA. Agent and Lender have received a license from the U.S. Small Business Administration ("SBA") to extend loans as a small business investment company ("SBIC") pursuant to the Small Business Investment Act of 1958, as amended, and the associated regulations (collectively, the "SBIC Act"). Portions of the loan to Borrower will be made under the SBA license and the SBIC Act. Addendum 1 to this Agreement outlines various responsibilities of Agent, Lender and Borrower associated with an SBA loan, and such Addendum 1 is hereby incorporated in this Agreement.

- 7.16 Use of Proceeds. Borrower agrees that the proceeds of the Loans shall be used solely to pay related fees and expenses in connection with this Agreement and for working capital and general corporate purposes. The proceeds of the Term Loan Advances will not be used in violation of Anti-Corruption Laws or applicable Sanctions.
- 7.17 Foreign Subsidiary Voting Rights. Borrower shall not, and shall not permit any Subsidiary, to amend or modify any governing document of any Foreign Subsidiary of Borrower (other than an Eligible Foreign Subsidiary) the effect of which is to require a vote of greater than 50.1% of the Equity Interests or voting rights of such entity for any decision or action of such entity.

#### 7.18 Compliance with Laws.

Borrower shall maintain, and shall cause its Subsidiaries to maintain, compliance in all material respect with all applicable laws, rules or regulations (including any law, rule or regulation with respect to the making or brokering of loans or financial accommodations), and shall, or cause its Subsidiaries to, obtain and maintain all required governmental authorizations, approvals, licenses, franchises, permits or registrations reasonably necessary in connection with the conduct of Borrower's business.

Neither Borrower nor any of its Subsidiaries shall, and Borrower and its Subsidiaries shall use commercially reasonable efforts not to permit any Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Neither Borrower nor any of its Subsidiaries shall, and Borrower and its Subsidiaries shall use commercially reasonable efforts not to permit any Affiliate to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law.

From and after the earlier to occur of the date specified in Section 7.22(c) or the date on which the covenant described in such Section has been satisfied, Borrower has implemented and maintains in effect policies and procedures designed to ensure compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions. Borrower, its Subsidiaries and their respective officers and employees and to the knowledge of Borrower its directors and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects.

None of Borrower, any of its Subsidiaries or any of their respective directors, officers or employees, or to the knowledge of Borrower, any agent for Borrower or its Subsidiaries that will act in any capacity in connection with or benefit from the credit

facility established hereby, is a Sanctioned Person. No Loan, use of proceeds or other transaction contemplated by this Agreement will violate Anti-Corruption Laws or applicable Sanctions.

- 7.19 Transactions with Affiliates. Borrower shall not and shall not permit any Subsidiary to, directly or indirectly, enter into or permit to exist any transaction of any kind with any Affiliate of Borrower or such Subsidiary on terms that are less favorable to Borrower or such Subsidiary, as the case may be, than those that might be obtained in an arm's length transaction from a Person who is not an Affiliate of Borrower or such Subsidiary.
- 7.20 Cash Requirement. Borrower shall cause all Cash of the Consolidated Group, to the extent in excess of Seven Hundred Fifty Thousand (\$750,000) or the United States dollar equivalent of such amount, to be held in depository, operating, securities, investment and similar accounts in the name of Borrower, inside the United States and subject to an Account Control Agreement in accordance with Section 7.12 hereof.
- 7.21 Holdings. Holdings shall not engage in any business activities and shall not own any material property or assets other than (A) ownership of the Equity Interests of Borrower, (B) participating in activities and contractual rights incidental to the maintenance of its corporate existence, (C) performance of its obligations under the Loan Documents, (D) subject to Section 7.20, ownership of the Barclays Deposit Accounts, and (E) participating in tax, accounting and other administrative activities and arrangements as the parent of the consolidated group of companies and to adhere with applicable laws.
- 7.22 Post-Closing Covenants. Borrower shall timely comply with and perform all obligations set forth below unless, with respect to each such obligation, the same is waived in writing by Agent (which may be provided or withheld in Agent's sole discretion) or the delivery date of such obligation is extended by Agent in its sole discretion:
- (a) Borrower shall deliver to Agent, within thirty (30) days following the Closing Date, such insurance endorsements, in form and substance reasonably satisfactory to the Agent, satisfying the requirements of Section 6.2 herein;
- (b) Borrower shall deliver to Agent, in form and substance reasonably satisfactory to Agent, (i) on or before November 17, 2017, formal binding documentation of directors' and officers' insurance policies, and (ii) within thirty (30) days following the Closing Date, certificates evidencing such directors' and officers' insurance coverage (together with notice of cancellation endorsements in favor of Agent), in each case as to the foregoing clauses (i) and (ii) having an expiration date of no earlier than November 16, 2018; and
- (c) Borrower shall deliver to Agent, within sixty (60) days following the Closing Date and in form and substance reasonably satisfactory to Agent, evidence that Borrower has implemented and maintains in effect policies and procedures designed to

ensure compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions.

## **SECTION 8. RIGHT TO INVEST**

8.1 Lender or its assignee or nominee shall have the right, in its discretion, to participate in any Subsequent Financing in an amount of up to \$1,000,000 on the same terms, conditions and pricing afforded to others participating in any such Subsequent Financing. This Section 8.1, and all rights and obligations hereunder, shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, this Agreement.

## **SECTION 9. EVENTS OF DEFAULT**

The occurrence of any one or more of the following events shall be an Event of Default:

- 9.1 Payments. Borrower fails to pay any amount due under this Agreement or any of the other Loan Documents on the due date; provided, however, that an Event of Default shall not occur on account of a failure to pay due solely to an administrative or operational error of Agent or Lender or Borrower's bank if Borrower had the funds to make the payment when due and makes the payment within three (3) Business Days following Borrower's knowledge of such failure to pay; or
- 9.2 Covenants. Borrower breaches or defaults in the performance of any covenant or Secured Obligation under this Agreement, or any of the other Loan Documents or any other agreement among Borrower, Agent and Lender, and (a) with respect to a default under any covenant under this Agreement (other than under Sections 6, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.14, 7.15, 7.16, 7.17, 7.18, 7.20, 7.21 and 7.22, any other Loan Document or any other agreement among Borrower, Agent and Lender, such default continues for more than fifteen (15) days after the earlier of the date on which (i) Agent or Lender has given notice of such default to Borrower and (ii) Borrower has actual knowledge of such default or (b) with respect to a default under any of Sections 6, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.14, 7.15, 7.16, 7.17, 7.18, 7.20, 7.21 and 7.22, the occurrence of such default; or
  - 9.3 Material Adverse Effect. A circumstance has occurred that could reasonably be expected to have a Material Adverse Effect; or
- 9.4 Representations. Any representation or warranty made by Borrower in any Loan Document shall have been false or misleading in any material respect when made or when deemed made; or
- 9.5 Insolvency. Borrower (A) (i) shall make an assignment for the benefit of creditors; or (ii) shall be unable to pay its debts as they become due, or be unable to pay or perform under the Loan Documents, or shall become insolvent; or (iii) shall file a voluntary petition in bankruptcy; or (iv) shall file any petition, answer, or document seeking for itself any reorganization, arrangement, composition, readjustment, liquidation,

dissolution or similar relief under any present or future statute, law or regulation pertinent to such circumstances; or (v) shall seek or consent to or acquiesce in the appointment of any trustee, receiver, or liquidator of Borrower or of all or any substantial part (i.e., 33-1/3% or more) of the assets or property of Borrower; or (vi) shall cease operations of its business as its business has normally been conducted, or terminate substantially all of its employees; or (vii) Borrower or its directors or majority shareholders shall take any action initiating any of the foregoing actions described in clauses (i) through (vi); or (B) either (i) forty-five (45) days shall have expired after the commencement of an involuntary action against Borrower seeking reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, without such action being dismissed or all orders or proceedings thereunder affecting the operations or the business of Borrower being stayed; or (ii) a stay of any such order or proceedings shall thereafter be set aside and the action setting it aside shall not be timely appealed; or (iii) Borrower shall file any answer admitting or not contesting the material allegations of a petition filed against Borrower in any such proceedings; or (iv) the court in which such proceedings are pending shall enter a decree or order granting the relief sought in any such proceedings; or (v) forty-five (45) days shall have expired after the appointment, without the consent or acquiescence of Borrower, of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower without such appointment being vacated; or

- 9.6 Attachments; Judgments. Any portion of Borrower's assets is attached or seized, or a levy is filed against any such assets, or a judgment or judgments is/are entered for the payment of money (not covered by independent third party insurance as to which liability has not been rejected by such insurance carrier), individually or in the aggregate, of at least \$200,000, or Borrower is enjoined or in any way prevented by court order from conducting any part of its business; or
- 9.7 Other Obligations. The occurrence of any default under any agreement or obligation of any member of the Consolidated Group involving any Indebtedness in excess of \$350,000 which could entitle or permit any Person to accelerate such Indebtedness.
- 9.8 Guaranty. (a) Any guaranty of any Secured Obligations terminates or ceases for any reason to be in full force and effect; (b) any Guarantor does not perform any obligation or covenant under any guaranty of the Secured Obligations; (c) the liquidation, winding up, or termination of existence of any Guarantor; or (d) a material impairment in the perfection or priority of Agent's Lien in the collateral provided by any Guarantor or in the value of such collateral.

#### **SECTION 10. REMEDIES**

10.1 General. Upon and during the continuance of any one or more Events of Default, (i) Agent may, and at the direction of the Required Lenders shall, accelerate and demand payment of all or any part of the Secured Obligations together with a Prepayment Charge and declare them to be immediately due and payable (provided, that upon the occurrence of an Event of Default of the type described in Section 9.5, all of the Secured

Obligations shall automatically be accelerated and made due and payable, in each case without any further notice or act), (ii) Agent may, at its option, sign and file in Borrower's name any and all collateral assignments, notices, control agreements, security agreements and other documents it deems necessary or appropriate to perfect or protect the repayment of the Secured Obligations, and in furtherance thereof, Borrower hereby grants Agent an irrevocable power of attorney coupled with an interest, and (iii) Agent may notify any of Borrower's account debtors to make payment directly to Agent, compromise the amount of any such account on Borrower's behalf and endorse Agent's name without recourse on any such payment for deposit directly to Agent's account. Agent may, and at the direction of the Required Lenders shall, exercise all rights and remedies with respect to the Collateral under the Loan Documents or otherwise available to it under the UCC and other applicable law, including the right to release, hold, sell, lease, liquidate, collect, realize upon, or otherwise dispose of all or any part of the Collateral and the right to occupy, utilize, process and commingle the Collateral. All Agent's rights and remedies shall be cumulative and not exclusive.

10.2 Collection; Foreclosure. Upon the occurrence and during the continuance of any Event of Default, Agent may, and at the direction of the Required Lenders shall, at any time or from time to time, apply, collect, liquidate, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Agent may elect. Any such sale may be made either at public or private sale at its place of business or elsewhere. Borrower agrees that any such public or private sale may occur upon ten (10) calendar days' prior written notice to Borrower. Agent may require Borrower to assemble the Collateral and make it available to Agent at a place designated by Agent that is reasonably convenient to Agent and Borrower. The proceeds of any sale, disposition or other realization upon all or any part of the Collateral shall be applied by Agent in the following order of priorities:

First, to Agent and Lender in an amount sufficient to pay in full Agent's and Lender's reasonable costs and professionals' and advisors' fees and expenses as described in Section 11.11;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations (including principal, interest, and the default rate interest pursuant to Section 2.3), in such order and priority as Agent may choose in its sole discretion; and

Finally, after the full and final payment in Cash of all of the Secured Obligations (other than inchoate obligations), to any creditor holding a junior Lien on the Collateral, or to Borrower or its representatives or as a court of competent jurisdiction may direct.

Agent shall be deemed to have acted reasonably in the custody, preservation and disposition of any of the Collateral if it complies with the obligations of a secured party under the UCC.

- 10.3 No Waiver. Agent shall be under no obligation to marshal any of the Collateral for the benefit of Borrower or any other Person, and Borrower expressly waives all rights, if any, to require Agent to marshal any Collateral.
- 10.4 Cumulative Remedies. The rights, powers and remedies of Agent hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of or election of remedies with respect to any other rights, powers and remedies of Agent.

## **SECTION 11. MISCELLANEOUS**

- 11.1 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.
- 11.2 Notice. Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication (including the delivery of Financial Statements) that is required, contemplated, or permitted under the Loan Documents or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier of: (i) the day of transmission by electronic mail or hand delivery or delivery by an overnight express service or overnight mail delivery service; or (ii) the third calendar day after deposit in the United States of America mails, with proper first class postage prepaid, in each case addressed to the party to be notified as follows:
  - (a) If to Agent:

HERCULES CAPITAL, INC. Legal Department Attention: Chief Legal Officer and Bryan Jadot 400 Hamilton Avenue, Suite 310 Palo Alto, CA 94301 email: legal@herculestech.com; bjadot@htgc.com Telephone: 650-289-3060

(b) If to Lender:

HERCULES TECHNOLOGY II, L.P. HERCULES TECHNOLOGY III, L.P. Legal Department Attention: Chief Legal Officer and Bryan Jadot 400 Hamilton Avenue, Suite 310 Palo Alto, CA 94301 email: legal@herculestech.com; bjadot@htgc.com

Telephone: 650-289-3060

(c) If to Borrower:

MOTIF BIOSCIENCES INC. 125 Park Avenue 25<sup>th</sup> Floor, Suite 2510 New York, New York 10017 Attention: Robert Dickey IV Email: rob.dickey@motifbio.com Telephone: 650-864-6470

With a copy to:

DLA PIPER LLP (US) One Liberty Place 1650 Market Street, Suite 4900 Attention: Fahd M.T. Riaz, Esq. Philadelphia, Pennsylvania Email: fahd.riaz@dlapiper.com Telephone: 215-656-3316

or to such other address as each party may designate for itself by like notice.

- 11.3 Entire Agreement; Amendments.
- (a) This Agreement and the other Loan Documents constitute the entire agreement and understanding of the parties hereto in respect of the subject matter hereof and thereof, and supersede and replace in their entirety any prior proposals, term sheets, non-disclosure or confidentiality agreements, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof or thereof (including Agent's revised proposal letter dated October 13, 2017 and the Non-Disclosure Agreement).
- (b) Neither this Agreement, any other Loan Document, nor any terms hereof or thereof may be amended, supplemented or modified except in accordance with the provisions of this Section 11.3(b). The Required Lenders and Borrower party to the relevant Loan Document may, or, with the written consent of the Required Lenders, the Agent and the Borrower party to the relevant Loan Document may, from time to time, (i) enter into written amendments, supplements or modifications hereto and to the other Loan Documents for the purpose of adding any provisions to this Agreement or the other Loan Documents or changing in any manner the rights of the Lenders or of the Borrower hereunder or thereunder or (ii) waive, on such terms and conditions as the Required Lenders or the Agent, as the case may be, may specify in such instrument, any of the requirements of this Agreement or the other Loan Documents or any default or Event of Default and its consequences; provided, however, that no such waiver and no such

amendment, supplement or modification shall (A) forgive the principal amount or extend the final scheduled date of maturity of any Loan, extend the scheduled date of any amortization payment in respect of any Term Loan Advance, reduce the stated rate of any interest or fee payable hereunder) or extend the scheduled date of any payment thereof, in each case without the written consent of each Lender directly affected thereby; (B) eliminate or reduce the voting rights of any Lender under this Section 11.3(b) without the written consent of such Lender; (C) reduce any percentage specified in the definition of Required Lenders, consent to the assignment or transfer by the Borrower of any of its rights and obligations under this Agreement and the other Loan Documents, release all or substantially all of the Collateral or release a Borrower from its obligations under the Loan Documents, in each case without the written consent of all Lenders; or (D) amend, modify or waive any provision of Section 11.17 without the written consent of the Agent. Any such waiver and any such amendment, supplement or modification shall apply equally to each Lender and shall be binding upon Borrower, the Lender, the Agent and all future holders of the Loans.

- 11.4 No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.
- 11.5 No Waiver. The powers conferred upon Agent and Lender by this Agreement are solely to protect its rights hereunder and under the other Loan Documents and its interest in the Collateral and shall not impose any duty upon Agent or Lender to exercise any such powers. No omission or delay by Agent or Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrower at any time designated, shall be a waiver of any such right or remedy to which Agent or Lender is entitled, nor shall it in any way affect the right of Agent or Lender to enforce such provisions thereafter.
- 11.6 Survival. All agreements, representations and warranties contained in this Agreement and the other Loan Documents or in any document delivered pursuant hereto or thereto shall be for the benefit of Agent and Lender and shall survive the execution and delivery of this Agreement. Sections 6.3 and 8.1 shall survive the termination of this Agreement.
- 11.7 Successors and Assigns. The provisions of this Agreement and the other Loan Documents shall inure to the benefit of and be binding on Borrower and its permitted assigns (if any). Borrower shall not assign its obligations under this Agreement or any of the other Loan Documents without Agent's express prior written consent, and any such attempted assignment shall be void and of no effect. Agent and Lender may assign, transfer, or endorse its rights hereunder and under the other Loan Documents without prior notice to Borrower, and all of such rights shall inure to the benefit of Agent's and Lender's successors and assigns; provided that as long as no Event of Default has occurred and is continuing, neither Agent nor any Lender may assign, transfer or

endorse its rights hereunder or under the Loan Documents to any party that is a direct competitor of Borrower (as reasonably determined by Agent), it being acknowledged that in all cases, any transfer to an Affiliate of any Lender or Agent shall be allowed.

- 11.8 Governing Law. This Agreement and the other Loan Documents have been negotiated and delivered to Agent and Lender in the State of California, and shall have been accepted by Agent and Lender in the State of California. Payment to Agent and Lender by Borrower of the Secured Obligations is due in the State of California. This Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.
- 11.9 Consent to Jurisdiction and Venue. All judicial proceedings (to the extent that the reference requirement of Section 11.10 is not applicable) arising in or under or related to this Agreement or any of the other Loan Documents may be brought in any state or federal court located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to nonexclusive personal jurisdiction in Santa Clara County, State of California; (b) waives any objection as to jurisdiction or venue in Santa Clara County, State of California; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement or the other Loan Documents. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 11.2, and shall be deemed effective and received as set forth in Section 11.2. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.
  - 11.10 Mutual Waiver of Jury Trial / Judicial Reference.
- (a) Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert Person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes be resolved by a judge applying such applicable laws. EACH OF BORROWER, AGENT AND LENDER SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY BORROWER AGAINST AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE OR BY AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE AGAINST BORROWER. This waiver extends to all such Claims, including Claims that involve Persons other than Agent, Borrower and Lender; Claims that arise out of or are in any way connected to the relationship among Borrower, Agent and Lender; and any Claims for damages, breach of contract, tort, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement, any other Loan Document.

- (b) If the waiver of jury trial set forth in Section 11.10(a) is ineffective or unenforceable, the parties agree that all Claims shall be resolved by reference to a private judge sitting without a jury, pursuant to Code of Civil Procedure Section 638, before a mutually acceptable referee or, if the parties cannot agree, a referee selected by the Presiding Judge of the Santa Clara County, California. Such proceeding shall be conducted in Santa Clara County, California, with California rules of evidence and discovery applicable to such proceeding.
- (c) In the event Claims are to be resolved by judicial reference, either party may seek from a court identified in Section 11.9, any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by judicial reference.
- 11.11 Professional Fees. Borrower promises to pay Agent's and Lender's fees and expenses necessary to finalize the loan documentation, including but not limited to reasonable and documented out-of-pocket attorneys' fees, UCC searches, filing costs, and other miscellaneous expenses. In addition, Borrower promises to pay any and all reasonable and documented out-of-pocket attorneys' and other professionals' fees and expenses incurred by Agent and Lender after the Closing Date in connection with or related to: (a) the Loan; (b) the administration, collection, or enforcement of the Loan; (c) the amendment or modification of the Loan Documents; (d) any waiver, consent, release, or termination under the Loan Documents; (e) the protection, preservation, audit, field exam, sale, lease, liquidation, or disposition of Collateral or the exercise of remedies with respect to the Collateral; (f) any legal, litigation, administrative, arbitration, or out of court proceeding in connection with or related to Borrower or the Collateral, and any appeal or review thereof; and (g) any bankruptcy, restructuring, reorganization, assignment for the benefit of creditors, workout, foreclosure, or other action related to Borrower, the Collateral, the Loan Documents, including representing Agent or Lender in any adversary proceeding or contested matter commenced or continued by or on behalf of Borrower's estate, and any appeal or review thereof.
- Borrower are confidential and proprietary information of Borrower, if and to the extent such information either (x) is marked as confidential by Borrower at the time of disclosure, or (y) should reasonably be understood to be confidential (the "Confidential Information"). Accordingly, Agent and Lender agree that any Confidential Information it may obtain in the course of originating and documenting the Loan and acquiring, administering, or perfecting Agent's security interest in the Collateral shall not be disclosed to any other Person or entity in any manner whatsoever, in whole or in part, without the prior written consent of Borrower, except that Agent and Lender may disclose any such information: (a) to its own directors, officers, employees, accountants, counsel and other professional advisors and to its Affiliates if Agent or Lender in their sole discretion determines that any such party should have access to such information in connection with such party's responsibilities in connection with the Loan or this Agreement and, provided that such recipient of such Confidential Information

either (i) agrees to be bound by the confidentiality provisions of this paragraph or (ii) is otherwise subject to confidentiality restrictions that reasonably protect against the disclosure of Confidential Information; (b) if such information is generally available to the public; (c) if required or appropriate in any report, statement or testimony submitted to any governmental authority having or claiming to have jurisdiction over Agent or Lender; (d) if required or appropriate in response to any summons or subpoena or in connection with any litigation, to the extent permitted or deemed advisable by Agent's or Lender's counsel; (e) to comply with any legal requirement or law applicable to Agent or Lender; (f) to the extent reasonably necessary in connection with the exercise of any right or remedy under any Loan Document, including Agent's sale, lease, or other disposition of Collateral after default; (g) to any participant or assignee of Agent or Lender or any prospective participant or assignee; provided, that such participant or assignee or prospective participant or assignee agrees in writing to be bound by this Section prior to disclosure; or (h) otherwise with the prior consent of Borrower; provided, that any disclosure made in violation of this Agreement shall not affect the obligations of Borrower or any of its Affiliates or any guarantor under this Agreement or the other Loan Documents. Agent's and Lender's obligations under this Section 11.12 shall supersede all of their respective obligations under the Non-Disclosure Agreement.

- 11.13 Assignment of Rights. Borrower acknowledges and understands that Agent or Lender may, subject to Section 11.7, sell and assign all or part of its interest hereunder and under the Loan Documents to any Person or entity (an "Assignee"). After such assignment the term "Agent" or "Lender" as used in the Loan Documents shall mean and include such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Agent and Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, Agent and Lender shall retain all rights, powers and remedies hereby given. No such assignment by Agent or Lender shall relieve Borrower of any of its obligations hereunder. Lender agrees that in the event of any transfer by it of the Note(s)(if any), it will endorse thereon a notation as to the portion of the Principal of the Note(s), which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.
- 11.14 Revival of Secured Obligations. This Agreement and the Loan Documents shall remain in full force and effect and continue to be effective if any petition is filed by or against Borrower for liquidation or reorganization, if Borrower becomes insolvent or makes an assignment for the benefit of creditors, if a receiver or trustee is appointed for all or any significant part of Borrower's assets, or if any payment or transfer of Collateral is recovered from Agent or Lender. The Loan Documents and the Secured Obligations and Collateral security shall continue to be effective, or shall be revived or reinstated, as the case may be, if at any time payment and performance of the Secured Obligations or any transfer of Collateral to Agent, or any part thereof is rescinded, avoided or avoidable, reduced in amount, or must otherwise be restored or returned by, or is recovered from, Agent, Lender or by any obligee of the Secured Obligations, whether as a "voidable preference," "fraudulent conveyance," or otherwise, all as though such payment, performance, or transfer of Collateral had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, avoided, avoidable, restored, returned, or

recovered, the Loan Documents and the Secured Obligations shall be deemed, without any further action or documentation, to have been revived and reinstated except to the extent of the full, final, and indefeasible payment to Agent or Lender in Cash.

- 11.15 Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.
- 11.16 No Third Party Beneficiaries. No provisions of the Loan Documents are intended, nor will be interpreted, to provide or create any third-party beneficiary rights or any other rights of any kind in any Person other than Agent, Lender and Borrower unless specifically provided otherwise herein, and, except as otherwise so provided, all provisions of the Loan Documents will be personal and solely among Agent, the Lender and the Borrower.

#### 11.17 Agency.

- (a) Lender hereby irrevocably appoints Hercules Capital, Inc. to act on its behalf as the Agent hereunder and under the other Loan Documents and authorizes the Agent to take such actions on its behalf and to exercise such powers as are delegated to the Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto.
- (b) Lender agrees to indemnify the Agent in its capacity as such (to the extent not reimbursed by Borrower and without limiting the obligation of Borrower to do so), according to its respective Term Commitment percentage (based upon the total outstanding Term Loan Commitments) in effect on the date on which indemnification is sought under this Section 11.17, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever that may at any time be imposed on, incurred by or asserted against the Agent in any way relating to or arising out of, this Agreement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by the Agent under or in connection with any of the foregoing; The agreements in this Section shall survive the payment of the Loans and all other amounts payable hereunder.
- (c) Agent in Its Individual Capacity. The Person serving as the Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Agent and the term "Lender" shall, unless otherwise expressly indicated or unless the context otherwise requires, include each such Person serving as Agent hereunder in its individual capacity.
- (d) Exculpatory Provisions. The Agent shall have no duties or obligations except those expressly set forth herein and in the other Loan Documents. Without limiting the generality of the foregoing, the Agent shall not:

- (i) be subject to any fiduciary or other implied duties, regardless of whether any default or any Event of Default has occurred and is continuing:
- (ii) have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Agent is required to exercise as directed in writing by the Lender, provided that the Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Agent to liability or that is contrary to any Loan Document or applicable law; and
- (iii) except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and the Agent shall not be liable for the failure to disclose, any information relating to the Borrower or any of its Affiliates that is communicated to or obtained by any Person serving as the Agent or any of its Affiliates in any capacity.
- (e) The Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Lender or as the Agent shall believe in good faith shall be necessary, under the circumstances or (ii) in the absence of its own gross negligence or willful misconduct.
- (f) The Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Section 4 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Agent.
- (g) Reliance by Agent. Agent may rely, and shall be fully protected in acting, or refraining to act, upon, any resolution, statement, certificate, instrument, opinion, report, notice, request, consent, order, bond or other paper or document that it has no reason to believe to be other than genuine and to have been signed or presented by the proper party or parties or, in the case of cables, telecopies and telexes, to have been sent by the proper party or parties. In the absence of its gross negligence or willful misconduct, Agent may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to Agent and conforming to the requirements of this Agreement or any of the other Loan Documents. Agent may consult with counsel, and any opinion or legal advice of such counsel shall be full and complete authorization and protection in respect of any action taken, not taken or suffered by Agent hereunder or under any Loan Documents in accordance therewith. Agent shall have the right at any time to seek instructions

concerning the administration of the Collateral from any court of competent jurisdiction. Agent shall not be under any obligation to exercise any of the rights or powers granted to Agent by this Agreement, this Agreement and the other Loan Documents at the request or direction of Lenders unless Agent shall have been provided by Lender with adequate security and indemnity against the costs, expenses and liabilities that may be incurred by it in compliance with such request or direction.

- 11.18 Publicity. None of the parties hereto nor any of its respective member businesses and Affiliates shall, without the other parties' prior written consent (which shall not be unreasonably withheld or delayed), publicize or use (a) the other party's name (including a brief description of the relationship among the parties hereto), logo or hyperlink to such other parties' web site, separately or together, in written and oral presentations, advertising, promotional and marketing materials, client lists, public relations materials or on its web site (together, the "Publicity Materials"); (b) the names of officers of such other parties in the Publicity Materials; and (c) such other parties' name, trademarks, servicemarks in any news or press release concerning such party; provided however, notwithstanding anything to the contrary herein, no such consent shall be required (i) to the extent necessary to comply with the requests of any regulators, legal requirements or laws applicable to such party, pursuant to any listing agreement with any national securities exchange (so long as such party provides prior notice to the other party hereto to the extent reasonably practicable) and (ii) to comply with Section 11.12.
  - 11.19 Withholding; Gross-up.
  - (a) <u>Defined Terms.</u> For purposes of this Section, the term "applicable law" includes FATCA.
- (b) Payments Free of Taxes. Any and all payments by or on account of any obligation of the Consolidated Group under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable law. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then the applicable Withholding Agent shall be entitled to make such deduction or withholding in the minimum amount required by law and shall timely pay the full amount deducted or withheld to the relevant governmental authority in accordance with applicable law and, if such Tax is an Indemnified Tax, then the sum payable by the Consolidated Group shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.
- (c) <u>Payment of Other Taxes by Consolidated Group</u>. The Consolidated Group shall timely pay to the relevant governmental authority in accordance with applicable law, or at the option of the Agent timely reimburse it for the payment of, any Other Taxes.
- (d) <u>Indemnification by Consolidated Group</u>. The Consolidated Group shall indemnify each Recipient, within 10 days after demand therefor, for the full amount of any

Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant governmental authority. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Agent), or by the Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

- (e) Indemnification by the Lenders. Each Lender shall severally indemnify the Agent, within 10 days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that the Consolidated Group has not already indemnified the Agent for such Indemnified Taxes and without limiting the obligation of the Borrower to do so), and (ii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant governmental authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Agent to the Lender from any other source against any amount due to the Agent under this paragraph (e).
- (f) <u>Evidence of Payments.</u> As soon as practicable after any payment of Taxes by the Consolidated Group to a governmental authority pursuant to this Section, the Borrower shall deliver to the Agent the original or a certified copy of a receipt issued by such governmental authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Agent.
- g) Status of Lenders. (i) Any Lender that is entitled to an exemption from or reduction of U.S. withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Agent, at the time or times reasonably requested by the Borrower or the Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by the Borrower or the Agent as will enable the Borrower or the Agent to determine whether or not such Lender is subject to U.S. backup withholding or U.S. information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in paragraphs (g)(ii)(A), (ii)(B) and (ii)(D) of this Section) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.
  - (ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Borrower,

- (A) any Lender that is a U.S. Person shall deliver to the Borrower and the Agent on or about the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;
- (B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Agent), whichever of the following is applicable:
  - (1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;
    - (2) executed copies of IRS Form W-8ECI;
  - (3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the IRC, (x) a certificate to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the IRC, a "10 percent shareholder" of the Borrower within the meaning of Section 871(h)(3)(B) of the IRC, or a "controlled foreign corporation" related to the Borrower as described in Section 881(c)(3)(C) of the IRC (a "U.S. Tax Compliance Certificate") and (y) executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E; or
  - (4) to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN, IRS Form W-8BEN-E, a U.S. Tax Compliance Certificate and/or other certification documents from each beneficial owner, as applicable; <u>provided</u> that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate on behalf of each such direct and indirect partner;

- (C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Agent), executed copies of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit the Borrower or the Agent to determine the withholding or deduction required to be made; and
- (D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the IRC, as applicable), such Lender shall deliver to the Borrower and the Agent at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the IRC) and such additional documentation reasonably requested by the Borrower or the Agent as may be necessary for the Borrower and the Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Agent in writing of its legal inability to do so.

(h) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section (including by the payment of additional amounts pursuant to this Section), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant governmental authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (h) (plus any penalties, interest or other charges imposed by the relevant governmental authority) in the event that such indemnified party is required to repay such refund to such governmental authority. Notwithstanding anything to the contrary in this paragraph (h), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (h) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject

to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

- (i) Exemption from UK Withholding. Each Lender shall, following written notice from Borrower that any payment made by or on account of any obligation of the Consolidated Group under any Loan Document has a United Kingdom source, take commercially reasonable steps to cooperate with Borrower in completing any procedural formalities necessary for the relevant member of the Consolidated Group making the payment to obtain authorization to make the relevant payment to that Lender without withholding on account of United Kingdom Tax on interest and, having done so, that Lender shall have no further obligation under this Section 11.19(i) in respect of Taxes on United Kingdom source interest.
- (j) <u>Survival</u>. Each party's obligations under this Section shall survive the resignation or replacement of the Agent or any assignment of rights by, or the replacement of, a Lender, the termination of this Agreement and the repayment, satisfaction or discharge of all obligations under any Loan Document.
- 11.20 Register. The Agent, acting solely for this purpose as an agent of the Borrower, shall maintain at one of its offices in the United States a register for the recordation of the names and addresses of the Lenders, and the commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(SIGNATURES TO FOLLOW)

IN WITNESS WHEREOF, Borrower, Agent and Lender have duly exfirst above written.	ecuted and delive	ered this Loan and Security Agreement as of the day and year	
	BORROWER:		
	MOTIF BIOSCIENCES INC.		
	Signature:	/s/ Robert Dickey IV	
	Print Name:	Robert Dickey IV	
	Title:	Chief Financial Officer	
Accepted in Palo Alto, California:			
	AGENT:		
	HERCULES CAPITAL, INC.		
	Signature:	/s/ Zhuo Huang	
	Print Name:	Zhuo Huang	

Signature Page to Loan and Security Agreement

Title:

Zhuo Huang

Associate General Counsel

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## ADDENDUM 1 to LOAN AND SECURITY AGREEMENT

- (a) Borrower's Business. For purposes of this Addendum 1, Borrower shall be deemed to include its "affiliates" as defined in Title 13 Code of Federal Regulations Section 121.103. Borrower represents and warrants to Agent and Lender as of the Closing Date and covenants to Agent and Lender for a period of one year after the Closing Date with respect to subsections 2, 3, 4, 5, 6 and 7 below, as follows:
  - 1. Size Status. Borrower does not have tangible net worth in excess of \$19.5 million or average net income after Federal income taxes (excluding any carry-over losses) for the preceding two completed fiscal years in excess of \$6.5 million;
  - 2. No Relender. Borrower's primary business activity does not involve, directly or indirectly, providing funds to others, purchasing debt obligations, factoring, or long-term leasing of equipment with no provision for maintenance or repair;
  - 3. No Passive Business. Borrower is engaged in a regular and continuous business operation (excluding the mere receipt of payments such as dividends, rents, lease payments, or royalties). Borrower's employees are carrying on the majority of day to day operations. Borrower will not pass through substantially all of the proceeds of the Loan to another entity;
  - 4. No Real Estate Business. Borrower is not classified under Major Group 65 (Real Estate) or Industry No. 1531 (Operative Builders) of the SIC Manual. The proceeds of the Loan will not be used to acquire or refinance real property unless Borrower (x) is acquiring an existing property and will use at least 51 percent of the usable square footage for its business purposes; (y) is building or renovating a building and will use at least 67 percent of the usable square footage for its business purposes; or (z) occupies the subject property and uses at least 67 percent of the usable square footage for its business purposes.
  - 5. No Project Finance. Borrower's assets are not intended to be reduced or consumed, generally without replacement, as the life of its business progresses, and the nature of Borrower's business does not require that a stream of cash payments be made to the business's financing sources, on a basis associated with the continuing sale of assets (e.g., real estate development projects and oil and gas wells). The primary purpose of the Loan is not to fund production of a single item or defined limited number of items, generally over a defined production period, where such production will constitute

the majority of the activities of Borrower (e.g., motion pictures and electric generating plants).

- 6. No Farm Land Purchases. Borrower will not use the proceeds of the Loan to acquire farm land which is or is intended to be used for agricultural or forestry purposes, such as the production of food, fiber, or wood, or is so taxed or zoned.
- 7. No Foreign Investment. The proceeds of the Loan will not be used substantially for a foreign operation. At the time of the Loan, Borrower will not have more than 49 percent of its employees or tangible assets located outside the United States of America. The representation in this subsection (7) is made only as of the date hereof and shall not continue for one year as contemplated in the first sentence of this Section 1.
- (b) Small Business Administration Documentation. Agent and Lender acknowledge that Borrower completed, executed and delivered to Agent SBA Forms 480, 652 and 1031 (Parts A and B) together with a business plan showing Borrower's financial projections (including balance sheets and income and cash flows statements) for the period described therein and a written statement (whether included in the purchase agreement or pursuant to a separate statement) from Agent regarding its intended use of proceeds from the sale of securities to Lender (the "Use of Proceeds Statement"). Borrower represents and warrants to Agent and Lender that the information regarding Borrower and its affiliates set forth in the SBA Form 480, Form 652 and Form 1031 and the Use of Proceeds Statement delivered as of the Closing Date is accurate and complete.
- (c) Inspection. The following covenants contained in this Section (c) are intended to supplement and not to restrict the related provisions of the Loan Documents. Subject to the preceding sentence, Borrower will permit, for so long as Lender holds any debt or equity securities of Borrower, Agent, Lender or their representative, at Agent's or Lender' expense, and examiners of the SBA to visit and inspect the properties and assets of Borrower, to examine its books of account and records, and to discuss Borrower's affairs, finances and accounts with Borrower's officers, senior management and accountants, all at such reasonable times as may be requested by Agent or Lender or the SBA.
- (d) Annual Assessment. Promptly after the end of each calendar year (but in any event prior to February 28 of each year) and at such other times as may be reasonably requested by Agent or Lender, Borrower will deliver to Agent a written assessment of the economic impact of Lender's investment in Borrower, specifying the full-time equivalent jobs created or retained in connection with the investment, the impact of the investment on the businesses of Borrower in terms of expanded revenue and taxes, other economic benefits resulting from the investment (such as technology development or commercialization, minority business development, or expansion of exports) and such other information as may be required regarding Borrower in connection with the filing of Lender's SBA Form 468. Lender will assist Borrower with preparing such assessment. In

addition to any other rights granted hereunder, Borrower will grant Agent and Lender and the SBA access to Borrower's books and records for the purpose of verifying the use of such proceeds. Borrower also will furnish or cause to be furnished to Agent and Lender such other information regarding the business, affairs and condition of Borrower as Agent or Lender may from time to time reasonably request.

- (e) Use of Proceeds. Borrower will use the proceeds from the Loan only for purposes set forth in Section 7.16. Borrower will deliver to Agent from time to time promptly following Agent's request, a written report, certified as correct by Borrower's Chief Financial Officer, verifying the purposes and amounts for which proceeds from the Loan have been disbursed. Borrower will supply to Agent such additional information and documents as Agent reasonably requests with respect to its use of proceeds and will permit Agent and Lender and the SBA to have access to any and all Borrower records and information and personnel as Agent deems necessary to verify how such proceeds have been or are being used, and to assure that the proceeds have been used for the purposes specified in Section 7.16.
- (f) Activities and Proceeds. Neither Borrower nor any of its affiliates (if any) will engage in any activities or use directly or indirectly the proceeds from the Loan for any purpose for which a small business investment company is prohibited from providing funds by the SBIC Act, including 13 C.F.R. §107.720. Without obtaining the prior written approval of Agent, Borrower will not change within 1 year of the date hereof, Borrower's current business activity to a business activity which a licensee under the SBIC Act is prohibited from providing funds by the SBIC Act.
- (g) Redemption Provisions. Notwithstanding any provision to the contrary contained in the Certificate of Incorporation of Borrower, as amended from time to time (the "Borrower Charter") or the Memorandum and Articles of Association of Guarantor (the "Guarantor Charter"), if, pursuant to the redemption provisions contained in the Borrower Charter or the Guarantor Charter, Lender is entitled to a redemption of its Warrant, such redemption (in the case of Lender) will be at a price equal to the redemption price set forth in the Borrower Charter or the Guarantor Charter, as applicable (the "Existing Redemption Price"). If, however, Lender delivers written notice to Borrower that the then current regulations promulgated under the SBIC Act prohibit payment of the Existing Redemption Price in the case of an SBIC (or, if applied, the Existing Redemption Price would cause the Preferred Stock to lose its classification as an "equity security" and Lender has determined that such classification is unadvisable), the amount Lender will be entitled to receive shall be the greater of (i) fair market value of the securities being redeemed taking into account the rights and preferences of such securities plus any costs and expenses of the Lender incurred in making or maintaining the Warrant, and (ii) the Existing Redemption Price where the amount of accrued but unpaid dividends payable to the Lender is limited to Borrower's earnings plus any costs and expenses of the Lender incurred in making or maintaining the Warrant; provided, however, the amount calculated in subsections (i) or (ii) above shall not exceed the Existing Redemption Price.

(h) Compliance and Resolution. Borrower agrees that a failure to comply with Borrower's obligations under this Addendum, or any other set of facts or circumstances where it has been asserted by any governmental regulatory agency (or Agent or Lender believes that there is a substantial risk of such assertion) that Agent, Lender and their affiliates are not entitled to hold, or exercise any significant right with respect to, any securities issued to Lender by Borrower, will constitute a breach of the obligations of Borrower under the financing agreements among Borrower, Agent and Lender. In the event of (i) a failure to comply with Borrower's obligations under this Addendum; or (ii) an assertion by any governmental regulatory agency (or Agent or Lender believes that there is a substantial risk of such assertion) of a failure to comply with Borrower's obligations under this Addendum, then (i) Agent, Lender and Borrower will meet and resolve any such issue in good faith to the satisfaction of Borrower, Agent, Lender, and any governmental regulatory agency, and (ii) upon request of Lender or Agent, Borrower will cooperate and assist with any assignment of the financing agreements among Hercules Technology II, L.P., Hercules Technology III, L.P. and Hercules Capital, Inc.

# EXHIBIT A

## FORM OF ADVANCE REQUEST

То:	Agent	:		Date:	,20[]	
	400 H Palo <i>A</i>	les Capital, Inc. (the "Agent") amilton Avenue, Suite 310 klto, CA 94301 legal@herculestech.com				
"Lend Agree	er") an A ment am	dvance in the aggregate amount of Do	om each of Hercules Technology II, L.P. and Hercules dellars (\$ ) on , 20 (the "Advance Date") nent"). Capitalized words and other terms used but not	pursuant to the	he Loan and Securi	ty
Please	:					
	(a)	Issue a check payable to Borrower				
		or				
	(b)	Wire Funds to Borrower's account	[IF FILED PUBLICLY, ACCOUNT INFO RE	DACTED FO	R SECURITY PUR	POSES]
		Bank: Address: ABA Number: Account Number: Account Name: Contact Person:				

Borrower represents that the conditions precedent to the Advance set forth in the Agreement are satisfied and shall be satisfied upon the making of such Advance, including but not limited to: (i) that no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing; (ii) that the representations and warranties set forth in the Agreement and in the Warrant are and shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date; (iii) that Borrower is in compliance in all material respects with all the terms and provisions set

Phone Number To Verify Wire Info: Email address: forth in each Loan Document on its part to be observed or performed; and (iv) that as of the Advance Date, no fact or condition exists that could (or could, with the passage of time, the giving of notice, or both) constitute an Event of Default under the Loan Documents. Borrower understands and acknowledges that Agent has the right to review the financial information supporting this representation and, based upon such review in its sole discretion, Lender may decline to fund the requested Advance.

Borrower hereby represents that Borrower's corporate status and locations have not changed since the date of the Agreement or, if the Attachment to this Advance Request is completed, are as set forth in the Attachment to this Advance Request.

Borrower agrees to notify Agent promptly before the funding of the Loan if any of the matters which have been represented above shall not be true and correct on the Borrowing Date and if Agent has received no such notice before the Advance Date then the statements set forth above shall be deemed to have been made and shall be deemed to be true and correct as of the Advance Date.

Executed as of [ ], 20[ ].		
	BORROWER:	
	MOTIF BIOSCIENCES INC.	
	SIGNATURE: TITLE:	
	PRINT NAME:	
	7	

## ATTACHMENT TO ADVANCE REQUEST

Dated:

Borrower hereby represents and warrants to Agent that Borrower's current name and organizational status is as follows:

Name: MOTIF BIOSCIENCES INC.

Type of organization: Corporation

State of organization: Delaware

Organization file number: 3734188

Borrower hereby represents and warrants to Agent that the street addresses, cities, states and postal codes of its current locations are as follows:

[Borrower to provide]

### EXHIBIT B

### FORM OF SECURED TERM PROMISSORY NOTE

\$ Advance Date: ,20[ ]

Maturity Date: , 20[]

FOR VALUE RECEIVED, MOTIF BIOSCIENCES INC., a Delaware corporation, for itself and each of its Qualified Subsidiaries (the "Borrower") hereby promises to pay to the order of [Hercules Technology II, L.P.] [Hercules Technology III, L.P.], a Delaware limited partnership or the holder of this Note (the "Lender") at 400 Hamilton Avenue, Suite 310, Palo Alto, CA 94301 or such other place of payment as the holder of this Secured Term Promissory Note (this "Promissory Note") may specify from time to time in writing, in lawful money of the United States of America, the principal amount of Dollars (\$ ) or such other principal amount as Lender has advanced to Borrower, together with interest at a rate as set forth in Section 2.1(c) of the Loan Agreement (as hereinafter defined) based upon a year consisting of 360 days, with interest computed daily based on the actual number of days in each month.

This Promissory Note is the Note referred to in, and is executed and delivered in connection with, that certain Loan and Security Agreement dated November 14, 2017, by and among Borrower, Hercules Capital, Inc., a Maryland corporation (the "Agent") and the several banks and other financial institutions or entities from time to time party thereto as lender (as the same may from time to time be amended, modified or supplemented in accordance with its terms, the "Loan Agreement"), and is entitled to the benefit and security of the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), to which reference is made for a statement of all of the terms and conditions thereof. All payments shall be made in accordance with the Loan Agreement. All terms defined in the Loan Agreement shall have the same definitions when used herein, unless otherwise defined herein. An Event of Default under the Loan Agreement shall constitute a default under this Promissory Note.

Borrower waives presentment and demand for payment, notice of dishonor, protest and notice of protest under the UCC or any applicable law. Borrower agrees to make all payments under this Promissory Note without setoff, recoupment or deduction (except, in the case of deduction for Taxes, to the extent required by applicable law) and regardless of any counterclaim or defense.

This Promissory Note has been negotiated and delivered to Lender and is payable in the State of California. This Promissory Note shall be governed by and construed and enforced in accordance with, the laws of the State of California, excluding any conflicts of law rules or principles that would cause the application of the laws of any other jurisdiction.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, this Promissory Note has been duly executed and delivered by the undersigned as of the date above first written.

BORROWER FOR ITSELF AND
ON REHALF OF ITS OUALIFIED SUBSIDIARIES: MOTIF BIOSCIENCES INC

By: Title:

## EXHIBIT C

## NAME, LOCATIONS, AND OTHER INFORMATION FOR BORROWER

1. Borrower represents and warrants to Agent that Borrower's current name and organizational status as of the Closing Date is as follows:

Name: Motif BioSciences Inc.

Type of organization: Corporation

State of organization: Delaware

Organization file number: 3734188

Tax Identification number: 20-1020447

Fiscal Year End Date: 12/31/2017

2. Borrower represents and warrants to Agent that for five (5) years prior to the Closing Date, Borrower did not do business under any other name or organization or form except the following:

None.

3. Borrower represents and warrants to Agent that its chief executive office is located at 125 Park Avenue 25<sup>th</sup> Floor, Suite 2510, New York, NY 10017.

# EXHIBIT D

# Borrower's Patents, Trademarks, Copyrights and Licenses

1.	Patents:			
None.				
II.	Patent Applications:			
Serial N	Nos.		Assignee	
III.	Registered Trademarks			
None.				
None.				
IV.	Trademark Applications:			
Mark		Application No.	Owner/ Applicant	

	MOTIF BIOSCIENCES	87/426,006	Motif BioSciences Inc.
	MBS-17-1211 (United States)		
V.	Registered Copyrights		
None.			
VI.	Material Agreements		

# EXHIBIT E

## **Financial Accounts**

	Bank	Phone	Account	Name of	Description of
Bank Name	Address	Number	Number	Account Owner	Account
Wells Fargo Bank					

### **EXHIBIT F**

### FORM OF COMPLIANCE CERTIFICATE

Hercules Capital, Inc. (as "Agent") 400 Hamilton Avenue, Suite 310 Palo Alto, CA 94301

Reference is made to that certain Loan and Security Agreement dated November 14, 2017 and the Loan Documents (as defined therein) entered into in connection with such Loan and Security Agreement all as may be amended from time to time (hereinafter referred to collectively as the "Loan Agreement") by and among MOTIF BIOSCIENCES INC., a Delaware corporation, (the "Company"), as Borrower, the several banks and other financial institutions or entities from time to time party thereto (collectively, the "Lender") and Hercules Capital, Inc., as agent for the Lender (the "Agent"). All capitalized terms not defined herein shall have the same meaning as defined in the Loan Agreement.

The undersigned is an Officer of the Company, knowledgeable of all Company financial matters, and is authorized to provide certification of information regarding the Company; hereby certifies, in such capacity, that in accordance with the terms and conditions of the Loan Agreement, the Company is in compliance for the period ending of all covenants, conditions and terms and hereby reaffirms that all representations and warranties contained therein are true and correct on and as of the date of this Compliance Certificate with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date, after giving effect in all cases to any standard(s) of materiality contained in the Loan Agreement as to such representations and warranties. Attached are the required documents supporting the above certification. The undersigned further certifies that these are prepared in accordance with IFRS (except for the absence of footnotes with respect to unaudited financial statement and subject to normal year-end adjustments) and are consistent from one period to the next except as explained below.

REPORTING REQUIREMENT REQUIRED CHECK IF ATTACHED

Interim Financial Statements Monthly within 30 days

Interim Financial Statements Quarterly within 45 days

Audited Financial Statements FYE within 120 days

The undersigned hereby also confirms the below disclosed accounts represent all depository accounts and securities accounts presently open in the name of Holdings, Borrower or Subsidiary, as applicable.

Depository AC #	Financial Institution	Account Type (Depository / Securities)	Last Month Ending Account Balance	Purpose of Account
1 2 3 4				
5 6 7				
1 2 3 4 5 6 7				
1 2 3 4 5 6 7				

Very Truly Yours,
MOTIF BIOSCIENCES INC.
By: Name:
Its:

### **EXHIBIT G**

### FORM OF JOINDER AGREEMENT

This Joinder Agreement (the "Joinder Agreement") is made and dated as of [ ], 20[], and is entered into by and between corporation ("Subsidiary"), and HERCULES CAPITAL, INC., a Maryland corporation (as "Agent").

### RECITALS

- A. Subsidiary's Affiliate, MOTIF BIOSCIENCES INC., a Delaware corporation ("Company") has entered into that certain Loan and Security Agreement dated November 14, 2017, with the several banks and other financial institutions or entities from time to time party thereto as lender (collectively, the "Lender") and the Agent, as such agreement may be amended (the "Loan Agreement"), together with the other agreements executed and delivered in connection therewith:
- B. Subsidiary acknowledges and agrees that it will benefit both directly and indirectly from Company's execution of the Loan Agreement and the other agreements executed and delivered in connection therewith;

### **AGREEMENT**

NOW THEREFORE, Subsidiary and Agent agree as follows:

a

- 1. The recitals set forth above are incorporated into and made part of this Joinder Agreement. Capitalized terms not defined herein shall have the meaning provided in the Loan Agreement.
- 2. By signing this Joinder Agreement, Subsidiary shall be bound by the terms and conditions of the Loan Agreement the same as if it were the Borrower (as defined in the Loan Agreement) under the Loan Agreement, mutatis mutandis, provided however, that (a) with respect to (i) Section 5.1 of the Loan Agreement, Subsidiary represents that it is an entity duly organized, legally existing and in good standing under the laws of [], (b) neither Agent nor Lender shall have any duties, responsibilities or obligations to Subsidiary arising under or related to the Loan Agreement or the other Loan Documents, (c) that if Subsidiary is covered by Company's insurance, Subsidiary shall not be required to maintain separate insurance or comply with the provisions of Sections 6.1 and 6.2 of the Loan Agreement, and (d) that as long as Company satisfies the requirements of Section 7.1 of the Loan Agreement, Subsidiary shall not have to provide Agent separate Financial Statements. To the extent that Agent or Lender has any duties, responsibilities or obligations arising under or related to the Loan Agreement or the other Loan Documents, those duties, responsibilities or obligations shall flow only to Company and not to Subsidiary or any other Person or entity. By way of example (and not an exclusive list): (i) Agent's providing notice to Company in accordance with the Loan Agreement or as otherwise agreed among Company, Agent and Lender shall be deemed provided to Subsidiary; (ii) a Lender's providing an Advance to Company shall be deemed an Advance to Subsidiary; and (iii) Subsidiary shall have no right to request an Advance or make any other demand on Lender.
- 3. Subsidiary agrees not to certificate its equity securities without Agent's prior written consent, which consent may be conditioned on the delivery of such equity securities to Agent in order to perfect Agent's security interest in such equity securities.
- 4. Subsidiary acknowledges that it benefits, both directly and indirectly, from the Loan Agreement, and hereby waives, for itself and on behalf on any and all successors in interest (including without limitation

any assignee for the benefit of creditors, receiver, bankruptcy trustee or itself as debtor-in-possession under any bankruptcy proceeding) to the fullest extent provided by law, any and all claims, rights or defenses to the enforcement of this Joinder Agreement on the basis that (a) it failed to receive adequate consideration for the execution and delivery of this Joinder Agreement or (b) its obligations under this Joinder Agreement are avoidable as a fraudulent conveyance.

5. As security for the prompt, complete and indefeasible payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, Subsidiary grants to Agent a security interest in all of Subsidiary's right, title, and interest in and to the Collateral.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

# [SIGNATURE PAGE TO JOINDER AGREEMENT]

SUBSIDIARY:	
	By: Name: Title:
	Address:
	Telephone: email:
AGENT:	
HERCULES CA	PITAL, INC.
	By: Name: Title:  Address: 400 Hamilton Ave., Suite 310 Palo Alto, CA 94301 email: legal@herculestech.com Telephone: 650-289-3060

## **EXHIBIT H**

### FORM OF ACH DEBIT AUTHORIZATION AGREEMENT

Hercules Technology II, L.P. Hercules Technology III, L.P. 400 Hamilton Avenue, Suite 310 Palo Alto, CA 94301

[IF FILED PUBLICLY, ACCOUNT INFO REDACTED FOR SECURITY PURPOSES]

Re: Loan and Security Agreement dated November 14, 2017 (the "Agreement") by and among MOTIF BIOSCIENCES INC., a Delaware corporation ("Borrower"), Hercules Capital, Inc., as agent ("Agent"), and the lenders party thereto (collectively, the "Lender")

In connection with the above referenced Agreement, the Borrower hereby authorizes the Company to initiate debit entries for (i) the periodic payments due under the Agreement and (ii) reasonable and documented out-of-pocket legal fees and costs incurred by Agent or Lender pursuant to Section 11.11 of the Agreement to the Borrower's account indicated below. The Borrower authorizes the depository institution named below to debit to such account.

DEPOSITORY NAME

CITY

STATE AND ZIP CODE

TRANSIT/ABA NUMBER

ACCOUNT NUMBER

This authority will remain in full force and effect so long as any amounts are due under the Agreement.

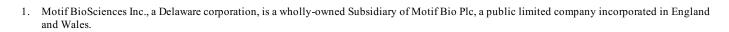
(Borrower)(Please Print)

By:

Date:

# Schedule 1

## Subsidiaries



## Commitments

Lender	Tranche	Term Commitment
Hercules Technology II, L.P.	Term A Loan	\$ 7,500,000
Hercules Technology III, L.P.	Term A Loan	\$ 7,500,000
Hercules Technology II, L.P.	Term B Loan	\$ 2,500,000
Hercules Technology III, L.P.	Term B Loan	\$ 2,500,000
Total Commitments		\$ 20,000,000

# Schedule 1A

# **Existing Permitted Indebtedness**

# Schedule 1B

## **Existing Permitted Investments**

# Schedule 1C

# **Existing Permitted Liens**

## Consents

# **Intellectual Property Claims**

# **Intellectual Property**

## **Borrower Products**

## Capitalization

## Motif BioSciences Inc.

Delaware corporation Par Value \$0.00001 per share

Shares Authorized Shares Outstanding 1,000 1

Stockholder	Common Stock	Fully-Diluted Shares	Fully-Diluted Percentage
Motif Bio Plc	1	1	100.00%
Total	1	1	100.00%

## **EXECUTION COPY**

THIS WARRANT AND THE SHARES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS, AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR, SUBJECT TO SECTION 11 HEREOF, AN OPINION OF COUNSEL (WHICH MAY BE COMPANY COUNSEL) REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE ACT, OR SUCH LAWS.

### WARRANT AGREEMENT

To Purchase American Depositary Shares of

### MOTIF BIO PLC

Dated as of November 14, 2017 (the "Effective Date")

WHEREAS, Motif Bio Plc, a public limited company incorporated in England and Wales (the "Company"), is the direct parent of Motif BioSciences Inc., a Delaware corporation (the "Borrower");

WHEREAS, the Borrower has entered into a Loan and Security Agreement of even date herewith (as amended, restated, supplemented or otherwise modified and in effect from time to time, the "Loan Agreement") with Hercules Capital, Inc., a Maryland corporation (the "Warrantholder"), in its capacity as administrative and collateral agent, and the lenders party thereto (the "Lenders");

WHEREAS, the Company acknowledges and agrees that it shall derive direct and indirect benefits from the provision of loans and other financial accommodations by the Warrantholder and the Lenders to the Borrower pursuant to the Loan Agreement;

WHEREAS, the Company has agreed to guarantee the obligations of the Borrower to the Warrantholder and the Lenders;

WHEREAS, pursuant to the Loan Agreement and as additional consideration to the Warrantholder for, among other things, its agreements in the Loan Agreement, the Company has agreed to issue to the Warrantholder this Warrant Agreement, evidencing the right to purchase American Depositary Shares of the Company (this "Warrant", "Warrant Agreement", or this "Agreement");

NOW, THEREFORE, in consideration of the Warrantholder having executed and delivered the Loan Agreement and provided the financial accommodations contemplated therein, and in consideration of the mutual covenants and agreements contained herein, the Company and Warrantholder agree as follows:

## **SECTION 1.** GRANT OF THE RIGHT TO PURCHASE SHARES.

(a) For value received, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe for and purchase from the Company, up to 73,452 Shares (as defined below) at a purchase price per Share equal to the Exercise Price (as defined below). The number of Shares and the Exercise Price are subject to adjustment as provided in Section 8. As used herein, the following terms shall have the following meanings:

"Act" means the Securities Act of 1933, as amended.

"Business Day" means any day other than Saturday, Sunday or any other day on which banking institutions in the State of New York are closed for business.

"Deposit Agreement" means that certain Deposit Agreement dated November 17, 2016 by and among the Company, The Bank of New York Mellon as Depositary, and the Owners and Holders (each as defined therein) of American Depositary Shares, as amended and in effect from time to time.

"Depositary" has the meaning given in the Deposit Agreement.

"Exercise Price" means \$9.53, subject to adjustment from time to time in accordance with the provisions of this Warrant.

"Liquid Sale" means the closing of a Merger Event in which the consideration received by the Company and/or its shareholders and/or holders of Shares, as applicable, consists solely of immediately available funds and/or Marketable Securities.

"Marketable Securities" in connection with a Merger Event means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by the Warrantholder in connection with the Merger Event were the Warrantholder to exercise this Warrant on or prior to the closing thereof is then traded on a national securities exchange or over-the-counter market, and (iii) following the closing of such Merger Event, the Warrantholder would not be restricted from publicly re-selling all of the issuer's shares and/or other securities that would be received by the Warrantholder in such Merger Event were the Warrantholder to exercise this Warrant in full on or prior to the closing of such Merger Event, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Merger Event.

"Merger Event" means any of the following: (i) a sale, assignment or other transfer or disposition of all or substantially all assets of the Company, (ii) any merger or consolidation involving the Company in which the Company is not the surviving entity or in which the outstanding Shares and/or shares of the Company's capital stock are otherwise converted into or exchanged for shares of capital stock or other securities or property of another entity, or (iii) any sale by holders of the outstanding Shares and/or the holders of Ordinary Shares in a single transaction or series of related transactions of such securities constituting a majority of the outstanding voting power of the Company.

"Ordinary Shares" means the Company's ordinary shares, par value £0.01 per share.

"<u>Purchase Price</u>" means, with respect to any exercise of this Warrant, an amount equal to the then-effective Exercise Price multiplied by the number of Shares as to which this Warrant is then exercised.

"Shares" means the Company's American Depositary Shares issued by the Depositary under the Deposit Agreement.

## **SECTION 2.** TERM OF THE AGREEMENT.

The term of this Agreement and the right to purchase Shares as granted herein shall commence on the Effective Date and, subject to Section 8(a) below, shall be exercisable until 5:00 p.m. (Eastern Time) on the fifth (5th) anniversary of the Effective Date.

### **SECTION 3.** EXERCISE OF THE PURCHASE RIGHTS.

(a) Exercise. Subject to the terms and conditions hereof, the purchase rights set forth in this Agreement may be exercised by the Warrantholder, in whole or in part, at any time, or from time to time, prior to the expiration of the term set forth in Section 2, by (i) tendering to the Company at its respective address set forth herein a notice of exercise in the form attached hereto as Exhibit I (the "Notice of Exercise"), duly completed and executed; and (ii) delivery of the Purchase Price to the Company. Promptly following the Warrantholder's delivery of the Notice of Exercise and the clearance of the funds in payment of the Purchase Price in accordance with the terms set forth below, and in no event later than three (3) Business Days thereafter, the Company shall (x) issue and deposit with the Depositary a number of Ordinary Shares that will be represented by the number of Shares to which the Warrantholder is entitled in respect of that exercise, and (y) cause the Depositary to execute and deliver to that Warrantholder a Receipt (as defined in the Deposit Agreement) evidencing the number of Shares purchased, or credit the same via book entry to the Warrantholder. The Company shall withhold any and all taxes which must be withheld with respect to the issuance and delivery of Shares upon exercise of this Warrant. The Company shall execute the acknowledgment of exercise in the form attached hereto as Exhibit II (the "Acknowledgment of Exercise") indicating the number of Shares which remain subject to future purchases under this Warrant, if any.

The Purchase Price may be paid at the Warrantholder's election either (i) in cash, by certified or bank check or by wire transfer of immediately available funds to an account designated in writing by the Company ("<u>Cash Exercise</u>"), or (ii) by surrender of all or a portion of this Warrant for Shares to be exercised under this Agreement ("<u>Net Issuance</u>"). If the Warrantholder elects the Net Issuance method: (i) the Company shall, subject to receipt by the Company of the Issuance Price (as defined below), cause the Depositary to issue Shares totaling "X" as calculated in accordance with formula (1) specified below; (ii) the Warrantholder, as a condition of making that exercise, shall pay the Company in full, in cash by check or in immediately available funds, an amount ("Z") calculated in accordance with formula (2) specified below ("<u>Issuance Price</u>"); and (iii) without delay following receipt of the Issuance Price, the Company shall pay the Warrantholder, in cash by check or in immediately available funds, the rounding difference ("D"), if any, calculated in accordance with formula (3) specified below:

## Formula (1):

$$X = \frac{Y \times (A - B)}{(A - C)}$$

Formula (2):

$$Z = X \times C$$

Formula (3):

$$D = [Y \times (A - B)] - [(X \times A) - Z]$$

Where:

- X = the number of Shares to be issued to the Warrantholder, rounded down to the nearest whole number, with respect to such Net Issuance.
- Y = the number of Shares as to which this Agreement is being exercised (inclusive of the Shares surrendered to the Company in payment of the aggregate Purchase Price).
- Z = the Issuance Price payable by the Warrantholder to the Company with respect to such Net Issuance.
- A = the then-current fair market value of one (1) Share at the time of exercise of this Warrant.
- B = the then-effective Exercise Price.
- C = the then-nominal value of one Ordinary Share, at the time of issuance of such Shares, multiplied by the number of Ordinary Shares receivable by a holder of a Share upon conversion of one Share to Ordinary Shares.
- D = the rounding difference (if any) payable by the Company to the Warrantholder with respect to such Net Issuance.

For purposes of the above calculation, the current fair market value of a Share shall be determined as follows:

- (i) at all times when Shares traded on a national securities exchange, inter- dealer quotation system or over-the-counter bulletin board service, the average of the closing prices over a five (5) day period ending three days before the day the current fair market value of the Shares is being determined;
- (ii) if the exercise is in connection with a Merger Event, the fair market value of a Share shall be deemed to be the per Share value received by the holders of the outstanding Shares pursuant to such Merger Event as determined in accordance with the definitive transaction documents executed among the parties in connection therewith; or
- (iii) in cases other than as described in the foregoing clauses (i) and (ii), the current fair market value of a Share shall be determined in good faith by the Company's Board of Directors.

Upon partial exercise by either Cash Exercise or Net Issuance, prior to the expiration or earlier termination hereof, the Company shall promptly issue an amended Agreement representing the remaining number of Shares purchasable hereunder. All other terms

and conditions of such amended Agreement shall be identical to those contained herein, including, but not limited to the Effective Date hereof.

- (b) Exercise Prior to Expiration. To the extent this Warrant is not previously exercised as to all Shares subject hereto prior to the expiration of the term set forth in Section 2 hereof, and if the then-current fair market value of one Share is greater than the Exercise Price then in effect, this Agreement shall be deemed automatically exercised in full on a Net Issuance basis pursuant to Section 3(a) (even if not surrendered) as of immediately before its expiration determined in accordance with Section 2. For purposes of such automatic exercise, the fair market value of one Share upon such expiration shall be determined pursuant to Section 3(a). To the extent this Warrant or any portion hereof is deemed automatically exercised pursuant to this Section 3(b), the Company shall promptly notify the Warrantholder of the number of Shares if any, the Warrantholder is to receive by reason of such automatic exercise and, subject to receipt of the Issuance Price with respect to the Net Issuance, (x) promptly issue and deposit with the Depositary a number of Ordinary Shares that will be represented by the number of Shares to which the Warrantholder is entitled in respect of such exercise, and (y) promptly cause the Depositary to execute and deliver to that Warrantholder a Receipt (as defined in the Deposit Agreement) evidencing the number of Shares purchased, or credit the same via book entry to the Warrantholder.
- (c) Treatment on Liquid Sale. Notwithstanding anything contained in this Agreement to the contrary, in the case of a Liquid Sale where the then-current fair market value of one Share (as determined as of the closing of such Liquid Sale in accordance with the definitive agreements executed by the parties in connection therewith) to be paid to the holders thereof is greater than the Exercise Price then in effect, the Company shall, contingent upon such closing, cause this Warrant to be exchanged for the consideration that the Warrantholder would have received in respect of the Shares issuable on exercise hereof had it exercised this Warrant in full by Cash Exercise as of immediately prior to such closing, net of the Purchase Price therefor, as and when such consideration is paid to the holders of the outstanding Shares.
- (d) Admission. At any time when the Ordinary Shares are admitted to trading on AIM or listed on the Official List of the Financial Conduct Authority, the Company shall apply for the Ordinary Shares to be issued pursuant to any exercise of this Warrant to be admitted to trading on AIM or listed on the Official List of the Financial Conduct Authority (as applicable).
- (e) <u>Currency</u>. Payment by the Warrantholder of the Issuance Price and/or any other amounts designated in UK Pounds or other non-US Dollar currency may be made in US Dollars using the applicable closing exchange rate published in the on-line edition of the *Wall Street Journal* for the business day immediately preceding the date on which such payment is made.

### **SECTION 4.** RESERVATION AND DEPOSIT OF SHARES.

During the term of this Agreement, the Company shall, at all times and at its sole expense, reserve a sufficient number of authorized Ordinary Shares, free from all liens, claims and encumbrances thereon, to provide for the issuance to the Warrantholder of the Shares upon exercise of this Warrant.

#### **SECTION 5.** NO FRACTIONAL SHARES OR SCRIP.

No fractional Shares or scrip representing fractional Shares shall be issued upon the exercise of this Agreement, but should any fractional Share interest arise, then in lieu of such

fractional Share the Company shall make a cash payment therefor in an amount equal to the product of (a)(i) the then-fair market value of one Share (determined in accordance with Section 3(a) above, less (ii) the Exercise Price then in effect, multiplied by (b) such fraction of a Share.

### **SECTION 6.** NO RIGHTS AS SHAREHOLDER

Without limitation of any provision hereof, the Warrantholder acknowledges and agrees that (i) this Agreement does not entitle the Warrantholder to any voting rights or other rights as a holder of Shares unless and until the exercise hereof and then only with respect to the Shares issued upon such exercise, (ii) ownership of Shares does not entitle the holder thereof to any rights as a holder of Ordinary Shares.

### **SECTION 7.** WARRANTHOLDER REGISTRY.

The Company shall maintain a registry showing the name and address of the registered holder of this Agreement. The Warrantholder's initial address, for purposes of such registry, is set forth in Section 12(g) below. The Warrantholder may change such address by giving written notice of such changed address to the Company.

### **SECTION 8.** ADJUSTMENT RIGHTS.

The Exercise Price and the number of Shares purchasable hereunder are subject to adjustment from time to time, as follows:

- (a) Merger Event. In connection with a Merger Event that is not a Liquid Sale, the Company shall cause the successor or surviving entity to assume this Warrant and the obligations of the Company hereunder on the closing thereof, and thereafter this Warrant shall be exercisable for the same number and type of securities or other property as the Warrantholder would have received in consideration for the Shares issuable hereunder had it exercised this Warrant in full as of immediately prior to such closing, at an aggregate Exercise Price no greater than the aggregate Exercise Price in effect as of immediately prior to such closing, and subject to further adjustment from time to time in accordance with the provisions of this Warrant. The provisions of this Section 8(a) shall similarly apply to successive non-Liquid Sale Merger Events.
- (b) Reclassification of Shares. Except for Merger Events subject to Section 8(a), if the Company at any time shall, by combination, reclassification, exchange or subdivision of securities or otherwise, change any of the securities as to which purchase rights under this Agreement exist into the same or a different number of securities of any other class or classes of securities, this Agreement shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Agreement immediately prior to such combination, reclassification, exchange, subdivision or other change. The provisions of this Section 8(b) shall similarly apply to successive combination, reclassification, exchange, subdivision or other change.
- (c) <u>Subdivision or Combination of Shares.</u> If the Company or Depositary at any time shall combine or subdivide the outstanding Shares, or if the Company shall at any time combine or subdivide its outstanding Ordinary Shares in respect of which the Shares are issued, (i) in the case of a subdivision, the Exercise Price shall be proportionately decreased (solely to the extent that such decrease would not result in a contravention of section 580 of the UK Companies Act 2006) and the number of Shares for which this Warrant is exercisable shall be proportionately increased, or (ii) in the case of a combination, the Exercise Price shall be proportionately

increased and the number of Shares for which this Warrant is exercisable shall be proportionately decreased.

- (d) <u>Dividends</u>. If the Company or Depositary at any time while this Agreement is outstanding and unexpired shall:
- (i) pay a dividend with respect to the outstanding Shares or the Ordinary Shares in respect of which the Shares are issued, payable in additional Shares, then the Exercise Price shall be adjusted, from and after the date of determination of holders of Shares entitled to receive such dividend, to that price determined by multiplying the Exercise Price in effect immediately prior to such date of determination by a fraction (A) the numerator of which shall be the total number of Shares outstanding immediately prior to such dividend or distribution, and (B) the denominator of which shall be the total number of Shares outstanding immediately after such dividend or distribution, and the number of Shares for which this Warrant is exercisable shall be proportionately increased; or
- (ii) make any other dividend or distribution on or with respect to the outstanding Shares or the Ordinary Shares in respect of which the Shares are issued, except any dividend or distribution specifically provided for in any other clause of this Section 8, then, in each such case, provision shall be made by the Company such that the Warrantholder shall receive upon exercise or conversion of this Warrant a proportionate share of any such dividend or distribution as though it were the holder of the Shares issuable on exercise hereof as of the record date fixed for the determination of the holders of Shares entitled to receive such dividend or distribution.
- (e) Notice of Certain Events. If: (i) the Company or Depositary shall declare any dividend or distribution upon the outstanding Shares or the Ordinary Shares of the Company in respect of which the Shares are issued, payable in shares, cash, property or other securities (provided that the Warrantholder (in its capacity as agent under the Loan Agreement) and the Lenders consent to such dividend); (ii) the Company or Depositary shall offer for subscription pro rata to the holders of outstanding Shares any additional Shares or any other security of any class, or other rights to acquire same; (iii) there shall be any Merger Event; or (iv) there shall be any voluntary dissolution, liquidation or winding up of the Company or the Depositary; then, in connection with each such event, the Company shall give the Warrantholder notice thereof at the same time and in the same manner as it gives notice thereof to the holders of outstanding Shares. In addition, if at any time the number of Shares outstanding is reduced such that the number of Shares or other securities issuable upon exercise of this Warrant shall exceed five percent (5%) of the then outstanding Shares, then, within three (3) Business Days of such event, the Company shall give the Warrantholder written notice thereof.

### **SECTION 9.** REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

(a) Reservation of Shares. The Company covenants and agrees that it shall take any and all actions, and shall cause the Depositary to take any and all actions, necessary so that all Shares that may be issued upon the exercise of the rights represented by this Warrant will, upon issuance, be validly issued and outstanding, fully paid and non-assessable, and will be free of any taxes, liens, charges or encumbrances of any nature whatsoever; provided, that the Shares issuable pursuant to this Agreement may be subject to restrictions on transfer under US state and/or federal securities laws. The Company has made available to the Warrantholder true, correct and complete copies of the Deposit Agreement currently in effect together with all other agreements

and documents governing the Shares. The issuance of certificates or book-entry credit for Shares upon exercise of this Warrant shall be made without charge to the Warrantholder for any issuance tax in respect thereof, or other cost incurred by the Depositary in connection with such exercise and related issuance of Shares.

- (b) <u>Due Authority</u>. The execution and delivery by the Company of this Agreement and the performance of all obligations of the Company hereunder, including the issuance to the Warrantholder of the right to acquire the Shares, have been duly authorized by all necessary corporate action on the part of the Company. This Agreement: (i) does not violate the Deposit Agreement or the Company's organizational and other governing documents; (ii) does not contravene any law or governmental rule, regulation or order applicable to the Company; and (iii) except as could not reasonably be expected to have a Material Adverse Effect (as defined in the Loan Agreement), does not and will not contravene any provision of, or constitute a default under, any indenture, mortgage, contract or other instrument to which the Company or Depositary is a party or by which it is bound. This Agreement constitutes a legal, valid and binding agreement of the Company, enforceable in accordance with its terms, except as may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting creditors' rights generally (including, without limitation, fraudulent conveyance laws) and by general principles of equity, regardless of whether considered in a proceeding in equity or at law.
- (c) <u>Consents and Approvals</u>. No consent or approval of, giving of notice to, registration with, or taking of any other action in respect of any US or non-US state, federal or other governmental authority or agency is required with respect to the execution, delivery and performance by the Company of its obligations under this Agreement, except for the filing of notices pursuant to Regulation D promulgated under the Act ("<u>Regulation D</u>") and any filing required by applicable state securities law, which filings, if required, will be effective by the time required thereby.
- (d) Exempt Transaction. Subject to the accuracy of the Warrantholder's representations in Section 10, the issuance of the Shares upon exercise of this Agreement will constitute a transaction exempt from (i) the registration requirements of Section 5 of the Act, in reliance upon Section 4(a)(2) thereof, and (ii) the qualification requirements of the applicable US state securities laws.
- (e) <u>Information Rights</u>. At all times (if any) prior to the earlier to occur of (x) the date on which all Shares issued on exercise of this Warrant have been sold, or (y) the expiration or earlier termination of this Warrant, when the Company shall not be required to file reports pursuant to Section 13 or 15(d) of the Exchange Act or shall not have timely filed all such required reports, the Warrantholder shall be entitled to the information rights contained in Section 7.1(b) (f) of the Loan Agreement, and in any such event Section 7.1(b) (f) of the Loan Agreement is hereby incorporated into this Agreement by this reference as though fully set forth herein, provided, however, that the Company shall not be required to deliver a Compliance Certificate once all Indebtedness (as defined in the Loan Agreement) owed by the Borrower and the Company to Warrantholder and the Lenders has been repaid.

### (f) [Intentionally Omitted].

(g) Rule 144 Compliance. The Company shall, at all times during the period commencing on the first date on which any Shares issued on exercise of this Warrant may be sold by the Warrantholder pursuant to Rule 144 without volume limitation or other restriction and ending on the earlier to occur of (i) the date of sale or other disposition by Warrantholder of all Shares issued on exercise of this Warrant, or (ii) the expiration or earlier termination of this Warrant if the Warrant has not been exercised in full or in part on such date, use all commercially reasonable efforts to timely file all reports required under the Exchange Act and otherwise timely

take all actions necessary to permit the Warrantholder to sell or otherwise dispose of this Warrant and the Shares issued on exercise hereof pursuant to Rule 144, provided that the foregoing shall not apply in the event of a Merger Event following which the successor or surviving entity is not subject to the reporting requirements of the Exchange Act. If the Warrantholder proposes to sell Shares issuable upon the exercise of this Agreement in compliance with Rule 144, then, upon the Warrantholder's written request to the Company, the Company shall furnish to the Warrantholder, within five (5) Business Days after receipt of such request, a written statement confirming the Company's compliance with the filing and other requirements of Rule 144.

### **SECTION 10.** REPRESENTATIONS AND COVENANTS OF THE WARRANTHOLDER.

This Agreement has been entered into by the Company in reliance upon the following representations and covenants of the Warrantholder:

- (a) <u>Investment Purpose</u>. This Warrant and the Shares issued on exercise hereof will be acquired for investment and not with a view to the sale or distribution of any part thereof in violation of applicable federal and state securities laws, and the Warrantholder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.
- (b) <u>Private Issue</u>. The Warrantholder understands that (i) the Shares issuable upon exercise of this Agreement are not, as of the Effective Date, registered under the Act or qualified under applicable US state securities laws, and (ii) the Company's reliance on exemption from such registration is predicated on the representations set forth in this Section 10.
- (c) <u>Financial Risk</u>. The Warrantholder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment, and has the ability to bear the economic risks of its investment.
  - (d) Accredited Investor. The Warrantholder is an "accredited investor" within the meaning of Rule 501 of Regulation D.
- (e) <u>Restricted Securities</u>. Without limitation of the Company's obligations under Section 9(f) above, the Warrantholder understands that unless and until a registration statement is effective under the Act covering the resale of the Shares issuable upon exercise of this Warrant, it may be required to hold such securities and may not be able to sell such securities when desired. The Warrantholder also understands that any sale of this Warrant or Shares issued hereunder that may be made by it in reliance upon Rule 144 may be made only in accordance with the terms and conditions thereof.
- (f) No Short Sales. The Warrantholder has not at any time on or prior to the Effective Date engaged in any short sales or equivalent transactions in the Shares or the Ordinary Shares in respect of which the Shares are issued. Warrantholder agrees that at all times from and after the Effective Date and on or before the expiration or earlier termination of this Warrant, it shall not engage in any short sales or equivalent transactions in the Shares or the Ordinary Shares in respect of which the Shares are issued.

## **SECTION 11.** TRANSFERS.

Subject to compliance with applicable US federal and state securities laws, this Agreement and all rights hereunder are transferable, in whole or in part, without charge to the holder hereof (except for transfer taxes) upon surrender of this Agreement properly endorsed. Each taker and holder of this Agreement, by taking or holding the same, consents and agrees that this Agreement, when endorsed in blank, shall be deemed negotiable, and that the holder hereof, when this Agreement shall have been so endorsed and its transfer recorded on the Company's

books, shall be treated by the Company and all other persons dealing with this Agreement as the absolute owner hereof for any purpose and as the person entitled to exercise the rights represented by this Agreement. The transfer of this Agreement shall be recorded on the books of the Company upon receipt by the Company of a notice of transfer in the form attached hereto as Exhibit III (the "<u>Transfer Notice</u>"), at its principal offices and the payment to the Company of all transfer taxes and other governmental charges imposed on such transfer. Until the Company receives such Transfer Notice, the Company may treat the registered owner hereof as the owner for all purposes. Notwithstanding anything herein or in any legend to the contrary, the Company shall not require an opinion of counsel in connection with any sale, assignment or other transfer by the Warrantholder of this Warrant (or any portion hereof or any interest herein) or of any Shares issued upon any exercise hereof to an affiliate (as defined in Regulation D) of the Warrantholder, provided that such affiliate is an "accredited investor" as defined in Regulation D.

### **SECTION 12. MISCELLANEOUS.**

- (a) Effective Date. The provisions of this Agreement shall be construed and shall be given effect in all respects as if it had been executed and delivered by the Company on the date hereof. This Agreement shall be binding upon any successors or assigns of the Company.
- (b) <u>Remedies</u>. In the event of any default hereunder, the non-defaulting party may proceed to protect and enforce its rights either by suit in equity and/or by action at law, including but not limited to an action for damages as a result of any such default, and/or an action for specific performance for any default where the Warrantholder will not have an adequate remedy at law and where damages will not be readily ascertainable.
- (c) No Impairment of Rights. The Company will not, by amendment of its organizational or other governing documents or the Deposit Agreement, or through any other means, avoid or seek to avoid the observance or performance of any of the terms of this Agreement, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate in order to protect the rights of the Warrantholder against impairment.

### (d) [Reserved].

- (e) Attomeys' Fees. In any litigation, arbitration or court proceeding between the Company and the Warrantholder relating hereto, the prevailing party shall be entitled to attomeys' fees and expenses and all costs of proceedings incurred in enforcing this Agreement. For the purposes of this Section 12(e), attomeys' fees shall include without limitation fees incurred in connection with the following: (i) contempt proceedings; (ii) discovery; (iii) any motion, proceeding or other activity of any kind in connection with an insolvency proceeding; (iv) garnishment, levy, and debtor and third party examinations; and (v) post-judgment motions and proceedings of any kind, including without limitation any activity taken to collect or enforce any judgment.
- (f) <u>Severability</u>. In the event any one or more of the provisions of this Agreement shall for any reason be held invalid, illegal or unenforceable, the remaining provisions of this Agreement shall be unimpaired, and the invalid, illegal or unenforceable provision shall be replaced by a mutually acceptable valid, legal and enforceable provision, which comes closest to the intention of the parties underlying the invalid, illegal or unenforceable provision.
- (g) Notices. Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication that is required, contemplated, or permitted under this Agreement or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier

of: (i) personal delivery to the party to be notified, (ii) when sent by confirmed telex, electronic transmission or facsimile if sent during normal business hours of the recipient, if not, then on the next Business Day, (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt, and shall be addressed to the party to be notified as follows:

### If to the Warrantholder:

HERCULES CAPITAL, INC. Legal Department Attention: Chief Legal Officer 400 Hamilton Avenue, Suite 310 Palo Alto, CA 94301 Facsimile: 650-473-9194 Telephone: 650-289-3060

### If to the Company:

Motif Bio Plc Attention: Chief Financial Officer 125 Park Avenue, 25<sup>th</sup> Floor New York, NY 10011 Facsimile: Telephone: Email:

or to such other address as each party may designate for itself by like notice.

- (h) Entire Agreement; Amendments. This Agreement constitutes the entire agreement and understanding of the parties hereto in respect of the subject matter hereof, and supersedes and replaces in their entirety any prior proposals, term sheets, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof. None of the terms of this Agreement may be amended except by an instrument executed by each of the parties hereto.
- (i) <u>Headings</u>. The various headings in this Agreement are inserted for convenience only and shall not affect the meaning or interpretation of this Agreement or any provisions hereof.
- (j) Advice of Counsel. Each of the parties represents to each other party hereto that it has discussed (or had an opportunity to discuss) with its counsel this Agreement and, specifically, the provisions of Sections 12(n), 12(o), 12(p), 12(q) and 12(r).
- (k) No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.
- (l) No Waiver. No omission or delay by the Warrantholder at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by the Company at any time designated, shall be a waiver of any such right or

remedy to which the Warrantholder is entitled, nor shall it in any way affect the right of the Warrantholder to enforce such provisions thereafter during the term of this Agreement.

- (m) <u>Survival</u>. All agreements, representations and warranties contained in this Agreement or in any document delivered pursuant hereto shall be for the benefit of the Warrantholder and shall survive the execution and delivery of this Agreement and the expiration or other termination of this Agreement.
- (n) Governing Law. This Agreement has been negotiated and delivered to the Warrantholder in the State of New York, and shall be deemed to have been accepted by the Warrantholder in the State of New York. Delivery of Shares to the Warrantholder by the Company or Depositary under this Agreement is due in the State of New York. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of New York, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.
- (o) Consent to Jurisdiction and Venue. All judicial proceedings arising in or under or related to this Agreement may be brought in any state or federal court of competent jurisdiction located in the State of New York. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (i) consents to personal jurisdiction in New York County, State of New York; (ii) waives any objection as to jurisdiction or venue in New York County, State of New York; (iii) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (iv) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 12(g), and shall be deemed effective and received as set forth in Section 12(g). Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.
- (p) Mutual Waiver of Jury Trial. Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes arising under or in connection with this Warrant be resolved by a judge applying such applicable laws. EACH OF THE COMPANY AND THE WARRANTHOLDER SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY THE COMPANY AGAINST THE WARRANTHOLDER OR ITS ASSIGNEE OR BY THE WARRANTHOLDER OR ITS ASSIGNEE AGAINST THE COMPANY RELATING TO THIS WARRANT. This waiver extends to all such Claims, including Claims that involve persons or entities other the Company and the Warrantholder; Claims that arise out of or are in any way connected to the relationship between the Company and the Warrantholder; and any Claims for damages, breach of contract, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement.
- (q) Arbitration. If the Mutual Waiver of Jury Trial set forth in Section 12(p) is ineffective or unenforceable, the parties agree that all Claims shall be submitted to binding arbitration in accordance with the commercial arbitration rules of JAMS, such arbitration to occur before one arbitrator, which arbitrator shall be a retired New York state judge or a retired Federal court judge. Such proceeding shall be conducted in New York County, State of New York, with New York rules of evidence and discovery applicable to such arbitration. The decision of the arbitrator shall be binding on the parties, and shall be final and nonappealable to the maximum

extent permitted by law. Any judgment rendered by the arbitrator may be entered in a court of competent jurisdiction and enforced by the prevailing party as a final judgment of such court.

- (r) <u>Pre-arbitration Relief.</u> In the event Claims are to be resolved by arbitration, either party may seek from a court of competent jurisdiction identified in Section 12(o), any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by binding arbitration.
- (s) <u>Counterparts</u>. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts (including by facsimile or electronic delivery (PDF), and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.
- (t) Specific Performance. The parties hereto hereby declare that it is impossible to measure in money the damages which will accrue to the Warrantholder or the Company by reason of the other party's failure to perform any of the obligations under this Agreement and agree that the terms of this Agreement shall be specifically enforceable by the Warrantholder and the Company. If the Warrantholder and the Company institutes any action or proceeding to specifically enforce the provisions hereof, any person against whom such action or proceeding is brought hereby waives the claim or defense therein that the Company or the Warrantholder, respectively has an adequate remedy at law, and such person shall not offer in any such action or proceeding the claim or defense that such remedy at law exists.
- (u) <u>Lost, Stolen, Mutilated or Destroyed Warrant</u>. If this Warrant is lost, stolen, mutilated or destroyed, the Company may, on such terms as to indemnity or otherwise as it may reasonably impose (which shall, in the case of a mutilated Warrant, include the surrender thereof), issue a new Warrant of like denomination and tenor as this Warrant so lost, stolen, mutilated or destroyed. Any such new Warrant shall constitute an original contractual obligation of the Company, whether or not the allegedly lost, stolen, mutilated or destroyed Warrant shall be at any time enforceable by anyone.
- (v) <u>Legends</u>. To the extent required by applicable laws, this Warrant and the Shares issuable hereunder may be imprinted with a restricted securities legend in substantially the following form:

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION RELATED THERETO OR, SUBJECT TO SECTION 11 OF THE WARRANT AGREEMENT DATED NOVEMBER 14, 2017, BETWEEN MOTIF BIO PLC (THE "COMPANY") AND HERCULES CAPITAL, INC., AN OPINION OF COUNSEL (WHICH MAY BE COMPANY COUNSEL) REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE ACT OR SUCH LAWS.

[Remainder of Page Intentionally Left Blank]

Effectiv	IN WITNESS WHEREOF, the parties hereto have caused this Warrant Agreement to be executed by its officers thereunto duly authorized as of the fective Date.			
	COMPANY:	MOTIF BIO PLC		
			/s/ Robert Dickey IV Robert Dickey IV Chief Financial Officer	
WARR	ANTHOLDER:	HERCUL By:	ES CAPITAL, INC.	
		Name: Title:	Zhuo Huang Associate General Counsel	

Signature Page to Warrant Agreement

# EXHIBIT I

# NOTICE OF EXERCISE

To:			
(1)	The undersigned Warrantholder hereby elects to purchase [ ] American Depositary Shares of Motif Bio Plc (the "Company"), pursuant to the terms of the Warrant Agreement dated November 14, 2017 (as amended, restated, supplemented or otherwise modified and in effect from time to time, the "Warrant Agreement") between the Company and the Warrantholder, and tenders herewith payment of the Purchase Price in full, together with all applicable transfer taxes, if any. [NET ISSUANCE: elects pursuant to Section 3(a) of the Warrant Agreement to effect a Net Issuance and tender payment of the Issuance Price.]		
(2)	Please issue a certificate or certificates or book-entry credit(s) representing said Shares in the name of the undersigned or in such other name as is specified below.		
	(Name)		
	(Address)		
WARR	ANTHOLDER: HERCULES CAPITAL, INC.		
	Ву:		
	Name: Title:		
	15		
	1.)		

# EXHIBIT II

# ACKNOWLEDGMENT OF EXERCISE

The undersigned [ ], hereby acknowledges receipt of the "No	tice of Exe	rcise" from Hercules Capital, Inc. to purchase [ ] American	
Depositary Shares of Motif Bio Plc, pursuant to the terms of the Warrant Agr	eement by	and between Motif Bio Plc and Hercules Capital, Inc. dated	
November 14, 2017 (as amended, restated, supplemented or otherwise modified	fied and in	effect from time to time, the "Agreement"), and further acknowledges	
that [ ] shares remain subject to purchase under the terms of the Agreement.			
COMPANY:	[	]	
	By:		
	Title:		
	Date:		
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# EXHIBIT III

#### TRANSFER NOTICE

(To transfer or assign the foregoing Agreement execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Agreement and all rights evidenced thereby are hereby transferred and assigned to (Please Print) whose address is Dated: Holder's Signature: Holder's Address: Signature Guaranteed: NOTE: The signature to this Transfer Notice must correspond with the name as it appears on the face of the Agreement, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Agreement.

#### REGISTRATION AGREEMENT

THIS REGISTRATION AGREEMENT is entered into as of November 14, 2017 by and between Motif Bio Plc, a public limited company incorporated in England and Wales (the "Company"), and Hercules Capital, Inc., a Maryland corporation ("Hercules").

#### RECITALS

WHEREAS, in connection with the transactions contemplated by that certain Loan and Security Agreement of even date herewith (as amended, restated, supplemented or otherwise modified and in effect from time to time, the "Loan Agreement"), among Motif BioSciences Inc., a Delaware corporation (the "Borrower"), Hercules and the lenders party thereto (the "Lenders"), the Company has issued to Hercules that certain Warrant Agreement dated as of the date hereof (as amended, restated, supplemented or otherwise modified and in effect from time to time, the "Warrant"), representing the right of Hercules to purchase certain American Depositary Shares of the Company are exchanged or substituted pursuant to a reorganization, recapitalization, exchange offer or the like, "American Depositary Shares");

WHEREAS, the Company is the direct parent of Motif BioSciences Inc., a Delaware corporation (the "Borrower"), and the Company acknowledges and agrees that it shall derive direct and indirect benefits from the provision of loans and other financial accommodations by Hercules and the Lenders to the Borrower pursuant to the Loan Agreement;

WHEREAS, as additional consideration to Hercules for its agreements in the Loan Agreement, the Company has agreed to use commercially reasonable efforts to cause the Registrable Securities (as defined below) to be registered for re-sale by Hercules (and/or its assignees or transferees) under the Securities Act (as defined below) pursuant to and in accordance with this Agreement;

NOW, THEREFORE, in consideration of the premises and the mutual agreements herein contained, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

#### ARTICLE I DEFINITIONS

Section 1.1 Definitions. In addition to the definitions set forth above, the following terms, as used herein, have the following meanings:

"Affiliate" of any Person means any other Person directly or indirectly controlling or controlled by or under common control with such Person. For the purposes of this definition, "control" when used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

- "Agreement" means this Registration Agreement, as it may be amended, supplemented or restated from time to time.
- "Business Day" means any day except a Saturday, Sunday or other day on which commercial banks in the City of New York, New York are authorized by law to close.
  - "Commission" means the U.S. Securities and Exchange Commission.
  - "Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.
  - "Holder" means Hercules together with any successor thereto and/or any assignee of the Warrant or any portion thereof.
  - "Indemnified Party" has the meaning set forth in Section 2.7.
  - "Indemnifying Party" has the meaning set forth in Section 2.7.
- "Person" means an individual or a corporation, partnership, limited liability company, association, trust, or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.
- "Registrable Securities" means the American Depositary Shares issued and issuable upon exercise of the Warrant, together with all American Depositary Shares, if any, issued to Holder in respect thereof by way of a share dividend or split or otherwise, until the earliest of (i) a registration statement (including a Shelf Registration Statement) covering such American Depositary Shares has been declared effective by the Commission and such American Depositary Shares have been disposed of pursuant to such effective registration statement, (ii) such American Depositary Shares can be publicly sold under Rule 144 without volume limitation or other restriction and, upon any proposed sale by Holder pursuant to Rule 144, counsel for the Company shall have delivered all required legal opinions, if any, necessary for the Company's transfer agent to effect such sale within two (2) business days thereafter, or (iii) the third (3<sup>Td</sup>) anniversary of the effective date of the Shelf Registration Statement.
  - "Registration Expenses" has the meaning set forth in Section 2.4.
  - "Required Date" means the date that is one hundred eighty (180) days after the date hereof.
  - "Resale Shelf Registration" has the meaning set forth in Section 2.1(a).
- "Rule 144" means Rule 144 promulgated under the Securities Act, as amended from time to time, or any similar successor rule thereto that may be promulgated by the Commission.
  - "Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.
  - "Shelf Registration Statement" has the meaning set forth in Section 2.1(a).

"Suspension Notice" means any written notice delivered by the Company pursuant to Section 2.11 with respect to the suspension of rights under a Shelf Registration Statement or any prospectus contained therein.

"Underwriter" means a securities dealer who purchases any Registrable Securities as principal and not as part of such dealer's market-making activities.

#### ARTICLE II REGISTRATION

#### Section 2.1 Shelf Registration.

- (a) Subject to Section 2.11, the Company agrees that it shall, promptly following the date hereof, prepare and file with the Commission, and thereafter use commercially reasonable efforts to cause to become effective as soon thereafter as practicable but in no event later than the Required Date, a "shelf' registration statement with respect to the resale of the Registrable Securities ("Resale Shelf Registration") by Holder on Form S-3 or F-3 (or, if the Company is not then eligible to use Form S-3 or F-3, such other appropriate form) for an offering to be made on a delayed or continuous basis pursuant to Rule 415 under the Securities Act (the "Shelf Registration Statement") and permitting the resale of such Registrable Securities by such Holder in accordance with the methods of distribution set forth in the Shelf Registration Statement. The Company shall use commercially reasonable efforts to keep such Shelf Registration Statement continuously effective for a period ending when all American Depositary Shares issued and issuable under the Warrant and covered by the Shelf Registration Statement are no longer Registrable Securities. Holder shall be named as a selling securityholder in the Shelf Registration Statement and the related prospectus.
  - (b) [Intentionally Omitted].
- (c) Registration Term. The Company shall prepare and file such additional registration statements as necessary and use commercially reasonable efforts to cause such registration statements to be declared effective by the Commission so that a Shelf Registration Statement remains continuously effective, subject to Section 2.11, with respect to the Registrable Securities as and for the periods required under Section 2.1(a).
- Section 2.2 [Intentionally Omitted].

Section 2.3 Registration Procedures; Filings; Information. Subject to Section 2.11 hereof, in connection with any Shelf Registration Statement under Section 2.1(a), the Company will use commercially reasonable efforts to effect the registration of the Registrable Securities covered thereby in accordance with the intended method of disposition thereof as quickly as practicable, but in no event later than the Required Date. In connection with any Shelf Registration Statement:

(a) The Company will, if requested, prior to filing a Shelf Registration Statement or prospectus or any amendment or supplement thereto, furnish to Holder copies of such registration statement as proposed to be filed, and thereafter furnish to

Holder, such number of conformed copies of such registration statement, each amendment and supplement thereto (in each case including all exhibits thereto and documents incorporated by reference therein), the prospectus included in such registration statement (including each preliminary prospectus) and such other documents as Holder may reasonably request in order to facilitate the disposition of the Registrable Securities owned by Holder.

- (b) After the filing of a Shelf Registration Statement, the Company will promptly notify Holder of any stop order issued or threatened by the Commission and take all reasonable actions required to prevent the entry of such stop order or to remove it if entered and promptly notify Holder of the removal of such stop order.
- (c) The Company will use commercially reasonable efforts to (i) register or qualify the Registrable Securities under such other securities or "blue sky" laws of such jurisdictions in the United States (where such registration or qualification is required in order to sell in such jurisdiction and an exemption does not apply) as Holder reasonably (in light of Holder's intended plan of distribution) requests and (ii) cause such Registrable Securities to be registered with or qualified by such other governmental agencies or authorities as may be necessary by virtue of the business and operations of the Company and do any and all other acts and things that may be reasonably necessary or advisable to enable Holder to consummate the disposition of the Registrable Securities owned by Holder; *provided* that the Company will not be required to (A) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this paragraph (c), (B) subject itself to taxation in any such jurisdiction or (C) consent to general service of process in any such jurisdiction.
- (d) The Company will immediately notify Holder, at any time when a prospectus relating thereto is required to be delivered under the Securities Act, of (i) the Company's receipt of any notification of the suspension of the qualification of any Registrable Securities covered by a Shelf Registration Statement for sale in any jurisdiction and will immediately notify Holder of the removal or lifting of any such suspension; or (ii) the occurrence of an event requiring the preparation of a supplement or amendment to such prospectus so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading and promptly make available to Holder any such supplement or amendment.
- (e) The Company will otherwise use commercially reasonable efforts to comply with all applicable rules and regulations of the Commission.
- (f) The Company will use commercially reasonable efforts to cause all Registrable Securities covered by such Shelf Registration Statement to be listed on the primary securities exchange on which the American Depositary Shares are then listed.
- (g) The Company may require Holder to promptly furnish in writing to the Company such information regarding Holder, the Registrable Securities held by it and the intended method of distribution of the Registrable Securities as the Company may from time to time reasonably request and as may be legally required in connection with such

registration. Holder further agrees to furnish to the Company as soon as reasonably practicable all information required to be disclosed in order to make information previously furnished to the Company in writing by Holder and included by the Company in the Shelf Registration not materially misleading.

(h) Holder agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 2.3(b) or 2.3(d) or upon receipt of a Suspension Notice, Holder will forthwith discontinue disposition of Registrable Securities pursuant to the registration statement covering such Registrable Securities until Holder's receipt of written notice from the Company that such disposition may be made and, in the case of clause (ii) of Section 2.3(d) or, if applicable, Section 2.11, copies of any supplemented or amended prospectus contemplated by clause (ii) of Section 2.3(d) or, if applicable, prepared under Section 2.11, and Holder will deliver to the Company all copies then in Holder's possession, other than permanent file copies, of the most recent prospectus covering such Registrable Securities at the time of receipt of such notice. Holder agrees that it will immediately notify the Company at any time when a prospectus relating to the registration of such Registrable Securities is required to be delivered under the Securities Act of the happening of an event as a result of which information previously furnished by Holder to the Company in writing for inclusion in such prospectus contains an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances in which they were made.

Section 2.4 Registration Expenses. In connection with any registration statement required to be filed hereunder, the Company shall pay the following registration expenses incurred in connection with the registration hereunder (the "Registration Expenses"): (i) all registration and filing fees, (ii) fees and expenses of compliance with securities or "blue sky" laws (including reasonable fees and disbursements of counsel in connection with blue sky qualifications of the Registrable Securities), (iii) printing expenses, (iv) internal expenses (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties), (v) the fees and expenses incurred in connection with the listing of the Registrable Securities, (vi) all fees and disbursements of counsel for the Company and all fees and expenses for independent certified public accountants retained by the Company, (vii) all fees and expenses of any special experts retained by the Company in connection with such registration; and (viii) not more than \$20,000 in reasonable fees and expenses of not more than one (1) counsel to Holder. The Company shall have no obligation to pay any broker or underwriter fees, discounts or commissions attributable to the sale of Registrable Securities, or, except as otherwise set forth in this Agreement, any out-of-pocket expenses of Holder (or any agents who manages its accounts) or any transfer taxes relating to the registration or sale of the Registrable Securities.

Section 2.5 *Indemnification by the Company*. To the extent permitted by law, the Company will indemnify and hold harmless Holder, its partners, members, managers, officers and directors and each person, if any, who controls Holder within the meaning of the Securities Act or the Exchange Act, against any losses, claims, damages, or liabilities (joint or several) to which they may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively a

"Violation") by the Company: (i) any untrue statement or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation of the Securities Act, the Exchange Act, any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law in connection with the offering covered by such registration statement; and the Company will pay as incurred to Holder and/or each such partner, member, manager, officer, director, underwriter or controlling person for any legal or other expenses reasonably incurred by he, it or them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the indemnity agreement contained in this Section 2.5 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, delayed or conditioned, nor shall the Company be liable in any such case for any such loss, claim, damage, liability or action to the extent that it arises out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished by Holder under an instrument duly executed by Holder and stated to be specifically for use in connection with such registration.

Section 2.6 Indemnification by Holder. To the extent permitted by law, Holder will indemnify and hold harmless the Company, each of its directors and officers and each person, if any, who controls the Company within the meaning of the Securities Act, against any losses, claims, damages or liabilities (joint or several) to which the Company or any such director, officer or controlling person may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs (1) in reliance upon and in conformity with written information furnished by Holder under an instrument duly executed by Holder and stated to be specifically for use in connection with such registration, or (2) subject to the Company having complied with its obligations under Sections 2.3(a), (b) and (d) and 2.11 hereof, as a result of Holder's failure to deliver any prospectus as required by applicable law or delivers same while a stop order or Suspension Notice is then in effect; and Holder will pay as incurred any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person, or underwriter in connection with investigating or defending any such loss, claim, damage, liability or action if it is judicially determined that there was such a Violation; provided, however, that the indemnity agreement contained in this Section 2.6 shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of Holder, which consent shall not be unreasonably withheld, delayed or conditioned; provided further, that in no event shall any indemnity under this Section 2.6 exceed the net proceeds from the offering and sale of Registrable Securities actually received by Holder.

Section 2.7 Conduct of Indemnification Proceedings. In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to Section 2.5 or 2.6, such person (an "Indemnified Party") shall promptly notify the person against whom such indemnity may be sought (an "Indemnifying Party") in writing and the Indemnifying Party shall assume the defense thereof,

including the employment of counsel reasonably satisfactory to such Indemnified Party, and shall assume the payment of all fees and expenses; provided, however, that the failure of any Indemnified Party to give such notice will not relieve such Indemnified Party of any obligations under Section 2.5 or 2.6, except to the extent such Indemnified Party is materially prejudiced by such failure. In any such proceeding, any Indemnified Party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party unless (i) the Indemnifying Party and the Indemnified Party shall have mutually agreed to the retention of such counsel or (ii) representation of the Indemnified Party by the counsel retained by the Indemnifying Party would be inappropriate due to actual or potential differing interests between the Indemnified Party and the Indemnified Party. It is understood that the Indemnifying Party shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees and expenses of more than one separate firm of attorneys (in addition to any local counsel) at any time for all such Indemnified Parties, and that all such fees and expenses shall be reimbursed as they are incurred. In the case of any such separate firm for the Indemnified Parties, such firm shall be designated in writing by (i) in the case of Persons indemnified pursuant to Section 2.5 hereof, Holder, and (ii) in the case of Persons indemnified pursuant to Section 2.6, the Company. The Indemnifying Party shall not be liable for any settlement of any proceeding effected without its written consent, which consent shall not be unreasonably withheld, but if settled with such consent, or if there be a final judgment for the plaintiff, the Indemnifying Party shall indemnify and hold harmless such Indemnified Parties from and against any loss or liability (to the extent stated above) by reason of such settlement or judgment. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, which consent shall not be unreasonably withheld, delayed or conditioned, consent to any entry of judgment or effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Party is or could have been a party and indemnity could have been sought hereunder by such Indemnified Party, unless such settlement includes an unconditional release of such Indemnified Party from all liability arising out of such proceeding.

Section 2.8 Contribution. If the indemnification provided for in Section 2.5 or 2.6 hereof is unavailable to an Indemnified Party or insufficient in respect of any losses, claims, damages or liabilities referred to herein, then each such Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such losses, claims, damages or liabilities in such proportion as is appropriate to reflect the relative fault of the Company and of Holder in connection with such statements or omissions which resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative fault of the Company on the one hand and of Holder on the other shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by such party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and Holder agree that it would not be just and equitable if contribution pursuant to this Section 2.8 were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the immediately preceding paragraph. The amount paid or payable by an Indemnified Party as a result of the losses, claims, damages or liabilities referred to in the immediately preceding

paragraph shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending any such action or claim. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

Section 2.9 [Intentionally Omitted].

Section 2.10 [Intentionally Omitted].

Section 2.11 Suspension of Use of Registration Statement.

- (a) Notwithstanding anything to the contrary in this Agreement, if the Board of Directors of the Company determines in its reasonable good faith judgment that the filing of a Shelf Registration Statement under Section 2.1(a) or the use of any related prospectus would be materially detrimental to the Company because such action would require the disclosure of material information that the Company has a bona fide business purpose for preserving as confidential or the disclosure of which would materially impede the Company's ability to consummate a significant transaction, and that the Company is not otherwise required by applicable securities laws or regulations to disclose, upon written notice of such determination by the Company to Holder which shall be signed by the Chief Executive Officer, President or any Executive Vice President of the Company certifying thereto, the rights of the Holder to offer, sell or distribute any Registrable Securities pursuant to a Resale Shelf Registration or to require the Company to take action with respect to the registration or sale of any Registrable Securities pursuant to a Shelf Registration Statement shall be suspended until the earliest of (i) the date upon which the Company notifies Holder in writing that suspension of such rights for the grounds set forth in this Section 2.11(a) is no longer necessary and they may resume use of the applicable prospectus, (ii) the date upon which copies of the applicable supplemented or amended prospectus is distributed to Holder, and (iii) up to 90 consecutive days after the notice to Holder; provided, that the Company shall not be entitled to exercise any such right more than two (2) times in any twelve month period or less than 30 days from the termination of the prior such suspension period. The Company agrees to give the notice under (i) above as promptly as practicable following the date that such suspension of rights is no longer necessary.
- (b) If all reports required to be filed by the Company pursuant to the Exchange Act have not been filed by the required date without regard to any extension, or if the consummation of any business combination by the Company has occurred or is probable for purposes of Rule 3-05 or Article 11 of Regulation S-X promulgated under the Securities Act or any similar successor rule, upon written notice thereof by the Company to Holder, the rights of the Holder to offer, sell or distribute any Registrable Securities pursuant to a Shelf Registration Statement or to require the Company to take action with respect to the registration or sale of any Registrable Securities pursuant to a Shelf Registration Statement shall be suspended until the date on which the Company has filed such reports or obtained and filed the financial information required by Rule 3-05 or Article 11 of Regulation S-X to be included or incorporated by reference, as applicable, in a Shelf Registration Statement, and the Company shall notify Holder as promptly as practicable when such suspension is no longer required.

#### Section 2.12 [Intentionally Omitted].

Section 2.13 *Survival*. The obligations of the Company and Holder under Sections 2.4 through 2.8 inclusive shall survive completion of any offering of Registrable Securities in a registration statement and the termination of this agreement.

#### ARTICLE III MISCELLANEOUS

- Section 3.1 *Remedies*. In addition to being entitled to exercise all rights provided herein and granted by law, including recovery of damages, Holder shall be entitled to specific performance of the rights under this Agreement. The Company agrees that monetary damages may not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Agreement and hereby agrees to waive the defense in any action for specific performance that a remedy at law would be adequate.
- Section 3.2 Amendments and Waivers. The provisions of this Agreement, including the provisions of this sentence, may not be amended, modified or supplemented, and waivers or consents to departures from the provisions hereof may not be given, in each case without the written consent of the Company and Holder. No failure or delay by any party to insist upon the strict performance of any covenant, duty, agreement or condition of this Agreement or to exercise any right or remedy consequent upon any breach thereof shall constitute waiver of any such breach or any other covenant, duty, agreement or condition.
- Section 3.3 *Notices*. All notices and other communications in connection with this Agreement shall be made in writing by hand delivery, registered first-class mail, fax, or air courier guaranteeing overnight delivery to a party at its address as set forth in Section 12(g) of the Warrant or to such other address as a party may hereafter specify in writing in accordance with the requirements of such Section. All such notices and communications shall be deemed to have been duly given at the times set forth in Section 12(g) of the Warrant.
- Section 3.4 Successors and Assigns; Assignment of Registration Rights. This Agreement shall inure to the benefit of and be binding upon the successors, assigns and transferees of each of the parties. Holder may assign its rights under this Agreement without the consent of the Company in connection with a transfer of the Warrant or any portion thereof.
- Section 3.5 Counterparts. This Agreement may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Each party shall become bound by this Agreement immediately upon affixing its signature hereto.
- Section 3.6 Governing Law. This Agreement shall be governed by and construed in accordance with the internal domestic laws of the State of New York, without regard to its conflict of laws provisions.
- Section 3.7 Severability. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable,

the validity, legality and enforceability of any such provision in every other respect and of the remaining provisions contained herein shall not be affected or impaired thereby.

Section 3.8 *Entire Agreement*. This Agreement is intended by the parties as a final expression of their agreement with respect to the subject matter hereof and intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of such subject matter, and supersedes all prior agreements and understandings between the parties with respect to such subject matter.

Section 3.9 *Headings*. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

Section 3.10 *Termination*. The obligations of the parties hereunder shall terminate when no Holder holds Registrable Securities, except, in each case, for any obligations under Sections 2.4, 2.5, 2.6, 2.7, 2.8 and Article III.

[Remainder of page left blank intentionally; signature page follows]

IN WITNESS WHEREOF, the undersigned have executed this Registration Agreement as of the date first written above.

# MOTIF BIO PLC

 By:
 /s/ Robert Dickey IV

 Name:
 Robert Dickey IV

 Title:
 Chief Financial Officer

HERCULES CAPITAL, INC.

By: /s/ Zhuo Huang
Name: Zhuo Huang

Name: Zhuo Huang
Title: Associate General Counsel

Signature Page to Registration Agreement

#### STOCK PLEDGE AGREEMENT

This Stock Pledge Agreement (this "Agreement") is entered into as of November 14, 2017, by and between HERCULES CAPITAL, INC., as administrative agent and collateral agent (in such capacity, "Agent") for a syndicate of secured parties (together with Agent, collectively, "Secured Parties") and MOTIF BIO PLC, a public limited company organized under the laws of England and Wales ("Pledgor").

#### RECITAL

MOTIF BIOSCIENCES INC., a Delaware corporation ("Borrower"), wishes to borrow money from time to time from Secured Parties pursuant to that certain Loan and Security Agreement dated as of even date executed by and among Borrower and Secured Parties (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"; capitalized terms used but not otherwise defined herein shall have the meanings given them in the Loan Agreement). Secured Parties have agreed to extend credit and provide other financial accommodations to Borrower upon the terms and conditions set forth in the Loan Agreement provided Pledgor secures the Obligations in accordance with the terms of this Agreement.

NOW, THEREFORE, Pledgor and Agent, for the ratable benefit of Secured Parties, agree as follows:

#### CREATION OF SECURITY INTEREST.

#### 1.1 Grant of Security Interest

- (a) Pledgor hereby pledges, assigns and delivers to Agent and grants to Agent, for the ratable benefit of Secured Parties, a security interest in the property described on <u>Exhibit A</u> attached hereto (the "Pledged Collateral") as security for the prompt payment and performance of all of the Obligations.
- (b) The term "Pledged Collateral" shall also include any securities, investment properties, instruments or distributions of any kind issuable, issued or received by Pledgor upon conversion of, in respect of, or in exchange for any other Pledged Collateral, including, but not limited to, those arising from a stock dividend, stock split, reclassification, reorganization, merger, consolidation, sale of assets or other exchange of securities or any dividends or other distributions of any kind upon or with respect to the Pledged Collateral.
- 1.2 <u>Delivery of Additional Documentation Required.</u> Pledgor will from time to time execute and deliver to Agent, at the request of Agent, all financing statements and other documents that Agent may reasonably request, in form satisfactory to Agent, to perfect and continue the perfection of Agent's security interests in the Pledged Collateral. Pledgor authorizes Agent to file financing statements without notice to Pledgor, in all appropriate jurisdictions, as Agent deems appropriate, to perfect or protect Agent's interest in the Pledged Collateral. The certificate or certificates for the securities included in the Pledged Collateral, accompanied by an instrument of assignment duly executed in blank by Pledgor, have been, or will, within five (5) days after the date hereof, be delivered by Pledgor to Agent. Pledgor shall cause the books of Borrower to reflect the pledge of the Pledged Collateral.

1.3. <u>Voting Prior to Demand</u>. Unless an Event of Default (as defined below) shall have occurred and be continuing, Pledgor shall be entitled to exercise any voting rights with respect to the Pledged Collateral and to give consents, waivers and ratifications in respect thereof, <u>provided</u> that no vote shall be cast or consent, waiver or ratification given or action taken which would be inconsistent with any of the terms of this Agreement or which would constitute or create any violation of any of such terms. All such rights of Pledgor to vote and give consents, waiver and ratifications shall upon notice to Pledgor cease in case such an Event of Default hereunder shall occur and be continuing.

#### 2. REPRESENTATIONS AND WARRANTIES. Pledgor represents and warrants that:

- 2.1 <u>Due Organization and Qualification</u>. Pledgor is duly existing and in good standing under the laws of its jurisdiction of organization and is qualified and licensed to do business in, and is in good standing in, each jurisdiction in which the conduct of its business or its ownership of property requires that it be so qualified.
- 2.2 <u>Due Authorization; No Conflict.</u> The execution, delivery, and performance of this Agreement are within Pledgor's powers, have been duly authorized, and neither conflict with nor constitute a breach of any provision contained in Pledgor's formation documents or bylaws, nor will they constitute an event of default under any material agreement to which Pledgor is a party or by which Pledgor is bound.
- 2.3 No Prior Encumbrances. Pledgor has good title to the Pledged Collateral, free and clear of any liens, security interests, or other encumbrances other than the security interest in favor of Agent.
- 2.4 <u>Litigation</u>. There is no action, suit or proceeding affecting Pledgor pending or threatened before any court, arbitrator, or governmental authority, domestic or foreign, which may have a material adverse effect on the ability of Pledgor to perform its obligations under this Agreement.
- 2.5 Solvency. The incurrence of Pledgor's obligations under this Agreement will not cause Pledgor to (a) become insolvent; (b) be left with unreasonably small capital for any business or transaction in which Pledgor is presently engaged or plans to be engaged; or (c) be unable to pay its debts as such debts mature.

#### 3. AFFIRMATIVE COVENANTS

Pledgor covenants and agrees that, until (i) the indefeasible payment in full in cash of the Obligations, (ii) no Secured Party has any obligation to extend credit to Borrower or otherwise perform under the Loan Agreement, and (iii) the termination of the Loan Documents (the occurrence of all of the foregoing events being referred to herein as "Payment in Full of the Obligations"), Pledgor shall do all of the following:

3.1 <u>Government Compliance</u>. Comply with all statutes, laws, ordinances and government rules and regulations to which it is subject, noncompliance with which could have a material adverse effect on Pledgor's business.

3.2 <u>Fees and Costs.</u> To the extent not otherwise paid by Borrower, pay all costs and expenses described in Section 11.11 of the Loan Agreement (the "Bank Expenses") incurred through and after the date of this Agreement.

#### 4. <u>NEGATIVE COVENANTS</u>

Pledgor covenants and agrees that, until the Payment in Full of the Obligations, Pledgor shall not do any of the following:

- 4.1 <u>Dispositions.</u> Convey, sell, lease, transfer, pledge, assign control over or otherwise dispose of all or any part of the Pledged Collateral.
- 4.2 <u>Encumbrances.</u> Create, incur, assume or suffer to exist any security interest, lien or encumbrance with respect to the Pledged Collateral, other than the security interest in favor of Agent, for the ratable benefit of Secured Parties.

#### 5. <u>EVENTS OF DEFAULT</u>

Any one or more of the following events shall constitute an "Event of Default" under this Agreement:

- 5.1 <u>Loan Agreement</u>. If an Event of Default occurs under the Loan Agreement or any other Loan Document.
- 5.2 <u>Covenant Default.</u> If Pledgor fails or neglects to perform, keep, or observe any material term, provision, condition, covenant, or agreement contained in this Agreement or in any other Loan Document, and, except with respect to Sections 4.1 and 4.2 of this Agreement, as to any default under a term, condition or covenant that can be cured, has not cured the default within 5 days after it occurs, or if the default cannot be cured within 5 days or cannot be cured after Pledgor's attempts in the 5 day period, and the default may be cured within a reasonable time, then Pledgor has an additional time, (of not more than 10 days) to attempt to cure the default.
- 5.3 Attachment. If any portion of the Pledged Collateral is made the subject of a lien, security interest or other encumbrance (other than that in favor of Agent), or is attached, seized, subjected to a writ or distress warrant, or is levied upon, or comes into the possession of any trustee, receiver or person acting in a similar capacity and such attachment, seizure, writ or distress warrant or levy has not been removed, discharged or rescinded within 5 days, or if Pledgor is enjoined, restrained, or in any way prevented by court order from continuing to conduct all or any material part of its business affairs.
- 5.4 <u>Misrepresentations</u>. If any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth herein.
- 5.5 <u>Insolvency</u>. (a) Pledgor becomes insolvent; (b) Pledgor begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Pledgor and not dismissed or stayed within 30 days.
  - 5.6 <u>Material Adverse Change.</u> If there is a material impairment in the priority of Agent's security interest in the Pledged Collateral.

#### 6. AGENT'S RIGHTS AND REMEDIES

- 6.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Agent may, at its election, without notice of its election and without demand, do any one or more of the following, all of which are authorized by Pledgor:
- (a) Exercise all such rights as a secured party under the UCC as it, in its sole judgment, shall deem necessary or appropriate, including the right to sell all or any part of the Pledged Collateral at one or more public or private sales upon five (5) days' prior written notice to Pledgor, and any such sale or sales may be made for cash, upon credit, or for future delivery, and in connection therewith, Agent may grant options, provided that any such terms or options shall, in the best judgment of Agent, be extended only in order to obtain the best possible price.
- (b) Declare all Obligations immediately due and payable (but if an Event of Default described in Section 5.5 occurs all Obligations are immediately due and payable without any action by Agent).
- 6.2 <u>Sale of Pledged Collateral</u>. Pledgor recognizes that Agent may be unable to effect a public sale of all or a part of the Pledged Collateral by reason of certain prohibitions contained in the Securities Act of 1933, as amended (the "Act"), so that Agent may be compelled to resort to one or more private sales to a restricted group of purchasers who will be obliged to agree, among other things, to acquire the Pledged Collateral for their own account, for investment and without a view to the distribution or resale thereof. Pledgor understands that private sales so made may be at prices and on other terms less favorable to the seller than if the Pledged Collateral were sold at public sales, and agrees that Agent has no obligation to delay the sale of any of the Pledged Collateral for the period of time necessary (even if Agent would agree), to register such securities for sale under the Act. Pledgor agrees that private sales made under the foregoing circumstances shall be deemed to have been made in a commercially reasonable manner.
- 6.3 Remedies Cumulative. Agent's rights and remedies under this Agreement and the other Loan Documents shall be cumulative. Agent shall have all other rights and remedies not inconsistent herewith as provided under the UCC, by law, or in equity. No exercise by Agent of one right or remedy shall be deemed an election, and no waiver by Agent of any Event of Default on Pledgor's part shall be deemed a continuing waiver. No delay by Agent shall constitute a waiver, election, or acquiescence by it.
- 6.4 <u>Demand; Protest</u>. Pledgor waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees at any time held by Agent on which Pledgor may in any way be liable.
- 6.5 <u>Hold on Pledged Collateral</u>. Pledgor agrees that, until Payment in Full of the Obligations, Agent may hold and refuse to release the Pledged Collateral to any party, including Pledgor.
- 6.6 <u>Power of Attorney.</u> Pledgor irrevocably appoints Agent as its lawful attorney to transfer the Pledged Collateral into the name of Agent or a third party as the Code permits and

cause new certificates representing the Pledged Collateral to be issued in the name of Agent; <u>provided</u> that such power of attorney shall only be exercisable upon the occurrence and during the continuance of an Event of Default. Agent may exercise the power of attorney to sign Pledgor's name on any documents necessary to perfect or continue the perfection of any security interest regardless of whether an Event of Default has occurred. Agent's appointment as Pledgor's attorney in fact, and all of Agent 's rights and powers, coupled with an interest, are irrevocable until the Payment in Full of the Obligations.

- 6.7 <u>Bank Expenses.</u> If Pledgor fails to pay any amount due hereunder or furnish any required proof of payment to third persons in connection with the Pledged Collateral, Agent may make all or part of the payment and take any action Agent deems prudent. Any amounts paid by Agent are Bank Expenses and immediately due and payable, bearing interest at the then applicable rate and secured by the Pledged Collateral. No payments by Agent are deemed an agreement to make similar payments in the future or Agent's waiver of any Event of Default. After the sale of any of the Pledged Collateral, Agent may deduct all reasonable legal and other expenses and attorneys' fees for preserving, collecting, selling and delivering the Pledged Collateral and for enforcing its rights with respect to the Obligations, and shall apply the remainder of the proceeds to the Obligations in such manner as Agent in its reasonable discretion shall determine, and shall pay the balance, if any, to Pledgor.
- 6.8 Agent's Liability for Pledged Collateral. If Agent complies with reasonable banking practices, it is not liable or responsible for the safekeeping of the Pledged Collateral.

#### 7. <u>NOTICES</u>

Unless otherwise provided in this Agreement, all notices or demands by any party relating to this Agreement shall be made in accordance with Section 11.2 of the Loan Agreement; provided that communications and notices to Pledgor may be made to Borrower on behalf of Pledgor.

#### 8. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER

- 8.1 Governing Law. This Agreement have been negotiated and delivered to Agent in the State of California, and shall have been accepted by Agent in the State of California. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.
- 8.2 Consent to Jurisdiction and Venue. All judicial proceedings (to the extent that the reference requirement of Section 8.3 is not applicable) arising in or under or related to this Agreement may be brought in any state or federal court located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to nonexclusive personal jurisdiction in Santa Clara County, State of California; (b) waives any objection as to jurisdiction or venue in Santa Clara County, State of California; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 7, and shall be deemed effective and received as set forth in Section 7. Nothing

herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

- 8.3 Mutual Waiver of Jury Trial. Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert Person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes be resolved by a judge applying such applicable laws. EACH OF PLEDGOR AND AGENT SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY PLEDGOR AGAINST AGENT OR ITS ASSIGNEE OR BY AGENT OR ITS ASSIGNEE AGAINST PLEDGOR. This waiver extends to all such Claims, including Claims that involve Persons other than Agent or Pledgor; Claims that arise out of or are in any way connected to the relationship among Pledgor and Agent; and any Claims for damages, breach of contract, tort, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement.
- 8.4 <u>Judicial Reference</u>. If the waiver of jury trial set forth in Section 8.3 is ineffective or unenforceable, the parties agree that all Claims shall be resolved by reference to a private judge sitting without a jury, pursuant to Code of Civil Procedure Section 638, before a mutually acceptable referee or, if the parties cannot agree, a referee selected by the Presiding Judge of the Santa Clara County, California. Such proceeding shall be conducted in Santa Clara County, California, with California rules of evidence and discovery applicable to such proceeding. In the event Claims are to be resolved by judicial reference, either party may seek from a court identified in Section 8.2, any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by judicial reference.
- 8.5 Private Judge. WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY, if the above waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, mutually selected by the parties (or, if they cannot agree, by the Presiding Judge of the Santa Clara County, California Superior Court) appointed in accordance with California Code of Civil Procedure Section 638 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts), sitting without a jury, in Santa Clara County, California; and the parties hereby submit to the jurisdiction of such court. The reference proceedings shall be conducted pursuant to and in accordance with the provisions of California Code of Civil Procedure §§ 638 through 645.1, inclusive. The private judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently sealed. If during the course of any dispute, a party desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which shall be conducted in the same manner as it would be before a court under the rules of discovery

applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and order applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to the California Code of Civil Procedure § 644(a). Nothing in this paragraph shall limit the right of any party at any time to exercise self-help remedies, foreclose against collateral, or obtain provisional remedies. The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph.

#### 9. GENERAL PROVISIONS

- 9.1 Amendment of Loan Documents. Pledgor authorizes Agent, without notice or demand and without affecting its liability hereunder, from time to time to (a) renew, extend, or otherwise change the terms of the Loan Documents or any part thereof, as provided in Section 11.3 of the Loan Agreement; (b) take and hold security for the payment of the Loan Documents, and exchange, enforce, waive and release any such security; and (c) apply such security and direct the order or manner of sale thereof as Agent in its sole discretion may determine.
- 9.2 Pledgor Waivers. Pledgor waives any right to require Agent to (a) proceed against Borrower, any other guarantor or any other person; (b) proceed against or exhaust any security held from Borrower; (c) marshal any assets of Borrower; or (d) pursue any other remedy in Agent's power whatsoever. Agent may, at its election, exercise or decline or fail to exercise any right or remedy it may have against Borrower or any security held by Agent, including without limitation the right to foreclose upon any such security by judicial or nonjudicial sale, without affecting or impairing in any way the liability of Pledgor hereunder. Pledgor waives any defense arising by reason of any disability or other defense of Borrower or by reason of the cessation from any cause whatsoever of the liability of Borrower. Pledgor waives any setoff, defense or counterclaim that Borrower may have against Agent. Pledgor waives any defense arising out of the absence, impairment or loss of any right of reimbursement or subrogation or any other rights against Borrower. Pledgor shall have no right of subrogation or reimbursement, contribution or other rights against Borrower, and Pledgor waives any right to enforce any remedy that Agent now has or may hereafter have against Borrower. Pledgor waives all rights to participate in any security now or hereafter held by Agent. Pledgor waives all presentments, demands for performance, notices of nonperformance, protests, notices of protest, notices of dishonor, and notices of acceptance of this Pledge Agreement and of the existence, creation, or incurring of new or additional indebtedness. Pledgor assumes the responsibility for being and keeping itself informed of the financial condition of Borrower and of all other circumstances bearing upon the risk of nonpayment of any indebtedness or nonperformance of any obligation of Borrower, warrants to Agent that it will keep so informed, and agrees that absent a request for particular information by Pledgor, Agent shall have no duty to advise Pledgor of in
- 9.3 <u>Borrower Insolvency.</u> If Borrower becomes insolvent or is adjudicated bankrupt or files a petition for reorganization, arrangement, composition or similar relief under any present or future provision of the United States Bankruptcy Code, or if such a petition is filed against Borrower, and in any such proceeding some or all of any indebtedness or obligations

under the Loan Documents are terminated or rejected or any obligation of Borrower is modified or abrogated, or if Borrower's obligations are otherwise avoided for insolvency, bankruptcy or any similar reason, Pledgor agrees that Pledgor's liability hereunder shall not thereby be affected or modified and such liability shall continue in full force and effect as if no such action or proceeding had occurred. This Agreement shall continue to be effective or be reinstated, as the case may be, if any payment must be returned by Agent or any other Secured Party upon the insolvency, bankruptcy or reorganization of Borrower, Pledgor, any other person, or otherwise, as though such payment had not been made.

- Subordination of Indebtedness. Any indebtedness or other obligation of Borrower now or hereafter held by or owing to Pledgor is hereby subordinated in time and right of payment to all obligations of Borrower to Secured Parties, except as such indebtedness or other obligation is expressly permitted to be paid under the Loan Agreement; and such indebtedness of Borrower to Pledgor is assigned to Agent as security for this Agreement, and if Agent so requests shall be collected, enforced and received by Pledgor in trust for Agent and to be paid over to Agent on account of the Obligations. Any notes now or hereafter evidencing such indebtedness of Borrower to Pledgor shall be marked with a legend that the same are subject to this Agreement and shall be delivered to Agent. Pledgor shall, and Agent is hereby authorized to, in the name of Pledgor from time to time, execute and file financing statements and continuation statements and execute such other documents and take such other action as Agent deem necessary or appropriate to perfect, preserve and enforce its rights hereunder.
- 9.5 <u>Disclosure of Information; Collateral.</u> Pledgor acknowledges that it has, independently of and without reliance on Agent or any other Secured Party, made its own credit analysis of Borrower and the Collateral, performed its own legal review of this Agreement, the Loan Documents and all related filings, and is not relying on Agent or any other Secured Party with respect to any of the aforesaid items. Pledgor has established adequate means of obtaining from Borrower, on a continuing basis, financial and other information pertaining to Borrower's financial condition and the value of the Collateral and status of Agent's lien on and in the Collateral. Pledgor agrees to keep adequately informed from such means of any facts, events or circumstances which might in any way affect Pledgor's risks hereunder, and Pledgor further agrees that Agent shall have no obligation to disclose to Pledgor information or material with respect to Borrower or the Collateral acquired in the course of Agent's relationship with Borrower. Agent makes no representation, express or implied, with respect to the Collateral or its interest in, or the priority or perfection of its lien on and in the Collateral. Pledgor acknowledges that its obligation hereunder will not be affected by (a) Agent's failure properly to create a lien on or in the Collateral, (b) Agent's failure to create or maintain a priority with respect to the lien purported to be created in the Collateral, or (c) any act or omission of Agent (whether negligent or otherwise) which adversely affects the value of the Collateral or Agent's lien therein or thereon or the priority of such lien.
- 9.6 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Pledgor may not assign this Agreement or any rights under it without Agent's prior written consent. Agent has the right, without the consent of or notice to Pledgor, to sell, transfer, negotiate, or grant participation in all or any part of, or any interest in, Agent's obligations, rights and benefits under this Agreement.
- 9.7 <u>Indemnification</u>. Pledgor agrees to indemnify and hold Agent, Lender and their officers, directors, employees, agents, in-house attorneys, representatives and shareholders (each, an "Indemnified Person") harmless from and against any and all claims, costs, expenses,

damages and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including reasonable attorneys' fees and disbursements and other costs of investigation or defense (including those incurred upon any appeal) (collectively, "Liabilities"), that may be instituted or asserted against or incurred by such Indemnified Person as the result of credit having been extended, suspended or terminated under this Agreement and the other Loan Documents or the administration of such credit, or in connection with or arising out of the transactions contemplated hereunder and thereunder, or any actions or failures to act in connection therewith, or arising out of the disposition or utilization of the Collateral, excluding in all cases Liabilities to the extent resulting solely from any Indemnified Person's gross negligence or willful misconduct. Pledgor agrees to pay, and to save Agent and Lender harmless from, any and all liabilities with respect to, or resulting from any delay in paying, any and all excise, sales or other similar taxes (excluding taxes imposed on or measured by the net income of Agent or Lender) that may be payable or determined to be payable with respect to any of the Collateral or this Agreement. In no event shall any Indemnified Person be liable on any theory of liability for any special, indirect, consequential or punitive damages (including any loss of profits, business or anticipated savings).

- 9.8 <u>Time of Essence.</u> Time is of the essence for the performance of all obligations set forth in this Agreement.
- 9.9 <u>Severability of Provisions</u>. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.
- 9.10 Amendments in Writing, Integration. All amendments to this Agreement must be in writing and executed by the parties hereto. This Agreement and the other Loan Documents constitute the entire agreement and understanding of the parties hereto in respect of the subject matter hereof and thereof, and supersede and replace in their entirety any prior proposals, term sheets, non-disclosure or confidentiality agreements, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof or thereof.
- 9.11 Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.
- 9.12 <u>Survival</u>. All covenants, representations and warranties made in this Agreement continue in full force while any obligations remain outstanding. Section 9.7 of this Agreement shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, the Loan Agreement.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Stock Pledge Agreement to be executed as of the date first written above.

Pledgor MOTIF BIO PLC

By: /s/ Robert Dickey IV
Name: Robert Dickey IV
Title: Chief Financial Officer

AGENT HERCULES CAPITAL, INC.

By: /s/ Zhuo Huang Name: Zhuo Huang

Title: Associate General Counsel

Signature Page to Stock Pledge Agreement

# EXHIBIT A

The Pledged Collateral consists of all of Pledgor's right, title and interest in and to the following whether owned now or hereafter arising and whether the Pledgor has rights now or hereafter has rights therein and wherever located:

All of the issued and outstanding Equity Interests in Motif BioSciences Inc., a Delaware corporation, together with all proceeds and substitutions thereof, all cash, stock and other moneys and property paid thereon, all rights to subscribe for securities declared or granted in connection therewith, and all other cash and noncash proceeds of the foregoing; and

All Pledgor's books relating to the foregoing and any and all claims, rights and interests in any of the above and all substitutions for, additions and accessions to and proceeds thereof.

# CONSULTING AGREEMENT Effective Date: February 2, 2018

THIS CONSULTING AGREEMENT (this "Agreement") is entered into by and between Motif Biosciences, Inc., a Delaware corporation (the "Company"), and Robert Dickey IV, an individual ("Consultant"), as of the date set forth above (the "Effective Date").

WHEREAS, the Consultant was previously the Chief Financial Officer of the Company ("CFO"); and

WHERAS, the Company wishes to obtain the services of Consultant for a five (5) month period to facilitate the transition of the Consultant's prior duties as the CFO of the Company to the Company's new CFO, and Consultant wishes to provide such services, all subject to the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the Company and Consultant hereby agree to be legally bound as follows:

#### 1. Services.

- During the Service Period (as defined below), Consultant shall assist the new CFO of the Company as requested by the Company (the "<u>Services</u>"). The Services will be performed in a professional manner and will be performed remotely and/or at the offices of the Company as reasonably requested by the Company.
- 1.2 Consultant is not an employee of the Company and will not be entitled to participate in or receive any benefit or right as a Company employee under any Company employee benefit and welfare plan, including, without limitation, employee insurance, pension, savings and security plans as a result of his entering into this Agreement.
- 1.3 All taxes relating to Consultant's performance under this Agreement shall be the responsibility of Consultant. In particular, Consultant shall be solely responsible for the payment of all federal, state and local taxes or contributions imposed or required under unemployment insurance, social security and income tax laws that pertain to the compensation paid or reimbursements provided to Consultant.
- 2. <u>Compensation.</u> In connection with the Services, the Company shall pay Consultant an amount of \$26,666.00 per month to be paid in two (2) equal bi-weekly installments during the Service Period for an aggregate payment of \$133,330. The Company shall reimburse Consultant for all reasonable expenses incurred by Consultant in connection with the performance of the Services, including travel expenses, which have received Company prior written approval.
- 3. <u>Term.</u> The term of this Agreement shall begin on the Effective Date and shall continue through June 30, 2018 (the "<u>Service Period</u>"); provided, however that Company may terminate this Agreement at any time upon written notice to Consultant. In the event that Company terminates this Agreement, Consultant shall be paid all compensation that would have been paid through the Service Period irrespective of the date of termination of this Agreement by the Company.

#### 4. Confidentiality.

- 4.1 Company Confidential Information. Consultant shall hold in strict confidence, and not to use, except for the benefit of the Company, and not to disclose to any person or entity without written authorization of the Company, any Confidential Information (as defined below) of the Company. "Confidential Information" means any proprietary or confidential information, technical data, trade secrets or know-how, including, but not limited to, research, product plans, products, services, customer lists and customers, markets, software, developments, inventions, processes, formulas, technology, designs, drawings, engineering, marketing, distribution and sales methods and systems, sales and profit figures, finances and other business information disclosed to Consultant by or on behalf of the Company, either directly or indirectly, whether in writing, orally or by drawings or inspection of documents or other tangible property; provided, that Confidential Information shall not include any of the foregoing items to the extent they have become publicly known and made generally available through no wrongful act of Consultant.
- 4.2 Third Party Information Held by Consultant. Consultant shall not improperly use or disclose to the Company or any of its directors, officers, employees or agents, any Confidential Information of any current or former client or other person or entity with whom Consultant has an agreement or duty to keep such information confidential, and that Consultant shall not bring onto the premises of the Company any such information in any medium unless consented to in writing by such client, person or entity.
- 4.3 Third Party Information Held by the Company. Consultant recognizes that the Company has received, and in the future may receive, from third parties Confidential Information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. Consultant shall hold all such information in strict confidence and not disclose it to any person or entity or use it except as necessary in carrying out Services, consistent with the Company's agreement with such third party. For purposes of this Agreement, such third party information shall be deemed part of the Confidential Information of the Company.
- 4.4 <u>Required Disclosure of Confidential Information</u>. If Consultant is required by law or court or governmental order to disclose Confidential Information, Consultant shall give the Company prompt written notice of such requirement such that the Company shall have the opportunity to apply for a protective order, injunction or for confidential treatment of such Confidential Information.

#### 5. Miscellaneous.

- 5.1 <u>Assignment; No Third Party Beneficiaries.</u> Neither party may assign this Agreement without the prior written consent of the other party. All of the terms and provisions of this Agreement shall be binding upon and inure to the benefit of and be enforceable by the respective heirs, executors, administrators, legal representatives, successors and permitted assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer on any person or entity other than the parties hereto or their respective successors and permitted assigns, any benefits, rights or remedies.
- 5.2 <u>Governing Law, Jurisdiction and Attorney Fees</u>. This Agreement shall be governed by and interpreted in accordance with laws of the State of Delaware without giving effect to any

conflict of laws provisions. Consultant agrees that any dispute or controversy arising out of or relating to any interpretation, construction, performance or breach of this Agreement shall solely be brought in the United States District Court in Delaware, or if such court does not accept jurisdiction or will not accept jurisdiction, in any court of general jurisdiction in the State of Delaware.

- 5.3 Entire Agreement, Amendment and Waiver. This Agreement is the sole agreement between Consultant and the Company with respect to the Services and it supersedes all prior agreements and understandings with respect thereto, whether oral or written. No amendment, supplement or other modification to any provision of this Agreement shall be binding unless in writing and signed by both Consultant and the Company. No waiver of any rights under this Agreement shall be effective unless in writing signed by the party to be charged. A waiver of a breach or violation of any provision of this Agreement will not constitute or be construed as a waiver of any subsequent breach or violation of that provision or as a waiver of any breach or violation of any other provision of this Agreement.
- 5.4 <u>Severability.</u> If any provision of this Agreement or application thereof to anyone or under any circumstances is adjudicated to be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect any other provision or application of this Agreement which can be given effect without the invalid or unenforceable provision or application and shall not invalidate or render unenforceable such provision or application in any other jurisdiction.
- 5.5 <u>Headings</u>. The headings in this Agreement are intended solely for convenience or reference and shall be given no effect in the construction or interpretation of this Agreement.
- 5.6 <u>Counterparts.</u> This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, but all of which together shall constitute but one and the same instrument.

IN WITNESS WHEREOF, the undersigned, intending to be legally bound, have duly executed this Agreement as of the Effective Date.

MOTIF BIOSCIENCES, INC.	CONSULTANT
/s/ Graham G. Lumsden	/s/ Robert Dickey IV
Authorized Signature	Robert Dickey IV
Name: Graham G. Lumsden Title: CEO	

#### CONFIDENTIAL SEPARATION AGREEMENT AND RELEASE

THIS CONFIDENTIAL SEPARATION AGREEMENT AND RELEASE (the "Agreement") is made and entered into by and between Robert Dickey IV ("Dickey") and Motif BioSciences, Inc. (the "Company") (collectively, the "Parties").

WHEREAS, Dickey was employed by the Company pursuant to an employment agreement, dated January 16, 2017 (the "Employment Agreement"); and

WHEREAS, the Parties wish to memorialize the terms and conditions of the termination of Dickey's employment by the Company.

NOW THEREFORE, in consideration of the covenants, promises, and other good and valuable consideration set forth herein, it is agreed by and between the Parties as follows:

- 1. Separation of Employment. Dickey agrees that his employment with the Company will terminate effective as of February 2, 2018 (the "Separation Date"). Dickey agrees that from and after the Separation Date, he will no longer be, nor hold himself out as, an employee, officer, representative or agent of the Company, except as otherwise provided for in the Consulting Agreement (defined below). Dickey agrees that, on or before the Separation Date, he will resign from all Board, officer or other positions with the Company and will take all necessary actions to effect such resignation, including signing the necessary resignation letters and other documents. Dickey' termination will be treated as a termination without cause. Dickey shall be paid his current annual salary through the Separation Date and for accrued but unused vacation as of the Separation Date, less applicable withholdings and authorized deductions. Dickey shall be entitled to reimbursement for reasonable business expenses incurred on or before the Separation Date, provided Dickey submits appropriate supporting receipts and documentation to Graham Lumsden, CEO within ten (10) business days after the Separation Date; reimbursements will be made at such time and in such manner as provided for by the Company's normal policies and practices governing such payments.
- 2. Amendment to Employment Agreement & Entry into Consulting Agreement. Subject to Dickey's execution and non-revocation of this Agreement, and in consideration of the releases and covenants given by Dickey in this Agreement, Dickey and the Company shall enter into a Consulting Agreement dated February 2, 2018 (the "Consulting Agreement")). The Company and Dickey hereby agree to amend the Employment Agreement to delete Section 3(b)(iii) from the Employment Agreement. Dickey hereby acknowledges and agrees that the Consulting Agreement is being entered into in lieu of and in full satisfaction of any amounts that might otherwise be payable under any contract, plan, policy or practice, past or present, of the Company, and any of its affiliates, including but not limited to the Employment Agreement.
  - 3. Acknowledgments. Dickey further acknowledges and agrees that:
- a. The Consulting Agreement, and compensation provided for therein, provides valid and sufficient consideration for Dickey undertakings pursuant to this Agreement, are in addition to what Dickey would otherwise be entitled, and would not be made but for Dickey' execution of this Agreement.

- b. Except as set forth in Section 2 above and other as set forth in the Consulting Agreement, Dickey is not entitled to and will not at any time seek or receive any further consideration from the Company, including any compensation, bonus, incentive compensation, equity securities (including under any stock option agreement grant) or benefits of any kind. For clarity, the Non-Qualified Stock Option Agreement, dated January 17, 2017 by and between Motif Bio PLC (parent to Company) and Dickey ("NQSO Agreement") is terminated as of the Separation Date. Notwithstanding the provisions of the NQSO Agreement, including, but not limited to Section 5, all rights and options (including vested options) granted to Dickey in the NQSO Agreement are terminated as of the Separation Date and are no longer exercisable by Dickey.
- c. After the Separation Date, Dickey will not be entitled to participate in, or continue to participate in, any benefit programs offered by the Company to its employees. Any benefits due to Dickey will be treated in accordance with the Company's benefit plans, programs, or policies, as applicable. Notwithstanding the foregoing, Dickey will be entitled to continue to receive his health insurance benefits through February 28, 2018. Dickey will receive, under separate cover, information concerning his right to continue health insurance benefits (at his own expense) after February 28, 2018 in accordance with the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA") and/or New York State's mini-COBRA law.

#### 4. Release and Waiver of Claims.

- a. As a material inducement to the Company to enter into this Agreement, Dickey, for himself and his heirs, successors, and assigns, hereby forever releases and discharges, to the fullest extent permitted by law, the Company, its owners, investors, parents, subsidiaries, affiliated corporations, related entities, divisions, predecessors, successors and assigns, and its and their respective directors, officers, partners, principals, shareholders, attorneys, agents, representatives, employees, insurers, trustees, heirs, executors, and administrators, past and present (collectively, the "Released Parties") from any and all claims, demands, actions, and causes of action of any kind whatsoever, past or present, known and unknown, whether in law or in equity, which Dickey ever had, now has, or may have against the Released Parties arising at any time up to and including the date of his execution of this Agreement, including but not limited to:
  - (i) all claims directly or indirectly relating to or arising out of Dickey's employment with the Company and the termination of same;
- (ii) all claims under any federal, state or local statute or ordinance, including without limitation all claims under Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, Section 1981 of Title 42 of the United States Code, the Age Discrimination in Employment Act ("ADEA"), the Older Workers Benefit Protection Act ("OWBPA"), the Americans with Disabilities Act, the Employee Retirement Income Security Act of 1974, the Family and Medical Leave Act of 1993, the Fair Labor Standards Act, the Equal Pay Act, the Genetic Information Nondiscrimination Act, the Sarbanes-Oxley Act of 2002, the New York

State Human Rights Law, the New York City Human Rights Law, the New York Labor Code, each as amended, and any other federal, state, or local law, rule, or regulation pertaining to employment;

- (iii) all claims under any express or implied contract or claims under any common law theory, including claims for unjust enrichment, negligence, defamation, failure to hire, wrongful discharge, intentional and unintentional torts, breach of the covenant of good faith and fair dealing, fraud, retaliation, harassment or discrimination; and
- (iv) all claims for compensation or damages of any type whatsoever, including but not limited to, back pay, front pay, wages, economic loss, compensatory damages, emotional distress, pain and suffering, liquidated and punitive damages, attorneys' fees, expenses and costs.
- b. Notwithstanding the generality of the foregoing, nothing herein constitutes a release or waiver by Dickey of: (i) any claim or right based on any facts or set of facts that may arise after the execution of this Agreement; (ii) any claim that may not be waived under law, including claims for unemployment or workers compensation benefits; (iii) the right to provide information to, file a charge with, or participate in an investigation by a governmental agency; and (iv) any claim or right Dickey may have under this Agreement. Provided, however, that Dickey acknowledges and agrees that, if he pursues, or someone pursues on his behalf, a claim that is not waived as set forth in this Section 4(b), Dickey hereby waives and disclaims any right to individual recovery for such claim, including money damages or other relief, except that this limitation on monetary recovery will not apply to claims for unemployment or workers compensation benefits or to administrative proceedings before the U.S. Securities and Exchange Commission. Moreover, nothing in this Agreement limits or waives Dickey's right, pursuant to the OWBPA, to seek a judicial determination of the validity of this Agreement's waiver of claims under the ADEA.
- 5. Covenant Not to Sue. Dickey represents that he has not, prior to signing this Agreement, filed any suit, proceeding, complaint, charge, grievance, arbitration, or claim against the Company or any of the Released Parties in any forum. Dickey further represents that he has not assigned or transferred, or purported to assign or transfer, to any person or entity any claim or other matter released in this Agreement. Dickey further agrees that, to the fullest extent permitted by law, he will not institute nor consent to allow any other person or entity to institute on his behalf against the Company or any of the Released Parties any claim, lawsuit, or proceeding with any forum in any way relating to or arising out of any claim or other matter released in this Agreement. In the event any action or claim is brought in violation of this section, Dickey understands that the General Release and Waiver set forth in Section 4 will completely bar any recovery or relief obtained on his behalf, whether monetary or otherwise, by any person or entity with respect to any of the claims that he has released in this Agreement.
- 6. <u>Return of Property</u>. Within five (5) business days following the Separation Date, Dickey shall return to the Company all Company Property, whether tangible or intangible, whether created by Dickey or not, that is in his custody, possession or control. "Company Property" includes, but is not limited to, any and all originals, copies, excerpts and synopses of any files, notes, documents, records, computer disks, printouts, video recordings, audio

recordings, correspondence on Company letterhead, communications (including without limitation correspondence, e-mails and text messages) and other methods of storing information which pertain to, relate to, constitute, contain or reference the Company's business or Confidential Information.

- 7. Non-Disparagement. Each Party agrees that it will not take any actions, make any statements, or knowingly cause others to take any actions or make any statements that disparage, derogate, or defame the other Party or any other Released Party. Nothing in this Agreement shall prevent a Party from providing information to or participating in a proceeding before a court, administrative agency, or other governmental body, or as otherwise required by law.
- 8. **No Disclosure.** Dickey agrees to keep the existence and terms of this Agreement confidential, except that Dickey may tell his immediate family, attorneys, and accountants, if any, of the Agreement as needed, but only if any individual he tells about this Agreement agrees to maintain the confidentiality of this Agreement. This Section shall not prohibit disclosure (a) as may be necessary for the prosecution of claims relating to the performance or enforcement of this Agreement or (b) as may be ordered by any regulatory agency or court or as required by other lawful process.
- 9. **Continuing Obligations.** Dickey agrees to comply with the sections of his Employment Agreement titled "Restrictive Covenants," "Confidentiality," and "Works For Hire" by their terms, as if set forth expressly herein, and acknowledges that his obligations set forth in such sections survive the termination of his employment with the Company. For purposes of this Agreement, "business competitor" in Section 4(b) of the Employment Agreement shall mean any person or entity working in the field of anti-infectives development.
- 10. Non-Admission of Liability. This Agreement is entered into voluntarily by the Parties in order to bring a mutually agreeable resolution to the termination of Dickey's employment with the Company. This Agreement is not, and shall not in any way be construed as, an admission by the Company of any fault, liability, or wrongdoing of any kind. The Company specifically disclaims on the part of the Company, its respective directors, officers, executives, employees, representatives and agents, any liability to or wrongful acts against Dickey or any other person.
- 11. Choice of Law; Venue. This Agreement shall be interpreted, governed by, and construed in accordance with the laws of the State of New York, without giving effect to its conflict of law principles. Any claims arising out of or relating to this Agreement, the execution of this Agreement, or the waiver of claims in this Agreement shall be brought exclusively in the state courts of New York or, if the jurisdictional prerequisites are met, in the United States District Court for the Southern District of New York; the Parties agree and consent to the jurisdiction of and venue in those courts.
- 12. <u>Injunctive Relief.</u> Dickey acknowledges and agrees that any breach of his covenants and other obligations set forth in Sections 5 through 9, inclusive, will cause irreparable harm to the Company that is incapable of calculation and for which monetary damages will be grossly inadequate. Dickey therefore acknowledges and agrees that in the event of a breach or threatened breach of Sections 5 through 9, inclusive, the Company shall be entitled to immediate

injunctive or other preliminary or equitable relief, as appropriate and without the requirement to post any bond, in addition to all other remedies available at law and equity. The Company shall be entitled to recover all reasonable attorneys' fees and costs incurred with respect to any action brought to enforce its rights under this Paragraph 12.

- 13. Severability. It is the desire and intent of the Parties that the provisions of this Agreement shall be enforced to the fullest extent permissible under the laws and public policies applied in each jurisdiction in which enforcement is sought. In the event that any one or more of the provisions of this Agreement shall be held to be invalid, illegal, or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby. Provided, however, that if either of both of the General Release and Waiver in Section 4 or the Covenant Not to Sue in Section 5 are held to be invalid, illegal, or unenforceable, then Dickey acknowledges and agrees that (a) he will be required to enter into a new agreement containing an enforceable release of all legally waivable claims against the Released Parties and a promise to not file any legal proceeding against any of the Released Parties based on such released claims and (b) the Severance Payment will constitute sufficient consideration for his entering into such new agreement.
- 14. Entire Agreement: Amendment. This Agreement sets forth the entire agreement and understanding between the Parties and fully supersedes and replaces any and all prior agreements or understandings (whether oral or written) between the Parties pertaining to the subject matter hereof; provided however, that nothing in this Agreement shall impair Dickey's obligations under the Employment Agreement that survive termination of his employment, as set forth in Section 9 above. The Parties acknowledge and agree that in signing this Agreement, they have not relied upon any representation, promise or inducement that is not expressly set forth in this Agreement. This Agreement may be amended or modified only with the written consent of the Company. No oral waiver, amendment or modification will be effective under any circumstances whatsoever.

#### 15. Acknowledgments, Consideration and Revocation Period.

- a. Dickey acknowledges and represents that he has carefully read this Agreement, knows its contents, and understands its terms. By signing this Agreement, Dickey acknowledges that he does so same freely and voluntarily, without any compulsion, duress or undue influence from anyone.
- b. Dickey acknowledges that he has been advised in writing (by this Agreement) that he has the right to consult with an attorney of his choosing concerning the legal significance of this Agreement prior to signing it.
- c. Dickey acknowledges that (i) by entering into this Agreement, he is releasing and waiving valuable rights and claims, including specifically, but not limited, any rights and claims that may exist under the ADEA; (ii) the waiver and release of claims set forth in Section 4 and the promise not to sue set forth in Section 5 do not apply to any rights or claims that may arise under the ADEA after the date of execution of this release, nor do they apply to his right to challenge the validity of this Agreement's waiver and release of claims under the ADEA.

- d. Dickey shall have a period of 21 days from the date on which a copy of this Agreement has been delivered to him to consider whether to sign it and return a signed copy to the Company to Graham Lumsden, CEO in person, by mail, or by email at graham.lumsden@motifbio.com. Any modifications, material or otherwise, made to this Agreement do not restart or affect in any manner the original twenty-one (21) day consideration period. Dickey acknowledges that if he signs and returns this Agreement before the expiration of the 21-day period, he will have done so knowingly and voluntarily and will have waived the remainder of the 21-day period.
- e. If Dickey signs the Agreement, he then has a period of 7 days following the date of signing (the "Revocation Period") to revoke his acceptance of the Agreement. Any revocation must be in writing and received by Graham Lumsden, CEO in person, by mail, or by email at graham.lumsden@motifbio.com on or prior to the end of seventh day in order to be effective. A letter of revocation that is not received by the seventh day after Dickey has signed the Agreement will be invalid and will not revoke this Agreement. If no revocation occurs, this Agreement shall become effective on the eighth day after it is signed by Dickey (the "Effective Date").
- 16. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts, which together shall be effective as if they were a single document. Signatures on the Agreement transmitted by email or facsimile copy shall have the same force and effect as original signatures.

WHEREFORE, the Parties to this Agreement, intending to be legally bound, have caused this Agreement to be executed as of the date(s) set forth below.

Robert Dickey IV	Motif BioSciences, Inc.		
/s/ Robert Dickey IV	By: /s/ Graham G. Lumsden		
	Name: Graham G. Lumsden		
	Title: CEO		
Date: February 13, 2018	Date: February 13, 2018		

#### Certification by the Principal Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

#### I, Dr. Graham Lumsden, certify that:

- 1. I have reviewed this annual report on Form 20-F of Motif Bio plc (the "Company") for the fiscal year ended December 31, 2017;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this annual report;
- 4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(f) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
  - (d) Disclosed in this annual report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
- 5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: April 10, 2018

/s/ Dr. Graham Lumsden

Name: Graham Lumsden
Title: Chief Executive Officer
(Principal Executive Officer)

#### Certification by the Principal Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

#### I, Jonathan Gold, certify that:

- 1. I have reviewed this annual report on Form 20-F of Motif Bio plc (the "Company") for the fiscal year ended December 31, 2017;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this annual report;
- 4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
  - (d) Disclosed in this annual report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
- 5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: April 10, 2018

/s/ Jonathan Gold

Name: Jonathan Gold

Title: Chief Financial Officer (Principal Financial Officer)

# Certification by the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the annual report of Motif Bio plc (the "Company") on Form 20-F for the fiscal year ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof, I, Dr. Graham Lumsden, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The annual report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the annual report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 10, 2018

/s/ Dr. Graham Lumsden

Name: Graham Lumsden Title: Chief Executive Officer

(Principal Executive Officer)

# Certification by the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the annual report of Motif Bio plc (the "Company") on Form 20-F for the fiscal year ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof, I, Jonathan Gold, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The annual report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the annual report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 10, 2018

/s/ Jonathan Gold

Name: Jonathan Gold Title: Chief Financial Officer

(Principal Financial Officer)

# CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form F-3 (Nos. 333-222042, 333-222614) of Motif Bio plc of our report dated April 10, 2018 relating to the financial statements, which appears in this Form 20-F.

/s/ PricewaterhouseCoopers LLP Florham Park, New Jersey, United States of America April 10, 2018

# CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form F-3 (Nos. 333-222042, 333-222614) of Motif Bio plc of our report dated May 16, 2016 relating to the financial statements, which appears in this Form 20-F.

/s/ PricewaterhouseCoopers LLP Aberdeen, United Kingdom April 10, 2018

#### CONSENT OF BAL PHARMA CONSULTING, LLC

BAL Pharma Consulting, LLC hereby consents to all references to the market research survey it was commissioned to prepare on behalf of Motif Bio plc entitled "Assessment of Iclaprim Commercial Opportunity in the Gram Positive Antibiotic Hospital Market" and to the results of such survey (collectively, the "BAL Information") included in this Annual Report on Form 20-F of Motif Bio plc for the year ending December 31, 2017, and to all references to BAL Pharma Consulting, LLC as having prepared such survey. BAL Pharma Consulting, LLC further consents to the incorporation by reference in Motif Bio plc's Registration Statements on Registration Statements on Form F-3 (File Nos. 333-222614 and 333-222042), as amended and supplemented, filed with the United States Securities and Exchange Commission, of the BAL Information and all references to BAL Pharma Consulting, LLC, as having prepared such survey.

/s/ Lynda Berne

Lynda Beme Principal BAL Pharma Consulting, LLC April 10, 2018

# CONSENT OF JMI LABORATORIES

JMI Laboratories hereby consents to all references to the worldwide microbiological survey (protocol #15-MOT-01) it was commissioned to prepare on behalf of Motif Bio plc and to the results of such survey (collectively, the "JMI Information") included in this Annual Report on Form 20-F of Motif Bio plc for the year ending December 31, 2017, and to all references to JMI Laboratories as having prepared such survey. JMI Laboratories further consents to the incorporation by reference in Motif Bio plc's Registration Statements on Registration Statements on Form F-3 (File Nos. 333-222614 and 333-222042), as amended and supplemented, filed with the United States Securities and Exchange Commission, of the JMI Information and all references to JMI Laboratories, as having prepared such survey.

/s/ Andrew Fuhrmeister	
Andrew Fuhrmeister	
CEO	
JMI LABORATORIES	
April 10, 2018	

# CONSENT OF IHMA LABORATORIES

IHMA Laboratories hereby consents to all references to the US and Europe microbiological survey it was commissioned to prepare on behalf of Motif Bio plc and to the results of such survey (collectively, the "IHMA Information") included Annual Report on Form 20-F of Motif Bio plc for the year ending December 31, 2017, and to all references to IHMA Laboratories as having prepared such survey. IHMA Laboratories further consents to the incorporation by reference in Motif Bio plc's Registration Statements on Registration Statements on Form F-3 (File Nos. 333-222614 and 333-222042), as amended and supplemented, filed with the United States Securities and Exchange Commission, of the IHMA Information and all references to IHMA Laboratories, as having prepared such survey.

/s/ Stephen Hawser Stephen Hawser CEO IHMA LABORATORIES April 10, 2018