Bioblast Pharma Ltd.
Form 20-F
April 23, 2018

United States

Securities and Exchange Commission

Washington, D.C. 20549

FORM 20-F

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES

EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2017

Commission file number: 001-36578

Bioblast Pharma Ltd.

(Exact name of Registrant as specified in its charter)

State of Israel

(Jurisdiction of incorporation or organization)

PO Box 318, Tel-Aviv, Israel 6100201

(Address of principal executive offices)

Mr. Fredric D. Price

Tel: 03-5736632

PO Box 318, Tel-Aviv, Israel 6100201

(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:
Ordinary Shares, par value of NIS 0.05	Nasdaq Capital Market

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.

3,342,393 Ordinary Shares, par value NIS 0.05 per share as of December 31, 2017

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

¨ Yes x 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 x 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.

x Yes ¨ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, 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).

x Yes ¨ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of “large accelerated filer, “accelerated filer,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ¨ Accelerated Filer ¨ Non-Accelerated Filer x

Emerging Growth Company x

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

U.S. GAAP x

International Financial Reporting Standards as issued by the International Accounting Standards Board ¨

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 x No

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INTRODUCTION

We are a clinical stage orphan disease-focused biotechnology company committed to developing meaningful therapies for patients with rare and ultra-rare genetic diseases. Currently our focus is on trehalose, a therapeutic platform that offers potential solutions for several diseases that share a common pathophysiological mechanism, which are the functional changes that accompany a particular syndrome or disease. Since our inception in 2012, our work with trehalose has centered around oculopharyngeal muscular dystrophy, or OPMD, and Spinocerebellar Ataxia Type 3, or SCA3.

On June 5, 2017, we announced our engagement with JSB-Partners, L.P., or JSB Partners, a global life sciences advisor, to assist us in executing our business development objectives, which include selecting potential development and commercial partners for our investigational proprietary intravenous (IV) form of trehalose 90 mg/mL solution (trehalose), which has been studied in humans with OPMD and SCA3 and mergers and acquisitions, or M&A, opportunities. Among other transaction structures, we are simultaneously exploring the possibility of a merger or sale of the entire company or a controlling interest in the company, as well as a sale or licensing of our product candidate followed either by the distribution of any proceeds to our shareholders or an unrelated merger of the company with an operating company that would seek to benefit from the company's then status as a "shell" company listed for trading on Nasdaq (reverse IPO). We have cut our expenses and terminated almost all of our employees and are now dedicating all of our resources to support the process led by JSB-Partners. Accordingly, we are not currently actively pursuing our core business focus as described in the preceding paragraph.

Unless otherwise indicated, all references to the "Company," "we," "our" "us" and "Bioblast" refer to Bioblast Pharma Ltd. and its wholly owned subsidiary, Bio Blast Pharma, Inc., a Delaware corporation. References to "U.S. dollars" and "$" are to the currency of the United States of America, and references to "NIS" are to New Israeli Shekels. References to "Ordinary Shares" are to our Ordinary Shares, par value of NIS 0.05 per share. All references to Ordinary Share amounts have been retroactively restated to reflect the 1:5 reverse shares split that took effect on September 25, 2017.

In this annual report, the term "Trehalose IV" refers to trehalose 90mg/mL intravenous solution, our current product candidate.

We do not endorse or adopt any third-party research or forecast firms' statements or reports referred to in this annual report and assume no responsibility for the contents or opinions represented in such statements or reports, nor for the updating of any information contained therein.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual report contains express or implied "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 and other U.S. Federal securities laws. These forward-looking statements include, but are not limited to:

- our prospects for consummating a transaction with a partner for our investigational product candidate or an M&A transaction and the involvement of JSB-Partners, or another third party, in facilitating such transaction;
- our ability to continue as a going concern and to meet our financial needs, as well as potential raising of funds and their effect on our shareholders;
- our expectations regarding the timing of commencing clinical trials with respect to our Trehalose IV solution in OPMD, if at all;
- the continued listing of our Ordinary Shares on Nasdaq;
- our expectations regarding the progress of our clinical trials, including the duration, cost and whether such trials will be conducted at all;
- the number, scope, size and design of our planned development programs, including nonclinical, clinical trials;
- our intention to successfully complete clinical trials in order to be in a position to submit a New Drug Application, or NDA, to the Food and Drug Administration, or FDA;

- the possibility that we will apply in the future for regulatory approval for our current and any future product candidates we may develop, and the costs and timing of such regulatory approvals;
- the likelihood of regulatory approvals for any product candidate we may develop;
- the timing, cost or other aspects of the commercial launch of any product candidate we may develop, including the possibility that we will build a commercial infrastructure to support commercialization of our current and any future product candidates we may develop;
- our intention to retain global commercialization rights to our product to maximize long-term value;
- future sales of our product candidate or any other future products or product candidates;
- our ability to achieve favorable pricing for our product candidates;
- the potential for our product candidates to receive designation as an orphan drug and implications if they do not receive such designation;
- that any product candidate we develop potentially offers effective solutions for various diseases;
- whether we will develop any future product candidates internally or through strategic partnerships;
- our expectations regarding the manufacturing and supply of any product candidate for use in our nonclinical and clinical trials, and the commercial supply of those product candidates;
- third-party payer reimbursement for our current or any future product candidates;
- our estimates regarding anticipated expenses, capital requirements and our needs for substantial additional financing;
- the ultra-rare and rare diseases patient market size and market adoption of our current or any future product candidates by physicians and patients;
- completion and receiving favorable results of clinical trials for our product candidates;

- protection of our intellectual property, including issuance of patents to us by the United States Patent and Trademark Office, or USPTO, and other governmental patent agencies;

- our intention to pursue marketing and orphan drug exclusivity periods that are available to us under regulatory provisions in certain countries;

- the development and approval of the use of our current or any future product candidates for additional indications other than ultra-rare and rare diseases;

- our expectations regarding commercial and pre-commercial activities;

- our expectations regarding licensing, acquisitions, and strategic operations; and

- our liquidity.

In some cases, forward-looking statements are identified by terminology such as “may,” “will,” “could,” “should,” “expects,” “plans,” “anticipates,” “believes,” “intends,” “estimates,” “predicts,” “potential,” or “continue” or the negative of these terms o comparable terminology. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or performance to differ materially from those projected. These statements are only current predictions and are subject to known and unknown risks, uncertainties, and other factors that may cause our or our industry’s actual results, levels of activity, performance or achievements to be materially different from those anticipated by the forward-looking statements. In addition, historic results of scientific research and clinical and preclinical trials do not guarantee that the conclusions of future research or trials would not suggest different conclusions or that historic results referred to in this annual report would not be interpreted differently in light of additional research, clinical and preclinical trials results. The forward-looking statements contained in this annual report are subject to risks and uncertainties, including those discussed under Item 3.D. - “Risk Factors” and in our other filings with the Securities and Exchange Commission, or the SEC. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by law, we not intend to (and expressly disclaim any such obligation to) update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, after the date of this annual report.

PART ONE

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

3.A. Selected financial data

Our historical financial statements are prepared in accordance with generally accepted accounting principles in the United States and are presented in U.S. dollars. The following summary consolidated financial data for the years ended December 31, 2017, 2016 and 2015 and as of December 31, 2017 and 2016 are derived from, and should be

read in conjunction with, the audited consolidated financial statements, and notes thereto, appearing elsewhere in this annual report. The summary consolidated financial for the years ended December 31, 2014 and 2013 and as of December 31, 2015, 2014 and 2013 have been derived from audited financial statements not included in this annual report.

The information presented below is qualified by the more detailed historical financial statements set forth in this annual report, and should be read in conjunction with those financial statements, the notes thereto and the discussion under Item 5 - "Operating and Financial Review and Prospects."

Statement of Operations Data - Year Ended December 31

U.S. dollars in thousands, except share and per share data

	2017	2016	2015	2014	2013
Research and development	$2,517	$8,881	$7,694	$4,441	$732
Pre-commercialization	479	1,085	829	-	-
General and administrative	2,959	5,900	6,953	2,639	416
Total operating expenses	5,955	15,866	15,476	7,080	1,148
Loss from operations	(5,955)	(15,866)	(15,476)	(7,080)	(1,148)
Financial income, net	38	60	135	58	3
Loss before taxes on income	(5,917)	(15,806)	(15,341)	(7,022)	(1,145)
Taxes on income	(28)	(216)	(24)	-	-
Deemed dividend	-	-	-	-	(26)
Net loss	$(5,945)	$(16,022)	$(15,365)	$(7,022)	$(1,171)
Net loss attributable to Ordinary shareholders	$(5,945)	$(16,022)	$(15,365)	$(7,022)	$(1,171)
Net loss per share attributable to Ordinary shareholders - basic and diluted	$(1.79)	$(5.03)	$(5.40)	$(2.85)	$(0.70)
Weighted average number of Ordinary Shares outstanding - basic and diluted	3,313,635	3,188,433	2,846,096	2,451,920	1,684,604

Balance Sheet Data - December 31,

U.S. dollars in thousands

	2017	2016	2015	2014	2013
Cash and cash equivalents	$3,526	$6,871	$7,286	$10,583	$270
Short-term bank deposits	-	3,007	12,046	22,028	-
Current Assets	3,622	10,541	20,392	32,885	299
Total assets	3,622	10,630	20,516	32,954	306
Current liabilities	460	1,931	2,514	2,280	131
Long-term liabilities	-	-	70	-	-
Total Liabilities	460	1,931	2,584	2,280	131
Accumulated deficit	(45,754)	(39,809)	(23,787)	(8,422)	(1,400)
Shareholders' equity	3,162	8,699	17,932	30,674	175

3.B. Capitalization and indebtedness

Not applicable.

3.C. Reasons for the offer and use of proceeds

Not applicable.

3.D. Risk factors

Investing in our Ordinary Shares involves a high degree of risk. You should carefully consider the risks described below before investing in our Ordinary Shares.

Our business, operating results and financial condition could be seriously harmed due to any of the following risks, among others. If we do not successfully address the risks to which we are subject, we could experience a material adverse effect on our business, results of operations and financial condition and our share price may decline. We cannot assure you that we will successfully address any of these risks.

Risks Related to Our Financial Position and Capital Resources

We are currently seeking business development and M&A opportunities. There is intense competition for businesses/products suitable for a transaction of the type we are contemplating.

There is currently a very competitive market for business opportunities, which could reduce the likelihood of consummating a successful transaction for acquisition of a business or technology. We anticipate that we will be a small participant in the pharmaceuticals M&A or joint ventures market with, or in the acquisition of, small private entities. A large number of established and well-financed entities, including small public companies, venture capital firms, and special purpose acquisition companies are active in M&A of companies that may be desirable target candidates for us. We have significantly less financial resources, technical expertise and managerial capabilities than many of these entities, and we may be unable to effectively compete with such entities in identifying possible business opportunities and successfully completing a transaction. These and other competitive factors may reduce the likelihood of our identifying and consummating a successful transaction.

We may not be able to enter into a transaction of the type contemplated and if we complete such a transaction, we may need to raise additional capital.

Even if we identify a successful target for a transaction, there can be no assurance that we (or the entity with which we combine) will be able to complete any such transaction. If we are not able to complete such a transaction, for whatever reason, we might not be able to continue as a going concern. If we cannot continue as a going concern, our investors may lose almost all or their entire investment. In the event that we complete such a transaction, we may need to raise substantial additional capital. In such event, we may need to rely on external sources of financing to meet any capital requirements and to obtain such funding through the debt and equity markets. We cannot provide any assurances regarding the availability of any such additional funding and, if available, regarding the terms thereof. If we fail to obtain such necessary funding, any such transaction may not be successful.

Potential acquisitions of or investments in companies or technologies may negatively impact our financial condition and may not yield the expected returns.

Even if we are able to make an acquisition or investment on reasonable terms, we have no prior experience in successfully completing acquisitions, and we could experience difficulties combining the two companies and/or in retaining and motivating key personnel from these businesses. We may also incur unanticipated liabilities. We cannot be certain that our actual cash requirements resulting from an acquisition, business combination or investment will not be greater than anticipated. Furthermore, there can be no assurance that we will be able to realize the anticipated benefits or synergies of any such acquisition, combination or investment. In that regard, we note that should we combine with, or invest in, any entity that is in the developmental stage, such as we were when we first went public, the ultimate success of such business will depend, in large part, on the combined company's ability to be successful with clinical trials and in obtaining any required regulatory approvals.

Our Board of Directors has sole discretion to identify and evaluate transaction candidates and in some cases to complete such transactions without approval of our shareholders.

We are not obligated to follow any particular operating, financial, geographic or other criteria in evaluating candidates for a potential transaction. We will choose a technology or business that we believe will provide an opportunity for our shareholders potentially to receive long-term financial returns if the transaction is successful and our board will determine the purchase price and other terms and conditions of such transaction. Accordingly, there can be no assurance that any such transaction would be subject to shareholder review or approval. As a general matter, under Israeli law, there is no requirement for us to have an acquisition approved by our shareholders. Furthermore, under the Nasdaq Listing Rules, our status as a foreign private issuer enables us to take advantage of certain exemptions regarding Nasdaq Listing Rules, such as the Nasdaq shareholder approval requirement for an acquisition in which we would issue more than 20% of our existing share capital.

Raising additional capital, or issuance of our Ordinary Shares as consideration in a merger or acquisition transaction would cause dilution to our existing shareholders, and may restrict our operations or require us to relinquish rights.

We have in the past and may continue to seek additional capital through a combination of private and public equity offerings, debt financings and collaborations and strategic and licensing arrangements. We may also in the future issue substantial number of our Ordinary Shares as consideration in connection with merger and acquisition transactions. To the extent that we raise additional capital through the sale of equity or convertible notes securities, or the issuance of securities as part of a merger and acquisition transaction your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a shareholder. Debt financing, if available, would result in increased fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring debt, making capital expenditures or declaring dividends. If we raise additional funds through collaboration, strategic alliance and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates, or grant licenses on terms that are not favorable to us.

We are a development-stage company and have a limited operating history on which to assess our business, we have incurred significant losses since our inception, and anticipate that we will continue to incur significant losses for the foreseeable future.

We are a development-stage biotechnological company with a limited operating history. We have incurred net losses since our inception in January 2012, including a net loss of $5.9 million for the year ended December 31, 2017. As of December 31, 2017, we had an accumulated deficit of $45.8 million.

Until we began our strategic process with JSB-Partners, we had devoted substantially all of our financial resources to identify, acquire, license, and develop our current product candidate, including conducting nonclinical and clinical trials and providing general and administrative support for these operations. To date, we have financed our operations primarily through the sale of equity securities. The amount of our future net losses will depend, in part, on the rate of our future expenditures. Biotechnological product development is a highly speculative undertaking and involves a substantial degree of risk. We are in Phase 2 development of Trehalose IV, which is the only product candidate that we have pursued. It may be several years, if ever, before we have this product candidate and/or any future product candidates that we may pursue 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 sufficient market acceptance, pricing, reimbursement from third-party payers, and adequate market share for our current or future product candidates in those markets.

We have incurred continuing losses, and depend on outside financing resources to continue our activities. On August 5, 2014, we completed a successful initial public offering that raised net proceeds of approximately $31.4 million, and in March 2016 we completed a net $6.1 million registered direct offering of our Ordinary Shares and a private placement of warrants to purchase additional Ordinary Shares. In the opinion of our management and based on our current plans and search for business development and M&A opportunities, our balances of cash and cash equivalents including short-term bank deposits will enable us to fund our activities at least until after the end of the third quarter of 2018. However, the actual amount of cash we will need to fund our operations is subject to many factors, including, but not limited to, the timing, design and execution of the clinical trials of our existing drug candidate, any future projects which may be in-licensed or any other business development activities. For example, changing circumstances and/or acquisition of new technologies may cause us to consume capital significantly faster than management currently anticipates and we may need to spend more money than currently expected because of, among others, circumstances beyond our control. Should we be unable to obtain additional funding required, we may reduce our activities until we have sufficient funds to continue.

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 our research and nonclinical and clinical development of our product candidate and any future products candidates that we may pursue;

- expand the scope of our clinical trials for our sole product candidate;

- change or add additional manufacturers or suppliers;

- seek regulatory and marketing approvals for our current and any future product candidates that successfully complete clinical trials;

- establish a sales, marketing, and distribution infrastructure to commercialize Trehalose IV and/or any products for which we may obtain marketing approval;

- seek to identify, assess, acquire, license, and/or develop other future product candidates;

- make milestone or other payments under any license agreements;

- seek to maintain, protect, and expand our intellectual property portfolio;

- seek to attract and retain skilled personnel; and

- create additional infrastructure to support our operations as a public company and our product development and planned future commercialization efforts.

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.

The report of our independent registered public accounting firm contains an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern.

The report of our independent registered public accounting firm on our audited financial statements as of and for the year ended December 31, 2017 contains an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern. Our financial statements do not include any adjustments that might result from the outcome of the uncertainty regarding our ability to continue as a going concern. This going concern opinion could materially limit our ability to raise additional funds through the issuance of equity or debt securities or otherwise. Further reports on our financial statements may include an explanatory paragraph with respect to our ability to continue as a going concern. If we cannot continue as a going concern, our investors may lose their entire investment.

We have not generated any revenue from any commercial products and may never be profitable.

Our ability to become profitable depends upon our ability to generate revenue. Unless and until marketing approval is obtained from either the FDA (to market and sell Trehalose IV in the United States), the European Medicines Agency, or EMA, (to market and sell Trehalose IV in the European Union), or any comparable foreign agency for Trehalose IV or any future product candidates we may develop, we may not be able to generate any revenue or attain profitability. In addition, our ability to generate profits after any regulatory approval of our current or future product candidates is subject to our ability to contract for the manufacture of commercial quantities of our product candidates at acceptable cost levels and establish sales and marketing capabilities or identify and enter into one or more strategic collaborations to effectively market and sell any approved product candidates.

Even if Trehalose IV or any future product candidate is approved for commercial sale, any approved therapeutic may not gain market acceptance or achieve commercial success, and such commercialization could come with significant costs. If we are unable to generate product revenues, we will not become profitable and may be unable to continue operations without continued funding.

We have a limited operating history and no history of commercializing drugs, which may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

We commenced operations in 2012, and our operations to date have been largely focused on raising capital and developing Trehalose IV, including undertaking nonclinical studies and conducting clinical trials. Trehalose IV is the only product candidate that we are currently pursing. We have not yet demonstrated our ability to successfully complete additional later-stage clinical trials, obtain FDA or other regulatory approvals, manufacture a commercial-scale drug or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization.

Consequently, we may encounter unforeseen expenses, difficulties, complications, delays and other known or unknown factors in achieving our business objectives. We will need to transition at some point from a company with a development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

Risks Related to Development, Regulatory Approval and Commercialization of Trehalose IV and any Future Product Candidates

If we do not pursue an M&A transaction, or other business development opportunities, we will be entirely dependent on the success of Trehalose IV, which is in the early stages of clinical development. We cannot give any assurance that Trehalose IV or any future product candidate will receive regulatory approval, which is necessary before they can be commercialized.

We are a biotechnology company with no products approved by regulatory authorities or available for commercial sale, and have never submitted a product for approval to the FDA or comparable foreign regulatory authorities. Our future success is dependent on our ability to successfully develop, obtain regulatory approval for, and then successfully commercialize Trehalose IV.

In the past we focused, and we expect in the future to focus our business on the development of Trehalose IV, which is in the early stages of development. Trehalose IV will require additional non-clinical and clinical development, management of nonclinical, clinical, and manufacturing activities, regulatory approval, obtaining adequate manufacturing supply, building of a commercial organization, and significant marketing efforts before we generate any revenue from product sales. We completed two Phase 2a clinical trials of Trehalose IV in two indications. We are not permitted to market or promote any of our current or any future product candidates before we receive regulatory approval from the FDA or comparable foreign regulatory authorities, and we may never receive such regulatory approval for any of our product candidates, including Trehalose IV. We may also receive regulatory approval in some jurisdictions, but not others. We cannot be certain that Trehalose IV will be successful in clinical trials or receive regulatory approval. Further, Trehalose IV may not receive regulatory approval, even if it is successful in clinical trials. If we do not receive regulatory approvals for any product candidates we attempt to develop, we are not likely to be able to continue our operations.

In the future, we generally plan to seek regulatory approval to commercialize Trehalose IV in the United States, Canada, the European Union, and in additional foreign countries where we have commercial rights. 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 the product candidates we may attempt to commercialize. Even if we are successful in obtaining approval in one jurisdiction, we cannot ensure that we will obtain approval in any other jurisdictions, and as such our revenues and results of operations could be negatively affected.

The drug development and regulatory approval processes of the FDA and comparable foreign regulatory authorities are comprehensive and therefore are likely to be lengthy and expensive. If we are ultimately unable to obtain regulatory approval for our current or future product candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA and comparable foreign regulatory authorities is expensive, typically takes many years following the commencement of early stage clinical trials, and depends upon numerous factors. We have not obtained regulatory approval for our sole product candidate.

In addition, even if we obtain regulatory approvals, the timing or scope of any approvals may prohibit or reduce our ability to commercialize Trehalose IV successfully. For example, if the approval process takes too long, we may miss market opportunities and give other companies the ability to develop competing products or establish market dominance. Any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render Trehalose IV not commercially viable. Further, regulatory authorities may approve Trehalose IV for fewer or more limited indications than we request, may limit approved usage to narrower patient populations, may grant approval contingent on the performance of costly post- marketing clinical trials, or may approve Trehalose IV with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that indication. Any of the foregoing scenarios could harm the commercial prospects for Trehalose IV and our business.

Delays in the initiation of the planned Phase 2b clinical trial of Trehalose IV in OPMD and the clinical trials for other indications, or any future clinical trials we intend to conduct for other product candidates we may develop, or negative findings in those trials, could significantly affect our product development costs or our ability to commercialize Trehalose IV. We do not know whether future trials will begin or whether all of our planned clinical trials, will be completed on schedule, if at all, or will be successful. Product development costs for Trehalose IV for OPMD or any other future indications we may pursue or for product candidates we may develop in the future will increase if we have delays in testing or approval, if we need to perform more or larger clinical studies than planned or if we have delays in adding new clinical trial sites.

The success of Trehalose IV and/or any other future product candidates that we may pursue, will depend on the receipt and maintenance of regulatory approval and the issuance and maintenance of such approvals is uncertain and subject to a number of risks, including the following:

- the FDA or comparable foreign regulatory authorities, institutional review boards, or IRBs, or ethics committees may disagree with the design or conduct of our clinical trials and suspend or terminate the trials;

- we may not be able to provide acceptable evidence of Trehalose IV's safety and efficacy;

- the results of our clinical trials may not meet the level of statistical or clinical significance required by the FDA or comparable foreign regulatory authorities for marketing approval;

- patients in our clinical trials may suffer adverse effects for reasons that may or may not be related to Trehalose IV and would raise concerns regarding safety;

- the population studied in any clinical program may not be sufficiently broad or representative to assure safety or efficacy in the full population for which we seek approval;

- the data collected from clinical trials may not be sufficient to obtain regulatory approval in the United States or elsewhere;

- the FDA or comparable foreign regulatory authorities may find, during an inspection at clinical sites, serious violations that jeopardize patient safety and rights and either stop or disregard the results of the study;

- the FDA or comparable foreign regulatory authorities may identify deficiencies with the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies and/or may suspend or withdraw approval of our products;

- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval;

- we may need to repeat trials if previous and future research activities are no longer acceptable by the FDA and other comparable regulatory agencies to support regulatory approval;

- the FDA or comparable foreign regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional clinical trials, or nonclinical or other studies; and

- even if we obtain marketing approval in one or more countries, future safety or other issues could result in the suspension or withdrawal of regulatory approval in such countries.

These factors that can cause, or lead to, termination or suspension of, or a delay in the commencement or completion of clinical trials may also ultimately lead to the denial or even withdrawal of regulatory approval of Trehalose IV for OPMD, SCA3 and any other indication.

We have no experience in filing the applications necessary to gain regulatory approvals and have relied before and expect to continue to rely on consultants and third-party contract research organizations, or CROs, with expertise in this area to assist us in this process. Securing FDA and other comparable regulatory approval requires the submission

of extensive nonclinical and clinical data, information about product manufacturing processes and inspection of facilities and supporting information to the FDA for each therapeutic indication to establish a product candidate's safety and efficacy for each indication and manufacturing quality.

In addition, regulatory approval obtained in one jurisdiction does not necessarily mean that a product candidate will receive regulatory approval in all jurisdictions in which we may seek approval, but the failure to obtain approval in one jurisdiction may negatively impact our ability to seek approval in a different jurisdiction. The inability to meet the continuously evolving regulatory standards for approval may result in our failing to obtain regulatory approval to market our current product candidate or any other one we may develop in the future, which would significantly harm our business, results of operations, and prospects.

Positive results of clinical trials may be different from results of other clinical trials, and positive data from open-label clinical trials might not be replicated in subsequent open-label (open versus blinded) or placebo-controlled (controlled versus non-controlled) clinical trials.

Failure can occur at any time during the clinical trial process. The results of nonclinical trials and early clinical trials of any product candidate we may develop may not be predictive of the results of later-stage clinical trials. Product candidates that have shown promising results in early-stage clinical trials may still suffer significant setbacks in subsequent clinical trials. There is a high failure rate for drugs proceeding through clinical trials, and product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through nonclinical trials and initial clinical trials. A number of companies in the biotechnological industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Moreover, nonclinical and clinical data are often susceptible to varying interpretations and analyses. We do not know whether any Phase 2, Phase 3, or other clinical trials we may conduct will demonstrate consistent or adequate efficacy and safety sufficient to obtain regulatory approval to market our drug candidates.

On March 16, 2016, we reported the final results from our open-label HOPEMD Phase 2a clinical trial, on October 24, 2016 we reported the final results of a double-blind placebo-controlled pharmacokinetic study of Trehalose IV in healthy volunteers, and on September 12, 2016 we reported the results of the extension portion of HOPEMD Phase 2a trial. This trial relates to the treatment of patients suffering from OPMD, with our lead product candidate, Trehalose IV. These final results may not necessarily predict results from future trials. Results in our open-label HOPEMD Phase 2a clinical trial might not be repeated in later trials or may not be statistically significant, because, among other things, early stage trials are often conducted in smaller groups of patients than later trials, and without the same trial design features, such as randomized controls and blinding. If the results are not replicated in future trials or are not statistically significant, we might not be able to rationalize continued development of the product candidate, or substantiate our request to obtain approval from applicable regulatory authorities at a future time.

Changes in regulatory requirements and guidance may also occur and we may need to amend clinical trial protocols submitted to applicable regulatory authorities to reflect these changes. Amendments may require us to resubmit clinical trial protocols to IRBs or ethics committees for re-examination, which may impact the costs, timing or successful completion of a clinical trial.

The FDA's and other regulatory authorities' policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of Trehalose IV and/or any future product candidates we may develop. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. 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, clinical trials may be adversely effected, terminated, or disregarded. Additionally, we may lose any marketing approval that we may have obtained, and we may not achieve or sustain profitability, which would harm our business, prospects, financial condition and results of operations.

In the event that the FDA's and/or other regulatory authorities' policies change, we could be forced to conduct additional pre-clinical, clinical trials or other studies with respect to Trehalose IV or any future product candidates we may develop beyond those that we currently contemplate. Regardless of past results, if we are unable to successfully complete the additional requirements required by regulatory changes, we may be delayed in obtaining regulatory approval of Trehalose IV and any future product candidates we may develop, we may not be able to obtain regulatory approval at all or we may obtain approval of indications that are not as broad as intended. Moreover, due to potential regulatory changes, our product development costs may also increase if we experience delays in the additional testing or approvals required. As a result, we may not have sufficient funding to complete the testing and approval process for Trehalose IV or any future product candidates we may develop. Significant clinical trial delays could allow our competitors to bring products to market before we do and impair our ability to commercialize our products if and when approved. If any of this occurs, our business would be harmed.

In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions, which may

require significant financial resources and may cause delays in the approval or the decision not to approve an application.

We may find it difficult to enroll patients in our clinical trials, in particular with respect to Trehalose IV and/or any future product candidates that we may pursue, which could delay or prevent clinical trials of Trehalose IV and any future product candidates we may develop and potentially harm our business.

Identifying and approving patients (those with required or desired characteristics to achieve diversity in a trial) to participate in clinical trials of Trehalose IV and any future product candidates we may develop in the future is critical to our success. When we initiate our clinical trials, the timing thereof will depend on the speed at which we can recruit patients to participate in testing Trehalose IV and any future product candidates we may develop as well as completion of required follow-up periods. If patients are unable or unwilling to participate in our clinical trials for any reason, the timeline for recruiting patients, conducting studies and obtaining regulatory approval of Trehalose IV and any future product candidates we may develop may be delayed. These delays could result in increased costs, delays in advancing Trehalose IV or any of our future product candidates, delays in testing the safety and effectiveness of our product candidates or termination of the clinical trials altogether, any of which would have an adverse effect on our business.

In particular, the conditions for which we currently plan to evaluate Trehalose IV are orphan diseases, which consist of limited patient populations from which to draw for clinical trials. Patient enrollment is affected by factors including:

- severity of the disease under investigation;
- design of the clinical trial protocol;
- perceived risks and benefits of the product candidate under trial;
- proximity and availability of clinical trial sites for prospective patients;
- availability of competing therapies and clinical trials;
- efforts to facilitate timely enrollment of patients in clinical trials; and
- our ability to monitor patients adequately during and after treatment.

We could encounter delays in recruitment for clinical trials if physicians and healthcare providers encounter unresolved ethical issues associated with enrolling patients in clinical trials of Trehalose IV and any future product candidates we may develop. We may not be able to initiate or continue clinical trials if we cannot enroll a sufficient number of eligible patients to participate in the clinical trials. Our ability to successfully initiate, enroll and complete a clinical trial in any foreign country is subject to numerous risks unique to conducting business in foreign countries, including:

- difficulty in establishing or managing relationships with CROs and physicians;
- different requirements and standards for conducting clinical trials;
- foreign corruption;
- our inability to locate qualified local consultants, physicians and partners; and

- the potential burden of complying with a variety of foreign laws, medical standards and regulatory requirements, including the regulation of pharmaceutical and biotechnology products and treatments.

Trehalose IV and/or any future product candidates that we may pursue may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

Undesirable side effects caused by Trehalose IV, our only current product candidate, could cause us or regulatory authorities to interrupt, delay, or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign authorities. Patients enrolled in our trials of Trehalose IV for OPMD and other indications, may suffer side effects associated with the use of our Trehalose IV. Results of our trials could reveal a high and unacceptable severity and prevalence of side effects. In such an event, our trials could be suspended or terminated, and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny or withdraw approval of our product candidates for any or all targeted indications.

Any drug-related side effects could affect patient recruitment, the ability of enrolled patients to complete the trial, and/or result in potential product liability claims.

Additionally, if Trehalose IV or any other product candidate we may choose to develop receives marketing approval, and we or others later identify undesirable side effects caused by such products (even when used or tested for other indications, patient populations or other countries), or if a patient suffers a serious complication, including death, with respect to one of our products, a number of potentially significant negative consequences could result, including but not limited to:

- regulatory authorities may withdraw approvals of such product;

- regulatory authorities may require additional warnings on the label;

- we may be required to create a Risk Evaluation and Mitigation Strategy, or REMS, plan, which could include a medication guide outlining the risks of such side effects for distribution to patients, a communication plan for healthcare providers, and/or other elements to assure safe use;

- we could be sued and held liable for harm caused to patients; and

- our reputation may suffer.

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, results of operations, and prospects.

Even if we receive regulatory approval of Trehalose IV, we may still face future development and regulatory challenges that could inhibit or preclude our ability to commercialize Trehalose IV for any indication.

If we continue to develop Trehalose IV and it is approved, they will be subject to ongoing regulatory requirements for manufacturing and quality, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing trials, and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and in other foreign jurisdictions. In addition, manufacturers, manufacturers' facilities, shippers and distributors are required to comply with extensive FDA and other international regulatory regulations, including ensuring that quality control and manufacturing procedures conform to current Good Manufacturing Practices, or cGMP. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any approved New Drug Application, or NDA, Marketing Authorization Application, or MAA. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, shipping storage and quality control.

Any regulatory approvals that we receive for Trehalose IV 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, including pharmacovigilance data collection. We will also be required to routinely report adverse reactions and production problems, if any, to the FDA and other international regulatory agencies, and to comply with requirements concerning advertising and promotion for our products. The FDA or comparable foreign

regulatory authorities could require a special warning on the label, such as a Black Box Warning, which could significantly affect marketing and promotional efforts. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we may not promote Trehalose IV and/or any future product candidates that we may pursue for indications or uses for which they do not have regulatory approval. The holder of an approved NDA, MAA or BLA must also submit new or supplemental applications and variations and obtain FDA and other regulatory authority approval for certain changes to product labeling or manufacturing processes. We could also be asked to conduct post-marketing clinical trials to verify the safety and efficacy of our products in general or in specific patient subsets. If original marketing approval were to be obtained for our products via the accelerated or conditional approval pathways, we could be required to conduct a post-marketing confirmatory clinical trial. A post-marketing trial that fails to confirm the clinical benefit or failure to complete such a trial could result in the withdrawal of marketing approval and, thus, cessation of marketing and sales of the product.

If we or a regulatory agency discovers previously unknown problems such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other actions:

- issue FDA Form 483 or Warning Letters, which may be made public, or similar letters by other regulatory authorities;

- publish information on the FDA or other authorities homepage;

- impose civil or criminal penalties;
- impose an Import Alert or detention;
- suspend or withdraw regulatory approval;
- suspend any of our ongoing clinical trials;
- refuse to approve pending applications or supplements to approved applications submitted by us;
- seek an injunction or impose other restrictions on our operations, including closing our contract manufacturers' facilities; or
- seize or detain products, or require corrective action, such as a product recall.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure by us or our partners to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our products. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results will be adversely affected.

We may face substantial competition from other companies with considerable resources that may already have products available in the market, and they or others may also discover, develop or commercialize additional products before or more successfully than we do.

Our industry is highly competitive and subject to rapid and significant technological change as researchers learn more about diseases and develop new technologies and treatments. Our potential competitors include primarily large pharmaceutical, biotechnology and specialty pharmaceutical companies. In attempting to achieve the widespread commercialization of Trehalose IV, we will face competition from established drug companies or generic versions of these products. Key competitive factors affecting the commercial success of Trehalose IV and any other product candidates we may develop are likely to be efficacy, safety and tolerability profile, reliability, convenience of administration, price and reimbursement and effectiveness of our promotional activities. Competition could also force us to lower prices or could result in reduced sales with other, more well-known or effective products or by selling their product at a lower price.

Our existing or potential competitors may have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of current or future product candidates we may develop, obtaining FDA and other regulatory approvals of products and the commercialization of those products. These companies may also have long-established relationships within the medical and patient community, including patients, physicians, nurses and commercial third-party payors and government payors. Our ability to compete successfully will depend largely on our ability to:

- discover and develop product candidates that are competitive with or superior to other products in the market;
- obtain required regulatory approvals;
- be free of material capital commitments and limitations;
- adequately communicate the benefits of Trehalose IV, if approved;
- attract and retain qualified personnel;
- obtain and maintain patent and/or other proprietary protection for Trehalose IV and any future product candidates that we may develop; and
- in certain geographies, obtain collaboration arrangements to commercialize Trehalose IV and any future product candidates we may develop.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a small number of our competitors. Accordingly, our competitors may be more successful than we may be in obtaining FDA or other regulatory agency approvals of drugs and achieving widespread market acceptance. Our competitors' drugs may be more effective, or more effectively marketed and sold, than any drug we may commercialize and may render Trehalose IV or any future product candidates we may develop obsolete or non-competitive before we can recover the expenses of developing and commercializing Trehalose IV or any future product candidates we may develop.

In addition, if one or more clinical trials are delayed, not only could our competitors be able to bring products to market before we do, and significantly reduce the commercial viability of Trehalose IV, but any trial delays could also shorten any periods during which our products have patent protection. Such delays may allow our competitors to bring products to market before we do, which could impair our ability to obtain orphan exclusivity and to successfully commercialize our current or future product candidates and may harm our business and results of operations.

We anticipate that we will face intense and increasing competition as new drugs enter the market and more advanced technologies become available. If we are unable to compete effectively, our opportunity to generate revenue from the sale of Trehalose IV or any future product candidates we may develop, if approved, could be impaired.

The number of patients suffering from OPMD and SCA3 is small and has yet to be established with precision. Our assumptions and estimates regarding prevalence may be wrong. If our Trehalose IV product candidate is approved for sale, and the actual number of patients in the applicable market is smaller than we estimate, our revenue could be adversely affected, possibly materially.

We target indications that are rare or ultra-rare diseases. Based on our own market research, in the United States and Canada there are approximately 4,300 patients with OPMD, our target indication. Similarly, there are a small number of individuals with SCA3, also known as Machado Joseph disease. However, there is no guarantee that these estimates are correct. The ultimate number of patients with OPMD and SCA3, in particular the number of patients for whom our Trehalose IV solution, if approved, is approved for use, could actually be significantly fewer than these estimates.

If the total addressable market for our products is smaller than we estimate, our revenue could be adversely affected, possibly materially.

Even if we receive regulatory approval of Trehalose IV, it may not achieve an adequate level of government price authorization or acceptance by physicians, patients and third-party payors and government payors, and we may not generate sufficient revenue or be able to achieve or sustain profitability.

Even if we receive regulatory approvals of Trehalose IV, its commercial success will depend in large part on the willingness of private and government payers to reimburse for its use at an appropriate price and for physicians to prescribe Trehalose IV to their patients. In order to achieve an acceptable level of prescriptions for Trehalose IV, we must be able to meet the needs of payors, the medical community and patients with respect to cost, efficacy, safety and other factors, including, but not limited to the following:

- the efficacy of the product as demonstrated in clinical trials and potential advantages over competing treatments;
- the prevalence and severity of any side effects, including any limitations or warnings contained in a product's approved labeling;
- the clinical indications for which approval is granted;
- relative convenience and ease of administration;
- the cost of treatment, particularly in relation to competing treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support and timing of market introduction of competitive products;

- publicity concerning our products or competing products and treatments; and

- sufficient price approval and third-party insurance reimbursement to generate sufficient revenue and achieve or sustain profitability.

Even if Trehalose IV is approved, it may not achieve an adequate level of acceptance by physicians, healthcare payors and patients, and we may not generate sufficient revenue or be able to achieve or sustain profitability. Our efforts to educate the medical community, patients, governments and private payors on the benefits of Trehalose IV to achieve an adequate level of their acceptance may require significant resources and may never be successful.

The manufacture and packaging of our current and any future product candidates that we may pursue are subject to FDA requirements and those of similar foreign regulatory bodies. If we or our third-party manufacturers fail to satisfy these requirements, our product development and commercialization efforts may be harmed.

The manufacture and packaging of pharmaceutical products, such as trehalose dyhidrate, our active pharmaceutical ingredient, or API, and our Trehalose IV solution, if approved, are regulated by the FDA and similar foreign regulatory bodies and must be conducted in accordance with the FDA's cGMP and comparable requirements of foreign regulatory bodies. In order to comply with these requirements, we may be required to perform additional development work, including, but not limited to changes or additions to the manufacturing process and increased quality controls. Failure by us or our third-party manufacturers to comply with applicable regulations or requirements could result in sanctions being imposed on us, including fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of our products, delays, suspension or withdrawal of approvals, seizures or voluntary recalls of product, operating restrictions and criminal prosecutions, any of which could harm our business.

Should Trehalose IV solution or any future product that we may pursue be approved to market in the United States, post approval changes in the manufacturing process or procedure may require FDA review and approval. Changes include, but are not limited to, changes in the location where the product is manufactured, the manufacturing process, or the identity of a third-party manufacturer. The FDA ensures that the change does not compromise the quality of the product. Any new facility is subject to an inspection by the FDA and would require us to demonstrate product comparability to the FDA. There are comparable foreign requirements. This review may be costly and time consuming and could delay or prevent the launch of a product. Moreover, the cost of manufacturing may be too high to sustain profitability or conduct clinical and nonclinical trials.

In order to obtain approval of our Trehalose IV and/or any future product candidates that we may pursue, we will be required to complete a process validation which is defined as the collection and evaluation of data, from the process design stage through commercial production, which establishes scientific evidence that a process is capable of consistently delivering quality product. Process validation involves a series of activities taking place over the lifecycle

of the product and process. If the FDA does not consider the result of the process validation or required testing to be satisfactory, regulatory approval and/or commercial supply after launch may be delayed. The FDA and similar foreign regulatory bodies may also implement new requirements, or change their interpretation and enforcement of existing requirements, for manufacture, packaging or testing of products at any time. If we are unable to comply, we may be subject to regulatory, civil actions or penalties which could harm our business.

Our relationships with patients, physicians, third-party payors and others will be subject to applicable state and federal anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians, and others will play a primary role in the recommendation and prescription of Trehalose IV and any future product candidates we may develop for which we obtain regulatory approval. Our operations may expose us to broadly applicable federal and state fraud and abuse, patient privacy, and other healthcare laws and regulations that may affect our business or financial arrangements and relationships through which we would market, sell and distribute our products. Restrictions under applicable federal and state healthcare laws and regulations that may affect our operations and expose us to areas of risk include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or paying remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual, or the purchase, order or recommendation of, any good, item, or service, for which payment may be made in whole or in part, under a federal healthcare program, such as Medicare and Medicaid;

- federal civil and criminal false claims laws and civil monetary penalty laws, including the False Claims Act, which impose criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program 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, and for knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statements in connection with the delivery of or payment for healthcare benefits, items or services;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, of 2009, and their implementing regulations, which also impose obligations and requirements on healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of certain individually identifiable health information;

- the federal transparency requirements under the Affordable Care Act, or the ACA, including the provision commonly referred to as the Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid or Children's Health Insurance Program to report annually to Centers for Medicare and Medicaid Services, or CMS, information related to payments and other transfers of value to physicians and teaching hospitals, and ownership and investment interests held by physicians and their immediate family members;

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may be broader in scope and apply to referrals and items or services reimbursed both governmental and by non-governmental third-party payors, including private insurers; some state laws which require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information to the state related to payments and other transfers of value to physicians and other healthcare providers, price disclosures, or marketing expenditures; and state and foreign laws which govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and often are not preempted by federal law, thus complicating compliance efforts; and

- the U.S. Foreign Corrupt Practices Act, or FCPA, which prohibits companies from making improper payments to foreign government officials and other persons for the purpose of obtaining or retaining business.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. For example, the Affordable Care Act, among other things, amends the intent requirement of the federal anti-kickback and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. Moreover, the Affordable Care Act 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 False Claims Act.

Efforts to ensure that our business arrangements with third parties are compliant with applicable healthcare laws and regulations will involve the expenditure of appropriate, and possibly significant, resources. In addition, and with respect to dealings with governmental regulatory agencies, we cannot assure that our employees or independent contractors will not engage in prohibited conduct under the FCPA. If our operations are found to be in violation of any current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, and the curtailment or restructuring of our operations, which could adversely affect our ability to operate our business and our results of operations. If any physicians or other healthcare providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs, which could adversely affect our ability to operate our business and our results of operations.

Unless we pursue an M&A transaction or other business development opportunities, the long-term growth of our business will depend on our efforts to leverage Trehalose IV to be used in other indications, which may require substantial financial resources and may ultimately be unsuccessful.

The long-term growth of our business will depend upon our ability to utilize our proprietary Trehalose IV as a platform to be used in other indications, aside from SCA3 and OPMD, which is something that we may never achieve or ever receive regulatory approval for. Research programs to identify new target indications for Trehalose IV require substantial technical, financial and human resources whether or not we ultimately identify any such applicable indication.

There are a number of FDA, EMA and other health authority requirements that we must satisfy before we can commence a clinical trial of Trehalose IV in other indications. If we are able to identify additional potential new indications, satisfaction of these regulatory requirements will entail substantial time, effort and financial resources. Any time, effort and financial resources we expend on development of other indications may impair our ability to continue development and commercialization of Trehalose IV for the treatment of OPMD and SCA3. As a result of such impairments, we may never commence clinical trials of such development programs despite expending significant resources in pursuit of their development. If we do commence clinical trials of other indications, these product candidates may never demonstrate sufficient safety and efficacy to be approved by the FDA or other regulatory authorities. If any of these events occur, we may be forced to abandon our development efforts for such program or programs, which could harm our business.

We may be unable to obtain orphan drug designation or exclusivity for the use of Trehalose IV for other indications. Even if we obtain orphan drug designation, we may not be able to capitalize on its benefits.

Our Trehalose IV solution has been granted orphan designation in the United States and the European Union for the treatment of OPMD and SCA3. Regulatory authorities in some jurisdictions, including the United States and the European Union, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act of 1983, or the Orphan Drug Act, the FDA may designate a product candidate as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as having a patient population of fewer than 200,000 individuals diagnosed annually in the United States. In the European Union, the European Commission, after reviewing the opinion of the EMA's Committee for Orphan Medicinal Products, or COMP, grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Union. In the Health Canada proposal, a rare disease is described as a life-threatening, seriously debilitating, or serious chronic condition that only affects a very small number of patients, typically less than five in 10,000 persons.

Additionally, orphan drug designation is granted for products intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition when, without incentives, it is unlikely that sales of the drug would be sufficient to justify the necessary investment in developing the product candidate. Even if we request orphan drug designation for any future product candidates or other indications we may develop, there can be no assurances that the FDA or the European Commission will grant any of these product candidates such designation. Additionally, the orphan drug designation by the FDA of our current or any future product candidates we may develop as an orphan drug does not guarantee that the FDA will accelerate regulatory review of or ultimately approve that product candidate.

Generally, if a product candidate with an orphan drug designation subsequently receives the first marketing approval of the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the EMA or the FDA from approving another marketing application for the same drug and indication for that time period, except in limited circumstances. The applicable period is seven years in the United States and 10 years in Europe. The European exclusivity period can be reduced to six years if a product no longer meets the criteria for orphan drug designation or if the product is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the product to meet the needs of patients with the rare disease or condition.

Because the extent and scope of patent protection for our products may in some cases be limited, orphan drug designation is especially important for our products for which orphan drug designation may be available. For Trehalose IV, we plan to rely on the exclusivity period under the Orphan Drug Act to maintain a competitive position. If we do not obtain orphan drug exclusivity for Trehalose IV or any therapeutic candidate designated as an orphan drug but does not have broad patent protection, our competitors may then sell the same drug to treat the same condition sooner than if we had obtained orphan drug exclusivity and our revenue will be reduced.

Even though, we may have obtained orphan drug designation for Trehalose IV in the United States for the treatment of OPMD and SCA3, we may not successfully obtain orphan drug exclusivity. Any such exclusivity that we do obtain may not effectively protect the product candidate from competition because different drugs can be approved for the same condition and the same drugs can be approved for different indications and might then be used off-label in our approved indication. In the United States, even after an orphan drug is approved, the FDA can subsequently approve another drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. In addition, if our current or any future product candidate we may develop receives an orphan drug designation is approved for a particular indication or use within the rare disease or condition, the FDA may later approve the same drug for additional indications or uses within that rare disease or condition that are not protected by our exclusive approval. As a result, if our product is approved and receives orphan drug status, the FDA can still approve other drugs for use in treating the same indication or disease covered by our product, which could create a more competitive market for us.

We currently have no sales organization and a limited pre-commercial/marketing organization. If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our products that may be approved or cleared for marketing in the future, we may be unable to generate any revenue.

We currently do not have any products that are approved or cleared for marketing. In the event that Trehalose IV and/or any therapeutic candidate that we may pursue is approved or cleared for marketing, we may still be unable to generate revenue. Although our management has experience with selling other similar products in the past while employed at other companies, we as a company have no experience selling and marketing our current product candidate and we currently have no sales organization and limited pre-commercial/marketing organization. To successfully commercialize any products that may result from our development programs, we will need to develop these capabilities, either on our own or with others. If our current product candidate or any future product candidates receive regulatory approval, we intend to establish a sales and marketing organization with technical expertise and supporting distribution capabilities to commercialize our product candidates in major markets, which will be expensive, difficult, and time consuming. Any failure or delay in the development of our internal sales, marketing, and distribution capabilities would adversely impact the commercialization of our products. We would need to invest resources in this prior to regulatory approval, which may prove to be a waste if such approval cannot be obtained.

Further, given our lack of prior experience in marketing and selling biotechnological products, our initial estimate of the size of the required sales force may be materially inadequate when compared to the size of the sales force actually

required to effectively commercialize our current and/or future product candidates. As such, we may be required to hire substantially more sales representatives to adequately support the commercialization of our current and/or future product candidates or we may incur excess costs as a result of hiring more sales representatives than necessary. With respect to certain geographical markets, we may enter into collaborations with other entities to utilize their local marketing and distribution capabilities, but we may be unable to enter into such agreements on favorable terms, if at all. If our future collaborators do not commit sufficient resources to commercialize our future products, if any, and we are unable to develop the necessary marketing capabilities on our own, we will be unable to generate sufficient product revenue to sustain our business. We may be competing with companies that currently have extensive and well-funded marketing and sales operations. Without an internal team or the support of a third party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies.

While orphan drug products are typically sold at a high price relative to other medications, the market may not be receptive to high pricing of our products.

We currently have one product candidate and may develop additional product candidates to treat rare and ultra-rare diseases, a space where medications are usually sold at high prices compared with other medications. However, even if regulatory authorities approve any product candidates that we may develop, the market may not be receptive to, and it may be difficult for us to achieve, a per-patient per-year price high enough to allow us to realize a return on our investment.

The insurance coverage and reimbursement status of newly-approved products is uncertain. If we are able to obtain regulatory approval for our product candidates, failure to obtain or maintain adequate coverage and reimbursement for new or current products could limit our ability to market those products and decrease our ability to generate revenue.

Our target patient populations are small, and accordingly the pricing, coverage, and reimbursement of our current and/or future product candidates, if approved, must be adequate to support our commercial infrastructure. Our per-patient prices must be sufficient to recover our development and manufacturing costs and potentially achieve profitability. Accordingly, the availability and adequacy of coverage and reimbursement by governmental and private payers are essential for most patients to be able to afford potentially expensive treatments such as ours, assuming we are able to obtain regulatory approval for our products. If we are able to obtain regulatory approval, sales of our product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid for by health maintenance, managed care, pharmacy benefit, and similar healthcare management organizations, or reimbursed by government authorities, private health insurers, and other third-party payers. If coverage and reimbursement are not available, or are available only in limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a return on our investment.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. The process for determining whether a third-party payor will provide coverage for a product may be separate from the process for setting the reimbursement rate that the payor will pay for the product. Moreover, a payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. In order to obtain coverage and reimbursement for any product that might obtain regulatory approval, we may need to provide supporting scientific, clinical and cost-effectiveness data relating to such product, which may be costly and difficult to obtain. Further, in the U.S., the Centers for Medicare and Medicaid Services, or CMS, and other third-party payors, frequently change product descriptors, coverage policies, product and service codes, payment methodologies and reimbursement rates. Private payers tend to follow the coverage reimbursement policies and payment limitations established by CMS to a substantial degree. It is difficult to predict what CMS or any other third-party payor will decide with respect to reimbursement for products such as ours, assuming we are able to obtain regulatory approval for our products, and any such policies or payment limitations may be subject to change in the future.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe, Canada, and other countries has and will continue to put pressure on the pricing and usage of any product candidate we attempt to commercialize. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. In general, the prices of medicines under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for medicinal products, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the

amount that we are able to charge for any product candidate that we may develop. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits.

Moreover, increasing efforts by government bodies and third-party payers in the United States and abroad to cap or reduce healthcare costs may cause both coverage and the level of reimbursement for newly approved products to be limited and, as a result, we may not obtain adequate payment or coverage for our current or any future product candidates. We expect to experience pricing pressures in connection with the sale of our current product candidate or any future product candidates, if we obtain regulatory approval, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, and additional legislative changes. In the U.S., changes in federal healthcare policy and reforms aimed at lowering healthcare costs were enacted through the Affordable Care Act in 2010 and some provisions are still being implemented. Some reforms and cost containment measures could result in reduced reimbursement rates for our product candidates, which would adversely affect our business strategy, operations and financial results. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products.

Changes to healthcare and FDA laws, regulations and policies may have a material adverse effect on our business and results of operations.

United States

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs and to modify the regulation of drug and biologic products. For example, the Affordable Care Act, as amended, substantially changed the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Affordable Care Act, among other things, subjects biologic products to potential competition by lower-cost biosimilars, addresses 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, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, and establishes annual fees and taxes on manufacturers of certain branded prescription drugs. Implementation of the Affordable Care Act remains ongoing, and there remains uncertainty as to how the law’s various provisions will ultimately affect the industry and whether the law will remain in place.

Other legislative changes have been adopted in the United States, including the Cures Act and the Budget Control Act of 2011, or the Budget Act, signed into law in 2011. The Cures Act introduced a wide range of reforms and the Budget Act, among other things, required reductions in federal spending, which eventually triggered Medicare sequestration—the requirement to reduce Medicare payments to providers up to 2% per fiscal year. In 2013, the 2% Medicare payment reductions were applied to fee-for-service claims with dates of service or dates of discharge on or after April 1, 2013. Sequestration was initially set to expire in fiscal year 2021 but has been extended to 2025.

We expect that additional state and federal healthcare reform measures and regulations could be adopted in the future, including proposals to reduce the exclusivity protections provided to already approved biological products and to provide biosimilar and interchangeable biologic products an easier path to approval. Any of these measures and regulations could limit the amounts that federal and state governments will pay for healthcare products and services, result in reduced demand for our product candidates or additional pricing pressures and affect our product development, testing, marketing approvals and post-market activities.

European Union

In the EU, the European Commission has adopted detailed rules for the safety features appearing on the packaging of medicinal products for human use. The regulations set forth the rules for the features appearing on the packaging of these medicinal products, including, among other things, the characteristics and technical specifications of the unique identifier that enables the authenticity of medicinal products to be verified and individual packs to be identified, the modalities for the verification of the safety features, and the list of medicinal products and product categories subject and not subject to prescription which shall not bear and bear (respectively) safety features.

The European Commission has also launched a series of public consultations that are aimed at the adoption of notices and guidelines which will serve the interpretation of currently applicable regulations and directives. For example, between August 2015 and December 2016, the European Commission launched public consultations which concerned good manufacturing practices, clinical trials for human medicinal products, and orphan medicinal products. The purpose of the consultation on orphan medicinal products (which will be replaced with a Notice) is to streamline the regulatory framework and to adapt the applicable regulations to technical progress. The consultation focuses on a variety of elements of Regulation (EC) No 141/2000, which include the encouragement of development of orphan medicinal products for communicable diseases and the simplification of the procedure for the reassessment of orphan criteria when two authorization application procedures are pending in parallel for two orphan medicinal products. If we are not able to adhere to the rules and guidelines of the European Commission and other EU regulatory bodies, our business might sustain adverse effects.

We may not be able to maintain our current product liability coverage, and, even if we do, our coverage may not be adequate to cover any or all liabilities that we may incur, which could decrease our cash and harm our business.

We currently have $10 million in product liability insurance coverage in the aggregate, which may not be adequate to cover any or all liabilities that we may incur. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. We intend to expand our product liability insurance coverage to include the sale of commercial products if we obtain marketing approval of Trehalose IV and any future product candidates we may develop, but we may be unable to obtain commercially reasonable product liability insurance for these product candidates, if approved for marketing. Large judgments have been awarded in class action lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us, particularly if judgments exceed our insurance coverage, could decrease our cash and harm our business, and in the extreme case, cause us to shut down. In addition, we may not be able to maintain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims, which could prevent or inhibit the commercial production and sale of our products.

Additionally, if any claims are brought against us, even if we are fully covered by insurance, we may suffer harm such as adverse publicity. We also could suffer diversion of attention of technical and management personnel and incur substantial costs in resolving disputes, including litigation, with our insurance provider regarding coverage.

Risks Related to our Reliance on Third Parties

We will rely in the future on third parties to conduct our nonclinical studies, clinical trials, drug product manufacturing and other research and development activities. If these third parties do not appropriately carry out their contractual duties, fail to conduct high-quality studies or meet expected deadlines, regulatory approval and commercialization of Trehalose IV or any future candidates we may develop could be delayed or not obtained at all.

We do not have the ability to conduct all of our clinical trials independently. We relied in the past and plan to rely on third parties, including clinical investigators, third-party CROs, labs and consultants, to monitor, manage and protect sensitive data for, and execute our ongoing nonclinical and planned clinical programs for Trehalose IV and other potential product candidates. We currently have only two employees, and will need to hire additional employees in order to identify and monitor our third-party providers. Nevertheless, as we did in the past, we plan to be responsible for ensuring that each of our nonclinical studies and clinical trials are conducted, not only in accordance with contractual obligations, but also in accordance with the applicable protocol and legal, regulatory and scientific requirements and standards, including, for example, Good Laboratory Practices, the Animal Welfare Act and Good Clinical Practices, or GCPs. In addition, we rely on their policies and standard operating procedures. In addition, we may be responsible for maintaining compliance with applicable federal and state regulations that impose requirements related to privacy and security of health information, including those promulgated pursuant to HIPAA. Our reliance on third parties does not relieve us of our regulatory responsibilities. Regulatory authorities enforce GCPs and other standards through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties fail to comply with applicable GCPs and other standards, the clinical data generated in our clinical trials may be deemed unreliable and the relevant regulatory authorities may require us to perform additional clinical trials in support of our regulatory approval applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP requirements and other standards. Failure to comply with these regulations may require us to repeat nonclinical studies and clinical trials, which would delay the regulatory approval process. 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 nonclinical studies and clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval of or successfully commercialize Trehalose IV and any future product candidates we may develop. Additionally, we must ensure that our contracts with third parties are at an affordable price. As a result, our results of operations and the commercial prospects for our current and/or future product candidates could be harmed, our costs could increase and our ability to generate revenues could be delayed. To the extent we are unable to identify and successfully manage the performance of third-party service providers in the future, our business may be adversely affected.

We will rely completely on third parties to manufacture Trehalose IV. Our business could be harmed if those third parties fail to provide us with sufficient quantities of Trehalose IV, or fail to do so at acceptable quality levels.

We did not have in the past, nor do we plan to acquire, the infrastructure or internal capability to manufacture our nonclinical and clinical drug supplies for use in the conduct of our nonclinical and clinical trials, and we lack the resources and the capability to manufacture Trehalose IV on a clinical or, if approved, commercial scale. In specific instances we may rely on a single provider or manufacturer for a product candidate. For example, the raw materials used to manufacture our Trehalose IV solution product candidate are acquired from a single third party drug products supplier. Additionally, our Trehalose IV solution is manufactured by a single third party manufacturer. There are a limited number of suppliers for raw materials that are used to manufacture trehalose, and there may be a need to identify alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce any product candidate we are developing for our clinical trials, and, if approved, ultimately for commercial sale. Any significant delay or discontinuity in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay completion of our clinical trials.

In the event that the FDA believes that Trehalose IV and/or any future therapeutic candidate that we may develop in the future, is approvable, our contract manufacturers would be audited by the FDA before approving our NDA. We will rely on our contract manufacturing partners for compliance with cGMPs for manufacture of both API and finished drug products. These cGMP regulations and other relevant standards cover all aspects of the manufacturing, testing, quality control and record keeping relating to Trehalose IV. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, we will not be able to secure and/or maintain regulatory approval of our product candidate being manufactured at their manufacturing facilities or have sufficient quantities to meet market demands. If the FDA or a comparable foreign regulatory authority finds deficiencies at these facilities, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval of or market Trehalose IV, if approved.

If, for any reason, these third parties are unable or unwilling to perform, we may not be able to terminate our agreements with them, and we may not be able to locate alternative manufacturers or formulators or enter into favorable agreements with them and we cannot be certain that any such third parties will have the manufacturing capacity to meet future requirements. If these manufacturers or any alternate manufacturer of finished drug product experiences any significant difficulties in its respective manufacturing processes for our API or finished Trehalose IV product or should cease doing business with us, we could experience significant interruptions in the supply of Trehalose IV or may not be able to create a supply of Trehalose IV at all. Our inability to coordinate the efforts of our third-party manufacturing partners, or the lack of capacity available at our third-party manufacturing partners, could impair our ability to supply Trehalose IV at required levels. Due to the significant regulatory requirements that we would need to satisfy in order to qualify a new bulk or finished product manufacturer, if we face these or other difficulties with our current manufacturing partners, we could experience significant interruptions in the supply of Trehalose IV if we decided to transfer the manufacture of Trehalose IV to one or more alternative manufacturers in an effort to deal with the difficulties.

In the event that Trehalose IV and/or any future product candidates that we may pursue is approved or cleared for marketing, manufacturers may not have the experience or ability manufacture those products at commercial levels. We may run into technical or scientific issues related to manufacturing or development that we may be unable to resolve in a timely manner or with available funds.

If the manufacturing costs of Trehalose IV remain at current levels, these costs may significantly impact our operating results. In order to reduce costs, we may need to develop and implement process improvements. However, in order to do so, we will need, from time to time, to notify or make submissions with regulatory authorities, and the improvements may be subject to approval by such regulatory authorities. We cannot be sure that we will receive these necessary approvals or that these approvals will be granted in a timely fashion. We also cannot guarantee that we will be able to enhance and optimize output in our commercial manufacturing process, as any deviations from normal manufacturing processes, for Trehalose IV and any other product candidate we may develop, could result in reduced production yields, product defects, and other supply disruptions. If we cannot enhance and optimize output, we may not be able to reduce our costs over time.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain effective patent and other intellectual property rights for our product candidates or any future product candidates, we may not be able to compete effectively in our markets.

We rely upon a combination of patents, trade secret protection, and confidentiality agreements to protect the intellectual property related to our technologies and product candidates. Our success depends in large part on our and our licensors' ability to obtain and maintain patent and other intellectual property protection in the United States and in

other countries around the world with respect to our proprietary technology and products.

We have sought to protect our proprietary position by filing patent applications in the United States and abroad related to our novel technologies, methods of treatments, formulations and products that are important to our business. This process is expensive, time consuming and inherently uncertain. We may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. 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. It is also possible that some of our filed applications may not result in issued patents.

There is no assurance that all potentially relevant prior art relating to our patents and patent applications has been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or are published in a foreign language or in some cases not at all. We therefore cannot be certain that we or our licensors were the first to make the invention claimed in our owned and licensed patents or pending applications, or that we or any of our licensors were the first to file for patent protection of such inventions before any prior publication. 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. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property, provide exclusivity for our product candidates, or prevent others from designing around our claims.

If we cannot obtain and maintain effective patent rights for our product candidates, we may not be able to compete effectively and our business and results of operations could be harmed.

Patent policy and rule changes could increase the uncertainties and costs surrounding the prosecution of our patent applications and the value, 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 United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings have narrowed the scope 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 could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. The laws and courts of foreign countries also may not protect our rights to the same extent as the laws and courts of the United States.

If we are unable to maintain effective proprietary rights for our product candidate or any future product candidates, we may not be able to compete effectively in our markets.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to obtain or to enforce and any other elements of our product candidate discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. Trade secrets, however, can be difficult to protect. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our employees, consultants, scientific advisors, and contractors. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. There are different laws of varying scope and strength that protect trade secrets in every state of the U.S., as well as foreign countries, and depending on what acts occur where, or what law applies to a given situation, the trade secret may not be recognized as a trade secret, many not fall under a confidentiality agreement, or may be found insufficient by a court ruling on such a dispute over trade secrets or other proprietary information.

Although we expect all of our employees and consultants to assign their inventions to us, and all of our employees, consultants, advisors, and any third parties who have access to our proprietary know-how, information, or technology

to enter into confidentiality agreements, we cannot provide any assurances that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Misappropriation or unauthorized disclosure of our trade secrets could impair our competitive position and may have a material adverse effect on our business. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret.

We may not be successful in obtaining or maintaining necessary rights to our product candidate through acquisitions and in-licenses.

While we currently have three issued patents and other pending patent applications, our programs may require the use of intellectual proprietary rights held by third parties. Accordingly, the growth of our business may depend in part on our ability to acquire, in-license, maintain or use these proprietary rights. In addition, our current and/or future product candidates may require specific formulations to work effectively and efficiently and the rights to these formulations may be held by others. We may be unable to acquire or in-license any compositions, methods of use, processes, or other third-party intellectual property rights from third parties that we identify as necessary for our current and/or future product candidates. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources, and greater clinical development and commercialization capabilities.

If we are unable to successfully obtain rights to required third-party intellectual property rights, we may have to abandon development of that program and our business and financial condition could suffer.

We may be involved in lawsuits to protect or enforce our patents or confidential information, which could be expensive, time consuming, and unsuccessful.

Competitors may infringe our patents or the patents of our licensors, or misappropriate our confidential information. If we or one of our licensing partners were to initiate legal proceedings against a third party to enforce a patent or confidential information covering or related to a product candidate we develop, the defendant could counterclaim that the patent covering our product candidate is invalid and/or unenforceable or that the confidential information is not confidential or otherwise not protectable. In patent litigation in the United States, defendant counterclaims alleging invalidity 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, or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable.

Interference or other post-grant proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority or patentability 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, or might eliminate the key claim coverage of a product, process, or proposed technology. Depending on the proceeding, our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of litigation, or interference or other post-grant 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 post-grant proceedings at the PTO or equivalent patent office in any other jurisdiction could have a material adverse effect on 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 current and/or future product candidates to market.

Furthermore, because of the substantial amount of discovery required in connection with any type of intellectual property litigation or even the more limited discovery in a post-grant proceeding, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation or proceeding. 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 have a material adverse effect on the price of our Ordinary Shares.

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.

In the past we employed, and we plan to employ in the future 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, we may be subject to claims that we or our employees, consultants, or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employee's former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages or be subjected to a court order, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. 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 or ownership of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor, or that such third party owns the patent or intellectual property rights. For example, we may have inventorship or ownership disputes arise from conflicting obligations of consultants or others who are involved in developing our current or any future product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. 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. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation or patent office proceedings could result in substantial costs and be a distraction to management and other employees. Therefore, we may receive less revenue from future products if such claims are successful which in turn could impact our future profitability.

We may not be able to protect our intellectual property rights throughout the world.

Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export otherwise 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, enforcing, 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 or post-grant proceedings that we initiate and the damages or other remedies awarded to us if we prevail, 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.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Because we will rely on third parties to develop and manufacture our current product candidate, we must, at times, share trade secrets 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 would impair our competitive position and may have a material adverse effect on our business.

Risks Related to Our Business Operations

Our future success depends in part on our ability to retain our executive officers and management level employees and to attract, retain, and motivate other qualified personnel.

Our ability to compete in the highly competitive pharmaceuticals industry depends in large part upon our ability to attract and retain highly qualified managerial, pre-commercial, scientific and medical personnel. We are highly dependent on our management personnel. In order to induce valuable employees to remain with us, we have provided employees with stock options that vest over time. The value to employees of stock options that vest over time is significantly affected by movements in our stock price that we cannot control and, together with our other compensation programs and benefits, may at any time be insufficient to counteract more lucrative offers from other companies.

We are highly dependent on Fredric Price, our Executive Chairman of the Board and Chief Executive Officer and Dr. Warren Wasiewski, our Chief Medical Officer and Vice President of Research and Development. These executives have significant management and research and development, regulatory industry and/or corporate finance experience. The loss of either of these executive would impair our ability to identify, develop and market new products and conduct successful operations.

Our business and operations would suffer in the event of computer system failures, cyber-attacks on our systems or deficiency in our cyber security measures.

Despite the implementation of security measures, our internal computer systems, and those of third parties on which we rely, are vulnerable to damage from computer viruses, unauthorized access, malware, natural disasters, fire, terrorism, war and telecommunication, electrical failures, cyber-attacks or cyber-intrusions over the Internet,

attachments to emails, persons inside our organization, or persons with access to systems inside our organization. The risk of a security breach or disruption, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. To the extent that any disruption or security breach results in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability due to lost revenues resulting from the unauthorized use or theft of sensitive business information, remediation costs, and litigation risks including potential regulatory action by governmental authorities. In addition, any such disruption, security breach or other incident could delay the further development of our future product candidates due to theft or corruption of our proprietary data or other loss of information. Our business and operations could also be harmed by any reputational damage with customers, investors or third parties with whom we work, and our competitive position could be adversely impacted.

If our development and commercialization plans and strategies develop, we expect to need additional managerial, operational, sales, marketing, financial, legal, research, and other resources. 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. Our growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates.

In addition, failure to succeed in nonclinical or clinical trials may make it more challenging to recruit and retain qualified personnel. The inability to recruit and retain qualified personnel, or the loss of the services of these executives without proper replacement, may impede the progress of our overall growth. If this were to occur, our expenses could increase more than expected, our ability to generate and/or grow revenue could be reduced and we could face challenges in implementing our business strategy. No recruitment is anticipated while the Company is engaged with JSB-Partners to affect a business transaction.

Our employees, independent contractors, consultants, commercial partners, principal investigators, CROs and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk that our employees, independent contractors, consultants, commercial partners, principal investigators, CROs and vendors may engage in fraudulent conduct or other misconduct, including intentional failures to comply with FDA regulations or similar regulations of comparable foreign regulatory authorities, to provide accurate information to the FDA or comparable foreign regulatory authorities, to comply with regulations pertaining to clinical trials, to comply with manufacturing standards we have established, to comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities, and to report financial information or data accurately or disclose unauthorized activities to us. The misconduct of our employees and contractors could also involve the improper use of information obtained in the course of clinical trials and other research and development activities, which could result in regulatory sanctions and serious harm to our reputation. In connection with our initial public offering, we implemented a code of conduct and ethics for our directors, officers and employees, but it is not always possible to identify and deter such misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions.

We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives.

As a public company, we incur significant legal, accounting, and other expenses. In addition, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, as well as rules subsequently implemented by the SEC and the Nasdaq Stock Market, or Nasdaq, have imposed various requirements on public companies. New laws and regulations as well as changes to existing laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act, and changes in required accounting practices and rules adopted by the SEC and by Nasdaq, would likely result in increased costs to us as we respond to their requirements.

Emerging growth companies may implement some of these requirements over a longer period and up to five years from the date of their initial public offering. We are taking advantage of this legislation but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Shareholder activism, the current political environment, and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations have increased our legal and financial compliance costs and will make some activities more time consuming and costly. For example, these rules and regulations make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain our current levels of such coverage.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, pursuant to Section 404 of the Sarbanes-Oxley Act, we are required to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting. Our testing may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. Our compliance with the SEC's rules requires that we incur substantial accounting expense and expend significant management efforts. Per Section 404 of the Sarbanes-Oxley Act, we are required to disclose if we maintain effective disclosure controls and procedures and internal control over financial reporting. Nevertheless, for so long as we remain an emerging growth company, as defined in the JOBS Act, we are not required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act.

Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected. Moreover, if we are not able to comply with the SEC's requirements in a timely manner or if we identify or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, we may not be able to produce timely and accurate financial statements. As a result we would be required to place additional financial and management resources on solving the issue. Moreover, if any of the aforementioned were to occur, the market price of our Ordinary Shares could decline and we could be subject to sanctions or investigations by the stock exchange on which our Ordinary Shares is listed, the SEC or other regulatory authorities.

Compliance with changing European privacy laws could require us to incur significant costs or experience significant business disruption and failure to so comply could result in an adverse impact on our business.

In Europe, Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, or the Directive, has required European Union member states to implement data protection laws to meet the strict privacy requirements of the Directive. Among other requirements, the Directive regulates transfers of personally identifiable data that is subject to the Directive, or Personal Data, to countries such as the United States, that have not been found to provide adequate protection to such Personal Data. We have not in the past and cannot in the future rely upon adherence to the U.S. Department of Commerce's Safe Harbor Privacy Principles and compliance with the U.S.-EU and U.S.-Swiss Safe Harbor Frameworks as agreed to and set forth by the U.S. Department of Commerce, and the European Union and Switzerland, which established a means for legitimating the transfer of Personal Data by data controllers in the European Economic Area, or the EEA, to the United States. As a result of the October 6, 2015 European Union Court of Justice, or ECJ, opinion in Case C-362/14 (Schrems v. Data Protection Commissioner) regarding the adequacy of the U.S.-EU Safe Harbor Framework, the U.S. – EU Safe Harbor Framework is no longer deemed to be a valid method of compliance with requirements set forth in the Directive (and member states' implementations thereof) regarding the transfer of Personal Data outside of the EEA. In addition, in May 2016, the European Union adopted the General Data Protection Regulation ("GDPR") that will impose more stringent data protection requirements and will provide for

greater penalties for noncompliance beginning in May 2018.

Recently, it was announced that negotiators from Europe and the United States reached political agreement on a successor to the Safe Harbor framework that will be referred to as the EU-US Privacy Shield. However, we cannot predict when all of the details regarding the Privacy Shield program will be finalized and a procedure is introduced to allow interested companies to participate in the program. While the details regarding the Privacy Shield program continue to be finalized, we will continue to face uncertainty as to whether our efforts to comply with our obligations under European privacy laws will be sufficient. If we are investigated by a European data protection authority, we may face fines and other penalties. Any such investigation or charges by European data protection authorities could have a negative effect on our existing business and on our ability to attract and retain new customers. We may be unsuccessful in establishing conforming means of transferring data from the EEA, including due to ongoing legislative activity, which may vary the current data protection landscape.

The Directive may be replaced in time with the pending European General Data Protection Regulation, which may impose additional obligations and risk upon our business and which may increase substantially the penalties to which we could be subject in the event of any non-compliance. We may incur substantial expense in complying with the new obligations to be imposed by the European General Data Protection Regulation and we may be required to make significant changes in our operations, all of which may adversely affect our business.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

Our research and development activities and our third-party manufacturers' and suppliers' activities will involve the controlled storage, use, and disposal of hazardous materials, including the components of our product candidate and other hazardous compounds. We and our manufacturers and suppliers are subject to laws and regulations governing the use, manufacture, storage, handling, and disposal of these hazardous materials. In some cases, these hazardous materials and various wastes resulting from their use are stored at our and our manufacturers' facilities pending their use and disposal. We cannot eliminate the risk of contamination, which could cause an interruption of our commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling, and disposal of these materials and specified waste products. Although we believe that the safety procedures utilized by our third-party manufacturers for handling and disposing of these materials generally comply with the standards prescribed by these laws and regulations, we cannot guarantee that this is the case or eliminate the risk of accidental contamination or injury from these materials. In such an event, we may be held liable for any resulting damages, such liability could exceed our resources and state or federal or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Furthermore, environmental laws and regulations are complex, change frequently, and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance. We do not currently carry biological or hazardous waste insurance coverage.

Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

We collect and store sensitive data, including intellectual property, our proprietary business information and that of our manufacturers, business partners, healthcare professionals and patients. This includes, where required or permitted by applicable laws, personally identifiable information. The secure maintenance of this information is critical to our operations and business strategy. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, disrupt our operations, and damage our reputation which could adversely affect our business.

Exchange rate fluctuations between the U.S. dollar and non-U.S. currencies may negatively affect our results of operations.

The U.S. dollar is our functional and reporting currency; however, a portion of our operations are currently conducted in Israel and a portion of the Israeli expenses are currently paid or denominated in NIS. We also contract with CROs internationally, primarily for the execution of clinical trials and manufacturing activities. A portion of these transactions are settled in Euros or Great British Pounds, or GBPs. As a result, we are exposed to the risk that the NIS, Euro or GBP may appreciate relative to the U.S. dollar, or, if the NIS, Euro or GBP instead devalue relative to the U.S. dollar, that the relative inflation rate may exceed such rate of devaluation, or that the timing of such devaluation may lag behind the relative inflation. In any such event, the U.S. dollar cost of our operations in Israel and transactions with certain CROs and other third parties would increase and our U.S. dollar-denominated results of operations would be adversely affected. To date, we have not engaged in hedging transactions. In the future, we may enter into currency hedging transactions to decrease the risk of financial exposure from fluctuations in the exchange rates of our principal operating currencies. These measures, however, may not adequately protect us from the material adverse effects of such fluctuations. If the U.S. dollar cost of our operations increases, our U.S. dollar-measured results of operations will be adversely affected. See Item 5 - “Operating and Financial Review and Prospects - Quantitative and Qualitative Disclosure about Market Risk.”

Risks Related to the Ownership of Our Ordinary Shares

Nasdaq has stock market listing standards for share prices and market capitalization, and failure to comply with the standards might result in our Ordinary Shares being de-listed from the Nasdaq Capital Market.

On March 10, 2017, we announced that the Nasdaq Listing Qualifications Department notified us that we were subject to potential delisting from the Nasdaq Global Market because our stockholders’ equity did not satisfy the Nasdaq Global Market continued listing requirements as set forth in Nasdaq Stock Market Rule 5450(b)(1)(A), which requires a minimum of $10,000,000 in stockholders’ equity. The notification provided us until April 20, 2017 to submit to Nasdaq a plan to regain compliance with the aforementioned Nasdaq rule.

On April 17, 2017, we timely notified the Nasdaq Listing Qualifications Department of our intention to transfer the listing of our Ordinary Shares to the Nasdaq Capital Market, which requires a minimum of $2,500,000 in stockholders' equity for continued listing.

On the same date, April 17, 2017, we announced that we received an additional notice from the Nasdaq Listing Qualifications Department advising us that we were not in compliance with Nasdaq's requirement that listed securities maintain a minimum bid price of $1.00 per share as set forth in the Nasdaq Stock Market Rule 5450(a)(1). This requirement applied irrespective of our transfer of Ordinary Shares from Nasdaq's Global Market to Nasdaq's Capital Market. We were afforded a 180 day period, until October 9, 2017, to regain compliance with the $1.00 minimum bid price requirement.

On September 25, 2017, we announced the effectiveness of a five to one reverse split of our share capital, as approved by our shareholders at an Extraordinary General Meeting on September 18, 2017. The reverse split was intended to increase the per-share trading price of our Ordinary Shares in order to satisfy the $1.00 minimum bid price requirement for continued listing on the Nasdaq Capital Market, and we actually regained such compliance.

While our Ordinary Shares are not subject to delisting from the Nasdaq Capital Market at the moment, there remains a constant risk of future delisting for the above and additional reasons. If this were to occur the price of our Ordinary Shares may decrease further and our ability to secure additional financing through the issuance and sale of equity could be adversely affected. In addition, upon such delisting and if we were not able to list our Ordinary Shares on another recognized stock exchange, our Ordinary Shares would be considered a "penny stock." Broker-dealers desiring to make transactions in penny stocks have to comply with the SEC's penny stock rules. These requirements would also likely adversely affect the trading activity in the secondary market for our Ordinary Shares.

Our directors, executive officers and principal shareholders exercise significant control over our company, which will limit your ability to influence corporate matters.

Our executive officers, directors and principal shareholders beneficially own approximately 54.4% of our Ordinary Shares. As a result, these shareholders, if they act together, will be able to influence our management and affairs and all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. In addition, this concentration of ownership may delay or prevent a change in control of our company and make some future transactions more difficult or impossible without the support of these shareholders. The interests of these shareholders may not coincide with our interests or the interests of other shareholders.

We will likely be characterized as a "passive foreign investment company" for U.S. tax purposes, which could cause adverse U.S. income tax consequences to U.S. holders of our Ordinary Shares.

If we were to be characterized as a passive foreign investment company, or PFIC, under the U.S. Internal Revenue Code of 1986, as amended, or the Code, in any taxable year during which a U.S. taxpayer owns Ordinary Shares, such U.S. holder could be liable for additional taxes and interest charges upon certain distributions by us and any gain recognized on a sale, exchange or other disposition, including a pledge, of the Ordinary Shares, whether or not we continue to be a PFIC. Based on the nature of our business, the projected composition of our income and the projected composition and estimated fair market values of our assets, we believe that we likely will be deemed a PFIC. In addition, we may have been a PFIC in prior years and may be a PFIC in the future. Were we to be classified as a PFIC, a U.S. investor may be able to mitigate some of the adverse U.S. federal income tax consequences with respect to owning the Ordinary Shares for our taxable year ended December 31, 2016, provided that such U.S. investor is eligible to make, and successfully makes, a "mark-to-market" election. U.S. investors could also mitigate some of the adverse U.S. federal income tax consequences of us being classified as a PFIC by making a "qualified electing fund", or QEF, election, provided that we provide the information necessary for a U.S. investor to make such an election. We intend to make available to U.S. investors upon request the information necessary for U.S. holders to make qualified electing fund elections. U.S. Holders are strongly urged to consult their tax advisors about the PFIC rules, including tax return filing requirements and the eligibility, manner, and consequences to them of making a QEF or mark-to-market election with respect to our Ordinary Shares in the event we that qualify as a PFIC. For more information see Item 10.E - "Taxation - U.S. Federal Income Tax Consequences."

We do not know whether a market for our Ordinary Shares will be sustained or what the market price of our Ordinary Shares will be and as a result it may be difficult for you to sell your shares.

On August 5, 2014, we completed an initial public offering of 3,200,000 Ordinary Shares at a price to the public of $11.00 per share. In March 2016, we completed the sale of 2,161,290 Ordinary Shares in a registered direct offering at a price of $3.10 per share, which included a private placement of warrants to purchase additional Ordinary Shares. Although our Ordinary Shares were quoted on the Nasdaq Global Market, and then on the Nasdaq Capital Market, an active trading market for our Ordinary Shares may not be sustained. It may be difficult for you to sell your Ordinary Shares at all or without depressing the market price for the Ordinary Shares. As a result of these and other factors, you may not be able to sell your Ordinary Shares at or above the price you paid for such shares or at all. In addition, the trading price of our Ordinary Shares is likely to be volatile.

We have registered for offer and sale of the Ordinary Shares that are reserved for issuance pursuant to outstanding options, and intend to similarly register addition Ordinary Shares in the future. Shares covered by such registration statements upon the exercise of stock options generally will be eligible for sale in the public market, except that affiliates continue to be subject to volume limitations and other requirements of Rule 144 under the Securities Act. The issuance or sale of such shares could depress the market price of our Ordinary Shares.

In addition, the stock market in general, and Nasdaq in particular, as well as biotechnology companies, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of small companies. Broad market and industry factors may negatively affect the market price of our Ordinary Shares, regardless of our actual operating performance. Further, a systemic decline in the financial markets and related factors beyond our control may cause our share price to decline rapidly and unexpectedly.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our securities may be volatile, and in the past companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Litigation of this type could result in substantial costs and diversion of management’s attention and resources, which could seriously hurt our business. Any adverse determination in litigation could also subject us to significant liabilities. While we currently have directors’ and officers’ insurance, there is no guarantee that the current policy will be maintained, or whether it will be sufficient to cover the costs of potential litigation.

Sales of a substantial number of our Ordinary Shares in the public market by our existing shareholders could cause our share price to fall.

Sales of substantial amounts of our Ordinary Shares in the public market, or the perception that these sales may occur, could materially and adversely affect the price of our securities and could impair our ability to raise capital through the sale of additional equity securities. Our Ordinary Shares are freely tradable, without restriction, in the public market.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they adversely change their recommendations or publish negative reports regarding our business or our Ordinary Shares, our share price and trading volume could decline.

The trading market for our Ordinary Shares is and will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. We do not have any control over these analysts and we cannot provide any assurance that analysts will cover us or provide favorable coverage. If any of the analysts who may cover us adversely change their recommendation regarding our Ordinary Shares, or provide more favorable relative recommendations about our competitors, our share price would likely decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our share price or trading volume to decline.

We have never paid cash dividends on our capital stock and we do not anticipate paying any dividends in the foreseeable future. Consequently, any gains from an investment in our Ordinary Shares will likely depend on whether the price of our Ordinary Shares increases, which may not occur.

We have not paid cash dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, the Israeli Companies Law 5759-1999, or the Companies Law, imposes restrictions on our ability to declare and pay dividends. As a result, capital appreciation, if any, of our Ordinary Shares will be your sole source of gain for the foreseeable future. Consequently, in the foreseeable future, you will likely only experience a gain from your investment in our Ordinary Shares if the price of our Ordinary Shares increases beyond the price in which you originally acquired the Ordinary Shares.

The JOBS Act and our status as a foreign private issuer will allow us to postpone the date by which we must comply with some of the laws and regulations intended to protect investors and to reduce the amount of information we provide in our reports filed with the SEC, which could undermine investor confidence in our company and adversely affect the market price of our Ordinary Shares.

For so long as we remain an "emerging growth company" as defined in the JOBS Act, we intend to take advantage of certain exemptions from various requirements that are applicable to public companies that are not emerging growth companies including:

- the provisions of the Sarbanes-Oxley Act requiring that our independent registered public accounting firm provide an attestation report on the effectiveness of our internal control over financial reporting;

- Section 107 of the JOBS Act, which provides that an emerging growth company may take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act, for complying with new or revised accounting standards. This means that an emerging growth company may delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to delay such adoption of new or revised accounting standards. As a result, our financial statements may not be comparable to companies that comply with the public company effective date; and

- any rules that may be adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotation or a supplement to the auditor's report on the financial statements.

We intend to take advantage of these exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of our initial public offering which occurred in 2014, (b) in which we have total annual gross revenue of at least $1.07 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our Ordinary Shares that is held by non-affiliates exceeds $700 million as of the prior June 30th, and (2) the date on which we have issued more than $1 billion in non-convertible debt during the prior three-year period.

Our status as a foreign private issuer also exempts us from compliance with certain laws and SEC regulations and certain regulations of Nasdaq, including the proxy rules, the short-swing profits recapture rules, and certain governance requirements such as independent director oversight of the nomination of directors and executive compensation. Also, although the Companies Law requires us to disclose the annual compensation of our five most highly compensated senior officers and directors on an individual basis (rather than on an aggregate basis, as was formerly permitted under the Companies Law for Israeli public companies listed overseas, such as in the United States, prior to a recent amendment), this disclosure is not as extensive as that required of a U.S. domestic issuer. For example, it currently appears as if the disclosure required under Israeli law would be limited to compensation paid in the immediately preceding year without any requirement to disclose option exercises and vested stock options,

pension benefits or potential payments upon termination or change of control.

We cannot predict if investors will find our Ordinary Shares less attractive because we may rely on these exemptions. If some investors find our Ordinary Shares less attractive as a result, there may be a less active trading market for our Ordinary Shares, and our share price may be more volatile and may decline.

Risks Related to Israeli Law and Our Operations in Israel

While our senior management team is in the United States, a number of our current directors and future employees may be located in Israel and, therefore, our results may be adversely affected by political, economic and military instability in Israel.

Our business headquarters and a number of our directors as well as potential future employees are or will be located in Israel. Similarly, we are incorporated under Israeli law and we may, at a future time, opt to rent office space in Israel. Accordingly, security, political and economic conditions in the Middle East in general, and in Israel in particular, may directly affect our business.

Over the past several decades, a number of armed conflicts have taken place between Israel and its Arab neighbors and a state of hostility, varying in degree and intensity, has led to security and economic problems for Israel. From time to time since late 2000, there has also been a high level of violence between Israel and the Palestinians. In addition, since 2010 political uprisings and conflicts in various countries in the Middle East, including Egypt and Syria, are affecting the political stability of those countries. Any armed conflicts or political instability in the region, including acts of terrorism or any other hostilities involving or threatening Israel, could affect business conditions and could make it more difficult for us to conduct our operations in Israel, which could increase our costs and adversely affect our financial results.

Further, in the past, the State of Israel and Israeli companies have been subjected to economic boycotts. Several countries still restrict business with the State of Israel and with Israeli companies. These restrictive laws and policies may have an adverse impact on our operating results, financial conditions or the expansion of our business.

We may become subject to claims for remuneration or royalties for assigned service invention rights by our employees, which could result in litigation and harm our business.

A significant portion of our intellectual property has been developed by our employees in the course of their employment for us. Under the Israeli Patent Law, 5727-1967, or the Patent Law, and recent decisions by the Israeli Supreme Court and the Israeli Compensation and Royalties Committee, a body constituted under the Patent Law, Israeli employees may be entitled to remuneration for intellectual property that they develop for us unless they explicitly waive any such rights. Although we do not currently have any Israeli employees, to the extent we enter into agreements with our future employees pursuant to which they agree that any inventions created in the scope of their employment or engagement are owned exclusively by us (as we did in the past), we may face claims demanding remuneration. As a consequence of such claims, we could be required to pay additional remuneration or royalties to our current and former employees, or be forced to litigate such claims, which could negatively affect our business.

Under current Israeli law, we may not be able to enforce our Israeli employees' covenants not to compete and therefore may be unable to prevent our competitors from benefiting from the expertise of some of our former employees.

In the past we entered, and we plan in the future to enter into non-competition agreements with our key employees, in most cases within the framework of their employment agreements. These agreements prohibit our key employees, if they cease working for us, from competing directly with us or working for our competitors for a limited period. Under applicable Israeli law, we may be unable to enforce these agreements or any part thereof against our Israeli employees. If we cannot enforce our non- competition agreements against our Israeli employees, then we may be unable to prevent our competitors from benefiting from the expertise of these former employees, which could impair our business, results of operations and ability to capitalize on our proprietary information.

Provisions of Israeli law and our amended and restated articles of association may delay, prevent or otherwise impede a merger with, or an acquisition of, our company, which could prevent a change of control, even when the terms of such a transaction are favorable to us and our shareholders.

As a company incorporated under the law of the State of Israel, we are subject to Israeli corporate law. Israeli corporate law regulates mergers, requires tender offers for acquisitions of shares above specified thresholds, requires special approvals for transactions involving directors, officers or significant shareholders and regulates other matters that may be relevant to such types of transactions. For example, a merger may not be consummated unless at least 50 days have passed from the date on which a merger proposal is filed by each merging company with the Israel Registrar of Companies and at least 30 days have passed from the date on which the shareholders of both merging companies have approved the merger. In addition, a majority of each class of securities of the target company must approve a merger. Moreover, a tender offer for all of a company's issued and outstanding shares can only be completed if the acquirer receives positive responses from the holders of at least 95% of the issued share capital. Completion of the tender offer also requires approval of and a majority of the offerees that do not have a personal interest in the tender offer approves the tender offer, unless, following consummation of the tender offer, the acquirer would hold at least 98% of the company's outstanding shares. Furthermore, the shareholders, including those who indicated their acceptance of the tender offer, may, at any time within six months following the completion of the tender offer, claim that the consideration for the acquisition of the shares does not reflect their fair market value, and petition an Israeli court to alter the consideration for the acquisition, unless accordingly, other than those who indicated their acceptance of the tender offer in case the acquirer stipulated in its tender offer that a shareholder that accepts the offer may not seek such appraisal rights., and the acquirer or the company published all required information with respect to the tender offer prior to the tender offer's response date. See Item 10.B - "Articles of Associations - Acquisitions under Israeli Law" for additional information.

Furthermore, Israeli tax considerations may make potential transactions unappealing to us or to our shareholders whose country of residence does not have a tax treaty with Israel exempting such shareholders from Israeli tax. See Item 10.E - "Taxation - Israeli Tax Considerations" for additional information.

Our amended and restated articles of association also contain provisions that could delay or prevent changes in control or changes in our management without the consent of our Board of Directors. These provisions include the following:

- no cumulative voting in the election of directors, which limits the ability of minority shareholders to elect director candidates; and

- the right of our Board of Directors to elect a director to fill a vacancy created by the expansion of the Board of Directors or the resignation, death or removal of a director, which may prevent shareholders from being able to fill vacancies on our Board of Directors.

It may be difficult to enforce a judgment of a United States court against us, to assert United States securities laws claims in Israel or to serve process on our officers and directors that reside outside of the United States.

We were incorporated in Israel. Several of our directors reside outside of the United States, and most of our assets and the assets of these persons are located outside of the United States. Therefore, a judgment obtained against us, or any of these persons, including a judgment based on the civil liability provisions of the U.S. federal securities laws, may not be collectible in the United States and may not necessarily be enforced by an Israeli court. It also may be difficult for you to affect service of process on these persons in the United States or to assert U.S. securities law claims in original actions instituted in Israel. Additionally, it may be difficult for an investor, or any other person or entity, to initiate an action with respect to United States securities laws in Israel. Israeli courts may refuse to hear a claim based on an alleged violation of United States securities laws reasoning that Israel is not the most appropriate forum in which to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not United States law is applicable to the claim. If United States law is found to be applicable, the content of applicable United States law must be proven as a fact by expert witnesses, which can be a time consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel that addresses the matters described above. As a result of the difficulty associated with enforcing a judgment against us in Israel, you may not be able to collect any damages awarded by either a United States or foreign court.

Your rights and responsibilities as a shareholder will be governed by Israeli law which differs in some material respects from the rights and responsibilities of shareholders of U.S. companies.

The rights and responsibilities of the holders of our Ordinary Shares are governed by our amended and restated articles of association and by Israeli law. These rights and responsibilities differ in some material respects from the rights and responsibilities of shareholders in typical U.S.-based corporations. In particular, a shareholder of an Israeli company has certain duties to act in good faith and fairness toward the Company and other shareholders, and to refrain from abusing its power in us. See Item 16G. - "Corporate Governance - Approval of Related Party Transactions under Israeli Law" for additional information. There is limited case law available to assist us in understanding the nature of this duty or the implications of these provisions. These provisions may be interpreted to impose additional obligations on holders of our Ordinary Shares that are not typically imposed on shareholders of U.S. corporations.

Our operations may be disrupted as a result of the obligation of management or key personnel to perform military service.

While we do not currently have employees in Israel, any future employees and consultants in Israel, that may include members of our senior management, may be obligated to perform one month, and in some cases longer periods, of military reserve duty until they reach the age of 40 (or older, for citizens who hold certain positions in the Israeli armed forces reserves) and, in the event of a military conflict or emergency circumstances, may be called to immediate and unlimited active duty. In the event of severe unrest or other conflict, individuals could be required to serve in the military for extended periods of time. In response to increases in terrorist activity, there have been periods of significant call-ups of military reservists. It is possible that there will be similar large-scale military reserve duty call-ups in the future. Our operations could be disrupted by the absence of a significant number of our officers, directors, employees and consultants related to military service. Such disruption could materially adversely affect our business and operations.

ITEM 4. INFORMATION ON THE COMPANY

4.A. History and development

We are an Israeli corporation with our principal executive office located in Tel-Aviv, Israel, and were incorporated on January 22, 2012. Our legal and commercial name is Bioblast Pharma Ltd. Our principal executive offices are located at PO Box 318, Tel-Aviv, Israel 6100201, and our telephone number is: +972-3-5736632. Our wholly owned U.S. subsidiary, Bio Blast Pharma, Inc., incorporated in Delaware, has been appointed our agent in the United States and its registered address is 1811 Silverside Road, Wilmington, Delaware 19810. Our website address is https://bioblastpharma.com/. The information contained on, or that can be accessed through, our website is not part of this annual report. We have included our website address herein solely as an inactive textual reference.

We are an "emerging growth company," as defined in Section 2(a) of the Securities Act of 1933, as amended, or the Securities Act, as modified by the JOBS Act. As such, we are eligible to, and intend to, take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not "emerging growth companies" such as the exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002. We could remain an "emerging growth company" for up to five years from the date of our initial public offering in July 2014, or until the earliest of (a) the last day of the first fiscal year in which our annual gross revenue exceeds $1.07 billion, (b) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, which would occur if the market value of our securities held by non-affiliates exceeds $700 million as of the last business day of our most recently completed second fiscal quarter, or (c) the date on which we have issued more than $1 billion in nonconvertible debt during the preceding three-year period.

Our capital expenditures for 2017, 2016 and 2015 amounted to $2,000, $18,000 and $48,000, respectively. These expenditures were primarily for computers, electrical equipment, office furniture and leasehold improvements. We expect to finance future expenditures primarily from available cash resources.

4.B. Business overview

Who We Are

We are a clinical stage orphan disease-focused biotechnology company committed to developing meaningful therapies for patients with rare and ultra-rare genetic diseases. Currently our focus is on trehalose, a therapeutic platform that offers potential solutions for several diseases that share a common pathophysiological mechanism, which are the functional changes that accompany a particular syndrome or disease. Since our inception in 2012, our work with

trehalose has centered around OPMD and SCA3.

On June 5, 2017, we announced our engagement with JSB-Partners, a global life sciences advisor, to assist us in executing our business development objectives, which include selecting potential development and commercial partners for our investigational proprietary intravenous (IV) form of trehalose 90 mg/mL solution (trehalose), which has been studied in humans with OPMD and SCA3 and M&A opportunities. Among other transaction structures, we are simultaneously exploring the possibility of a merger or sale of the entire company or a controlling interest in the company, as well as a sale or licensing of our product candidate followed either by the distribution of any proceeds to our shareholders or an unrelated merger of the company with an operating company that would seek to benefit from the company's then status as a "shell" company listed for trading on Nasdaq (reverse IPO). We have cut our expenses and terminated almost all of our employees and are now dedicating all of our resources to support the process led by JSB-Partners. Accordingly, we are not currently actively pursuing our core business focus as described in the preceding paragraph.

We intend to address diseases with severe and debilitating manifestations, where the unmet medical need is clear, the biological mechanism of action is understood, and for which there is no satisfactory treatment.

Trehalose IV Solution

Trehalose is a protein stabilizer and an autophagy enhancer that activates lysosomal pathways. We have developed a proprietary high dose, trehalose 90mg/mL intravenous, or Trehalose IV, solution that allows trehalose to reach target organs and facilitate tissue penetration to the brain and muscles. Mutant unstable cellular proteins are the cause of several protein aggregation genetic diseases known as PolyA/PolyQ diseases, including OPMD, where mutant protein aggregates in muscle, and in SCA3 where mutant protein aggregates in the brain. These pathological proteins aggregate within cells and cell nuclei eventually leading to cell death. Data from the literature and from our nonclinical studies in both cell and animal models of disease indicate that trehalose may have the potential to prevent mutant protein aggregation and to enhance autophagy in human diseases, by stabilizing proteins, reducing the formation of protein aggregates, and promoting clearance of abnormal proteins or other storage materials thereby preventing cell death.

Summary of our Clinical Trials to Date

In March 2016, we reported final results of our HOPEMD Phase 2a open-label study in which 25 patients with OPMD were treated with our Trehalose IV solution for 24 weeks using a weekly dose of 27 grams. Our Trehalose IV solution was observed to be generally safe and well tolerated, with no drug-related serious adverse events, and while not powered for efficacy, the study produced early efficacy signals. These efficacy signals related to the main symptoms of OPMD, such as dysphagia (difficulty in swallowing), and muscle weakness. At the conclusion of the 24-week trial, patients were allowed to continue treatment for another 12 months. 22 patients of the original HOPEMD trial enrolled in this extension study (16 of whom continued to receive our Trehalose IV solution while six were in the non-treatment group), in which our Trehalose IV solution was observed to be generally safe and well tolerated. Patients who remained on our Trehalose IV solution remained stable with improved dysphagia and patients withdrawn from treatment had worsening of their dysphagia. In October 2016, we reported the results of a randomized double-blind placebo-controlled trial assessing the pharmacokinetics of trehalose in 24 healthy volunteers (randomized 3:1 trehalose to placebo) to establish safety and tolerability of escalating doses of trehalose and to determine the Maximum Tolerated Dose (MTD), or maximum feasible dose, and assess pharmacokinetics of escalating doses of trehalose. Our Trehalose IV solution was observed to be generally safe and well tolerated at twice the 27 grams dose used in the HOPEMD clinical trial. The MTD was 54 grams administered by IV over 60 minutes. In January 2017, we reported the results of a Phase 2a open-label study of 14 SCA3 patients for a six-month period; eight patients received a dose of 13.5 grams and six patients received a dose of 27 grams of our Trehalose IV solution on a weekly basis. (The study began with 15 patients; however, one patient withdrew after three weeks and prior to any efficacy assessment). Weekly Trehalose IV infusions of both doses were generally safe and well tolerated. There were no changes in any safety laboratory parameters with treatment. Patients remained stable with no change on the Scale for Assessment and Rating of Ataxia, or SARA, score – a well-accepted clinical tool for measuring the effect of the disease – over the six-month period. Five patients received treatment for as long as 12 months and continued to remain stable on the SARA scale.

SARA is a clinical scale that assesses a range of different impairments in cerebellar ataxia. The scale is made up of eight measurements related to gait, stance, sitting, speech, finger-chase test, nose-finger test, fast alternating movements and heel-shin test. A higher score indicates a more symptomatic patient. A recently published long term natural history study in patients with SCA3 showed an average annual increase of 1.56 points on the SARA scale score, denoting the disease progression.

At the present time, no developmental activity with trehalose is being pursued as the Company investigates various strategic business alternatives.

Our Long Term Approach

Our long term plan is to develop (by ourselves or with strategic partners) our Trehalose IV solution as a first-in-class therapy for orphan-designated genetic diseases with high unmet needs where the mechanism of action involves prevention of protein aggregation, activation of autophagy or lysosomal pathways, and where there is involvement of the brain and/or muscle. We focus on diseases where there is proof of concept for trehalose in disease models.

The patients we seek to treat have diseases with limited or no treatment options, and their lives and well-being are highly dependent upon on the development of new therapies. The main components of our business strategy include the following:

- *Focus on rare and ultra-rare diseases with significant unmet medical need*. There are numerous rare and ultra-rare metabolic genetic diseases that currently have no approved drug therapy. Some such diseases have drugs currently in development. Patients suffering from these diseases often have a high unmet medical need with significant morbidity and/or mortality. We plan to focus on developing and commercializing therapies for multiple indications with our intended focus on genetic diseases with high unmet needs characterized by protein aggregation or abnormal storage of metabolites, including neuromuscular diseases and lysosomal storage diseases with a neurologic or muscle involvement;

- *Focus on diseases and therapies with clear mechanisms of action*. We plan to focus on diseases that have biology and root causes that are well understood. We believe that developing drugs that directly impact known disease pathways will increase the probability of success of our development programs;

- *Develop and selectively commercialize our Trehalose IV solution for multiple indication*s. Development of multiple programs based on one compound has the potential to generate development and commercial efficiencies as well as multiple market opportunities and reduced risk; and

- *Focus on excellent and efficient clinical and regulatory execution*. We believe that building a successful and sustainable rare disease-focused company requires very specific expertise in the areas of patient identification, clinical trial design and conduct, and regulatory strategy. We plan to assemble a team with both a successful track record in managing global clinical development activities in an efficient manner, and with multinational experience in obtaining regulatory approvals for rare disease products.

Drug Candidate - Overview and Development Plan

Our strategy will be to either retain global commercialization rights to our product to maximize long-term value or to build our own commercial organization in the United States, which we believe would be of modest size due to the relatively small number of specialists who treat patients with rare and ultra-rare diseases, and we are actively considering partnership arrangements that may accelerate product development and facilitate access to international market opportunities.

The diseases which we plan to address have severe consequences on patients' health, quality of life and potential life expectancy. In addition, these diseases create significant burdens on patients' families and caretakers as well as on public health resources. In all diseases we are addressing, patients either cannot be offered an alternative therapy or the current solutions are inadequate to alter the course of the disease. We believe that prompt and efficient drug development can be of substantial benefit to the patients who are suffering from these incurable diseases. We have assembled an experienced team of employees, consultants, service providers and a Board of Directors with extensive drug development and commercialization capabilities, particularly in the orphan drug area.

Trehalose

Trehalose is naturally-occurring and is well known for its protein-stabilizing properties, and recently, for its autophagy enhancing properties and effect on activation of lysosomal pathways. When orally administered, trehalose is metabolized at the epithelial brush border of the intestine into two D-glucose molecules. Less than 0.5% of ingested trehalose is absorbed into the blood stream where it is further metabolized by the liver and kidney. To achieve

therapeutic amounts of trehalose in the muscle cells, it is necessary to circumvent the massive metabolism in the gastrointestinal tract.

Our proprietary IV solution of Trehalose IV has been designed to circumvent the breakdown of trehalose in the gastrointestinal tract and to enable therapeutic doses of trehalose to reach target organ muscle and brain tissues.

We have shown in a nonclinical study that trehalose administered via an IV is able to penetrate muscle and remain measurable in the muscle tissue for 48 hours. In a separate study trehalose administered via an IV was shown to penetrate the brain where it remained measurable for 24 hours.

Trehalose is a low molecular weight disaccharide (0.342 kilodaltons), which is a chemical molecule comprised of two sugar components that can prevent the folding of proteins and that buffer abnormal protein aggregation, thus protecting against pathological processes in cells. Trehalose has been shown to prevent pathological aggregation of proteins within cells in several diseases associated with abnormal cellular-protein aggregation as well as acting as an autophagy enhancer. Autophagy is the basic catabolic mechanism that involves cell-based degradation of unnecessary or dysfunctional cellular components. Autophagy in healthy adults, or if regulated in those with abnormalities, ensures degradation and recycling of cellular components. Trehalose effectively reduced the aggregation and toxicity of mutant PABPN1 proteins in OPMD cell models. Furthermore, treatment of an OPMD in a mouse model with trehalose resulted in the attenuation of muscle weakness, decreased aggregate formation and a reduced number of TUNEL-positive nuclei in skeletal muscle fibers.

Trehalose IV Solution for the Treatment of OPMD

Trehalose IV solution is our proprietary drug candidate for the treatment of OPMD, an ultra-rare, inherited myopathy. OPMD is a muscle disease caused by a primary defect in muscle cells as a result of aggregation of a protein called PABPN1. Overall worldwide prevalence of OPMD is estimated at 1:100,000. Characteristically to genetic diseases with autosomal inheritance, there are documented clusters of higher prevalence. For example, in people of French Canadian origin residing in Quebec, Canada, among Hispanics in Northern New Mexico, USA, and Bukhara Jews in Israel. The prevalence data collected suggest that the prevalence is approximately 1:1,000 patients among French Canadian, approximately 12:100,000 patients among Hispanics of Northern New Mexico, and approximately 1:600 patients among Bukhara Jews in Israel. We estimate that there are about 4,300 patients in the United States and Canada and overall about 12,000 patients around the world.

OPMD is characterized by progressive muscle weakness that leads to development of symptoms including ptosis (dropping of eyelids), dysphagia (difficulty in swallowing) and proximal muscle weakness. As the dysphagia becomes more severe, patients may suffer from repeated incidents of aspiration pneumonia, may become malnourished (cachexia), and may develop tongue atrophy and speech difficulties (dysphonia). OPMD is caused by a genetic mutation responsible for the creation of a mutant protein (PABPN1) with an expanded polyalanine domain that aggregates within patient muscle cells. OPMD is one of a larger group of diseases called tri-nucleotide repeat diseases that are associated with the presence of an abnormal cellular protein that aggregates in the cells, eventually causing cell death. In OPMD, the mutant protein PABPN1 was found to be correlated with disease severity in animal models and was identified within the typical cellular protein aggregates-the intranuclear inclusion body (INI) that is the diagnostic hallmark of the disease.

There is no drug therapy or, to our knowledge, potential cure for OPMD. Current therapeutic strategies are confined to interventions and surgical procedures that have limited efficacy and may need to be repeated while the progressive loss of muscle contractility continues relentlessly.

The HOPEMD Phase 2a open-label clinical study was conducted at two centers - Montreal Neurological Institute at McGill University in Montreal, Canada, and Hadassah-Hebrew University Medical Center in Jerusalem, Israel. The primary objective was to assess the safety and tolerability of our Trehalose IV solution in patients suffering from OPMD. Although not powered for efficacy, secondary endpoints were included to explore if our Trehalose IV solution could improve or prevent worsening of OPMD disease markers, notably those related to dysphagia (difficulty in swallowing) and upper and lower muscle weakness. A total of 25 patients were enrolled, with 11 patients in Canada and 14 patients in Israel. All 25 patients received our Trehalose IV solution weekly, for 24 weeks.

Our Trehalose IV solution was observed to be generally safe and well-tolerated with no drug-related serious adverse events. There were no significant changes in lab safety data including chemistry, hematology, and electrocardiography tests. There was one death due to aspiration pneumonia that was not considered drug-related but instead was related to the underlying disease. No patients chose to discontinue the study for reasons related to safety or side effects. Additionally, improvements versus baseline were observed in a number of secondary efficacy endpoints related to dysphagia and muscle strength and function as detailed below.

The dysphagia (swallowing difficulties) endpoints were the timed cold water drinking test (80mL) for all sites, the nectar (80mL) and honey (80mL) timed drinking tests at the Canadian site and the Penetration Aspiration Score as measured by video fluoroscopy (VFS-PAS), a radiographic technique to determine the severity of swallowing difficulties and risk of aspiration. The swallowing quality of life questionnaire (SWAL-QOL), specifically developed for patients suffering from swallowing problems, was employed to assess the degree to which patients felt that their swallowing capability improved with treatment.

In a post-hoc analysis there was a 40.2% reduction in the median individual drinking time (n=23) and in the nectar and honey timed drinking tests, there was a 46.5% and 61.7% reduction, respectively, in the median drinking times (n=11). Patients in the Israeli arm of the trial did not get tested for nectar or honey timed drinking tests. Out of the 11 patients in Canada whose scores were evaluated in the per protocol analysis of the VFS-PAS, six patients improved (54.5%), two patients showed stabilization (18.2%), and three patients deteriorated (27.2%). Deviations from protocol and deficient radiological procedures lead to exclusion of the VFS-PAS tests from the Israel cohort from the final analysis. With respect to the SWAL-QOL questionnaire, there was a 12.4% (n=24) mean improvement versus baseline with the mean total symptom severity score increasing from 43.2 to 48.7.

In the muscle strength tests, as measured quantitatively by a digital hand-held dynamometer, there was a mean increase in lower body muscle strength compared to baseline in knee extension of 15.0% (n=22) and foot dorsiflexion of 22.4% (n=22). Hip flexion did not materially change (1.3% deterioration, n=21). For the upper extremity strength tests, arm (bicep) flexion increased on average 17.9% (n=22), and shoulder abduction increased by 11.4% (n=22). In the muscle function tests, the 30 second arm-lift test showed an average of 16.0% increase in the number of completed tasks (n=20 right arm -21 left arm) at 24 weeks of treatment versus baseline while the 30 second sit-to-stand test showed a 16.6% increase (n=21). The standard 4-stair climbing test did not materially change (1.5% deterioration, n=21).

At the conclusion of the 24-week trial, 22 patients (13 in Israel and 9 in Canada) elected to continue treatment for another 12 months; 16 of whom continued to receive Trehalose IV while six were in the non-treatment group. There were three main objectives for this extension study: (i) to determine the long-term effect of trehalose on disease progression as assessed by the changes in the disease markers; (ii) to determine the long-term effect of trehalose on disease progression as assessed by the changes in the patient’s swallowing quality of life; and (iii) to determine the long-term safety and tolerability of repeated IV administration of trehalose 30 grams in OPMD patients.

The results from the extension study indicated that trehalose was generally safe and well tolerated. There were no clinically significant changes in safety labs. There was one serious adverse event, unrelated to drug treatment, renal colic; and there were no infusion reactions or adverse events leading to discontinuation. Patients who remained on treatment (n=16) continued to benefit as demonstrated by a continued improvement in the cold water drinking test times. Patient who were removed from treatment (n=6) had an increase in their cold water drinking times over the one year period. Thus, the treatment effects of trehalose persisted over the year of continued treatment, but were lost for those who came off treatment. At the conclusion of the 12-month extension study, 10 patients in Israel rolled into a 52-week compassionate use study, and nine patients in Canada were rolled into a subsequent 52-week extension study. These studies were initiated in September 2016. All 19 patients participating in these studies receive a weekly dose of 27 grams of our Trehalose IV solution.

Trehalose IV Solution for the Treatment of SCA3

SCA3, also known as Machado Joseph disease, a dominantly inherited ataxia, is the most common of the cerebellar ataxias, and is one of a group of genetic diseases that are characterized by memory deficits, spasticity, difficulty with speech and swallowing, weakness in arms and other muscular disorders. The prevalence of SCA3 is conservatively estimated at approximately 3-4 cases per 100,000 people in North America and Europe. The prevalence of the disease is highest among people of Portuguese/Azorean descent. For example, among immigrants of Portuguese ancestry in New England, the prevalence is approximately one in 4,000, and the highest prevalence in the world, about one in 140, occurs on the small Azorean island of Flores. There is no medical treatment for SCA3 and current approaches are focused on alleviating disease symptoms and supportive care.

In most individuals with SCA3, symptoms typically begin in the third to fifth decade of life but can start as early as young childhood or as late as 70 years of age. Eventually SCA3 leads to paralysis, and severe cases can lead to an early death in the fourth decade of life. SCA3 is incurable, and there is currently no approved treatment for the disease. Natural history studies indicate that death occurs, on average, 21 years after diagnosis. SCA3 is caused by a mutation in the DNA that leads to the creation of a pathological protein called ataxin 3. In affected patients, ataxin 3 is unstable, aggregates within the cells, and eventually leads to cell death.

Multiple reported studies in cell models have shown that trehalose, both as an anti-mutant protein aggregation agent and as an autophagy enhancer, is able to reduce protein aggregates and improve cell survival in several spinocerebellar ataxias including SCA3 cells. We have conducted animal studies in two disease models of SCA3, demonstrating that treatment with trehalose reduced the level of the pathological protein in nerve cells and reduced the disease symptoms. In 2015, we announced positive *in vivo* proof of concept results for our Trehalose IV solution for SCA3 in these two different mouse models.

During 2015 and 2016, we conducted a 24-week Phase 2a open-label study (that also included a six-month follow-up period) investigating Trehalose IV in patients with SCA3. The objectives of the study were to establish safety and tolerability of two doses of Trehalose IV as well as to assess an effect of the drug on reducing the rate of clinical decline in this progressively disabling disease. The Phase 2a open-label study evaluated 14 SCA3 patients over 24 weeks; eight patients received a dose of 13.5 grams of Trehalose IV, and six patients received a dose of 27 grams, both on a weekly basis. (The study began with 15 patients; however, one patient withdrew after three weeks prior to any efficacy assessment). Investigators and patients were blinded to the dose administered.

The study had several key findings, including (i) weekly trehalose infusions of both doses were generally safe and well tolerated (there were no changes in any safety laboratory parameters with treatment), (ii) patients remained stable with no change on the SARA score – over the 24 week treatment and (iii) five patients received treatment for as long as 12 months and continued to remain stable on the SARA scale.

Trehalose IV Solution Safety and Dosing

During 2016, we conducted a randomized double-blind placebo-controlled single ascending dose pharmacokinetic (PK) study of Trehalose IV in 24 healthy volunteers separated to three groups of eight patients each. In each group, six patients received trehalose and two patients received a placebo. The first group received 27 grams of IV trehalose as a one hour infusion. The second group was then dosed with 54 grams, and the third group was then dosed with 81 grams. The primary objective of the study was to establish safety and tolerability of escalating doses of trehalose. The secondary objectives were to determine the Maximum Tolerated Dose (MTD) and pharmacokinetics of escalating doses of trehalose. The key findings of the study were: (i) the MTD was determined to be 54 grams administered IV over 60 minutes, which is twice the level of drug that has been given to patients in our OPMD and SCA3 Phase 2a studies, (ii) 54 grams of trehalose administered over one hour was generally safe and well tolerated with no changes in any safety parameters, (iii) the PK of trehalose was linear; i.e. doubling the dose, doubled the exposure, (iv) the half-life of trehalose was approximately 1.5 hours and did not change when the dose was increased, (v) there was no effect on serum glucose levels during or following the infusion, and (vi) the rate of trehalose clearance from the blood was directly related to the patient's weight; i.e., the greater the weight the faster the clearance of drug.

Peak serum concentration increased with increasing doses from 27 grams to 81 grams. The mean elimination half-life (t½) ranged from 1.41 hours to 1.59 hours and was consistent as the dose increased. In the 81-gram dose cohort, one subject out of six subjects who received trehalose had an increase in liver enzymes that resolved without treatment; thus no higher doses of trehalose were administered, thereby establishing the MTD for trehalose as 54 grams. There was a positive relationship between clearance of trehalose from the blood and body weight over a range of 50 kilograms (kg) to 100kg. This finding suggested that clearance is related to body size and thus, weight-based dosing, i.e. g/kg, would be more appropriate to achieve consistent exposure across a range of body weights in future studies.

Overview of Clinical and Nonclinical Study Results

The most common adverse event in the HOPEMD Phase 2a study in patients with OPMD, as well as in the Phase 2a study in patients with SCA3, was transient and benign glucosuria, lasting for a few hours after infusion of trehalose. Glucosuria is the result of the metabolism of trehalose by the enzyme trehalase into two glucose molecules and subsequent excretion in the urine. The following table summarizes the dosing of Trehalose IV solutions administered during completed clinical studies:

Study	**Design**	**Length**	**Dosing**	**Dose**	**Subjects**
Single Ascending Dose	DB Placebo Controlled	8 Days	1 dose	27,54,81 g	24
OPMD Phase 2a	Open Label	6 months	Weekly	27 g	25
OPMD Extension	Open Label/Withdrawal	12 Months	Weekly	27 g	22
SCA3 Phase 2a	Open Label	6 Months	Weekly	13.5 or 27 g	14
SCA3 Extension	Open Label	6 Months	Weekly	13.5 or 27 g	14

A total of 58 people were exposed to trehalose: 25 patients with OPMD, 15 patients with SCA3 and 18 healthy subjects, with some patients having been on the drug for more than 18 months. These patients and healthy volunteers have received a total of more than 2,200 doses of Trehalose IV, representing a total of more than 56,000 grams. Overall, trehalose has been well tolerated in all 58 people, with no infusion reactions being reported and no safety signals identified. No adverse event has led to discontinuation of the study drug, or drug related death.

Nonclinical toxicology studies have shown that trehalose is generally safe and well tolerated, is not genotoxic, and there is no CYP450 inhibition in drug-drug interaction analysis. Such nonclinical toxicology studies included two short-term 3-months studies in dogs and rats using a dose of 3.6 g/kg which were completed, and two chronic toxicity studies. Chronic toxicology studies were performed at a dose range of 2.7 g/kg through 10.8 g/kg and include a 6-months rat study (in which the in-life phase was terminated at 5 months due to catheter complications) and an on-going 9-month dog study for which the 6-months interim report had no negative findings. The six-month rat study report showed that there was no systemic toxicity, at any dose studied, of trehalose. However, there was increased incidence of procedural-related (indwelling catheters) complications with increasing doses of trehalose, thus suggesting that trehalose infusion may exacerbate this procedure-related event. Indwelling catheters have not been used and are not permitted in the clinical trials of trehalose.

Trehalose IV 90mg/mL Solution Next Steps

During 2016, we initiated a prospective natural history of disease study for OPMD conducted at the Sherbrooke University in Canada. As part of the study, retrospective data from more than 300 patients was reviewed and a longitudinal data collection will begin in 2017, to document the natural progression of the disease over time including, age of onset, age at diagnosis, mutation size and symptoms. Based on preliminary analysis of retrospective data collected, 96.6% of patients in the cohort experienced dysphagia as one of their symptoms.

In the future, subject to regulatory approval, we or a strategic partner anticipate initiating a multicenter 24 week, double-blind placebo-controlled Phase 2b trial with our Trehalose IV solution in OPMD. The plan is to enroll 48 patients and randomize them in a 1:1 ratio. The study is designed to assess safety and tolerability as well as explore whether our Trehalose IV solution could improve or prevent worsening of OPMD disease markers.

Based on the mechanism of action of trehalose and nonclinical and clinical findings, we believe that this drug platform has the potential to treat several PolyA/PolyQ diseases, protein aggregation diseases, lysosomal storage diseases and certain hepatic diseases.

Competition

The commercialization of new drugs is competitive, and we may face worldwide competition from individual investigators, major pharmaceutical companies, specialty pharmaceutical companies, biotechnology companies and ultimately biosimilar and generic companies. Our competitors may develop or market therapies that are more effective, safer, or less costly than any that may be commercialized by us, or may obtain regulatory approval for their therapies more rapidly than we may obtain approval for ours. Many of our competitors have substantially greater financial, technical and human resources than we have. Additional mergers and acquisitions in the pharmaceutical industry may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances made in the commercial applicability of technologies and greater availability of capital for investment in these fields. Our success will be based in part on our ability to build and actively manage a portfolio of indication-specific trehalose products that addresses unmet medical needs and creates value in patient therapy.

Trehalose IV Solution Competition

Although we are not aware of any other products currently in clinical development for the treatment of OPMD, it is possible that competitors may produce, develop and commercialize therapeutics, or utilize other approaches, such as gene therapy, to treat OPMD. Benitec Pharma is in the nonclinical testing phase with a gene silencing program. University Hospital, Caen is testing an autologous transplantation of myoblasts for treatment of ptosis related to OPMD. Hopitaux de Paris, Association Francaise contre les Myopathies (AFM) is testing autologous transplantation of myoblasts for the treatment of dysphagia related to OPMD.

With respect to our programs in our Trehalose IV solution for SCA3, Biohaven Pharmaceutical is developing a new chemical entity, BHV-4157, for SCA3 which is in a Phase 2b/3 clinical trial. Steminent Biotherapeutics is developing a stem cell based therapy (allogeneic adipose derived mesenchymal stem cells) in a Phase 2 clinical trial. It is possible that other competitors may produce, develop and commercialize therapeutics, or utilize other approaches such as gene therapy, to treat SCA3. In the last few years several academic research initiatives were conducted to explore the efficacy of approved drugs such as lithium, varenicline (Chantix ®), riluzol and dalfampridine.

Although only insignificant amounts of trehalose can be absorbed through an oral administration, it is possible that other companies or individuals may attempt to use food-grade trehalose taken orally as a substitute for a drug, and others may attempt to sell the product via a nutraceutical or food pathway. We believe that if our patent applications are approved, we will be well protected in our intellectual property from the use of trehalose as an IV product.

Terminated License Agreements

In 2011, we entered into a Research and Exclusive License Agreement with Yissum Research Development Company of the Hebrew University of Jerusalem Ltd., and another with Hadasit Medical Research Services and Development Ltd. whereby we obtained exclusive licenses to a mitochondrial protein replacement platform which included two patent families. In addition, on January 1, 2014, we entered into an Exclusive License Agreement with Ramot at Tel Aviv University Ltd. for the use, development and commercialization of a read-through. Both agreements were terminated during September and November 2016, respectively, and we surrendered all rights and titles to these platforms and related data. Pursuant to the mutual termination agreement with Ramot at Tel Aviv University Ltd., and under certain conditions, although unlikely, we may be entitled to future royalty payments.

Intellectual Property and Patents and Proprietary Rights

The proprietary nature of, and protection for, our current and/or any future product candidates, processes and know-how are important to our business as is our ability to operate without infringing on the proprietary rights of others, and to prevent others from infringing our proprietary rights. We seek patent protection in the United States and internationally for our current and any future product candidates we may develop and other technology. Our policy is to patent or in-license the technology, inventions and improvements that we consider important to the development of our business. In addition to patent protection, we intend to use other means to protect our proprietary rights, including pursuing marketing or data exclusivity periods, orphan drug status, and similar rights that are available under regulatory provisions in certain countries, including the United States, Europe, Japan, and China. See “U.S. Government Regulation - Orphan Designation and Exclusivity,” “U.S. Government Regulation - Pediatric Studies and Exclusivity,” “U.S. Government Regulation - Patent Term Restoration,” “U.S. Government Regulation - Biosimilars and Exclusivity,” “U.S. Government Regulation - Abbreviated New Drug Applications for Generic Drugs,” “U.S. Government Regulation - Hatch-Waxman Patent Certification and the 30-Month Stay,” and “European Union/Rest of World

Government Regulation - Orphan Designation and Exclusivity" below for additional information. We also rely on trade secrets, know-how and continuing innovation to develop and maintain our competitive position. We cannot be certain that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any of our existing patents or any patents granted to us in the future will be commercially useful or sufficient in protecting our technology. We seek regulatory approval for our products in disease areas with high unmet medical need, great market potential and where we have a proprietary position through patents covering various aspects of our products, such as composition, dosage, formulation, use and manufacturing process, among others. Our success depends on an intellectual property portfolio that supports our future revenue streams and erects barriers to our competitors. We are maintaining and building our patent portfolio through filing new patent applications, prosecuting existing applications and licensing and acquiring new patents and patent applications.

Despite these measures, any of our intellectual property and proprietary rights could be challenged, invalidated, circumvented, infringed, found unenforceable, or misappropriated, or such intellectual property and proprietary rights may not be sufficient to permit us to take advantage of current market trends or otherwise to provide competitive advantages. For more information, see Item 3.D - "Risk Factors - Risks Related to our Intellectual Property." With respect to any patents that may issue in the United States and Europe, we may also be entitled to obtain a patent term extension and/or patent term adjustment to extend or adjust the patent expiration date. For example, in the United States, we can apply for a patent term extension of up to five years for one of the patents covering a product once the product is approved by the FDA. The exact duration of the extension depends on the time we spend in clinical trials as well as getting an NDA from the FDA.

Trehalose IV solution

We have three U.S. issued patents relating to methods of administering IV trehalose for the treatment of OPMD (US 9,084,720), SCA3 (US 9,125,924) and Huntington's disease (US 9,572,825). In addition, we have filed 12 patent applications that are pending in the United States and around the world that relate to the use of parenteral trehalose for the treatment of protein aggregation diseases. The patent applications are directed to a novel therapeutic regime using parenteral administration of trehalose, thereby achieving higher bioavailability and therapeutic efficacy in the treatment of myopathic and neurodegenerative diseases associated with abnormal protein aggregation, specifically polyalanine (PolyA) or polyglutamine (PolyQ) expansion protein and tauopathies disorders such as OPMD, SCA, spino bulbar muscular atrophy, Huntington's disease and other diseases. Of those patent applications, one pending patent application in the United States relates to deuterated forms of trehalose.

The expiring patent terms for such patents and, if issued, pending patent applications in the United States would be 2034 if all fees are timely paid, with possible patent term extension. We intend to pursue marketing and orphan drug exclusivity periods that are available to us under regulatory provisions in certain countries.

In addition, we have received orphan drug designation for the use of trehalose in OPMD and SCA3 patients, in the United States and in the E.U., which if approved will provide seven and ten years, respectively, of data exclusivity for the product.

Trademarks

We have filed with the USPTO an intent to use application for the trademark BIOBLAST in association with prescription pharmaceutical preparations for the treatment of rare and ultra-rare (orphan) diseases.

Other

We rely upon unpatented trade secrets, know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our ownership of know-how and trade secrets through an active program of legal mechanisms including assignments, confidentiality agreements, material transfer agreements, research collaborations and licenses.

Manufacturing

We plan to contract in the future with third parties for the manufacturing and testing of our Trehalose IV solution for nonclinical and clinical trials and intend to do so in the future. We do not own or operate manufacturing facilities for the production of clinical quantities of our product candidate. We currently have no plans to build our own clinical or commercial scale manufacturing capabilities, though we may decide to build a capable facility in the future.

The drug substance for our Trehalose IV solution is purchased from a third-party supplier and the drug product for our Trehalose IV solution is manufactured by a third-party manufacturer.

To date, our third-party manufacturers have met our manufacturing requirements. Although we have not yet engaged our third-party manufacturers in long-term commercial supply agreements, we expect third-party manufacturers to be capable of providing sufficient quantities of our product candidate to meet anticipated full scale commercial demands. In addition to third parties with whom we currently work, we believe that there are alternate sources of supply that can satisfy our clinical and commercial requirements, although we cannot be certain that identifying and establishing relationships with such sources, if necessary, would not result in significant delay or material additional costs.

Sales and Marketing

We may build the commercial infrastructure in the United States to effectively support the commercialization of our current or any future product candidates, if and when we believe a regulatory approval of the first of such a product candidate in that particular geographic market appears imminent. The commercial infrastructure for orphan products typically consists of a targeted, specialty sales force that calls on a limited and focused group of physicians supported by sales management, medical liaisons, internal sales support, an internal marketing group and distribution support. One challenge unique to commercializing therapies for rare diseases is the difficulty in identifying eligible patients due to the very small and sometimes heterogeneous disease populations. Our management team is experienced in maximizing patient identification for both clinical development and commercialization purposes in rare diseases.

Additional capabilities important to the orphan marketplace include the management of key accounts such as managed care organizations, group-purchasing organizations, specialty pharmacies and government accounts. To develop the appropriate commercial infrastructure, we will have to invest significant amounts of financial and management resources, some of which will be committed prior to any confirmation that our current or any future product candidates will be approved.

Outside of the United States, where appropriate, we may elect in the future to utilize strategic partners, distributors, or contract sales forces to assist in the commercialization of our products. In certain instances, we may consider building our own commercial infrastructure.

Government Regulation

Clinical trials, the drug approval process and the marketing of drugs are intensively regulated in the United States and in all other major foreign countries. Governmental authorities in the United States (including federal, state and local authorities) and in other countries, extensively regulate, among other things, the manufacturing, research and clinical development, marketing, labeling and packaging, storage, distribution, post-approval monitoring and reporting, advertising and promotion, pricing and export and import of pharmaceutical products, such as those we are developing. The process for obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

U.S. Government Regulation

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and related regulations, and the Public Health Service Act, or PHSA and its implementing regulations. FDA approval is required before any new drug candidate or dosage form, including a new use of a previously approved drug, can be marketed in the United States. We intend to submit an NDA in the United States. Failure to comply with the applicable United States regulatory requirements at any time during the product development process, approval process or after approval may subject an applicant to administrative or judicial sanctions. These sanctions could include the imposition by the FDA or an IRB of a clinical hold on trials, the FDA's refusal to approve pending applications or supplements, license suspension or revocation, withdrawal of an approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, other corrective action, injunctions, fines, civil penalties or criminal prosecution. Any agency or judicial enforcement action could have a material adverse effect on us.

The FDA and foreign regulatory authorities impose substantial requirements upon the clinical development, manufacture and marketing of pharmaceutical products. These agencies and other federal, state and local entities

regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, storage, distribution, record keeping, approval, advertising and promotion of our products.

The FDA's policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of our platforms and candidate products or any future product candidates or approval of new disease indications or label changes. We cannot predict the likelihood, nature or extent of adverse governmental regulation that might arise from future legislative or administrative action, either in the United States or abroad.

Marketing Approval

The process required by the FDA before a product candidate may be marketed in the United States generally involves the following:

- completion of extensive nonclinical laboratory tests and nonclinical animal studies, all performed in accordance with cGMP and current Good Laboratory Practices, or cGLP, guidance and regulations;

- submission to the FDA of an investigational new drug, or IND, application which must become effective before human clinical trials may begin and must be updated annually;

- approval by an IRB or ethics committee representing each clinical site before each clinical trial may be initiated;

- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the product candidate for each proposed indication;

- preparation of and submission to the FDA an NDA after completion of all clinical trials;

- potential review of the product application by an FDA Advisory Committee, where appropriate and if applicable;

- a determination by the FDA within 60 days of its receipt of an NDA to file the application for review;

- satisfactory completion of FDA pre-approval inspection of the manufacturing facilities where the proposed product is produced to assess compliance with cGMP; and

- FDA 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 and financial resources and we cannot be certain that any approvals for our candidate products will be granted on a timely basis, if at all.

An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for human studies. The IND also includes results of *in vitro* and *in vivo* studies and animal testing results assessing the toxicology, pharmacokinetics and pharmacodynamic characteristics of the product; chemistry, manufacturing and controls information; and any available human data or literature to support the use of the investigational new drug. An IND must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to the proposed clinical trials. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before clinical trials can begin. Accordingly, submission of an IND may or may not result in the FDA allowing clinical trials to commence.

We will need to successfully complete clinical trials in order to be in a position to submit an NDA to the FDA. Our planned future clinical trials for our candidate products may not begin or be completed on schedule, if at all. Clinical trials can be delayed for a variety of reasons, including:

- not obtaining regulatory approval to commence a trial;

- not reaching agreement with third-party clinical trial sites and their subsequent performance in conducting accurate and reliable studies on a timely basis;

- not obtaining IRB approval to conduct a trial at a prospective site;

- recruiting an insufficient number of patients to participate in a trial;

- inadequate supply of the drug; and

- clinical adverse finding(s) during the trial itself.

We must reach agreement with the FDA on the proposed protocols for our future clinical trials in the United States. A separate submission apart from an IND application must be made for each clinical trial to be conducted during product development. Further, an independent IRB for each site proposed to conduct the clinical trial must review and approve the plan for any clinical trial before it commences at that site. Informed consent must also be obtained from each trial subject. Regulatory authorities, an IRB or the sponsor, may suspend or terminate a clinical trial at any time on various grounds, including a finding that the participants are being exposed to an unacceptable health risk.

Clinical trials

Clinical trials involve the administration of the product candidate to human subjects under the supervision of qualified investigators in accordance with current good clinical practices, or cGCP, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the 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. Additionally, approval must also be obtained from each clinical trial site's IRB before the studies may be initiated and the IRB must monitor the trial until completed. There are also requirements governing the reporting of ongoing clinical trials and clinical trial results to public registries.

Our objective is to conduct clinical trials for our candidate products and, if those trials are successful, seek marketing approval from the FDA and other worldwide regulatory bodies.

For purposes of NDA approval, human clinical trials are typically conducted in phases that may overlap.

- *Phase 1* . The drug is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients;

- *Phase 2* . This phase involves trials in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage;

- *Phase 3* . This phase involves trials undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population, often at geographically dispersed clinical trial sites. These trials are intended to establish the overall benefit/risk profile of the product and provide an adequate basis for product labeling; and

- *Phase 4* . In some cases, the FDA may condition approval of an NDA for a product candidate on the sponsor's agreement to conduct additional clinical trials after approval. In other cases, a sponsor may voluntarily conduct additional clinical trials after approval to gain more information about the drug. Such post-approval studies are typically referred to as Phase 4 clinical trials.

A pivotal trial is a clinical trial that adequately meets regulatory agency requirements for the evaluation of a drug candidate's efficacy and safety such that it can be used to justify the approval of the product. Generally, pivotal trials are Phase 3 trials, but the FDA may accept results from Phase 2 trials if the trial design provides a well-controlled and reliable assessment of clinical benefit, particularly in situations where there is an unmet medical need and the results are sufficiently robust.

The FDA, the IRB, or the clinical trial sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects 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 oversight and assessment of designated milestones based on access to certain data during the conduct of the trial. We may also suspend or terminate a clinical trial based on evolving business objectives and/or competitive climate.

All of these trials must be conducted in accordance with GCP requirements in order for the data to be considered reliable for regulatory purposes.

The clinical trial process can take three to ten years or more to complete and there can be no assurance that the data collected will support FDA approval or licensure of the product. Government regulation may delay or prevent marketing of a product candidate or new drugs for a considerable period of time and impose costly procedures upon our activities. We cannot be certain that the FDA or any other regulatory agency will grant approvals for a product candidate on a timely basis, if at all. Success in early stage clinical trials does not ensure success in later stage clinical trials. Data obtained from clinical activities is not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval.

The NDA Approval Process

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, detailed investigational new drug product information is submitted to the FDA in the form of an NDA requesting approval to market the product for one or more indications. Under federal law, the submission of most NDAs is subject to an application user fee. For the FDA's fiscal year 2017, the application user fee with clinical data was $2,038,100, and the sponsor of an approved NDA is also subject to annual product and establishment user fees. For the FDA's fiscal year 2017, these fees were set at $97,750 per product and $512,200 per establishment. These fees are typically increased annually. Applications for orphan drug products are exempted from the NDA user fees and may be exempted from product and establishment user fees, unless the application includes an indication for other than a rare disease or condition.

An NDA must include all relevant data available from pertinent nonclinical and clinical trials, regardless of the results or findings, together with detailed information relating to the product's chemistry, manufacturing, controls and proposed labeling, among other things. Data is generated from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, or in certain instances, from other sources, including trials initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the investigational new drug product to the satisfaction of the FDA.

The FDA will initially review the NDA for completeness before it accepts it for filing. The FDA has 60 days from receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that the application is sufficiently complete to permit substantive review. After the NDA submission is accepted for filing, the FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, strength, quality and purity. The FDA may refer applications for novel drug products or drug products that present difficult questions of safety or efficacy to an Advisory Committee, typically a panel that includes independent clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and, if so, under what conditions. The FDA is not bound by the recommendations of an Advisory Committee, but it considers such recommendations carefully when making decisions.

Upon the request of an applicant, the FDA may grant a Priority Review designation to a product, which sets the target date for FDA action on the application at six months, rather than the standard ten months. Priority review is given where preliminary assessments indicates that a product, if approved, has the potential to provide a significant improvement compared to marketed products or offers a therapy where no satisfactory alternative therapy exists. Priority Review designation does not alter the scientific/medical standard for approval or the quality of evidence necessary to support approval.

The FDA is required to complete its review in a certain amount of time, for which the user fees are paid to help with the costs of the evaluation. However, FDA and the sponsor can agree to extend this review time. After the FDA completes its review of an NDA, it will communicate to the sponsor that the drug will either be approved, or it will issue a Complete Response Letter to communicate that the NDA will not be approved in its current form and inform the sponsor of changes that must be made or additional clinical, nonclinical or manufacturing data that must be received before the application can be approved, with no implication regarding the ultimate approvability of the application.

Before approving an NDA, the FDA will typically inspect the facilities at which the drug substance or drug product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications.

Additionally, before approving an NDA, the FDA may inspect one or more clinical sites to assure compliance with GCPs. If the FDA determines the application, manufacturing process or manufacturing facilities are not acceptable, it typically will outline the deficiencies and often will request additional testing or information. This may significantly delay further review of the application. If the FDA finds that a clinical site did not conduct the clinical trial in accordance with GCP, the FDA may determine the data generated by the clinical site should be excluded from the primary efficacy analyses provided in the NDA. Additionally, notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

The testing and approval process for a drug requires substantial time, effort and financial resources and this process may take several years to complete. Data obtained from clinical activities are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval on a timely basis, or at all. We may encounter difficulties or unanticipated costs in our efforts to secure necessary governmental approvals, which could delay or preclude us from marketing our products.

The FDA may require, or companies may pursue, additional clinical trials after a product is approved. These so-called Phase 4 trials may be made a condition to be satisfied for continuing drug approval. The results of Phase 4 trials can confirm the effectiveness of a product candidate and can provide important safety information. In addition, the FDA now has express statutory authority to require sponsors to conduct post-market trials to specifically address safety issues identified by the agency.

Any approvals that we may ultimately receive could be withdrawn if required post-marketing trials or analyses do not meet the FDA requirements, which could materially harm the commercial prospects for our candidate products.

The FDA also has authority to require a Risk Evaluation and Mitigation Strategy, or REMS, from sponsors to ensure that the benefits of a drug or biological product outweigh its risks. A sponsor may also propose a REMS as part of the NDA submission. The need for a REMS is determined as part of the review of the NDA. Based on statutory standards, elements of a REMS may include “Dear Doctor” letters, a Medication Guide, more elaborate targeted educational programs and in some cases restrictions on distribution. These elements are negotiated as part of the NDA approval, and in some cases if consensus is not obtained until after the Prescription Drug User Fee Act review cycle, the approval date may be delayed. Once adopted, REMS are subject to periodic assessment and modification.

Even if a product candidate receives regulatory approval, the approval may be limited to specific disease states, patient populations and dosages, or might contain significant limitations on use in the form of warnings, precautions or contraindications, including Black Box Warnings, or in the form of risk management plans, restrictions on distribution, or post-marketing trial requirements. Further, even after regulatory approval is obtained, later discovery of previously unknown problems with a product may result in restrictions on the product or complete withdrawal of the product from the market. Delay in obtaining, or failure to obtain, regulatory approval for our candidate products, or obtaining approval but for significantly limited use, would harm our business. In addition, we cannot predict what adverse governmental regulations may arise from future U.S. or foreign governmental action.

FDA 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 sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, changes to the approved product or the addition of new indications or other labeling claims are subject to prior FDA review and approval. 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.

Drug sponsors and their manufacturers are subject to periodic unannounced inspections by the FDA and state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may 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 us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

We rely, and expect to continue to rely, on third parties for the production of clinical quantities of our current product candidate, and expect to rely in the future on third parties for the production of commercial quantities. Future FDA and state inspections may identify compliance issues at our facilities or at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of previously unknown problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved NDA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA’s policies may change, which could delay or prevent regulatory approval of our products under development.

The FDA may withdraw 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 severity or frequency, or 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 a requirement to conduct post-market trials or clinical trials to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, but not limited to the following:

- 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;
- injunctions or the imposition of civil or criminal penalties; or
- product seizure or detention, or refusal to permit the import or export of products.

The FDA 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 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 enforcement and product liability exposure.

Orphan Drug Designation and Exclusivity

The FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000 individuals in the United States, there is no reasonable expectation that the cost of developing and making the drug for this type of disease or condition will be recovered from sales in the United States.

Orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. In addition, if a product receives FDA approval for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity. Orphan drug designation does not affect the regulatory review standards or shorten the review period. Designation does not imply FDA approval, and it is possible a company may, in certain cases, lose designation before a product's approval and, thus, may not obtain orphan drug exclusivity.

European Union/Rest of World Government Regulation

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products.

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials. In the European Union, for example, a clinical trial application, or CTA, must be submitted for each clinical protocol to each country's national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is accepted in accordance with a country's requirements, the clinical trial may proceed.

The requirements and process governing the conduct of clinical trials vary from country to country. In all cases, the clinical trials are conducted in accordance with cGCP, the applicable regulatory requirements, and the ethical principles that have their origin in the Declaration of Helsinki.

To obtain regulatory approval of an investigational medicinal product under European Union regulatory systems, we must submit a marketing authorization application. The content of the NDA or BLA filed in the United States is similar to that required in the European Union, with the exception of, among other things, country and EU-specific document requirements.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing product licensing, pricing, and reimbursement vary from country to country.

Countries that are part of the European Union, as well as countries outside of the European Union, have their own governing bodies, requirements, and processes with respect to the approval of pharmaceutical products. If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Authorization Procedures in the European Union

Medicines can be authorized in the European Union by using either the centralized authorization procedure or national authorization procedures (Decentralized or Mutual recognition or national procedures).

Centralized procedure. The European Commission implemented the centralized procedure for the approval of human medicines to facilitate marketing authorizations that are valid throughout the EEA which is comprised of the 28 member states of the European Union plus Norway, Iceland, and Lichtenstein. This procedure results in a single marketing authorization issued by the European Commission that is valid across the EEA. The centralized procedure is compulsory for human medicines that are: derived from biotechnology processes, such as genetic engineering, contain a new active substance indicated for the treatment of certain diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative disorders or autoimmune diseases and other immune dysfunctions, and officially designated orphan medicines.

For medicines that do not fall within these categories, an applicant has the option of submitting an application for a centralized marketing authorization to the EMA following a favorable eligibility request by the EMA, as long as the medicine concerned is a significant therapeutic, scientific or technical innovation, or if its authorization would be in the interest of public health.

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National authorization procedures . There are also two other possible routes to authorize medicinal products in several European Union countries, which are available for investigational medicinal products that fall outside the scope of the centralized procedure:

Decentralized procedure . Using the decentralized procedure, an applicant may apply for simultaneous authorization in more than one European Union country of medicinal products that have not yet been authorized in any European Union country and that do not fall within the mandatory scope of the centralized procedure.

Mutual recognition procedure. In the mutual recognition procedure, a medicine is first authorized in one European Union Member State, in accordance with the procedure laid down in the EU directive 2001/83 as amended and implemented into national legislation. Following this, further marketing authorizations can be sought from other European Union countries in a procedure whereby the countries concerned agree to recognize the validity of the original, national marketing authorization.

In some cases, a Pediatric Investigation Plan, or PIP, and/or a request for waiver or deferral, is required for submission prior to submitting a marketing authorization application. A PIP describes, among other things, proposed pediatric trials and their timing relative to clinical trials in adults.

New Chemical Entity Exclusivity

In the European Union, new chemical entities, sometimes referred to as new active substances or new molecular entities, as well as submissions following Article 8.3 of Directive 2001/83 as amended, qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. This data exclusivity, if granted, prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic (abbreviated) application for eight years, after which generic marketing authorization can be submitted, and the innovator's data may be referenced, the product may be approved but must not be launched prior to the end of the 10 years data exclusivity period. The overall ten-year period will be extended by one year if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, is held to bring a significant clinical benefit, in comparison with existing therapies, or by six months if there is a pediatric development in accordance with a PIP has been performed.

Orphan Drug Designation and Exclusivity

In the European Union, the EMA's COMP grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions affecting not more than five in 10,000 persons in the European Union and for which no satisfactory method of diagnosis, prevention, or treatment has been authorized (or the product would be a significant benefit to those affected, i.e. where a prior approval was granted). Additionally, designation is granted for products intended for the diagnosis, prevention, or treatment of a life-threatening, seriously debilitating or serious and chronic condition and when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in developing the medicinal product.

In the European Union, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers and 10 years of market exclusivity is granted following medicinal product approval. This period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. This period can be prolonged to 12 years in case a pediatric development has been performed following an agreed PIP.

Orphan drug designation must be requested and granted before submitting an application for marketing approval. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

Exceptional Circumstances/Conditional Approval

Orphan drugs or drugs with unmet medical needs may be eligible for European Union approval under exceptional circumstances or with conditional approval. Approval under exceptional circumstances is applicable to all applications including orphan products and is used when an applicant is unable to provide comprehensive data on the efficacy and safety under normal conditions of use because the indication for which the product is intended is encountered so rarely that the applicant cannot reasonably be expected to provide comprehensive evidence, when the present state of scientific knowledge does not allow comprehensive information to be provided, or when it is medically unethical to collect such information. Conditional marketing authorization is applicable to orphan medicinal products, medicinal products for seriously debilitating or life-threatening diseases, or medicinal products to be used in emergency situations in response to recognized public threats. Conditional marketing authorization can be granted on the basis of less complete data than is normally required in order to meet unmet medical needs and in the interest of public health, provided the risk-benefit balance is positive, it is likely that the applicant will be able to provide the comprehensive clinical data after approval, and unmet medical needs will be fulfilled. Conditional marketing authorization is subject to certain specific obligations to be reviewed annually. The initial approval needs to be renewed annually. This renewal is controlled by the CHMP and, if not granted, may lead to cessation of the marketing authorization at the end of this particular year .

Accelerated Review

Under the Centralized Procedure in the European Union, the maximum timeframe for the evaluation of a marketing authorization application is 210 days (excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the EMA’s Committee for Medicinal Products for Human Use, or CHMP). Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of a major public health interest, particularly from the point of view of therapeutic innovation. In this circumstance, EMA ensures that the opinion of the CHMP is given within 150 days, excluding clock stops.

Drug Application Process in Canada

In Canada, the *Food and Drugs Act* governs which drugs can be manufactured, marketed and sold in the country. It also establishes approval processes and sets standards for the manufacture, testing, packaging and labelling of regulated products. Applications for approval to market drugs and related products in Canada are reviewed by the Health Products and Food Branch, or HPFB, of Health Canada.

New Drug Approval Process

In the case of new drugs, the HPFB will review preclinical test results indicating that the substance produces the desired result and is not toxic, before authorizing clinical trials in Canada. When the clinical trial studies (the application process is detailed below) prove that the drug has potential therapeutic value that outweighs the risks associated with its use, the sponsor may file a New Drug Submission, or NDS, with HPFB.

An NDS consists of data and material on the safety, effectiveness and quality of the drug, as well as the results of the preclinical and clinical studies, whether done in Canada or elsewhere, and information that the sponsor proposes to provide to health care practitioners and consumers, such as details regarding the production of the drug, packaging and labelling, and information regarding therapeutic claims and side effects.

If the HPFB concludes that the benefits outweigh the risks and that the risks can be mitigated, the drug is issued a Notice of Compliance, as well as a Drug Identification Number which permits the sponsor to market the drug in Canada and indicates the drug's official approval in Canada.

Clinical Trial Application Process

In Canada, clinical trial sponsors must submit a clinical trial application, or CTA, to Health Canada for authorization to sell or import a drug for the purpose of a clinical trial. A CTA must be filed prior to the initiation of the trial, and approval from both Health Canada and the clinical site(s) Research Ethics Board(s) must be obtained prior to the initiation of the trial. During the 30-day review of Health Canada, a 'No Objection Letter' is issued to the sponsor company if the application is deemed acceptable. All clinical testing is subject to rigorous regulatory requirements, including the requirement to follow good clinical practices, obtain study subjects informed consent, and obtain institutional review board or independent ethics committee approval.

Orphan Drugs in Canada

Canada does not have specific legislation regarding orphan drug development and approval. Health Canada is developing an orphan drug regulatory framework that seeks to encourage the development of orphan drugs and increase the availability of these products on the Canadian market. In this regard, the *Office of Legislative and Regulatory Modernization, Policy, Planning and International Affairs Directorate, Health Products and Food Branch* published the *Initial Draft Discussion Document for A Canadian Orphan Drug Regulatory Framework*.

Health Canada's draft definition of the term "orphan drug" is to mean a drug that meets the following criteria:

a. the drug is intended for the diagnosis, treatment, mitigation or prevention of a life-threatening, seriously debilitating, or serious and chronic disease or condition affecting not more than five (5) in ten thousand (10,000) persons in Canada; and

b. the drug is not currently authorized by the Minister of Health or if currently authorized, it will provide a potentially substantial benefit for the patient distinguishable from the existing therapy.

In the absence of an orphan drug regulatory framework in Canada, Canadians have been able to access some orphan drugs, also known as Drugs for Rare Diseases, through Health Canada's Special Access Program, clinical trials or as new drugs that have received their Notice of Compliance under Part C, Division 8 of the *Food and Drug Regulations*.

Pharmaceutical Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any drug products for which we may obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of coverage and reimbursement from third-party payers. Third-party payers include government authorities, managed care providers, private health insurers and other organizations. If we obtain regulatory approval for our products, third-party payers may not provide coverage for our products, or may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drugs for a particular indication. Moreover, a payer's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

Third-party payers are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. To obtain coverage and reimbursement for any product that receives regulatory approval for commercial sale, we may need to provide supporting scientific, clinical and cost-effectiveness data, which may be difficult and costly to obtain. Our current or any future product candidates may not be considered medically necessary or cost-effective. If third-party payers do not consider a product to be cost-effective compared to other available therapies, they may not cover the product after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products at a profit.

The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of health care costs, including price controls, reporting requirements, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. By way of example, the ACA contains provisions that may reduce the profitability of drug products, including, for example, increased rebates for drugs sold to Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs. Adoption of additional government controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals.

In the U.S., judicial challenges as well as legislative initiatives to modify, limit, or repeal the ACA have been initiated and continue, including a recent Executive Order signed by the U.S. President directing executive departments and federal agencies to waive, defer, grant exemptions from, or delay the implementation of provisions of the ACA that would impose a fiscal or regulatory burden on individuals and certain entities to the maximum extent permitted by law. The extent to which any repeal or replacement of elements of the ACA, or other legislation, would affect our ability to obtain regulatory approval for the sale of Trehalose IV, or the prices and net revenues from its sale is unknown at the time of this filing and represent an additional uncertainty.

In the European Union, governments influence the price of pharmaceutical products through their pricing and reimbursement rules, legislation and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed to by the government. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

In Canada, the federal government, provinces and territories provide coverage to about one third of residents through publicly financed programs. Both the federal and provincial governments play a role in regulating drug prices and reimbursement. The prices of patented drugs are regulated at the federal level by the Patented Medicine Prices Review Board, which ensures that prices are not excessive. Also, drugs must be approved at the provincial level in order to be covered under provincial health insurance systems. Once Health Canada has approved a drug for use, the country's public drug plans must decide if the drug will be eligible for public reimbursement. The Canadian Agency for Drugs and Technologies in Health (CADTH), an independent non-profit agency has a mandate to provide advice and evidence-based information about the effectiveness of drugs and other health technologies to Canadian health care decision makers. CADTH implements a Common Drug Review (CDR) process to provide formulary recommendations for all provinces except Quebec. Through the CDR process, CADTH conducts evaluations of the clinical, economic, and patient evidence on drugs, and uses this evaluation to provide reimbursement recommendations and advice to Canada's federal, provincial, and territorial public drug plans, with the exception of Quebec. About two-thirds of Canada's residents are covered for prescription drugs by private insurance. Private plans establish their own lists of covered drugs.

The marketability of any products for which we receive regulatory approval for commercial sale may suffer if governmental and other third-party payers fail to provide adequate coverage and reimbursement. In addition, there is an increasing emphasis on cost containment measures in the United States and other countries, which we expect will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Other Healthcare Laws and Compliance Requirements

If we obtain regulatory approval for our current or any future product candidates, we may be subject to various federal and state laws targeting fraud and abuse in the healthcare industry. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce or reward, or in return for, the referral of an individual, or the purchase, order or recommendation of any good, item or service reimbursable under a federal healthcare program, such as Medicare and Medicaid;

- federal civil and criminal false claims laws and civil monetary penalty laws, including the False Claims Act, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from the federal government, including Medicare, Medicaid, or other third-party payers, that are false or fraudulent;

- HIPAA, which imposes criminal and civil liability for knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program 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, and for knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statements in connection with the delivery of or payment for healthcare benefits, items or services;

- the federal transparency laws, including the physician sunshine provisions of the Affordable Care Act, that requires certain drug manufacturers to disclose certain payments and other transfers of value provided to physicians and teaching hospitals, and ownership and investment interests held by physicians and their family members;

- HIPAA, as amended by HITECH, and its implementing regulations, which imposes certain requirements relating to the privacy and security of individually identifiable health information;

- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payer, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts; and

- the FCPA, which prohibits companies from making improper payments to foreign government officials and other persons for the purpose of obtaining or retaining business.

The ACA broadened the reach of the fraud and abuse laws by, among other things, amending the intent requirement of the federal Anti-Kickback Statute and the applicable criminal healthcare fraud statutes contained within 42 U.S.C. §1320a-7b. Pursuant to the statutory amendment, a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, the Affordable Care Act 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) or the civil monetary penalties statute. Many states have adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only federal healthcare programs such as the Medicare and Medicaid programs.

Safeguards we implement to prohibit improper payments or offers of payments by our employees, consultants, and others may be ineffective, and violations of the fraud and abuse laws, the FCPA and similar laws may result in severe criminal or civil sanctions, or other liabilities or proceedings against us, any of which would likely harm our reputation, business, financial condition and result of operations.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, exclusion from participation in government healthcare programs, such as Medicare and Medicaid, imprisonment, damages, fines, disgorgement, contractual remedies, reputational harm, diminished profits and future earnings, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Labeling, Marketing and Promotion

The FDA closely regulates the labeling, marketing and promotion of drugs. While doctors are free to prescribe any drug approved by the FDA for any use, a company can only make claims relating to safety and efficacy of a drug that are consistent with FDA approval, and the company is allowed to actively market a drug only for the particular use and treatment approved by the FDA. In addition, any claims we make for our products in advertising or promotion must be appropriately balanced with important safety information and otherwise be adequately substantiated. Failure to comply with these requirements can result in adverse publicity, enforcement letters, such as publicly-posted warning letters, corrective advertising, injunctions and potential civil and criminal penalties. Government regulators recently have increased their scrutiny of the promotion and marketing of drugs. These federal enforcement actions can also potentially lead to state actions and product liability claims, as well as competitor challenges of deceptive advertising.

Anti-Kickback Statute, False Claims Act, and Other Laws

In the United States, the research, manufacturing, distribution, sale and promotion of drug products and medical devices are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare & Medicaid Services, other divisions of the U.S. Department of Health and Human Services (e.g., the Office of Inspector General), the U.S. Department of Justice, state Attorneys General, and other federal, state and local government agencies. For example, sales, marketing and scientific/educational grant programs must comply with, among others, the federal Anti-Kickback Statute, the federal False Claims Act, privacy and security regulations promulgated under HIPAA, and similar state laws, as applicable. All of these activities are also potentially subject to federal and state consumer protection and unfair competition laws.

The federal Anti-Kickback Statute makes it illegal for any person, including a prescription drug manufacturer (or a party acting on its behalf) to knowingly and willfully solicit, receive, offer, or pay any remuneration that is intended to induce or reward referrals, or the purchase, order, or prescription of a particular drug or other item or service, for which payment may be made under a federal healthcare program, such as Medicare or Medicaid.

The federal False Claims Act prohibits anyone from knowingly presenting, or causing to be presented, for payment to the government, claims for items or services, including drugs that are false or fraudulent, such as claims for items or services not provided as claimed, or claims for medically unnecessary items or services.

There are also an increasing number of state laws that require manufacturers to make reports to states on pricing and marketing information. Many of these laws contain ambiguities as to what is required to comply with the laws. In addition, a similar federal requirement requires manufacturers to track and report to the federal government certain payments made to physicians and certain teaching hospitals made in the previous calendar year. These laws may affect our sales, marketing, and other promotional activities by imposing administrative and compliance burdens on us, and additional laws and regulations may be enacted in the future that expand our compliance obligations even further. In addition, given the lack of clarity with respect to these laws and their implementation, our reporting actions could be subject to the penalty provisions of the pertinent state, and federal authorities.

Other Regulations

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. We may incur significant costs to comply with such laws and regulations now or in the future.

Israel

Clinical Testing in Israel

In order to conduct clinical testing on humans in the State of Israel, special authorization must first be obtained from the ethics committee and general manager of the institution in which the clinical trials are scheduled to be conducted, as required under the Guidelines for Clinical Trials in Human Subjects implemented pursuant to the Israeli Public Health Regulations (Clinical Trials in Human Subjects), as amended from time to time, and other applicable legislation. These regulations require authorization by the institutional ethics committee and general manager as well as from the Israeli Ministry of Health, except in certain circumstances, and in the case of genetic trials, special fertility trials and complex clinical trials, an additional authorization of the Ministry of Health's overseeing ethics committee. The institutional ethics committee must, among other things, evaluate the anticipated benefits that are likely to be derived from the project to determine if it justifies the risks and inconvenience to be inflicted on the human subjects, and the committee must ensure that adequate protection exists for the rights and safety of the participants as well as the accuracy of the information gathered in the course of the clinical testing. Since we perform a portion of the clinical trials on certain of our therapeutic candidates in Israel, we are required to obtain authorization from the ethics committee and general manager of each institution in which we intend to conduct our clinical trials, and in most cases, from the Israeli Ministry of Health.

4.C. Organizational structure

Our sole wholly owned subsidiary is Bio Blast Pharma, Inc., which was incorporated in the state of Delaware.

4.D. Property, plants and equipment

During 2017, we vacated our headquarters in Tel Aviv, Israel and we currently do not lease any office space for our operations. In the event that we will resume our product candidate development program we plan to lease appropriate space for our operations.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

Introduction

We are a clinical stage orphan disease-focused biotechnology company committed to developing meaningful therapies for patients with rare and ultra-rare genetic diseases. Currently our focus is on trehalose, a therapeutic platform that offers potential solutions for several diseases that share a common pathophysiological mechanism, which are the functional changes that accompany a particular syndrome or disease. Since our inception in 2012, our work with trehalose has centered around OPMD and SCA3.

On June 5, 2017, we announced our engagement with JSB-Partners, a global life sciences advisor, to assist us in executing our business development objectives, which include selecting potential development and commercial partners for our investigational proprietary intravenous (IV) form of trehalose 90 mg/mL solution (trehalose), which has been studied in humans with OPMD and SCA3 and M&A opportunities. Among other transaction structures, we are simultaneously exploring the possibility of a merger or sale of the entire company or a controlling interest in the company, as well as a sale or licensing of our product candidate followed either by the distribution of any proceeds to our shareholders or an unrelated merger of the company with an operating company that would seek to benefit from the company's then status as a "shell" company listed for trading on Nasdaq (reverse IPO). We have cut our expenses and terminated almost all of our employees and are now dedicating all of our resources to support the process led by JSB-Partners. Accordingly, we are not currently actively pursuing our core business focus as described in the preceding paragraph.

To date, we have not generated revenue from the sale of any product, and we do not expect to generate significant revenue unless and until we obtain marketing approval of, and commercialize our product candidate. As of December 31, 2017, we had an accumulated deficit of $45.8 million. Our financing activities are described below under "Liquidity and Capital Resources". Assuming that we will resume the development of our product candidates, we expect to incur significant expenses and operating losses for at least the next several years. These losses, combined with prior losses will continue to have an adverse effect on our cash resources, shareholders' deficit and working capital. As a result of these expected losses and negative cash flows from operations, along with our current cash position, we only have sufficient resources to fund operations at least until the end of end of 2018. Therefore, there is substantial doubt about our ability to continue as a going concern.

If we obtain regulatory approval for our product candidate and any future product candidates we may develop, we may incur significant sales, marketing, in-licensing and outsourced manufacturing expenses, as well as continued research and development expenses. In addition, we expect our research and development expenses to significantly increase if we proceed with an additional Phase 2b clinical trial of Trehalose IV for treatment of OPMD patients and other planned clinical trials of our Trehalose IV solution for treatments of other indications, and as we develop additional product candidates for our drug pipeline. Because of the numerous risks and uncertainties associated with developing and commercializing pharmaceutical products, we are unable to predict the extent of any future losses or when we will become profitable, if at all.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings and debt financings, as well as license and collaboration agreements with potential partners. We may be unable to raise capital when needed or on attractive terms, or to enter into collaboration agreements, which could force us to delay, limit, reduce or terminate our product development or future commercialization efforts. We will need to generate significant revenues to achieve profitability, which we may not be able to achieve.

Financial Overview

Research and Development

Research and development expenses consist of expenses incurred in performing research and development activities, including compensation and benefits (which includes share based compensation for research and development employees), an allocation of facilities expenses, overhead expenses, nonclinical pharmacology and toxicology studies, manufacturing process-development, clinical trial and related clinical manufacturing expenses, fees paid to CROs, investigative sites, and other external expenses. In the early phases of development, our research and development costs include expanding our product platform as well as early development of specific product candidates. If we expand the clinical development of our Trehalose IV solution, we expect the amount of research and development spending to continue to grow. The majority of our research and development expenses have been spent on the development of our Trehalose IV solution.

We expense research and development costs as incurred. Generally speaking, conducting a significant amount of research and development is central to our business model that we plan to execute in the future. Product candidates in advanced stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of advanced stage clinical trials. If and when we resume the development of our product candidates, we plan to increase our research and development expenses, which will be required to obtain regulatory approval for our Trehalose IV solution in the United States and rest of the world as well as to expand the indications for our Trehalose IV solution, and to further advance our nonclinical and earlier

stage research and development projects into clinical stages. The successful development of our Trehalose IV solution for treatment of OPMD patients and other indications is highly uncertain. At this time, we cannot reasonably estimate the nature, timing or costs of the efforts that will be necessary to complete the remainder of the development of our Trehalose IV solution, or the period, if any, in which material net cash inflows from this product candidates may commence. Clinical development timelines, the probability of success and development costs can differ materially from expectations. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those which we currently anticipate will be required for the completion of clinical development of a product candidate or if we experience significant delays in any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development.

Pre-commercialization

Pre-commercialization expenses consist primarily of professional fees related to preparation for, and if approved, the eventual commercialization of our Trehalose IV solution, including compensation and benefits (which includes share-based compensation), fees paid to third parties for market research activities and commercialization planning activities, and allocation of facilities expenses and overhead expenses. We anticipate that if and when we resume executing on the existing development programs these expenses will materially increase as we accelerate our preparation for commercialization and, if it is approved, start to market our Trehalose IV solution and as we explore new collaborations to develop and commercialize our Trehalose IV solution and other products.

General and Administrative

General and administrative expenses consist primarily of salaries and related benefits, including share-based compensation, related to our executive, finance, business development, and support functions. Other general and administrative expenses include facility-related costs not otherwise allocated to research and development expenses, travel expenses for our general and administrative personnel and professional fees for auditing, tax, as well as corporate and intellectual property legal services. We anticipate that if and when we resume executing on our development programs, our general and administrative expenses will increase, reflecting an expanding infrastructure and increased professional fees associated with being a public company and potentially as a commercial-stage company.

Finance Income, Net

Finance income, net consists mainly of interest income on bank deposits offset by bank fees and exchange rate fluctuations.

Provision for Income Taxes

We are subject to Israeli income taxes for earnings generated in Israel and for federal and state income taxes for earnings of our wholly-owned U.S. subsidiary generated in the United States. Our consolidated tax expense is affected by the mix of our taxable income (loss) in the Israel and the United States permanent items, discrete items, and unrecognized tax benefits. We file Israeli income tax returns, U.S. federal and various U.S. states returns. The associated tax filings remain subject to examination by applicable tax authorities for a certain length of time following the tax year to which those filings relate. As of December 31, 2017, in Israel and the United States, some, or all of the tax years since inception (2012 in Israel, and 2015 in the United States) remain subject to examination by the applicable taxing authorities.

Results of Operations

Comparison for the years ended December 31, 2017 and 2016

The following tables set forth, for the periods indicated, our results of operations and the change between the specified periods expressed as a percent increase or decrease:

Research and Development Expenses

	2017	2016	$ change	% change
	U.S. dollars in thousands, except percentages			
Research and development	2,517	8,881	(6,364)	(72)%

For the year ended December 31, 2017, our total research and development expenses decreased by approximately $6.4 million, or 72%, compared to the prior year. The decrease was due to reduced clinical trial related activities, specifically with respect to our planned Phase 2b clinical trial of trehalose 90mg/mL IV solution for treatment of OPMD patients and due to reduced preclinical activity during 2017.

Pre-Commercialization Expenses

	2017	2016	$ change	% change
	U.S. dollars in thousands, except percentages			
Pre-commercialization	479	1,085	(606)	(56)%

For the year ended December 31, 2017, our pre-commercialization expenses decreased by $0.6 million, or 56 %, compared to the prior year. The decrease was primarily due to a halt in market research activities during the second quarter of 2017. In addition, we did not incur any related salary cost during the second half of 2017.

General and Administrative Expenses

	2017	2016	$ change	% change
	U.S. dollars in thousands, except percentages			
General and administrative	2,959	5,900	(2,941)	(50)%

For the year ended December 31, 2017, our general and administrative expenses decreased by approximately $2.9 million, or 50%, compared to the prior year due to our decision to downsize corporate overhead by reducing the number of employees of our wholly-owned U.S. subsidiary and closing of U.S. offices. The general and administrative costs during 2016 included termination related payments to departing employees. Such termination related payments were offset by reversal of previously recognized share-based compensation due to forfeiture of options previously granted to departing employees.

Finance Income, Net

Our finance income, net totaled $38,000 for the year ended December 31, 2017 and was $60,000 for the year ended December 31, 2016. The decrease was primarily due to the reduction of our outstanding balance of cash equivalents and short-term bank deposits on which we generate interest income.

Provision for Income Taxes

Our total tax provision was $28,000 for the year ended December 31, 2017, representing an effective tax rate of approximately (0.5%), as compared to a tax provision of $216,000 for the year ended December 31, 2016, representing an effective tax rate of approximately (1.4%).

Our deferred tax assets at December 31, 2017 and 2016 were $0 and $5,000, respectively. Deferred tax assets were reported net of valuation allowances of approximately $9.08 million and $7.64 million at December 31, 2017 and 2016, respectively, primarily as a result of the recording of a full valuation allowance against net operating loss, or NOL, carryforwards, as we believe it is more likely than not that we will not be able to generate sufficient future taxable income to absorb them. On December 31, 2017, we had Israeli NOL carryforwards of approximately $37 million. The Israeli NOL carryforwards do not expire.

Our effective tax rate differs from the statutory rate each year primarily due to a full valuation allowance maintained against deferred tax assets.

Comparison for the Years Ended December 31, 2016 and 2015

The following tables set forth, for the periods indicated, our results of operations and the change between the specified periods expressed as a percent increase or decrease:

Research and Development Expenses

	2016	2015	$ change	% change
	U.S. dollars in thousands			
Research and development	$8,881	$7,694	$ 1,187	15 %

For the year ended December 31, 2016, our total research and development expenses increased by approximately $1.19 million, or 15%, compared to the prior year. The increase was primarily due to increased salaries and related expenses including share-based compensation expenses, as well as initiation activities with respect to our planned Phase 2b clinical trial of our Trehalose IV solution for treatment of OPMD patients.

Pre-Commercialization Expenses

	2016	2015	$ change	% change
	U.S. dollars in thousands			
Pre-commercialization	$1,085	$829	$ 256	31 %

For the year ended December 31, 2016, our pre-commercialization expenses increased by $256,000, or 31%, compared to the prior year. The increase was primarily due to increased market research activities directed at assessing the commercial opportunity presented by our Trehalose IV solution for treatment of OPMD and SCA3 patients which were offset by reversal of previously recognized share-based compensation due to forfeiture of options previously granted to departing employees.

General and Administrative Expenses

	2016	2015	$ change	% change
	U.S. dollars in thousands			
General and administrative	$5,900	$6,953	$ (1,053)	(15)%

For the year ended December 31, 2016, our general and administrative expenses decreased by approximately $1.05 million, or 15%, compared to the prior year. The decrease was primarily due to our decision to downsize corporate overhead by reducing the number of employees of our wholly-owned U.S. subsidiary and closing of U.S. offices. The general and administrative costs during 2016 included termination related payments to departing employees. Such termination related payments were offset by reversal of previously recognized share-based compensation due to forfeiture of options previously granted to departing employees.

Finance Income, net

Our finance income, net totaled $60,000 for the year ended December 31, 2016, and was $135,000 for the year ended December 31, 2015. The decrease was primarily due to the reduction of our outstanding balance of cash equivalents and short-term bank deposits on which we generate interest income.

Provision for Income Taxes

Our total tax provision was $216,000 for the year ended December 31, 2016, representing an effective tax rate of (1.37%), as compared to a tax provision of $24,000 for the year ended December 31, 2015, representing an effective tax rate of (0.16%).

Our deferred tax assets at December 31, 2016 and 2015 were $5,000 and $0, respectively. Deferred tax assets were reported net of valuation allowances of approximately $7.64 million and $5.77 million at December 31, 2016 and 2015, respectively, primarily as a result of the recording of a full valuation allowance against NOL carryforwards, as we believe it is more likely than not that we will not be able to generate sufficient future taxable income to absorb them. On December 31, 2016, we had Israeli NOL carryforwards of approximately $24.72 million. The Israeli NOL carryforwards do not expire.

Our effective tax rate differs from the statutory rate each year primarily due to a full valuation allowance maintained against deferred tax assets.

Liquidity and Capital Resources

Since our inception and through December 31, 2017, we had raised an aggregate of approximately $44.2 million to fund our operations, of which approximately $37.5 million is from issuing our Ordinary Shares in our initial public offering and follow-on offerings, and approximately $6.7 million from the issuance of securities in private offerings.

At December 31, 2017, our cash, cash equivalents and short-term bank deposits were $3.5 million, compared to approximately $9.9 million at December 31, 2016. Our cash and cash equivalents are highly liquid investments with maturities of 90 days or less at the date of purchase, and are stated at fair value. We did not hold any marketable securities nor any mortgage asset-backed or auction-rate securities in our investment portfolio as of December 31, 2017. Our U.S. subsidiary held $72,000 in cash as of December 31, 2017. All of our cash is available for corporate use.

Plan of Operations and Future Funding Requirements

Generally, our primary uses of capital are, and we expect will continue to be, further development and the seeking of regulatory approval of our Trehalose IV solution. These costs will include clinical trial costs, manufacturing and process development costs, compensation and related expenses, third-party clinical and nonclinical research and development services, laboratory and related supplies, legal and other regulatory expenses, and other general operating costs. However, in recent months, and continuing until we complete an M&A transaction or other business opportunities, we expect that our resources will be dedicated to identifying and promoting such transaction or opportunities, and, accordingly, we have reduced to a minimum other activities.

We expect that our cash and cash equivalents and short-term deposits as of December 31, 2017 will fund our operating expenses and capital expenditure requirements, based on our current plan as outlined above, at least until the end of the third quarter of 2018. Additional funding beyond our existing cash resources will be required to resume our clinical development plans. Should we be unable to obtain the additional funding required to resume our clinical activity, we may reduce those activities until we have sufficient resources to do so. In addition, we expect that we will require substantial additional capital to obtain regulatory approval for, and to commercialize, our Trehalose IV solution. Furthermore, our operating plans may change as a result of many factors that may currently be unknown to us, and we may need to seek additional funds sooner than planned. Our future capital requirements will depend on many factors, including:

- continuing our research and nonclinical and clinical development of our product candidate;
- expanding the scope of our current clinical trials for our product candidate;
- change or addition of additional manufacturers or suppliers;
- seeking regulatory and marketing approvals for our product candidate that successfully complete clinical trials;
- establishing a sales, marketing, and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- seeking to identify, assess, acquire, license, and/or develop other product candidates;
- milestone or other payments under any license agreements;

- maintaining, protecting, and expanding our intellectual property portfolio;

- seeking to attract and retain skilled personnel; and

- creating additional infrastructure to support our operations as a public company and our product development and planned future commercialization efforts.

Until such time, if ever, as we can generate substantial product sales, we expect to finance our cash needs through a combination of equity offerings, debt financings and license and collaboration arrangements. To the extent that we raise additional capital through future issuance of equity or debt, the ownership interest of our shareholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing ordinary shareholders. If we raise additional funds through collaboration arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams or drug candidates on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market our current and any future product candidates that we would otherwise prefer to develop and market ourselves. This may raise substantial doubts about our ability to continue as a going concern.

Cash Flow

The following is a summary of cash flows for the years ended December 31, 2017 and 2016:

	2017	2016
	U.S. dollars in thousands	
Operating activities	$ (6,352)	$ (15,486)
Investing activities	3,007	8,982
Financing activities	-	6,089

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Operating Activities

For the year ended December 31, 2017, net cash used in operating activities was approximately $6.4 million and primarily consisted of $5.9 million in net loss, adjusted for non-cash items of $(0.5) (primarily share-based compensation expenses), and changes in operating assets and liabilities of $0.9 million. Net cash used in operating activities was approximately $15.5 million during the year ended December 31, 2016, and primarily consisted of approximately $16.0 million in net loss, adjusted for non-cash items of approximately $777,000 (primarily share-based compensation expenses), and partially offset by changes in operating assets and liabilities of $241,000. The decrease in net cash used of approximately $9.1 million was driven by a reduction of activities related to clinical studies of trehalose 90mg/mL IV solution in OPMD and a decrease in compensation and related personnel expenses, professional services and pre-commercial work related to the trehalose 90mg/mL IV solution.

Investing Activities

For the year ended December 31, 2017, net cash provided by investing activities was approximately $3.0 million, compared to cash provided by investing activities of approximately $9.0 million for the year ended December 31, 2016. The majority of cash provided by investing activities in both years is attributable to withdrawal of short-term bank deposits that matured during both years.

Financing Activities

For the year ended December 31, 2017, net cash provided by financing activities was $0, compared to cash provided by financing activities of approximately $6.1 million for the year ended December 31, 2016 which consisted of net proceeds from a public offering of Ordinary Shares and warrants.

We have an effective Form F-3 registration statement, filed under the Securities Act with the SEC using a “shelf” registration process. Under this shelf registration process, and subject to certain limitations, we may, from time to time, sell our Ordinary Shares in one or more offerings up to a total dollar amount of $100 million. In March 2016, we issued 432,258 Ordinary Shares in a registered direct offering with gross proceeds of approximately $6.70 million. Since the aggregate market value of our Ordinary Shares held by non-affiliates is less than $75 million, we are limited to selling Ordinary Shares under such “shelf” registration statement during any 12 month period that have an aggregate value that is no more than one-third of the aggregate market value of our Ordinary Shares held by non-affiliates.

Critical Accounting Policies and Use of Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, and expenses, and the disclosure of contingent assets and liabilities as of and during the reporting periods. These items are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities and the reported amount of expenses that are not readily apparent from other sources. Changes in estimates are reflected in reported results for the period in which they become known. Actual results may differ materially from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in the notes to our consolidated financial statements included elsewhere in this annual report, we believe that the following accounting policies are critical to the process of making significant judgments and estimates in the preparation of our consolidated financial statements and understanding and evaluating our reported financial results.

Share-based Compensation

We issue share-based awards to employees and nonemployees generally in the form of options. We account for our share-based awards in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718, *Compensation—Stock Compensation*, or ASC 718. ASC 718 requires all share-based payments to employees, including grants of employee options and modifications to existing options, to be recognized in the consolidated statements of operations based on their fair values on the date of grant or date of modification. We account for share-based awards to nonemployees in accordance with FASB ASC Topic 505-50, *Equity-Based Payments to Non-Employees*, which requires the fair value of the nonemployee awards to be remeasured as the award vests. For employee stock-based awards with only service conditions, we recognize compensation using the graded vesting attribution approach over the requisite service period, which is usually the vesting period of the award.

For modification of share-based compensation awards, we record the incremental fair value of the modified awards as compensation on the date of modification for vested awards, or over the remaining vesting period for unvested awards. The incremental compensation is the excess of the fair value of the modified awards on the date of modification over the fair value of the original awards immediately before the modification.

Compensation expense related to our share-based awards is subject to a number of estimates including volatility and the underlying fair value of our Ordinary Shares, as well as the estimated life of the awards. Since our initial public offering in July 2014, share option value has been determined based on the trading price of our Ordinary Shares. As of December 31, 2017 and 2016, we recognized share-based compensation expenses of $408,000 and $700,000, respectively.

Income Taxes

The consolidated financial statements presented elsewhere in this annual report reflect provisions for Israeli, federal and state income taxes. Deferred tax assets and liabilities represent future tax consequences of temporary differences between the financial statement carrying amounts and the tax basis of assets and liabilities and for loss carryforwards using enacted tax rates expected to be in effect in the years in which the differences reverse. A valuation allowance is recorded when it is more likely than not that some or all of the deferred tax assets will not be realized. We cannot be certain that future Israeli taxable income will be sufficient to realize our deferred tax assets and, accordingly, a full valuation allowance has been provided against our Israeli net deferred tax assets.

We evaluate the tax positions we have taken when preparing our Israeli, federal and state income tax returns, and determine whether it is more likely than not that a tax position will be sustained upon examination. If it is not more

likely than not that a position will be sustained, none of the benefit attributable to the position is recognized. The tax benefit to be recognized for any tax position that meets the more-likely-than-not recognition threshold is calculated as the largest amount that is more than 50% likely of being realized upon resolution of the contingency. As of December 31, 2017 and 2016, we have provided a liability of $24,000 and $24,000, respectively.

JOBS Act

Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We are electing to delay such adoption of new or revised accounting standards. As a result, our financial statements may not be comparable to companies that comply with the public company effective date.

Quantitative and Qualitative Disclosure about Market Risk

In the ordinary course of our operations, we are exposed to certain market risks, primarily changes in foreign currency exchange rates and interest rates.

The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates. As of December 31, 2017, we had approximately $3.5 million in cash and cash equivalents and short-term bank deposits, consisting of cash in checking accounts and deposits at Israeli and U.S. banking institutions. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of Israeli and U.S. interest rates. Given the current low rates of interest we receive, we do not believe will be adversely affected if such rates are reduced. As of December 31, 2017, we had no outstanding borrowings, and as such, we are not exposed to interest rate risks associated with credit facilities or other debt.

We are subject to currency risk for balances held, or denominated, in currencies other than U.S. dollars. We work to maintain all balances in U.S. dollars until payment in other currencies is required. In addition, portions of our expenses are denominated in each of NIS, Euro and GBP. For instance, in 2017, approximately 10% of our expenses were denominated in NIS. Changes of 5% and 10% in the U.S. dollar / NIS exchange rate will increase/decrease our operating expenses by approximately 0.5% and 1%, respectively. However, these historical figures may not be indicative of future exposure, as the percentage of our NIS denominated expenses may change in the future.

We do not hedge our foreign currency exchange risk.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Contractual Obligations

The following table summarizes our contractual obligations at December 31, 2017:

	Total	Less than 1 Year	1-3 years	3-5 years	More than 5 years
	(in thousands of U.S. dollars)				
Operating leases Motor vehicles (1):	$ 3	$ 3	$ -	$ -	$ -
Total:	$ 3	$ 3	$ -	$ -	$ -

(1) Represents future minimum lease payments under non-cancelable operating leases in effect as of December 31, 2017.

The table excludes potential payments we may be required to make under existing agreements with suppliers and service providers as the timing of when these payments will actually be made is uncertain and the payments are contingent upon the initiation and completion of future activities.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

6.A. Directors and executive officers

The following table sets forth information regarding our executive officers, key employees and directors as of April 20, 2018:

Name	Age	Position
Fredric D. Price	72	Executive Chairman of the Board of Directors, Chief Executive Officer
Dr. Warren Wasiewski	65	Chief Medical Officer, Vice President of Research and Development
Michael Burshtine [(1)(2)(3)]	54	Director
Thomas I.H. Dubin [(1)(3)]	56	Director
Robert Friedman [(1)(2)(3)]	62	Director
Dr. Marlene Haffner [(2)(3)]	77	Director
Dr. Dalia Megiddo	66	Director

(1) Member of our Audit Committee.
(2) Member of our Compensation Committee.
(3) Indicates independent director under Nasdaq rules.

Fredric D. Price has been our Chief Executive Officer since July 2016, and has served as Executive Chairman of our Board of Directors since April 2014, having served as our Chairman of the Board of Directors from April 2012 until April 2014. Since 2013, Mr. Price has served as a member of the Advisory Board of FDNA Inc. From 2013 until 2014, he was Executive Chairman of the Board of Directors and from 2008 to 2013 Chairman of the Board of Directors and Chief Executive Officer of Chiasma, Inc. From 2004 to 2008, Mr. Price was Chairman of the Board of Directors of Omrix Biopharmaceuticals, Inc., from 2006 to 2012 a member of the Board of Directors of Enobia Pharma Corp., from 2007 to 2010 a member of the Board of Directors of Pharmasset Inc., from 2007 to 2011 Executive Chairman of the Board of Directors of Peptimmune, Inc., from 2004 to 2005 Executive Chairman of the Board of Directors of Zymenex A/S, from 2000 to 2004 Chairman of the Board of Directors and Chief Executive Officer of BioMarin Pharmaceutical Inc., and from 1994 to 2000 Chief Executive Officer and a member of the Board of Directors of Applied Microbiology Inc. As Chairman and/or Chief Executive Officer, he has raised more than $700 million in a variety of securities transactions, led a total of 22 M&A and licensing transactions, built FDA approved facilities and had drugs approved in the United States as well as in international markets. His earlier experience includes having been Vice President of Finance and administration and Chief Financial Officer of Regeneron Pharmaceuticals, Inc., the founder of the strategy consulting firm RxFDP, and Vice President of Pfizer, Inc. with both line and staff responsibilities. Mr. Price is a co-inventor of 17 issued U.S. patents. He received a B.A. from Dartmouth College and an M.B.A. from the Wharton School of the University of Pennsylvania.

Dr. Warren Wasiewski has been our Chief Medical Officer and Vice President of Research and Development since November 2015. Dr. Wasiewski is a board certified pediatric neurologist with twenty-two years of clinical experience in pediatric neurology and fifteen years of experience in the pharmaceutical industry. From 2014 to 2015, Dr. Wasiewski was Chief Medical Officer and Executive Vice President of Clinical Development for Neurotrope BioScience, Inc. Prior to this, from 2012 to 2014, he was Vice President of Clinical Development for Neurology at Alexion Pharmaceuticals, Inc. (Nasdaq: ALXN), an S&P 500 biopharmaceuticals company that discovers, develops, and commercializes medicines for patients with ultra-rare, life-threatening disorders. From 2001 to 2006 he was the Senior Medical Director for AstraZeneca plc (LON: AZN) in Neurology. In 2012, Dr. Wasiewski was an Associate Professor of Pediatrics and Neurology at Penn State Children’s Hospital where he had previously served from 1987 to 1991 as an Assistant Professor of Pediatrics. In 1991, he founded Child Neurology Associates PC in Lancaster PA and was appointed Chair of Pediatrics at Lancaster General Hospital. Dr. Wasiewski has a B.A. from Rutgers College, an M.S. from State University of New York Downstate Medical Center, and an M.D. from State University of New York, at Buffalo. Dr. Wasiewski is member of the medical honor society, Alpha Omega Alpha and Fellow of the American Academy of Pediatrics.

Michael Burshtine has been a director since October 30, 2014. Mr. Burshtine is currently serving as co-Chief Executive Officer at Adhestick Innovations Ltd., a chemical company specializing in the development, manufacturing and marketing of adhesion polymers formulations. Mr. Burshtine served as the president and Chief Executive Officer of Flight Medical Innovations Ltd., a med-tech company specializing in the development, manufacturing and marketing of portable ventilators, between 2009 and May 2014. Prior to that, between 2007 and 2009, he served as President and Chief Executive Officer of Recoly N.V., a bio-med company engaged in the research, development and commercialization of drug enhancement technologies. From 2004 to 2007, he served as the Chief Financial Officer of Omrix Biopharmaceuticals Inc., a public biotechnology company that develops, manufactures and commercializes plasma derivative products. Mr. Burshtine has been a certified CPA since 1994 and was a senior partner at Kesselman & Kesselman PricewaterhouseCoopers (PwC) auditing firm, until 2004. He holds an M.B.A. and a B.A. in economics

and accounting, both from Tel Aviv University. Mr. Burshtine serves on our Audit Committee and our Compensation Committee.

Thomas I.H. Dubin has been a director since September 2015. Mr. Dubin is an attorney and has over twenty years of senior leadership experience in the pharmaceutical and biotechnology industries. From January 2014 through November 2014, Mr. Dubin served as an advisor to the Chief Executive Officer of Infinity Pharmaceuticals Inc. (Nasdaq: INFI). From 2008 through 2013, he was Senior Vice President and Chief Legal Officer, and from 2001 through 2008 he was Vice President and General Counsel, of Alexion Pharmaceuticals, Inc. (Nasdaq:ALXN). Prior to Alexion, from 1992 to 2000, Mr. Dubin served in senior positions at ChiRex, Inc. (Nasdaq:CHRX) and at Warner-Lambert Company (NYSE:WLA) prior to its sale to Pfizer, Inc. Mr. Dubin began his career as an attorney with Cravath, Swaine & Moore LLP in New York City. He is a Trustee of the American Jewish World Service, and a Member of Launchpad Venture Group. Mr. Dubin received his J.D. from New York University School of Law, and his B.A. from Amherst College, cum laude.

Robert Friedman has been a director since October 2016. Mr. Friedman has had a long career in life sciences management consulting that began with The Wilkerson Group in 1987 and has included IBM Corporation, Easton Associates, LLC, where he was a co-founder, and Navigant Consulting, Inc. He has advised companies both large and small in biotechnology, pharmaceuticals, medical devices and diagnostics. Mr. Friedman's areas of expertise include corporate and product strategy development and execution, pre-commercial planning, and due diligence. In addition to his experience as a consultant, Mr. Friedman spent five years as an equity analyst for several investment banks including Lehman Brothers, Paine Webber and Hanover Securities, where he covered universes of both large- and small-cap biotech companies. Mr. Friedman began his career as an Associate at Steinberg & Lyman, a venture capital fund dedicated to creating new biopharmaceutical firms. There, he was instrumental in founding Genetic Therapy, Inc., the first gene therapy company, which was sold to Novartis. Mr. Friedman holds an MBA in Marketing and Finance from the Johnson Graduate School of Management, Cornell University, and a BA in Biology from Yeshiva University.

Dr. Marlene Haffner has been a director since July 1, 2013. From 1986 until 2007, Dr. Haffner served as the Director of the Office of Orphan Products Development (OOPD) of the FDA. As OOPD Director she was responsible for the leadership and management of the FDA orphan products development program, the first Orphan Products program in the world. After leaving the FDA, and from 2007 until 2009, she served as Executive Director, Global Regulatory Policy and Intelligence at Amgen, Inc., and since 2009 has held the position of Chief Executive Officer at Orphan Solutions and Haffner Associates, LLC, services companies for the orphan drug industry. In addition to her consulting activities, Dr. Haffner is Adjunct Professor, Department of Preventive Medicine and Biometrics and Clinical Professor at the Department of Medicine of the F. Edward Hébert School of Medicine, Uniformed Services University of the Health Sciences in Bethesda, Maryland. For 36 years she served in the United States Public Health Service beginning her career with the Indian Health Service in Gallup, New Mexico prior to moving to the FDA. Dr. Haffner received her M.D. from the George Washington University School of Medicine where she then interned in Internal Medicine. She received further training in internal medicine, dermatology and hematology at the Presbyterian Hospital, New York and at the Albert Einstein College of Medicine, New York. She received an M.P.H. from the Johns Hopkins University Bloomberg School of Public Health. During her public health career, she rose to the rank of Rear Admiral in the United States Public Health Service.

Dr. Dalia Megiddo has been a director since our inception. From our inception until February 2015, Dr. Megiddo was our Chief Executive Officer, from January 2015 to November 2015, she was our Chief Development Officer and from November 2015 to December 2016, she was a special advisor to our Chief Executive Officer. Dr. Megiddo co-founded Alcobra Ltd. (Nasdaq: ADHD), a company primarily focused on the development and commercialization of a drug to treat Attention Deficit Hyperactivity Disorder in February 2008, and became a Director at that time. She is an entrepreneur and a medical doctor in family medicine. Since 2000, she has been a manager of InnoMed Ventures LP, an Israeli venture capital fund focused on life sciences. From 2006 to 2010, she was also a manager of 7 Health Ventures Ltd., an Israeli venture capital fund. She is also the founder of a number of life science companies. Dr. Megiddo received her M.D. degree from Hebrew University Hadassah Medical School and holds a specialist degree in Family Medicine, and also holds an M.B.A. from the Kellogg-Recanati School of Business.

There are no arrangements or understandings with major shareholders, customers, suppliers or others pursuant to which any of our directors or members of senior management were selected as such. In addition, there are no family relationships among our executive officers and directors.

6.B. Compensation

The table below reflects the compensation granted to our five most highly compensated officers during or with respect to the year ended December 31, 2017. All amounts reported in the table reflect the cost to the Company, in U.S. Dollars, as recognized in our financial statements for the year ended December 31, 2017. Amounts paid in NIS are translated into U.S. dollars at the rate of NIS 3.560 = U.S.$1.00, based on the average representative rate of exchange between the NIS and the U.S. dollar as reported by the Bank of Israel in the year ended December 31, 2017.

Name and Position	**Salary/Fees** (1)	Share-Based **Compensation** (2)	Bonus/Severance	Total
Fredric D. Price, *Chairman of the Board of Directors, Chief Executive Officer* (3)	$ 400,000	$ 144,841	$ -	$544,841
Dr. Warren Wasiewski, *Chief Medical Officer, Vice President of Research and Development* (4)	$ 320.000	$ 305,039	$ -	$625,040
Chaime Orlev, *former Chief Financial Officer* (5)	$ 218,785	$ 17,499	$ -	$236,283
Dana Gelbaum, *former Chief Commercial Officer* (6)	$ 90,530	$ - (7)	$ -	$90,530
Dr. Dalia Megiddo, *Director*	$ 50,000	$ -	$ -	$-

(1) Represents salaries, related compensation expenses, employer's costs and fees.

(2) Amounts reflect the grant date fair value of option awards granted or modified during the year ended December 31, 2017, in accordance with ASC 718. Such grant date fair value does not take into account any estimated forfeitures related to service-vesting conditions. For information regarding assumptions underlying the valuation of equity awards, see Note 10 to our financial statements and the discussion under Item 5 - "Operating And Financial Review And Prospects - Critical Accounting Policies and Use of Estimates - Share-based Compensation" included elsewhere in this annual report. These amounts do not correspond to the actual value that may be recognized by the respective executive officers upon vesting of applicable awards.

(3) Mr. Price has been our Chief Executive Officer since July 2016 and Chairman of the Board of Directors, since April 2012.

(4) Dr. Wasiewski has been our Chief Medical Officer, Vice President of Research and Development since November 2015.

(5) Mr. Orlev's employment with the Company terminated in November 2017.

(6) Ms. Gelbaum's employment with the Company terminated in July 2017.

(7) Based on ASC 718, the Company recorded an income of $11,173 due to a reversal of expense upon forfeiture of Ms. Gelbaum, non-vesting options.

The aggregate amount of compensation paid or accrued to all of our directors and executive officers as a group with respect to the year ended December 31, 2017 was approximately $1,280,507. Such amount is inclusive of the grant date fair value of option awards granted or modified during the year ended December 31, 2017 in the amount of $1,522,617. The amount does not include business travel, relocation, professional and business association due and expenses.

Employment Agreements with Executive Officers

We have entered into written employment or service agreements with all of our executive officers. Each of these agreements contains provisions regarding non-competition, confidentiality of information and ownership of inventions. The non-competition provision applies for a period that is generally 12 months following termination of

employment. The enforceability of covenants not to compete in Israel and the United States is subject to limitations. In addition, we are required to provide notice prior to terminating the employment of our executive officers, other than in the case of a termination for cause. For further information, see Item 3.D - "Risk Factors - Risks Related to Israeli Law and Our Operations in Israel."

Directors' Service Contracts

Other than with respect to our directors that are also executive officers, we do not have written agreements with any director providing for benefits upon the termination of his or her service to us. We have service contracts or employment agreements with our directors, Fredric Price and Dr. Dalia Megiddo. All of the foregoing service contracts have been approved by our shareholders.

Under the Companies Law, a Compensation Policy must be approved by the Board of Directors, after considering the recommendations of the Compensation Committee. The Compensation Policy must also be approved by a majority of the company's shareholders, provided that (i) such majority includes at least a majority of the shareholders who are not controlling shareholders and who do not have a personal interest in the matter, present and voting (abstentions are disregarded), or (ii) the non-controlling shareholders and shareholders who do not have a personal interest in the matter who were present and voted against the policy hold two percent or less of the voting power of the company. The Compensation Policy must be approved by the Board of Directors and the shareholders every three years. If the Compensation Policy is not approved by the shareholders, the Compensation Committee and the Board of Directors may nonetheless approve the policy, following further discussion of the matter and for specified reasons. Our Board of Directors approved our Compensation Policy on March 30, 2015, and our shareholders approved it on May 5, 2015. See Item 6.C - "Board Practices - Board Committees - Compensation Committee."

Under Amendment 20 of the Companies Law, the "Terms of Office and Employment" of office holders require the approval of the Compensation Committee and the Board of Directors. The Terms of Office and Employment of directors and the Chief Executive Officer must also be approved by shareholders.

Changes to existing Terms of Office and Employment of office holders (other than directors) can be made with the approval of the Compensation Committee only, if the committee determines that the change is not substantially different from the existing terms.

Under certain circumstances, the compensation committee and the Board of Directors may approve an arrangement that deviates from the Compensation Policy, provided that such arrangement is approved by the special majority of the company's shareholders mentioned above. Such shareholder approval will also be required with respect to determining the Terms of Office and Employment of a director or the Chief Executive Officer during the transition period until the company adopts a Compensation Policy. Notwithstanding the foregoing, a company may be exempted from receiving shareholder approval with respect to the Terms of Office and Employment of a candidate for Chief Executive Officer if such candidate meets certain independence criteria, the terms are in line with the Compensation Policy and the Compensation Committee has determined for specified reasons that shareholder approval would prevent the engagement.

6.C. Board practices

Board Practices

Board of Directors

Under the Companies Law, our Board of Directors is vested with the power to set corporate policy and oversee over our business. Our Board of Directors may exercise all powers and may take all actions that are not specifically granted to our shareholders or to management. Our executive officers are responsible for our day-to-day management and have individual responsibilities established by our Board of Directors. Our Chief Executive Officer is appointed by, and serves at the discretion of, our Board of Directors, subject to the employment agreement that we have entered into with him. All other executive officers are appointed by our Chief Executive Officer, and are subject to the terms of any applicable employment agreements that we may enter into with them.

Under our amended and restated articles of association, our Board of Directors must consist of at least five and not more than eleven directors. Our Board of Directors currently consists of seven directors. We have only one class of

directors.

Our directors are each elected at the annual general meeting of our shareholders and serve until the next annual general meeting. Such election is subject to the selection, or recommendation for the Board of Director's selection, by a majority of independent directors. Directors may nevertheless be removed prior to the end of their term by the majority of our shareholders at a general meeting of our shareholders or upon the occurrence of certain events, all in accordance with the Companies Law and our amended and restated articles of association.

In addition, our amended and restated articles of association allow our Board of Directors to appoint directors, to fill vacancies on our Board of Directors, for a term of office equal to the remaining period of the term of office of the directors whose offices have been vacated, or appoint new additions to the Board of Directors up to the maximum number of directors.

Under the Companies Law, nominations for directors may be made by any shareholder holding at least one percent of our outstanding voting power. However, any such shareholder may make such a nomination only if a written notice of such shareholder's intent to make such nomination has been given to our Board of Directors. Any such notice must include certain information which is required under the Companies Law to provide to our shareholders, the consent of the proposed director nominee(s) to serve as our director(s) if elected and a declaration signed by the nominee(s) declaring that there is no limitation under the Companies Law preventing their election and that all of the information that is required under the Companies Law to be provided to us in connection with such election has been provided.

External Directors

Under the Companies Law, except as provided below, companies incorporated under the laws of the State of Israel that are publicly traded, including Israeli companies with shares listed on the Nasdaq, are required to appoint at least two external directors who meet the qualification requirements set forth in the Companies Law. The definitions of an external director under the Companies Law and independent director under the Listing Rules of Nasdaq are similar such that it would generally be expected that our two external directors will also comply with the independence requirement under the Listing Rules of Nasdaq.

Pursuant to the Companies Law, the Board of Directors of a company such as the Company is not required to have external directors if: (i) the company does not have a controlling shareholder (as such term is defined in the Companies Law); (ii) a majority of the directors serving on the Board of Directors are "independent," as defined under Nasdaq Listing Rule 5605(a)(2); and (iii) the company follows Nasdaq Rule 5605(e)(1), which requires that the nomination of directors be made, or recommended to the Board of Directors, by a Nominating Committee of the Board of Directors consisting solely of independent directors, or by a majority of independent directors. The Company meets all these requirements. On June 28, 2016, our Board of Directors resolved to adopt the corporate governance exemption set forth above, and accordingly we no longer have external directors as members of our Board of Directors.

Leadership Structure of the Board

In accordance with the Companies Law and our amended and restated articles of association, our Board of Directors is required to appoint one of its members to serve as Chairman of the Board of Directors. Our Board of Directors has appointed Mr. Fredric Price who is also serving as our Chief Executive Officer) to serve as Executive Chairman of the Board of Directors. Under the Companies Law, the Chief Executive Officer of a public company may not serve as the Chairperson of the board of such company unless approved by the Company's shareholders, which approval lapses after three years. On August 9, 2016, our shareholders approved that our Executive Chairperson may also serve as our Chief Executive Officer.

Role of Board in Risk Oversight Process

Risk assessment and oversight are an integral part of our governance and management processes. Our Board of Directors encourages management to promote a culture that incorporates risk management into our corporate strategy and day-to-day business operations. Management discusses strategic and operational risks at regular management meetings, and conducts specific strategic planning and review sessions during the year that include a focused

discussion and analysis of the risks facing us. Throughout the year, senior management reviews these risks with the Board of Directors at regular board meetings as part of management presentations that focus on particular business functions, operations or strategies and presents the steps taken by management to mitigate or eliminate such risks.

Board Committees

Audit Committee

Under the Companies Law, the Board of Directors of a public company must appoint an audit committee.

Our Audit Committee provides assistance to our Board of Directors in fulfilling its legal and fiduciary obligations in matters involving our accounting, auditing, financial reporting, internal control and legal compliance functions by pre-approving the services performed by our independent accountants and reviewing their reports regarding our accounting practices and systems of internal control over financial reporting. Our Audit Committee also oversees the audit efforts of our independent accountants and takes those actions that it deems necessary to satisfy itself that the accountants are independent of management.

Under the Companies Law, our Audit Committee is responsible for:

- determining whether there are deficiencies in the business management practices of our Company, and making recommendations to the Board of Directors to improve such practices;

- determining whether to approve certain related party transactions (including transactions in which an office holder has a personal interest and whether such transaction is extraordinary or material under the Companies Law) (see Item 16G. - “Corporate Governance - Approval of Related Party Transactions under Israeli law”);

- examining our internal controls and internal auditor’s performance, including whether the internal auditor has sufficient resources and tools to dispose of its responsibilities;

- examining the scope of our auditor's work and compensation and submitting a recommendation with respect thereto to our Board of Directors or shareholders, depending on which of them is considering the appointment of our auditor;

- establishing procedures for the handling of employees' complaints as to the management of our business and the protection to be provided to such employees;

- determining whether certain acts of an office holder not in accordance with his or her fiduciary duty owed to the Company are extraordinary or material and to approve such acts and certain related party transactions (including transactions in which an office holder has a personal interest) and whether such transaction is extraordinary or material under the Companies Law (see Item 16G. - "Corporate Governance - Approval of Related Party Transactions under Israeli Law");

- deciding whether to approve and to establish the approval process (including by tender or other competitive proceedings) for certain transactions with a controlling shareholder or in which a controlling shareholder has a personal interest; and

- determining the process of approving of transactions that are not negligible, including determining the types of transactions that will be subject to the approval of the Audit Committee.

Audit Committee - Charter

Our Board of Directors has adopted an Audit Committee charter setting forth the responsibilities of the Audit Committee consistent with the rules of the SEC and the Listing Rules of Nasdaq, and to the requirements under the Companies Law, as described below. The Audit Committee Charter is posted on our website.

Nasdaq requirements

Under the Listing Rules of Nasdaq, we are required to maintain an Audit Committee consisting of at least three independent directors, all of whom are financially literate and one of whom has accounting or related financial management expertise.

Our Audit Committee consists of Mr. Michael Burshtine, who serves as the chairperson, Mr. Thomas Dubin and Mr. Robert Friedman. Our Board of Directors has determined that Mr. Burshtine is an audit committee financial expert as

defined by the SEC rules and has the requisite financial experience as defined by the Listing Rules of Nasdaq. All of the members of our Audit Committee meet the requirements for financial literacy under the applicable Listing Rules of Nasdaq.

Each member of the Audit Committee is required to be "independent" as such term is defined in Rule 10A-3(b)(1) under the Exchange Act.

Compensation Committee

Under the Companies Law, the Board of Directors of a public company must appoint a Compensation Committee.

Under the Listing Rules of Nasdaq, we are required to maintain a Compensation Committee consisting entirely of independent directors (or the determination of such compensation solely by the independent members of our Board of Directors).

Our Compensation Committee consists of Mr. Robert Friedman, who serves as the chairperson, Mr. Michael Burshtine and Dr. Marlene Haffner.

Under the Companies Law, our Compensation Committee is responsible for (i) proposing an office holder compensation policy to the Board of Directors, (ii) proposing necessary revisions to the compensation policy and examining its implementation, (iii) determining whether to approve transactions with respect to the terms of office and employment of office holders and (iv) determining, in accordance with our office holder compensation policy, whether to exempt an engagement with an unaffiliated nominee for the position of Chief Executive Officer from requiring shareholders' approval. Under the regulations promulgated under the Companies Law, certain exemptions and reliefs with respect to the Compensation Committee are granted to companies whose securities are traded outside of Israel. We may use these exemptions and reliefs after the listing of our Ordinary Shares on the Nasdaq.

The Companies Law provides that our compensation policy must serve as the basis for the decisions concerning the financial terms of employment or engagement of executives and directors, including exculpation, insurance, indemnification or any monetary payment or obligation of payment in respect of employment or engagement. The compensation policy must be approved (or reapproved) not longer than every three years, and relate to certain factors, including advancement of the company's objective, business plan and its long term strategy and creation of appropriate incentives for office holders. It must also consider, among other things, the company's risk management, size and nature of its operations. The compensation policy must furthermore consider the following additional factors:

- the knowledge, skills, expertise and accomplishments of the relevant office holder;
- the office holder's roles and responsibilities and prior compensation agreements with him or her;
- the relationship between the terms offered and the average compensation of the other employees of the company, including those employed through manpower companies;
- the impact of disparities in salary upon work relationships in the company;
- the possibility of reducing variable compensation at the discretion of the Board of Directors or the possibility of setting a limit on the exercise value of non-cash variable equity-based compensation; and
- as to severance compensation, the period of service of the office holder, the terms of his or her compensation during such service period, the company's performance during that period of service, the person's contributions towards the company's achievement of its goals and the maximization of its profits and the circumstances under which the person is leaving the company.

The compensation policy must also include the following principles:

- the link between variable compensation and long-term performance and measurable criteria;
- the relationship between variable and fixed compensation, and the ceiling for the value of variable compensation;
- the conditions under which a director or executive would be required to repay compensation paid to him or her if it was later shown that the data upon which such compensation was based was inaccurate and was required to be restated in the company's financial statements;

- the minimum holding or vesting period for variable, equity-based compensation; and

- maximum limits for severance compensation.

Our compensation policy, consistent with the foregoing Companies Law requirements, was adopted by our shareholders on May 5, 2015.

Compensation Committee - Charter

Our Board of Directors has adopted a Compensation Committee Charter setting forth the responsibilities of the Compensation Committee consistent with the Listing Rules of Nasdaq and the requirements under the Companies Law, as described above. The Compensation Committee Charter requires that our Compensation Committee be comprised of at least three members. The Compensation Committee Charter is posted on our website.

Nominating Committee

Our Board of Directors does not have an independent Nominating Committee. As indicated above, the election of members of our Board of Directors is subject to the selection, or recommendation for the Board of Director’s selection, by a majority of our independent directors.

Internal auditor

Under the Companies Law, the Board of Directors of an Israeli public company must appoint an internal auditor recommended by the audit committee and nominated by the Board of Directors. An internal auditor may not be:

- a person (or a relative of a person) who holds more than 5% of the Company's outstanding shares or voting rights;
- a person (or a relative of a person) who has the power to appoint a director or the general manager of the company;
- an office holder (including a director) of the company (or a relative thereof); or
- a member of the company's independent accounting firm, or anyone on his or her behalf.

The role of the internal auditor is to examine, among other things, our compliance with applicable law and orderly business procedures.

6.D. Employees

As of April 20, 2018, we had two employees, our Chief Executive Officer and our Chief Medical Officer. We also engage a consultant to perform the functions of our principal financial officer. We believe that we maintain good relations with our employees.

6.E. Share ownership

2013 Incentive Option Plan

We maintain one equity incentive plan - our 2013 Incentive Option Plan, or our 2013 Plan. As of April 20, 2018, there were a total of 661,164 options to purchase Ordinary Shares under our 2013 Plan, of which 325,353 options to purchase Ordinary Shares were issued and outstanding and 343,841 remained available for future issuance. A total of 234,969 options to purchase Ordinary Shares were vested as of that date, with a weighted average exercise price of $13.44 per share.

Our 2013 Plan, which was adopted by our Board of Directors on November 13, 2013, and amended most recently on March 28, 2016, provides for the grant of options to our and our affiliates' respective directors, employees, office holders, service providers and consultants.

The 2013 Plan is administered by our Board of Directors, which shall determine, subject to Israeli law, the grantees of awards and various terms of the grant. The 2013 Plan provides for granting options in compliance with Section 102 of the Israeli Income Tax Ordinance, 1961, or the Ordinance.

Options granted under the 2013 Plan to Israeli employees have been granted under the capital gains track of Section 102 of the Ordinance. Section 102 of the Ordinance allows employees, directors and officers, who are not controlling shareholders, to receive favorable tax treatment for compensation in the form of shares or options. Our Israeli non-employee service providers and controlling shareholders may only be granted options under Section 3(i) of the Ordinance, which does not provide for similar tax benefits. Section 102 of the Ordinance includes two alternatives for tax treatment involving the issuance of options or shares to a trustee for the benefit of the grantees and also includes an additional alternative for the issuance of options or shares directly to the grantee (without a trustee). Section 102(b)(2) of the Ordinance, the most favorable tax treatment for grantees, permits the issuance to a trustee under the "capital gains track." However, under this track we are not allowed to deduct an expense with respect to the issuance of the options or shares. In order to comply with the terms of the capital gains track, all options granted under the 2013 Plan pursuant and subject to the provisions of Section 102 of the Ordinance, as well as the Ordinary Shares issued upon exercise of these options and other shares received subsequently following any realization of rights with respect to such options, such as share dividends and share splits, must be granted to a trustee for the benefit of the relevant employee, director or officer and should be held by the trustee for at least two years after the date of the grant.

Options granted under the 2013 Plan will generally vest over four years commencing on the date of grant such that 25% vest after one year and an additional 6.25% vest at the end of each subsequent three-month period thereafter for 36 months. Options that are not exercised within ten years from the grant date expire, unless otherwise determined by the Board of Directors or its designated committee, as applicable. In case of termination for reasons of disability or death, the grantee or his legal successor may exercise options that have vested prior to termination within a period of six months from the date of disability or death. If we terminate a grantee's employment or service for cause, all of the grantee's vested and unvested options will expire on the date of termination. If a grantee's employment or service is terminated for any other reason, the grantee may exercise his or her vested options within 90 days of the date of termination. Any expired or unvested options return to the pool for reissuance.

In the event of a merger or consolidation of our company subsequent to which we shall no longer exist as a legal entity, or a sale of all, or substantially all, of our shares or assets or other transaction having a similar effect on us, then any outstanding option shall be assumed, or an equivalent option shall be substituted, by such successor corporation or an affiliate thereof or, in case the successor corporation refuses to assume or substitute the option, our Board of Directors or its designated committee may (a) provide the grantee with the opportunity to exercise the option as to all or part of the shares, vested or otherwise, and (b) specify a period of time, no less than 7 days, following which all outstanding options shall terminate.

See also Item 7.A below.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

7.A. Major shareholders

The following table sets forth information relating to the beneficial ownership of our Ordinary Shares as of April 20, 2018 by: each person, or group of affiliated persons, known by us to beneficially own more than 5% of our outstanding Ordinary Shares; each of our directors; each of our named executive officers; and all directors and executive officers as a group.

The number of shares beneficially owned by each entity, person, director or executive officer 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 shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days of April 20, 2018 through the exercise of any stock options or other rights. 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 April 20, 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 directors and executive officers as a group. Unless otherwise indicated below, the address for each beneficial owner listed is c/o Bioblast Pharma Ltd., PO Box 318, Tel-Aviv, Israel 6100201.

We are not owned or controlled, directly or indirectly, by another corporation or by any foreign government. We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

	Number of shares beneficially owned	Percentage of shares beneficially owned	
Holders of more than 5% of our voting securities:			
Udi Gilboa [1]	468,700	14.0	%
Dr. Dalia Megiddo	662,285	19.7	%
Pontifax Funds [2]	508,427	15.1	%
Fredric D. Price [3]	210,257	6.0	%
Directors and executive officers who are not 5% holders:			
Dr. Warren Wasiewski [4]	48,028	1.4	%
Michael Burshtine[5]	2,625	*	
Thomas I.H. Dubin[6]	2,625	*	
Robert Friedman [7]	2,250	*	
Dr. Marlene Haffner [8]	19,341	*	
All directors and executive officers as a group (8 persons) [9]	1,455,838	41.1	%

(1) Based solely on a Schedule 13G/A filed with the SEC on February 14, 2018, and which reflects holdings as of December 31, 2017.

(2) Comprised of 344,820 ordinary shares owned by Pontifax Israel III L.P., 160,982 ordinary shares owned by Pontifax Cayman III L.P. and options to purchase 2,625 ordinary shares exercisable within 60 days of December 31, 2017, owned by Pontifax Israel III L.P. and by Pontifax Cayman III L.P. Pontifax Management Fund III L.P. is the general partner of Pontifax Israel III L.P. and Pontifax Cayman III L.P. Pontifax Management III G.P. (2011) Ltd. is the general partner of Pontifax Management Fund III L.P. Ran Nussbaum is a director of Pontifax Management III G.P. (2011) Ltd.

(3) Comprised of: (a) 90,257 Ordinary Shares; and (b) 120,000 options to purchase Ordinary Shares presently exercisable or exercisable within 60 days of April 20, 2018.

(4) Comprised of 48,028 options to purchase Ordinary Shares presently exercisable or exercisable within 60 days of April 20, 2018.

(5) Comprised of 2,625 options to purchase Ordinary Shares presently exercisable or exercisable within 60 days of April 20, 2018.

(6) Comprised of 2,625 options to purchase Ordinary Shares presently exercisable or exercisable within 60 days of April 20, 2018.

(7) Comprised of 2,250 options to purchase Ordinary Shares presently exercisable or exercisable within 60 days of April 20, 2018.

(8) Comprised of: (a) 16,716 Ordinary Shares; and (b) 2,625 options to purchase Ordinary Shares presently exercisable or exercisable within 60 days of April 20, 2018.

(9) Comprised of: (a) 1,275,060 Ordinary Shares; and (b) 180,778 options to purchase Ordinary Shares presently exercisable or exercisable within 60 days of April 20, 2018.

Record Holders

According to our transfer agent, as of April 20, 2018, there were seven record holders of our Ordinary Shares, among whom are three U.S. holders (including Cede & Co., the nominee of the Depositary Trust Company, holding 67% of our Ordinary Shares). The number of record holders in the United States is not representative of the number of beneficial holders nor is it representative of where such beneficial holders are resident since many of these Ordinary Shares are held by brokers or other nominees. None of our shareholders has different voting rights from other

shareholders.

The Company is not controlled by another corporation, by any foreign government or by any natural or legal persons

7.B. Related party transactions

Employment Agreements

We have entered into written employment and service agreements with each of our executive officers. These agreements provide for notice periods of varying duration for termination of the agreement by us or by the relevant executive officer, during which time the executive officer will continue to receive base salary and benefits. We have also entered into customary non-competition, confidentiality of information and ownership of inventions arrangements with our executive officers. However, the enforceability of the noncompetition provisions may be limited under applicable law. We describe our service agreements with directors under Item 6.B. Compensation above.

Options

Since our inception we have granted options to purchase our Ordinary Shares to our officers and certain of our directors. Such option agreements may contain acceleration provisions upon certain merger, acquisition, or change of control transactions. We describe our option plan under Item 6.E. Share Ownership - “2013 Incentive Option Plan” above. If the relationship between us and an executive officer or a director is terminated, except for cause (as defined in the various option plan agreements), options that are vested will generally remain exercisable for ninety days after such termination.

Indemnification Agreements and Insurance Coverage

Our amended and restated articles of association permit us to exculpate, indemnify and insure each of our directors and office holders to the fullest extent permitted by the Companies Law. We have entered into indemnification agreements with each of our directors and other office holders, undertaking to indemnify them to the fullest extent permitted by Israeli law. We have also obtained directors and officers insurance for each of our officers and directors.

7.C. Interests of experts and counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

8.A. Financial statements and other financial information

See Item 18 - Financial Statements.

Legal Proceedings

From time to time, we are involved in various routine legal proceedings incidental to the ordinary course of our business. We do not currently believe that the outcome of these legal proceedings have had in the recent past, or will have (with respect to any pending proceedings), significant effects on our financial position or profitability.

Dividends

We have never paid any cash dividends on our Ordinary Shares and do not anticipate paying any cash dividends in the foreseeable future. Payment of cash dividends, if any, in the future will be at the discretion of our Board of Directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our Board of Directors may deem relevant.

The Companies Law imposes further restrictions on our ability to declare and pay dividends. See Item 10.B. -"Articles of Association - Rights, Preferences, Restrictions of Shares and Shareholder Meetings - Dividend and Liquidation Rights" for additional information.

Payment of dividends may be subject to Israeli withholding taxes. See Item 10.E. - "Taxation" below for additional information.

8.B. Significant changes

Except as disclosed elsewhere in this annual report, there have been no other significant changes since December 31, 2017, until the date of the filing of this annual report.

ITEM 9. THE OFFER AND LISTING

9.A. Offer and listing details

Our Ordinary Shares have been listed on the Nasdaq Capital Market under the symbol "ORPN" since April 27, 2017. Prior to that date, our Ordinary Shares were listed on the Nasdaq Global Market since July 31, 2014. Our initial public offering was priced at $11.00 per share on July 30, 2014. The following table sets forth for the periods indicated the high and low sales prices per Ordinary Share as reported on the Nasdaq Global Market or Nasdaq Capital Market, as applicable.

	Low	High
Annual information		
2014	$22.50	$55.00
2015	$17.25	$44.25
2016	$4.60	$39.75
2017	$1.49	$7.75
Quarterly information		
First quarter 2016	$11.50	$39.75
Second quarter 2016	$7.70	$15.65
Third quarter 2016	$7.50	$10.20
Fourth quarter 2016	$4.60	$8.75
First quarter 2017	$3.75	$7.75
Second quarter 2017	$2.05	$4.09
Third quarter 2017	$1.49	$4.15
Fourth quarter 2017	$1.81	$3.98
Monthly information		
October 2017	$2.02	$3.98
November 2017	$1.82	$3.06
December 2017	$1.81	$3.35
January 2018	$2.19	$5.99
February 2018	$2.59	$3.08
March 2018	$1.87	$3.31
April 2018*	$1.86	$2.29

* Updated through April 20, 2018

9.B. Plan of distribution

Not applicable.

9.C. Market for Ordinary Shares

Our Ordinary Shares have been quoted on the Nasdaq Capital Market since April 27, 2017 and prior to that date, our Ordinary Shares were listed on the Nasdaq Global Market since July 31, 2014, in both cases under the symbol ORPN.

9.D. Selling shareholders

Not applicable.

9.E. Dilution

Not applicable.

9.F. Expenses of the issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

10.A. Share capital

Not applicable.

10.B. Articles of Association

Securities Register

We are registered with the Israeli Registrar of Companies. Our registration number is 51-471648-9. Our amended and restated articles of association provide that we may engage in any type of lawful business.

Board of Directors

The Companies Law requires that certain transactions, actions and arrangements be approved as provided for in a company's articles of association and in certain circumstances by the Audit Committee, the Compensation Committee, by the Board of Directors itself and by the shareholders. The vote required by the Audit Committee, Compensation Committee and the Board of Directors for approval of such matters, in each case, is a majority of the disinterested directors participating in a duly convened meeting. If, however, a majority of the members participating in such meeting have a personal interest in the approval of such matter, then all directors may participate in the discussions and the voting on approval thereof and in such case the matter shall be subject to further shareholder approval.

The Companies Law requires that an office holder promptly disclose to the Board of Directors any personal interest that he or she may have concerning any existing or proposed transaction with a company, as well as any substantial information or document with respect thereof. An interested office holder's disclosure must be made promptly and in any event no later than the first meeting of the Board of Directors at which the transaction is considered. A personal interest includes an interest of any person in an act or transaction of a company, including a personal interest of one's relative or of a corporate body in which such person or a relative of such person is a 5% or greater shareholder, director or general manager or in which he or she has the right to appoint at least one director or the general manager, but excluding a personal interest stemming from one's ownership of shares in the company. A personal interest furthermore includes the personal interest of a person for whom the office holder holds a voting proxy or the interest of the office holder with respect to his or her vote on behalf of the shareholder for whom he or she holds a proxy even if such shareholder itself has no personal interest in the approval of the matter. An office holder is not, however, obliged to disclose a personal interest if it derives solely from the personal interest of a relative of such office holder in a transaction that is not considered an extraordinary transaction. Under the Companies Law, an extraordinary transaction is defined as any of the following:

- a transaction other than in the ordinary course of business;

- a transaction that is not on market terms; or

· a transaction that may have a material impact on a company's profitability, assets or liabilities.

If it is determined that an office holder has a personal interest in a transaction, approval by the Board of Directors is required for the transaction, unless the company's articles of association provide for a different method of approval. Further, so long as an office holder has disclosed his or her personal interest in a transaction, the Board of Directors may approve an action by the office holder that would otherwise be deemed a breach of duty of loyalty. However, a company may not approve a transaction or action that is adverse to the company's interest or that is not performed by the office holder in good faith. Approval first by the company's Audit Committee and subsequently by the Board of Directors is required for an extraordinary transaction in which an office holder has a personal interest. Arrangements regarding the compensation, indemnification or insurance of an office holder require the approval of the Compensation Committee, Board of Directors and, in certain circumstances, the shareholders, in that order.

Pursuant to Israeli law, the disclosure requirements regarding personal interests that apply to directors and executive officers also apply to a controlling shareholder of a public company. In the context of a transaction involving a controlling shareholder or an officer who is a controlling shareholder of the company, a controlling shareholder also includes any shareholder who holds 25% or more of the voting rights if no other shareholder holds more than 50% of the voting rights. Two or more shareholders with a personal interest in the approval of the same transaction are deemed to be a single shareholder and may be deemed a controlling shareholder for the purpose of approving such transaction. Extraordinary transactions, including private placement transactions, with a controlling shareholder or in which a controlling shareholder has a personal interest, and engagements with a controlling shareholder or his or her relative, directly or indirectly, including through a corporation in his or her control, require the approval of the Audit Committee, the Board of Directors and the shareholders of the company, in that order. In addition, the shareholder approval must fulfill one of the following requirements:

- a disinterested majority; or

- the votes of shareholders who have no personal interest in the transaction and who are present and voting, in person, by proxy or by voting deed at the meeting, and who vote against the transaction may not represent more than two percent (2%) of the voting rights of the company.

To the extent that any such transaction with a controlling shareholder is for a period extending beyond three years, approval is required once every three years, unless the Audit Committee determines that the duration of the transaction is reasonable given the circumstances related thereto.

Arrangements regarding the terms of engagement and compensation of a controlling shareholder who is an office holder, and the terms of employment of a controlling shareholder who is an employee of the company, require the approval of the Compensation Committee, Board of Directors and, generally, the shareholders, in that order.

Our amended and restated articles of association provide that, all actions done bona fide at any meeting of the Board of Directors or by a committee thereof or by any person(s) acting as director(s) will, notwithstanding that it may afterwards be discovered that there was some defect in the appointment of the participants in such meeting or any of them or any person(s) acting as aforesaid, or that they or any of them were disqualified, be as valid as if there were no such defector disqualification.

- Pursuant to Israeli law, a director who has a personal interest in an extraordinary transaction which is brought for discussion before our Board of Directors or our Audit Committee shall neither vote in nor attend discussions concerning the approval of such transaction. If the director did vote or attend as aforesaid, the approval given to the aforesaid activity or arrangement will be invalid.

- Our amended and restated articles of association provide that, subject to the Companies Law, our Board of Directors may delegate its authority, in whole or in part, to such committees of the Board of Directors as it deems appropriate, and it may from time to time revoke such delegation. To the extent permitted by the Companies Law, our Board of Directors may from time to time confer upon and delegate to a President, Chief Executive Officer, Chief Operating Officer or other executive officer then holding office, such authorities and duties of the Board of Directors as it deems fit, and they may delegate such authorities and duties for such period and for such purposes and subject to such conditions and restrictions which they consider in our best interests, without waiving the authorities of the Board of Directors with respect thereto.

- Arrangements regarding compensation of directors require the approval of the Compensation Committee, our Board of Directors and the shareholders.

Borrowing Powers

Pursuant to the Companies Law and our amended and restated articles of association, our Board of Directors may exercise all powers and take all actions that are not required under law or under our amended and restated articles of association to be exercised or taken by our shareholders or other corporate bodies, including the power to borrow money for company purposes.

Rights, Preferences, Restrictions of Shares and Shareholders Meetings

- General. Our share capital is NIS 500,000, consisting of 10,000,000 Ordinary Shares, NIS 0.05 par value per share.

- Voting. The Ordinary Shares do not have cumulative voting rights in the election of directors. As a result, the holders of Ordinary Shares that represent more than 50% of the voting power have the power to elect all the Directors.

- Dividend and liquidation rights. Our Board of Directors may declare a dividend to be paid to the holders of our Ordinary Shares according to their rights and interests in our profits and may fix the record date for eligibility and the time for payment. The directors may from time to time pay to the shareholders on account of the next forthcoming dividend such interim dividends as, in their judgment, our position justifies. All dividends unclaimed for one year after having been declared may be invested or otherwise used by the directors for our benefit until claimed. No unpaid dividend or interest shall bear interest as against us. Our Board of Directors may determine that a dividend may be paid, wholly or partially, by the distribution of certain of our assets or by a distribution of paid up shares, debentures or debenture stock or any of our securities or of any other companies or in any one or more of such ways in the manner and to the extent permitted by the Companies Law.

- Transfer of shares; record dates. Fully paid up Ordinary Shares may be freely transferred pursuant to our amended and restated articles of association unless such transfer is restricted or prohibited by another instrument or securities laws. Each shareholder who would be entitled to attend and vote at a General Meeting of shareholders is entitled to receive notice of any such meeting. For purposes of determining the shareholders entitled to notice and to vote at such meeting, the Board of Directors will fix a record date.

- Voting; annual general and extraordinary meetings. Subject to any rights or restrictions for the time being attached to any class or classes of shares, each shareholder shall have one vote for each share of which he or she is the holder, whether on a show of hands or on a poll. Our amended and restated articles of association do not permit cumulative voting and it is not mandated by Israeli law. Votes may be given either personally or by proxy. A proxy need not be a shareholder. If any shareholder is without legal capacity, he may vote by means of a trustee or a legal custodian, who may vote either personally or by proxy. If two or more persons are jointly entitled to a share then, in voting upon any question, the vote of the senior person who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other registered holders of the share and, for this purpose seniority shall be determined by the order in which the names stand in the shareholder register.

- Quorum for general meetings. The quorum required for our general meetings of shareholders consists of at least two shareholders present in person, by proxy or written ballot who holds or represent between them at least one-third of the total outstanding voting rights. A meeting adjourned for lack of a quorum is generally adjourned to the same day in the following week at the same time and place or to a later time/date if so specified in the summons or notice of the meeting. At the reconvened meeting, any two or more shareholders present in person or by proxy shall constitute a lawful quorum.

- Notice of general meetings. Unless a longer period for notice is prescribed by the Companies Law, at least 10 days and not more than 60 days' notice of any general meeting shall be given, specifying the place, the day and the hour of the meeting and, in the case of special business, the nature of such business, shall be given in the manner hereinafter mentioned, to such shareholders as are under the provisions of our amended and restated articles of association, entitled to receive notices from us. Only shareholders of record as reflected on our share register at the close of business on the date fixed by the Board of Directors as the record date determining the then shareholders who will be entitled to vote, shall be entitled to notice of, and to vote, in person or by proxy, at a general meeting and any postponement or adjournment thereof.

- Annual; agenda; calling a general meeting. General Meetings are held at least once in every calendar year at such time (within a period of 15 months after the holding of the last preceding General Meeting), and at such time and place as may be determined by the Board of Directors. At a General Meeting, decisions shall be adopted only on matters that were specified on the agenda. The Board of Directors is obligated to call extraordinary general meeting of the shareholders upon a written request in accordance with the Companies Law. The Companies Law provides that an extraordinary general meeting of shareholder may be called by the Board of Directors or by a request of two directors or 25% of the directors in office, or by shareholders holding at least 5% of the issued share capital of the company and at least 1% of the voting rights, or of shareholders holding at least 5% of the voting rights of the company.

- Majority vote. Except as otherwise provided in the amended and restated articles of association, any resolution at a General Meeting shall be deemed adopted if approved by the holders of a majority of our voting rights represented at the meeting in person or by proxy and voting thereon. In the case of an equality of votes, the chairman of the meeting shall not be entitled to a further vote.

- Discrimination against shareholders. According to our amended and restated articles of association, there are no discriminating provisions against any existing or prospective holders of our shares as a result of a shareholder holding a substantial number of shares.

Modification of Class Rights

If, at any time, the share capital is divided into different classes of shares, the rights attached to any class (unless otherwise provided by the terms of issuance of the shares of that class) may be varied with the consent in writing of the holders of all the issued shares of that class, or with the sanction of a majority vote at a meeting of the shareholders passed at a separate meeting of the holders of the shares of the class. The provisions of our amended and restated articles of association relating to general meetings shall apply, mutatis mutandis, to every such separate general meeting. Any holder of shares of the class present in person or by proxy may demand a secret poll.

Unless otherwise provided by the conditions of issuance, the enlargement of an existing class of shares, or the issuance of additional shares thereof, shall not be deemed to modify or abrogate the rights attached to the previously issued shares of such class or of any other class. These conditions provide for the minimum shareholder approvals permitted by the Companies Law.

Restrictions on Shareholders Rights to Own Securities

Our amended and restated articles of association and the laws of the State of Israel do not restrict in any way the ownership or voting or our shares by non-residents of Israel, except with respect to subjects of countries which are in a state of war with Israel.

Acquisitions under Israeli Law

Full tender offer

A person wishing to acquire shares of an Israeli public company and who would as a result hold over 90% of the target company's issued and outstanding share capital or of the issued and outstanding share capital of a certain class of shares is required by the Companies Law to make a tender offer to all of the company's shareholders for the purchase of all of the issued and outstanding shares of the company or of all of the issued and outstanding shares of the same class.

If the shareholders who do not respond to or accept the offer hold less than 5% of the issued and outstanding share capital of the company or of the applicable class of the shares, and more than half of the shareholders who do not have a personal interest in the offer accept the offer, all of the shares that the acquirer offered to purchase will be transferred to the acquirer by operation of law. However, a tender offer will be accepted if the shareholders who do not accept it hold less than 2% of the issued and outstanding share capital of the company or of the applicable class of the shares.

Upon a successful completion of such a full tender offer, any shareholder that was an offeree in such tender offer, whether such shareholder accepted the tender offer or not, may, within six months from the date of acceptance of the tender offer, petition the Israeli court to determine whether the tender offer was for less than fair value and that the fair value should be paid as determined by the court. However, under certain conditions, the offeror may determine in the terms of the tender offer that an offeree who accepted the offer will not be entitled to petition the Israeli court as described above.

If the shareholders who did not respond or accept the tender offer hold at least 5% of the issued and outstanding share capital of the company or of the applicable class, the acquirer may not acquire shares of the company that will increase its holdings to more than 90% of the company's issued and outstanding share capital or of the applicable class from shareholders who accepted the tender offer.

Special tender offer

The Companies Law provides that an acquisition of shares of an Israeli public company must be made by means of a special tender offer if as a result of the acquisition the purchaser would become a holder of at least 25% of the voting rights in the company. This rule does not apply if there is already another holder of at least 25% of the voting rights in the company.

Similarly, the Companies Law provides that an acquisition of shares in a public company must be made by means of a special tender offer if as a result of the acquisition the purchaser would become a holder of more than 45% of the voting rights in the company, if there is no other shareholder of the company who holds more than 45% of the voting rights in the company.

These requirements do not apply if the acquisition (i) occurs in the context of a private offering, on the condition that the shareholders meeting approved the acquisition as a private offering whose purpose is to give the acquirer at least 25% of the voting rights in the company if there is no person who holds at least 25% of the voting rights in the company, or as a private offering whose purpose is to give the acquirer 45% of the voting rights in the company, if there is no person who holds 45% of the voting rights in the company; (ii) was from a shareholder holding at least 25% of the voting rights in the company and resulted in the acquirer becoming a holder of at least 25% of the voting rights in the company; or (iii) was from a holder of more than 45% of the voting rights in the company and resulted in the acquirer becoming a holder of more than 45% of the voting rights in the company.

The special tender offer may be consummated only if (i) at least 5% of the voting power attached to the company's outstanding shares will be acquired by the offeror and (ii) the special tender offer is accepted by a majority of the votes of those offerees who gave notice of their position in respect of the offer; in counting the votes of offerees, the votes of a holder of control in the offeror, a person who has personal interest in acceptance of the special tender offer, a holder of at least 25% of the voting rights in the company, or any person acting on their or on the offeror's behalf, including their relatives or companies under their control, are not taken into account.

In the event that a special tender offer is made, a company's Board of Directors is required to express its opinion on the advisability of the offer or shall abstain from expressing any opinion if it is unable to do so, provided that it gives the reasons for its abstention.

An office holder in a target company who, in his or her capacity as an office holder, performs an action the purpose of which is to cause the failure of an existing or foreseeable special tender offer or is to impair the chances of its acceptance, is liable to the potential purchaser and shareholders for damages resulting from his acts, unless such office holder acted in good faith and had reasonable grounds to believe he or she was acting for the benefit of the company. However, office holders of the target company may negotiate with the potential purchaser in order to improve the terms of the special tender offer, and may further negotiate with third parties in order to obtain a competing offer.

If a special tender offer was accepted by a majority of the shareholders who announced their stand on such offer, then shareholders who did not respond to the special offer or had objected to the special tender offer may accept the offer within four days of the last day set for the acceptance of the offer.

In the event that a special tender offer is accepted, then the purchaser or any person or entity controlling it and any corporation controlled by them shall refrain from making a subsequent tender offer for the purchase of shares of the target company and may not execute a merger with the target company for a period of one year from the date of the offer, unless the purchaser or such person or entity undertook to effect such an offer or merger in the initial special tender offer.

Merger

The Companies Law permits merger transactions if approved by each party's Board of Directors and, unless certain requirements described under the Companies Law are met, a majority of each party's shareholders, by a majority of each party's shares that are voted on the proposed merger at a shareholders' meeting.

The Board of Directors of a merging company is required pursuant to the Companies Law to discuss and determine whether in its opinion there exists a reasonable concern that as a result of a proposed merger, the surviving company will not be able to satisfy its obligations towards its creditors, taking into account the financial condition of the merging companies. If the Board of Directors has determined that such a concern exists, it may not approve a proposed merger. Following the approval of the Board of Directors of each of the merging companies, the Boards of Directors must jointly prepare a merger proposal for submission to the Israeli Registrar of Companies.

For purposes of the shareholder vote, unless a court rules otherwise, the merger will not be deemed approved if a majority of the shares voting at the shareholders meeting (excluding abstentions) that are held by parties other than the other party to the merger, any person who holds 25% or more of the means of control of the other party to the merger or any one on their behalf including their relatives or corporations controlled by any of them, vote against the merger.

If the transaction would have been approved but for the separate approval of each class of shares or the exclusion of the votes of certain shareholders as provided above, a court may still rule that the company has approved the merger upon the request of holders of at least 25% of the voting rights of a company, if the court holds that the merger is fair and reasonable, taking into account the appraisal of the merging companies' value and the consideration offered to the shareholders.

Under the Companies Law, each merging company must send a copy of the proposed merger plan to its secured creditors. Unsecured creditors are entitled to receive notice of the merger, as provided by the regulations promulgated under the Companies Law. Upon the request of a creditor of either party to the proposed merger, the court may delay or prevent the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations of the target company. The court may also give instructions in order to secure the rights of creditors.

In addition, a merger may not be completed unless at least 50 days have passed from the date that a proposal for approval of the merger was filed with the Israeli Registrar of Companies and 30 days from the date that shareholder approval of both merging companies was obtained.

Potential Issues that Could Delay a Merger

Certain provisions of Israeli corporate and tax law may have the effect of delaying, preventing or making more difficult any merger or acquisition of us.

Requirement of Disclosure of Shareholder Ownership

There are no provisions of our amended and restated articles of association governing the ownership threshold above which shareholder ownership must be disclosed. We are subject, however, to U.S. securities rules that require beneficial owners of more than 5% of our Ordinary Shares to make certain filings with the SEC.

Changes in Capital

Our amended and restated articles of association do not impose any conditions governing changes in capital that are more stringent than required by the Companies Law.

10.C. Material contracts

For a description of the agreements related to our directors and officers, see Item 6.B -“Compensation”.

10.D. Exchange controls

There are currently no Israeli currency control restrictions on payments of dividends or other distributions with respect to our Ordinary Shares or the proceeds from the sale of our Ordinary Shares, except for the obligation of Israeli residents to file reports with the Bank of Israel regarding certain transactions. However, legislation remains in effect

pursuant to which currency controls can be imposed by administrative action at any time.

Non-residents of Israel who purchase our securities with non-Israeli currency will be able to repatriate dividends (if any), liquidation distributions and the proceeds of any sale of such securities, into non-Israeli currencies at the rate of exchange prevailing at the time of repatriation, provided that any applicable Israeli taxes have been paid (or withheld) on such amounts.

Neither our amended and restated articles of association nor the laws of the State of Israel restrict in any way the ownership or voting of our Ordinary Shares by non-residents of Israel, except with respect to citizens of countries that are in a state of war with Israel.

10.E. Taxation

The following is a summary of the current tax structure, which is applicable to companies in Israel, with special reference to its effect on us. The following also contains a discussion of material Israeli and U.S. tax consequences to persons purchasing our Ordinary Shares and government programs from which we and some of our group companies benefit. To the extent that the discussion is based on new tax legislation, which has yet to be subject to judicial or administrative interpretation, there can be no assurance that the views expressed in the discussion will accord with any such interpretation in the future. The discussion is not intended and should not be construed as legal or professional tax advice and is not exhaustive of all possible tax considerations. An Israeli company that is subject to Israeli taxes on the income of its non-Israeli subsidiaries will receive a credit for income taxes paid/withheld or that will be paid/withheld by the subsidiary in its country of residence, according to the terms and conditions determined in the Israeli Tax Ordinance.

The following summary is included herein as general information only and is not intended as a substitute for careful tax planning. Accordingly, each investor should consult his or her own tax advisor as to the particular tax consequences to such investor of the purchase, ownership or sale of an ordinary share, including the effect of applicable state, local, foreign or other tax laws and possible changes in tax laws.

Israeli Taxation Considerations

THE FOLLOWING IS A SUMMARY OF THE MATERIAL ISRAELI INCOME TAX LAWS APPLICABLE TO US. THIS SECTION ALSO CONTAINS A DISCUSSION OF MATERIAL ISRAELI INCOME TAX CONSEQUENCES CONCERNING THE OWNERSHIP AND DISPOSITION OF OUR ORDINARY SHARES. THIS SUMMARY DOES NOT DISCUSS ALL THE ASPECTS OF ISRAELI INCOME TAX LAW THAT MAY BE RELEVANT TO A PARTICULAR INVESTOR IN LIGHT OF HIS OR HER PERSONAL INVESTMENT CIRCUMSTANCES OR TO SOME TYPES OF INVESTORS SUBJECT TO SPECIAL TREATMENT UNDER ISRAELI LAW. EXAMPLES OF THIS KIND OF INVESTOR INCLUDE RESIDENTS OF ISRAEL OR TRADERS IN SECURITIES WHO ARE SUBJECT TO SPECIAL TAX REGIMES NOT COVERED IN THIS DISCUSSION. TO THE EXTENT THAT THE DISCUSSION IS BASED ON NEW TAX LEGISLATION THAT HAS NOT YET BEEN SUBJECT TO JUDICIAL OR ADMINISTRATIVE INTERPRETATION, WE CANNOT ASSURE YOU THAT THE APPROPRIATE TAX AUTHORITIES OR THE COURTS WILL ACCEPT THE VIEWS EXPRESSED IN THIS DISCUSSION. THIS SUMMARY IS BASED ON LAWS AND REGULATIONS IN EFFECT AS OF THE DATE OF THIS ANNUAL REPORT AND DOES NOT TAKE INTO ACCOUNT POSSIBLE FUTURE AMENDMENTS WHICH MAY BE UNDER CONSIDERATION.

General corporate tax structure in Israel

As of January 1, 2016, Israeli resident companies, such as us, were generally subject to corporate tax at the rate of 25%. As of January 1, 2017, the corporate tax rate was reduced to 24% and as of January 1, 2018, the corporate tax rate is reduced to 23%. Between January 1, 2014 and December 31, 2015, the corporate tax rate was 26.5%.

Capital gains derived by an Israeli resident company are generally subject to tax at the same rate as the corporate tax rate. Under Israeli tax legislation, a corporation will be considered as an “Israeli Resident” if it meets one of the following: (a) it was incorporated in Israel; or (b) its business is managed and controlled from Israel.

Taxation of our Israeli individual shareholders on receipt of dividends

Israeli residents who are individuals are generally subject to Israeli income tax for dividends paid on our Ordinary Shares (other than bonus shares or share dividends) at a rate of 25%, or 30% if the recipient of such dividend is a “substantial shareholder” (as defined below) at the time of distribution or at any time during the preceding 12-month period.

As of January 1, 2016, an additional income tax at a rate of 2% will be imposed on high earners whose annual taxable income or gain exceeds NIS 803,520. As of January 1, 2017, an additional income tax at a rate of 3% will be imposed on high earners whose annual taxable income or gain exceeds NIS 640,000. As of January 1, 2018, an additional income tax at a rate of 3% will be imposed on high earners whose annual taxable income or gain exceeds NIS 641,880.

A “substantial Shareholder” is generally a person who alone, or together with his relative or another person who collaborates with him on a regular basis, holds, directly or indirectly, at least 10% of any of the “means of control” of the corporation. “Means of control” generally include the right to vote in a general meeting of shareholders, the right to receive profits, the right to nominate a director or an officer, the right to receive assets upon liquidation (after settling the debts), or the right to instruct someone who holds any of the aforesaid rights regarding the manner in which he or she is to exercise such right(s), and whether by virtue of shares, rights to shares or other rights, or in any other manner, including by means of voting agreements or trusteeship agreements.

The term “Israeli Resident” for Individuals is generally defined under Israeli Income Tax Ordinance [New Version], 1961, or the Israeli Tax Ordinance, as an individual whose center of life is in Israel. According to the Israeli Tax Ordinance, in order to determine the center of life of an individual, account will be taken of the individual’s family, economic and social connections, including: (a) the place of the individual’s permanent home; (b) the place of residence of the individual and his family; (c) the place of the individual’s regular or permanent place of business or the place of his permanent employment; (d) place of the individual’s active and substantial economic interests; (e) place of the individual’s activities in organizations, associations and other institutions. The center of life of an individual will be presumed to be in Israel if: (a) the individual was present in Israel for 183 days or more in the tax year; or (b) the individual was present in Israel for 30 days or more in the tax year, and the total period of the individual’s presence in Israel in that tax year and the two previous tax years is 425 days or more. The presumption in this paragraph may be rebutted either by the individual or by the assessing officer.

Taxation of Israeli Resident Corporations on Receipt of Dividends

Israeli resident corporations are generally exempt from Israeli corporate income tax with respect to dividends paid on our Ordinary Shares.

Capital Gains Taxes Applicable to Israeli Resident Shareholders

The income tax rate applicable to Real Capital Gain derived by an Israeli individual from the sale of shares which had been purchased after January 1, 2012, whether listed on a stock exchange or not, is 25%. However, if such shareholder is considered a "Substantial Shareholder" (as defined above) at the time of sale or at any time during the preceding 12-month period, such gain will be taxed at the rate of 30%. As of January 1, 2016, an additional tax at a rate of 2% will be imposed on high earners whose annual income or gains exceed NIS 803,520. As of January 1, 2017, an additional income tax at a rate of 3% will be imposed on high earners whose annual taxable income or gain exceeds NIS 640,000. As of January 1, 2018, an additional income tax at a rate of 3% will be imposed on high earners whose annual taxable income or gain exceeds NIS 641,880.

Moreover, capital gains derived by a shareholder who is a dealer or trader in securities, or to whom such income is otherwise taxable as ordinary business income, are taxed in Israel at ordinary income rates (currently, up to 50% for individuals and As of January 1, 2016, 25% for Israeli resident corporations, as of January 1, 2017, the corporate tax rate is reduced to 24% and as of January 1, 2018, the corporate tax rate is reduced to 23%).

Taxation of Non-Israeli Shareholders on Receipt of Dividends

Non-Israeli residents are generally subject to Israeli income tax on the receipt of dividends paid on our Shares at the rate of 25% (or 30% for individuals, if such individual is a "substantial shareholder" at the time receiving the dividend or on any date in the 12 months preceding such date), which tax will be withheld at source, unless a tax certificate is obtained from the Israeli Tax Authority authorizing withholding-exempt remittances or a reduced rate of tax pursuant to an applicable tax treaty.

A non-Israeli resident who receives dividends from which tax was withheld is generally exempt from the duty to file tax returns in Israel in respect of such income.

For example, under the Convention Between the Government of the United States of America and the Government of Israel with Respect to Taxes on Income, as amended, Israeli withholding tax on dividends paid to a U.S. resident for treaty purposes may not, in general, exceed 25%, or 15% in the case of dividends paid out of the profits of a Benefited Enterprise, subject to certain conditions. Where the recipient is a U.S. corporation owning 10% or more of the outstanding shares of the voting stock of the paying corporation during the part of the paying corporation's taxable year which precedes the date of payment of the dividend and during the whole of its prior taxable year (if any) and not more than 25% of the gross income of the paying corporation for such prior taxable year (if any) consists certain interest or dividends, the Israeli tax withheld may not exceed 12.5%, subject to certain conditions.

Capital gains income taxes applicable to non-Israeli shareholders.

Non-Israeli resident shareholders are generally exempt from Israeli capital gains tax on any gains derived from the sale, exchange or disposition of our Ordinary Shares, provided that such gains were not derived from a permanent establishment or business activity of such shareholders in Israel and if additional conditions are met. However, non-Israeli corporations' shareholders will not be entitled to the foregoing exemptions if an Israeli resident (i) has a controlling interest of more than 25% in such non-Israeli corporation or (ii) is the beneficiary of or is entitled to 25% or more of the revenues or profits of such non-Israeli corporation, whether directly or indirectly.

Regardless of whether shareholders may be liable for Israeli income tax on the sale of our Ordinary Shares, the payment of the consideration may be subject to withholding of Israeli tax at the source. Accordingly, shareholders may be required to demonstrate that they are exempt from tax on their capital gains in order to avoid withholding at source at the time of sale.

Estate and gift tax

Currently, Israeli law does not impose estate or gift taxes.

United States Federal Income Tax Consequences

THE FOLLOWING SUMMARY IS INCLUDED HEREIN FOR GENERAL INFORMATION AND IS NOT INTENDED TO BE, AND SHOULD NOT BE CONSIDERED TO BE, LEGAL OR TAX ADVICE. EACH U.S. HOLDER SHOULD CONSULT WITH HIS OR HER OWN TAX ADVISOR AS TO THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND SALE OF ORDINARY SHARES, INCLUDING THE EFFECTS OF APPLICABLE STATE, LOCAL, FOREIGN OR OTHER TAX LAWS AND POSSIBLE CHANGES IN THE TAX LAWS.

U.S. Federal Income Taxation

On December 22, 2017, the Tax Cuts and Jobs Act of 2017, or TCJA, was signed into law making significant changes to U.S. income tax law, including a corporate tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the mandatory deemed repatriation of cumulative foreign earnings as of December 31, 2017. We do not see a material direct impact on our financials as of December 31, 2017.

Subject to the limitations described in the next paragraph, the following discussion summarizes the material U.S. federal income tax consequences to a “U.S. Holder” arising from the purchase, ownership and sale of the Ordinary Shares. For this purpose, a “U.S. Holder” is a holder of Ordinary Shares that is: (1) an individual citizen or resident of the United States, including an alien individual who is a lawful permanent resident of the United States or meets the substantial presence residency test under U.S. federal income tax laws; (2) a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) or a partnership (other than a partnership that is not treated as a U.S. person under any applicable U.S. Treasury Regulations) created or organized in or under the laws of the United States or the District of Columbia or any political subdivision thereof; (3) an estate, the income of which is subject to U.S. federal income tax regardless of source; (4) a trust if a court within the United States 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; (5) a trust that has a valid election in effect to be treated as a U.S. person to the extent provided in U.S. Treasury regulations; or (6) any person otherwise subject to U.S. federal income tax on a net income basis in respect of the Ordinary Shares, if such status as a U.S. Holder is not overridden pursuant to the provisions of an applicable tax treaty.

This summary is for general information purposes only and does not purport to be a comprehensive description of all of the U.S. federal income tax considerations that may be relevant to a decision to purchase or hold our Ordinary Shares. This summary generally considers only U.S. Holders that will own our Ordinary Shares as capital assets. Except as explicitly discussed below, this summary does not consider the U.S. federal tax consequences to a person that is not a U.S. Holder, nor does it describe the rules applicable to determine a taxpayer's status as a U.S. Holder. This summary is based on the provisions of the Code, final, temporary and proposed U.S. Treasury Regulations promulgated thereunder, administrative and judicial interpretations thereof, and the U.S./Israel Income Tax Treaty, all as in effect as of the date hereof and all of which are subject to change, possibly on a retroactive basis, and all of which are open to differing interpretations. We will not seek a ruling from the U.S. Internal Revenue Service, or the IRS, with regard to the U.S. federal income tax treatment of an investment in our Ordinary Shares by U.S. Holders and, therefore, can provide no assurances that the IRS will agree with the conclusions set forth below.

This discussion does not address all of the aspects of U.S. federal income taxation that may be relevant to a particular shareholder based on such shareholder's particular circumstances and in particular does not discuss any estate, gift, generation-skipping, transfer, state, local or foreign tax considerations. In addition, this discussion does not address the U.S. federal income tax treatment of a U.S. Holder who is: (1) a bank, life insurance company, regulated investment company, or other financial institution or "financial services entity"; (2) a broker or dealer in securities or foreign currency; (3) a person who acquired our Ordinary Shares in connection with employment or other performance of services; (4) a U.S. Holder that is subject to the U.S. alternative minimum tax; (5) a U.S. Holder that holds our Ordinary Shares as a hedge or as part of a hedging, straddle, conversion or constructive sale transaction or other risk-reduction transaction for U.S. federal income tax purposes; (6) a tax-exempt entity; (7) real estate investment trusts; (8) a U.S. Holder that expatriates out of the United States or a former long-term resident of the United States; or (9) a person having a functional currency other than the U.S. dollar. This discussion does not address the U.S. federal income tax treatment of a U.S. Holder that owns, directly or constructively, at any time, Ordinary Shares representing 10% or more of our voting power. Additionally, the U.S. federal income tax treatment of persons who hold Ordinary Shares through a partnership or other pass-through entity are not considered.

You are encouraged to consult your own tax advisor with respect to the specific U.S. federal and state income tax consequences to you of purchasing, holding or disposing of our Ordinary Shares, including the effects of applicable state, local, foreign or other tax laws and possible changes in the tax laws.

Distributions on Ordinary Shares

Subject to the discussion under the heading “Passive Foreign Investment Companies” below, a U.S. Holder, other than certain U.S. Holders that are U.S. corporations, will be required to include in gross income as ordinary income the amount of any distribution paid on Ordinary Shares (including the amount of any Israeli tax withheld on the date of the distribution), to the extent that such distribution does not exceed our current and accumulated earnings and profits, as determined for U.S. federal income tax purposes. The amount of a distribution that exceeds our earnings and profits will be treated first as a non-taxable return of capital, reducing the U.S. Holder’s tax basis for the Ordinary Shares to the extent thereof, and then capital gain. Corporate holders generally will not be allowed a deduction for dividends received. For noncorporate U.S. Holders, to the extent that their total adjusted income does not exceed applicable thresholds, the maximum federal income tax rate for “qualified dividend income” and long-term capital gains is generally 15%. For those noncorporate U.S. Holders whose total adjusted income exceeds such income thresholds, the maximum federal income tax rate for “qualified dividend income” and long-term capital gains is generally 20%. For this purpose, “qualified dividend income” means, inter alia, dividends received from a “qualified foreign corporation.” A “qualified foreign corporation” is a corporation that is entitled to the benefits of a comprehensive tax treaty with the United States which includes an exchange of information program. The IRS has stated that the Israel/U.S. Tax Treaty satisfies this requirement and we believe we are eligible for the benefits of that treaty.

For U.S. Holders that are corporations, the TCJA provides a 100% deduction for the foreign-source portion of dividends received from “specified 10-percent owned foreign corporations” by U.S. corporate holders, subject to a one-year holding period. No foreign tax credit, including Israeli withholding tax (or deduction for foreign taxes paid with respect to qualifying dividends) would be permitted for foreign taxes paid or accrued with respect to a qualifying dividend. Deduction would be unavailable for “hybrid dividends.”

In addition, our dividends will be qualified dividend income if our Ordinary Shares are readily tradable on Nasdaq or another established securities market in the United States. Dividends will not qualify for the preferential rate if we are treated, in the year the dividend is paid or in the prior year, as a PFIC. A U.S. Holder will not be entitled to the preferential rate: (1) if the U.S. Holder has not held our Ordinary Shares or ADRs for at least 61 days of the 121 day period beginning on the date which is 60 days before the ex-dividend date, or (2) to the extent the U.S. Holder is under an obligation to make related payments on substantially similar property. Any days during which the U.S. Holder has diminished its risk of loss on our Ordinary Shares are not counted towards meeting the 61-day holding period. Finally, U.S. Holders who elect to treat the dividend income as “investment income” pursuant to Code section 163(d)(4) will not be eligible for the preferential rate of taxation.

The amount of a distribution with respect to our Ordinary Shares will be measured by the amount of the fair market value of any property distributed, and for U.S. federal income tax purposes, the amount of any Israeli taxes withheld therefrom. (See discussion above under Item 10.E - "Israeli Tax Considerations - Taxation of Our Shareholders - Dividends.") Cash distributions paid by us in NIS will be included in the income of U.S. Holders at a U.S. dollar amount based upon the spot rate of exchange in effect on the date the dividend is includible in the income of the U.S. Holder, and U.S. Holders will have a tax basis in such NIS for U.S. federal income tax purposes equal to such U.S. dollar value. If the U.S. Holder subsequently converts the NIS, any subsequent gain or loss in respect of such NIS arising from exchange rate fluctuations will be U.S. source ordinary exchange gain or loss.

Distributions paid by us will generally be foreign source income for U.S. foreign tax credit purposes. Subject to the limitations set forth in the Code, U.S. Holders, other than certain U.S. Holders that are corporations, may elect to claim a foreign tax credit against their U.S. income tax liability for Israeli income tax withheld from distributions received in respect of the Ordinary Shares. In general, these rules limit the amount allowable as a foreign tax credit in any year to the amount of regular U.S. tax for the year attributable to foreign source taxable income. This limitation on the use of foreign tax credits generally will not apply to an electing individual U.S. Holder whose creditable foreign taxes during the year do not exceed $300, or $600 for joint filers, if such individual's gross income for the taxable year from non-U.S. sources consists solely of certain passive income. A U.S. Holder will be denied a foreign tax credit with respect to Israeli income tax withheld from dividends received with respect to the Ordinary Shares if such U.S. Holder has not held the Ordinary Shares for at least 16 days out of the 31-day period beginning on the date that is 15 days before the ex-dividend date or to the extent that such U.S. Holder is under an obligation to make certain related payments with respect to substantially similar or related property. Any day during which a U.S. Holder has substantially diminished his or her risk of loss with respect to the Ordinary Shares will not count toward meeting the 16-day holding period. A U.S. Holder will also be denied a foreign tax credit if the U.S. Holder holds the Ordinary Shares in an arrangement in which the U.S. Holder's reasonably expected economic profit is insubstantial compared to the foreign taxes expected to be paid or accrued. The rules relating to the determination of the U.S. foreign tax credit are complex, and U.S. Holders should consult with their own tax advisors to determine whether, and to what extent, they are entitled to such credit. U.S. Holders that do not elect to claim a foreign tax credit may instead claim a deduction for Israeli income taxes withheld, provided such U.S. Holders itemize their deductions.

Disposition of Shares

Except as provided under the PFIC rules described below, upon the sale, exchange or other disposition of our Ordinary Shares, a U.S. Holder will recognize capital gain or loss in an amount equal to the difference between such U.S. Holder's tax basis in the sold Ordinary Shares and the amount realized on the disposition of such Ordinary Shares (or its U.S. dollar equivalent determined by reference to the spot rate of exchange on the date of disposition, if the amount realized is denominated in a foreign currency). The gain or loss realized on the sale or exchange or other disposition of Ordinary Shares will be long-term capital gain or loss if the United States Holder has a holding period of more than one year at the time of the disposition.

In general, gain realized by a U.S. Holder on a sale, exchange or other disposition of Ordinary Shares will generally be treated as U.S. source income for U.S. foreign tax credit purposes. A loss realized by a U.S. Holder on the sale, exchange or other disposition of Ordinary Shares is generally allocated to U.S. source income. However, U.S. Treasury Regulations require such loss to be allocated to foreign source income to the extent specified dividends were received by the taxpayer within the 24-month period preceding the date on which the taxpayer recognized the loss. The deductibility of a loss realized on the sale, exchange or other disposition of Ordinary Shares is subject to limitations.

Tax on Net Investment Income

U.S. Holders who are individuals, estates or trusts will generally be required to pay a 3.8% tax on their net investment income (including dividends on and gains from the sale or other disposition of our Ordinary Shares), or in the case of estates and trusts on their net investment income that is not distributed. In each case, the 3.8% Medicare tax applies only to the extent the U.S. Holder's total adjusted income exceeds applicable thresholds.

Passive Foreign Investment Companies.

Special U.S. federal income tax laws apply to a U.S. Holder who owns shares of a corporation that was (at any time during the U.S. Holder's holding period) a PFIC. We would be treated as a PFIC for U.S. federal income tax purposes for any tax year if, in such tax year, either:

- 75% or more of our gross income (including our pro rata share of gross income for any company, U.S. or foreign, in which we are considered to own 25% or more of the shares by value), in a taxable year is passive, or the Income

Test; or

- At least 50% of our assets, averaged over the year and generally determined based upon value (including our pro rata share of the assets of any company in which we are considered to own 25% or more of the shares by value), in a taxable year are held for the production of, or produce, passive income, or the Asset Test.

For this purpose, passive income generally consists of dividends, interest, rents, royalties, annuities and income from certain commodities transactions and from notional principal contracts. Cash is treated as generating passive income.

If we are or become a PFIC, each U.S. Holder who has not elected to treat us as a qualified electing fund by making a "QEF election", or who has not elected to mark the shares to market (as discussed below), would, upon receipt of certain distributions by us and upon disposition of our Ordinary Shares at a gain, be liable to pay U.S. federal income tax at the then prevailing highest tax rates on ordinary income plus interest on such tax, as if the distribution or gain had been recognized ratably over the taxpayer's holding period for the Ordinary Shares. In addition, when shares of a PFIC are acquired by reason of death from a decedent that was a U.S. Holder, the tax basis of such shares would not receive a step-up to fair market value as of the date of the decedent's death, but instead would be equal to the decedent's basis if lower, unless all gain were recognized by the decedent. Indirect investments in a PFIC may also be subject to special U.S. federal income tax rules.

The PFIC taxation regime would not apply to a U.S. Holder who makes a QEF election for all taxable years that such U.S. Holder has held the Ordinary Shares while we are a PFIC, provided that we comply with specified reporting requirements. Instead, each U.S. Holder who has made such a QEF election is required for each taxable year that we are a PFIC to include in income such U.S. Holder's *pro rata* share of our ordinary earnings as ordinary income and such U.S. Holder's *pro rata* share of our net capital gains as long-term capital gain, regardless of whether we make any distributions of such earnings or gain. In general, a QEF election is effective only if we make available certain required information. The QEF election is made on a shareholder-by-shareholder basis and generally may be revoked only with the consent of the IRS. U.S. Holders should consult with their own tax advisors regarding eligibility, manner and advisability of making a QEF election if we are treated as a PFIC.

A U.S. Holder of PFIC shares which are traded on qualifying public markets, including the Nasdaq, can elect to mark the shares to market annually, recognizing as ordinary income or loss each year an amount equal to the difference as of the close of the taxable year between the fair market value of the PFIC shares and the U.S. Holder's adjusted tax basis in the PFIC shares. Losses are allowed only to the extent of net mark-to-market gain previously included income by the U.S. Holder under the election for prior taxable years.

Based on the nature of our business, the projected composition of our income and the projected composition and estimated fair market values of our assets, we likely will be classified as a PFIC. In addition, we may have been a PFIC in prior years and may be a PFIC in the future. U.S. Holders who hold Ordinary Shares during a period when we are a PFIC will be subject to the foregoing rules, even if we cease to be a PFIC, subject to specified exceptions for U.S. Holders who made a QEF or mark-to-market election. U.S. Holders are strongly urged to consult their tax advisors about the PFIC rules, including tax return filing requirements and the eligibility, manner, and consequences to them of making a QEF or mark-to-market election with respect to our Ordinary Shares in the event we that qualify as a PFIC. As with a QEF election, a mark-to-market election is made on a shareholder-by-shareholder basis, applies to all Ordinary Shares held or subsequently acquired by an electing U.S. holder and can only be revoked with consent of the IRS (except to the extent the Ordinary Shares no longer constitute "marketable stock").

Information Reporting and Withholding

A U.S. Holder may be subject to backup withholding (at a rate of 28%) with respect to cash dividends and proceeds from a disposition of Ordinary Shares. In general, back-up withholding will apply only if a U.S. Holder fails to comply with specified identification procedures. Backup withholding will not apply with respect to payments made to designated exempt recipients, such as corporations and tax-exempt organizations. Backup withholding is not an additional tax and may be claimed as a credit against the U.S. federal income tax liability of a U.S. Holder, provided that the required information is timely furnished to the IRS.

Foreign Asset Reporting

Certain U.S. Holders who are individuals may be required to report information relating to an interest in the Ordinary Shares, subject to certain exceptions. U.S. Holders are urged to consult their tax advisors regarding the application of these and other reporting requirements that may apply to their ownership of Ordinary Shares.

Non-U.S. Holders of Ordinary Shares

Except as provided below, an individual, corporation, estate or trust that is not a U.S. Holder generally will not be subject to U.S. federal income or withholding tax on the payment of dividends on, and the proceeds from the disposition of, our Ordinary Shares.

A non-U.S. Holder may be subject to U.S. federal income or withholding tax on a dividend paid on our Ordinary Shares or the proceeds from the disposition of our Ordinary Shares if: (1) such item is effectively connected with the conduct by the non-U.S. Holder of a trade or business in the United States or, in the case of a non-U.S. Holder that is a resident of a country which has an income tax treaty with the United States, such item is attributable to a permanent establishment or, in the case of gain realized by an individual non-U.S. Holder, a fixed place of business in the United States; (2) in the case of a disposition of our Ordinary Shares, the individual non-U.S. Holder is present in the United States for 183 days or more in the taxable year of the sale and other specified conditions are met; (3) the non-U.S. Holder is subject to U.S. federal income tax pursuant to the provisions of the U.S. tax law applicable to U.S. expatriates.

In general, non-U.S. Holders will not be subject to backup withholding with respect to the payment of dividends on our Ordinary Shares if payment is made through a paying agent, or office of a foreign broker outside the United States. However, if payment is made in the United States or by a U.S. related person, non-U.S. Holders may be subject to backup withholding, unless the non-U.S. Holder provides on an applicable Form W-8 (or a substantially similar form) a taxpayer identification number, certifies to its foreign status, or otherwise establishes an exemption. A U.S. related person for these purposes is a person with one or more current relationships with the United States.

The amount of any backup withholding from a payment to a non-U.S. Holder will be allowed as a credit against such holder's U.S. federal income tax liability and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

10.F. Dividends and paying agents

Not applicable.

10.G. Statement by experts

Not applicable.

10.H. Documents on display

We are subject to certain of the information reporting requirements of the Exchange Act. As a foreign private issuer, we are exempt from the rules and regulations under the Exchange Act prescribing 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, with respect to their purchase and sale of our Ordinary Shares. In addition, we are not required to file reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act. However, we are required to file with the SEC, within four months after the end of each fiscal year, an annual report on Form 20-F containing financial statements audited by an independent accounting firm. We publish unaudited interim financial information after the end of each quarter. We furnish this quarterly financial information to the SEC under cover of a Form 6-K.

You may read and copy any document we file with the SEC at its public reference facilities at 100 F Street, NE, Washington, D.C. 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, NE, Washington, D.C. 20549. The SEC also maintains a website that

contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of this website is http://www.sec.gov. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

10.I. Subsidiary information

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

For a discussion related to our market risk, see Item 5 - “Operating and Financial Review and Prospects”.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

We do not have any outstanding American Depositary Shares or American Depositary Receipts.

PART TWO

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

None.

ITEM 15. CONTROLS AND PROCEDURES

(a) Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Mr. Oren Elmaliah, a consultant who performs the functions of our principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2017, or the Evaluation Date. Based on such evaluation, those officers have concluded that, as of the Evaluation Date, our disclosure controls and procedures are effective in recording, processing, summarizing and reporting, on a timely basis, information required to be included in periodic filings under the Exchange Act and that such information is accumulated and communicated to management, including our principal executive and financial officers, as appropriate to allow timely decisions regarding required disclosure.

(b) 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 such term is defined in Rule 13a-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including our Chief Executive Officer and Mr. Oren Elmaliah, a consultant who performs the functions of our principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based principally on the framework and criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission as of the end

of the period covered by this report. Based on that evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2017 at providing 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) Attestation Report of the Registered Public Accounting Firm

This annual report does not include an attestation report of our registered public accounting firm because we are a non-accelerated filer and an emerging growth company.

(d) Changes in Internal Control over Financial Reporting

During the year ended December 31, 2017, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16A. Audit Committee Financial Expert

Our Board of Directors has determined that Michael Burshtine, a member of our Audit Committee, is an audit committee financial expert, as defined under the rules under the Exchange Act, and is independent in accordance with applicable Exchange Act rules and Nasdaq rules.

ITEM 16B. Code of Ethics

We have adopted a written code of ethics that applies to our officers and employees, including our principal executive officer, principal financial officer, principal controller and persons performing similar functions as well as our directors. Our Code of Business Conduct and Ethics is posted on our website at https://bioblastpharma.com. Information contained on, or that can be accessed through, our website does not constitute a part of this annual report on Form 20-F and is not incorporated by reference herein. If we make any amendment to the Code of Business Conduct and Ethics or grant any waivers, including any implicit waiver, from a provision of the code, we will disclose the nature of such amendment or waiver on our website to the extent required by the rules and regulations of the SEC including the instructions to Item 16B of Form 20-F. We have not granted any waivers under our Code of Business Conduct and Ethics.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Kost Forer Gabbay & Kasierer (a Member of EY Global), has served as our principal independent registered public accounting firm for each of the two years ended December 31, 2017 and 2016.

The following table provides information regarding fees paid by us to Kost Forer Gabbay & Kasierer and/or other member firms of EY Global for all services, including audit services, for the years ended December 31, 2017 and 2016:

	Year Ended December 31,	
	2017	2016
Audit fees [1]	$ 80,000	$ 100,000
Audit related fees [2]	23,000	30,000
Tax fees [3]	22,500	48,000
Total	$ 125,500	$ 178,000

(1) Includes professional services rendered in connection with the audit of our annual financial statements and the review of our interim financial statements.

(2) Audit-related fees relate to assurance and associated services that traditionally are performed by the independence auditor including SEC filings, comfort letter, consents and comment letters in connection with regulatory filings.

(3) Includes professional fees related to tax returns and other tax related services.

Pre-Approval of Auditors' Compensation

Our Audit Committee has adopted a pre-approval policy for the engagement of our independent registered public accounting firm to perform certain audit and non-audit services. Pursuant to this policy, which is designed to assure that such engagements do not impair the independence of our auditors, the Audit Committee pre-approves annually a catalog of specific audit and non-audit services in the categories of audit services, audit-related services and tax services that may be performed by our independent registered public accounting firm. If a type of service, that is to be provided by our auditors, has not received such general pre-approval, it will require specific pre-approval by our Audit Committee. The policy prohibits retention of the independent registered public accounting firm to perform the prohibited non-audit functions defined in applicable SEC rules. All of the fees in the table above were either pre-approved according to this policy, or otherwise pre-approved by our Audit Committee or Board of Directors.

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

The Sarbanes-Oxley Act, as well as related rules subsequently implemented by the SEC, requires foreign private issuers, such as us, to comply with various corporate governance practices. In addition, we are required to comply with Nasdaq Stock Market rules. Under those rules, we may elect to follow certain corporate governance practices permitted under the Companies Law in lieu of compliance with corresponding corporate governance requirements otherwise imposed by the Nasdaq Stock Market rules for U.S. domestic issuers.

In accordance with Israeli law and practice and subject to the exemption set forth in Rule 5615 of the Listing Rules of Nasdaq, we have elected to follow the provisions of the Companies Law, rather than the Listing Rules of Nasdaq, with respect to the following requirements:

- *Distribution of periodic reports to shareholders; proxy solicitation.* As opposed to the Listing Rules of Nasdaq, which require listed issuers to make such reports available to shareholders in one of a number of specific manners, Israeli law does not require us to distribute periodic reports directly to shareholders, and the generally accepted business practice in Israel is not to distribute such reports to shareholders but to make such reports available through a public website. In addition to making such reports available on a public website, we currently make our audited financial statements available to our shareholders at our offices and will only mail such reports to shareholders upon request. As a foreign private issuer, we are generally exempt from the SEC's proxy solicitation rules.

- *Quorum*. While the Listing Rules of Nasdaq require that the quorum for purposes of any meeting of the holders of a listed company's common voting stock, as specified in the company's bylaws, be no less than one third of the company's outstanding common voting stock, under Israeli law, a company is entitled to determine in its articles of association the number of shareholders and percentage of holdings required for a quorum at a shareholders meeting. In line with the Listing Rules of Nasdaq, our amended and restated articles of association provide that the quorum required for our general meetings of shareholders consists of at least two shareholders present in person, by proxy or written ballot who holds or represent between them at least one-third of the total outstanding voting rights. A meeting adjourned for lack of a quorum is generally adjourned to the same day in the following week at the same time and place or to a later time/date if so specified in the summons or notice of the meeting. However, unlike the Listing Rules of Nasdaq, at the reconvened meeting, any two or more shareholders present in person or by proxy shall constitute a lawful quorum.

- *Compensation of officers.* Israeli law and our amended and restated articles of association do not require that the independent members of our Board of Directors (or a Compensation Committee composed solely of independent members of our Board of Directors) determine an executive officer's compensation, as is generally required under the Nasdaq Stock Market rules with respect to the Chief Executive Officer and all other executive officers.

Shareholder approval is generally required in the event (i) approval by our Board of Directors and our Compensation Committee is not consistent with our office holders compensation policy, or (ii) compensation required to be approved is that of our Chief Executive Officer or an executive officer who is also the controlling shareholder of us (including an affiliate thereof). Such shareholder approval shall require a majority vote of the shares present and voting at a shareholders meeting, provided either (i) such majority includes a majority of the shares held by non-controlling shareholders who do not have a personal interest in the compensation arrangement that are voted at the meeting, excluding for such purpose any abstentions disinterested majority, or (ii) the total shares held by non-controlling disinterested shareholders voted against the arrangement does not exceed 2% of the voting rights in us.

Additionally, approval of the compensation of a director, including a director who is also an executive officer, shall require a simple majority vote of the shares present and voting at a shareholders meeting, if consistent with our office

holders compensation policy or a special majority as set forth above if the proposed compensation for the director is not consistent with our compensation policy. Our Compensation Committee and Board of Directors may, in special circumstances, approve the compensation of an executive officer (other than a director or a controlling shareholder) despite shareholders' objection, based on specified arguments and taking shareholders' objection into account. Our Compensation Committee may exempt an engagement with a nominee for the position of Chief Executive Officer, who meets the non-affiliation requirements for an external director, as set forth in the Companies Law, from requiring shareholders' approval, if such engagement is consistent with our office holders compensation policy and our Compensation Committee determines based on specified arguments that presentation of such engagement to shareholders' approval is likely to prevent such engagement.

A director or executive officer may not be present when the Compensation Committee or Board of Directors of a company discusses or votes upon the terms of his or her compensation, unless the Chairman of the Compensation Committee or Board of Directors (as applicable) determines that he or she should be present to present the transaction that is subject to approval.

- *Shareholder approval.* We will seek shareholder approval for all corporate actions requiring such approval under the requirements of the Companies Law, rather than seeking approval for corporation actions in accordance with Nasdaq Listing Rule 5635. In particular, under this Nasdaq rule, shareholder approval is generally required for: (i) an acquisition of shares/assets of another company that involves the issuance of 20% or more of the acquirer's shares or voting rights or if a director, officer or 5% shareholder has greater than a 5% interest in the target company or the consideration to be received; (ii) the issuance of shares leading to a change of control; (iii) adoption/amendment of equity compensation arrangements; and (iv) issuances of 20% or more of the shares or voting rights (including securities convertible into, or exercisable for, equity) of a listed company via a private placement (and/or via sales by directors/officers/5% shareholders) if such equity is issued (or sold) at below the greater of the book or market value of shares. By contrast, under the Companies Law, shareholder approval is required for, among other things: (i) transactions with directors concerning the terms of their service or indemnification, exemption and insurance for their service (or for any other position that they may hold at a company), for which approvals of the Compensation Committee, Board of Directors and shareholders are all required, (ii) extraordinary transactions with controlling shareholders of publicly held companies, which require the special approval described below under "Approval of Related Party Transactions under Israeli Law - Disclosure of personal interests of controlling shareholders", and (iii) terms of employment or other engagement of the controlling shareholder of the company or such controlling shareholder's relative, which require the special approval described below under "Approval of Related Party Transactions under Israeli Law - Disclosure of personal interests of controlling shareholders". In addition, under the Companies Law, a merger requires approval of the shareholders of each of the merging companies.

Approval of Related Party Transactions under Israeli Law

Disclosure of personal interests of a controlling shareholder and approval of transactions

The Companies Law also requires that a controlling shareholder promptly disclose to the company any personal interest that he or she may have and all related material information or documents relating to any existing or proposed transaction by the company. A controlling shareholder's disclosure must be made promptly and in any event no later than the first meeting of the Board of Directors at which the transaction is considered. Extraordinary transactions with a controlling shareholder or in which a controlling shareholder has a personal interest, including a private placement in which a controlling shareholder has a personal interest, and the terms of engagement of the company, directly or indirectly, with a controlling shareholder or a controlling shareholder's relative (including through a corporation controlled by a controlling shareholder), regarding the company's receipt of services from the controlling shareholder, and if such controlling shareholder is also an office holder of the company, regarding his or her terms of employment, require the approval of each of (i) the Audit Committee or the Compensation Committee with respect to the terms of the engagement of the company, (ii) the Board of Directors and (iii) the shareholders, in that order. In addition, the shareholder approval must fulfill one of the following requirements:

- a majority of the shares held by shareholders who have no personal interest in the transaction and are voting at the meeting must be voted in favor of approving the transaction, excluding abstentions; or

- the shares voted by shareholders who have no personal interest in the transaction who vote against the transaction represent no more than 2.0% of the voting rights in the company.

In addition, any extraordinary transaction with a controlling shareholder or in which a controlling shareholder has a personal interest with a term of more than three years requires the abovementioned approval every three years, however, such transactions not involving the receipt of services or compensation can be approved for a longer term, provided that the Audit Committee determines that such longer term is reasonable under the circumstances.

The Companies Law requires that every shareholder that participates, in person, by proxy or by voting instrument, in a vote regarding a transaction with a controlling shareholder, must indicate in advance or in the ballot whether or not that shareholder has a personal interest in the vote in question. Failure to so indicate will result in the invalidation of that shareholder's vote.

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

PART THREE

ITEM 17. FINANCIAL STATEMENTS

Not applicable.

ITEM 18. FINANCIAL STATEMENTS

The following financial statements, and the related notes thereto, and the Reports of Independent Public Accountants are filed as a part of this annual report.

ITEM 19. EXHIBITS

EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
1.1	Amended and Restated Articles of Association of the Company, filed as Exhibit 3.2 to Form F-1/A filed on July 8, 2014 (File No. 333-193824) and incorporated herein by reference.
4.1	Bioblast Pharma Ltd. 2013 Incentive Option Plan, as amended, filed as Exhibit 4.1 to Form 20-F filed on March 29, 2016 (File No. 001-36578), and incorporated herein by reference.
4.2	Form of Indemnification Agreement, filed as Exhibit 10.4 to Form F-1/A filed on April 8, 2014 (File No. 333-193824) and incorporated herein by reference.
4.3	Bioblast Pharma Ltd. Compensation Policy for Company Office Holders, included in Exhibit 99.1 to Form 6-K filed on March 31, 2015 (File No. 001-36578), and incorporated herein by reference.
4.4	Form of Ordinary Share Purchase Warrant issued to investors on March 22, 2016, filed as Exhibit 4.1 to Form 6-K filed on March 18, 2016 (File No. 001-36578), and incorporated herein by reference.
12.1	Certification of the Chief Executive Officer pursuant to rule 13a-14(a) of the Securities Exchange Act of 1934.
12.2	Certification of the Principal Financial Officer pursuant to rule 13a-14(a) of the Securities Exchange Act of 1934.
13.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. 1350, furnished herewith.
13.2	Certification of the Principal Financial Officer pursuant to 18 U.S.C. 1350, furnished herewith.
15.1	Consent of Kost, Forer, Gabbay & Kasierer, a member of EY Global
101	The following materials from our Annual Report on Form 20-F for the year ended December 31, 2017 formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Changes in Shareholders' Equity, (iv) the Consolidated Statements of Cash Flows and (v) the Consolidated Notes to Financial Statements, tagged as blocks of text and in detail.

SIGNATURES

Bioblast Pharma Ltd. 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.

Bioblast Pharma Ltd.

By: /s/ Fredric D. Price
Fredric D. Price
Executive Chairperson and Chief Executive Officer
Date: April 23, 2018

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BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

CONSOLIDATED FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2017

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of

BIOBLAST PHARMA LTD.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Bioblast Pharma Ltd. and its subsidiary (the "Company") as of December 31, 2017 and 2016 and the related consolidated statements of operations, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2017, and 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 at December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

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 from operations, and has stated that substantial doubt exists about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These 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 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 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Kost Forer Gabbay & Kasierer,
A Member of Ernst & Young Global

We have served as the Company's auditor since 2013.

Tel-Aviv, Israel
April 23, 2018

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

CONSOLIDATED BALANCE SHEETS
U.S. dollar in thousands, except share data

	December 31,	
	2017	2016
Assets		
CURRENT ASSETS:		
Cash and cash equivalents	$3,526	$6,871
Short-term bank deposits	-	3,007
Receivables and prepaid expenses	96	663
Total current assets	3,622	10,541
LONG TERM ASSETS:		
Long-term assets	-	18
Property and equipment, net	-	71
Total long-term assets	-	89
Total Assets	$3,622	$10,630
Liabilities and shareholders' Equity		
CURRENT LIABILITIES		
Trade payables	$19	$700
Other accounts payable	441	1,231
Total current liabilities	460	1,931
Shareholders' equity:		
Ordinary shares of NIS 0.05 par value - 10,000,000 shares authorized at December 31, 2017 and 2016; 3,342,393 issued and outstanding shares at December 31, 2017 and 3,278,487 issued and outstanding shares at December 31, 2016, respectively	45	45
Additional paid-in capital	48,871	48,463
Accumulated deficit	(45,754)	(39,809)
Total shareholders' equity	3,162	8,699
Total liabilities and shareholders' equity	$3,622	$10,630

The accompanying notes are an integral part of the consolidated financial statements.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

CONSOLIDATED STATEMENTS OF OPERATIONS
U.S. dollar in thousands, except share and per share data

	Year ended December 31,		
	2017	2016	2015
Research and development	$2,517	$8,881	$7,694
Pre commercialization	479	1,085	829
General and administrative	2,959	5,900	6,953
Total operating expenses	5,955	15,866	15,476
Loss from operations	(5,955)	(15,866)	(15,476)
Financial income, net	38	60	135
Loss before taxes on income	(5,917)	(15,806)	(15,341)
Taxes on income	(28)	(216)	(24)
Net loss	$(5,945)	$(16,022)	$(15,365)
Basic and diluted net loss per share	$(1.79)	$(5.03)	$(5.40)
Weighted average number of Ordinary shares used in computing basic and diluted net loss per share	3,313,635	3,188,433	2,846,096

The accompanying notes are an integral part of the consolidated financial statements.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
U.S. dollar in thousands except share and per share data

	Ordinary shares		Additional paid-in	Accumulated	Total shareholders'
	Number	Amount	capital	deficit	equity
Balance as of January 1, 2015	2,846,229	39	39,057	(8,422)	30,674
Share based compensation, net	-	-	2,623	-	2,623
Net loss	-	-	-	(15,365)	(15,365)
Balance as of December 31, 2015	2,846,229	39	41,680	(23,787)	17,932
Issuance of Ordinary shares and warrants, net	432,258	6	6,083	-	6,089
Share based compensation, net	-	-	700	-	700
Net loss	-	-	-	(16,022)	(16,022)
Balance as of December 31, 2016	3,278,487	45	48,463	(39,809)	8,699
Exercise of stock options	63,906	*)	*)	-	-*)
Share based compensation	-	-	408	-	408
Net loss	-	-	-	(5,945)	(5,945)
Balance as of December 31, 2017	3,342,393	45	48,871	(45,754)	3,162

*) Represents an amount lower than $1.

The accompanying notes are an integral part of the consolidated financial statements.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS
U.S. dollars in thousands

	Year Ended December 31,		
	2017	2016	2015
Cash flows from operating activities:			
Net loss	$(5,945)	$(16,022)	$(15,365)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	64	38	17
Share-based compensation, net	408	700	2,623
Interest on short-term deposit	7	39	(18)
Changes in operating assets and liabilities:			
Decrease (increase) in receivables and prepaid expenses	567	399	(786)
Decrease (increase) in long-term deposit	18	13	(24)
Increase (decrease) in trade payables	(681)	(712)	127
Increase (decrease) in other accounts payable	(790)	129	107
Increase (decrease) in accrued severance pay	-	(70)	70
Net cash used in operating activities	(6,352)	(15,486)	(13,249)
Cash flow from investing activities:			
Change in short term bank deposits	3,000	9,000	10,000
Proceeds from sale of property and equipment	9	-	-
Purchase of property and equipment	(2)	(18)	(48)
Net cash provided by (used in) investing activities	3,007	8,982	9,952
Cash flow from financing activities:			
Proceeds from exercise of options	*) -	-	-
Issuance of shares, net	-	6,089	-
Net cash provided by financing activities	*) -	6,089	-
Decrease in cash and cash equivalents	(3,345)	(415)	(3,297)
Cash and cash equivalents at the beginning of the period	6,871	7,286	10,583
Cash and cash equivalents at the end of the period	$3,526	$6,871	$7,286
Supplemental disclosures of cash flow information:			
Cash paid for taxes	$32	$210	$4
Cash received for interest	$43	$120	$162

*) Represents an amount lower than $1.

The accompanying notes are an integral part of the consolidated financial statements.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
U.S. dollar in thousands, except share and per share data

1. Nature of business

Bioblast Pharma Ltd. (the "Parent") was incorporated in Israel and commenced its operations on January 22, 2012. In January 2015, Bioblast Pharma Inc. was established in the state of Delaware as a wholly owned subsidiary (the "Subsidiary"). The Parent and the Subsidiary (together the "Company") are a clinical-stage biotechnology company committed to developing clinically meaningful therapies for patients with rare and ultra-rare genetic diseases. The Company focuses on trehalose, a therapeutic platform that potentially offers solutions for several diseases that share a common pathophysiological mechanism, which are the functional changes that accompany a particular syndrome or disease. The Company focuses on diseases with severe and debilitating manifestations, where the unmet medical need is clear, the biological mechanism of action is understood, and for which there is no satisfactory treatment. Since inception in 2012, the Company has been engaged in the development of potential treatments using trehalose for two diseases, oculopharyngeal muscular dystrophy ("OPMD") and spinocerebellar ataxia type 3 (SCA3; Machado Joseph disease). The Company's ordinary shares ("Ordinary shares") are traded on the Nasdaq Capital Market.

The Company is currently developing trehalose, which is the only product candidate that it currently pursues. There can be no assurance that the Company's research and development activities with respect to trehalose will be successfully completed, that adequate protection for the Company's intellectual property will be obtained, that trehalose or any other future products the Company may developed will obtain required regulatory approval or that any approved products will be commercially viable. Even if the Company's development efforts are successful, it is uncertain when, if ever, the Company will generate significant product sales. The Company operates in an environment of rapid technological change and substantial competition from pharmaceutical and biotechnology companies.

On August 4, 2017, the Company announced a plan to devote all of its resources to exploring merger opportunities and selecting potential development and commercial partners for its trehalose therapeutic platform. Accordingly the number of employees was reduced to three, including the Chief Executive Officer, the Chief Medical Officer and the Chief Financial Officer, all of whom are assisting JSB-Partners, LP, which is the Company's exclusive advisor to find a third party for partnership or merger opportunities. In addition, a comprehensive review of operations identified expenses that have been eliminated or cut back across-the-board. Effective as of August 31, 2017, as part of the continuing effort to reduce expenditures, the Company announced that Colin Foster and Ralf Rosskamp, MD, submitted their resignations as members of the Board of Directors and that the Company's Chief Financial Officer transitioned to a part-time basis through November 30, 2017, after which his employment was terminated. In addition, the Company decided to terminate its current leases and to write off its fixed assets (see Note 4).

The Company has not generated revenue from the sale of any product and does not expect to generate significant revenue unless and until it obtains marketing approval, and successfully commercializes its products. Since its inception, the Company has financed its operations through the issuance of preferred shares, its initial public offering (the “IPO”) and a subsequent registered direct offering. The Company recorded a net loss of $5,945 during the year ended December 31, 2017 and as of December 31, 2017, the Company had an accumulated deficit of $45,754. As of December 31, 2017, the Company’s cash and cash equivalents were $3,526. Additional funding beyond its existing cash resources will be required in order to cover the total cost of the Company’s planned Phase 2b study in OPMD patients and the underlying expense of the Company’s operations while the study is ongoing. The Company plans to continue to fund its losses from operations and capital funding needs through the issuance of equity and/or debt or through collaborations or license agreements with other companies. Equity or debt financing may not be available on a timely basis on terms acceptable to the Company, or at all. If the Company is not able to secure adequate additional funding, the Company may be forced to make reductions in spending, extend payment terms with suppliers, liquidate assets where possible, or suspend or curtail planned programs. Any of these actions could materially harm the Company’s business, results of operations and future prospects.

The Company’s ability to continue to operate is dependent upon its ability to raise additional financing or to execute its plan for merger opportunities and selecting potential development and commercial partners for its trehalose therapeutic platform . These factors raise substantial doubt about the Company’s ability to continue as a going concern. The financial statements as of December 31, 2017, do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
U.S. dollar in thousands, except share and per share data

2. Summary of significant accounting policies

Basis of presentation

The accompanying consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (the "U.S. GAAP") and are stated in U.S. dollars. The consolidated financial statements have been prepared on the basis of continuity of operations, realization of assets and the satisfaction of liabilities in the ordinary course of business.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. The actual results may ultimately differ from these aforementioned estimates and assumptions. The Company's management believes that the estimates and assumptions used are reasonable and based upon information available at the time they were made.

Principles of consolidation

The consolidated financial statements include the accounts of Bioblast Pharma Ltd. and its Subsidiary. All significant intercompany balances and transactions have been eliminated in consolidation.

Financial statements in U.S. dollars

The Company finances its operation primarily in U.S. dollars, and a significant part of the Company's expenses are denominated and determined in U.S. dollars. The Company's management believes that the U.S dollar is the currency of the primary economic environment in which it operates and expects to continue to operate in the foreseeable future. Thus, the functional currency of the Company is the U.S. dollar.

The Parent and the Subsidiary's transactions and balances denominated in U.S. dollars are presented at their original amounts. Non-dollar transactions and balances have been remeasured to U.S. dollars in accordance with Accounting Standards Codification ("ASC") 830, "Foreign Currency Matters", of the Financial Accounting Standards Board (the "FASB"). All transaction gains and losses from remeasurement of monetary balance sheet items denominated in non-dollar currencies are reflected in the statements of operations as financial income or expenses, as appropriate.

Cash equivalents

All highly liquid investments that are readily convertible to cash, are not restricted to withdrawal or use, and of which included a period to maturity that did not exceed three months at time of deposit, are considered cash equivalents.

Short-term bank deposits

Short-term bank deposits are deposits with maturities of more than three months but less than one year. Short–term bank deposits are presented at their amortized cost, including accrued interest, which approximates fair value. As of December 31, 2016, the Company's bank deposits were in U.S. dollars and bore interest at a rate of 1.25% per-annum.

Segment information

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, the Company's Chief Executive Officer, in making decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business in one operating segment.

Concentrations of credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents and short-term bank deposits. Cash and cash equivalents and short-term bank deposits are invested in major banks in Israel and the United States. Generally, these deposits may be redeemed upon demand and therefore bear minimal risk. The Company has no off-balance-sheet concentration of credit risk such as foreign exchange contracts, option contracts or other foreign hedging arrangements.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
U.S. dollar in thousands, except share and per share data

Fair value of financial instruments

The Company has no financial instruments that are measured at fair value. The carrying amounts of cash and cash equivalents, short-term bank deposits, receivables and prepaid expenses, trade payables and other accounts payable, approximate their fair value due to the short-term maturities of such instruments.

Property and equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets at the following rates:

	%
Computers and software	33
Electronic equipment	15
Office furniture and equipment	6

Leasehold improvements are depreciated over the shorter of the estimated useful life or the lease period.

Long-term assets

Long-term assets include long-term deposits related to motor vehicles under operating leases, presented at their cost and deposits to secure credit line for the Company's employee's credit cards. In accordance with FASB Accounting Standards Update ("ASU") No. 2015-17, long-term assets also include deferred tax assets.

Impairment of long-lived assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted cash flows expected to be generated by the

assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. In 2017 the Company decided to terminate its current leases and to write down its fixed assets (see Note 4).

Contingent liabilities

In the normal course of business, the Company is subject to proceedings, lawsuits, and other claims and assessments. The Company assesses the likelihood of any adverse judgments or outcomes to these matters as well as potential ranges of probable losses. A determination of the amount of reserves required, if any, for these contingencies is made after careful analysis of each individual issue. The required reserves may change in the future due to new developments in each matter or changes in approach such as a change in settlement strategy in dealing with these matters. The Company records charges for the losses it anticipates incurring in connection with litigation and claims against it when it concludes a loss is probable and the Company can reasonably estimate these losses. During the years ended December 31, 2017, 2016, and 2015, the Company was not subject to any material litigation or claims and assessments.

Warrants

Warrants to purchase Ordinary shares issued in connection with an offering of Ordinary shares are classified as a component of shareholders' equity because they are free standing financial instruments that are legally detachable, separately exercisable, do not embody an obligation for the Company to repurchase its own shares, and permit the holders to receive a fixed number of Ordinary shares upon exercise. In addition, the Ordinary shares warrants require physical settlement and do not provide any guarantee of value or return. Ordinary shares warrants are initially recorded at their relative fair value and are not subsequently remeasured.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
U.S. dollar in thousands, except share and per share data

Share-based compensation

The Company applies ASC 718 and ASC 505-50 "Equity Based Payments to Non-Employees" ("ASC 505-50") with respect to options and warrants issued to non-employee consultants. The Company accounts for all share-based compensation granted to employees and non-employees using a fair value method. Share-based compensation is measured at the grant date fair value of employees' and directors' Ordinary share option grants and is recognized over the requisite service period of the awards, usually the vesting period, on the graded vesting attribution method. The expenses are adjusted for actual forfeitures on a quarterly basis. Share-based compensation awards to non-employees are subject to revaluation over their vesting terms.

For modification of share compensation awards, the Company records the incremental fair value of the modified award as share-based compensation on the date of modification for vested awards or over the remaining vesting period for unvested awards. The incremental compensation is the excess of the fair value of the modified award on the date of modification over the fair value of the original award immediately before the modification.

The Company recognizes, as expense, the estimated fair value of all share-based payments to employees which is determined using the Black-Scholes option pricing model using the graded vesting attribution approach over the vesting period of the award. In periods that the Company grants Ordinary share options, fair value assumptions are based on volatility, interest, dividend yield, and expected term over which the Ordinary share options will be outstanding. The computation of expected volatility is based on an average historical share price volatility based on an analysis of reported data for a peer group of comparable publicly traded companies, which were selected based upon industry similarities. The interest rate for periods within the expected term of the award is based on the U.S. Treasury risk-free interest rate in effect at the time of grant. The expected lives of the options were estimated using the simplified method.

Income *taxes*

The consolidated financial statements reflect provisions for Israeli, U.S. federal and state income taxes. Deferred tax assets and liabilities represent future tax consequences of temporary differences between the consolidated financial statement carrying amounts and the tax basis of assets and liabilities and for loss carryforwards using enacted tax rates expected to be in effect in the years in which the differences reverse. A valuation allowance is recorded when it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company determines whether it is more likely than not that a tax position will be sustained upon examination. If it is not more likely than not that a position will be sustained, none of the benefit attributable to the position is recognized. The tax benefit to be recognized for any tax position that meets the more-likely-than-not recognition threshold is calculated as the largest amount that is more than 50% likely of being realized upon resolution of the contingency. The Company accounts for interest and penalties related to uncertain tax positions as part of its tax expenses.

Basic and diluted loss per share

The Company computes basic loss per share attributable to Ordinary shareholders by dividing net loss attributable to Ordinary shareholders by the weighted average number of Ordinary share outstanding for the period. The Company computes diluted loss per Ordinary share after giving consideration to all potentially dilutive Ordinary shares, including Ordinary share options and warrants outstanding during the period except where the effect of such non-participating securities would be antidilutive.

Since the Company reported net loss attributable to Ordinary shareholders for the years ended December 31, 2017, 2016 and 2015, basic and diluted net loss per share attributable to Ordinary shareholders are the same as basic net loss per share attributable to Ordinary shareholders for those periods. All Ordinary share warrants and Ordinary share options have been excluded from the computation of diluted weighted-average shares outstanding because such securities would have an antidilutive impact due to net losses reported for the years ended December 31, 2017, 2016 and 2015.

Adoption of new standards

In November 2015, the FASB issued ASU No. 2015-17 related to balance sheet classification of deferred taxes. The new guidance requires that deferred tax assets and liabilities to be classified as noncurrent in a classified statement of financial position.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
U.S. dollar in thousands, except share and per share data

In March 2016, the FASB issued ASU 2016-09, Improvements to Employee Share-Based Payment Accounting. The new guidance will require all implications on income tax caused by awards to be recognized in the income statement when the awards vest or are settled. It will allow an employer to repurchase more of an employee's shares than it can today for tax withholding purposes without triggering liability accounting. It also will allow an employer to make a policy election to account for forfeitures as they occur. The Company elected to adopt ASU 2016-09 in 2016.

In May 2017, the FASB issued ASU 2017-09, "Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting." ASU 2017-09 was issued to provide clarity and reduce both (1) diversity in practice and (2) cost and complexity when applying the guidance provided in Topic 718 to a change in the terms or conditions of a share-based payment award. ASU 2017-09 provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting under Topic 718. The amendments provided in ASU 2017-09 are effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. Early adoption is permitted, including its adoption in any interim period. The amendments provided in ASU 2017-09 should be applied prospectively to an award modified on or after the adoption date. The adoption of this ASU will not have a material effect on our consolidated financial statements.

3. Receivables and prepaid expenses

	December 31,	
	2017	2016
	U.S. dollars in thousands	
Government authorities	$ 28	$ 52
Prepaid expenses	68	611
	$ 96	$ 663

4. Property and equipment, net

	December 31,	
	2017	2016
	U.S. dollars in thousands	

Cost:		
Computers and software	$ -	$ 50
Electronic equipment	-	20
Office furniture and equipment	-	39
Leasehold improvements	-	2
	$ -	$ 111
Accumulated depreciation:	-	40
Depreciated cost	$ -	$ 71

Depreciation expenses for the years ended December 31, 2017, 2016 and 2015 were $12, $25 and $17, respectively.

The Company terminated its lease facilities, include the workforce and accordingly write off its property and equipment in the amount of $52, which was recorded in the general and administrative expenses in the consolidated statements of operation.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
U.S. dollar in thousands, except share and per share data

5. Other accounts payable

	December 31,	
	2017	2016
	U.S. dollars in thousands	
Employees and payroll accruals	$ 38	$ 677
Accrued expenses	403	554
	$ 441	$ 1,231

6. License agreements

The Company entered into a research and exclusive license agreement with Yissum Research Development Company of the Hebrew University in Jerusalem Ltd. (“Yissum”), for the use, development and commercialization of TAT-MTS-Protein for protein replacement in mitochondrial diseases. The consideration to Yissum was composed of a tiered low single digit royalty on net sales and a sublicense fee that will not exceed twenty (20) percent of the sublicense consideration, however, if the sublicense arises from the sales of a product, the sublicense fee shall not be less than a low single digit percent of the gross sales of such product. On September 30, 2016, the Company terminated the license agreement with Yissum and surrendered all rights and titles to the licensed product and related data.

The Company entered into an exclusive license agreement with Ramot at Tel Aviv University Ltd. (“Ramot”) for the use, development and commercialization of a read-through platform. The consideration to Ramot was composed of a tiered low single digit royalty on net sales and a sublicense fee that in the single digit percent range of payments or other consideration that the Company receives in connection with a sublicense. On November 29, 2016, the Company executed a mutual termination agreement with Ramot pursuant to which it surrendered all rights and titles to the platform and related data. In addition, pursuant to the mutual termination agreement and under certain conditions the Company may be entitled to future royalty payments.

7. Commitments and contingent liabilities

The Parent entered into an operating lease agreement for its facilities in Israel until June 2020, while maintaining the right to terminate the lease agreement under certain conditions during its term. To secure its obligation under the lease agreement, the Parent provided bank guarantees in the amount of $26. The lease expenses for those facilities for the years ended December 31, 2017, 2016 and 2015 amounted to $65, $100, and $104, respectively. On August 31, 2017, the Parent terminated the lease and vacated the facilities. The Company paid $16 as a penalty for early termination and the bank guarantee was canceled.

The Subsidiary entered into short-term operating lease agreements for office facilities in New Haven, CT and in Doylestown, PA. The combined lease expenses for those facilities for the years ended December 31, 2016 and 2015 amounted to $80 and $36, respectively. The Subsidiary terminated both lease agreements during October 2016.

The Parent entered into an operating lease agreement for certain vehicles provided to its employees until 2019. To secure its obligation under the lease agreement, the Parent provided a cash deposit in the total amount of $3. The vehicles lease expenses for the years ended December 31, 2017, 2016 and 2015 amounted to $47, $46 and $43, respectively.

In May 2017, the Company engaged JSB-Partners, LP, which is the Company’s exclusive advisor for identifying a third party for partnership or merger opportunities. The Company has agreed to pay a monthly retainer fee (during the term of the agreement). During 2017, the Company paid $160, providing that such agreement terminates within one year unless mutually agreed to extend. In addition, the Company agreed to pay JSB-Partners, LP, a percentage of the consideration of any transaction arising from this engagement.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
U.S. dollar in thousands, except share data and per share data

8. Ordinary shares

On March 22, 2016, the Company completed a registered direct offering of 432,258 Ordinary shares at a price of $15.50 per share for a total net consideration of $6,089, after deducting underwriting commissions and other issuance expenses.

On September 18, 2017 the shareholders of the Company approved a reverse split of the Company's share capital at a ratio of five to one, so each five Ordinary shares, par value NIS 0.01 per share, shall be consolidated into one Ordinary share, par value NIS 0.05. All references to Ordinary shares amounts have been retroactively restated to reflect this reverse split.

9. Warrants

The following Ordinary shares warrants were issued by the Company:

Issued in connection with:	Shares of Ordinary Shares Underlying Warrants	Exercise Price Per Share	Issuance Date	Expiration Date
Registered direct offering of Ordinary shares	216,129	$ 22.50	March 22, 2016	September 22, 2021
Total	216,129			

The Ordinary shares warrants are exercisable at any time following September 22, 2016 and through their expiration dates

10. Share option plans

In December 2013, the Company adopted the 2013 Incentive Option Plan (the "2013 Plan"), which provided for the grant of incentive Ordinary share options and nonqualified Ordinary share options to employees, directors, and non-employees of the Company. As of December 31, 2017, the 2013 Plan included a total of 669,194 options to purchase Ordinary shares. Option awards generally expire 10 years from the grant date and generally vest over four years; however, vesting conditions can vary at the discretion of the Company's board of directors (the "Board"). As of December 31, 2017, 331,841 Ordinary shares were available for future grants under the 2013 Plan.

The fair value of each Ordinary share option issued was estimated at the date of grant using the following weighted-average assumptions:

	Year ended December 31,		
	2017	2016	2015
Risk-free interest rate	-	1.2%-2.1%	1.3% -1.9%
Expected option term (years)	-	5.0-7.0	5.1-7.0
Expected price volatility	-	79.3%-90.6%	70.4%-83.7%
Dividend yield	-	0%	0%

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

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U.S. dollar in thousands, except share data and per share data

A summary of option activity as of December 31, 2017, and the year then ended is presented below:

	Number of Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding, January 1, 2017	530,356	$ 17.05	7.63	$ 419,840
Exercised	(63,906)	*) -		
Forfeited/Expired	(193,005)	$ 29.30	-	-
Outstanding, December 31, 2017	273,445	$ 12.40	7.63	$ 38,079
Exercisable, December 31, 2017	256,099	$ 17.67	6.07	$ 38,079
Vested and expected to vest, December 31, 2017	273,445	$ 12.40	7.63	$ 38,079

*) Represents an amount lower than $1.

The weighted-average grant date per-share fair value of Ordinary shares options granted 2016 and 2015 were $12.40, $1.56, and $4.16, respectively did not grant any options in 2017. As of December 31, 2017, there was $424 of unrecognized compensation costs related to Ordinary share options, which is expected to be recognized over a weighted-average period of 0.93 years.

Share-based compensation expense is classified in the consolidated statements of operations as follows:

	December 31,		
	2017	2016	2015

U.S. dollars in thousands

Research and development expenses	$198	$531	$381
Pre-commercialization expenses	(11)	(147)	159
General and administrative expenses	221	316	2,083
	$408	$700	$2,623

During 2016, and primarily as result of the workforce reductions discussed in Note 13, 1,110,137 Ordinary share options were forfeited. As a result of said forfeitures $1,424 of previously recognized share based compensation expenses were reversed, of which $130, $287 and $1,007, were recorded in the research and development expenses, pre-commercialization expenses and general and administrative expenses, respectively.

During 2017, and primarily as a result of the workforce reductions discussed in Note 13, 193,004 Ordinary share options were forfeited. As a result of said forfeitures, $144 of previously recognized share based compensation expenses were reversed, of which $107, $11 and $26, were recorded in the research and development expenses, pre-commercialization expenses and general and administrative expenses, respectively.

During 2017 and 2016, the Company modified the terms of certain outstanding Ordinary shares options by extending exercisability of the options through the first anniversary of termination of employment. In addition, during 2015, the Company modified terms of certain outstanding Ordinary shares options by (a) extending exercisability of the options through the first anniversary of termination of employment, and (b) accelerating the vesting of Ordinary shares options upon termination of employment. The incremental compensation expense, resulting from comparing the fair value of Ordinary shares options immediately before and immediately after the modifications, for the year ended December 31, 2015 totaled $46 classified as general and administrative expense in the accompanying consolidated financial statements. There was no incremental compensation related to the modifications in 2017 and 2016.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

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U.S. dollar in thousands, except share data and per share data

11. Income taxes

Loss before provision for income taxes consists of the following:

	December 31,		
	2017	2016	2015
	U.S. dollars in thousands		
Domestic (Israel)	$5,582	$15,765	$13,388
Foreign (U.S.)	335	41	1,953
	$5,917	$15,806	$15,341

The components of income tax provision consist of the following:

	December 31,		
	2017	2016	2015
	U.S. dollars in thousands		
Current Provision for income taxes:			
Domestic (Israel)	$ -	$ 5	$ -
Foreign (U.S.)	39	166	24
Total current provision for income taxes	$ 39	$ 171	$ 24
Previous years adjustments – foreign	(16)	50	-
Deferred tax benefit – foreign	5	(5)	-
Total provision for income tax	$ 28	$ 216	$ 24

The main reconciling item between the statutory tax rate of the Company and the effective tax rate are its losses in Israel, amounting to $ 5,582, $ 15,765 and $ 13,338 for the years ended December 31, 2017, 2016 and 2015, respectively, for which valuation allowance was provided in each year.

The Parent is taxed under the Israeli tax law at the corporate tax rate of 24%, 25% and 26.5% for the years 2017, 2016 and 2015, respectively, and its current corporate tax rate was reduced to 23% effective as from January 1, 2018.

The Subsidiary is taxed under U.S. tax law. The federal corporate tax rate (progressive) is up to 24% excluding state tax. State tax rates vary and are dependent on the state in which the Subsidiary conducts its business.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company’s deferred tax assets are as follows:

	December 31,	
	2017	2016
	U.S. dollars in thousands	
Operating loss roll forward	$ 8,459	$ 5,685
Reserves and allowances	1,018	1,956
Net deferred tax asset before valuation allowance	9,477	7,641
Valuation allowance	(9,477)	(7,636)
	$ -	$ 5

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

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U.S. dollar in thousands, except share data and per share data

When realization of a deferred tax asset is more likely than not to occur, the benefit related to the deductible temporary differences attributable to operations is recognized as a reduction of income tax expense. Valuation allowances are provided against deferred tax assets when, based on all available evidence, it is considered more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. The Company cannot be certain that future Israeli taxable income will be sufficient to realize its deferred tax assets. Accordingly, a full valuation allowance has been provided against its Israeli net deferred tax assets. The Company continues to monitor the need for a valuation allowance based on the profitability of its future operations.

Both the Parent and the Subsidiary have yet to receive a final tax assessment in accordance with Israeli tax law.

The Parent has accumulated losses for tax purposes as of December 31, 2017, in the amount of $36,778, which may be carried forward and offset against taxable income in the future for an indefinite period.

The Company files income tax returns in Israel, in the United States and in various U.S. states. The associated tax filings remain subject to examination by applicable tax authorities for a certain length of time following the tax year to which those filings relate. In Israel and the United States all tax years since inception remain subject to examination by the applicable taxing authorities as of December 31, 2017.

As of December 31, 2017, the Company provided a liability of $24, for uncertain tax positions related to various income tax matters from prior years, which was classified as other long-term liabilities. These uncertain tax positions would affect the Company’s effective tax rate, if recognized. The Company does not expect that the amounts of uncertain tax positions will change significantly within the next 12 months.

U.S. Tax Reform

The U.S. Tax Cuts and Jobs Act of 2017 (“TCJA”) was approved by the U.S. Congress on December 20, 2017 and signed into law by U.S. President Donald J. Trump on December 22, 2017. This legislation makes complex and

significant changes to the U.S. Internal Revenue Code. Such changes include a reduction in the corporate tax rate and limitations on certain corporate deductions and credits, among other changes. The Tax Reform will not have a material effect on our consolidated financial statements.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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12. Related party transactions

In July 2013, the Company entered into a two-year services agreement with one of its shareholders ("Shareholder A"), to render consulting services in consideration for a monthly fee of $1. The agreement expired in July 2015. Effective as of August 2014, Shareholder A received an annual compensation of $25, for services rendered as a member of the Board. As of August 2016, the Company's annual director's fee was increased to a total of $30 per year. In addition, in August 2016, the Company granted to a member of its Board, who is a principal of Shareholder A, 30,000 options to purchase Ordinary shares at an exercise price of $8.10 per share. In January 2017, Shareholder A resigned as a director of the Company and terminated the services agreement.

During December 2015, the Company paid for administration support services provided during 2015 a $15 one-time fee to an employee of an entity owned by one of the Company's shareholders ("Shareholder A"), who was also a co-founder of the Company and a member of the Board. Also during 2015, the Company paid $1 to a family member of Shareholder A in connection with services related leasehold improvements of the Parent's new offices. Such payment was recorded to leasehold improvement as part of property and equipment.

In August 2013, the Company entered in to a consulting agreement with an entity owned by one of its shareholders ("Shareholder B"), who was also a co-founder of the Company and a member of the Board. Pursuant to the agreement, Shareholder B was appointed as the Company's chief financial officer in consideration for a monthly fee of $6. In April 2014, the agreement was amended and restated to affect, upon the consumption of the Company's IPO (which took place in August 2014), an increase of the monthly fee to a total of $15 as well as a one-time bonus payment to Shareholder B in the amount of $80. During 2015, the Company paid a subsequent one-time bonus to Shareholder B in the amount of $70 in connection with services rendered. As of January 2016, following the appointment of a new chief financial officer, the consulting agreement was amended and restated. Pursuant to such amendment, Shareholder B was appointed as a special advisor to the chief executive officer with no change to his remuneration. In June 2016, the Company terminated the amended and restated consulting agreement effective as of February 2017.

In August 2013, the Company entered in to a consulting agreement with an entity owned by one of its shareholders ("Shareholder C"), who was also a co-founder of the Company and a member of the Board. Pursuant to the agreement, Shareholder C was appointed as the Company's chief executive officer in consideration for a monthly fee of $15. In April 2014, the agreement was amended and restated to affect, upon the consumption of the Company's IPO (which took place in August 2014), an increase of the monthly fee to of $19, as well as a one-time bonus payment in the

amount of $90. As of January 2015, following the appointment of a new chief executive officer, the consulting agreement was terminated and the Company's shareholders approved the entry into an employment agreement, pursuant to which Shareholder C was appointed as chief development officer of the Company, and was entitled to a gross annual salary of $250. Such agreement was never executed. In November 2015, effective retrospectively as of January 2015, the consulting agreement was amended and restated (and the employment agreement was terminated), pursuant to which Shareholder C was appointed as a special advisor to the chief executive officer and was entitled to a monthly fee of $28. In June 2016, the Company terminated the amended and restated consulting agreement effective December 2016. During 2017, the Company engaged with Shareholder C to provide services relating to the Company's intellectual property and relevant patent filings, in which Shareholder C reported to the chief executive officer of the Company. Shareholder C has not received any remuneration for these services rendered, and in November 2017 at the shareholders' Annual General Meeting, the shareholders approved a one time payment of $50.

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Balances with related parties:

	December 31,	
	2017	2016
	U.S. dollars in thousands	
Other accounts payables	$ 50	$ 1

Related parties' expenses:

	Year Ended December 31,		
	2017	2016	2015
	U.S. dollars in thousands		
Research and development expense	$ -	$ 318	$ 312
General and administrative expense	$ 79	$ 207	$ 196

13. Employee benefits plan

Pursuant to the Israeli Severance Pay Law 1963 (the "Israeli Severance Pay Law"), Israeli employees are entitled to severance pay equal to one month's salary for each year of employment, or a portion thereof. The Israeli employees of the Company. agreed to the terms set forth under Section 14 of the Israeli Severance Pay Law, according to which amounts deposited in severance pay funds by the Company shall be the only severance payments released to the employee upon termination of employment, voluntarily or involuntarily. As a result, no assets or liabilities are recorded in the accompanying consolidated balance sheets, as the Company is legally released from the obligation to employees once the deposit amount has been paid. Such payments are recorded as severance expenses.

The severance expenses for the years ended December 31, 2017, 2016 and 2015 amounted to $36, $65, and $131, respectively.

Since 2015, the Company's U.S. operations maintain a retirement plan (the "U.S. Plan") that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Participants in the U.S. Plan may elect to defer a portion of their pre-tax earnings, up to the Internal Revenue Service annual contribution limit. The Company matches 100% of each participant's contributions up to 4%. Contributions to the U.S. Plan are recorded during the year contributed as an expense in the consolidated statement of operations. Total employer 401(k) contributions for the years ended December 31, 2017, 2016 and 2015 were $14, $42, $11, respectively.

Since 2015, the Company's U.S. operations maintain a retirement plan (the "U.S. Plan") that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Participants in the U.S. Plan may elect to defer a portion of their pre-tax earnings, up to the Internal Revenue Service annual contribution limit. The Company matches 100% of each participant's contributions up to 4%. Contributions to the U.S. Plan are recorded during the year contributed as an expense in the consolidated statement of operations. Total employer 401(k) contributions for the years ended December 31, 2017, 2016 and 2015 were $14, $42, $11, respectively.

BIOBLAST PHARMA LTD. AND ITS SUBSIDIARY

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In June 2016, following a decision to downsize the Company and focus on one product platform, the Subsidiary terminated the employment agreements of certain employees. These employees were entitled to payments upon their involuntary termination. The employee termination process was completed by the end of 2016. During the year ended December 31, 2016, the Subsidiary paid a total of $1,907, termination related payments to departing employees, of which $145 and $1,762 were recorded as research and development and general and administrative expenses, respectively. In addition, as of December 31, 2016, the Subsidiary accrued a total of $19 related to termination benefits of departing employees, which was paid during 2017.

In July 2017, following a decision to downsize the Company activities, the Subsidiary terminated the employment agreements of certain employees. One employee was entitled to payments upon her involuntary termination. The employee termination process was completed by July 2017. During the year ended December 31, 2017, the Subsidiary paid a total of $53, termination related payments to departing employees, of which all was recorded as research and development.

14. Financial income, net

Financial income, net are as follows:

	Year Ended December 31,		
	2017	2016	2015
	U.S. dollars in thousands		
Interest income	$ 39	$ 90	$ 186
Gain (loss) on foreign currency transactions, net	4	(22)	(39)
Other expenses	(5)	(8)	(12)
Total	$ 38	$ 60	$ 135