COMPUGEN LTD
Form 20-F
February 16, 2017

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

FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2016

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

DATE OF EVENT REQUIRING THIS SHELL COMPANY REPORT _____

COMMISSION FILE NO. 000-30902

_____

Compugen Ltd.
(Exact name of registrant as specified in its charter and translation of registrant's name into English)

_____

Israel
(Jurisdiction of incorporation or organization)

Azrieli Center, 26 Harokmim Street, Building D, Holon 5885849 Israel
(Address of principal executive offices)

_____

Ari Krashin, Chief Financial Officer
Phone: +972-3-765-8585, Fax: +972-3-765-8555
Azrieli Center, 26 Harokmim Street, Building D, Holon 5885849 Israel
(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 NIS 0.01 per share	The NASDAQ Stock Market LLC (The NASDAQ Global Market)

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

(Title of Class)

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:

51,131,534 Ordinary Shares

Indicate by check mark if 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

o 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 o No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

x Yes o No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of “accelerated filer and large accelerated filer” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer x Non-accelerated filer

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

U.S. GAAP

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

TABLE OF CONTENTS

CAUTIONARY STATEMENT REGARDING

FORWARD-LOOKING STATEMENTS

This annual report on Form 20-F includes “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. These statements include words such as “will,” “may,” “assume,” “expect,” “anticipate,” “could,” “project,” “estimate,” “possible,” “potential,” “believe “intend,”, and describe opinions about future events. We have based these forward-looking statements on information available to us as of the date hereof, and on our current assumptions, intentions, beliefs, expectations and projections about future events. We assume no obligation to update any such forward-looking statements. These forward-looking statements involve known and unknown risks and uncertainties that may cause the actual results, performance or achievements of Compugen to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Factors that could cause our actual results to differ materially from those projected in the forward-looking statements include, without limitation, the risk factors set forth under “Item 3. Key Information. Risk Factors,” the information about us set forth under “Item 4. Information about the Company” and information related to our financial condition under “Item 5. Operating and Financial Review and Prospects.”

All references in this annual report on Form 20-F to “Compugen,” the “Company,” “we,” “us,” “our,” or similar references refe to Compugen Ltd. and our wholly owned subsidiary Compugen USA, Inc., except where the context otherwise requires or as otherwise indicated.

We have prepared our consolidated financial statements in United States dollars and in accordance with generally accepted accounting principles in the United States, or U.S. GAAP. All references herein to “dollars” or “$” are to United States dollars, and all references to “Shekels” or “NIS” are to New Israeli Shekels.

PART I.

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

A. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data are derived from our audited consolidated financial statements which have been prepared in accordance with U.S. GAAP. The selected consolidated financial data as of December 31, 2016 and 2015 and for the years ended December 31, 2016, 2015 and 2014 have been derived from our audited consolidated financial statements and notes thereto included elsewhere in this annual report. The selected consolidated financial data as of December 31, 2014, 2013 and 2012 and for the years ended December 31, 2013 and 2012 have been derived from audited consolidated financial statements not included in this annual report. The selected consolidated financial data set forth below should be read in conjunction with and are qualified by reference to “Item 5. Operating and Financial Review and Prospects” and our consolidated financial statements and notes thereto included elsewhere in this annual report.

Selected Financial Data

	Year ended December 31,				
	2012	2013	2014	2015	2016
	(US$ in thousands, except share and per share data)				
Consolidated Statement of Operations Data					
Revenues	$242	$3,549	$12,367	$9,277	$712
Cost of revenues	201	2,509	3,344	1,633	223
Total operating expenses [1]	13,583	18,083	21,360	28,562	33,072
Operating loss	(13,542)	(17,043)	(12,337)	(20,918)	(32,583)
Financial and other income (expenses), net	(86)	3,460	1,758	1,145	1,097
Equity loss	-	-	(155)	-	-
Losses before taxes on income	(13,628)	(13,583)	(10,734)	(19,773)	(31,486)
Taxes on income	-	(500)	(360)	(390)	(20)
Net loss	(13,628)	(14,083)	(11,094)	(20,163)	(31,506)
Realized and unrealized gain (loss) from investment in marketable securities and from foreign currency derivative contracts	1,103	(739)	(3,406)	(801)	(414)
Total comprehensive loss	(12,525)	(14,822)	(14,500)	(20,964)	(31,920)
Basic net loss per share	$(0.38)	$(0.36)	$(0.23)	$(0.40)	$(0.62)
Weighted average number of ordinary shares used in computing basic net loss per share	35,844,496	38,869,438	47,808,855	50,437,040	50,855,908
Diluted net loss per share	$(0.38)	$(0.36)	$(0.26)	$(0.40)	$(0.62)
Weighted average number of ordinary shares used in computing diluted net loss	36,249,262	38,869,438	48,387,063	50,437,040	50,855,908

per share

(1) Includes stock based compensation – see Note 9 to our 2016 consolidated financial statements.

1

	As of December 31,				
	2012	2013	2014	2015	2016
	(US$ in thousands)				
Consolidated Balance Sheet Data					
Cash and cash equivalents, short-term bank deposits and restricted cash	$19,685	$46,920	$73,328	$81,421	$61,527
Trade receivable	-	-	-	7,800	-
Investment in marketable securities	5,196	4,565	1,054	426	-
Long-term bank deposits	-	-	35,026	-	-
Total assets	28,909	56,711	114,986	99,307	71,139
Deferred Revenues	-	6,772	1,789	312	-
Research and development funding arrangements and others	7,872	13,189	421	-	-
Accumulated deficit	(194,119)	(208,202)	(219,296)	(239,459)	(270,965)
Total shareholders' equity	$17,672	$31,888	$106,116	$89,897	$63,519

For additional financial information, please see “Item 5. Operating and Financial Review and Prospects – A. Operating Results,”

B. CAPITALIZATION AND INDEBTEDNESS

Not applicable.

C. REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

D. RISK FACTORS

An investment in our ordinary shares involves a high degree of risk and many factors could affect our financial condition, cash flows and results of operations. You should carefully consider the following risk factors, as well as the other information in this Annual Report. If we do not successfully, or cannot, address the risks to which we are subject, we could experience a material adverse effect on our business, results of operations and financial condition, which could include the need to limit or even discontinue our business operations, and accordingly our share price, may decline. We can give no assurance that we will successfully address any of these risks. The principal risks we face are described below.

Risks Related to our Business, Financial Results and Financing Needs

We cannot provide assurance that our business model will succeed in generating substantial revenues.

Our business model is primarily based on expected future revenues in the form of fees, research revenues, milestone payments, royalties on product sales and other revenue sharing payments from commercialization of products by third parties based on target candidates and/or their related product candidates discovered by us and licensed to such third parties pursuant to various forms of collaborations. In 2010, we began to focus our discovery efforts primarily on the prediction and selection of novel drug target candidates in specific areas of high interest in both oncology and immunology, and in particular, immune checkpoint candidates. The resulting predicted novel target candidates then undergo initial target validation studies and, in selected cases, are advanced to therapeutic product candidate discovery and early development (our “Pipeline Program”) prior to proposed licensing or other forms of third party collaborations. To date, third party collaborations have only been entered into at early validation or preclinical stages which have an inherent risk of high failure rate. The inability to derive adequate revenues from our business model would materially harm our business, financial condition and results of operations and could result in the need to limit or even discontinue our business operations.

We have a history of losses, we expect to incur future losses and we may never achieve or sustain profitability.

As of December 31, 2016, we had an accumulated deficit of approximately $271.0 million and had incurred net losses of approximately $11.1 million in 2014, approximately $20.2 million in 2015 and approximately $31.5 million in 2016, in large part due to the expenditures related to the long-term establishment and continuing enhancement of our predictive discovery infrastructure, and since late 2010, expenditures associated with our Pipeline Program. In addition, we expect to continue to incur net losses in the future due to our anticipated costs and expenses, primarily associated with our Pipeline Program activities, including significantly increasing our activities in the United States, and to a lesser degree, associated with the development, validation and integration of additional discovery platforms. To date, we have entered into only one commercial arrangement with respect to our Pipeline Program candidates under which to date we have received a total amount of $25.4 million. Otherwise, we have received only minimal revenues from limited commercialization efforts with respect to discoveries made during our infrastructure building period. We cannot be certain that we will receive additional revenues under our existing collaborations or enter into additional arrangements for our Pipeline Program candidates or other discoveries or capabilities, or that such additional arrangements will provide sufficient revenues to achieve profitability. Even if we do achieve profitability,

we may not be able to sustain or increase profitability.

We may need to raise additional funds in the future, and if we are unable to raise such additional funds, we may need to curtail or cease operations. To the extent any such funding is based on the sale of equity, our existing shareholders would experience dilution of their shareholdings.

We believe that our existing cash and cash equivalents and short-term bank deposits will be sufficient to fund our current level of operations for the coming 24 months, without considering the possible receipt of any additional funds, such as proceeds from existing or additional licensing and/or commercialization agreements, or from financings. However, we cannot predict with any degree of certainty when, or even if, we will achieve profitability and therefore may need additional funds to continue financing our discovery, validation, development and commercialization activities. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current and future operating plans.

Additional funds, including proceeds from commercialization agreements, or from other financings, may not be available to us on acceptable terms when needed, or at all. In addition, the terms of any financing may adversely affect the holdings or the rights of our existing shareholders. For example, if we raise additional funds by issuing equity securities, our existing shareholders would experience dilution of their shareholdings. Debt financing, if available, may involve restrictive covenants that could limit our flexibility in conducting future business activities. If we are unable to obtain funding on a timely basis, we may be required to significantly curtail one or more of our research or development programs. We also could be required to seek funds through arrangements with collaborators or others that may require us to enter into arrangements on terms that would otherwise not be acceptable to us. Any failure to raise funds when needed would materially harm our business, financial condition and results of operations.

We are currently pursuing our business model primarily in the fields of oncology and immunology, with a primary focus on immuno-oncology, and this limitation may not yield sufficient revenues to support our increasing level of activities.

Following the development, validation and integration of our relevant individual predictive discovery capabilities, we initiated our Pipeline Program to predict and select novel drug target candidates in specific areas of high interest in both oncology and immunology, with a primary focus on immuno-oncology. To date, we have entered into only one commercial arrangement, with Bayer Pharma AG (“Bayer”), with respect to two Pipeline Program drug target candidates (the “Bayer Collaboration”), under which to date we have received a total amount of $25.4 million. We cannot be certain this current focus on our discovery, research and development efforts to the fields of oncology and immunology, with a more specific focus on immuno-oncology, along with our decision to advance selected programs at our own expense, will generate a stable or significant revenue stream. The inability to derive adequate revenues within our field of focus would materially harm our business, financial condition and results of operations and could result in the need to limit or even discontinue our business operations.

Our Pipeline Program will require additional resources that may not be available.

In 2010 we initiated our Pipeline Program pursuant to which we both (i) have continually increased the number of predicted drug target candidates being evaluated by us, and, (ii) are taking certain drug target candidates and an Fc fusion product candidate based on such beyond their initial validation stage into disease animal model studies, as applicable, therapeutic monoclonal antibody (“mAb”) discovery and evaluation and in selected cases, preclinical and possible clinical development of therapeutic product candidates. This may result in multiple drug target and/or therapeutic product candidates reaching more costly stages of research and development in parallel. If we are not able to secure the funding or the capabilities required for such expanded amount and type of activities, we may be required to abandon, postpone, or attempt to license out certain drug target candidates or therapeutic product candidates at an earlier than anticipated stage, which may result in a substantial reduction in the potential returns from the Pipeline Program, or even result in the inability to have some or all of such therapeutic product candidates further developed towards potential commercialization.

We operate in a rapidly developing field and will be required to allocate substantial additional funds in the future to our research activities.

Our discovery capabilities rely on an integrated approach of proprietary predictive models, algorithms and other computational tools based on and incorporating proprietary knowledge of key biological phenomena. Life science today is a rapidly changing field with substantial research being undertaken on a worldwide basis by both academia and industry. In order to maintain our competitive position in predictive discovery, we must continue to allocate resources to broadening and deepening our scientific infrastructure. Any inability to allocate such resources when needed could materially harm our future business, financial condition and results of operations.

We have a limited operating history with respect to the commercialization aspects of our business model upon which investors can base an investment decision or upon which to predict future revenues.

Our ability to generate revenues from collaboration and licensing activities for current and future drug target candidates and therapeutic product candidates based on our predictive discoveries, primarily in the form of fees, research revenues, milestone payments, royalties and other revenue sharing payments has had limited success to date. In 2013, we entered into the Bayer Collaboration, our first collaboration with respect to two of our Pipeline Program drug target candidates, under which we have received to date a total amount of $25.4 million, and have received only minimal revenues from our earlier collaborations based on discoveries made during the building of our predictive discovery approach. We recognized $0.7 million in revenue in 2016, $9.3 million in revenue in 2015 and $12.4 million in revenue in 2014, approximately 98% of which related to the Bayer Collaboration. Furthermore, only in 2010 did we implement our Pipeline Program pursuant to which we are currently advancing certain therapeutic product candidates past disease animal model proof of concept or other validation studies. We therefore have very limited experience with respect to the financial terms that may be available for our candidates at later stages of validation and development, and financial terms for agreements by other companies, to the degree disclosed, vary greatly. Accordingly, our operating history with respect to the commercialization aspects of our business model provides a limited basis to assess our ability to generate significant fees, research revenues, milestone payments, royalties or other revenue sharing payments from the licensing, development and anticipated future commercialization of product candidates based on our existing and future target discoveries.

Risks Related to our Discovery and Development Activities

Our predictive discovery activities are focused on novel drug target candidates and our therapeutic product candidates are primarily based on Compugen discovered targets.

While we believe that our novel target programs represent a compelling and unique opportunity to generate first-in-class therapeutic products, they require significant investment in the research and validation of the drug target candidate and its respective therapeutic product candidate. The lack of sufficient published scientific body of evidence to support the potential of our novel drug targets to serve as therapeutic target opportunities, increases the risk of failure. Although Compugen has built the infrastructure required to translate its novel targets into therapeutic antibody programs, we cannot be assured that our investment in such target programs will result in validated drug targets, or that we will realize success in product development or our ability to commercialize such opportunities and generate revenues.

Major pharmaceutical companies might be hesitant to pursue development programs based on novel targets lacking robust experimental validation results particularly those discovered through computational predictive discovery approach.

There is a growing recognition of the need for new drug targets generating new treatment options for non-responsive patients, particularly in areas where biologics have become more accessible to develop, as compared with small molecules. Our business model seeks to combine early stage collaborations (where the novel target is the subject of the partnership) and later stage collaborations (where the lead antibody or clinical therapeutic product candidate against such novel target is the subject of the partnership). Entering into early-stage collaborations, as opposed to the more industry common later-stage product-based collaborations, generates significant challenges for us and our potential collaborators. In addition, although we have had some success in the demonstration of our predictive discovery capabilities regarding novel drug target candidates, major pharmaceutical companies may be hesitant to enter into early stage collaborations based on novel targets discovered by computer, as opposed to drug targets validated in human clinical trials or being marketed, or even only with significant published experimental validation. Therefore, we cannot assure that our strategy to enter into commercialization arrangements for our early stage novel targets will be successful.

5

We are focusing our therapeutic development activities on mAb drug target candidates for uses in oncology, and an Fc fusion protein product candidate for use in immunology. If these current candidates fail, and we fail to continue to discover and develop drug target candidates of industry interest in these fields our business will likely be materially harmed.

Since late 2010 we have increasingly focused our Pipeline Program therapeutic discovery and development activities on mAb immune-oncology therapeutics and an Fc fusion protein. A result of this decision in 2010 is that we are not undertaking internal discovery and development in other areas, including those where we previously demonstrated discovery capabilities, such as other areas in oncology, other fields of therapy or diagnostic products (other than biomarker discovery for selected internal checkpoint programs), and presently intend to pursue such opportunities, if at all, only in collaboration with third parties. With respect to immune checkpoint proteins, although there have been positive clinical results reported by others with respect to a number of products based on certain checkpoint proteins, resulting in substantial industry, academic and medical interest, with some products gaining approval by the U.S. Food and Drug Administration , or FDA, based on this positive data, there can be no assurance that our immune checkpoint target candidates or the more recent myeloid target candidates, which currently are the basis for the majority of therapeutic product candidates in our Pipeline Program, will provide similar clinical advantages or interest, that no long term adverse effects will be seen, or that a different class of targets or other products will not be discovered and developed with comparable or superior attributes. In the event of any of these occurrences, the actual and/or perceived value of a substantial portion of our Pipeline Program would likely be reduced in which case our business may be materially harmed. Additionally, although certain of our immune checkpoint target candidates are generating interest from potential partners, to date we have signed only one collaboration involving two such discoveries and all our candidates are at early stages of research and development. There is no assurance that we will be able to consummate additional collaborations or agreements on reasonable terms, if at all. In addition, if we fail to continue to discover drug target candidates of industry interest in our fields of focus, or to pursue validation and development efforts in our Pipeline Program on the most promising discoveries, our business will likely be materially harmed. There are many risks associated with this decision of focusing on these areas that include, among others:

- not utilizing all of our target discovery capabilities;
- choosing therapeutic areas with a very high degree of competition;
- choosing therapeutic areas of great complexity and with very high failure rates in product development;
- having insufficient relevant knowledge in our chosen therapeutic areas to select the right unmet medical needs, or novel target candidates, or to timely, properly and efficiently select the appropriate mAb for further development as therapeutic product candidates, or to timely, properly or efficiently further them in development; and
- the inherent risk of high program failure rate in early stage therapeutic development.

In each case, our failure could be due to lack of experience, delays in our internal research programs or applying the wrong criteria or experimental systems and procedures, or unanticipated scientific, safety or efficacy issues with our selected targets or product candidates, with the possible result that none of our candidates result in licensed or marketable products. If any of these risks should materialize, our business, financial condition and results of operations would be materially harmed.

Our predictive discovery capabilities remain unproven with respect to yielding novel targets which can serve as the basis for marketable therapeutic products. If in further development and clinical evaluation of such resulting therapeutic candidates, all, or a larger percentage than typically seen in industry experience, of our product candidates fail to prove sufficiently safe and effective for regulatory approval and marketing, our business will be significantly harmed.

Our in silico (by computer) predictive approach to drug target discovery remains unproven with respect to yielding novel targets that can serve as the basis for marketable therapeutic products, and to date, our validation efforts for our initial targets and product candidates have been limited to in vitro testing and in vivo testing using animal disease models. These discovery capabilities, which are designed to predict and select novel drug target candidates in many different therapeutic areas of interest, rely on the modeling, by our scientists, of complex biological processes, both physiological and pathological. This modeling is partial and may prove insufficient to result in true predictions of the biological processes as they occur naturally and/or to predict appropriate targets for therapeutic intervention. If after further development and clinical evaluation, all, or a larger percentage than typically seen in industry experience, of our therapeutic product candidates based on our novel drug targets fail to prove sufficiently safe and efficacious for regulatory approval and marketing, our business will be significantly harmed.

Our in silico predictive approach to target discovery typically results in a significant number of putative discoveries of interest with each discovery program. If we or our partners fail to select the right drug target candidates to validate and/or progress in the therapeutic development, due to either lack of experience or applying the wrong criteria or experimental methodology, the selected target candidates may never result in approvable or marketable therapeutic products and our business, financial condition and results of operations will be materially harmed.

Our in silico predictive approach to drug target discovery typically results in a significant number of putative discoveries of interest with each discovery program. Following each such discovery run, we assess which of such putative discoveries to move forward with initiation of validation based on various available scientific and business criteria, which may or may not be correct or sufficient, and this assessment continues on an on-going basis. In addition, since our research and development resources are limited we are able to progress with only a fraction of our discoveries in parallel. If at any stage in such assessment, we or our partners fail to select the right drug target candidates to validate and/or progress in development, due to either lack of experience or applying the wrong criteria or experimental methodology, the selected candidates may never result in licensable targets or marketable products, and our business, financial condition and results of operations may be materially harmed.

The multiple drug target candidates in our Pipeline Program may dilute the required resources available for each individual candidate and thus result in significant delays or failures.

Our predictive in-silico methodology results in the availability of a large number of drug target candidates for possible entrance into our Pipeline Program. Evaluating multiple drug target candidates both for entrance to the Pipeline Program and for their continuance and priority in the program limits the resources available to each individual target candidate and might create delays, failures or premature program prioritization. If such delays or premature program prioritization become significant this can make the resulting therapeutic product candidates less competitive or even obsolete as competing products advance or significantly reduce their value due to shorter patent term protection. In addition, allocating our limited resources to multiple programs could result in no single program reaching commercialization with the total resources available to us. Therefore, any such insufficient allocation of resources to specific programs may significantly decrease the value of such programs and our business in general.

If either the predictive discovery approach in general, or our “first-in class biologics for key medical needs” approach, does not prove to be successful, our business will be significantly harmed.

Our method of discovering novel drug target candidates involves first selecting either on our own or with a partner company an unmet key medical need where we believe our predictive capabilities would be relevant, or could be modified to be relevant. In this “first-in class biologics for key medical needs” approach, our goal is to harness all of our relevant predictive discovery capabilities in order to identify attractive novel drug targets for addressing such medical need of interest. Although our “first-in class biologics for key medical needs” approach has resulted in the discovery of a number of novel drug target candidates in several areas of significant industry interest, all of these drug target candidates and related therapeutic product candidates are in very early stages of research and development. Therefore, we cannot predict whether this “first-in class biologics for key medical needs” approach will continue to yield drug target candidates or that any of our existing candidates or future candidate discoveries will be suitable for the successful development of therapeutic products and/or that these will be first-in-class. If either the predictive discovery approach in general does not prove to be successful, or this “first-in class biologics for key medical needs” approach does not lead to successful therapeutic product candidates, our business will be significantly harmed.

Our focus on the Pipeline Program has resulted in a substantial increase in activities, certain of which we will undertake for the first time and may result in therapeutic product candidate failures, or fewer therapeutic product candidates being available for commercialization.

Until recently, our in vitro and in vivo validation studies concluded with the drug target candidate expression profile and/or functional analysis. Upon completion of such activities, or earlier, we initiated our efforts to enter into collaborations for such drug target candidates. This is at an earlier stage than is typical for licensing in the pharmaceutical industry. Pursuant to the Pipeline Program initiated in 2010, and with the increase in our R&D activities, we are conducting additional validation studies and advancing multiple programs in parallel, including advancing our lead therapeutic product candidates into preclinical activities, with the possibility of some of these candidates being selected for future clinical evaluation. This decision to move forward multiple programs in parallel and advance certain therapeutic product candidates further requires us to undertake certain activities for the first time. Any failure to successfully undertake these new activities may result in product candidate delays or failures either due to our lack of expertise, unsupportive findings, or lack of an appropriate technology, or the inherent risk of failure with respect to such activities. Furthermore, due to our limited resources, we must choose which Pipeline Program candidates to advance further in extensive target validation studies, followed by therapeutic product candidate development. This could result in fewer drug target candidates being available for commercialization, due to our available resources being insufficient to further advance all programs. In addition, if we fail to select the right drug target candidates or therapeutic product candidates to advance further, due to either lack of experience or applying wrong criteria or experimental methodology, the selected drug target candidates may never result in a licensable, approvable or marketable product. If any of these risks materialize, our business, financial condition and results of operations may be materially harmed.

We have limited experience in the development of therapeutic product candidates.

Our experience in the development of therapeutic product candidates is very limited. In order to successfully develop and commercialize therapeutic products, we must either access such expertise via collaborations or service providers, and/or continue to enhance and improve our internal expertise, capabilities and facilities. We may not be able to hire the scientists with the required expertise in a timely manner, if at all, and/or engage any or all of the service providers or other experts that we need in order to do so. If we fail to have available, at the appropriate times, the required experience and expertise for the further development and commercialization of our therapeutic product candidates, we may be unsuccessful in these activities, or these activities may be significantly delayed and as a result our business would be materially harmed.

Our continued expansion of our California-based therapeutic mAb research and development capabilities contains a number of risks.

In 2012, we established our own therapeutic mAb development capabilities at our U.S. based, wholly owned subsidiary, Compugen USA, Inc., in order to discover and develop mAb therapeutics against the drug target candidates that we discover. The continued expansion of such in-house capabilities contains a number of risks, including, without limitation, the need for additional resources and funding to maintain such capabilities or to acquire additional discovery capabilities, and the need to identify additional qualified employees and consultants in order to further advance these capabilities. Furthermore, although the scientists we have hired have prior experience with other organizations in the field of therapeutic mAb research and development, we have limited experience as a company in this field. Therefore, as a result, if we are unsuccessful in any of these required undertakings, our business could be materially harmed.

There are risks that are inherent in the development and commercialization of therapeutic products, and if any of these risks materialize, our business and financial results may be materially harmed.

We and our collaborators face a number of risks of failure that are inherent in the process of developing and commercializing novel therapeutic products. These risks, which typically result in very high failure rates even for successful biopharma companies, include, among others, the possibility that:

- our drug target candidates will prove to be inappropriate targets for mAb therapeutics;
- our therapeutic product candidates will fail to progress to preclinical studies or clinical trials;
- our early stage commercialization efforts may provoke competition by potential partners;
- our early stage collaborations may face internal competition by our partners within their own organizations;
- our therapeutic product candidates will be found to be therapeutically ineffective;
- our therapeutic product candidates will be found to be toxic or to have other unacceptable side effects;
- our therapeutic product candidates will be inferior, or not show added value, compared to competing products;
- we or our collaborators will fail to receive required regulatory approvals;
- we or our collaborators will not be able to generate differentiation for our therapeutic product candidates;
- we or our collaborators will fail to manufacture our therapeutic product candidates in the quantity or quality needed for preclinical studies or clinical trials on a large scale and in a cost effective manner;

8

- the commercialization of our therapeutic product candidates or our drug target candidates may infringe third party intellectual property rights;

- the development, marketing or sale of our therapeutic product candidates will fail because of our inability or failure to protect or maintain our own intellectual property rights;

- once a product is launched on the market, there will be little or no demand for it for a number of possible reasons, including lack of acceptance by the medical community or by patients, lack of or insufficient coverage and payment by third party payors, inefficient marketing and sales activities or as a result of there being more attractive, less risky or less expensive, products available for the same use; and

- the product will be withdrawn from the market, or sales limited due to side effects observed in clinical practice.

If one or more of these risks or any similar risks should materialize, our business and financial results may be materially harmed.

Risks Related to Development, Manufacturing, Clinical Trials and Government Regulation

We or our collaborators may be unable to obtain regulatory approval for any product that we or a collaborator may develop.

Any therapeutic product that we or our collaborators may attempt to develop, manufacture or market in the United States will be subject to extensive regulation by the FDA, including regulations relating to development, preclinical testing, performance of clinical trials, manufacturing and post-approval commercialization. Preclinical testing, clinical trials and manufacturing, among other activities, will be subjected to an extensive review process before a new therapeutic product may be sold in the United States. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. The time required to obtain FDA approval, and any other required approvals for therapeutic products is unpredictable but typically requires several years and may never be obtained.

Any therapeutic product that we or our collaborators may wish to develop, manufacture or market in countries other than the United States will also be subject to numerous foreign regulatory requirements governing the conduct of clinical trials, manufacturing and marketing, pricing and third-party reimbursement among other things in such countries. The foreign regulatory approval process includes all of the risks and uncertainties associated with FDA approval described above as well as risks attributable to the satisfaction of local regulations in such foreign jurisdictions.

It is possible that none of the therapeutic products we or our collaborators may develop will obtain the approvals necessary for us or our collaborators to sell them either in the United States or any other country. Furthermore, approval by the FDA of a therapeutic product does not assure approval by regulatory authorities outside the United States or vice versa. Even if approval for a therapeutic product is obtained, such approval may be subject to limitations on the indicated uses or appropriate patient population that could result in a significantly reduced potential market size for the product.

If we or our collaborators fail to obtain the appropriate regulatory approvals necessary for us or our collaborators to sell our products, or if the approvals are more limited than those that we intend to seek, our business, financial condition and results of operations would be materially harmed.

Clinical development involves a lengthy and expensive process, with an uncertain outcome. We may encounter substantial delays or even an inability to begin clinical trials for any specific product, or may not be able to conduct or complete our trials on the timelines we expect.

Obtaining marketing approval from regulatory authorities for the sale of any therapeutic product requires substantial preclinical development and then extensive human clinical trials to demonstrate the safety and efficacy of such product candidates. It is impossible to predict when or if any of our programs or those of our collaborators based on our target discoveries will yield products that will be approved for human testing, or, if such testing is proven sufficiently safe and effective to receive regulatory approval for marketing. Preclinical and clinical testing is expensive, time consuming, and subject to uncertainty. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for such products.

We expect that the preclinical activities to be performed by us and third-parties with whom we may engage will support the anticipated submission to the FDA of an Investigational New Drug application, or IND, for CGEN-15029 in the fourth quarter of 2017. However, there can be no assurance that we will in fact submit any IND, nor if submitted, the actual timing for such submission, nor that such submission will be accepted by the FDA allowing clinical trials to begin. There can be no assurance that clinical trials will begin at any predicted date or will be completed on schedule, if at all. Moreover, even if these clinical trials begin, issues may arise that could result in the suspension of or termination of such clinical trials. A failure of one or more clinical trials can occur at any stage of testing. Events that may prevent successful or timely completion of clinical development include:

• lack of authorization from regulators or institutional review boards, or IRBs, or ethics committees to allow us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;

• inability to generate sufficient preclinical, toxicology, or other in vivo or in vitro data to support the initiation of clinical trials;

• delays in sufficiently developing, characterizing, or controlling a manufacturing process suitable for clinical trials;

• delays in reaching a consensus with regulatory agencies on study design;

• delays in reaching agreement on acceptable terms with prospective contract research organizations (“CROs”) and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;

• imposition of a temporary or permanent clinical hold by the FDA, or a similar delay imposed by foreign regulatory agencies for a number of reasons, including after review of an IND, other application or amendment; (i) as a result of a new safety finding that presents unreasonable risk to clinical trial participants; (ii) a negative finding from an inspection of our clinical study operations or study sites; (iii) developments on trials conducted by competitors for related technology that raises FDA concerns about risk to patients of the technology broadly; or (iv) if FDA finds that the investigational protocol or plan is clearly deficient to meet its stated objectives;

• clinical trials of any product candidates may fail to show safety or efficacy, produce negative or inconclusive results and we may decide, or regulators may require us, to conduct additional preclinical studies or clinical trials or we may decide to abandon product development programs;

• difficulty collaborating with patient groups and investigators;

• failure by our CROs, other third parties, or us to adhere to clinical trial and related regulatory requirements;

• failure to perform in accordance with the FDA’s Good Clinical Practice, or GCP. requirements, or similar applicable regulatory guidelines in other countries;

• the number of patients required for clinical trials of any product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials or fail to return for post-treatment follow-up at a higher rate than we anticipate;

• delays in having patients complete participation in a trial or return for post-treatment follow-up;

• occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;

• changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;

• changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;

• the cost of clinical trials of our product candidates being greater than we anticipate;

• clinical trials of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon product development programs;

• delays or failure to secure supply agreements with suitable reagent suppliers, or any failures by suppliers to meet our quantity or quality requirements for necessary reagents; and

• delays in manufacturing, testing, releasing, validating, or importing/exporting sufficient stable quantities of our product candidates for use in clinical trials or the inability to do any of the foregoing.

Our product development costs will increase if we experience delays in clinical trials or in obtaining marketing approvals. We do not know whether any of our preclinical trails or clinical trials will begin as planned, and once begun will need to be restructured or will be completed on schedule, or at all. Significant preclinical or clinical trial delays also may allow our competitors to bring products to market before we do, potentially impairing our ability to successfully commercialize our product candidates and harming our business and results of operations. Any delays in our preclinical or future clinical development programs may harm our business, financial condition and prospects significantly.

It may be difficult to manufacture therapeutic products based on our discovery capabilities.

Our Pipeline Program is focused mainly on mAbs and with respect to the CGEN-15001 product candidate, Fc fusion protein technology. Such therapeutic types can be difficult to manufacture in the quantity and quality needed for preclinical, clinical and commercial use. The production of mAbs and protein therapeutics must be conducted pursuant to a well-controlled and reproducible process and the resulting product testing must conform to defined quality standards. Should it prove to be difficult to manufacture any therapeutics based on our discovery capabilities in sufficient quantities, meeting the required quality standards or in an economical manner to conduct clinical trials and to commercialize any approved therapeutic candidate, our business, financial condition and results of operations would be materially harmed.

If we or any of our collaborators, or third-party manufacturers, fail to comply with regulatory requirements, we or they could be subject to enforcement or other regulatory actions, which could affect the marketability of Compugen-discovered therapeutics and may significantly harm our financial status and/or reputation.

If we or any of our collaborators or third-party manufacturers with which we may enter into agreements in the future fail to comply with applicable federal, state or foreign laws or regulations, we or they could be subject to enforcement or other regulatory actions. These actions may include:

•warning letters;

•clinical trial holds;

•recalls, product seizures or medical product safety alerts;

•data lock, for failure to comply with applicable privacy and data security laws;

•restrictions on, or prohibitions against, marketing such products;

•restrictions on importation of such products;

•suspension of review or refusal to accept or approve new or pending applications;

- withdrawal of product approvals;
- injunctions;
- civil and criminal penalties and fines; or
- debarment or other exclusions from government programs.

If we or our collaborators become subject to such enforcement actions, these enforcement actions, could affect the ability to successfully develop, market and sell therapeutic products based on our discoveries and could significantly harm our financial status and/or reputation and lead to reduced acceptance of such products by the market.

Significant disruptions of our information technology systems or breaches of our data security could adversely affect our business.

A significant invasion, interruption, destruction or breakdown of our information technology systems and/or infrastructure by persons with authorized or unauthorized access could negatively impact our business and operations. We could also experience business interruption, information theft and/or reputational damage from cyber-attacks, which may compromise our systems and lead to data leakage either internally or at our third party providers. Although we have invested in measures to reduce these risks, we cannot assure you that these measures will be successful in preventing compromise and/or disruption of our information technology systems and related data.

If a successful liability claim or other claim for damages or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, we could be forced to pay substantial damage awards.

The use of any of our product candidates in clinical trials might expose us to liability. Once we begin clinical trials, we expect to obtain clinical trial insurance coverage in amounts that we believe are reasonable and customary in our industry based on the size and design of such clinical trials. However, there can be no assurance that such insurance coverage will fully protect us against some or all of the claims to which we might become subject. We might not be able to maintain adequate insurance coverage at a reasonable cost or in sufficient amounts or scope to protect us against potential losses. In the event a claim is brought against us, we might be required to pay legal and other expenses to defend the claim, as well as uncovered damages awards resulting from a claim brought successfully against us. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to direct financial and managerial resources to such defense and adverse publicity could result, all of which could harm our business.

If we do not comply with laws regulating the use of human tissues or other human biological samples or the conduct of experiments involving animals, our business could be adversely affected.

We use human tissue samples and other human biological samples and conduct experiments involving animals for the purpose of development and validation of our technologies, discoveries and product candidates. Our access to and use of human tissue samples and other human biological samples and the conduct of experiments involving animals are subject to government regulation in the United States, Israel and elsewhere and may become subject to additional regulation. For example, the Israeli Ministry of Health requires, among other things compliance with the principles of the Helsinki Declaration, the Public Health Regulations (Clinical Trials in Human Subjects) 5740-1980, the Genetic Information Law, 5761-2000, the provisions of the Israel Ministry of Health Guidelines for Clinical Trials in Human Subjects and the provisions of the current Harmonized Tripartite Guideline for Good Clinical Practice. Our use of clinical data related to any tissue or other human biological samples must comply with applicable local, national and international privacy law. Our use of animal models for preclinical research must comply with the U.S. Animal Welfare Act, the United States Public Health Service Policy on Humane Care and Use of Laboratory Animals, and applicable state and local laws.Our failure, or the failure of our subcontractors or collaborators, to comply with these or similar regulations could negatively impact our business and results of operations.

If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be adversely affected.

Our research and development activities involve the use of hazardous materials and chemicals, and we maintain quantities of microbial agents, various flammable and toxic chemicals in our facilities. Although we believe our safety and other procedures for storing, handling and disposing these materials in our facilities comply with applicable governmental and local regulations and guidelines, the risk to our employees or others of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which may exceed our financial resources and may seriously harm our business. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures,

exposure to blood-borne pathogens and the handling of biohazardous materials. We may be subject to liability and may be required to comply with new or existing laws and regulations regulating pharmaceuticals or be subject to substantial fines or penalties if we violate any of these laws or regulations.

Risks Related to Our Dependence on Third Parties

We depend significantly on third parties to carry out the research, development and commercialization of our therapeutic product candidates. If we are unable to maintain our existing agreements or to enter into additional agreements with such third parties in the future, our business will likely be materially harmed.

Our primary strategy for the further development and commercialization of products based on our drug target and therapeutic product candidates depends on third parties to carry out and/or finance, research, development and commercialization of such products, principally pharmaceutical, and biotechnology companies and other healthcare related organizations either on their own or in collaboration with us. To date, we have entered into one collaboration with Bayer with respect to two drug target candidates from our Pipeline Program. None of the candidates subject to this agreement have advanced beyond the discovery and preclinical stages, and we cannot be sure that the agreement will result in the successful development or commercialization of any products. Further, we cannot provide assurance that we will succeed in identifying additional suitable parties or entering into any other additional agreements on satisfactory terms or at all for the discovery, research, development and/or commercialization of our drug target or therapeutic product candidates. If we are unable to identify such additional suitable parties or enter into new agreements on satisfactory terms, or at all, our business will likely be materially harmed.

We anticipate that we will rely completely on third parties to manufacture certain preclinical and all clinical drug supplies. Our business could be harmed if those third parties fail to provide us with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices.

We do not currently have, nor do we plan to acquire, the infrastructure or capability internally to manufacture our preclinical and clinical drug supplies for use in the conduct of our clinical trials, and we lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. In order to develop products, apply for regulatory approvals and commercialize our products, we will need to develop, contract for, or otherwise arrange for access to the necessary manufacturing capabilities. We anticipate that we will rely on contract manufacturing organizations, or CMOs, and other third party contractors, some of whom may have limited experience with the FDA's current Good Manufacturing Practice, or cGMP, to manufacture formulations and produce larger scale amounts of drug substance and the drug product required for any clinical trials that we initiate. Such third parties may not be able to deliver in a timely manner, or at all. We have entered into manufacturing and supply agreements with third parties for the manufacturing and respective analytics of COM701, our therapeutic antibody that we expect to file an IND for in the fourth quarter of 2017. These agreements are sole source agreements. Accordingly, if these third parties breach, terminate or otherwise are unable to fulfill their obligations under the agreements, we would need to identify an appropriately qualified alternative source, which could be time consuming, and we may not be able to do so without incurring material delays and costs in the development of COM701.

The manufacturing process for any products based on our technologies that we or our partners may develop is subject to the FDA regulation and foreign regulatory authority approval process, and we will need to contract with manufacturers who can meet cGMP requirements and foreign regulatory authority requirements on an ongoing basis. In addition, if we receive the necessary regulatory approval for any therapeutic drug candidate, we also expect to rely on third parties, including our commercial collaborators, to produce materials required for commercial supply. We may experience difficulty in obtaining adequate manufacturing capacity for our needs. If we are unable to obtain or maintain sufficient contract manufacturing for these product candidates, or to do so on commercially reasonable terms, we may not be able to successfully develop and commercialize our products.

To the extent that we enter into manufacturing arrangements with third parties, we will depend on these third parties to perform their obligations in a timely manner and consistent with regulatory requirements, including those related to quality control and quality assurance. The failure of a third-party manufacturer to perform its obligations as expected could adversely affect our business in a number of ways, including:

- we may not be able to initiate or continue preclinical and clinical trials of products that are under development;
- we may need to repeat clinical trials;

- we may be delayed in submitting regulatory applications, or receiving regulatory approvals, for our product candidates;
- we may lose the cooperation of our collaborators;
- we may be required to cease distribution or recall some or all batches of our products; and
- ultimately, we may not be able to meet commercial demands for our products, if approved.

If a third-party manufacturer with whom we contract fails to perform its obligations, we may be forced to manufacture the materials ourselves, for which we do not currently and may not in the future have the capabilities or resources, or identify and qualify a different third-party manufacturer, which we may not be able to do on reasonable terms, if at all. In some cases, the technical skills or processes required to manufacture our product may be unique to the original manufacturer and we may have difficulty transferring such skills or processes to a back-up or alternate manufacturer, or we may be unable to transfer such skills or processes at all. In addition, if we are required to change manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines. We will also be required to demonstrate that the newly manufactured material is similar to the previously manufactured material, or we may need to repeat clinical trials with the newly manufactured material. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop product candidates or commercialize approved products in a timely manner or within budget. Furthermore, a manufacturer may possess technology related to the manufacture of our product candidate that such manufacturer owns independently, which would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to have another third party manufacture our products.

Our dependence on collaboration agreements with third parties presents a number of risks, and if one or more of these risks materialize, our business may be materially harmed.

The risks that we face in connection with our existing collaborations, licenses and other business alliances as well as those that we may enter into in the future include, among others, the following:

- we may be unable to reach mutually agreeable terms and conditions with respect to potential new collaborations;
- we may be unable to comply or fully comply with our obligations under collaboration agreements into which we enter, and as a result, we may not generate royalties or milestone payments from such agreements, and our ability to enter into additional agreements may be harmed;
- our obligations under existing or future collaboration agreements may harm our ability to enter into additional collaboration agreements;
- our collaborators have significant discretion in electing whether to pursue any of the planned activities and the manner in which it will be done, including the amount and nature of the resources to be devoted to the development and commercialization of our product candidates;
- our collaborators have significant discretion in terminating the collaborations for scientific, business or other reasons;
- if our collaborators breach or terminate an agreement with us, the development and commercialization of our therapeutic product candidates could be adversely affected because at such time we may not have sufficient financial or other resources or capabilities to successfully develop and commercialize these therapeutics on our own or find other partners;
- our collaborators may fail to design and implement appropriate preclinical and/or clinical trials;
-

our collaborators may fail to manufacture our therapeutic product candidates needed for either clinical trials or for commercial purposes on a sufficiently large scale, in the required quality and/or in a cost effective manner;

- our collaborators may fail to develop and market products based on our discoveries due to various regulatory restrictions;

- our collaborators may fail to develop and market products based on our discoveries prior to the successful marketing of competing products by others or prior to expiry of the patents protecting such products;

- changes in a collaborator's business strategy may negatively affect its willingness or ability to complete its obligations under its arrangement or to continue with its collaboration with us;

- our collaborators may terminate the program or the agreement and then compete against us in the development or commercialization of similar therapeutics;

- ownership of the intellectual property generated under or incorporated in our collaborations may be disputed;

- our ownership of rights in any intellectual property or products that may result from our collaborations may depend on additional investment of money that we may not be able or willing to make;

- prospective collaborators may pursue alternative products or technologies, by internally developing them or by preferring those of our competitors;

- disagreements between us and our collaborators may lead to delays in, or termination of, the collaboration;

- our collaborators may fail to develop or commercialize successfully any products based on our novel targets or product candidates to which they have obtained rights from us;

- our early stage collaborations may face internal competition by our partners within their own organizations;

- prospective collaborators may hesitate to pursue collaborations on novel target candidates that lack robust validation to serve as a basis for the development of therapeutics; and

- our collaboration partners may be acquired by, acquire, or merge with, another company, and the resulting entity may have different priorities or competitive products to the collaboration product being developed previously by our partner.

If any of these risks should materialize, our business, financial condition and results of operations may be materially harmed.

To date we have entered into only one collaboration agreement with respect to our Pipeline Program drug target candidates, and this agreement with Bayer is subject to many risks. If such agreement is terminated by Bayer, our business and financial condition may be materially harmed.

In August 2013, we entered into a Research and Development Collaboration and License Agreement with Bayer for the research, development, and commercialization of antibody-based therapeutics for cancer immunotherapy against two novel, Compugen-discovered immune checkpoint regulators – CGEN 15001T and CGEN 15022. This is our first collaboration arrangement for any of our Pipeline Program candidates.

The collaboration with Bayer is subject to all of the risks as set forth above with respect to our dependence in general on collaboration agreements with third parties. In addition, since this is our first collaboration involving our Pipeline Program immune checkpoint target candidates, until such time as we have additional agreements, the effect of any event related to this collaboration will likely have a significantly greater effect on our business and financial condition than otherwise would be the case.

The Bayer Collaboration continues until Bayer is no longer required to make payments under the Agreement or until otherwise terminated by either party in accordance with the terms of the Agreement. Bayer may also terminate the agreement, at any time with or without cause either in whole or only with respect to one of the two programs, and in each case also on a product-by-product and/or country-by country basis, upon prior written notice. Upon any termination of the agreement, depending upon the circumstances, the parties have varying rights and obligations with

respect to the continued development and commercialization of any products and or various payment and royalty obligations in the event of such continuation of the development and commercialization. If significant adverse unforeseen events occur in the Bayer collaboration or the agreement is terminated, in whole or in part, particularly prior to our signing additional collaboration agreements, our business and financial condition may be materially harmed.

Our reliance on third parties for the performance of key research, validation and development activities heightens the risks faced by our business.

We invest significant efforts and resources into outsourcing certain key functions with third parties, including certain research, validation and development activities, manufacturing operations, and others. We do not control the third parties to whom we outsource these functions, but we depend on them to undertake activities and provide results or materials, including the production of certain biological reagents, which may be significant to us. If these third parties fail to properly or timely perform these activities, or provide us with incorrect or incomplete results, or fail to produce and/or provide certain materials this could lead to significant delays in the program or even program failure, along with significant additional costs. In addition, should any of these third parties fail to comply with the applicable laws and regulations and/or research and development or manufacturing accepted standards in the course of their performance of services for us, there is a risk that we could be held responsible for such violations of law as well. Any such failures by third parties could have a material adverse effect on our business, financial condition or results of operations.

Moreover, we do not always independently verify the results obtained by such third parties and in some cases, rely upon the data provided by the third party. If we fail to identify and obtain accurate and quality services technologies and/or data from such third parties, or if the contractual demands of such third parties become unreasonable and we are not able to reach satisfactory agreements with such third parties, we may not be able to obtain the required services and/or technologies, in which event we may lose our investment in these services, fail to receive the expected benefits from our discoveries, and our validation and development capabilities or activities, may be significantly harmed or delayed.

Additionally we have entered into an agreement to obtain access to a highly diverse human phage display antibody library to generate antibodies against novel target candidates for our Pipeline Program. The current term of this agreement terminates in June 2017, unless we pay certain renewal fees. In addition, if we fail to comply with the provisions of this agreement, the third party from which we have obtained license to this library may terminate our rights to use the library, which could harm our business, financial condition or results of operations.

We have limited experience and capabilities in conducting, managing or sponsoring preclinical evaluation of therapeutic product candidates.

During 2010, we began to focus our discovery efforts primarily in the fields of oncology and immunology, and initiated the Pipeline Program to both substantially increase the number of drug target candidates in our validation pipeline and to increase the value of certain of our drug target candidates by advancing selected therapeutic product candidates to preclinical studies and in selected cases, possibly clinical evaluation. We have limited experience and capabilities in conducting, managing or sponsoring the work and efforts required beyond the proof of concept experimental validation stage towards preclinical evaluation, and by doing so we will need to rely on our consultants and third party service providers. If we fail to identify the right consultants or service providers, if the consultants or service providers fail in providing the required services or if we fail to take the necessary steps towards preclinical evaluation, for these or other reasons, our business may be harmed.

We have no experience in conducting or managing clinical trials for potential therapeutic products, and rely on third parties to conduct such trials on our behalf. If these third parties are not successful in carrying out their duties our development of potential products may be delayed.

We have no experience in conducting or managing the clinical trials necessary to obtain regulatory approvals for any product, and we intend to rely on our collaborators or third parties, such as contract research organizations, or CROs, medical institutions and clinical investigators to perform these functions. Our reliance on third parties for clinical development activities reduces our control over these activities. Third-party contractors may not complete activities on schedule, or may not conduct clinical trials in accordance with regulatory requirements or our trial design. If these

third parties do not successfully carry out their contractual duties or meet required performance standards or expected deadlines, we might be required to replace them, or the data that they provide could be rejected, all of which may result in a delay of the affected trial and additional program costs.

We rely on access to public and commercial databases to feed our discovery capabilities, including our individual discovery platforms. If we are denied access to these databases, if the quality of available information is poor, or if the quantity of the available information is insufficient, our operations and business may be harmed.

In the development, validation and continuing expansion and enhancement of our discovery platforms and other tools, as well as in connection with the resulting drug target and therapeutic product candidates, we rely on our ability to access and use public and commercially available databases. The quality of our platforms, tools and discoveries is in part dependent on the quality and quantity of the data in these databases. If we are denied access to these databases, if we are granted access to such databases on terms which are not commercially reasonable, if the quality of data available from those databases is poor, or if the quantity of the available information is insufficient, each of which has occurred in the past, our business and our results of operations may be materially harmed.

We rely on access to high-quality biological samples supported by detailed clinical records to conduct parts of our discovery and validation activities. If we fail to identify and purchase or otherwise obtain such samples, if the quality of available biological samples is poor, or if the quantity of the available biological samples is insufficient, which has occurred in the past, our discovery and validation capabilities may be harmed.

In carrying out our discovery and validation of drug target candidates, we rely on our ability to access and use commercially available biological samples. The quality of our discoveries is in part dependent on the quality and quantity of available biological samples. If we fail to identify and purchase or otherwise obtain such samples for any reason, if the quality of available biological samples is poor, if the samples have not been obtained and made available for secondary use in accordance with applicable law, or if the quantity of the available biological samples is insufficient, which has occurred in the past, our discovery and validation capabilities may be harmed.

Risks Related to Competition and Commercialization

Our business model is at an early stage of implementation and to date has not yielded significant revenues.

The success of our business model relies on providing to third parties for commercialization, through licensing agreements and other forms of collaboration, therapeutic product candidates at various stages of research and development, or the rights to develop such candidates, in each case based on our discovered novel drug target candidates. Additionally, our business model includes research and discovery collaborations aimed at harnessing our infrastructure capabilities towards the partners' discovery needs. Our objective is that these collaborations, anticipated to be primarily with pharmaceutical and biotechnology companies, will be based on products, mostly derived from our existing and future Pipeline Program, with us having the right to receive fees, research revenues, milestones, royalties and other revenue-sharing payments from such products commercialized by, or on behalf of, such third party. Our commercialization efforts are at an early stage of implementation. To date, we have entered into the Bayer Collaboration with respect to two drug target candidates from our Pipeline Program. In addition, in the past we entered into a number of other small collaboration agreements, none of which provided significant revenues.

There can be no assurance that any current or future agreements based on our discoveries and product candidates based on such discoveries will be successful and thus provide significant revenues to our Company, nor can there be any assurance that we will be able to enter into additional future agreements. If we are unable to achieve success, primarily by entering into additional license agreements or other collaboration arrangements related to our discoveries, our business will be materially harmed.

In addition, the vast majority of our internal programs are in the target discovery, research and validation stage, and/or in the early therapeutic product preclinical stage. The validation and other data generated to date may not be sufficient for prospective collaborators, and furthermore the drug target candidate or prospective therapeutic product candidate may not fit their strategy. These companies may require more data, including their independent testing of our therapeutic product candidate, before considering a collaboration. We are therefore dependent on the fit of our programs to pharma strategy and, there can be no assurance that we will be able to identify additional partners interested in our programs at their current stages of research and development. This may adversely affect our ability to enter into additional agreements for the research, development, license or other form of collaboration or commercialization of our therapeutic product candidates, and as a result may harm our business.

Furthermore, the industry trend towards drug combinations in the field of cancer immunotherapy may result in a situation under which our therapeutic product candidates will serve in a combination product and may therefore be entitled to only a fraction of the anticipated product revenues. This trend may adversely affect any revenues we may be entitled to receive and as a result may harm our business.

The agreement cycle for potential collaborations is complex and lengthy and as a result, we may expend substantial funds and management resources with no assurance of success.

In general, each potential license agreement or other form of collaboration we may enter into will require negotiating with our potential partner a large number of scientific, legal and business terms and conditions that can vary significantly in each instance due to the specific drug target candidate or the therapeutic product candidate or candidates involved, the potential market opportunity and the potential partner's licensing, development and business operations and strategy. The accommodation of these requirements mandates a thorough consideration of both the scientific and business aspects of each transaction. Furthermore, the diversity and wide applicability of our discovery capabilities and our therapeutic product candidates, together with the fact that we are mainly located in Israel, adds additional levels of complexity to our business development efforts. As a result, the process of preparing and negotiating our licensing and other agreements may take more than 12 months and will require the input and substantial time and effort of our key scientific and management personnel. Accordingly, we will need to expend substantial funds and substantial key personnel time and effort into these business development activities with no assurance of successfully entering into agreements with potential collaborators and this could harm our business.

The trend towards consolidation in the pharmaceutical, diagnostic and biotechnology industries may adversely affect us.

There is a trend towards consolidation in the pharmaceutical, diagnostic and biotechnology industries. Although this consolidation trend is diminishing, it may still result in the remaining companies having greater financial resources and discovery and technological capabilities, thus intensifying competition in these industries. This trend may also result in fewer potential collaborators or licensees for our therapeutic and diagnostic product candidates. Also, if a consolidating company is already doing business with our competitors, we may lose existing or potential licensees or collaborators as a result of such consolidation. In addition, if a consolidating company is already doing business with us, we may lose the interest of the consolidating parties in our discovery capabilities or individual discoveries as a result of a modified strategy and new priorities of such consolidated entity. This trend may adversely affect our ability to enter into agreements for the development and commercialization of our therapeutic product candidates, and as a result may harm our business.

The biotechnology and pharmaceutical industries are highly competitive, and we may be unable to compete effectively.

The biotechnology and pharmaceutical industries in general, and the immune-oncology field in particular, are highly competitive. Numerous entities in the United States, Europe and elsewhere compete with our efforts to discover, validate, develop and partner with licensees and/or collaborators to commercialize drug target and therapeutic products or other product candidates. Our competitors include pharmaceutical and biotechnology companies, academic and research institutions and governmental and other publicly funded agencies. We face, and expect to continue to face, competition from these entities to the extent they develop products that have a function similar or identical to the function of our therapeutic product candidates in the fields of oncology and immunology that may attract our potential collaborators or that may reach the market sooner. We also face, and expect to continue to face, competition from entities that seek to develop technologies that enable the discovery of novel targets, antibodies and Fc fusion proteins in the fields of oncology and immunology. Many of our competitors have one or more of the following:

- much greater financial, technical and human resources than we have at every stage of the discovery, development, manufacture and commercialization process;
- more extensive experience in preclinical testing, conducting clinical trials, obtaining regulatory approvals, and in manufacturing and marketing diagnostics therapeutics;
- more extensive experience in oncology, immunology and immuno-oncology and in the fields of mAb therapy and fusion protein therapeutics;
- greater resources and means to compete with us on target discovery and as well as in acquiring or generating technologies complementary to, or necessary for, our programs as well as in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites;
- products that have been approved or are in late stages of development;
- reduced reliance on collaborations or partnerships with third parties in order to further develop and commercialize competitive therapeutic products; and
- collaborative arrangements in our target markets with leading companies and research institutions.

Since we are a small company with limited human and financial resources, we are not able to work with a large number of collaborators in parallel and/or advance a large number of drug target or therapeutic product candidates in parallel. Our competitors may develop or commercialize products with significant advantages over any therapeutic products we, our collaborators or third-party licensees may develop. They may also obtain patents and other intellectual property rights before us, or broader than ours, and thereby prevent us from pursuing the development and commercialization of our discoveries. They may also develop products faster than us and therefore limit our market share. Our competitors may therefore be more successful in developing and/or commercializing products than we, our collaborators, or third party licensees are, which could adversely affect our competitive position and business. If we are unable to compete successfully against existing or potential competitors, our financial results and business would be materially harmed.

Healthcare policy is volatile and changes in healthcare policy could increase our expenses, decrease our revenues and impact sales of, and reimbursement for, our products.

Our ability to commercialize our future therapeutic product candidates successfully, alone or with collaborators, will depend in part on the extent to which coverage and reimbursement for these product candidates will be available from government health programs, such as Medicare and Medicaid in the United States, private health insurers and other third-party payors. At present, significant changes in healthcare policy, in particular the continuing efforts of the U.S. and other governments, insurance companies, managed care organizations and other payors to contain or reduce health care costs are being discussed, considered and proposed. Drug prices in particular are under significant scrutiny and continue to be subject to intense political and societal pressures, which we anticipate will continue and escalate on a global basis.

For example, in the United States, there have been several initiatives implemented to achieve these aims. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act (collectively, the "ACA"), represents the biggest regulatory overhaul to the health care system in decades and substantially changes the way health care is financed by both governmental and private insurers. However, the ACA has faced challenges in Congress, the federal courts and from state governments, consumer groups and business organizations. The ACA has also been subject to multiple, unsuccessful appeal efforts and ACA repeal is a priority of the incoming Trump administration.

It is too early to predict specifically what effect repeal of the ACA and the implementation of any replacement or any future healthcare reform legislation or policies in the United States or other countries will have on our business, including our ability to set prices for our product candidates which we believe are fair, and therefore our ability to generate revenues and achieve and maintain profitability. Yet, current and future healthcare reform legislation and policies could have a material adverse effect on our business and financial condition.

Risks Related to our Operations

Our operations including research and development are centralized at two sites without significant redundancies. Physical or environmental damages or other reasons making one or both sites non-operational may significantly affect our business.

Our company has two major sites, in Holon, Israel and South San Francisco. Damage to either or both of these sites due to natural calamities or other reasons can significantly disrupt our business, delay our business operations, jeopardize our ability to meet contractual obligations or patent prosecution deadlines and result in significant harm to our business.

We may be unable to hire or retain key personnel or sufficiently qualified employees, in which case our business may be harmed.

Our business is highly dependent upon the continued services of our senior management and key scientific and technical personnel. While members of our senior management and other key personnel have entered into employment or consulting agreements and non-competition and non-disclosure agreements, they can terminate their employment agreements with us at any time without cause. We cannot be sure that these key personnel and others will not leave us or compete with us, which could harm our business activities and operations. It is difficult to find suitable and highly qualified personnel in certain aspects of our industry, mainly in the field of immuno-oncology.

It can also be difficult for us to find employees with appropriate experience for our business. During the year 2016 we continued to increase our number of employees, and our plans to further increase our R&D budget and activities during the year 2017 will require increased efforts to attract the required personnel with the required expertise and experience. We require a multidisciplinary approach and some of our researchers require an understanding in both

exact and biological sciences. In addition, we require experience in drug development and immuno-oncology, for which there is significant competition, mainly in the U.S.A., for highly qualified personnel in these fields. As a result, we may face higher than average employee turnover or challenges in hiring due to such competition. Our business may be harmed if we are unable to retain our key personnel, or to attract, integrate or retain other highly qualified personnel in the future.

We may be unable to safeguard the integrity, security and confidentiality of our data or third parties' data, and if we are unable to do so, our business may be harmed.

We rely heavily on the use and manipulation of large amounts of data and on the secure and continuous use of our internal computers, communication networks and software and hardware systems. We have implemented and maintain physical and software security measures to preserve and protect our computers and communication, hardware and software systems as well as our data and third parties' data. However, these methods may not fully protect us against fire, storm, flood, power loss, earthquakes, telecommunications failures, physical or software break-ins or similar events. In addition, these measures may not be sufficient to prevent unauthorized access, use or publication of such proprietary data. A party who is able to circumvent our security measures could misappropriate or destroy (partially or completely) proprietary information or cause interruptions in our operations. In addition, a party, including an employee or a contractor, who obtains unauthorized access to our proprietary data or breaches a confidentiality agreement with us could publish or transfer large portions or all of our proprietary data. Some of our proprietary data is maintained in secured cloud services that may also be subject to security breach, including by employees of the cloud services provider. Such publication of proprietary data could materially harm our intellectual property position, thereby seriously harming our competitive position. Such security breaches, if significant, could materially harm our operations and even cause our business to cease.

Risks Related to Intellectual Property.

We may not be able to obtain or maintain patent protection for our inventions and if we fail to do so, our business will likely be materially harmed.

We have applied for patents covering targets, therapeutic and diagnostic product candidates and their method of use, and the success of our business depends, to a large extent, on our ability to obtain and maintain such patents and any additional patents covering our future drug targets and product candidates. As of February 1, 2017 we had a total of 82 issued and allowed patents, of which 40 are U.S. patents, 12 are Australian patents, 14 are Israeli patents, eight are European patents, one is Canadian patent, one is New Zealand patent, three are Japanese patents, two are Chinese patents and one is a patent in Singapore. Our issued and allowed patents expire between 2020 and 2032. We also have 102 pending patent applications, which as of February 1, 2017, included 24 patent applications that have been filed in the United States, 10 patent applications that have been filed in Europe, nine patent applications that have been filed in Israel, six patent applications that have been filed in Australia, eight patent applications that have been filed in Canada, four patent applications that have been filed in Japan, four patent applications that have been filed in India, four patent applications that have been filed in China, 3 patent applications that have been filed in Brazil, 3 patent applications that have been filed in Korea, 3 patent applications that have been filed in New Zealand, four patent applications that have been filed in the Russian Federation, two patent applications that have been filed in Singapore, 3 patent applications that have been filed in Mexico, four patent applications that have been filed in South Africa, four patent applications that have been filed in Hong Kong, two patent applications that have been filed in Egypt and five applications that have been filed under the Patent Cooperation Treaty for which we have not yet designated the countries of filing. We plan to continue to apply for patent protection for our drug target candidates, therapeutic and diagnostic inventions, but we cannot be sure that any of our patent applications will be accepted, or that they will be accepted to the extent that we seek. Additionally, we file for patent protection in selected countries and not in all countries of the world. Therefore, we are exposed to competition in those countries in which we have no patent protection. Also, due to our early stage business model, we may be required to seek patent protection at a very early stage. This may cause us to file with insufficient supportive data, possibly making it difficult to obtain patents in jurisdictions that do not accept post filing evidence to support the claims, and thus enabling others to compete with us. This may also cause issuance of a patent at an earlier stage creating a shorter commercialization period under patent protection, possibly enabling others to compete with us. Delays in filing patents may preclude us from obtaining protection on some or all of our drug target candidates and product candidates due to others filing ahead of us. Patent applications filed before us, but yet unpublished may cause us to spend significant resources in areas that due to these previously filed patent we are not able to obtain patent protection or that the scope of protection is much narrower

than contemplated.

Because the patent position of biopharmaceutical companies involves complex legal and factual questions, we cannot predict the validity, scope or enforceability of patents with certainty. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability and our patents may be challenged in the courts or patent offices in the United States and abroad which may result in such patents being narrowed, invalidated, or held unenforceable. Our pending patent applications, and those we may file in the future may not result in patents being issued. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing their products to avoid being covered by our claims. If the breadth or strength of protection provided by the patent applications we hold is threatened, this could dissuade companies from collaborating with us to develop, and could threaten our ability to commercialize, product candidates.

The process of obtaining patents for inventions that cover our products is uncertain for a number of reasons, including but not limited to:

- in view of the multiple inventions that typically result from our predictive discovery methodologies, we need to accurately select those that we seek patent coverage for;

- the patenting of inventions involves complex legal issues relating to intellectual property laws, prosecution and enforcement of patent claims across a number or patent jurisdictions, many of which have not yet been settled;

- legislative and judicial changes, or changes in the examination guidelines of governmental patent offices may negatively affect our ability to obtain patent claims to certain biologic molecules- and/or use of certain therapeutic targets;

- in view of the finite number of human proteins, we face competition from other biotechnology and pharmaceutical companies who have already sought patent protection relating to proteins and protein based products, as well as therapeutic and diagnostic antibodies or other modulators specifically binding these proteins, and their utility based discoveries that we may intend to develop and commercialize; such prior patents may negatively affect our ability to obtain patent claims on certain proteins antibody or other biologic modulators, or may hinder our ability to obtain sufficiently broad patent claims for our inventions, and/or may limit our freedom to operate;

- publication of gene and/or data on gene products by non-commercial and commercial entities may hinder our ability to obtain sufficiently broad patent claims for our inventions;

- even if we succeed in obtaining patent protection, such protection may not be sufficient to prevent third parties from circumventing our patent claims;

- even if we succeed in obtaining patent protection, we may face freedom to operate (FTO) issues;

- even if we succeed in obtaining patent claims protecting or our inventions and product candidates, our patents could be subject to challenge and litigation by our competitors, and may be partially or wholly invalidated as a result of such legal/judicial challenges;

- there are significant costs that may need to be incurred in registering and filing patents;

- our data may be insufficient to support our claims and/or may support others in strengthening their patents;

- seeking patent protection at an early stage may prevent us from providing comprehensive data supporting the patent claims and may prevent allowance of certain patent claims or limit the scope of patent claim coverage;

- we may not be able to supply sufficient data to support our claims, within the legally prescribed time following our initial filing in order to support our patent claims and this may harm our ability to get appropriate patent protection or

protection at all; and

- our claims may be too broad and not have sufficient enablement, in which case such claims might be rejected by patent offices or invalidated in court.

The U.S. Supreme Court, or the Court, has also issued decisions for which the full impact is not yet understood. On June 13, 2013, in Association for Molecular Pathology v. Myriad Genetics, Inc. the Court held that claims to isolated genomic DNA were not patentable subject matter, but claims to complementary DNA (cDNA) molecules were patentable subject matter. The USPTO Examination Guidelines, first issued in March 2014 (with updated guidelines issued in December 2014, July 2015 and May 2016), introduced new procedure for determining subject matter eligibility of claims post Myriad, and they include specific questions and factors that weigh against or for patent eligibility of other isolated natural products. However these rules are still in flux, as additional decisions of the Court and/or lower courts impact the USPTO Examination Guidelines, which are then adjusted accordingly. On March 20, 2012, in Mayo Collaborative Services, DBA Mayo Medical Laboratories, et al. v. Prometheus Laboratories, Inc., the Court held that several claims drawn to measuring drug metabolite levels from patient samples and correlating them to drug doses were not patentable subject matter. The decision has created uncertainty around the ability to patent certain biomarker-related method patents. In a 2014 decision rendered by the Court of Appeals for the Federal Circuit in Abbvie Deutschland v. Janssen Biotech and Centocor Biologics, Fed. Cir. July 1, 2014, the jury found both Abbvie's patents on fully humanized antibodies to IL-12 invalid as failing the written description requirement. There are no clear rules regarding the number of species that must be disclosed to describe a genus claim, as this number necessarily changes with each invention, and it changes with progress in the field. Although it is well-settled that the written description requirement does not require actual reduction to practice of all of the representative species, a patentee must provide a clear correlation between common structural elements and function across the whole genus. These decisions have increased the uncertainty with regard to our ability to obtain patents in the future as well as the value of current and future patents, once obtained. Depending on decisions by the U.S. federal courts and the Patent Office, the interpretation of laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce our existing patents, all of which could have a material adverse effect on our business.

We may also be affected by decisions regarding the patents of others, which may impact our ability to make, use, sell, license or otherwise engage in business for our own inventions, due to the possibility of patent infringement. For example, BMS (Bristol-Myers Squibb) and partners sued Merck & Co over alleged infringement of the BMS partner's patent for anti-PD-1 antibody treatment of metastatic melanoma. We do not know the outcome of this lawsuit or others in this field nor how they will impact our own business.

If we do not succeed in obtaining patent protection for our inventions (should it be discoveries, drug targets candidates and product candidates) to the fullest extent for which we seek protection, or if we fail to select the best inventions to seek such protection, our business and financial results could be materially harmed.

We may not be able to protect our non-patented proprietary data, know-how, technologies or discoveries, and that may materially harm our business.

Aside from our patented information, we also rely on a combination of patents, trade secrets, know-how, technology and trademarks to maintain our competitive position. The protective measures that we employ may not provide adequate protection for our trade secrets and know-how. Our business collaborators, licensees, employees, advisers and consultants may disclose our proprietary know-how or trade secrets in violation of their obligations to us. We may not be able to meaningfully protect our rights in our proprietary know-how or trade secrets against such unauthorized disclosure and any consequent unauthorized publication. In addition, others may independently discover trade secrets and proprietary information, and in such cases we could not assert any trade secret rights against such party. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

If we are not able to adequately protect our proprietary know-how and trade secrets, competitors may be able to develop technologies and resulting discoveries and inventions that are the same or similar to our own discoveries and inventions. That could erode our competitive advantage and materially harm our business.

22

The existence of third party intellectual property rights may prevent us from developing our discoveries or require us to expend financial and other resources to be able to continue to do so.

In selecting a therapeutic product candidate or diagnostic product candidate for development, we take into account, among other considerations, the existence of third party intellectual property rights that may hinder our right to develop and commercialize that product candidate. The human genomic pool is finite. To our knowledge, third parties, including our competitors, have been filing wide patent applications covering an increasing portion of the human genomic pool and the proteins and peptides expressed therefrom or antibodies directed thereat. As a result of the existence of such third party intellectual property rights, we have been and may be further required to:

- forgo the research, development and commercialization of certain drug target candidates and product candidates that we discover, notwithstanding their promising scientific and commercial merits; or

- invest substantial management and financial resources to either challenge or in-license such third party intellectual property, and we cannot be sure that we will succeed in doing so on commercially reasonable terms, if at all.

We do not always have available to us, in a timely manner, information of the existence of third party intellectual property rights related to our own discoveries. The content of U.S. and other patent applications remains unavailable to the public for a period of approximately 18 months from the filing date. In some instances, the content of U.S. patent applications remains unavailable to the public until the patents are issued. Moreover, when patents ultimately are issued, the claims may be substantially different from those that were originally published, and may vary from country to country. As a result, we can never be certain that programs that we commence will be free of third party intellectual property rights. If we become aware of the existence of third party intellectual property rights only after we have commenced a particular program, we may have to forgo such project after having invested substantial resources in it.

We may infringe third party rights and may become involved in litigation, which may materially harm our business.

If a third party accuses us of infringing its intellectual property rights or if a third party commences litigation against us for the infringement of patent or other intellectual property rights, we may incur significant costs in defending such action, whether or not we ultimately prevail. Typically, patent litigation in the pharmaceutical and biotechnology industry is expensive and prolonged. Costs that we may incur in defending third party infringement actions would also result in the diversion of management's and technical personnel's time. In addition, parties making claims against us may be able to obtain injunctive or other equitable relief that could prevent us or our collaborators and licensees from further developing our discoveries or commercializing our products. In the event of a successful claim of infringement against us, we may be required to pay damages or obtain one or more licenses from the prevailing third party, which may not be available to us on commercially reasonable terms, if at all. If we are not able to obtain such a license or not able to obtain such a license at a reasonable cost, we could encounter delays in product introductions and loss of substantial resources while we attempt to develop alternative products. Defense of any lawsuit or failure to obtain any such license could prevent us or our partners from commercializing available products and could cause us to incur substantial expenditures.

Patent reform and other legislative changes in the U.S. and other countries may affect our ability to obtain and enforce our patents.

In 2011, the United States passed comprehensive patent reform laws in the "America Invents Act", or the "Act". These changes may affect our ability to obtain and enforce patents in a number of ways. First, the Act provides for a period of ex parte post-grant review with expanded grounds for challenging validity of a patent for nine months after grant of a patent. Second, the Act provides a new procedure of the Inter Partes Review, which replaces a previous inter partes reexamination procedure, for challenging the validity of a U.S. patent. The procedure is conducted by the Patent Trial and Appeal Court, and must be completed within 12 months from institution. The Inter Partes Review can be used to

challenge the patentability of one or more claims in a US patent on a ground that could be raised under 35 U.S.C. §§ 102 or 103, and on the basis of prior art consisting of patents or printed publications. If the validity of one of our U.S. patents is successfully challenged, some or all of the claims may be invalidated, such that we could not enforce the patent and hence may not be able to protect one or more of our therapeutic product candidates. Other countries may also pass legislative changes to their patent laws which could materially affect – and even invalidate – one or more of our already filed patent applications, or even granted patents.

Increased progress in our scientific and technological environment may reduce our chances of obtaining a patent.

In order to obtain a patent to protect one of our therapeutic product candidates, we must show that the underlying invention (that is, the product candidate itself or its use) is inventive. As an increasing amount of scientific knowledge is becoming available regarding genes, proteins and biological mechanisms, the bar is increasingly raised to show sufficient inventiveness, as inventiveness is judged against all publicly available information available prior to filing of the patent application (the exact date may vary by country or due to other circumstances). We were initially pioneers in a largely unexplored field, but now there are many others working in our area. We may not be able to obtain patents for our product candidates due to the increased information published in this area. Collective patent applications, in which a large number of candidates are included in one patent application, are also challenged due to the raised bar for information that must be included in a patent application, as well as due to the availability of other publications. Our own published patent applications and other publications also serve as prior art against our new inventions and patent applications, and may prevent us from obtaining new patents.

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

We enter into assignment of invention agreements with our employees pursuant to which such individuals agree to assign to us all rights to any inventions created in the scope of their employment or engagement with us. 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, inventions conceived by an employee due to and during his or her employment with a company are regarded as “service inventions”, which belong to the employer, absent a specific agreement between the employee and employer giving the employee service invention rights or waiver of such rights by employer. The Patent Law also provides that if there is no agreement with respect to whether the employee is entitled to remuneration for his or her service invention, to what extent and under what conditions, such entitlement and terms shall be determined by the Israeli Compensation and Royalties Committee, or the Committee, a body constituted under the Patent Law. Decisions by the Committee and Israeli courts have created some uncertainty in this area. Although our employees have agreed to assign to us service invention rights, we may face claims demanding remuneration in consideration for assigned inventions. As a consequence of such claims, we could be required to pay additional remuneration or royalties to our current and/or former employees, or be forced to litigate such claims, which could negatively affect our business.

Risks Related to Operations in Israel

Conditions in the Middle East and in Israel may adversely affect our operations.

Our headquarters and part of our research and development facilities are located in Israel. Accordingly, we are directly influenced by the political, economic and military conditions affecting Israel. Specifically, we could be adversely affected by:

• hostilities involving Israel;

• the interruption or curtailment of trade between Israel and its present trading partners;

• a downturn in the economic or financial condition of Israel; and

• a full or partial mobilization of the reserve forces of the Israeli army.

Israel has been subject to a number of armed conflicts that have taken place between it and its Arab neighbors. While Israel has entered into peace agreements with both Egypt and Jordan, Israel has not entered into peace arrangements with any other neighboring countries. Further, all efforts to improve Israel’s relationship with the Palestinian Authority

have failed to result in a permanent solution, and there have been numerous periods of hostility in recent years.

The uncertainty maintained in the region intensified in 2016 with the continuation of the civil war and state of chaos in Syria, adjacent to Israel's northern border, which followed violent uprisings in recent years in some Arab countries in the Middle East and North Africa, including in Egypt and Jordan which border Israel. The significant increase of hostile activities of the Islamic State in Syria and in the Sinai Peninsula also contributes to tension in the region. Lastly, relations between Israel and Iran continue to be strained, especially with regard to Iran's nuclear program.

All of the above raise a concern as to the stability in the region which may affect the political and security situation in Israel and therefore could adversely affect our business, financial condition and results of operations. Further deterioration of relations with the Palestinian Authority, Hamas or countries in the Middle East could disrupt international trading activities in Israel and may materially and negatively affect our business, financial conditions and could harm our results of operations.

Certain countries, as well as certain companies and organizations, primarily in the Middle East, continue to participate in a boycott of Israeli firms and others doing business with Israel and Israeli companies. The boycott, restrictive laws, policies or practices directed towards Israel or Israeli businesses could, individually or in the aggregate, have a material adverse effect on our business in the future. In addition, a number of our employees who are Israeli citizens are subject to an obligation to perform reserve military service. In case of further regional instability such employees who may include one or more of our key employees may be absent for extended periods of time which may materially adversely affect our business.

We can give no assurance that the political and security situation in Israel, as well as the economic situation, will not have a material impact on our business in the future.

Our results of operations may be adversely affected by the exchange rate fluctuations between the dollar and the New Israeli Shekel.

We hold most of our cash, cash equivalents and short-term and long-term bank deposits in U.S. dollars but incur a significant portion of our expenses, principally salaries and related personnel expenses and administrative expenses for our Israeli based operations, in NIS. As a result, we are exposed to exchange rate fluctuations between the U.S. dollar and the NIS, which may have a material adverse effect on our financial condition. In 2014 the U.S. Dollar appreciated against the NIS by 12%, in 2015 the U.S. Dollar appreciated against the NIS by 0.30%, and in 2016 the U.S. Dollar depreciated against the NIS by 1.46% and, as a result, our NIS denominated expenses were affected by these fluctuations. We entered into foreign currency derivative contracts to hedge a portion of our anticipated NIS payroll and certain operation expenses. For more information, see Note 2u of our 2016 consolidated financial statements.

We may not be entitled to certain tax benefits.

We may be entitled to benefit in the future from certain government programs and tax legislation, particularly as a result of the 'Approved Enterprise' status granted to some of our operations by the Investment Center in the Israeli Ministry of the Economy and the 'Benefiting Enterprise' status that resulted from our eligibility for tax benefits under the Israel Law for Encouragement of Capital Investments, 1959 (an "Approved Enterprise", a "Benefiting Enterprise" and the "Investment Law", respectively). The availability of these tax benefits, however, is subject to certain requirements under the Investment Law including, among other things, making specified investments in fixed assets and equipment. The tax benefits that we anticipate receiving under our current "Approved Enterprises" and "Benefiting Enterprises" programs may not be continued in the future at their current levels or at all. To date, we have not actually received any such tax benefits because we have not yet generated any taxable income.

It may be difficult to enforce a U.S. judgment against us, or our officers and directors or to assert U.S. securities law claims in Israel.

We are incorporated under the laws of the State of Israel. Service of process upon our directors and officers, almost all of whom reside outside the United States, may be difficult to obtain within the United States. Furthermore, because the majority of our assets and investments, and almost all of our directors and officers are located outside the United States, any judgment obtained in the United States against us or any of them may not be collectible within the United States. Additionally, it may be difficult to enforce civil liabilities under U.S. federal securities laws in original actions instituted in Israel.

Israeli courts may refuse to hear a claim based on an alleged violation of U.S. securities laws reasoning that Israel is not the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear such a claim, it is not certain whether Israeli law or U.S. law will be applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. 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.

Provisions of Israeli law may delay, prevent or make undesirable an acquisition of all or a significant portion of our shares or assets.

Israeli corporate law regulates mergers and requires that a tender offer be effected when certain thresholds of percentage ownership of voting power in a company are exceeded (subject to certain conditions). Further, Israeli tax considerations may make potential transactions undesirable to us or to some of our shareholders whose country of

residence does not have a tax treaty with Israel granting tax relief to such shareholders from Israeli tax. With respect to mergers, Israeli tax law allows for tax deferral in certain circumstances but makes the deferral contingent on the fulfillment of numerous conditions, including a holding period of two years from the date of the transaction during which certain sales and dispositions of shares of the participating companies are restricted. Moreover, with respect to certain share swap transactions, the tax deferral is limited in time, and when such time expires, the tax becomes payable even if no actual disposition of the shares has occurred. See “Item 10.B. Memorandum and Articles of Association—Change of Control.”

Furthermore, in accordance with the Restrictive Trade Practices Law, 1988 and under the Israeli law for the Encouragement of Industrial Research and Development of 1984 and regulations promulgated thereunder, which we refer to as the R&D Law, to which we are subject due to our receipt of grants from the Office of the Chief Scientist, or the OCS, approvals regarding a change in control (such as a merger or similar transaction) may be required in certain circumstances. For more information regarding such required approvals please see "Item 5. Operating and Financial Review and Prospects Finance – C. Research and Development, Patents and Licenses – The Office of the Chief Scientist."

These provisions of Israeli law could have the effect of delaying or preventing a change in control and may make it more difficult for a third party to acquire us or our shareholders to elect different individuals to our board of directors, even if doing so would be beneficial to our shareholders, and may limit the price that investors may be willing to pay in the future for our ordinary shares.

We received grants from the OCS that may restrict the transfer of know-how that we develop.

We have received research and development grants from the OCS. Therefore, even following full repayment of any OCS grants, and unless agreed otherwise by the applicable authority of the OCS, we must nevertheless continue to comply with the requirements of the R&D Law. Accordingly, the transfer to third parties of know-how or technologies developed under the programs submitted to the OCS and as to which we received the grants, or manufacturing or rights to manufacture based on and/or incorporating such know-how to third parties, might require the prior consent of the OCS, and may require certain payments of increased royalties to the OCS. Although such restrictions do not apply to the export from Israel of the Company's products developed with such know-how, they may prevent us from engaging in transactions with our affiliates, customers or other third parties outside Israel, involving product or other asset transfers, which might otherwise be beneficial to us. For more information regarding such restrictions please see "Item 5. Operating and Financial Review and Prospects Finance – C. Research and Development, Patents and Licenses – The Office of the Chief Scientist."

Being a foreign private issuer exempts us from certain SEC and NASDAQ requirements.

We are a "foreign private issuer" within the meaning of rules promulgated by the SEC. As such, we are exempt from certain provisions applicable to U.S. public companies including:

- the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q and current reports on Form 8-K;
- the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act;
- the provisions of Regulation FD aimed at preventing issuers from making selective disclosures of material information; and
- the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and establishing insider liability for profits realized from any "short-swing" trading transaction (a purchase and sale, or sale and purchase, of the issuer's equity securities within less than six months).

In addition, we may follow home country practice in Israel in lieu of certain NASDAQ listing requirements with regard to, among other things, director nomination procedure, composition of the compensation committee and approval of equity-based incentive plans for our employees. Following our home country governance practices as opposed to the requirements that would otherwise apply to a United States company listed on NASDAQ may provide less protection than is accorded to investors under the NASDAQ Listing Rules applicable to domestic issuers. For more information regarding specific exemptions we chose to adopt, please see "Item 16G — Corporate Governance."

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.

Because we are incorporated under Israeli law, the rights and responsibilities of our shareholders are governed by our Articles of Association ("Articles") and Israeli law. These rights and responsibilities differ in some respects from the rights and responsibilities of shareholders in U.S.-based corporations. In particular, a shareholder of an Israeli company has a duty to act in good faith and in a customary manner in exercising its rights and performing its obligations towards the company and other shareholders and to refrain from abusing its power in the company, including, among other things, in voting at the general meeting of shareholders on certain matters, such as an amendment to a company's articles of association, an increase of a company's authorized share capital, a merger of a company and approval of related party transactions that require shareholder approval. A shareholder also has a general duty to refrain from discriminating against other shareholders. In addition, a controlling shareholder or a shareholder who knows that it possesses the power to determine the outcome of a shareholders' vote or to appoint or prevent the appointment of an office holder in a company or has another power with respect to a company, has a duty to act in fairness towards such company. Israeli law does not define the substance of this duty of fairness and 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 and liabilities on our shareholders that are not typically imposed on shareholders of U.S. corporations.

Risks Related to our Ordinary Shares

Holders of our ordinary shares who are U.S. residents may be required to pay additional U.S. income taxes if we are classified as a PFIC for U.S. federal income tax purposes.

There is a risk that we may be classified as a passive foreign investment company, or PFIC. Our treatment as a PFIC could result in a reduction in the after-tax return of U.S. holders of our ordinary shares and may cause a reduction in the value of our shares. For U.S. federal income tax purposes, we will generally be classified as a PFIC for any taxable year in which either: (i) 75% or more of our gross income is passive income or (ii) at least 50% of the average value (determined on a quarterly basis) of our total assets for the taxable year produce or are held for the production of passive income. Based on our analysis of our income, assets, activities and market capitalization, we do not believe that we were a PFIC for the taxable year ended December 31, 2016. However, there can be no assurances that the United States Internal Revenue Service ("IRS") will not challenge our analysis or our conclusion regarding our PFIC status. There is also a risk that we were a PFIC for one or more prior taxable years or that we will be a PFIC in future years, including 2017. If we were a PFIC during any prior years, U.S. holders who acquired or held our ordinary shares during such years generally will be subject to the PFIC rules. The tests for determining PFIC status are applied annually and it is difficult to make accurate predictions of our future income, assets, activities and market capitalization, which are relevant to this determination. If we were determined to be a PFIC for U.S. federal income tax purposes, highly complex rules would apply to U.S. holders owning our ordinary shares and such U.S. holders could suffer adverse U.S. tax consequences. For more information, please see "Item 10. Additional Information – E. Taxation - Certain Material U.S. Federal Income Tax Considerations – Passive Foreign Investment Company."

Sales under our existing shelf registration statements will dilute existing shareholders.

On August 26, 2014, we filed a shelf registration statement on Form F-3 with the SEC under which we may offer and sell from time to time in one or more offerings, our ordinary shares, debt securities, rights, warrants and units comprising any combination of these securities having an aggregate offering price of up to $200 million (the "2014 Shelf Registration"). This registration statement was declared effective by the SEC on September 4, 2014 and expires on September 4, 2017. On August 9, 2016, we filed an additional shelf registration statement on Form F-3 with the SEC under which we may offer and sell from time to time in one or more offerings, our ordinary shares, debt securities, rights, warrants and units comprising any combination of these securities having an aggregate offering price of up to $200 million (the "2016 Shelf Registration"). This registration statement was declared effective by the SEC on October 11, 2016. As of the date of this Annual Report, no securities have been issued pursuant to the 2014 Shelf Registration or the 2016 Shelf Registration. While there is no assurance that we will sell any shares, including shares underlying securities convertible into, exchangeable for, exercisable for shares, under these shelf registration statements, any such sales in the future may result in dilution to existing shareholders. In addition, we may seek additional capital by selling shares or other securities under these shelf registration statements due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Our ordinary shares are traded on more than one market and this may result in price variations.

In addition to being traded on The NASDAQ Global Market, our ordinary shares are also traded on the Tel Aviv Stock Exchange, or TASE. Trading in our ordinary shares on these markets take place in different currencies (U.S. dollars on NASDAQ and NIS on the TASE), and at different times (resulting from different time zones, trading days and public holidays in the United States and Israel). The trading prices of our ordinary shares on these two markets may differ due to these and other factors. Any decrease in the price of our ordinary shares on one market could cause a decrease in the trading price of our ordinary shares on the other market.

Our share price and trading volume have been volatile and may be volatile in the future and that could limit investors' ability to sell our shares at a profit and could limit our ability to successfully raise funds.

During the calendar years 2015 and 2016, our stock price on NASDAQ has traded from a low of $4.32 to a high of $9.65 and trading volume is volatile from time to time. The volatile price of our shares and periodic volatile trading volume may make it difficult for investors to predict the value of their investment, to sell shares at a profit at any given time, or to plan purchases and sales in advance. A variety of factors may affect the market price of our ordinary shares including:

- global macroeconomic developments;
- our success (or lack thereof) in entering into collaboration agreements and achieving certain research and developmental milestones thereunder;
- our need to raise additional capital and our success or failure in doing so;
- our ability (or lack thereof) to disclose key discoveries or developments due to competitive concerns or need to secure our intellectual property position;
- achievement or denial of regulatory approvals by us or our competitors;
- announcements of technological innovations or new commercial products by our competitors;
- developments concerning proprietary rights, including patents;
- developments concerning our existing or new collaborations;
- regulatory developments in the United States, Israel and other countries;
- delay or failure by us or our partners in initiating, completing or analyzing preclinical or clinical trials or the unsatisfactory design or results of such trials;
- period to period fluctuations in our results of operations;
- changes in financial estimates by securities analysts;
- changes in senior management or the board of directors;
- our ability (or lack thereof) to disclose the commercial terms of, or progress under, our collaborations;
- our ability (or lack thereof) to show and accurately predict revenues; and
- transactions with respect to our ordinary shares by insiders or institutional investors.

We are not able to control many of these factors, and we believe that period-to-period comparisons of our financial results will not necessarily be indicative of our future performance.

In addition, the stock market in general, and the market for biotechnology companies in particular, have experienced extreme price and volume fluctuations that may be unrelated or disproportionate to the operating performance of individual companies. These broad market and industry factors may seriously harm the market price of our ordinary shares, regardless of our operating performance.

Furthermore, the market prices of equity securities of companies that have a significant presence in Israel may also be affected by the changing security situation in the Middle East and particularly in Israel. As a result, these companies may experience volatility in their stock prices and/or difficulties in raising additional financing required to effectively operate and grow their businesses. Thus, market and industry-wide fluctuations and political, economic and military conditions in the Middle East may adversely affect the trading price of our ordinary shares, regardless of our actual operating performance.

As a result of the volatility of our stock price, we could be subject to securities litigation, which could result in substantial costs and divert management's attention and company resources from our business.

ITEM 4. INFORMATION ON THE COMPANY

A. HISTORY AND DEVELOPMENT OF THE COMPANY

History

Our legal and commercial name is Compugen Ltd. We were incorporated on February 10, 1993 as an Israeli corporation and operate under the Israeli Companies Law, 5759-1999, as amended together with all regulations promulgated thereunder (the "Companies Law"). Our principal offices are located at 26 Harokmim Street, Holon 5885849, Israel, and our telephone number is +972-3-765-8585. Our web address is www.cgen.com. Information contained on our website does not constitute a part of this Annual Report.

Our agent for service of process in the United States is Compugen USA, Inc., our wholly owned U.S. subsidiary located at 250 E. Grand Avenue, Suite 65, South San Francisco, CA 94080, which was incorporated in Delaware in March 1997 and is qualified to do business in California. This subsidiary did not have any significant operations from 2008 to March 2012.

Principal Capital Expenditures

In the years ended December 31, 2016, 2015 and 2014, our capital expenditures were $2.6 million, $3.1 million and $1.9 million, respectively, and for the year 2016 were spent primarily on leasehold improvements for the new facilities in Holon, Israel (see Item 4D - Property, Plants and Equipment), laboratory equipment, general computer software and hardware. As of December 31, 2016, other than $0.1 million related to capital expenditures for the year ended December 31, 2016, not yet paid as of that date, we have no current significant commitments for capital expenditures.

B. BUSINESS OVERVIEW

Summary

Compugen is a leading therapeutic discovery company whose mission is to utilize its broadly applicable predictive discovery infrastructure to discover novel drug targets and develop first-in-class therapeutics. Our current pipeline primarily consists of early and preclinical stage immuno-oncology programs based on novel drug targets discovered by us, primarily immune checkpoint and myeloid protein target candidates. These programs are primarily aimed at the development of first-in-class cancer immunotherapy drugs with potential to harness the immune system to provide treatment solutions in areas of unmet medical needs in various cancer types and patient populations, both as monotherapy and in combination with other drugs. In addition, our pipeline currently includes a preclinical (prior to IND enabling studies) stage fusion protein autoimmune product candidate. Our business model relies on extracting the commercial value of our systematic discovery capability for novel target candidates by entering into various forms of revenue-sharing collaborations for our drug target candidates and their related therapeutic product candidates at various stages of research and development. Compugen is headquartered in Holon, Israel, with R&D facilities located in both Holon and South San Francisco. At the U.S. facilities, therapeutic monoclonal antibodies (mAbs) are discovered and developed against our novel drug target candidates.

Predictive Discovery of Novel Targets

The establishment of our broadly applicable discovery approach evolved over more than a decade of pioneering multidisciplinary research. This long-term focused research effort primarily involved in-depth understanding of key biological phenomena combined with the development of superior algorithmic and other computational capabilities. This approach, which is constantly enhanced and broadened, allows us to focus on various selected biomedical fields, and discover potential novel drug target candidates specifically for unmet medical needs in such fields. Throughout the years, we have demonstrated the discovery capability of this unique approach in multiple therapeutic and diagnostic areas, and more recently have demonstrated in our fields of focus significant advantages of our methodologies in terms of both the ability to discover novel target candidates and to accomplish such target discovery at reduced cost and time in comparison to traditional discovery methods.

Therapeutic/Disease Fields of Focus

Our fields of focus are oncology and immunology, with substantial current emphasis of our discovery capabilities on immuno-oncology. Oncology and immunology are medical fields with significant unmet medical needs, and both are of high interest to pharmaceutical companies with numerous efforts being made to identify novel therapeutic solutions. Within oncology, our primary focus area of immuno-oncology is of particularly high interest, and is seen as providing a major breakthrough in cancer treatment.

Oncology

Our primary focus in immuno-oncology are immune checkpoint targets, and more recently, we expanded to focus on myeloid targets present in the tumor micro-environment, in both cases with the objective of unleashing the potential of the natural anti-tumor immune response.

Checkpoint-blocking antibodies have demonstrated impressive clinical benefits and long-term survival, even for end-stage patients, raising hopes that this novel approach might lead to effective therapeutic strategies and valuable additions in the fight against cancer. There are currently four therapies approved for the treatment of cancer that target immune checkpoint proteins. Yervoy®, an antibody treatment targeting CTLA-4, was approved by the FDA in 2011 and registered 2015 sales of $1 billion dollars. In September 2014, Keytruda®, an antibody therapy targeting PD-1, received accelerated approval from the FDA for the treatment of advanced melanoma and has since been approved for the treatment of first-line metastatic non-small cell lung cancer patients highly expressing PD-L1 and metastatic head and neck squamous cell carcinoma. In 2015 Keytruda® registered sales of $566 million. Opdivo®, an antibody therapy targeting PD-1 was first approved for the treatment of advanced melanoma in December 2014 and has since been approved for the treatment of multiple cancers including: advanced lung cancer, metastatic renal cell carcinoma, hodgkin lymphoma and head and neck cancer. In 2015 Opdivo® registered sales of $1.2 billion. In May 2016, Tecentriq®, an antibody therapy targeting PD-L1, received approval from the FDA for the treatment of urothelial carcinoma and in May 2016 received approval to treat metastatic non-small cell lung cancer These therapies, along with many additional immune checkpoint targeting programs, are currently in advanced clinical trials in a large number of cancer indications with significant unmet need. Industry analysts estimate that the cancer immunotherapy market has a significant potential and annual sales' projections of some of these analysts range between $28 billion and $35 billion.

Myeloid biology is a critical component of immune suppression with myeloid cells now recognized as a key factor in the pathophysiology of cancers. Myeloid biology is an emerging and promising area within the field of immuno-oncology, with only a few known therapeutic targets. In the tumor microenvironment (TME), they comprise tumor-associated macrophages (TAMs), tumor-associated neutrophils (TANs), dendritic cells, and myeloid-derived suppressor cells. Some of these myeloid cells, in particular TAMs and TANs, are divided into type 1 or type 2 cells, according to the paradigm of T helper type 1 or type 2 cells. Type 1-activated cells are generally characterized as cells that aid tumor rejection, while all other myeloid cells are shown to favor tumor progression. Moreover, these cells are often at the basis of resistance to various therapies. Discovery of myeloid targets is anticipated to provide opportunities for the development of powerful new immuno-oncology therapeutics for patients with cancers possessing a strong immune suppressive environment or that are refractory to available immune checkpoint inhibitors.

Prior ADC Program

Antibody-drug conjugate (ADC) cancer therapy destroys cancer cells by harnessing the highly specific binding of a mAb to deliver high-potency cytotoxic agents, called the payload, directly to the cancer cells. The principle underlying ADC therapy is to use the selective binding of a mAb to impact the cancer cells by linking the cytotoxic agent payload to an antibody or antibody fragment that specifically binds to a protein that is present on cancer cells and expressed at lower levels in healthy cells. When administered to the patient, the antibody with the payload specifically binds to the protein of interest (the target), and upon binding the mAb and its payload are internalized into the cells, where the toxic payload is released and activated. Thus, unlike traditional chemotherapies, ADCs are designed to specifically destroy cells displaying the cancer target protein. ADCs against a few targets, both in solid and hematologic tumors, have already demonstrated clinical success, with two ADC products gaining FDA approval since 2011 providing Compugen with an opportunity to identify ADC targets with superior characteristics.

Currently there are approximately 50 ADCs in clinical testing. ADC therapeutics generated approximately $1.4 billion of sales in 2015 and the ADC market is forecast to grow to $10.4 billion dollars by 2024 (, representing major growth and substantial size, but significantly less than the current market and forecasts for immune checkpoint target based therapy.

Compugen's ADC target discovery program, which was initiated in 2013, utilized our underlying predictive discovery infrastructure, with the addition of certain algorithms and other computational capabilities specifically developed for this effort. The additional algorithms enable prediction of cell surface/membrane proteins that have the potential to be internalized, and have higher expression on cancer cells but have much lower expression on healthy cells, in order to

allow the ADC drug to selectively attack the tumor and spare healthy tissues.

In October 2015 we announced that CGEN-15027 was predicted to be a potential ADC target. Evaluation of CGEN-15027 as a target for ADC therapy included the prediction and validation of is high expression levels of CGEN-15027 in lung, breast, ovarian, and pancreatic tumors as compared to normal tissues. Using therapeutic antibodies for CGEN-15027 developed by us, we demonstrated the ability of an ADC to mediate potent killing of cancer cell lines expressing this protein.

Towards the end of 2016, in view of our increasing activities in immuno-oncology, both with respect to the addition of myeloid targets to our Pipeline Program and entering into further development activities for our immune checkpoint programs, we decided to deprioritize our efforts on ADC, and will look to outsource CGEN-15027 to a third party for further testing, and further focus our efforts on the immune-oncology opportunities within our Pipeline Program.

Immunology

In autoimmune diseases, our other area of focus, we have one lead program – CGEN-15001. In the absence of autoimmune disease, the immune system is programmed to avoid attacking the body's own cells and tissues in a mechanism known as self-tolerance. Immune checkpoints, the negative regulators of the immune system, play a critical role in the maintenance of self-tolerance. CGEN-15001 is an Fc fusion protein based on CGEN-15001T, which has been engineered to be fused to the Fc domain of an IgG (antibody) protein to provide a longer half-life in the blood and have drug like properties. CGEN-15001T is a novel immune checkpoint discovered by Compugen. CGEN-15001 has been shown to be effective in treating several autoimmune diseases in animal models, including models of multiple sclerosis, rheumatoid arthritis, type 1 diabetes and psoriasis. In addition, and in comparison to current therapeutic approaches that generally suppress the immune system, in some of these animal disease models, CGEN-15001 demonstrated the potential to provide, with a short period of treatment, a sustained resolution of the disease without compromising the immune system's capacity to fight infections and malignancies. Additional studies demonstrated that CGEN-15001 has an immuno-modulatory function manifested in attenuating inflammatory responses and promoting regulatory and anti-inflammatory activities, including the differentiation of regulatory T cells (Tregs), a population of immune cells that plays a pivotal role in induction and maintenance of immune tolerance.

Advances in the treatment of autoimmune diseases include biologic drugs that specifically target inflammation mediators, known as cytokines, that cause chronic inflammation. Although biologic drugs, such as Fc fusion proteins, have achieved significant clinical and commercial success as exemplified by the anti-rheumatic biologics ENBREL® (etanercept) with sales of about $9.1 billion in 2015, and ORENCIA® (abatacept) with about $1.9 billion in sales in 2015, significant unmet needs remain. There currently are no cures for autoimmune diseases, and existing therapeutic approaches rely mostly on general suppression of the immune system. In addition, many autoimmune diseases have no or few treatment options, and in others, patients have limited benefit from existing therapies.

Area of focus - Drug modalities

Biologics, such as mAb and Fc-fusion proteins, have revolutionized patients' treatment in both of our selected disease areas of focus – oncology and immunology –and have demonstrated substantial clinical benefit and commercial success. As a result, biologics are one of the fastest growing segments in the drug industry and made up 39% of 2015 FDA approvals. Seven of the top ten selling drugs in 2015 were biologics including Humira (adalimumab), the top selling drug in 2015 with sales of $14 billion, Remicade (infliximab) and Rituxan/MabThera (rituximab), all indicated for the treatment of arthritis, one of the therapeutic conditions in autoimmunity. Additionally, biologics to treat cancer represented three of the top ten best-selling drugs in 2015, and included Rituxan, Herceptin and Avastin.

For these reasons oncology and autoimmune diseases continue to be disease areas of high interest to pharmaceutical companies with numerous efforts to identify novel therapeutic solutions. Our science-driven predictive capabilities are well suited for the identification of novel target candidates suitable for therapeutic intervention for these complex, multi-factorial diseases.

Monoclonal Antibody Therapy for Oncology

mAb therapeutics is a class of biological drugs that harnesses the exquisite specificity and potent binding properties of antibodies to create a mono-specific antibody (drug) that binds to the drug target of interest with high specificity and thereby limits the potential for off-target toxicity that is often seen with small molecule drugs. The extremely large

repertoire of possible antibody sequences means that one can generate highly specific mAb drug candidates that can: a) bind to almost any extracellular or cell surface target protein; b) bind and antagonize the target of interest or c) bind and agonize the target of interest. Due to the versatility and high specificity of this approach, mAb therapies are being intensively researched, developed and commercialized as treatments for numerous serious diseases with the belief that they have the potential to be more effective treatments with fewer off-target side effects compared to traditional small molecule chemical drugs. During the past two decades, mAbs have emerged as an important and rapidly growing drug class, with over 30 mAbs already approved for therapeutic use in the United States for various clinical indications, including oncology, chronic inflammatory diseases, transplantation, infectious diseases and cardiovascular diseases. For cancer therapy, a mAb may inhibit cellular processes critical for tumor growth, stimulate the patient's immune system to attack the target cancerous cells, or be used for targeted delivery of chemotherapy specifically to the cells identified by the antibodies (known ADC technology). Moreover, according to an analysis by Tufts University, the rate of success for mAb therapeutics from first use in humans to regulatory approval is more than double that of traditional small molecule chemical drugs.

Although significant progress has been made in recent years in mAb therapeutics, numerous challenges still remain. One of the main challenges in this extremely promising field of mAb therapeutics is the identification of novel extracellular or cell surface targets that can translate into clinically relevant therapies for a variety of disease indications. To this end, we have developed several proprietary target discovery platforms through focusing on and integration of various aspects of our unique predictive discovery capabilities to identify novel drug targets for mAb therapies. Our Pipeline Program activities are currently focused on mAbs as the therapeutic modality for cancer immunotherapy, with an additional Fc fusion therapeutic program for autoimmune diseases.

Therapeutic Proteins for Autoimmunity

Therapeutic proteins are another type of biological drug, typically a large biological molecule or a fragment derived from a relevant extracellular or cell surface protein and usually engineered and produced by recombinant technologies to have drug-like properties. For example, a cell surface or extracellular protein could be engineered to be fused to the Fc domain of an IgG (antibody) protein to provide a longer half-life in the blood. Therapeutic proteins are clinically used to treat a wide range of diseases including cancer, autoimmune diseases, infectious diseases, blood-related disorders and others. CGEN-15001, our lead program for autoimmune diseases, is an Fc fusion protein.

Pipeline Program

Overview

During 2010, we integrated our approach to novel target discovery, moving from a “technology driven” individual platform based methodology to a “market driven” approach leading to potential firstinclass biologics. In this approach, we harnessed all of our relevant discovery platforms, systems and tools towards a selected unmet need in order to predict and validate novel target candidates that we believed have the highest potential to generate successful first-in-class therapeutics to address that particular need. With our primary area of focus in immuno-oncology, we believe this approach will enable us to make significant contributions to cancer treatment.

Our Pipeline Program allows for target validation and development of multiple therapeutic candidates based on our novel drug targets. Our Pipeline Program currently ranges from target validation to preclinical studies primarily in the field of immuno-oncology, with an additional Fc fusion therapeutic program for autoimmune diseases. The aim of the Pipeline Program is to advance the validation of Compugen-discovered drug target candidates to generate Ab therapeutic drug candidates against such targets and to further advance selected therapeutic candidates into preclinical and clinical testing. The newly discovered target candidates enter the Pipeline Program when they begin experimental evaluation following their in silico prediction and selection and undergo various validation studies to confirm their therapeutic potential. The experimental validation studies are conducted at our facilities or at external expert laboratories, selected specifically for each relevant field. This is followed by the generation of a therapeutic product candidate to be used for in vitro and in vivo proof of concept studies in disease animal models, as applicable. Therapeutic Fc fusion proteins or mAb product candidates, either humanized or fully-human, then enter the stage of lead candidate selection and optimization, with a final lead to be advanced to investigational new drug application (IND) enabling studies. For selected therapeutic product candidates, we intend to continue development into early clinical development. Our strategy is to partner our novel drug target candidates and their respective therapeutic product candidates in our Pipeline Program at different stages of the drug development process, under collaborative and/or licensing arrangements of different types with third parties. Our Pipeline Program activities are currently primarily focused on mAbs as the therapeutic modality for cancer immunotherapy, and an Fc fusion protein for immunology.

Immune Checkpoint and other Immunomodulatory Target Discovery

Overview

Modulation of the immune system has shown clinical success in several therapeutic applications, such as treating various types of cancer, inhibiting autoimmune diseases and prolonging graft survival in organ transplant recipients. This increasing clinical significance is the basis for significant interest in the discovery and development of immunomodulators for therapeutic uses, and the rationale behind Compugen's efforts: the identification of novel immune checkpoint protein candidates, myeloid target candidates and additional sets of immunomodulatory proteins that can serve as targets for therapeutic mAb discovery or be engineered to produce therapeutic product candidates.

Our first focused discovery program, the immune checkpoint discovery program, was directed towards the discovery of novel members of the B7/CD28 co-inhibitory proteins, which are of high interest to the industry and have therapeutic potential in both cancer and autoimmune diseases. As a result of this discovery effort, the primary focus of our Pipeline Program is mAb therapeutics targeting these potential B7/CD28 like checkpoint candidates for cancer immunotherapy, and to a lesser degree, Fc fusion protein therapeutics for autoimmune diseases based on one of these novel checkpoint candidates.

Our initial results in identifying potential B7/CD28-like immune checkpoint candidates and the high industry interest in this class of proteins, led us to expand our discovery efforts to the identification of additional sets of immunomodulatory proteins beyond this family. By extending our predictive discovery capabilities for immunotherapy, we developed additional methodologies designed to discover immunomodulators distinct from B7/CD28-like proteins. In order to identify myeloid targets, we have used a combination of our discovery approaches, principally the disease-associated platforms MED and LINKS, described below, for the discovery of targets that are expressed within the suppressive myeloid lineages.

Immune checkpoints:

Immune checkpoints are negative regulators of the immune system, that play critical roles in maintaining self-tolerance, preventing autoimmunity and protecting tissues from immune collateral damage. These immune checkpoints are often "hijacked" by tumors to restrain the ability of the immune system to mount an effective anti-tumor response. Blocking immune checkpoints provides a promising approach for activating anti-tumor immunity. Indeed, recent FDA approval of antibody-based drugs blocking the immune checkpoints CTLA4 and PD-1 has emerged as a paradigm shift in cancer therapy, leading to durable clinical responses even in patients with advanced cancer. The breakthrough successes in melanoma, lung, head and neck, Hodgkin's lymphoma and kidney cancers provided therapeutic validation for this approach and formed the foundation for a new era of cancer immunotherapy. Despite the success of CTLA4 and PD-1 blockers, many patients do not respond to these treatments and the clinical benefit is still limited to a subset of cancer indications. In those indications where a response is seen, it is typically only a minority of patients that achieve the promise of long-term survival. It is therefore clear there are additional immune evasion mechanisms mediated by other immune checkpoint proteins. The activity of the immune system is mostly regulated by immune cells called T cells. One protein family which is responsible for regulating immune cells, including T cells, is the B7/CD28 family of co-stimulatory and co-inhibitory receptors and ligands. Naïve T cells are initially activated by antigens derived from invading pathogens or from malfunctioning cells, such as cancer cells. The magnitude and efficacy of the immune response is determined by a delicate balance between co-stimulatory and co-inhibitory signals. Tumors exploit this regulatory mechanism by continuously inducing co-inhibitory signals (immune checkpoints) to evade immune destruction. Therefore, the ultimate goal of cancer immunotherapy is to enable the immune system to detect cancerous cells, destroy them and prevent further tumor development.

Predictive discovery of novel immune checkpoints:

A key Compugen established capability in this field was the development and use of our Predictive Discovery Platforms for the discovery of novel protein members belonging to various known and clinically important protein families. These discovery platforms incorporate two key Compugen proprietary infrastructure capabilities: a sequence analysis platform –LEADS, and a disease-association platform – MED, a capability which was further enhanced in the LINKS platform (described in more detail below). Specialized algorithms designed for identification of the unique characteristics of specific protein families, utilizing LEADS and MED, analyze the entire proteome to search for novel proteins belonging to a desired family. This platform concept was initially developed for the identification of novel immunomodulators which can serve as protein therapeutics for various pathological conditions, and more specifically, the B7/CD28 protein family of costimulators/coinhibitors. The reason we focused initially on this protein family is that B7/CD28 proteins are known to play key roles in regulating immune responses and serve as immune checkpoints. Also, there is a very low homology between these family members, which we believed we could overcome by using our unique approach. We believe new proteins belonging to this family could have significant therapeutic potential in many pathological conditions, including oncology, infectious disease, and autoimmune diseases. Applying the Predictive Discovery Platforms resulted in the identification of a number of putative immune checkpoint B7/CD28-like protein candidates, some of those we have disclosed are CGEN-15001T, CGEN-15022, CGEN-15029 andCGEN-15137.

Predictive discovery of other immunodulators:

In order to discover the immunomodulators distinct from B7/CD28-like proteins, we used another discovery methodology distinct from that employed in the discovery of Compugen's B7/CD28-like candidates. This discovery capability was modeled to exploit the interplay between the immune system and intruding pathogens. As a result of such interplay, some immune proteins tend to evolve differently from non-immune related ones. We devised an evolutionary model to detect such potential immune proteins, and this predictive algorithm was incorporated into our discovery infrastructure and integrated with our existing tools for the discovery of target candidates for cancer immunotherapy.

Predictive discovery of myeloid targets:

In order to identify myeloid targets, we have used a combination of our discovery approaches described above (immune-checkpoint discovery and other immune-modulators). The principal discovery platform employed in the identification of myeloid targets are the disease-associated platform MED and the LINKS platform for the discovery of targets that are expressed within the suppressive myeloid lineages. A specific discovery capability was developed that modeled the biology of tumor-associated macrophages (TAMs). TAMs are an important component of the tumor microenvironment and play a major role in creating the immunosuppressive environment that enables tumor development. Proteins having the potential to modulate the tumor microenvironment may serve as potential targets for cancer immunotherapy. This discovery capability relies heavily on our MED and LINKS platforms, which were employed to predict proteins that may play a role in the TAMs biology.

Target characterization and validation:

During 2014, 2015 and continuing into 2016 we enhanced our target characterization and validation infrastructure, in order to be able to advance multiple immune checkpoint candidates in our Pipeline Program. We added personnel, equipment, new experimental systems and technologies to increase expertise and workload throughput. Furthermore, in addition to our internal expansion efforts, we entered into new or expanded agreements with leading contract research organizations and academic research centers.

In December 2014, we signed a multi-year research collaboration with Johns Hopkins University, School of Medicine, currently under the direction of Prof. Drew Pardoll. Prof. Pardoll, a member of Compugen's Scientific Advisory Board, is a pioneer in the field of immuno-oncology. The collaboration focuses on further evaluation of selected novel B7/CD28-like immune checkpoint candidates discovered by us for the potential treatment of cancer. This evaluation includes the candidates' differentiation profile with respect to known checkpoints and their potential to serve either for monotherapy or in combination with other cancer treatments. This collaborative research expands our ongoing assessment of the biology and mechanism of actions of our novel B7/CD28-like immune checkpoint candidates, and provides access to the world-class immuno-oncology research tools and expertise at Johns Hopkins University. In January 2015, we signed an agreement with the U.S. National Institutes of Health (NIH) according to which we obtained rights to use certain biological systems and materials developed by the NIH in-house for purposes of advancing the research and development of our multiple immuno-oncology programs toward future clinical evaluation. The experimental systems and biological materials obtained from the NIH enable the engineering of human T cells to specifically recognize tumor antigens on cancer cells. Together with the collaboration with Johns Hopkins University, these new capabilities provide us with various capabilities and technologies to advance in parallel multiple immune checkpoint target programs toward the development of first-in-class biologics.

Immuno-Oncology Validation: Immune checkpoint target candidates:

In June 2015, we disclosed experimental validation data for CGEN-15029, known publicly as PVRIG, a novel B7/CD28-like immune checkpoint target candidate. Initial validation studies show that expression of CGEN-15029 in T-cells inhibits their activation by melanoma cells, consistent with an immune suppressive role of the target in the

tumor microenvironment. The target possesses signature immune-checkpoint receptor characteristics, including expression in relevant subsets of T- and NK-cells, with particularly high expression in lymphocytes that populate the tumor microenvironment (known as tumor infiltrating lymphocytes, or TILs). In 2015, we announced that we identified a binding partner for CGEN-15029, which enabled a clear path toward selection of a lead antibody and its therapeutic development. CGEN-15029 is our highest priority mAb program and was selected to be advanced toward clinical testing.

In 2016, our immuno-oncology target validation pipeline activities were focused on immune checkpoints and myeloid targets. Myeloid CGEN-target candidates have been identified within the tumor microenvironment of multiple cancers and are aggressively pursued by the Company and in collaboration with third parties.

Some of our immune checkpoint mAb target candidates were engineered as recombinant proteins consisting of the extracellular region of the immune checkpoint membrane proteins' candidate fused to an Fc antibody domain. CGEN-15001 was the first of these predicted candidates to undergo extensive in vitro and in vivo validation. In 2015 and 2016, we continued to expand our activities in the field of immuno-oncology and continued to commit a higher portion of our resources to immuno-oncology rather than immunology. Therefore, in the field of immunology we focused on CGEN-15001 in further elucidating its unique mechanism of action and in studying its translational potential using biological samples from autoimmune patients. See below: "Fc Fusion therapeutics: Immune checkpoint candidates."

Therapeutic Development: Novel Product Candidates

Overview

Our therapeutic Pipeline Program consists of mAb target candidates discovered by using our immuno-oncology predictive discovery methodologies and an autoimmune Fc fusion protein product candidate based on one of these target candidates. Immune checkpoint target candidates disclosed by Compugen include CGEN-15001T, CGEN-15022, CGEN-15029 and CGEN-15137, all of which are at various stages of research and therapeutic development, internally or with a partner, for oncology and CGEN-15001 fusion protein for autoimmune disease. Additional undisclosed immune checkpoint candidates are undergoing target validation or early stage drug discovery.

In 2015 we announced that we identified the binding partner for CGEN-15029, a protein known as PVRL2 that has been implicated in other immune checkpoint pathways. Antibodies that block the binding of mouse PVRIG to PVRL2 have been shown to inhibit tumor growth in multiple in vivo syngeneic models, demonstrating proof of concept for treatment of cancers in which both PVRIG and PVRL2 are present in the tumor microenvironment (TME). Additionally, mice in which the PVRIG gene has been ablated (or 'knocked out') demonstrate slower tumor growth than those in which the gene is intact. Therapeutic discovery efforts were initiated based on the strength of the validation program, and CGEN-15029 is currently our highest priority Pipeline Program.

In December 2016, we disclosed CGEN-15137, our cancer immunotherapy program for TIGIT, to complement the Company's CGEN-15029 program, following data recently generated for the CGEN-15029 (PVRIG) program. TIGIT is an immunomodulatory in the B7/CD28 family which has recently gained broad industry interest in the field of immuno-oncology. Recent preclinical studies have shown that antibody antagonists of TIGIT can potently inhibit tumor growth in mouse cancer models when combined with PD1 pathway blockade. TIGIT and PVRIG represent two distinct arms of the same biological pathway. Based on this and experimental data, the Company believes there is significant added value to developing both arms as a potential combination therapy. We expect to select the lead antibody for CGEN-15137 by end of the first quarter of 2017.

We have secured access to a highly diverse human phage display antibody library to generate antibodies against our novel targets for our therapeutic Pipeline Program. We use this library to screen for antibodies that bind to a given target with high specificity and affinity. Those antibodies are then tested for desired activities, such as the ability to stimulate anti-tumor immune response, or induce tumor cell killing when coupled with a toxin. Lead candidates are selected based on in vitro activity and/or efficacy in animal-based tumor studies, to be further advanced towards preclinical and clinical development.

In additional to phage display technologies, we also use traditional hybridoma approaches for antibody discovery. This is done to broaden the diversity of candidate antibodies for a given program, and to take advantage of the natural evolution of antibody affinity that occurs following immunization of an animal. During 2015, we established in-house

capabilities and expertise to generate hybridoma antibodies, thereby expanding our options for development of therapeutic product candidates.

Immuno-oncology therapeutic programs:

Compugen has two therapeutic programs that are currently under development in partnership with Bayer pursuant to a research and discovery collaboration and license agreement signed in August 2013:

- CGEN-15001T: a lead antibody has been selected for the program, which is now in preclinical development at Bayer under their full control. GMP material for clinical testing is currently in production, and pivotal GLP toxicity studies are ongoing.

- CGEN-15022: Research activities for the program are being jointly pursued by Bayer and Compugen. A novel mechanism of action has been revealed for the lead candidate antibodies, and further characterization of its role in anti-cancer immune responses is in progress.

In addition to the partnered Bayer programs, Compugen has a number of internal programs at various stages of therapeutic development:

- CGEN-15029/PVRIG: An antibody candidate for the program, COM701, was selected in June 2016 based on its high binding affinity, ability to block PVRIG interactions with its cognate ligand (PVRL2), and induction of enhanced T-cell activation in multiple in vitro assay systems. A research cell bank for COM701 has been established, and the program is proceeding through CMC and IND-enabling activities, with a target IND date anticipated in the fourth quarter of 2017.

- CGEN-15029e: Based on high PVRIG expression in certain T-cell leukemias, a second therapeutic opportunity for this target was identified and is being explored for further development. Existing antibodies from the CGEN-15029 program were modified to enable effector function, which will allow direct killing of cells expressing high levels of the target (i.e. the leukemic T-cells) by antibody dependent cellular cytotoxicity (ADCC) and/or complement dependent cytotoxicity (CDC).

- CGEN-15137/TIGIT: Based on the pathway association of CGEN-15029/PVRIG with TIGIT, we explored whether combination inhibition of both PVRIG and TIGIT would lead to greater activation of T-cells beyond inhibition of each separately. This has been borne out in multiple in vitro systems, leading to the initiation of a therapeutic TIGIT program. Multiple high affinity blocking antibodies have been identified that increase T-cell activation, both alone and in combination with COM701. Final lead selection is underway for the program, with a target date of March 2017 for selection of the lead candidate. Preclinical development activities will initiate in the company immediately following lead selection. Antibodies directed against TIGIT are currently being investigated in early clinical testing by Bristol-Myers Squibb Company, F. Hoffmann-La Roche Ltd & Merck Sharp & Dohme Corp. Additionally, other companies with disclosed preclinical stage programs, include Arcus Biosciences Inc. and OncoMed Pharmaceuticals, Inc.

- Undisclosed CGEN myeloid target: Compugen announced in November 2016 that a therapeutic program has been initiated for one of the targets from the myeloid discovery effort.

Autoimmune therapeutic program:

CGEN-15001 is an Fc fusion protein drug candidate for autoimmune diseases, consisting of the fusion of the extracellular region of CGEN-15001T to an IgG Fc domain. CGEN-15001 was previously shown to be effective in treating several autoimmune diseases in animal models, including models of multiple sclerosis, rheumatoid arthritis (RA), type 1 diabetes and psoriasis. Additional studies demonstrated that CGEN-15001 has an immuno-modulatory function manifested in attenuating inflammatory responses and promoting regulatory and anti-inflammatory activities, including the differentiation of regulatory T cells (Tregs), a population of immune cells that plays a pivotal role in induction and maintenance of immune tolerance. CGEN-15001 was previously shown to have anti-inflammatory

effects in translational studies both in healthy donors' cells as well as in cells from RA patients, thereby confirming that the CGEN-15001 pathway is functional and responsive in these autoimmune patients. In January 2017, we announced new animal model results demonstrating restoration of immune tolerance by CGEN-15001. This data demonstrated that immune tolerance can be transferred from diseased donor mice treated with CGEN-15001 to recipient naïve mice in an antigen specific manner.

In comparison to current therapeutic approaches that generally suppress the immune system, tolerance induction has the potential to provide a sustained resolution of the disease without compromising the immune system's capacity to fight infections and malignancies.

Our Predictive Discovery Approach

We discover novel drug targets through a unique, predictive, computational process that combines human biology predictions derived from genome analysis combined with disease information derived from analysis of vast amounts of publically available data, as well as proprietary data. This process, which is generally applicable to many fields of medical interest, usually results in multiple drug target candidates. Our comprehensive data analysis therefore enables us to often identify first-in-class drug target candidates, which are difficult to identify using traditional screening approaches. This effort is performed on an ongoing basis by an experienced multidisciplinary research team of scientists, and who over time have generated dozens of peer reviewed publications of certain of our findings and capabilities in scientific journals. This approach has been designed to allow us to focus on a selected biomedical field of research, and to emerge with a set of novel drug targets that otherwise would have been challenging to identify. We have internally demonstrated the applicability of our discovery approach in multiple therapeutic and diagnostic areas and have demonstrated significant advantages of our methodologies in terms of cost, time and probability of successful experimental validation, in comparison to traditional discovery methods.

We call our unique, predictive, computational process "Predictive Discovery" because our in silico findings predict the biological function and therapeutic relevance of novel proteins which, in most cases, were not previously considered as drug target candidates. For over a decade, we have been developing predictive platforms for a variety of biological processes and phenomena, which are continuously being improved and diversified to address the need for novel targets in areas of interest to the industry.

- Biological knowledge: For each biological phenomenon or process, we first screen the available biological literature on the topic. Our scientists study and critically evaluate the publically available information to discern the key components from a computational perspective.

- Genome and proteome analysis: The genome is the most complex encryption system known to mankind, and our discovery team has made exceptional progress in understanding and deciphering its code. Our proprietary genome and protein analysis platforms generate accurate, robust and comprehensive data sources which have proven successful in a variety of internal and collaborative programs. Our genome and proteome analysis tools are employed depending on the biological phenomenon or process of interest, and are one of the pillars of our discovery process.

- Experimental and disease data: The increased availability of molecular data and exponential growth in personal, clinical and life-style data are presenting a significant challenge alongside an extraordinary discovery opportunity. Our discovery team is focused on collecting these data, analyzing them, evaluating their quality and utility, and integrating relevant studies in a format that is appropriate for predictive discovery. MED and LINKS are examples of an internal platform that was created to integrate gene expression data.

The model is tested and continuously refined to identify with high accuracy key differentiating attributes from the three domains of known biology, genome and experimental and disease data.

During the past two years, we predicted additional B7/CD28-like immune checkpoint candidates, through the utilization of the same predictive models and algorithms that led to the identification of the first set of novel candidates in our earlier discovery efforts, but following enhancement of these models and algorithms through incorporation of additional information obtained from such earlier efforts.

Main Technology Platforms

An important aspect of our predictive development efforts was the creation of our three main technology platforms, LEADS, MED and LINKS, which integrate our scientific understandings and predictive models. These infrastructure platforms serve as key components first in the development of our individual discovery platforms described in the following section, and then in allowing us to approach unmet clinical needs through their integrated use with the discovery platforms and other computational systems and tools developed by us.

LEADS provides a comprehensive in silico view of the human transcriptome, proteome, and peptidome and serves as a rich infrastructure for the discovery of novel genes, transcripts and proteins. This was the first infrastructure platform developed by us and it has been enhanced and improved for over a decade. LEADS provides precise gene, transcript, protein and peptide prediction through modeling of various biological phenomena such as alternative splicing, antisense, fusion gene, RNA editing and polymorphisms. This infrastructure, originally based on mapping of messenger RNAs, or mRNAs, and expressed sequence tags (ESTs) to the genome, followed by clustering of the sequences and assembly of the gene structure and all possible mRNA transcripts and resulting proteins. The LEADS platform is now being leveraged for discovery by efficiently integrating genome annotation data and genome-aligned gene expression data.

MED is an in silico disease expression database integrating more than 70,000 microarray experiments which are grouped into approximately 1,400 sets. Each set is a unification of different experiments of tissues with the same clinical relevance (i.e. normal tissues, malignant tissues, tissues from drug treated patients). In contrast to a commonly used single experiments analysis approach, the results from all 70,000 microarray experiments are integrated by MED via a sophisticated procedure that we developed, and they are then unified into a "virtual" or in silico chip.

LINKS is designed to allow comprehensive characterization and differentiation of drug target candidates. LINKS was designed to integrate and analyze extremely large amounts of patients' disease and clinical data to associate novel drug targets with specific disease conditions, clinical attributes and disease-associated mechanisms of action. LINKS was applied to analyze our pipeline of immune checkpoint target candidates and to compare them to one another as well as to differentiate them from known immune checkpoints. This analysis includes expression in immune subpopulations, regulatory mechanisms and cancer-specific immune signatures, and enables us to compare and differentiate our large portfolio of novel immune checkpoint programs. In 2016 we disclosed that LINKS has been enhanced to include the in silico discovery of new immuno-oncology drug targets, with a specific focus on the discovery of myeloid targets within the tumor microenvironment (TME). LINKS now allows the Company to broaden its existing group of immune checkpoint targets, which already includes a few myeloid targets, predicted by algorithms and methodologies previously developed by us.

Target Discovery Platforms

- The Discovery of Novel B7/CD28-Like Immune Checkpoints: Compugen developed this platform to identify new checkpoint proteins that can be utilized as targets for cancer immunotherapy. The discovery platform used specialized algorithms designed to identify a set of the unique characteristics of this protein family at genomic and protein levels as well as unique gene expression profiles. The output of the platform also included CGEN-15029, PVRIG, and CGEN-15137, TIGIT, as well as other candidates, before they were published by others in the scientific literature, providing a strong validation of the predictive power of the model. Two of these novel proteins, CGEN-15001T and CGEN-15022, are the focus of the Bayer Collaboration.

- **Other Discovery Approaches for Immunomodulatory Proteins:** Compugen developed platforms to discover other types of immunomodulators, based on modeling of two distinct biological phenomena. One was an evolutionary model, which modeled the interplay between the immune system and intruding pathogens. The second modeled the role of tumor-associated macrophages (TAMs).

- Antibody-Drug Conjugate Cancer Therapy Discovery Platform: Compugen developed this platform to identify membrane proteins that have the potential to internalize and that are expressed on cancer cells and have low expression on healthy cells, in order to allow the ADC drug to selectively attack the tumor and spare healthy tissues.

- **Biomarker Discovery Approaches:** Compugen developed various biomarker discovery approaches based on specialized algorithms for the discovery of various type of biomarkers. The key approaches relate to the discovery of drug-induced toxicity biomarkers, and for the discovery of potential biomarkers for our selected immune checkpoint target candidates.

Commercialization

Our predictive discovery infrastructure has broad applicability and is not limited to a certain indication or therapeutic field. However, in early 2010, we determined to focus our activities on novel target discovery in the fields of oncology and immunology. In addition, we transitioned from a "technology driven" individual platform capability approach to a "market driven" approach. In this "market driven" approach we harnessed all of our relevant infrastructure and discovery platforms, systems and tools to predict and validate novel targets that we believe have the highest potential to serve clinical unmet needs and be the basis of successful first-in-class drug candidates addressing that need.

38

In late 2010, we also initiated our Pipeline Program, focusing on mAbs and protein therapeutics in the fields of oncology and immunology (autoimmune diseases), with our primary focus on the field of immuno-oncology.

Our business strategy is to seek collaborations on our Pipeline Programs with pharmaceutical partners at various stages of development (early target discovery/validation through clinical development). Through these collaborations we seek to create and further develop and commercialize therapeutic product candidates directed to our novel targets. These might include one or more of our therapeutic pipeline programs, including CGEN-15001 for autoimmune diseases, our novel myeloid target candidates, as well as COM701 - together with or without CGEN-15137/TIGIT, for which there appears to be a strong combination rationale. Potential revenue sources in line with this business model could include upfront fees, equity investment, research funding, milestones payments, option exercise fees, license fees, royalties and other revenue sharing payments. We may also seek co-development arrangements pursuant to which we would further advance partnered programs under any such partnership in order to retain higher value from future sales revenues.

Additionally, we are exploring research and discovery collaborations aimed at harnessing our infrastructure capabilities in line with our partners' pipeline needs. In these arrangements we would utilize our discovery approaches to identify and prioritize novel proteins and/or targets according to the specific unmet need of the therapeutic approach with our partner.

Bayer Collaboration

On August 5, 2013, Compugen and Bayer entered into the Bayer Collaboration for the research, development, and commercialization of antibody-based therapeutics against two novel, Compugen-discovered immune checkpoint regulators, CGEN 15001T and CGEN 15022.

Under the terms of the Bayer Collaboration, we received an upfront payment of $10 million, and we are eligible to receive an aggregate of over $500 million in potential milestone payments for both programs, not including aggregate preclinical milestone payments of up to $30 million during the research programs. Additionally, we are eligible to receive mid- to high single digit royalties on global net sales of any approved products under the collaboration.

In 2014, we achieved the first and second preclinical milestones and in 2015 we achieved the third preclinical milestone with respect to CGEN 15001T, one of the two immune checkpoint regulators licensed to Bayer, and received a total of $15 million in milestone payments. Pursuant to the terms of the Bayer Collaboration, this program was transferred to Bayer's full control for further preclinical and clinical development activities, and worldwide commercialization under milestone and royalty bearing licenses from Compugen. To date, preclinical activities, including pivotal toxicity studies and GMP clinical trial material production, are ongoing.

Compugen and Bayer are continuing the preclinical research program for CGEN 15022, the second of two checkpoint protein candidates discovered by us that are being developed pursuant to the Bayer Collaboration. In April 2016, pursuant to the third amendment to the Bayer Collaboration, we achieved the first preclinical milestone for CGEN 15022 for which we received a $400,000 payment. A joint steering committee consisting of representatives from each party is responsible for overseeing and directing the research program pursuant to an agreed upon workplan. Each party is responsible for the costs and expenses incurred by it in performing its designated activities under the workplan during the research programs. Following the completion of this second research program, Bayer will have full control over further clinical development of any cancer therapeutic product candidates targeting CGEN 15022 and will have worldwide commercialization rights for any approved products. To date, further characterization studies of its role in anti-cancer immune responses are ongoing.

The Bayer Collaboration continues until Bayer is no longer required to make payments under the Agreement or until otherwise terminated by either party in accordance with the terms of the Agreement. Bayer may also terminate the Bayer Collaboration, either in whole or only with respect to one of the programs, and in each case also on a

product-by-product and/or country-by country basis, at any time without cause, upon prior written notice. Either party may also terminate the Bayer Collaboration, either in whole or with respect to only one of the programs, if the other party is in material breach and such breach has not been cured within the applicable cure period. Upon any termination of the Agreement, depending upon the circumstances, the parties have varying rights and obligations with respect to the continued development and commercialization of any products and certain payment and royalty obligations.

Competition

The biotechnology and pharmaceutical industries are highly competitive. Numerous entities in the United States and elsewhere compete with our efforts to make discoveries and out-license them to pharmaceutical and biotech companies. Our competitors include biotechnology and pharmaceutical companies both small and large, the research and discovery groups within pharmaceutical companies, academic and research institutions and governmental and other publicly funded agencies.

We face, and expect to continue to face, ongoing competition from entities that discover and develop novel products, and that have therapeutic product candidates or a product that acts by similar, or possibly identical, mechanism of action (MOA) as well as by different mechanisms, but address the same unmet need. With respect to our therapeutic product candidates, our potential competitors are comprised of companies that discover and develop monoclonal antibody therapies and/or therapeutic proteins to novel targets for oncology and autoimmune diseases. Specifically in the field of immune checkpoints for cancer immunotherapy, there are several leading pharmaceutical and biotechnology companies as well as smaller biotechnology companies and academic institutions that are developing biological therapies to enhance immune response towards tumors, some of which may be based on the same targets we have discovered. The product candidates being developed by the smaller companies and/or academic institutions are expected to compete with our product candidates on licensing and collaboration opportunities. If approved, such cancer immunotherapy products would compete with our approved products in the respective fields.

Our discovery program depends, in large part, on our discovery platforms and other capabilities and our proprietary data to make inventions and establish intellectual property rights in protein-based products, including proteins and antibodies. There are a number of other means by which such inventions and intellectual property can be generated. We believe that our computational capabilities, and specifically our discovery platforms, provide us with a competitive advantage in the field of predicting gene-based products, new functions and linkage to disease. We believe that this advantage is made possible by building an infrastructure for predictive discovery based on the incorporation of ideas and methods from exact sciences into biology, and by the modeling and integration of significant biological phenomena and the resultant better research capabilities that we have developed, as well as our unique team of predictive discovery scientists from both biology and exact sciences disciplines who have worked together for more than ten years.

Many of our potential competitors, either alone or with their collaborative partners, have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of therapeutics, obtaining FDA and other regulatory approvals, and commercialization. Accordingly, our competitors may be more successful than we may be in identifying product candidates, protecting them with patent applications, developing them, accelerating their development process, obtaining FDA and other regulatory approvals and achieving widespread market acceptance. We anticipate that we will face intense and increasing competition as advanced technologies become available.

Intellectual Property Rights

Our intellectual property assets are our principal assets. These assets include the intellectual property rights subsisting in our proprietary know-how and trade secrets underlying our predictive biology capabilities and discovery platforms, our patents and patent applications, particularly with respect to Compugen discovered molecules and utilities. We seek to vigorously protect our rights and interests in our intellectual property. We expect that our commercial success will depend on, among other things, our ability to obtain commercially valuable patents, especially for our targets and product candidates, maintain the confidentiality of our proprietary know-how and trade secrets, and otherwise protect our intellectual property. We seek patent protection for certain promising inventions that relate to our product candidates. As of February 1, 2017, we had a total of 82 issued and allowed patents, of which 40 are U.S. patents, 12 are Australian patents, 14 are Israeli patents, eight are European patents, one is Canadian patent, one is New Zealand patent, three are Japanese patents, two are Chinese patents and one is a patent in Singapore. Our issued and allowed

patents expire between 2020 and 2032. We also have 102 pending patent applications, which as of February 1, 2017, included 24 patent applications that have been filed in the United States, 10 patent applications that have been filed in Europe, nine patent applications that have been filed in Israel, six patent applications that have been filed in Australia, eight patent applications that have been filed in Canada, four patent applications that have been filed in Japan, four patent applications that have been filed in India, four patent applications that have been filed in China, 3 patent applications that have been filed in Brazil, 3 patent applications that have been filed in Korea, 3 patent applications that have been filed in New Zealand, four patent applications that have been filed in the Russian Federation, two patent applications that have been filed in Singapore, 3 patent applications that have been filed in Mexico, four patent applications that have been filed in South Africa, four patent applications that have been filed in Hong Kong, two patent applications that have been filed in Egypt and five applications that have been filed under the Patent Cooperation Treaty for which we have not yet designated the countries of filing.

Our general policy is to continue patent filings and maintenance for our targets and product candidates, only with respect to candidates or projects that are being actively pursued internally or with partners, or that we believe to have future commercial value. We routinely abandon patent applications and may choose to abandon maintenance of patents supporting candidates or projects that do not meet these criteria.

We also seek protection for our proprietary know-how and trade secrets that are not protectable or protected by patents, by way of safeguarding them against unauthorized disclosure. This is done through the extensive use of confidentiality agreements and assignment agreements with our employees, consultants and third parties as well as by technological means. We use license agreements both to access third party technologies and to grant licenses to third parties to exploit our intellectual property rights.

Manufacturing

We currently rely on contract manufacturers or our collaborative partners to produce materials and drug substances for drug products required for our research and development activities. We do not currently own or operate manufacturing facilities for the production of clinical or commercial quantities of our therapeutic drug candidates. We do not have and we do not currently plan to acquire or develop the facilities or capabilities to manufacture bulk drug substance or filled drug product for use in human clinical trials. We plan to rely on CMOs and third party contractors to generate formulations and produce larger scale amounts of drug substance and the drug product required for our clinical trials. We expect to rely on CMOs and third party contractors to manufacture cGMP drug substance and drug product required for our clinical trials for the foreseeable future. We also plan to contract with CMOs and third party contractors for the labeling, packaging, storage and distribution of investigational drug products.

In 2016, we entered into agreements for the manufacturing and respective analytics of COM701, our therapeutic antibody. Our manufacturing strategy is currently structured to support our U.S. development plans. Although we believe the general manufacturing strategy developed for the United States will be applicable in other geographies, specific strategies for other geographies will be developed as part of our clinical and commercial plans for such other geographies. See “Item 3.D. Risk Factors – Risks Related to Our Dependence on Third Parties - We anticipate that we will rely completely on third parties to manufacture certain preclinical and all clinical drug supplies. Our business could be harmed if those third parties fail to provide us with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices.”

Government Regulation

Regulation of Therapeutic Product Candidates

In the United States, the FDA regulates pharmaceutical and biologic products under the Federal Food, Drug, and Cosmetic Act, or FDCA, d the Public Health Service Act, other statutes and regulations and implementing regulations. We anticipate that our product candidates will be regulated as biologics. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state and local statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable United States requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests and animal studies in compliance with the FDA’s GLP or other applicable regulations;

- submission to the FDA of an IND, which must become effective before human clinical trials may begin;

-

performance of adequate and well-controlled human clinical trials in accordance with Good Clinical Practices, or GCPs, to establish the safety and efficacy of the proposed drug for its intended use;

- submission to the FDA of a new drug application, or NDA if the drug is a small molecule, or a biologics license application, or BLA, if the drug is a biologic;

- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug or biologic is produced to assess compliance with current Good Manufacturing Practice, or cGMP, to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity; and

- FDA review and approval of the NDA or BLA.

Once a pharmaceutical candidate is identified for development it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information and analytical data, among other information, to the FDA as part of the IND. The sponsor will also include a clinical protocol detailing, among other things, the objectives of the first phase of the clinical trial, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated, if the first phase lends itself to an efficacy evaluation. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, places the clinical trial on a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Clinical holds also may be imposed by the FDA at any time before or during a clinical trial due to, among other things, safety concerns or non-compliance with applicable requirements.

All clinical trials must be conducted under the supervision of one or more qualified investigators in accordance with GCPs. An IRB at each institution participating in the clinical trial must review and approve the study plan for any clinical trial before it commences at that institution. An IRB considers, among other things, whether the risks to individuals participating in the trials are minimized and are reasonable in relation to anticipated benefits. The IRB also reviews the information regarding the trial, participant recruiting materials and the informed consent form that must be provided to each trial subject or his or her legal representative before participating in the trial. In addition, the IRB will monitor the trial until completed.

Each new clinical protocol must be submitted to the FDA, and to the IRBs. Protocols detail, among other things, the objectives of the study, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety and determine efficacy.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- 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, usually 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 may be conducted in patients.

- Phase 2: Involves studies 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: Involves studies undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical trial sites. These studies are intended to establish the overall risk-benefit ratio of the product and provide an adequate basis for product labeling and approval.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and safety reports for serious and unexpected adverse events must be submitted to the FDA and the investigators more frequently. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can

suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the applicable regulations or IRB requirements or if the drug has been associated with unexpected serious harm to patients.

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

United States Review and Approval Processes

The results of product development, nonclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling, and other relevant information are submitted to the FDA as part of an NDA or BLA requesting approval to market the product for one or more indications. The FDA initially reviews all NDAs or BLAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. The FDA may request additional information rather than accept an NDA or BLA for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA may refer the NDA or BLA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendation of an advisory committee.

The review process is lengthy and the FDA may refuse to approve an NDA or BLA if the applicable regulatory criteria are not satisfied or may require the submission of additional clinical or other data and information. Even if such data and information are submitted, the FDA may ultimately decide that the NDA or BLA does not satisfy the criteria for approval.

If a product receives regulatory approval, the approval will be limited to specific diseases and dosages or the approved indications for use may otherwise be limited, which could restrict the commercial value of the product. In addition, the FDA may require a company to conduct post-approval testing and clinical trials, to further assess a drug's safety and effectiveness after NDA or BLA approval, and may require testing and surveillance programs to monitor the safety of approved products which have been commercialized including Risk Evaluation and Mitigation Strategy (REMS) to ensure that the benefits of a drug outweigh its risks.

Post-approval Requirements

Approved drugs and biologics are subject to extensive and continuing regulation by the FDA, including, among other things, cGMP compliance, record-keeping requirements, reporting of adverse experiences with the drug, providing the FDA with updated safety and efficacy information, and complying with FDA promotion and advertising requirements. After an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements is not maintained or if serious problems occur after the product reaches the market. Drugs may be promoted for use only for the approved indication or indications and in accordance with the provisions of the approved label. The FDA and other federal and state 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 criminal and civil penalties.

Non-U.S. Regulations

In addition to regulations in the United States, drugs are subject to a variety of foreign laws and regulations governing clinical trials and commercial sales and distribution before they may be sold outside the United States. Whether or not we obtain FDA approval for a product, we must obtain the necessary approvals from comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. In some countries, we will also have to get pricing approval.

Environmental Regulation

Some of our research and development activities involve the controlled use of biologic and chemical materials, a small amount of which could be considered to be hazardous. We are subject to laws and regulations in the U.S. and Israel governing the use, storage, handling and disposal of all these materials and resulting waste products. We store relatively small amounts of biologic and chemical materials. To our knowledge, we substantially comply with these

laws and regulations. However, the risk of accidental contamination or injury from these materials cannot be entirely eliminated. In the event of an accident, we could be held liable for any resulting damages, and any liability could exceed our resources.

Regulation of Use of Human Tissue

We need to access and use various human or non-human tissue samples for the purpose of development and or validation of some of our product candidates. Our access and use of these samples is subject to government regulation, in the United States, Israel and elsewhere and may become subject to further regulation. The use of clinical data associated with human tissue samples is also heavily regulated in the United State, Israel and elsewhere. United States and other governmental agencies may also impose restrictions on the use of data derived from human or other tissue samples. To our knowledge, we substantially comply with these regulatory requirements.

Regulations Concerning the Use of Animals in Research

We also are subject to various laws and regulations regarding laboratory practices and the use of animals in our research. In the United States, the FDA regulations describe good laboratory practices, or GLPs, for various types of nonclinical laboratory studies that support or are intended to support applications for research or marketing permits for products regulated by the FDA, including INDs. Nonclinical animal studies conducted by us or third parties on our behalf may be subject to the U.S. Animal Welfare Act, the U.S. Public Health Service Policy on Humane Animal Care and Use, U.S. Department of Agriculture regulations for certain animal species. In Israel, the Council on Animal Experimentation has regulatory and enforcement powers, including the ability to suspend, change or withdraw approvals, among other powers. To our knowledge, the Company and the third party service providers we work with, as applicable, substantially comply with these regulatory requirements.

Regulation of Products Developed with the Support of Research and Development Grants

For a discussion of regulations governing products developed with research and development grants from the Government of Israel, see “Item 5. Operating and Financial Review and Prospects. C - Research and Development, Patents and Licenses – The Office of the Chief Scientist.”

C. ORGANIZATIONAL STRUCTURE

We were incorporated under the laws of the State of Israel on February 10, 1993 as Compugen Ltd., which is both our legal and commercial name. Compugen USA, Inc., a wholly owned subsidiary, was incorporated in Delaware in March 1997 and is qualified to do business in California.

D. PROPERTY, PLANTS AND EQUIPMENT

In December 2015, we moved to new facilities in Holon, Israel where we lease an aggregate of approximately 34,440 square feet of office and biology laboratory facilities under a lease that expires on March 15, 2021, with an option to extend the lease for two consecutive additional five year periods. In addition, Compugen USA, Inc. currently subleases 12,560 square feet of office and biology laboratory facilities in South San Francisco, California, under a sublease that expires on May 30, 2018.

To our knowledge, there are no environmental issues that affect our use of the properties that we lease.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS FINANCE

The following discussion of our critical accounting policies and our financial condition and operating results should be read in conjunction with our consolidated financial statements and related notes, prepared in accordance with U.S. GAAP as of December 31, 2016, and with any other selected financial data included elsewhere in this annual report.

Background

Compugen is a leading therapeutic discovery company whose mission is to utilize its broadly applicable predictive discovery infrastructure to discover novel drug targets and develop first-in-class therapeutics. Our current pipeline primarily consists of early and preclinical stage immuno-oncology programs with potential to harness the immune system to provide treatment solutions in the areas of unmet medical needs in various cancer types and patient populations. both as monotherapy and in combination with other drugs. Our business model relies on extracting the commercial value of our systematic discovery capability for novel target candidates by entering into various forms of revenue-sharing collaborations for our drug target candidates and their related therapeutic product candidates at various stages of research and development. Compugen is headquartered in Holon, Israel, with R&D facilities located in both Holon and South San Francisco. At the U.S. facilities, therapeutic monoclonal antibodies are discovered and developed against our novel target candidates.

A. OPERATING RESULTS

Overview

Since our inception, we have incurred significant losses and, as of December 31, 2016, we had an accumulated deficit of $271.0 million. We expect to continue to incur net losses for the foreseeable future.

Prior to 2010, we focused a significant portion of our research and discovery efforts on the creation of area specific discovery platforms intended to identify novel drug and diagnostic product candidates and in earlier years, had also commercialized certain of our computational biology software products. By year-end 2010 we had (i) largely integrated the various area specific discovery platforms and other computational biology tools and systems into a multi-dimensional and broadly applicable predictive discovery infrastructure, (ii) selected oncology and immunology as our areas of focus, (iii) selected the field of immune checkpoint proteins as our first focused discovery program, and (iv) initiated our Pipeline Program to advance selected drug target candidates beyond their research proof of concept stage. In 2012 we initiated activities in Compugen USA, Inc. for mAb discovery and development against certain targets we had discovered. In 2013, we entered into our first collaboration based on our Pipeline Program drug target candidates with Bayer (the “Bayer Collaboration”). Beginning in late 2013 we significantly increased our research activities in the field of immuno-oncology in order to allow for a larger number of immune checkpoint target and product candidates for cancer immunotherapy to move forward in parallel.During 2014, 2015 and continuing into 2016 we enhanced our target characterization and validation infrastructure, in order to be able to advance multiple immune checkpoint candidates in our Pipeline Program. We added personnel, equipment, new experimental systems and technologies to increase expertise and workload throughput.

We incurred net losses of approximately $11.1 million in 2014, approximately $20.2 million in 2015 and approximately $31.5 million in 2016. We expect to continue to incur net losses for the foreseeable future due in part to the costs and expenses associated with our research, development and discovery activities. Our business model primarily involves collaborations covering the research, development and commercialization of our discovered product candidates and various forms of research and discovery agreements, in both cases providing us with potential milestone payments and royalties on product sales or other forms of revenue sharing payments.

Our research and development expenses are expected to be our major operating expense in 2017, accounting for more than 75% of our expected total 2017 operating expenses. Our research and development expenditures have always comprised a significant portion of our total cash expenditures, and are budgeted to increase by more than 9% in 2017 compared to 2016.

We believe that we currently have sufficient working capital in order to sustain our operations for the coming 24 months. For a detailed description of our cash and cash equivalents position, see “Item 5. Operating and Financial Review and Prospects – B. Liquidity and Capital Resources.”

Critical Accounting Policies

The preparation of our consolidated financial statements and other financial information appearing in this annual report requires our management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We evaluate on an on-going basis these estimates, mainly related to share based payments, embedded derivatives and fair value measurements related to research and development funding arrangements, revenue recognition and commitments and contingencies.

We base our estimates on our experience and on various assumptions that we believe are reasonable under the circumstances. The results of our estimates form the basis for our management’s judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Share Based Payments

We account for stock-based compensation in accordance with ASC 718, “Compensation – Stock Compensation” (“ASC 718”), which requires companies to estimate the fair value of equity-based payment awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as an expense over the requisite service periods in our consolidated statement of comprehensive loss.

We primarily selected the Black-Scholes-Merthon model, which is the most common model in use in evaluating stock options. This model evaluates the options as if there is a single exercise point, and thus considers expected option life (expected term). The input factored in this model is constant for the entire expected life of the option.

We recognize compensation expenses for the value of awards which have graded vesting based on the straight line method over the requisite service period of each of the awards, net of estimated forfeitures. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

The computation of expected volatility is based on historical volatility of our stock. The risk-free interest rate assumption is the implied yield currently available on United States treasury zero-coupon issues with a remaining term equal to the expected life term of the options. We determined the expected life of the options based on historical experience, representing the period of time that options granted are expected to be outstanding.

We apply ASC 505-50, "Equity-Based Payments to Non-Employees" ("ASC 505-50") with respect to options and warrants issued to non-employees. ASC 505-50 requires the use of option valuation models to measure the fair value of the options and warrants at the measurement date.

Share-based compensation expense recognized under ASC 718 and ASC 505-50 were approximately $3.6 million, $3.8 million and $3.1 million for the years ended December 31, 2014, 2015 and 2016, respectively.

Embedded Derivatives and Fair Value Measurements related to research and development funding arrangements

In accordance with ASC 730-20, "Research and Development Arrangements" and ASC 815, "Derivative and Hedging" we considered the Participation Rights issued in the funding arrangements with Baize Investments (Israel) Ltd. ("Baize") to be a research and development arrangement (the "Research and Development Component") coupled with embedded derivatives (that are the Conversion Alternative and the Participation Rights) as those instruments do not have fixed settlement provisions.

Consequently, we determined that the embedded derivatives in the Research and Development Component should be accounted for as a liability to be measured at fair value at inception. The embedded derivatives will be re-measured to fair value at each reporting period until their exercise or expiration with the change in such calculated value reported in the statement of operations (as part of financial income or expenses). As a result, the fair value of those embedded derivatives would be bifurcated out of the amount to be allocated to the Research and Development Component.

We have further determined that the Detachable Warrants issued to Baize should be accounted for and classified as an equity component since the warrants have fixed settlement provisions.

The Research and Development Component was calculated as residual between the payments received and the embedded derivatives (as mentioned above), recorded at cost and has been amortized over the period in which the development is being provided in connection with the relevant designated product candidates as deduction from research and development expenses in the consolidated statements of comprehensive loss. For a detailed description of Embedded Derivatives and Fair Value Measurements related to the research and development funding arrangements, see "Item 5. Operating and Financial Review and Prospects – B. Liquidity and Capital Resources-Funding Agreements" and Note 7 to our 2016 consolidated financial statements.

The above approached to valuation uses estimations, which are consistent with the plans, and estimates that we use to manage our business. There is inherent uncertainty in making these estimates.

Revenue recognition

We currently generate revenue mainly from the Bayer Collaboration. The revenues are derived mainly from the upfront license payment, research and development services and contingent payments related to milestone achievements.

We apply ASC 605-25, “Multiple-Element Arrangements” pursuant to which each required deliverable is evaluated to determine whether it qualifies as a separate unit of accounting based on whether the deliverable has “stand-alone value”. The arrangement’s consideration that is fixed or determinable is then allocated to each separate unit of accounting based on the relative selling price of each deliverable which is not contingent based on its vendor specific objective evidence (“VSOE”) if available, third party evidence (“TPE”) if VSOE is not available, or estimated selling price (“ESP”) if neither VSOE nor TPE is available.

Revenues from upfront license payments and research and development services are recognized according to the proportional performance method along the research and development services period in accordance with ASC 605-10, “Revenue Recognition”.

Contingent payments related to milestone achievements and royalties are recognized immediately upon the accomplishment of futures events, in accordance with ASC 605-28, “Revenue Recognition – Milestone Method”.

On June 27, 2014, and October 14, 2014 we achieved the first and second substantive milestones with respect to one licensed program, under the Bayer Collaboration according to which we recognized revenues in total amount of $7.2 million in accordance with the criteria prescribed under ASC 605-28.

On December 14, 2015 we achieved the third substantive milestone with respect to one licensed program, under the Bayer Collaboration according to which we recognized revenues in total amount of $7.8 million in accordance with the criteria prescribed under ASC 605-28.

On April 17, 2016 we achieved the first substantive milestone with respect to the second licensed program, under the Bayer Collaboration according to which we recognized revenues in total amount of $0.4 million in accordance with the criteria prescribed under ASC 605-28. See Note 2 to our 2016 consolidated financial statements.

Selected Financial Data

The following discussion and analysis is based on and should be read in conjunction with our audited consolidated financial statements, including the related notes, contained in “Item 18 – Financial Statements” and the other financial information appearing elsewhere in this annual report.

	Year ended December 31,		
	2014	2015	2016
	(US$ in thousands, except share and per share data)		
Consolidated Statements of Operations Data			
Revenues	$ 12,367	$ 9,277	$ 712
Cost of revenues	3,344	1,633	223
Gross profit	9,023	7,644	489
Research and development expenses, net	15,074	21,245	24,549
Marketing and business development expenses	838	1,309	1,174
General and administrative expenses	5,448	6,008	7,349
Total operating expenses (*)	21,360	28,562	33,072
Operating loss	(12,337)	(20,918)	(32,583)
Financial income, net	1,758	1,145	1,097
Equity loss	(155)	-	-
Loss before taxes on income	(10,734)	(19,773)	(31,486)
Taxes on income	(360)	(390)	(20)
Net loss	$ (11,094)	$ (20,163)	$ (31,506)
Unrealized gain (loss) arising during the period from investment in marketable securities	(1,202)	(205)	-
Realized gain arising during the period from investment in marketable securities	(2,345)	(436)	(440)
	141	(19)	7

Unrealized gain (loss) from foreign currency derivative contracts			
Realized gain arising from foreign currency derivatives contracts	-	(141)	19
Total comprehensive loss	$ (14,500)	$ (20,964)	$ (31,920)
Basic net loss per share	(0.23)	(0.40)	(0.62)
Weighted average number of shares used in computing basic net loss per share	47,808,855	50,437,040	50,855,908
Diluted net loss per share	(0.26)	(0.40)	(0.62)
Weighted average number of shares used in computing diluted net loss per share	48,387,063	50,437,040	50,855,908

(*) Includes stock based compensation – see Note 9 to our 2016 consolidated financial statements.

	As of December 31,		
	2014	2015	2016
	(US$ in thousands)		
Consolidated Balance Sheet Data:			
Cash and cash equivalents, short-term bank deposits and restricted cash	$73,328	$81,421	$61,527
Trade receivable	-	7,800	-
Investment in marketable securities	1,054	426	-
Long-term bank deposits	35,026	-	-
Total assets	114,986	99,307	71,139
Deferred revenues	1,789	312	-
Research and development funding arrangements and others	421	-	-
Accumulated deficit	(219,296)	(239,459)	(270,965)
Total shareholders' equity	106,116	89,897	63,519

Years Ended December 31, 2016 and 2015

Revenues. Revenues totaled approximately $0.7 million in 2016 compared to $9.3 million in 2015. The decrease in revenues for 2016 is attributable mainly to the lower amount of milestones achieved in 2016 compared to 2015 in the amount of $0.4 million and $7.8 million respectively, as well as a decrease in the relevant portions of the non-refundable upfront payment recognized in each year relating to the Bayer Collaboration.

Cost of Revenues. Cost of revenues attributable to product candidate research and collaboration agreements decreased by 88% to approximately $0.2 million for 2016, from approximately $1.6 million for 2015. The decrease in the cost of revenues in 2016 is primarily due to a decrease in expenses attributed to the Bayer Collaboration.

Research and Development Expenses, Net. Research and development expenses, net increased by 16%, to approximately $24.5 million for 2016, from approximately $21.2 million for 2015. The increase was primarily due to a substantial increase in preclinical activities involving certain of our pipeline program candidates mainly related to COM701 and CGEN-15137/TIGIT, including the hiring of additional professional employees and manufacturing and regulatory consultants to support preclinical activities. Research and development expenses, net, as a percentage of total operating expenses, were 74% in 2016 and 2015.

Marketing and Business Development Expenses. Marketing and business development expenses decreased by 8% to approximately $1.2 million in 2016, from approximately $1.3 million in 2015. The decrease is attributed mostly to headcount changes during the year. Marketing and business development expenses, as a percentage of total operating expenses, were 4% in 2016 compared to 5% in 2015.

General and Administrative Expenses. General and administrative expenses increased by 22% to approximately $7.3 million for 2016, from approximately $6.0 million for 2015. The increase is attributed mainly to headcount related expenses as well expenses associated with the engaging of additional strategic advisers to the Company. General and administrative expenses, as a percentage of total operating expenses, were 22% in 2016 and 21% in 2015.

Financial Income (loss), Net. Financial income, net was approximately $1.1 million in both 2016 and 2015, and reflects mostly interest income from bank deposits in the amount of approximately $0.7 million and approximately $0.4 million of realized gain from the sale of a portion of our holdings of Evogene Ltd. ("Evogene") ordinary shares.

Income tax expenses. Income tax expenses were $20,000 in 2016 compared with $390,000 in 2015. These expenses were attributed to withholding tax related to the Bayer Collaboration.

Years Ended December 31, 2015 and 2014

Revenues. Revenues totaled approximately $9.3 million in 2015 compared to $12.4 million in 2014. The decrease in revenues for 2015 is attributable to the relevant portions of the non-refundable upfront payment relating to the Bayer Collaboration. Included in the revenues are the achievements of preclinical milestones in the total amount of $7.8 million in 2015 and $7.2 million in 2014 with respect to one of the immune checkpoint target candidates licensed to Bayer.

Cost of Revenues. Cost of revenues attributable to product candidate research and collaboration agreements decreased by 51% to approximately $1.6 million for 2015, from approximately $3.3 million for 2014. The decrease in the cost of revenues in 2015 is primarily due to a decrease in expenses attributed to the Bayer Collaboration.

Research and Development Expenses, Net. Research and development expenses, net increased by 40%, to approximately $21.2 million for 2015, from approximately $15.1 million for 2014. The increase was primarily due to the increasing levels of activities in support of our Pipeline Program, including a substantial increase in activities relating to the research and preclinical development activities at our U.S. subsidiary, a substantial increase in professional research and development headcount to support these activities, and the full impact of the move of our U.S. subsidiary to new facilities in South San Francisco at mid-2014. Research and development expenses, net, as a percentage of total operating expenses, were 74% in 2015 compared to 71% in 2014.

Marketing and Business Development Expenses. Marketing and business development expenses increased by 56% to approximately $1.3 million in 2015, from approximately $838,000 in 2014. The increase was primarily due to increase in professional headcount and related expenses by appointing a corporate and business and development Vice President to support these activities. Marketing and business development expenses, as a percentage of total operating expenses, were 5% in 2015 compared to 4% in 2014.

General and Administrative Expenses. General and administrative expenses increased by 11% to approximately $6.0 million for 2015, from approximately $5.4 million for 2014. The increase was attributed mainly to facility related expenses as a result of the move to our new facilities in Israel in 2015, higher head count related expenses and higher level of expenses related to corporate matters. General and administrative expenses, as a percentage of total operating expenses, were 21% in 2015 and 25% in 2014.

Financial Income (loss), Net. Financial income, net decreased by 39% to approximately $1.1 million in 2015, from approximately $1.8 million in 2014. This decrease was attributed to lower realized gain from the sale of a portion of our holdings of Evogene Ltd. ("Evogene") ordinary shares in the amount of $436,000 in 2015 compared to $2.3 million in 2014, offset by an increase in bank deposits' interest income of $815,000 in 2015 compared to $346,000 in 2014, and a lower effect of currency translation adjustments in 2015 compare to 2014.

Equity loss. Equity loss of $155,000 in 2014 was attributed to the amount provided to Neviah as part of a convertible loan arrangement.

Income tax expenses. Income tax expenses were $390,000 in 2015 compared with $360,000 in 2014. These expenses were attributed to withholding tax related to the Bayer Collaboration.

Governmental Policies that Materially Affected or Could Materially Affect Our Operations

Our income tax obligations consist of those of Compugen Ltd. in Israel and of Compugen USA, Inc. in its taxing jurisdictions.

The corporate tax rate in Israel was 25% in 2016 compared with 26.5% in 2015 and 2014.

On January 5, 2016, the government of Israel officially published the Law for the Amendment of the Israeli Tax Ordinance (Amendment 216), that reduces the corporate tax rate from 26.5% to 25%.

In December 2016, the government of Israel approved the Economic Efficiency Law (Legislative Amendments for Applying the Economic Policy for the 2017 and 2018 Budget Years) 2016 which reduces the corporate income tax rate to 24% (instead of 25%) effective from January 1, 2017 and to 23% effective from January 1, 2018.

In the future, if and when we generate taxable income, our effective tax rate may be influenced by, among others: (a) the split of taxable income between the various tax jurisdictions; (b) the availability of tax loss carry forwards and the extent to which valuable allowance has been recorded against deferred tax assets; (c) the portion of our income which is entitled to tax benefits pursuant to the Investment Law; (d) the changes in the exchange rate of the U.S. dollar to the NIS and (e) the Company's election to submit its tax returns for the year 2014 and onwards on a dollar basis, which may not be accepted by the Israeli Tax Authority. We may benefit from certain government programs and tax legislation, particularly as a result of the Approved Enterprise status granted to some of our operations by the Investment Center in the Israeli Ministry of Economy and the Benefiting Enterprise status that resulted from our eligibility for tax benefits under the Investment Law. To be eligible for these benefits, we need to meet certain conditions. Should we fail to meet such conditions, these benefits could be cancelled and we might be required to refund the amount of the benefits previously received, if any, in whole or in part, together with interest and linkage differences to the Israeli CPI, or other monetary penalty. We also benefit from a Government of Israel program under which we receive grants from the OCS. For more information, please see “Item 5 Operating and Financial Review and Prospects– C. Research and Development, Patents and Licenses - The Office of the Chief Scientist.” There can be no assurance that these programs and tax legislation will be continued in the future or that the available benefits will not be reduced.

The termination or curtailment of these programs or the loss or reduction of benefits under the Investment Law could have a material adverse effect on our business, financial condition and results of operations.

Currently we have two Approved Enterprises and two Benefiting Enterprises programs under the Investment Law. The tax benefits period with respect to all of these programs has not yet begun as we have not yet generated any taxable income. These benefits should result in income recognized by us being tax exempt or taxed at a lower rate for a specified period of time after we begin to report taxable income and exhaust any net operating loss carry-forwards. However, these benefits may not be applied to reduce the U.S. federal tax rate for any income that our U.S. subsidiary may generate.

We have elected the alternative benefits route under the Investment Law with respect to our Approved Enterprises. Under this route we waived government grants in return for a tax exemption on undistributed income. Due to the geographic location of our facilities, such tax exemption on undistributed income will apply for a limited period of two years. In the event that such tax exempt income is thereafter distributed as a dividend or a deemed dividend, we will be required to pay the applicable corporate tax that would otherwise have been payable on such income. During the remainder of the benefits period applicable to us, a corporate tax rate not exceeding 25% will apply.

In April 2005, substantive amendments to the Investment Law came into effect. Under these amendments, eligible investment programs of the type in which we participated prior to the amendment were eligible to qualify for substantially similar benefits as a ‘Benefiting Enterprise’, subject to meeting certain criteria. This replaced the previous terminology of ‘Approved Enterprise’, which required pre-approval from the Investment Center of the Ministry of the Economy of the State of Israel. As a result of these amendments, tax-exempt income generated from Benefiting Enterprises under the provisions of the amended law will, if distributed upon liquidation or if paid to a shareholder for the purchase of his or her shares, be deemed distributed as a dividend and will subject the Company to the applicable corporate tax that would otherwise have been payable on such income. Therefore, a company may be required to record deferred tax liability with respect to such tax-exempt income, which would have an adverse effect on its results of operations.

50

Additional amendments to the Investment Law became effective in January 2011 and were further amended in August 2013 (the “2011 Amendment”). Under the 2011 Amendment, income derived by ‘Preferred Companies’ from ‘Preferred Enterprises’ (both as defined in the 2011 Amendment) would be subject to a uniform rate of corporate tax for an unlimited period as opposed to the incentives prior to the 2011 Amendment that were limited to income from Approved or Benefiting Enterprises during their benefits period. According to the 2011 Amendment, the uniform tax rate on such income, referred to as ‘Preferred Income’, would be 10% in areas in Israel that are designated as Development Zone A and 15% elsewhere in Israel during 2011-2012, 7% and 12.5%, respectively, in 2013, and 9% and 16%, respectively, thereafter. Income derived by a Preferred Company from a ‘Special Preferred Enterprise’ (as defined in the Investment Law) would enjoy further reduced tax rates for a period of ten years of 5% in Development Zone A and 8% elsewhere. As of January 1, 2014, dividends distributed from Preferred Income would subject the recipient to a 20% tax (or lower, if so provided under an applicable tax treaty), which would generally be withheld by the distributing company, provided however that dividends distributed from ‘Preferred Income’ from one Israeli corporation to another, would not be subject to tax. Under the transitional provisions of the 2011 Amendment, companies may elect to irrevocably implement the 2011 Amendment with respect to their existing Approved and Benefiting Enterprises while waiving benefits provided under the legislation prior to the 2011 Amendment or keep implementing the legislation prior to the 2011 Amendment. Should a company elect to implement the 2011 Amendment with respect to its existing Approved Enterprises and Benefiting Enterprises prior to June 30, 2015 dividends distributed from taxable income derived from Approved or Benefiting Enterprises to another Israeli company would not be subject to tax. We have not elected to implement the 2011 Amendment and we do not currently have any Preferred Enterprises. While a company may incur additional tax liability in the event of distribution of dividends from tax exempt income generated from its Approved and Benefiting Enterprises, as previously described, no additional tax liability will be incurred by a company in the event of distribution of dividends from Preferred Income.

In December 2016, the Economic Efficiency Law (Legislative Amendments for Applying the Economic Policy for the 2017 and 2018 Budget Years), 2016 which includes Amendment 73 to the Law ("Amendment 73") was published. According to Amendment 73, a Preferred Enterprise located in development area A will be subject to a tax rate of 7.5% instead of 9% effective from January 1, 2017 and thereafter (the tax rate applicable to preferred enterprises located in other areas remains at 16%).The Amendment also prescribes special tax tracks for Technological Enterprises, which are subject to rules that are to be issued by the Minister of Finance by March 31, 2017.

The new tax tracks under the Amendment are as follows:

Technological Preferred Enterprise - an enterprise for which total consolidated revenues of its parent company and all subsidiaries are less than NIS 10 billion. A Technological Preferred Enterprise, as defined in the Law, which is located in the center of Israel will be subject to tax at a rate of 12% on profits deriving from intellectual property (in development area A - a tax rate of 7.5%).

Special Technological Preferred Enterprise - an enterprise for which total consolidated revenues of its parent company and all subsidiaries exceed NIS 10 billion. Such enterprise will be subject to tax at a rate of 6% on profits deriving from intellectual property, regardless of the enterprise's geographical location.

Any dividends distributed to "foreign companies", as defined in the Law, deriving from income from the Technological Enterprises will be subject to tax at a rate of 4%. Since as of December 31, 2016 definitive criteria to determine the tax benefits had not yet been established, it cannot be concluded that the legislation in respect of technological enterprises had been enacted or substantively enacted as of that date.

As of December 31, 2016, our net operating loss carry-forwards for Israeli tax purposes amounted to approximately $195.4 million. Under Israeli law, these net operating losses may generally be carried forward indefinitely and offset against certain future taxable income.

As of December 31, 2016, the net operating loss carry-forwards of our U.S. subsidiary for federal income tax purposes amounted to approximately $11.0 million. These losses are available to offset any future U.S. taxable income of our U.S. subsidiary and will expire between the years 2020 and 2032.

Use of our U.S. net operating losses may be subject to substantial annual limitation due to the “change in ownership” provisions of the Internal Revenue Code of 1986 and similar state provisions. The annual limitation may result in the expiration of net operating losses before utilization.

For a description of Israel government policies that affect our research and development expenses, and the financing of our research and development, see “Item 5. Operating and Financial Review and Prospects -C - Research and Development, Patents and Licenses - The Office of the Chief Scientist.”

B. LIQUIDITY AND CAPITAL RESOURCES

Public Offering of Ordinary Shares

On March 5, 2014 we closed an underwritten public offering of 6,900,000 ordinary shares, including 900,000 shares sold pursuant to the full exercise of the underwriters’ option to purchase additional shares, at a price to the public of $10.50 per share (the “2014 Offering”).

Gross proceeds to Compugen from the 2014 Offering were approximately $72.5 million, before deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

The 2014 Offering was made pursuant the effective shelf registration statement on Form F-3 (File No. 333-185910), which was filed with the Securities and Exchange Commission (the "Commission") on January 7, 2013 and declared effective by the Commission on January 16, 2013.

Jefferies LLC acted as the sole bookrunner for the 2014 Offering. JMP Securities LLC, Oppenheimer & Co. Inc. and Chardan Capital Markets acted as co-managers.

Funding Agreements

Baize Research and Development Funding Agreements

On December 29, 2010, we entered into a Funding Agreement (the "Original Pipeline Funding Agreement") with Baize, pursuant to which Baize provided the Company with $5.0 million in support of the Company's therapeutic product candidates in research and development. This agreement was amended on April 21, 2013 and was terminated on August 20, 2014. In connection with the termination of this agreement, we issued Baize 1,600,000 of our ordinary shares. On December 20, 2011, we also entered into a mAb Funding Agreement with Baize, pursuant to which Baize agreed to invest $8.0 million in connection with certain research funding for certain mAb product candidates. This agreement was amended on July 24, 2012 and December 27, 2012 and was terminated on April 21, 2013. We have no further obligations under either of these funding agreements.

Cash resources

In 2016, our primary sources of cash were:

·proceeds from 2014 Offering;

·preclinical milestones payments under the Bayer Collaboration;

·exercise of stock options; and

·sales of Evogene shares.

We used these funds primarily to finance our business operations.

We expect that our sources of cash for 2017 will include cash held in our bank accounts, and may include proceeds generated from license, collaborative and/or research agreements and proceeds from issuance of ordinary shares as a result of the exercise of stock options or from financing transactions.

Net Cash Used in Operating Activities

Net cash used in operating activities was approximately $11.1 million in 2014, approximately $25.6 million in 2015 and approximately $19.8 million in 2016. Net cash used in 2016 reflects higher level of preclinical expenses including manufacturing activities to generate clinical material associated with COM701. The higher level of expenses were offset by a decrease in trade receivables reflecting the collection of $7.8 million associated with the third preclinical milestone of one of the licensed programs under the Bayer Collaboration which had been achieved and recognized as revenue in the fourth quarter of 2015.

Net Cash Provided By (Used In) Investing Activities

Net cash used in investing activities was approximately $64.1 million in 2014; net cash provided by investing activities was approximately $9.8 million in 2015 and approximately $16.3 million in 2016. Changes in net cash during 2016 as compared to 2015 was attributed to the net effect of higher levels of proceeds from maturity of short-term bank deposits, offset by investment in short-term and long-term bank deposits.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was approximately $72.1 million in 2014, approximately $1.0 million in 2015 and approximately $2.5 million in 2016. The principal source of cash provided by financing activities in 2016 and 2015 were proceeds received from the exercise of stock options.

Net Liquidity

Liquidity refers to the liquid financial assets available to fund our business operations and pay for near-term obligations. These liquid financial assets mostly consist of cash and cash equivalents as well as short-term bank deposits. As of December 31, 2016, we had total cash and cash equivalents and short-term bank deposits of approximately $60.5 million. We believe that our existing cash and cash equivalents, and short-term bank deposits will be sufficient to fund our operations for the coming 24 months.

On January 7, 2013, we filed a shelf registration statement on Form F-3 with the SEC under which we may offer and sell from time to time in one or more offerings, our ordinary shares, debt securities, rights, warrants and units having an aggregate offering price of up to $100.0 million. This registration statement was declared effective by the SEC on January 16, 2013 and expired on January 15, 2016. We sold 6,900,000 ordinary shares for gross proceeds of approximately $72.5 million under this registration statement in the 2014 Offering. On August 26, 2014, we filed a shelf registration statement on Form F-3 with the SEC under which we may offer and sell from time to time in one or more offerings, our ordinary shares, debt securities, rights, warrants and units having an aggregate offering price of up to $200.0 million. This registration statement was declared effective by the SEC on September 4, 2014. On August 9, 2016, we filed a shelf registration statement on Form F-3 with the SEC under which we may offer and sell from time to time in one or more offerings, our ordinary shares, debt securities, rights, warrants and units having an aggregate offering price of up to $200.0 million. This registration statement was declared effective by the SEC on October 11, 2016. We may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

C. RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES

We invest heavily in research and development. Research and development expenses, net, were our major operating expenses representing more than 70% of total operating expenses for each of 2016, 2015 and 2014. Our research and development expenses, net, were approximately $24.6 million in 2016, compared to approximately $21.2 million in 2015and $15.1 million in 2014. As of December 31, 2016, 74 of our employees were engaged in research and development on a full-time basis. This represents approximately 76% of our entire work force.

We focus our efforts on the development of our discovery platforms and related technologies, and the discovery, validation and early stage development of primarily our drug targets and our mAb product candidates and to a lesser extent therapeutic Fc fusion proteins product candidates. During 2010 we initiated the Pipeline Program to substantially expand the number of product candidates undergoing in vitro and in vivo validation and to significantly enhance the commercial value of our product candidate pipeline by advancing certain mAb product candidates beyond the animal disease model proof of concept stage, towards pre-IND studies. We expect that in 2017 our research and development expenses, will continue to be our major operating expense, representing more than 75% of our total operating expenses.

We believe that our future success will depend, in large part, on our ability to discover promising drug target candidates and therapeutic product candidates and to successfully advance the research and development of certain of our product candidates under our internal Pipeline Program towards pre-IND studies and to successfully license such product candidates to pharmaceutical companies. In addition, we expect to continue to expand our inventory of proprietary algorithms, predictive models and discovery infrastructure and platforms which provide opportunities for the discovery of promising therapeutic candidates for inclusion in our Pipeline Program and pursuant to research and discoveries collaborations.

Research and Development Grants

We have participated in programs offered by the OCS that support research and development activities, and under the Israel-U.S. Binational Industrial Research and Development Foundation (“BIRD Foundation”). We also received certain

investment amounts under a funding agreement with Baize. We received grants from the OCS and BIRD Foundation as well as other forms of consideration from Baize accounted as reduction from the research and development expenses over the research period. See note 2 to our 2016 consolidated financial statement. We did not apply for additional grants from the OCS for research and technological development in 2016.

The Office of the Chief Scientist

The government of Israel encourages research and development projects in Israel through the Industrial Research and Development Administration, formerly and more commonly known as the OCS, pursuant to and subject to the provisions of the R&D Law. We received grants from the OCS for several projects, and may receive additional grants in the future. Under the terms of the grants received, we will be required to pay royalties ranging between 3% to 5% of the revenues we generate from our products which incorporate know how developed with funds received from the OCS ("OCS Products") until 100% of the dollar value of the grant is repaid (plus LIBOR interest applicable to grants received on or after January 1, 1999). As of December 31, 2016, our contingent obligation for royalties, based on royalty-bearing government grants, net of royalties already paid, totaled approximately $8.8 million.

The R&D Law requires that the manufacture of OCS Products will be carried out in Israel, unless the OCS provides its approval to the contrary. This approval may be subject to various conditions, including the repayment of increased royalties equal to up to 300% of the total grant amount plus applicable interest and an increase of 1% in the royalty rate. The specific increase within this ceiling would depend on the extent of the manufacturing to be conducted outside of Israel. Transfer of the know-how developed with funds received from the OCS and any right derived therefrom to third parties is prohibited, unless such transfer was approved in accordance with the R&D Law. The Research Committee operating under the OCS may approve the transfer of know how between Israeli entities, provided that the transferee undertakes all the obligations in connection with the grant as prescribed under the R&D Law. The transfer of know how outside of Israel may be approved by the Research Committee operating under the OCS, at its discretion, in special cases, subject to the receipt of certain payments calculated according to a formula set forth in the R&D Law and regulations promulgated thereunder up to an amount equal to six (6) times the total amount of OCS grants plus applicable interest; and three (3) times such total amount, should the R&D activity related to the know how remain in Israel.

The R&D Law has been amended effective as of January 1, 2016. Under the amendment, a new Industrial Research and Development Administration has been established and is in charge of implementing the governmental policy regarding the R&D Law (and has been given discretion in the implementation of the R&D Law for such purpose). However, and until prescribed otherwise, the existing provisions relating to the transfer of know-how and manufacturing outside of Israel, as detailed above, shall remain in full force and effect with respect to benefits and funding approved or received prior to such date.

These restrictions may impair our ability to sell our technological assets or to outsource or transfer developments or manufacturing activities with respect to any technology. These restrictions continue to apply even after full repayment of the OCS grants. However, we believe that these restrictions do not apply to the commercialization through licensing of product candidates that we discover by using our knowhow developed with funds received from the OCS.

D. TREND INFORMATION

Trend towards biologics

Biologics and monoclonal antibodies represent one of the fastest growing segments in the drug industry, making up nearly a third of all recently approved drugs (31% in 2016). The growth of this class has driven a large number of companies to invest in new technologies (e.g., bi-specific monoclonal antibodies) and new approaches to fully exploit the potential of this class. In addition, the emergence of new approaches for cancer cell therapies, such as CAR-T therapy, with promising early clinical data has also captured much attention in the pharma industry. Despite the increasing number of companies active in these areas, the majority of these technologies are directed towards a limited set of targets, which may provide more potential companies interested to license our discoveries and products.

Trend towards consolidation

There is a trend towards consolidation in the pharmaceutical, diagnostic and biotechnology industries, which may negatively affect our ability to enter into agreements and may cause us to lose existing licensees or collaborators as a result of such consolidation. This trend often involves larger companies acquiring smaller companies, and this may result in the larger companies having greater financial resources and technological capabilities. This trend towards consolidation in the pharmaceutical, diagnostic and biotechnology industries may also result in there being fewer potential companies to license our products and services.

Trend towards reduction of in-house research and development programs within major pharmaceutical companies.

Over the last few years, a number of major pharmaceutical companies have announced cutbacks in their in-house research and development programs. The effects of these cutbacks on our business opportunities could be positive or

negative, and are likely to vary on a company by company basis.

Trend towards reliance by major pharmaceutical companies on smaller company's product candidates to support their pipelines.

There appears to be a trend towards larger companies relying on smaller companies' product candidates. However, this trend usually applies to known and validated drug targets and product candidates that have reached a later stage of development. However, in certain fields, pharmaceutical and biotechnological companies are becoming more open to in-licensing product candidates at earlier stages of development, including at early preclinical stages. As a result, there may be more interest in entering into agreements with us for further development and commercialization of our early stage product candidates following their target validation stage.

However, if this is not correct we may be required to invest a substantial amount of money and other resources to advance each of our future product candidates to later stages prior to licensing, without assurance that any such product candidates will be commercialized, and limiting the number of product candidates that we are able to so advance, while reducing resources available for our discovery activities, due to resource constraints.

If, consistent with our strategy for commercialization of our therapeutic product candidates, we are successful in commercializing our drug target candidates and/or our future product candidates at an early stage, our licensees may propose terms that we may not consider commercially desirable and the consideration that we may receive for each individual product may be relatively low. The consideration that we would expect to receive for commercializing our product candidates increases commensurately with the number of such products commercialized and the stage of development that we attain for them. Furthermore, considerations regarding our willingness to advance the product candidate at our risk would likely be of much less importance in research and discovery collaborations.

E. OFF-BALANCE SHEET ARRANGEMENTS

We entered into forward contracts to hedge against the risk of overall changes in future cash flow from payments of salaries and related expenses as well as other expenses denominated in NIS. As of December 31, 2016, we had outstanding forward contracts in the notional amount of approximately $6.5 million. These contracts were for a period of twelve months ended December 31, 2017.

F. TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The table below summarizes our contractual obligations as of December 31, 2016, and should be read together with the accompanying comments that follow.

	Payments due by period (US$ in thousands)				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating Lease Obligations[1]	4,094	1,413	1,855	826	-
Accrued Severance Pay, net[2]	478	-	-	-	478
Total	4,572	1,413	1,855	826	478

[1] Consists of operating leases for our facilities and for motor vehicles. Excluding an option to extend the lease of the Israeli facility for two consecutive additional five year periods, following expiration of the current lease period.

[2] Severance pay obligations to our Israeli employees, for more information please see "Item 6. Directors, Senior Management and Employees – D. Employees."

The above table does not include royalties that we may be required to pay to the OCS. For more information, see "Item 5. Operating and Financial Review and Prospects – C. Research and Development, Patents and Licenses."

The above table also does not include contingent contractual obligations or commitments that may crystallize in the future, such as contractual undertakings to pay royalties subject to certain conditions occurring.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. DIRECTORS AND SENIOR MANAGEMENT

The following table sets forth information with respect to Compugen Ltd.'s directors and Compugen's senior management as of February 1, 2017:

Name	Age	Positions
Prof. Yair Aharonowitz[(1)(2)]	76	Director
Prof. Ruth Arnon	82	Director
Anat Cohen-Dayag, Ph.D.	50	President and Chief Executive Officer, Director
Martin S. Gerstel	75	Chairman of the Board of Directors
Dov Hershberg	77	Director
Arie Ovadia, Ph.D. [(1)(2)]	67	Director (Chairman of the Audit Committee)
Prof. Joshua Shemer[(1)(2)]	69	Director
Ari Krashin	44	Chief Financial and Operations Officer
John Hunter	54	Vice President, Antibody Research and Development
Zurit Levine	49	Vice President, Research and Discovery

(1) An external director pursuant to the Companies Law

(2) Member of our Audit Committee

Prof. Yair Aharonowitz joined Compugen's Board of Directors as an external director in July 2007 and was reappointed as an external director in April 2010 and in April 2013. He is a Professor (Emeritus) of Microbiology and Biotechnology at Tel Aviv University (TAU). He was a visiting scientist at Oxford University, an Alberta Heritage Fellow at the University of Alberta, Edmonton, and a visiting professor at the Karolinska Institute and at the University of British Columbia. Professor Aharonowitz's research interests include the molecular genetics and biosynthesis of antibiotics, molecular biology of microbial pathogens and the development of new targets for new antibiotics. He served as TAU Vice President and Dean for R&D (1997-2001), Chairman of the Department of Microbiology and Biotechnology and Chairman of the Institute of Biotechnology and served as a member of the TAU Executive Council. He served as the Chairman of Ramot Fund for Applied Research, as a member of TAU committee for strategic planning, on the TAU patent committee and was a member of the National Committee for Biotechnology. He is a Fellow of the American Academy of Microbiology.

Prof. Ruth Arnon joined Compugen's Board of Directors in May 2007. Formerly the Vice-President of the Weizmann Institute of Science (1988-1997), she is a noted immunologist, having joined the Institute in 1960. She served as Head of the Department of Chemical Immunology, Dean of the Faculty of Biology and Director of the Institute's MacArthur Center for Molecular Biology of Tropical Diseases. Prof. Arnon has made significant contributions to the fields of vaccine development, cancer research and to the study of parasitic diseases. Along with Prof. Michael Sela, she developed Copaxone® a drug for the treatment of multiple sclerosis which is presently marketed worldwide. Prof. Arnon is a member of the Israel Academy of Sciences and served as its President until September 2015. She is an elected member of the European Molecular Biology Organization, served as President of the European Federation of Immunological Societies and as Secretary-General of the International Union of Immunological Societies. Her awards include the Robert Koch Prize in Medical Sciences, Spain's Jiminez Diaz Memorial Prize, France's Legion of Honor, the Hadassah World Organization's Women of Distinction Award, the Wolf Prize for Medicine, the Rothschild Prize for Biology, the Israel Prize, the AESKU Prize for Life Contribution to Autoimmunity by the 6th International Congress on on Autoimmunity and she is a Member of the American Philosophical Society. Prof. Arnon received an Honorary Doctorate from Ben-Gurion University and from Tel Aviv University. In addition, Prof. Arnon is the

incumbent of the Paul Ehrlich Chair in Immunochemistry at the Weizmann Institute.

Anat Cohen-Dayag, Ph.D. joined Compugen's Board of Directors in February 2014. Dr. Cohen-Dayag joined Compugen in 2002 as Director of Diagnostics, a position she held until 2005 at which time she became Vice President Diagnostic Biomarkers, a position she held until January 2007. From January 2007 until November 2008, Dr. Cohen-Dayag served as Compugen's Vice President, Biomarkers and Drug Targets, at which point she was appointed Vice President, Research and Development. In June 2009, Dr. Cohen-Dayag was appointed, together with Mr. Martin Gerstel, as co-Chief Executive Officer of Compugen. In March 2010, upon Mr. Gerstel's election as Chairman of the Board of Directors, Dr. Cohen-Dayag was appointed as Compugen's President and CEO. Prior to joining Compugen, she was head of research and development and member of the Executive Management at Mindsense Biosystems Ltd. Prior to Mindsense Biosystems Ltd., Dr. Cohen-Dayag served as a scientist at the R&D department of Orgenics Ltd. Dr. Cohen-Dayag holds a B.Sc. in Biology from the Ben-Gurion University, Israel, and an M.Sc. in Chemical Immunology and a Ph.D. in Cellular Biology, both from the Weizmann Institute of Science, Israel. Additionally, Dr. Cohen-Dayag is a director of Ramot at Tel Aviv University Ltd., and a director of the IATI (Israeli Advanced Technologies Industries).

Martin S. Gerstel has served as a member and as the Chairman of the Board of Directors of Compugen since 1997, other than from February 2009 to February 2010, during which time he served as either CEO or co-CEO and, in both cases, as a member of the Board of Directors. Prior to Compugen, Mr. Gerstel was co-chairman and CEO of ALZA Corporation, which he helped found in 1968 and was a director of various public and private companies in the United States. In addition to his role as Active Chairman at the Company, Mr. Gerstel is the Chairman of Evogene Ltd., Keddem Bioscience Ltd., and the co-founder and a director of Itamar Medical Ltd. He is a member of the Board of Governors and the Executive Committee of the Weizmann Institute of Science and a director of Yeda, its technology licensing affiliate. Mr. Gerstel holds a B.Sc. from Yale University and an MBA from Stanford University. On February 15, 2017, the Company announced that Mr. Gerstel requested the Board to initiate a process to identify and recruit an appropriate person with the required capabilities and experience to replace him as chairman of the board.

Dov Hershberg joined Compugen's Board of Directors in 2009 and served as Chairman of the Board until 2010. Prior to Compugen, Mr. Hershberg co-founded Powermat Technologies Ltd., a pioneer wireless electrical charging company, and served as its CEO and later as board and management team member until September 2014. From 1997 through 2006 Mr. Hershberg managed the Israel US (BIRD) R&D Foundation and the Israel US Jordan (TRIDE) R&D Foundation, supporting and funding hundreds of successful hi-tech and bio tech joint projects, facilitating cooperation on an international scale. Prior to joining the BIRD Foundation Mr. Hershberg was the founder, with colleagues from Stanford University, and the CEO of Molecular Applications Group, a biomedical software company, which was located in Palo Alto, California. Mr. Hershberg holds graduate degrees in mathematics from the Hebrew University in Jerusalem, Israel and in applied mathematics and operations research from Columbia University in New York City.

Arie Ovadia, Ph.D. joined Compugen's Board of Directors as an external director in July 2007 and was reappointed as an external director in April 2010 and in April 2013. He advises major Israeli companies on finance, accounting and valuations, and is a member of the Board of Directors of several corporations, including Strauss Ltd., Israel Petrochemical Industries Ltd., Bazan Ltd., Maxtech Technologies Ltd., and Elron Electronic Industries Ltd. He has taught at New York University, Temple University and, in Israel, at Tel Aviv and Bradford Universities and The College of Management. Dr. Ovadia served as a member of the Israeli Accounting Board, and is a 14-year member of the Israel Securities Authority. Dr. Ovadia holds an undergraduate degree and an MBA from Tel Aviv University, and earned his Ph.D. in economics from the Wharton School at the University of Pennsylvania.

Prof. Joshua Shemer joined Compugen's Board of Directors as an external director in July 2007 and was reappointed as an external director in April 2010 and in April 2013. Prof. Shemer is Full Professor of Medicine (Emeritus) at the Tel Aviv University. In addition, Prof. Shemer is the Chairman of Assuta Medical Centers in Israel and a member of the Board of Directors of Maccabi Healthcare Services in Israel. Prof. Shemer is a director of the Israeli center for

medical technology assessment in healthcare in Gertner Institute, Tel Hashomer. Prof. Shemer is an Associate Editor at IMAJ and Harefuah, and a member of the Editorial Board of the International Journal of Technology Assessment in Health Care. For over 20 years, Prof. Shemer taught Medical Technology Management at the Faculty of Business Administration and at the School of Public Health at Tel Aviv University. He was a member and former chairman of the National Public Committee for Updating the National List of Health Services in Israel and the National Council for Trauma of the Israeli Ministry of Health. From 2001-2007, Prof. Shemer served as the Director-General of Maccabi Healthcare Services. Prof. Shemer was formerly Director-General of the Ministry of Health and Surgeon General of the Israel Defense Forces Medical Corps. Prof. Shemer has published five books and more than 200 peer reviewed articles. Additionally, Prof. Shemer is an external director of El-Al Airlines Ltd. Prof. Shemer is a graduate of the Hebrew University and Hadassah School of Medicine and Board certified in Internal Medicine and Health Administration in Israel.

Ari Krashin was appointed Chief Financial Officer of Compugen in September, 2014. Beginning March 1, 2016, Mr. Krashin will serve as Compugen's Chief Financial Officer and Chief Operating Officer, being additionally responsible for the Company's administrative, operational and IT activities. Mr. Krashin has over 15 years of experience in capital markets, finance and business development. He served as a chief financial officer for both public and private companies the most recent being AnyClip Media and Spacenet Inc. From 2000 – 2013, Mr. Krashin also served in various financial positions at Gilat Satellite Networks (NASDAQ: GILT), including his last position as chief financial officer, where he led the company's global finance and related operations, including business development, M&A activities, investor relations and administration. Mr. Krashin is a certified public accountant and began his professional career with Kesselman and Kesselman, PWC, Israel.

John Hunter, Ph.D joined Compugen in 2012 as Site Head at our U.S. subsidiary, Compugen USA, Inc., and VP Antibody Research and Development. Dr. Hunter has worked for 18 years on different aspects of oncology drug development. Following graduation from UCSF, from 1996 to 2003, Dr. Hunter worked for Millennium Pharmaceuticals Inc., where he employed genomic approaches to identify novel drug targets in lung cancer. As a founding member of Millennium's Translational Medicine group he worked to develop clinical biomarkers for their Aurora kinase small molecule inhibitors. Following Dr. Hunter's employment at Millennium, Dr. Hunter joined Xenogen Corp., where he worked as Senior Scientist in Oncology from 2004 to 2005. Dr. Hunter later joined XOMA Ltd., where from 2005 to 2012 he managed early stage antibody discovery for multiple therapeutic programs in oncology and inflammation. Dr. Hunter currently leads therapeutic antibody research and development efforts for Compugen's portfolio of novel oncology targets.

Zurit Levine, Ph.D. joined Compugen in 1999 and has held several positions in Compugen's Research & Development department. In 2004, she was appointed Director of Therapeutic Selection & Validation, which position she held until 2007 when she was appointed Director of Therapeutic Discovery. In 2009, she was appointed Executive Director of Research & Development. From January 2010 to August 2011, she held the position of Vice President, Research and Development. In August 2011 she was appointed Vice President, Research and Discovery. Dr. Levine holds a B.Sc. in Biology, a M.Sc. in Biochemistry and a Ph.D. in Biochemistry, all from the Tel Aviv University, Israel.

Arrangements Involving Directors and Senior Management

There are no arrangements or understandings of which we are aware relating to the election of our directors or the appointment of executive officers in our Company. In addition, there are no family relationships among any of the individuals listed in this Item 6. A.

B. COMPENSATION

Aggregate Executive Compensation -

During 2016, the aggregate compensation paid or accrued by us to all persons listed in Item 6.A above (Directors and Senior Management) was approximately $3.2 million. This amount includes approximately $0.3 million set aside or accrued to provide pension, severance, retirement or similar benefits, but excludes expenses (including business travel, professional and business association dues and expenses) reimbursed to our executives and other fringe benefits commonly reimbursed or paid by companies in Israel.

During 2016, we granted to our Directors and Senior Management a total of 380,000 options to purchase ordinary shares. These options are exercisable at $6.65 per share, and generally expire ten years after their respective dates of grant. As of December 31, 2016, there were a total of 3,557,484 outstanding options to purchase ordinary shares that were held by our Directors and Senior Management.

Individual Compensation of Covered Office Holders

The table below outlines the compensation granted to our five most highly compensated Office Holders (as such term is defined in the Companies Law – see below under "– Approval Required for Directors' and Officers' Compensation") with respect to the year ended December 31, 2016. All amounts reported in the table reflect the cost to the Company, as recognized in our financial statements for the year ended December 31, 2016. We refer to the five individuals for whom disclosure is provided herein as our "Covered Office Holders".

Information Regarding the Covered Office Holders	Compensation for Services[2]			
Name and Principal Position[1]	Base Salary($)	Benefits and Perquisites ($)[3]	Stock-Based Compensation($)[4]	Total($)
Dr. Anat Cohen-Dayag President & CEO	371,086	204,277	440,691	1,016,054
John Hunter VP Antibody Development	242,500	96,027	192,928	531,455
Ari Krashin Chief Financial and Operations Officer	206,596	146,788	154,562	507,946
Martin Gerstel Chairman of the Board of Directors	149,934	51,605	220,425	421,964
Zurit Levine VP Research and Discovery	162,688	97,157	151,050	410,895

1) All Covered Office Holders listed in the table other than Mr. Martin Gerstel are full-time employees of the Company.

2) Cash compensation amounts denominated in currencies other than the U.S. dollar were converted into U.S. dollars at an exchange rate of NIS 3.8417 = $1.00, which reflects the average conversion rate for 2016.

3) Amounts reported in this column include benefits and perquisites, including those mandated by applicable law. Such benefits and perquisites may include, to the extent applicable to the Covered Office Holders, bonuses, payments, contributions and/or allocations for savings funds, pension, severance, vacation, car or car allowance, medical insurances and benefits, risk insurance (e.g., life, disability, accident), phone, convalescence pay, payments for social security, tax gross-up payments and other benefits and perquisites consistent with the Company's policies.

4) Amounts reported in this column represent the expense recorded in our financial statements for the year ended December 31, 2016 with respect to options to purchase our ordinary shares granted to our Covered Office Holders. Assumptions and key variables used in the calculation of such amounts are discussed in Note 9 to our 2016 consolidated financial statements set forth elsewhere in this report.

Approval Required for Directors' and Officers' Compensation

As required by Amendment 20 to the Companies Law ("Amendment 20"), our shareholders, following the approval of the Board of Directors and the recommendation of the Compensation Committee, approved and adopted an amended compensation policy (the "Compensation Policy") at the 2015 Annual General Meeting, which sets forth the Company's policy regarding the Terms of Office and Employment (as defined below) of our Office Holders (as defined below). The Compensation Policy provides our Compensation Committee and our Board of Directors with adequate measures and flexibility to tailor each of our Office Holder's compensation package based, among other matters, on geography, tasks, role, seniority and capability. Moreover, the Compensation Policy is intended to motivate our Office Holders to achieve ongoing targeted results in addition to a high level business performance in the long term, all, without encouraging excessive risk taking.

The term "Office Holder" as defined in the Companies Law includes a director, the chief executive officer, an executive vice president, a vice president, any other person fulfilling or assuming any of the foregoing positions without regard to such person's title, and any manager who is directly subordinated to the chief executive officer. In addition to each person listed in the table under "Item 6. Directors, Senior Management and Employees – A. Directors and Senior Management", four other individuals have been Office Holders as of December 31, 2016. "Terms of Office and Employment" means the terms of office and employment of our Office Holders, including exemption and release of the Office Holder from liability for breach of his or her duty of care to the Company, an undertaking to indemnify the Office Holder, post factum indemnification or insurance; any grant, payment, remuneration, compensation, or other benefit provided in connection with termination of service; and any benefit, other payment or undertaking to provide any payment as aforesaid.

Pursuant to the Companies Law, arrangements with respect to the Terms of Office and Employment of Office Holders (who are not directors) must generally be approved by the compensation committee and the board of directors, and be consistent with the compensation policy. However, under certain circumstances and conditions, the compensation committee and board of directors may approve an arrangement that deviates from the compensation policy, provided that such arrangement is approved by the company's shareholders by a simple majority, and provided that (i) such majority includes a majority of the votes cast by shareholders who are present and voting (abstentions are disregarded) and are not controlling shareholders and who do not have a personal interest in the matter, or (ii) the votes cast by shareholders who are not controlling shareholders and who do not have a personal interest in the matter who were present and voted against the policy, constitute two percent or less of the voting power of the company (such majority determined in accordance with clause (i) or (ii), the "Compensation Majority").

The Terms of Office and Employment of directors, other than directors who serve as chief executive officers and/or who possess a controlling interest in a company, require the approval of the compensation committee, board of directors and shareholders by a simple majority; with respect to our President and Chief Executive Officer, who is also a director, or with respect to any chief executive officer who is not a director (to the extent applicable in the future), further approval of the shareholders by the Compensation Majority is required. In addition, under certain circumstances, a company may be exempt from receiving shareholder approval with respect to the Terms of Office and Employment of a candidate for the position of chief executive officer.

In special circumstances, to the extent the Terms of Office and Employment of Office Holders (who are not directors) are not approved by the shareholders (where such approval is required), the compensation committee and the board of directors may subsequently override the resolution of the shareholders following a new discussion of the matter and for specified reasons. Amendment of Terms of Office and Employment of Office Holders (who are not directors) requires the approval of the compensation committee only, if the committee determines that the amendment is not material. Under the Companies Law, the compensation payable to external directors and independent directors is subject to certain further limitations. See "Item 6 – Directors, Senior Management and Employees – C. Board Practices – External Directors and Independent Directors under the Companies Law."

60

Further, each Office Holder's annual cash bonus is determined according to a formula that is consistent with the Compensation Policy and that links the bonus payment score to measurable and qualitative objectives relating to both the Company's performance and to the performance by each such Office Holder of his responsibilities. The measurable criteria include a financial target which is uniform with respect to all of our Office Holders, including our Chief Executive Officer. In the case of our Office Holders other than the Chief Executive Officer, assuming that the bonus terms conform to the Compensation Policy, the annual bonus objectives and subsequent payment scores are determined by the Compensation Committee and Board of Directors, while the bonus terms for our Chief Executive Officer generally require the additional approval by our shareholders. For each fiscal year, our Board of Directors determines the maximum target bonus for each of our Office Holders, including our Chief Executive Officer. Through year 2016, our Chief Executive Officer as well as our Active Chairman of the Board of Directors were both subject to a three-year bonus plan which was approved by the shareholders at the 2014 Annual General Meeting.

Amendment 20, as originally adopted, required that all variable compensation, with the exception of a non-substantial portion, of Office Holders be based on measurable criteria. Accordingly, our Compensation Policy allows for a non-substantial portion of up to 20% of the bonus objectives for each year to be based on non-measurable criteria, and if and to the extent permissible pursuant to the Companies Law, our Compensation Committee and our Board of Directors (and with respect to our Chief Executive Officer and directors with the additional approval of our shareholders) may increase the portion of targets that are based on non-measurable criteria above the rate of 20%, up to the maximum portion permissible pursuant to the Companies Law, but not to more than 50%. An amendment to the Companies Law in 2016 (the "2016 Amendment") allows for 100% of the variable compensation of Office Holders, who are not directors or the chief executive officer, to be based on non-measurable criteria. Accordingly, our Compensation Committee and Board of Directors now have the authority to increase the portion of targets of our Office Holders (who are not directors and chief executive officer) that are based on non-measurable criteria to 50%.

Compensation to our Non-Management Directors

On September 17, 2013, our shareholders approved, following previous resolutions made by our Compensation Committee and the Board of Directors, and consistent with our Compensation Policy, to compensate each of our then serving directors (including external directors) and each additional or other director (including external directors) who may be appointed from time to time in the future and who is not, or who ceases to be, an employee of the Company and who does not, or ceases to, hold a management position with the Company or provide services to the Company in addition to his or her office as a director (each a "non-management director") as follows:

(i) an annual fee equal to the "Annual Minimum Amount" (as such term is defined under regulations promulgated under the Companies Law governing the terms of remuneration for external directors, the "Remuneration Regulations") (the "Annual Base Fee") and an additional annual amount of NIS 17,985 to be paid to non-management directors who serve on one or more committees of the Board (the "Annual Additional Fee") which together with the Annual Base Fee shall be referred to as the "Annual Fees". The Annual Base Fee on September 17, 2013 was NIS 36,452. The Annual Base Fee paid to our current non-management directors is equal to the current "Annual Minimum Amount" applicable to the Company (see below);

(ii) a per meeting fee of NIS 3,597 (provided such amount shall not be lower than the applicable "Participation Minimum Amount" under the Remuneration Regulations) for participation in any Board and/or committee meetings (the "Participation Fee"), and further provided that (a) if such participation is by means of telephonic communication then such Participation Fee shall be 60% of a per meeting fee; and (b) in the event a resolution is adopted in writing, without convening a meeting, then the Participation Fee shall be 50% of the per meeting fee;

(iii) each of the Annual Base Fee, the Annual Additional Fee and the Participation Fee are to be adjusted annually (currently annually pursuant to recent amendment to the Remuneration Regulations) pursuant to increases in the Israeli Consumer Price Index and the Annual Base Fee is further adjusted pursuant to changes in the Company's shareholders equity;

(iv) the Annual Fees and the Participation Fee are paid to such directors on a quarterly basis, in each case at the beginning of each calendar quarter with respect to the previous quarter, all as provided for in the Remuneration Regulations; and

(v) a grant of options to purchase 10,000 of the Company's ordinary shares on July 31 of each calendar year, at an exercise price equal to the closing price on the date of such grant on the principal securities exchange on which the Company's shares are then traded and subject (other than as described herein) to the terms and conditions of the Company's 2010 Share Incentive Plan (the "2010 Plan") or any other equity-based incentive plan the Company may adopt in the future and pursuant to which these equity awards would be granted. 3,333 of such options will vest on each of the first two anniversary dates of such grant and 3,334 will vest on the third anniversary date. Notwithstanding the terms of the relevant plan, all options granted to non-management directors shall be fully vested immediately upon the completion of one or more of the following events, whether by way of a consolidation, merger or reorganization of the Company or otherwise: (a) a sale of all or substantially all of Company's issued share capital or assets to any other company, entity, person or a group of persons, or (b) the acquisition of more than 50% of Company's equity or voting power by any shareholder or group of shareholders (a "Corporate Transaction"). Further, notwithstanding the terms of the relevant plan, all options granted which shall be vested as of the date of final termination of office as a non-management director of the Company may be exercised within one year following such termination of office. To the extent legally available and applicable, such options will be granted to the non-management directors through a trustee under Section 102 of the Israel Income Tax Ordinance [New Version], 5721-1961 (the "Tax Ordinance"), under the capital gains route.

After adjustments resulting from increases in the Israeli Consumer Price Index in 2014 and a change in the Company's shareholders equity, the Annual Base Fee paid to each non-management director, as of the date of this Annual Report, stood at NIS 52,685, the Annual Additional Fee to be paid to each non-management director who serves on one or more committees of the Board of Directors stood at NIS 18,311; and the Participation Fee to each non-management director stood at NIS 3,662 (approximately $13,982. $4,860 and $972 respectively according to the representative rate of exchange on February 1, 2016, of $1.00 = NIS 3.768, the "Representative Rate").

VAT is added to the above compensation in accordance with applicable law.

Compensation to our External Directors

Israeli law sets minimum and maximum amounts and other rules regarding compensation that may be paid to an external director. A company may also compensate an external director in shares or rights to purchase shares, other than convertible debentures which may be converted into shares, subject to certain limitations set forth under the Remuneration Regulations.

Israeli law further provides that the remuneration of these external directors may be determined in relativity to that of other directors of the company so that such remuneration shall not be higher than the weighted average of the total remuneration paid to all of the Company's directors and be no less than: (i) the "Minimum Amount" that must be paid to external directors of the Company in accordance with the Remuneration Regulations; and (ii) the lowest remuneration paid to any of the directors of the Company (the "Relative Remuneration"). According to the Remuneration Regulations, the "Minimum Amounts" are adjusted annually based on the Israeli Consumer Price Index and may also be adjusted as a result of changes in the Company's shareholders' equity. Under arrangements ratified and approved by the Compensation Committee, the Board of Directors and the shareholders, and consistent with our Compensation Policy, the Companies Law and the Remuneration Regulations, each of our external directors shall be entitled to receive fees in connection with their service as external directors and their participation in Board of Directors meetings, which are equivalent to the compensation payable to other non-management directors, except to the extent that each external director is also entitled to the Annual Additional Fee with respect to his service on one or more committees of the Board of Directors (such fees may or may not be paid to other non-management directors, depending on whether they are members of committees of the Board), and shall also be eligible to receive a grant of options to purchase ordinary shares on an annual basis equal to the number of options being granted to each non-management director on terms substantially similar to those described above, provided however that the cash compensation paid to the Company's external directors shall be consistent with the rules applying to Relative Remuneration.

Compensation to our Active Chairman of the Board of Directors

Effective as of March 1, 2010, and following the approval of our Audit Committee, Board of Directors and shareholders, we entered into an employment agreement with Mr. Gerstel which was amended by the Shareholders at the 2015 Annual General Meeting, pursuant to which he serves as our Active Chairman of the Board of Directors. The terms of Mr. Gerstel's employment and service are consistent with the provisions of our Compensation Policy, although initially approved prior to its adoption. Generally, any change to such terms will be subject to the approval process and other conditions set forth in the Companies Law as described above under “-Approval Required for Directors’ and Officers’ Compensation.”

Pursuant to Mr. Gerstel's employment agreement, for his role as Active Chairman for the Company, he is entitled to a gross monthly salary of NIS 48,000 (approximately $12,739 according to the Representative Rate) which will remain at NIS 48,000 regardless of exchange rate fluctuations but which is subject to adjustment from time to time in accordance with changes in the Israeli Consumer Price Index, and to certain other employment terms customary in Israel. The employment agreement may be terminated by either party by providing 90 days' prior written notice.

In addition, Mr. Gerstel is eligible for an annual grant of equity based compensation and an annual cash bonus based upon achievement of objectives determined by the Company, both subject to receipt of all approvals required by applicable law. Our shareholders approved, at our 2014 Annual General Meeting following the approval of the Compensation Committee and the Board of Directors, and consistent with our Compensation Policy, the annual target cash bonuses with respect to the years 2014, 2015 and 2016 for Mr. Gerstel and the related objectives and terms thereof.

Mr. Gerstel is not entitled to any compensation in addition to that being paid to him as the Active Chairman of the Board of the Company. However, in the event of termination of Mr. Gerstel's employment agreement, he will be entitled to receive such remuneration to the extent and for as long as he will serve as a non-management director of the Company.

As of December 31, 2016 Mr. Gerstel held options to purchase a total of 897,500 ordinary shares, of which options to purchase 50,000 ordinary shares were granted during 2016. Out of the options to purchase 897,500 ordinary shares (i) options to purchase 760,000 ordinary shares, with a weighted average exercise price of $2.02 per share, were exercisable as of December 31, 2016; and (ii) options to purchase 137,500 ordinary shares, with a weighted average exercise price of $7.86 per share, had not vested as of December 31, 2016. Of the unvested options at December 31, 2016, options to purchase 75,000 ordinary shares are expected to vest during 2017; options to purchase 25,000 ordinary shares are expected to vest during 2018 and options to purchase the remaining 37,500 ordinary shares are expected to vest during the period between January 1, 2019 and October 1, 2020. These options were granted under the Company's 2000 Option Plan and under the Company's 2010 Plan. Notwithstanding the terms of the relevant plan, the options granted to Mr. Gerstel described above have terms substantially similar to those of the non-management directors as described above (including with respect to acceleration upon a Corporate Transaction). For additional information on Mr. Gerstel's holdings see “Item 6. Directors, Senior Management and Employee – E. Share Ownership - Share Ownership by Directors and Other Office Holders.”

Compensation to our President and Chief Executive Officer

Dr. Anat Cohen-Dayag, the Company's President and Chief Executive Officer has been employed by the Company since September 2, 2002, and has served as the Company's President and co-Chief Executive Officer from June 2009 to March 2010, and as President and Chief Executive Officer since March 2010. Dr. Cohen-Dayag also serves as a director of the Company since February 2014.

Pursuant to Dr. Cohen-Dayag's employment agreement, as amended by the shareholders at the 2015 Annual General Meeting, as the President and Chief Executive Officer of the Company she is entitled to a gross monthly salary of NIS 118,800 (approximately $31,529 according to the Representative Rate), adjusted from time to time in accordance with changes in the Israeli Consumer Price Index, which shall be reviewed annually. Dr. Cohen-Dayag is also entitled to certain benefits and perquisites customary in Israel, including those mandated by applicable law. In addition, Dr. Anat Cohen-Dayag is eligible for an annual grant of equity based compensation and to an annual cash bonus based upon achievement of objectives determined by the Company, both subject to receipt of all approvals required by applicable law. The Company’s shareholders approved at the Company’s 2014 Annual General Meeting the annual target cash bonuses with respect to the years 2014, 2015 and 2016 for Dr. Cohen-Dayag and the related objectives and terms thereof.

Dr. Cohen-Dayag's employment agreement may generally be terminated by either party by providing six (6) months advance written notice, provided that in the event of termination by the Company for “justifiable cause” (as such term is defined in her employment agreement as shall be in effect from time to time) the Company may terminate Dr. Cohen-Dayag's employment without advance notice and that Dr. Cohen-Dayag may resign with advance notice of only two (2) months in the event of resignation for “good reason” (as such term is defined in her employment agreement as shall be in effect from time to time). Upon termination, Dr. Anat Cohen-Dayag will be entitled to receive certain payments associated with termination.

In the event that Dr. Cohen-Dayag's employment is: (a) terminated by the Company, other than for "justifiable cause"; or (b) terminated by Dr. Cohen-Dayag for "good reason" (hereinafter, (a) and (b) shall be referred to together as "Dismissal"), Dr. Cohen-Dayag will also be entitled to an additional one-time payment equal to six (6) monthly salaries (the "Termination Payment") and upon Dismissal within one year following certain "change of control" events (as defined in her employment agreement as shall be in effect from time to time), Dr. Cohen-Dayag will be entitled to a special termination payment (in addition to the Termination Payment) in an amount equal to six (6) monthly salaries.

In addition, upon Dismissal, or in the event of a "change of control", all outstanding unvested options granted to Dr. Cohen-Dayag as of such time will be accelerated and become immediately exercisable as of the effective date of such Dismissal/change of control. Upon acceleration due to an event of a Dismissal, Dr. Cohen-Dayag will also be entitled to exercise all outstanding vested options for a period of one (1) year from the date of such Dismissal, provided that such period does not extend beyond ten (10) years from the date of grant. Upon acceleration due to an event of change of control, following which Dr. Cohen-Dayag's employment is, within 12 months of the closing of such an event: (a) terminated by the Company, other than for "justifiable cause"; or (b) terminated by Dr. Cohen-Dayag for any reason, Dr. Cohen-Dayag will be entitled to exercise all outstanding vested options (including those vested as a result of such accelerated vesting) for a period of one (1) year from the date of termination of her employment , provided that such period does not extend beyond ten (10) years from the date of grant.

Dr. Cohen-Dayag is not entitled to any compensation (including in connection with her role as a director) in addition to that being paid to her as the President and Chief Executive Officer of the Company. However, in the event of termination of Dr. Cohen-Dayag employment agreement, she will be entitled to receive such remuneration to the extent and for as long as she will serve as a non-management director of the Company

As of December 31, 2016 Dr. Cohen-Dayag held options to purchase a total of 1,142,846 ordinary shares, of which options to purchase 100,000 ordinary shares were granted during 2016. Out of the options to purchase 1,142,846 ordinary shares: (i) options to purchase 867,862 ordinary shares, with a weighted average exercise price of $3.55 per share, were exercisable as of December 31, 2016; and (ii) options to purchase 275,000 ordinary shares, with a weighted average exercise price of $7.86 per share, had not vested as of December 31, 2016. Of the unvested options at December 31, 2016, options to purchase 150,000 ordinary shares are expected to vest during 2017, options to purchase 50,000 ordinary shares are expected to vest during 2018 and options to purchase the remaining 75,000 ordinary shares are expected to vest during the period between January 1, 2019 and October 1, 2020. These options were granted under the Company's 2000 Option Plan and the Company's 2010 Plan. For additional information on Dr. Cohen-Dayag's holdings see "Item 6. Directors, Senior Management and Employee – E. Share Ownership - Share Ownership by Directors and Other Office Holders."

Pursuant to a recent amendment to regulations promulgated under the Companies Law, , a company's compensation committee and board of directors are permitted to approve Terms of Office and Employment of a chief executive officer or of a director, without convening a general meeting of shareholders, provided however, that such terms: (ii) are not more beneficial than the former terms, or are essentially the same in their effect; (ii) are in line with the Compensation Policy; and (iii) are brought for shareholder approval at the next general meeting of shareholders;

Insurance, Indemnification and Exemption
Our Compensation Committee, Board of Directors and shareholders have resolved, consistent with our Compensation Policy to ratify and approve the purchase and the periodic renewal, at the expense of the Company of insurance coverage in respect of the liability of the Company's Office Holders currently in office and any additional or other Office Holders as may be appointed from time to time in the future, including external directors, without the need for further act or approval, to the maximum extent permitted by law, which will include coverage with respect to any public offering of shares or other securities of the Company.

Following the adoption of our Compensation Policy, and consistent therewith and with applicable law, the Compensation Committee and the Board of Directors resolved to undertake to indemnify in advance all Office

Holders of the Company currently in office and any additional or other Office Holders as may be appointed from time to time, without the need for further act or approval, to the extent, and for such matters, costs and expenses as set forth in a letter of indemnification and exemption and release approved for issuance to them; and to exempt and release to the maximum extent permitted by law all such Office Holders of the Company currently in office and any additional or other Office Holders of the Company as may be appointed from time to time in the future, from and against all liability for monetary or other damages due to, or arising or resulting from, a breach of their duty of care to the Company, including, with respect to directors, in their capacity as officers of the Company to the extent they also serve as officers of the Company, and to provide them with letters in this regard.

With the amendment to our Compensation Policy, and pursuant to the Companies Law, at the 2015 Annual General Meeting, our shareholders approved an increase in the insurance coverage in respect of the liability of our Office Holders and any additional or other Office Holders as may be appointed from time to time in the future, that will provide for up to $50 million in coverage with an annual premium of up to $250,000.

C. BOARD PRACTICES

We are incorporated in Israel, and, therefore, are generally subject to various corporate governance practices under Israeli law such as with respect to external directors, independent directors, audit committee, compensation committee and an internal auditor. These matters are in addition to the requirements of the NASDAQ Global Market and other relevant provisions of U.S. securities laws applicable to us. Under the NASDAQ Listing Rules, a foreign private issuer may generally follow its home country practices for corporate governance in lieu of the comparable NASDAQ Global Market requirements, except for certain matters such as composition and responsibilities of the audit committee and the SEC-mandated standards for the independence of its members. For U.S. domestic companies, the NASDAQ Listing Rules specify that the majority of the members of the board of directors must be independent. In addition, under the Companies Law, unless determined otherwise by the Company, we are required to appoint at least two external directors, with which we comply, as described below under “External Directors”. We currently comply with all the above-mentioned requirements.

Board of Directors

Our Board of Directors consists of seven members, three of whom were elected as external directors under the provisions of the Companies Law (discussed below). Other than our three external directors, who are elected for a fixed term of three years, our directors are elected by our shareholders by a simple majority of the voting power present and voting at an annual general meeting of shareholders for a term of approximately one year, ending at the annual general meeting immediately following the annual general meeting at which they were elected and until their successors have been duly elected or until any such directors' term of office terminates as provided in the Companies Law or due to any of the circumstances set forth in our Articles. Our Articles, provide that we may have no less than five, nor more than fourteen directors.

None of our directors is party to a service contract with us that provides for any severance or similar benefits upon termination of his or her service other than our active Chairman of the Board of Directors, Mr. Martin Gerstel, and our President and Chief Executive Officer, Dr. Anat Cohen-Dayag, with each of whom we have entered into an employment agreement. For additional information on the employment agreement entered into with each of Mr. Gerstel and Dr. Cohen-Dayag, please see “Item 6 – Directors, Senior Management and Employees – B. Compensation - Compensation to our Active Chairman of the Board of Directors; - Compensation to our President and Chief Executive Officer.”

Directors under the Companies Law - General

A nominee for service as a director in a public company may not be elected without submitting a declaration to the company, prior to his or her election, specifying that he or she has the requisite qualifications to serve as a director, an external director or an independent director, as applicable, and the ability to devote the appropriate time to performing his or her duties as such.

A director, including an external director or an independent director, who ceases to meet the statutory requirements to serve as a director, external director or independent director, as applicable, must notify the company to that effect immediately and his or her service as a director will expire upon submission of such notice.

External Directors and Independent Directors under the Companies Law

Under the Companies Law, unless determined otherwise by the board of directors, Israeli public companies are generally required to have on their board of directors at least two external directors meeting certain independence criteria, all as provided under Israeli law. If applicable, external directors are elected for a term of three years at the general meeting of shareholders by a disinterested majority of the shareholders, and may be re-elected for additional terms of three years each, subject to certain conditions; each committee of a company's board of directors that has the authority to exercise powers of the board of directors must include at least one external director. For additional requirements related to the inclusion of external directors in the composition of certain mandatory committees, see below in – "Board Committees."

Among other requirements, a person may not be elected as an external director of a company if such person, his or her relative, partner, employer, anyone to whom he or she is directly or indirectly subordinate, or any entity under his or her control, has or had, on or within the two years preceding the date of his or her election, any ‘affiliation’ (as defined in the Companies Law) with the company, any controlling shareholder of the company, a relative of a controlling shareholder, or any entity controlled by the company or by a controlling shareholder of the company; and if the company has no controlling shareholder or a shareholder or an affiliated group of shareholders holding 25% or more of the company’s voting rights, also with the chairman of the board of directors, the chief executive officer or the most senior financial officer of the company, or with a shareholder holding 5% or more of the outstanding shares or voting rights of the company. The term affiliation includes an employment relationship, a business or professional relationship, maintained on a regular basis, or control, as well as service as an Office Holder.

Pursuant to the Companies Law an external director is required to have either accounting and financial expertise or professional qualifications according to criteria set forth under the Companies Law and regulations promulgated there under, and at least one of the external directors is required to have accounting and financial expertise. The board of directors must make the determinations as to the financial and accounting expertise, and as to the professional qualifications, of a director taking into consideration those criteria and matters set forth in the regulations. In addition, the boards of directors of publicly traded companies are required to make a determination as to the minimum number of directors who must have financial and accounting expertise as aforesaid based, among other things, on the type of company, its size, the volume and complexity of the company’s activities and the number of directors. Our Board of Directors has determined that the minimum number of directors with financial and accounting expertise is one and that Dr. Arie Ovadia, one of the Company's external directors, qualifies as such.

A recent amendment to regulations promulgated under the Companies Law, allows companies whose shares are traded on NASDAQ and who do not have a controlling shareholder (within the meaning of the Companies Law) to exempt themselves from the requirement of having external directors on their Board of Directors and the related obligations concerning such external directors; provided that such companies continue to comply with applicable U.S. securities laws and NASDAQ Listing Rules. Implementation of such exemption would probably require shareholder approval.

Professor Yair Aharonowitz, Dr. Arie Ovadia and Professor Joshua Shemer currently serve as our external directors, each of whom is also independent under the NASDAQ Listing Rules. The initial election of each of Professor Yair Aharonowitz, Dr. Arie Ovadia and Professor Joshua Shemer for a term of three years was approved by our shareholders at our Annual General Meeting of shareholders held on July 31, 2007. They were each re-elected by our shareholders for further three-year terms on each of April 15, 2010, April 22, 2013 and April 20, 2016. Their current term expires on April 19, 2019.

Under the Companies Law, an 'independent director' is either an external director or a director appointed or classified as such who meets the same non-affiliation criteria as an external director, as determined by the company’s audit committee, and who has not served as a director of the company for more than nine consecutive years. For these purposes, ceasing to serve as a director for a period of two years or less would not be deemed to sever the consecutive nature of such director’s service. A company, such as the Company, whose shares are listed for trading on specified exchanges outside of Israel, including the NASDAQ Global Market, may also classify directors who qualify as independent directors under the relevant non-Israeli rules relating to independence standards and who meet certain non-affiliation criteria, as ‘independent directors’ under the Companies Law, all as provided under regulations promulgated under the Companies Law. Prof. Ruth Arnon and Mr. Dov Hershberg meet the ‘independent directors’ criteria under the Companies Law.

External directors and independent directors may receive compensation solely as provided for in the Companies Law and the Remuneration Regulations. In addition, the Companies Law includes specific provisions with respect to the manner in which external directors and independent directors may be dismissed from office. Following termination of service, external directors and independent directors and their relatives are generally subject to certain restrictions with

respect to receipt of benefits, service as an Office Holder, employment and provision of professional services to the company, a controlling shareholder thereof or any entity controlled by a controlling shareholder.

Independent Directors under the NASDAQ Listing Rules

In addition to the requirements of the Companies Law as described above, since our shares are listed on the NASDAQ Global Market, pursuant to the NASDAQ Listing Rules, a majority of our directors must be independent (as defined under the NASDAQ Listing Rules). We comply with such NASDAQ independence requirement, as five of the seven members of our Board of Directors - Professor Yair Aharonowitz, Dov Hershberg, Dr. Arie Ovadia, Professor Joshua Shemer and Professor Ruth Arnon- have been determined by our Board of Directors to meet the NASDAQ independence requirements.

Board Committees

Audit Committee

The Companies Law requires public companies such as ours to appoint an audit committee comprised of at least three directors. The audit committee must include all of the external directors, if applicable, one of whom shall serve as the chairman of the committee, and the majority of its members must be independent directors (as described above under "- External Directors and Independent Directors under the Companies Law"). Further, the chairman of the Board of Directors and any director employed by us or who regularly provides services to us ("Non-Permitted Members"), may not be members of the audit committee. Generally, persons not eligible to be audit committee members may not be present at the audit committee's meetings during discussion and resolutions, unless the chairman of the audit committee determines that such person or persons are required for the purpose of presenting a certain item on the meeting's agenda.

Under the NASDAQ Listing Rules, we are required to maintain an audit committee that operates under a formal written charter and has certain responsibilities and authority, including being directly responsible for the appointment, compensation, retention and oversight of the work of our independent auditors. According to the NASDAQ Listing Rules, the audit committee is required to consist of at least three members, all of whom must be financially literate and also meet the independence requirements established by the SEC under Rule 10A-3 of the Exchange Act and the independence criteria set forth in the NASDAQ Listing Rules. The NASDAQ Listing Rules also require that at least one member of the audit committee be financially sophisticated (as defined in such listing rules).

The responsibilities of the Audit Committee include among other things: (i) identifying flaws in the management of the Company's business and making recommendations to the Board of Directors as to how to correct them, and providing for arrangements regarding employee complaints with respect thereto, (ii) reviewing and considering certain related party transactions and certain actions involving conflicts of interest (as well as deciding whether certain actions specified in the Companies Law are considered material or non-material and whether certain transactions are considered exceptional or ordinary), (iii) reviewing the internal auditor's work program performance and examining the company's internal control structure and processes, (iv) examining the external auditor's scope of work as well as the external auditor's fees and providing its recommendations to the appropriate corporate organ and (v) overseeing the accounting and financial reporting processes of the Company.

In carrying out its duties, the Audit Committee meets with management at least once in each fiscal quarter at which time, among other things, it reviews, and either approves or disapproves, the financial results of the Company for the immediately preceding fiscal quarter and conveys its conclusions in this regard to the Board of Directors. The Audit Committee also generally monitors the services provided by the Company's external auditors to ensure their independence, and reviews all audit and non-audit services provided by them. The Company's external and internal auditors also report regularly to the Audit Committee at its meetings and the Audit Committee discusses with our external auditors the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments and the clarity of disclosures in our financial statements, as and when it deems it appropriate to do so.

Under the NASDAQ Listing Rules the audit committee is directly responsible for the appointment, compensation, retention and oversight of the work of our independent auditors, among other things. However, under Israeli law and our Articles, the appointment of independent auditors requires the approval of the shareholders and their compensation requires the approval of our Board of Directors. In addition, pursuant to the Companies Law, the Audit Committee is required to examine the independent auditors' scope of work as well as the external auditors' fees and to provide its recommendations with respect thereto to the appropriate corporate organ. Accordingly, the appointment of our independent auditors is required to be approved by our shareholders at the Audit Committee's recommendation and their compensation for audit services and non-audit services is required to be approved by the Board of Directors following the Audit Committee's recommendation.

As the composition of our Audit Committee satisfies the requirements of the Companies Law regarding the composition of a compensation committee, in accordance with the decision of our Board of Directors, under authorization provided in the Companies Law (as described below under "- Compensation Committee"), an additional purpose of our Audit Committee is to fulfill the legal role and duties as ascribed to a compensation committee under the applicable NASDAQ Listing Rules, the Companies Law or otherwise pursuant to the Board's authorization. Therefore, our Audit Committee has the following additional responsibilities: (i) reviewing and making recommendations to the Board of Directors with respect to our Compensation Policy, (ii) reviewing and considering arrangements with respect to the Terms of Office and Employment of Office Holders, and (iii) overseeing, subject to applicable law, the administration of the Company's various compensation plans and arrangements, including, incentive compensation and equity based plans. In carrying out these duties, the Compensation Committee meets on an ad hoc basis (usually several times in each fiscal year). Under the Companies Law, the Audit Committee may need to seek the approval of the Board of Directors and the shareholders for certain compensation-related decisions, (see "Item 6 - Directors, Senior Management and Employees – B. Compensation - Approval Required for Directors' and Officers' Compensation").

We have an Audit Committee consisting of three directors, Dr. Arie Ovadia, who serves as the chairman of our Audit Committee and Professors Yair Aharonowitz, and Joshua Shemer, all of whom are financially literate and one of whom has accounting or related financial management expertise and is financially sophisticated. All of the members of our Audit Committee qualify as independent directors under the NASDAQ Listing Rules and are external directors under the Companies Law. We have adopted a charter for the Audit Committee, which sets forth the purpose and responsibilities of such committee.

Compensation Committee

The Companies Law generally provides that public companies such as the Company must appoint a compensation committee comprised of at least three directors, including all of the external directors, if applicable, which shall be the majority of its members and one of whom must serve as the chairman of the committee. All other members of the compensation committee, who are not external directors, must be directors who receive compensation that is in compliance with the Companies Law and the Remuneration Regulations and may not be Non-Permitted Members. Pursuant to the 2016 Amendment, a company's audit committee whose composition is in line with such required composition of a compensation committee may be authorized to assume the functions and responsibilities of a compensation committee. As the composition of our Audit Committee satisfies the composition requirements set out in the Companies Law with respect to a compensation committee, our Board of Directors resolved to unify our compensation and audit committees. As a result, we no longer have a separate compensation committee and our Audit Committee also serves as a compensation committee (See – "Audit Committee" above). This practice is compliant with Israeli law. As all of the members of the Audit Committee meet the independence requirements for compensation committee members set forth in NASDAQ Listing Rule 5605(d)(2), as a foreign private issuer, we have elected, pursuant to NASDAQ Listing Rule 5615(a)(3), to follow Israeli practice, in lieu of compliance with the certain provisions of NASDAQ Listing Rule 5605(d), requiring us to have a separate compensation committee. Despite the fact that as a company whose shares are traded on NASDAQ, and does not have a controlling shareholder (within the meaning of the Companies Law), we are allowed to exempt ourselves from the above-mentioned composition requirements set under the Companies Law, and only follow the composition requirements under the Nasdaq Listing Rules, our decision not to exercise such exemption, and to adhere to the Israeli composition requirements with respect to both our Audit Committee and Compensation Committee, allowed us to implement said unification. Generally, persons not eligible to be compensation committee members may not present at the committee's meetings during discussion and resolutions, unless the Chairman of the Committee determines that such person or persons are required for the purpose of presenting a certain item on the meeting's agenda.

Nominating Committee

Our Board of Directors does not maintain a nominating committee. The functions of such committee are performed by the full Board of Directors. This practice is compliant with Israeli law and, as a foreign private issuer, we have elected, pursuant to NASDAQ Listing Rule 5615(a)(3), to follow Israeli practice, in lieu of compliance with the NASDAQ Listing Rule 5605(e).

Internal Auditor

Under the Companies Law, the board of directors must appoint an internal auditor, recommended by the audit committee. The role of the internal auditor is to examine, among other matters, whether the company's actions comply with the law and orderly business procedures. Under the Companies Law, an interested party or an Office Holder of a company, or a relative of an interested party or of an Office Holder of a company, as well as the company's independent auditors or any one on behalf of the independent auditors may not serve as a company's internal auditor. The internal auditor's tenure cannot be terminated without his or her consent, nor can he or she be suspended from such position unless the board of directors has so resolved after hearing the opinion of the audit committee and after providing the internal auditor with the opportunity to present his or her position to the board of directors and to the audit committee. An interested party is defined in the Companies Law as a holder of 5% or more of the company's outstanding shares or voting rights, any person or entity who has the right to designate one or more directors or the chief executive officer of the company or any person who serves as a director or as a chief executive officer of the company.

On February 8, 2010, our Board of Directors appointed Ms. Hila Barr of Brightman Almagor Zohar & Co., a member firm of Deloitte Touche Tohmatsu, to serve as our internal auditor. Ms. Hila Barr is not an employee, affiliate or Office Holder of the Company, or affiliated with the Company's independent auditors.

Fiduciary Duties and Approval of Related Party Transactions under Israeli Law

Fiduciary Duties of Office Holders

The Companies Law codifies the fiduciary duties that office holders owe to a company. Each person listed in the table under "Item 6.A—Directors and Senior Management" is an Office Holder. In addition to those persons listed in the table under Item 6.A, four other individuals were Office Holders as of December 31, 2016.

An Office Holders' fiduciary duties consist of a duty of care and a duty of loyalty. The duty of care requires an Office Holder to act with the standard of skills with which a reasonable Office Holder in the same position would have acted under the same circumstances. The duty of care includes a duty to use reasonable means to obtain:

- information regarding the business advisability of a given action brought for the Office Holder's approval or performed by the Office Holder by virtue of his or her position; and
- all other information of importance pertaining to the aforesaid actions.

The duty of loyalty requires an Office Holder to act in good faith and for the benefit of the company and includes the duty to:

- refrain from any act involving a conflict of interest between the fulfillment of his or her position in the company and the fulfillment of any other position or his or her personal affairs;
-

refrain from any act that is competitive with the business of the company;

- refrain from exploiting any business opportunity of the company with the aim of obtaining a personal gain for himself or herself or for others; and

- disclose to the company all relevant information and provide it with all documents relating to the company's affairs which the Office Holder obtained due to his or her position in the company.

Disclosure of Personal Interests of Office Holders and Approval of Certain Transactions

The Companies Law requires that an Office Holder of a company promptly disclose to the company any personal interest that the Office Holder may have and all related material information known to him or her, in connection with any existing or proposed transaction by the company. In addition, if the transaction is an extraordinary transaction, as defined under Israeli law, the Office Holder must also disclose any personal interest held by the Office Holder's spouse, siblings, parents, grandparents, descendants, spouse's descendants and the spouses of any of the foregoing (a "Relative"). In addition, the Office Holder must also disclose any interest held by any corporation in which the Office Holder: (i) holds at least 5% of the company's outstanding share capital or voting rights; (ii) is a director or general manager; or (iii) has the right to appoint at least one director or the general manager. An extraordinary transaction is defined as a transaction which is either not in the ordinary course of business, not on market terms, or likely to have a material impact on the company's profitability, assets or liabilities.

Under the Companies Law, unless the articles of association of a company provide otherwise, a transaction in which an Office Holder has a personal interest and which is not an extraordinary transaction, requires Board approval, after the Office Holder complies with the above disclosure requirement and provided the transaction is not adverse to the company's interest. Our Articles do not provide for a different method of approval. Furthermore, if the transaction is an extraordinary transaction, then, in addition to any approval stipulated by the articles of association, it also must be approved by the company's audit committee and then by the board of directors, and, under certain circumstances, by the shareholders of the company.

A person with a personal interest in any matter may not generally be present at any audit committee, compensation committee or board of directors meeting where such matter is being considered, and if he or she is a member of the committee or a director, he or she may not generally vote on such matter at the applicable meeting.

Disclosure of Personal Interest of Controlling Shareholders and Approval of certain Transactions

The Companies Law extends the disclosure requirements applicable to an Office Holder to a 'controlling shareholder' in a public company. For this purpose, a 'controlling shareholder' is a shareholder who has the ability to direct the activities of a company, including a shareholder or a group of shareholders who together own 25% or more of the voting rights if no other shareholder holds more than 50% of the voting rights.

Extraordinary transactions of a public company with a controlling shareholder or in which a controlling shareholder has a personal interest, as well as any engagement by a public company of a controlling shareholder or of such controlling shareholder's Relative, directly or indirectly, with respect to the provision of services to the company, and, if such person is also an Office Holder of such company, with respect to such person's Terms of Office and Employment as an Office Holder, and if such person is an employee of the company but not an Office Holder, with respect to such person's employment by the company, generally require the approval of each of the audit committee (or with respect to Terms of Office and Employment the compensation committee), the board of directors and the shareholders of the company, in that order. The shareholder approval must fulfill one of the following requirements: (i) it received the positive vote of at least a majority of the voting rights in the company who are present and voting in the meeting and held by shareholders who do not have a personal interest in the transaction; (abstentions are disregarded) or (ii) the voting rights held by shareholders who have no personal interest in the transaction and who have voted against the transaction, do not exceed two percent of the voting rights in the company.

Any extraordinary transactions with a controlling shareholder or in which a controlling shareholder has a personal interest with a term of more than three years generally need to be brought for re-approval in accordance with the above procedure every three years, unless the audit committee determined that the duration of the transaction is reasonable given the circumstances related thereto and has been approved by the shareholders for such longer duration.

Pursuant to regulations promulgated under the Companies Law, certain transactions with a controlling shareholder or his or her Relative, or with directors, that would otherwise require approval of a company's shareholders may be exempt from shareholder approval upon certain determinations of the audit committee or the compensation committee and board of directors.

For information concerning the direct and indirect personal interests of certain of our Office Holders and principal shareholders in certain transactions with us, see "Item 7. Major Shareholders and Related Party Transactions - B. Related Party Transactions."

Shareholders Duties

Pursuant to the Companies Law, a shareholder has a duty to: (i) act in good faith in fulfilling his obligations towards the company and the other shareholders; and (ii) refrain from abusing his or her power with respect to the company, including, when voting at a general meeting with respect to the following matters: (a) an amendment to the company's articles of association; (b) an increase of the company's authorized share capital; (c) a merger; or (d) interested party transactions that require shareholders' approval.

In addition, any controlling shareholder, any shareholder who knows that it possesses power to determine the outcome of a shareholder vote and any shareholder who, pursuant to the provisions of a company's articles of association has the power to appoint or prevent the appointment of an office holder in the company is under a duty of fairness towards the company. The Companies Law does not describe the substance of such duty of fairness but states that the remedies generally available upon a breach of contract will also apply in the event of a breach of the duty of fairness, taking into account such shareholder's position.

Approval of Significant Private Placement

Under the Companies Law, a significant private placement of securities requires approval by the board of directors and the shareholders by a simple majority. A private placement is considered a significant private placement if it results in a person becoming a controlling shareholder, or if all of the following conditions are met: the securities issued amount to 20% or more of the company's outstanding voting rights before the issuance; some or all of the consideration is other than cash or listed securities or the transaction is not on market terms; and the transaction will increase the relative holdings of a shareholder who holds 5% or more of the company's outstanding share capital or voting rights or that will cause any person to become, as a result of the issuance, a holder of more than 5% of the company's outstanding share capital or voting rights.

D. EMPLOYEES

The following table sets out the number of our full-time employees engaged in specified activities, at the end of the fiscal years 2016, 2015 and 2014 (the numbers include employees of our wholly owned U.S. subsidiary Compugen USA, Inc.):

	December 31, 2016	December 31, 2015	December 31, 2014
Research & Development	74	74	68
Administration, Accounting and Operations	21	16	13
Marketing and Business Development	3	3	2
Total	98	93	83

In April 2012 we established a new monoclonal antibody (mAb) research and development operation in South San Francisco, California. For the year ended December 31, 2014, 60 of our employees were located in Israel and 23 were located in the U.S., and for the year ended December 31, 2015, 66 of our employees were located in Israel and 27 were located in the U.S. and for the year ended December 31, 2016, 66 of our employees were located in Israel and 32 were located in the U.S.

We consider our relations with our employees to be satisfactory and we have not experienced a significant labor dispute or strike. We are not a party to any collective bargaining agreement with respect to our Israeli employees. However, we are subject to certain labor related statutes and to certain provisions of collective bargaining agreements between the Histadrut (General Federation of Labor in Israel) and the Coordinating Bureau of Economic Organizations and/or the Industrialists' Association, which are applicable to our Israeli employees by virtue of expansion orders of the Israeli Minister of the Economy. These statutes and provisions cover a wide range of subjects and provide certain minimum employment standards, including the length of the work day and work week, minimum

wages, travel expenses, contributions to a pension fund, insurance for work-related accidents, procedures for dismissing employees, determination of severance pay, annual and other vacations, sick pay and other conditions of employment. We generally provide our employees with benefits and working conditions beyond the required minimum. An additional provision applicable to all employees in Israel under collective bargaining agreements and expansion orders is the automatic adjustment of wages in relation to increases in the Israeli CPI. The amount and frequency of these adjustments are modified from time to time; however, no such adjustments have been made in recent years pursuant to expansion orders.

Our severance pay liability to our Israeli employees, based upon the number of years of service and the latest monthly salary, is in the large part covered by regular deposits with recognized pension funds, deposits with severance pay funds and purchases of insurance policies. Pursuant to Section 14 of the Israeli Severance Pay Law 5723-1963, certain of our liabilities for employee severance rights upon termination are covered by regular contributions to defined contribution plans so that upon termination of employment of the relevant employees, we are only required to release the payments made by us to such funds on account of severance and by doing so are deemed to have complied with all of our severance payment obligations relating to the service of applicable employees with respect to the period during which the provisions of such section apply. For information concerning our liability for severance pay, see Note 2o to our 2016 consolidated financial statements.

Our employees are not represented by a labor union. We have written employment contracts (including signed offers of employment) with each of our employees.

E. SHARE OWNERSHIP

Share Ownership by Directors and Other Executive Officers

All of the persons listed above under the caption “Directors and Senior Management” own ordinary shares of the Company and/or options to purchase ordinary shares of the Company. Except as set forth in the table below, none of the directors or executive officers beneficially owns ordinary shares and/or ordinary shares underlying options amounting to 1% or more of the outstanding ordinary shares. The following table sets forth certain information as of January 15, 2017, regarding the beneficial ownership by our directors and executive officers. All numbers quoted in the table are inclusive of options to purchase shares that are exercisable within 60 days after January 15, 2017. The information in this table is based on 51,131,534 ordinary shares outstanding as of January 15, 2017.

Beneficial Owner	Amount Owned	Percent of Class	
Martin S. Gerstel [1]	2,625,223	5.06	%
Anat Cohen-Dayag [2]	890,746	1.71	%
All directors and executive officers as a group (10 persons) [3]	4,582,296	8.52	%

---

(1) Includes (i) 119,240 shares held by Mr. Gerstel, (ii) 500,000 shares held by Shomar Corporation, an affiliate of Mr. Gerstel, (iii) 619,033 shares held by Merrill Lynch IRA for Martin S. Gerstel, of which Mr. Gerstel is the beneficiary, and (iv) 615,495 shares held in a trust for which Mr. Gerstel is trustee and a member his immediate family is the beneficiary. Also includes 771,455 shares subject to options that are currently exercisable or that become exercisable within 60 days after January 15, 2017 with a weighted average exercise price of $2.12 per share and which expire between January 2019 and May 2025.

(2) Consists of 890,746 shares subject to options that are exercisable within 60 days after January 15, 2017 with a weighted average exercise price of $3.69 per share, and which expire between October 2017 and August 2025.

(3) See Notes 1 and 2 above. Also includes (i) a total of 984,663 shares subject to options that are beneficially owned by directors and executive officers that are exercisable within 60 days after January 15, 2017 with a weighted average exercise price of $4.61 per share and which expire between October 2017 and May 2025 and (ii) a total of 81,664 ordinary shares held by directors.

Share Option Plans

We maintain one active share option plan, plus one additional share option plan under which prior grants remain outstanding, for our employees, directors and consultants. In addition to the discussion below, see Note 9 to our 2016 consolidated financial statements.

Our Board of Directors administered our share option plans until February 2014 and as of such date subject to applicable law (including with respect to the required approval procedure of compensation to Office Holders under the Companies Law (for additional information on the approval procedure of compensation to Office Holders, see "Item 6. Directors, Senior Management and Employees – B. Approval Required for Directors' and Officers' Compensation"), our Audit Committee currently administers our share option plans and has the authority to designate terms of the options granted under our plans including the grantees, exercise prices, grant dates, vesting schedules and expiration dates, which may be no more than ten years after the grant date. Options may not be granted with an exercise price of less than the fair market value of our ordinary shares on the date of grant, unless otherwise determined by our Board of Directors.

Compugen Share Option Plan (2000)

The Compugen Share Option Plan (2000), or the "2000 Option Plan," enabled granting options for up to an aggregate of 10,191,511 ordinary shares of the Company to our and our subsidiaries' employees, directors and consultants. No further options are being granted under this plan following a July 25, 2010 decision of our Board of Directors which resolved to cancel the 2000 Option Plan. As of December 31, 2016, options to purchase 1,763,910 ordinary shares at a weighted average exercise price of approximately $2.43 per share were outstanding (i.e., were granted but not canceled, expired or exercised) under the 2000 Option Plan. Options to purchase 5,909,449 ordinary shares under the plan have previously been exercised at a weighted average exercise price of approximately $2.84.

Compugen 2010 Share Incentive Plan

On July 25, 2010, our Board of Directors adopted the Compugen 2010 Share Incentive Plan or the "2010 Plan". The adoption of the 2010 Plan was approved by our shareholders on May 12, 2011. In addition, the Board of Directors and shareholders resolved that the options available for grants under the 2000 Option Plan, at such time, as well as any options that may return to such pool in connection with terminated options, will be made available for future grants under the 2010 Plan. 1,953,851 shares were initially reserved for the grant under the 2010 Plan. Our shareholders approved at our 2014 Annual General Meeting to authorize and reserve for purposes of and for issuance under the 2010 Plan an additional 3,000,000 ordinary shares. In keeping with our Board of Directors' and shareholders' resolution any shares subject to options granted under the 2000 Option Plan prior to the adoption of the 2010 Plan which terminate unexercised, will also be made available for future grants under the 2010 Plan.

If a grantee leaves his or her employment or other relationship with us, or if his or her relationship with us is terminated without cause (and other than by reason of death or disability, as defined in the 2010 Plan), the term of his or her unexercised options will generally expire in 90 days, unless determined otherwise by our Board of Directors. As of December 31, 2016, options to purchase 6,577,561 ordinary shares at a weighted average exercise price of approximately $6.03 per share were outstanding (i.e., were granted but not canceled, expired or exercised) under the 2010 Plan. Options to purchase 779,579 ordinary shares under the plan have previously been exercised at a weighted average exercise price of approximately $4.65. Options to purchase 1,076,791 ordinary shares remain available for future grant as of December 31, 2016.

Administration of our Share Options Plans

Our Board of Directors has elected the "Capital Gains Track" (as defined in Section 102(b) (2) of the Tax Ordinance) for the grant of options to Israeli grantees.

Pursuant to Section 102 of the Tax Ordinance, and pursuant to an election made by the Company thereunder, gains derived by employees (which term includes directors) in Israel arising from the sale of shares acquired pursuant to the exercise of options granted to them through a trustee under Section 102 of the Tax Ordinance after January 1, 2003, will generally be subject to a flat capital gains tax rate of 25%, although these gains, or part of them, may under certain circumstances also be considered part of an employee's regular salary and subject to such employee's regular tax rate applicable to such salary. As a result of this election under Section 102, the Company will not, in the case of equity awards made on or after January 1, 2003, be allowed to claim as an expense for tax purposes in Israel the amounts credited to the employee as capital gains, although it will generally be entitled to do so in respect of the salary income component (if any) of such awards when the related tax is paid by the employee.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. MAJOR SHAREHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our ordinary shares, with respect to each person known to us to be the beneficial owner of 5% or more of our outstanding ordinary shares, reported as of January 15, 2017. None of our shareholders has any different voting rights than any other shareholder. As of January 15, 2017, there were a total of 49 holders of record of our ordinary shares, of which 34 were registered with addresses in the United States. Such United States holders were, as of such date, the holders of record of approximately 99.9% of the outstanding ordinary shares. Our ordinary shares are traded on the NASDAQ Global Market in the United States and on the TASE in Israel. A significant portion of our shares are held in street name, therefore we cannot determine who our shareholders are, their geographical location or how many shares a particular shareholder owns.

Significant Changes in Share Ownership

The following table shows changes over the last three years in the percentage ownership by major shareholders:

	Ordinary Shares Owned as of March 1, 2015		Ordinary Shares Owned as of February 1, 2016		Ordinary Shares Owned as of January 15, 2017	
	Number of shares	Percentage of ownership	Number of shares	Percentage of ownership	Number of shares	Percentage of ownership
Martin Gerstel	2,541,268	4.98 %	2,551,268	4.98 %	2,625,223	5.06 %

B. RELATED PARTY TRANSACTIONS

Other than as set forth below and transactions related to compensation of our executive officers and directors as described under “Item 6. Directors, Senior Management and Employees—B. Compensation,” since January 1, 2016, we have not entered into any related party transactions.

Keddem Bioscience Ltd.

In 1999, we established a chemistry division to carry out a research program in which we integrated the disciplines of organic chemistry with physics and advanced computational technologies for the development of a method to substantially increase the predictability and success rates of small molecule drug discovery. These operations were subsequently transferred in 2004 to our then wholly owned subsidiary Keddem Bioscience Ltd (“Keddem”), where such operations were later suspended for financial reasons in 2007. On November 19, 2012 we signed an agreement with a private U.S.-based investment company pursuant to which up to $15 million in milestone related equity financing will be made available to Keddem. This financing will be used to further develop and commercialize Keddem's unique technology platform. Under the agreement, the new investor will obtain a majority equity interest in Keddem, with Compugen maintaining a minority interest and certain future preferential access rights to utilize the Keddem technology with Compugen discovered drug targets. Martin Gerstel, our Chairman of the Board of Directors is also Chairman of the Board of Keddem. As of the date of this annual report, we owned 29.41% of the outstanding securities of Keddem.

See also Note 2 to our 2016 consolidated financial statements.

Neviah Genomics Ltd.

In June 2012, we established together with Merck KGaA and Merck Holdings Netherlands B.V. (collectively, "Merck") a new start-up company, Neviah, which is focused on the discovery and development of novel biomarkers for the prediction of drug-induced toxicity. Neviah operates out of the Merck Serono Israel Bioincubator. Pursuant to our agreement, Merck is providing the initial funding for Neviah and its expertise in the validation and development of biomarkers into a diagnostic test, and we are utilizing certain proprietary predictive discovery technologies and receiving research revenues for our efforts. The agreement provides Compugen with an equity ownership in the new company and a right to royalties from potential future sales. In December 2014, we invested together with Merck an amount in addition to Merck's original investment in order to finance the further validation of the assay and remaining product development costs. In 2015, we recognized $32,000 in research revenues under this agreement. Following the biomarker discovery phase and the completion of the validation and development of an assay for the early detection of drug induced hepatotoxicity, Merck decided to not enter into commercialization of the products. As a result, Neviah will cease to exist. Merck will have the right to utilize the assay internally but not to provide it to third parties, and all commercialization rights and intellectual property generated by Neviah will become property of Compugen.

Dr. Zurit Levine our VP Research and Discovery, and Ari Krashin our Chief Financial and Operations Officer are directors in Neviah on behalf of the Company. As of the date of this annual report, we owned 25.12% of the outstanding securities of Neviah.

See also Note 2 and Note 14 to our 2016 consolidated financial statements.

Indemnification Agreements

Our Articles permit us to exculpate, indemnify and insure our Office Holders to the fullest extent permitted by the Companies Law. Accordingly, we release our Office Holders from liability and indemnify them to the fullest extent permitted by law, and provide them with letters of indemnification and exemption and release for this purpose, in the form approved at a Special General Meeting of the shareholders which took place in September, 2013. Under the letters of indemnification and exemption and release, (i) Compugen's undertaking to indemnify each Office Holder for monetary liabilities or obligations imposed by a court judgment (including a settlement or an arbitrator's award approved by a court) shall be limited to matters that result from or are connected to those events or circumstances set forth therein, and (ii) the indemnification that the Company undertakes towards all persons whom it resolved to indemnify for the matters and circumstances described therein, jointly and in the aggregate, shall not exceed $5 million.

Our Office Holders are also covered by directors' and officers' liability insurance. For more information see "Item 6. Directors, Senior Management and Employees—B. Compensation- Insurance, Indemnification and Exemption."

C. INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

Consolidated Financial Statements

Our consolidated financial statements are included beginning on page F-1 of this annual report. See also "Item 18. Financial Statements."

Legal Proceedings

Currently, we are not a party to any legal or arbitration proceedings, including governmental proceedings that are pending or known to be contemplated, that our management believes, individually or in the aggregate, may have, or have had in the recent past, a significant effect on our financial position or profitability, nor are we party to any material proceeding in which any director, member of our senior management or affiliate is a party adverse to us or our subsidiaries or has a material interest adverse to us or our subsidiaries.

Dividend Distribution Policy

We have never paid any cash dividends on our ordinary shares, and we do not intend to pay cash dividends on our ordinary shares in the foreseeable future. Our current policy is to retain earnings for use in our business.

In the event that we decide to pay a cash dividend from income that is tax exempt under our Approved Enterprises and/or Benefiting Enterprises programs, we would be required to pay the applicable corporate tax that would otherwise have been payable on such income which would be in addition to the tax payable by the dividend payee. See Note 10 to our 2016 consolidated financial statements and "Item 10. Taxation."

B. SIGNIFICANT CHANGES

Not applicable.

ITEM 9. THE OFFER AND LISTING

A. OFFER AND LISTING DETAILS

Our ordinary shares were listed on The NASDAQ Global Market through June 16, 2009. On June 17, 2009, we transferred the listing of our ordinary shares from The NASDAQ Global Market to The NASDAQ Capital Market, and on January 27, 2014 we transferred the listing of our ordinary shares from The NASDAQ Capital Market back to The NASDAQ Global Market. The high and low sales prices per share of our ordinary shares for the periods indicated are set forth below:

Year Ended	High	Low
December 31, 2012	$6.47	$2.96
December 31, 2013	$11.92	$4.56
December 31, 2014	$14.32	$6.27
December 31, 2015	$9.65	$4.64
December 31, 2016	$7.57	$4.32
Quarter Ended		
March 31, 2015	$9.65	$6.92
June 30, 2015	$7.98	$6.10
September 30, 2015	$7.41	$4.64
December 31, 2015	$7.79	$4.91
March 31, 2016	$6.92	$4.32
June 30, 2016	$7.14	$5.48
September 30, 2016	$7.57	$6.25
December 31, 2016	$6.80	$5.05

Month Ended	High	Low
August 31, 2016	$7.27	$6.54
September 30, 2016	$7.57	$6.25
October 31, 2016	$6.46	$5.55
November 30, 2016	$6.80	$5.50
December 31, 2016	$6.30	$5.05
January 31, 2017	$5.40	$4.40

The high and low sales prices per share of our ordinary shares on the Tel Aviv Stock Exchange for the periods indicated are set forth below. The currency in which our stock is traded on the Tel Aviv Stock Exchange is the New Israeli Shekel, or NIS. The below dollar amounts represent a conversion from NIS to dollar amounts in accordance with the dollar NIS conversion rate as of the relevant date.

Year Ended	High*	Low*
December 31, 2012	$6.35	$3.03
December 31, 2013	$11.80	$4.57
December 31, 2014	$13.48	$6.40
December 31, 2015	$9.66	$4.59
December 31, 2016	$7.38	$4.31
Quarter Ended		
March 31, 2015	$9.66	$7.33
June 30, 2015	$7.88	$6.16
September 30, 2015	$7.20	$4.59
December 31, 2015	$7.74	$5.02
March 31, 2016	$6.93	$4.31
June 30, 2016	$7.29	$5.51
September 30, 2016	$7.38	$6.30
December 31, 2016	$6.70	$5.11

Month Ended	High*	Low*
August 31, 2016	$7.23	$6.41
September 30, 2016	$7.38	$6.30
October 31, 2016	$6.35	$5.59
November 30, 2016	$6.70	$5.56
December 31, 2016	$6.27	$5.11
January 31, 2017	$5.32	$4.44

B. PLAN OF DISTRIBUTION

Not applicable

C. MARKETS

Our ordinary shares are traded in the United States on The NASDAQ Global Market and in Israel on the Tel Aviv Stock Exchange (TASE).

D. SELLING SHAREHOLDERS

Not applicable

E. DILUTION

Not applicable

F. EXPENSES OF THE ISSUE

Not applicable

ITEM 10. ADDITIONAL INFORMATION

A. SHARE CAPITAL

Not applicable

B. MEMORANDUM AND ARTICLES OF ASSOCIATION

Set forth below is a summary of certain provisions of our Memorandum of Association ("Memorandum") and our Articles. This description does not purport to be complete and is qualified in its entirety by reference to the full text of our Memorandum and Articles.

Objects and Purposes

We are incorporated under the Companies Law under the name Compugen Ltd. Our Memorandum was registered in 1993, and was most recently amended by our shareholders at our 2014 Annual General Meeting. At our 2013 Annual General Meeting, the shareholders adopted new Articles. The purpose of the Company as stated in our incorporation documents is to engage in any lawful act or activity for which companies may be organized under the Companies Law.

Rights Attached To Our Shares

Our authorized share capital is NIS 1,000,000 divided into 100,000,000 ordinary shares of nominal (par) value NIS 0.01 each.

Subject to our Articles, fully paid ordinary shares of the Company confer on the holders thereof rights to attend and to vote at general meetings of the shareholders. Subject to the rights of holders of shares with limited or preferred rights which may be issued in the future, the ordinary shares of the Company confer upon the holders thereof equal rights to receive dividends and to participate in the distribution of the assets of the Company upon its winding-up, in proportion to the amount paid up or credited as paid up on account of the nominal value of the shares held by them respectively and in respect of which such dividends are being paid or such distribution is being made, without regard to any premium paid in excess of the nominal value, if any. No preferred shares are currently authorized. All outstanding ordinary shares are validly issued and fully paid.

Voting Rights

Subject to the provisions of our Articles, holders of ordinary shares have one vote for each ordinary share held by such shareholder of record, on all matters submitted to a vote of shareholders. Shareholders may vote in person, by proxy or by proxy card. Alternatively, shareholders who hold shares through members of the Tel Aviv Stock Exchange may vote electronically via the electronic voting system of the Israel Securities Authority ("Electronic Vote"). These voting rights may be affected by the grant of any special voting rights to the holders of a class of shares with preferential rights that may be authorized in the future. As our ordinary shares do not have cumulative voting rights in the election of directors, the holders of the majority of the shares present and voting at a shareholders meeting generally have the power to elect all of our directors, except the external directors whose election requires a special majority.

Transfer of Shares

Our ordinary shares which have been fully paid-up are transferable by submission of a proper instrument of transfer together with the certificate of the shares to be transferred and such other evidence of title, as the Board of Directors may require, unless such transfer is prohibited by another instrument or by applicable securities laws.

Dividends

Under the Companies law, dividends may be distributed only out of profits available for dividends as determined by the Companies Law, provided that there is no reasonable concern that the distribution will prevent the Company from being able to meet its existing and anticipated obligations when they become due. If the company does not meet the profit requirement, a court may nevertheless allow the company to distribute a dividend, as long as the court is convinced that there is no reasonable concern that such distribution will prevent the company from being able to meet its existing and anticipated obligations when they become due. Pursuant to our Articles, no dividend shall be paid otherwise than out of the profits of the Company. Generally, under the Companies Law, the decision to distribute dividends and the amount to be distributed is made by a company's board of directors.

Our Articles provide that our Board of Directors, may, subject to the Companies Law, from time to time, declare and cause the Company to pay such dividends as may appear to the Board of Directors to be justified by the profits of our Company. Subject to the rights of the holders of shares with preferential, special or deferred rights that may be authorized in the future, our profits which shall be declared as dividends shall be distributed according to the proportion of the nominal (par) value paid up or credited as paid up on account of the shares held at the date so appointed by the Company and in respect of which such dividend is being paid, without regard to the premium paid in excess of the nominal (par) value, if any. The declaration of dividends does not require shareholders' approval.

To date, we have not declared or distributed any dividend and we do not intend to pay cash dividends on our ordinary shares in the foreseeable future.

Liquidation Rights

In the event of our winding up on liquidation or dissolution, subject to applicable law, our assets available for distribution among the shareholders shall be distributed to the holders of ordinary shares in proportion to the amount paid up or credited as paid up on account of the nominal value of the shares held by them respectively and in respect of which such distribution is being made, without regard to any premium paid in excess of the nominal value, if any. This liquidation right may be affected by the grant of limited or preferential rights as to liquidation to the holders of a class of shares that may be authorized in the future.

Redemption Provisions

We may, subject to applicable law and to our Articles, issue redeemable shares and redeem the same upon such terms and conditions as determined by our Board of Directors.

Capital Calls

Under our Articles, the liability of each shareholder for the Company's obligations is limited to the unpaid sum, if any, owing to the Company in consideration for the issuance of the shares held by such shareholder.

Modification of Class Rights

Our Memorandum provides that we may amend the Memorandum in order to increase, consolidate or divide or otherwise amend our share capital by a simple majority of the voting power present at a shareholders meeting as currently provided in our Articles or by such other majority as shall be set forth in our Articles from time to time.

Pursuant to our Articles, if at any time our share capital is divided into different classes of shares, the rights attached to any class, unless otherwise provided by our Articles, may be modified or abrogated by the Company, subject to the consent in writing of, or sanction of a resolution passed by, the holders of a majority of the issued shares of such class at a separate general meeting of the holders of the shares of such class.

Limitations on the Rights to Own Securities

Our Articles and Israeli law do not restrict the ownership or voting of ordinary shares by non-residents or persons who are not citizens of Israel, except with respect to subjects of nations which are in a state of war with Israel.

Changes in Capital

Our Articles enable us to increase or reduce our share capital. Any such changes are subject to the provisions of the Companies Law and must be approved by a resolution duly passed by a simple majority of our shareholders at a general meeting by voting on such change in the capital.

Shareholders Meetings and Resolutions

Our Articles provide that our annual general meeting shall be held once in every calendar year at such time (within a period of not more than fifteen months after the last preceding annual general meeting), and place determined by our Board of Directors. Our Board of Directors may, in its discretion, convene additional special shareholders meetings and, pursuant to the Companies Law, must convene a meeting upon the demand of: (a) two directors or one quarter of the directors in office; or (b) the holder or holders of (i) 5% or more of the Company’s issued share capital and one percent or more of its voting rights; or (ii) 5% or more of the Company’s voting rights. All demands for shareholders meetings must set forth the items to be considered at that meeting.

The chairman of the Board of Directors shall preside