# **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								
X	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934									
	FOR THE FISCAL YEAR ENDED DECEMBER 31, 2012									
		OR								
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) O	F THE SECURITIES EXCHANGE AC	CT OF 1934							
		OR								
	SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15	5(d) OF THE SECURITIES EXCHANG	GE ACT OF 1934							
	DATE OF EVENT REQUIRING THIS SHELL COMPANY REPORT									
		COMMISSION FILE NO. 000-30								
	(Exact name of registrant	Compugen Ltd. t as specified in its charter and translation								
	<del></del>	Israel (Jurisdiction of incorporation or orga	nization)							
		72 Pinchas Rosen Street, Tel Aviv, 69 (Address of principal executive of								
	Dikla Czaczkes Axselbrad, Chief Financial Officer Phone: 972-3-765-8585, Fax: 972-3-765-8555 72 Pinchas Rosen Street, Tel Aviv, 69512 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:									
	<b>Title of each class</b> Ordinary shares, par value NIS 0.01	per share	Name of each exchange on which registered The NASDAQ Stock Market LLC (The NASDAO Capital 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:
36,590,478 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 ⊠ No
If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
□ Yes ⊠ No
Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days:
⊠ Yes □ No
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rul 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).
⊠ Yes □ 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 th Exchange Act. (Check one):
Large accelerated filer □ Accelerated filer ☑ 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 ⊠ No
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#### 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 "may", "assume", "expect", "anticipate", "could", "project", "estimate", "believe", and "intend", and describe opinions about future events. We have based these forward-looking statements on information available to us on 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".

 $Compugen\ Ltd.\ is\ referred\ to\ in\ this\ annual\ report\ as\ "Compugen",\ "we",\ "our",\ "our\ company",\ "the\ Company"\ or\ "us".$ 

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

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## 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, 2012 and 2011 and for the years ended December 31, 2012, 2011 and 2010 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, 2010, 2009 and 2008 and for the years ended December 31, 2009 and 2008 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,								
		2008		2009		2010		2011	2012
				(US\$ in thous	ands,	except share and p	er sh	are data)	
Consolidated Statement of Operations Data									
Revenues	\$	338	\$	250	\$	1,115	\$	-	\$ 242
Total operating expenses (1)		13,243		7,879		8,769		11,979	13,583
Operating loss		(12,912)		(7,629)		(7,878)		(11,979)	(13,542)
Financial and other income (expenses), net		401		3,786		675		(25)	(86)
Losses from continuing operations		(12,511)		(3,843)		(7,203)		(12,004)	(13,628)
Net loss		(12,527)		(3,831)		(7,203)		(12,004)	(13,628)
Unrealized gain (loss) on Investment in Evogene		3,222		3,594		2,716		(1,902)	1,103
Total comprehensive loss		(9,305)		(237)		(4,487)		(13,906)	(12,525)
Basic and diluted net loss per share	\$	(0.44)	\$	(0.13)	\$	(0.22)	\$	(0.35)	\$ (0.38)
Weighted average number of ordinary shares used in computing basic net loss									
per share		28,434,946		28,608,317		33,284,017	_	34,276,697	 35,844,496
Weighted average number of ordinary shares used in computing diluted net loss				_					
per share		28,434,946		28,608,317		33,284,017		34,276,697	 36,249,262
		<u> </u>		<u>.                                      </u>					

	As of December 31,								
		2008		2009		2010		2011	2012
				-	(U	S\$ in thousands)			
Consolidated Balance Sheet Data									
Cash and cash equivalents, short-term bank deposits, marketable securities and									
restricted cash	\$	7,481	\$	15,800	\$	22,508	\$	22,463	\$ 19,685
Receivables on account of shares and from funding arrangement		-		7,790		5,000		-	-
Investment in Evogene		3,858		3,898		6,227		4,093	5,196
Total assets		14,244		30,185		36,458		29,081	28,909
Research and development funding arrangements and others		-		-		4,037		6,434	7,872
Accumulated deficit		(157,453)		(161,284)		(168,487)		(180,491)	(194,119)
Total shareholders' equity	\$	10,003	\$	27,398	\$	28,285	\$	19,581	\$ 17,672

<sup>(1)</sup> Includes stock based compensation – see Note 10 of our 2012 consolidated financial statements.

For additional financial information, please see "Item 5. Operating and Financial Review and Prospects - Results of Operations".

#### B. CAPITALIZATION AND INDEBTEDNESS

Not applicable.

## C. REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

#### D. RISK FACTORS

Many factors could affect our financial condition, cash flows and results of operations. We are subject to various risks all of which are inherent in pharmaceutical discovery and development and resulting from changing economic, political, social, industry, business and financial conditions. If we do not successfully address the risks to which we are subject, we could experience a material adverse effect on our business, results of operations and financial condition, 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 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 receiving revenues in the form of fees, research revenues, milestones, royalties and other revenue sharing payments from the commercialization of drug and diagnostic products by third parties based on product candidates (i) discovered by us and then licensed to such third parties, and/or (ii) discovered pursuant to various forms of collaborations with such third parties whereby our discovery platforms or other discovery capabilities target areas of their interest. To date, third party arrangements with respect to product candidates discovered by us have only been entered into at an early, proof of concept stage which has an inherent risk of high failure rate. Furthermore, these initial collaborations were based on product candidate discoveries, both therapeutics and diagnostics, that were made during the process of establishing individual predictive discovery capabilities prior to having a sufficiently broad and integrated infrastructure of such capabilities to allow a "Therapeutics Needs (market) driven" discovery process. Following establishment and validation of the required infrastructure, during 2010, a program was initiated to predict and select novel molecules in specific areas of high interest in both oncology and immunology. Therapeutic product candidates resulting from this "Therapeutics Needs (market) driven" effort are being validated and advanced forward in the preclinical stage prior to licensing or other collaborations (our "Pipeline Program"). To date, revenues related to our initial collaborations have been minimal, and we have had no revenues from our new Pipeline Program. We cannot be certain this business model will generate a stable or significant revenue stream. The inability to derive adequate revenues be used in the preclinical stage prior to licensing or other collaborations (our "Pipeline Program"). To date, revenues related to our initial collaborations have been minimal, and we have had no revenues from our new Pipeline Program. We cannot be c

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

As of December 31, 2012, we had an accumulated deficit of approximately \$194 million and had incurred net losses of approximately \$7 million in 2010, approximately \$12 million in 2011, and approximately \$14 million in 2012. To date, we have received only minimal revenues from limited commercialization efforts with respect to molecules discovered during our infrastructure building period, and we expect to continue to incur net losses in the future due to the costs and expenses associated with our expanding research and development activities, including our recently initiated "Therapeutics Needs (market) driven" focused product candidate discovery, our increasing Pipeline Program activities, our Compugen USA Inc. activities, and the development, validation and integration of additional discovery platforms. To date no commercial arrangements have been established with respect to our Pipeline Program molecules. We cannot be certain that we will ever enter into such arrangements, or that such arrangements will provide sufficient revenues to achieve profitability, and 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 needed 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 operations for at least the next 12 months. 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. Additional funds, including proceeds from commercialization agreements or from the sale of shares we hold in Evogene Ltd. (traded on the TASE), or from our current ATM program or from other financings, may not be available to us when needed on acceptable terms, 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 relinquish rights to some of our technologies or product candidates on terms that would otherwise not be acceptable to us. Any failure to raise capital when needed would materially harm our business, financial condition and results of operations.

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

In 2010 we initiated our Pipeline Program pursuant to which we are both (i) substantially increasing the number of predicted and selected therapeutic candidates being evaluated by us, and (ii) taking certain therapeutic candidates beyond their validation stage (of either disease animal model for Fc fusion proteins or drug target expression profile for monoclonal antibodies ("mAbs") targets) into preclinical activities for Fc fusion proteins and to disease animal models for therapeutic mAbs against the targets, and in selected cases, possibly clinical evaluation. Assuming a similar level of success as we experienced in the past in the initial validation stages, this may result in multiple product candidates reaching more costly stages of development in parallel. If we are not able to secure the funding required for these more advanced activities, we may be required to abandon, postpone, or attempt to license out certain molecules 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 successful "proof of concept" therapeutic candidates further developed and commercialized.

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

Our drug and diagnostic product candidate discovery capabilities rely on a proprietary infrastructure of predictive models, algorithms and other computational tools incorporating proprietary knowledge of key biological phenomena. Life science today is a rapidly changing field with substantial research being undertaken on a worldwide basis both by 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 product candidate discoveries, primarily in the form of fees, research revenues, milestones, royalties and other revenue sharing payments remains untested to date and we have received only minimal revenues from our initial collaborations, having recognized \$1.1 million of such revenue in 2010, none in 2011 and \$242,000 in 2012. Furthermore, only in 2010 did we implement our Pipeline Program pursuant to which we are advancing certain therapeutic product candidates past disease animal model proof of concept or other validation studies towards pre-clinical studies and in selected cases, possibly early stage clinical activities. Therefore we have no direct experience with respect to the financial terms that may be available for our candidates at these stages of development, and reported financial terms for agreements by other companies vary greatly and mostly are undisclosed. Therefore, our operating history with respect to the commercialization aspects of our business model provides an extremely limited basis for you to assess our ability to generate significant fees, research revenues, milestones, or royalties and other revenue sharing payments from the licensing and commercialization of our product candidate discoveries, or from research and development collaborations, and therefore on the advisability of investing in our securities.

## Risks Related to our Discovery and Development Activities

We are focusing our discovery activities on Fc fusion proteins, mAb drug targets, and mAb therapeutics, for uses in oncology and immunology, including both auto-immune and inflammatory disease. If we fail to continue to discover product candidates of industry interest in these fields, or to focus our Pipeline Program efforts on the most promising such discoveries, our business will likely be materially harmed.

In spite of the broad applicability of our discovery infrastructure, we have chosen to focus our discovery activities on Fc fusion proteins, mAb drug targets and mAb therapeutics for use in oncology and immunology, including both auto-immune and inflammatory conditions. By making this decision we have elected not to continue at present any internal development in other areas, such as diagnostic products and peptide based drugs, and to pursue such opportunities only in collaboration with third parties. Although certain of our initial discoveries in our fields of focus are generating interest from potential partners, all such candidates are at early stages of development, and there is no assurance that we will be able to consummate any collaboration or agreement on reasonable terms or at all. In addition, if we fail to continue to discover product candidates of industry interest in these fields, or to focus our Pipeline Program validation and development efforts on the most promising discoveries, our business will likely be materially harmed. There are many risks associated with this decision of focusing in these areas that include, among others:

- not utilizing all of our 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;
- failing to successfully focus our discovery infrastructure to discover novel product candidates in our chosen therapeutics areas;
- having insufficient relevant knowledge in our chosen therapeutic areas to select the right unmet needs or candidates, or to properly and efficiently further them in development
- 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 or applying the wrong criteria, with the possible result that no selected candidates result in licensed or marketable products in these fields. 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 marketable products. If in further development and clinical evaluation, all, or a larger percentage than typically seen in industry experience, of our product candidates fail to prove sufficiently safe and efficient for regulatory approval and marketing, our business will be significantly harmed.

Our in silico (by computer) predictive approach to drug discovery remains unproven with respect to yielding marketable products and to date, our validation efforts for our initial discoveries 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 potential product candidates in many different therapeutic and diagnostic 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. If in further development and clinical evaluation, all, or a larger percentage than typically seen in industry experience, of our initial product candidates fail to prove sufficiently safe and efficacious for regulatory approval and marketing, our business will be significantly harmed.

Our in silico predictive approach to drug 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 candidates to validate and/or progress, due to either lack of experience or applying the wrong criteria, the selected candidates may never result in marketable products and our business, financial condition and results of operations will be materially harmed.

Our in silico predictive approach to drug 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 scientific and business criteria, 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 candidates to validate and/or progress, due to either lack of experience or applying the wrong criteria, the selected candidates may never result in marketable products, and our business, financial condition and results of operations may be materially harmed.

If either the predictive discovery approach in general, or our "Therapeutics Needs (market) driven" approach, does not prove to be successful, our business will be significantly harmed.

Our method of discovering novel product candidates involves first selecting – either on our own or with a partner company - an unmet therapeutic need where we believe our predictive capabilities would be relevant, or could be modified to be relevant. In this "Therapeutics Needs (market) driven" approach, our goal is to harness all of our relevant capabilities in order to address the specific unmet need, rather than obtaining product candidates resulting from the development, validation or initial runs of a single discovery platform, as was the case prior to initiation of our Pipeline Program. After selection of the unmet need we wish to address, we then focus all of our discovery platforms, algorithms and other computational biology capabilities to predict in silico (i.e. by computer) sequences for a typically large number of possible product candidates. Next we utilize proprietary algorithms and tools and other methodologies to select, from this large number of possibilities, those novel molecules that we believe have the highest probability of success. Selected molecules are then produced and undergo in vitro and/or in vivo validation testing. Although our "Therapeutics Needs (market) driven" approach has resulted in the discovery of a number of novel molecules in an area of significant industry interest, these molecules are in the very early stages of development. Therefore, we cannot predict whether this "Therapeutics Needs (market) driven" approach will continue to yield product candidates or that any of our existing discoveries or future discoveries will be suitable for final development into therapeutic products. If either the predictive discovery approach in general does not prove to be successful, or this "Therapeutics Needs (market) driven" approach does not lead to successful 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 product candidate failures, or fewer molecules being available for commercialization.

Prior to 2010, Compugen's in vitro and in vivo validation studies concluded with disease animal model or drug target expression profile analysis. At the completion of such activities, or earlier, Compugen initiated its efforts to enter into collaborations for such molecules. This is at an earlier stage than is typical for licensing in the pharmaceutical industry. Pursuant to the Pipeline Program initiated in 2010, we have undertaken a substantial increase in the number of molecules being validated. In addition, certain molecules are now being advanced further towards pre-clinical activities, with the possibility of selected molecules entering clinical evaluation in the future. This decision to advance further with certain molecules is requiring us to undertake certain activities for the first time and may result in product candidate failures during such additional activities, either due to our lack of expertise or due to unsupportive findings. Furthermore, due to our limited resources, we must choose which Pipeline Program molecules we advance further towards pre-clinical, and in selected cases possibly clinical activities in the future. This could result in fewer molecules 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 molecules to advance further, due to either lack of experience or applying the wrong criteria, the selected candidates may never result in a 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 limited. In order to successfully develop and commercialize therapeutic products, we must either access such expertise via collaborations or service providers or improve our internal expertise, capabilities and facilities. We may not be able to maintain and/or engage any or all of the 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, and as a result our business would be materially harmed.

## Our establishment of our own therapeutic mAb development capabilities contains a number of risks.

In 2012, we announced that we had established our own therapeutic mAb development capabilities, in order to develop mAb therapeutics against the target candidates that we discovered. The establishment of such in-house capabilities contains a number of risks, including, without limitation, the need for additional resources and funding in order to maintain such 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 mAbs development, we have no experience as a company in this field. In addition, following the establishment of our mAb operations, the chairperson of our wholly owned U.S. subsidiary, Compugen USA, Inc. assumed the additional position of chief executive officer of another mAb discovery and development company, which although not at present directly competitive, could present, in the future, potential conflict of interest issues.

## There are risks that are inherent in the development and commercialization of therapeutic products, and if 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 therapeutic products. These risks, which typically result in a very high failure rate for even companies with a proven success record, include, among others, the possibility that:

- the product candidates will be found to be pharmacologically ineffective;
- · the product candidates will be found to be toxic or to have other unacceptable side effects;
- the product candidates will not show added value compared to competing products;
- our mAb targets will prove to be inappropriate targets for mAb therapeutics;
- we or our collaborators will fail to receive required regulatory approvals;
- we will not be able to differentiate between some of our product candidates;
- . we or our collaborators will fail to manufacture our product candidates in the quantity or quality needed for preclinical studies or clinical trials on a large scale in a cost effective manner;
- our early stage commercialization efforts may provoke competition by potential partners;
- the commercialization of our product candidates may infringe third party intellectual property rights;

- the development, marketing or sale of our product candidates will fail because of our inability or failure to protect or maintain our own intellectual property rights; and/or
- once a product is launched on the market, there will be little or no demand for it for a number of reasons including lack of acceptance by the medical community or by patients, lack of or insufficient coverage and payment by third party payors, or as a result of there being more attractive products available for use.

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

Under the agreements with Baize Investments (Israel) Ltd. entered in December 2010 and December 2011, as amended, we may have to share in any future economic success of certain product

We have entered into two agreements with Baize Investments (Israel) Ltd., or Baize, pursuant to which Baize has provided funding to Compugen in exchange for a future financial interest in certain product candidates. Under the first agreement we entered into with Baize on December 29, 2010 (hereinafter referred to as the 2010 Baize Agreement), Baize provided \$5 million in funding and received the right to receive ten percent (which amount may be reduced under certain circumstances) of certain cash consideration received by us pursuant to any licenses for the development and commercialization of products developed from five designated product candidates then in our Pipeline Program. Under this agreement, at any time through June 30, 2013, Baize may waive in its entirety its right to receive the cash consideration in exchange for 833,333 of our ordinary shares.

Under the second agreement we entered into with Baize on December 20, 2011, as amended on July 24, 2012 and December 27, 2012 (hereinafter referred to as the 2011 Baize Agreement), Baize paid \$3 million and has agreed to pay an additional \$5 million or \$7.5 million on or before April 30, 2013. In consideration for these funds, Baize has the right to receive a financial interest in six therapeutic mAb product candidates (if Baize pays an additional \$5 million) or eight such candidates (if Baize pays an additional), in each case that achieve specific milestones or are licensed out prior to December 31, 2014, or such date as may be extended pursuant to the terms of the agreement. In addition, during the first quarter of 2015, Baize has the right to exchange its right to receive the financial interest in the therapeutic mAb product candidates for our ordinary shares pursuant to a formula based on the trading price of our ordinary shares at such time as set forth in the 2011 Baize Agreement. If Baize fails to make the required additional payment on or before April 30, 2013, we have the right to terminate the 2011 Baize Agreement and Baize will not be entitled to any financial interest in the mAb product candidates, other than a potential cumulative maximum total of \$1.5 million on or after May 1, 2013.

If any of the product candidates designated under the 2010 Baize Agreement or the 2011 Baize Agreement are successfully licensed, developed or commercialized, and Baize has not elected to exchange its right to receive a financial interest under the related respective agreement as set forth above for our ordinary shares, we will need to provide Baize with a percentage of certain related potential cash consideration received by us, for such product candidates, thus reducing the amount of revenues from such transactions remaining for the benefit of our shareholders.

#### If Baize does not complete its payment obligations under the 2011 Baize Agreement, we may need to make up the cash shortfall from other sources.

Under the 2011 Baize Agreement as currently amended, Baize has agreed to pay Compugen an additional \$5 million or \$7.5 million on or before April 30, 2013. If Baize does not complete its payment obligations under this agreement, we may be required to utilize other cash resources to make up the shortfall, thus negatively impacting our financial strength and increasing the probability that we would need to raise additional capital.

## Risks Related to Development, Clinical Testing 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 will be subject to extensive governmental regulations, including those relating to development, performance of clinical trials, manufacturing and post-approval commercialization. Preclinical testing, manufacturing and controls and clinical trials, among other activities, will be subjected to an extensive regulatory review process before a new therapeutic product can 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 United States Food and Drug Administration, or FDA, and other approvals for therapeutic products is unpredictable but typically exceeds several years.

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

Approval by the FDA of a therapeutic product does not assure approval by regulatory authorities outside the United States or vice versa. Therefore, it is possible that none of the therapeutic products we or our collaborators may develop will obtain the appropriate regulatory approvals necessary for us or our collaborators to sell them.

Furthermore, any regulatory approval to market a therapeutic product may be subject to limitations on the indicated uses. These limitations may limit the size of the market for the therapeutic product.

If we or our collaborators fail to obtain the appropriate regulatory approvals necessary for us or our collaborators to sell them, or if the approvals are for limited use, our business, financial condition and results of operations would be materially harmed.

## It may be difficult to manufacture therapeutic products based on our technologies.

Our Pipeline Program is focused on protein and mAbs therapeutics in the fields of immunology and oncology. Protein and mAb-based therapeutics can be difficult to manufacture. If it should prove to be difficult to manufacture any therapeutics based on out technologies in sufficient quantities 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 our collaborators, or any third-party manufacturers with which we may enter into agreements in the future, fail to comply with regulatory requirements, we or they could be subject to enforcement actions, which could affect the marketability of Compugen-discovered therapeutics and may significantly harm our financial status and/or reputation.

If we or our collaborators or any 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 actions, which 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 or product recall. These enforcement actions may include:

- · warning letters;
- recalls, product seizures or medical product safety alerts;
- restrictions on, or prohibitions against, marketing such tests or products;
- · restrictions on importation of such tests or 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; and
- · debarment or other exclusions from government programs.

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

We use human tissue samples and conduct experiments involving animals for the purpose of development and validation of our technologies and product candidates. Our access to and use of human tissue 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 further regulation. For example, the Israeli Ministry of Health requires compliance with the principles of the Helsinki Declaration, the Public Health Regulations (Clinical Trials in Human Subjects) 1980, the Genetic Information Law, 5761-2000, the provisions of the Guidelines for Clinical Trials in Human Subjects and the provisions of the current Harmonized Tripartite Guideline for Good Clinical Practice. Our failure to comply with these or similar regulations could 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 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 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 could be substantial. 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 incur substantial costs to comply with, and substantial fines or penalties if we violate any of these laws or regulations.

#### Risks Related to Our Dependence on Third Parties

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

We invest a significant amount of effort 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 which may be significant to us. If these third parties fail to properly perform these activities, or provide us with incorrect or incomplete results 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.

We depend significantly on third parties to carry out the development and commercialization of our product candidates, and 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 final development and commercialization of products based on our product candidates depends on third parties to carry out and/or finance development and commercialization of such products based on our product candidates, principally, pharmaceutical, biotechnology and diagnostic companies and other healthcare related organizations. To date, we have entered into a small number of agreements covering discovery activities to be performed by us, and development and commercialization rights with respect to certain of our discovery stage product candidates. None of the product candidates subject to such agreements has advanced beyond the discovery and early pre-clinical stage and we cannot be assured that any of these agreements will result in the successful development or commercialization of any products. Further, we cannot assure you that we will succeed in identifying additional suitable parties or entering into any other additional agreements for the development and/or commercialization of our product candidates. If we are unable to identify such additional suitable parties or enter into new agreements, our business will likely be materially harmed.

## 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 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 collaborators have significant discretion in electing whether to pursue any of the planned activities and the manner in which it will be done;
- · our collaborators may fail to design and implement appropriate preclinical and/or clinical trials;
- . our collaborators may fail to manufacture our product candidates needed for either clinical trials or for commercial purposes on a sufficiently large scale 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;
- we may not be able to control our collaborators' willingness to pursue development of our product candidates, or the amount of resources that our collaborators will devote to the collaboration;
- 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;
- ownership of the intellectual property generated under 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; and
- · our collaborators may fail to develop or commercialize successfully any products based on discoveries or product candidates to which they have obtained rights from us.

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

We rely on the services of various third party service providers, such as contract research organizations, or CROs, contract manufacturing organizations, or CMOs, technology providers, and academia. If we fail to identify and obtain quality services from such third parties, our discovery, and validation and development capabilities may be harmed.

In carrying out discovery, validation and development activities for our product candidates, we and our partners rely on advice, services and results obtained from various third party service providers, such as CROs, CMOs, technology providers, academia and regulatory and other consultants. This includes, without limitation, production of certain biological reagents and performance of certain in vitro and in vivo validation of our discoveries and product candidates. 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 and/or technologies 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 may be significantly harmed or delayed.

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

During 2010, we began to focus our discovery efforts primarily in the fields of immunology and oncology, and initiated the Pipeline Program to both substantially increase the number of molecules in our validation pipeline and to increase the value of certain of our candidates by advancing selected molecules to pre-clinical 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.

We have no experience in conducting and 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 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 or if the quality of available information is poor, or if the quantity of the available information is insufficient, as has occurred in the past, our operations and business may be harmed.

In the development and validation of our discovery platforms and other tools, as well as in connection with the resulting therapeutic and diagnostic 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, or if we are granted access to such databases on terms which are not commercially reasonable, or 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 will fail to identify and purchase or otherwise obtain such samples for any reason, or 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 product 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 or 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.

## Risks Related to Competition and Commercialization

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

The success of our business model relies on providing, through licensing agreements and other forms of collaboration, product candidates for commercialization by third parties, principally pharmaceutical and biotechnology companies. In all cases, our objective is that these collaborations will be "product oriented", with us having the right to receive fees, research revenues, milestones, and royalties and other revenue-sharing payments from all products developed and commercialized based on our product candidates. Additionally, we are continuing to seek research and discovery collaborations either aimed at harnessing our infrastructure capabilities towards the partners' discovery needs, or pursuant to which we can license out our various non-focus specific discoveries of interest. Potential revenue sources in these types of transactions could include fees, research revenues, milestone payments and royalties. Our commercialization efforts are at an early stage of implementation. To date, we have entered into only a small number of collaboration agreements, none of which has to date provided significant revenues, and there can be no assurance that such agreements will be successful in the future or that we will be able to enter into additional arrangements with respect to other current or future discoveries. If we are unable to achieve success, primarily with entering into license agreements or other collaboration arrangements related to our product candidates, or to enter into agreements with sufficient future returns, our business will be materially harmed.

In addition, most of our programs are in the discovery stage, with the leading program in the lead optimization stage. The data generated so far may not be sufficient to prospective collaborators, and may not fit their strategy. A limited number of companies are interested in early stage collaborations, and some of them will require more data before they enter into a significant collaboration. We are therefore dependent on the fit to pharma strategy and we may not be able to identify a partner interested in programs at the stage we are in. This may adversely affect our ability to enter into agreements for the development and commercialization of our product candidates, 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 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 product candidate or candidates involved, and our 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 product candidates, together with the fact that we are 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 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 licensees or collaborators as a result of such consolidation, 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 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 checkpoints field in particular, are highly competitive. Numerous entities in the United States, Europe and elsewhere compete with our efforts to discover, validate and partner with licensees and/or collaborators to commercialize therapeutic and diagnostic products or product candidates. Our competitors include pharmaceutical, 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 Fc fusion proteins and antibodies in the fields of oncology and immunology. Many of our competitors have:

- 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 and therapeutics;

- more extensive experience in oncology and immunology and in the fields of mAb therapy and proteins therapeutics;
- · products that have been approved or are in late stages of development; 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 molecules 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 and thereby prevent us from pursuing the development and commercialization of our discoveries. 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.

#### 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 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 U.S., 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 foreign governments, insurance companies, managed care organizations and other payors to contain or reduce health care costs are being discussed, considered and proposed.

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(the "Healthcare Reform Act"), substantially changes the way health care is financed by both governmental and private insurers. The Healthcare Reform Act contains a number of provisions that are expected to impact our business and operations, including those governing enrollment in federal healthcare programs and reimbursement changes which will impact existing government healthcare programs and will result in the development of new programs.

In addition to the Healthcare Reform Act, there will continue to be proposals by legislators at both the federal and state levels, regulators and third-party payors to keep these costs down while expanding individual healthcare benefits. While in general it is too early to predict specifically what effect these acts and their implementation or any future healthcare reform legislation or policies in the U.S. 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, 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

#### 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, we cannot assure you 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.

It can be difficult for us to find employees with appropriate experience for our business. We require a multidisciplinary approach and our researchers require experience in both exact and biological sciences. On average, our employees have been employed by Compugen eight years. 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, communication, and 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, 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. Such publication of proprietary data could materially harm our intellectual property position, thereby seriously harming our competitive position. Such security breaches, if significant, could harm our operations and even cause our business to cease.

#### If we are unable to manage the challenges associated with our bi-national operations, the growth of our business could be limited.

In addition to our operations in Israel, our wholly owned subsidiary, Compugen USA Inc., operates in South San Francisco, California. We are subject to a number of risks and challenges that specifically relate to these bi-national operations. Our combined operations may not be successful if we are unable to meet and overcome these challenges, which could limit the growth of our business and may have an adverse effect on our business and operating results. These risks include:

- · difficulty managing coordinating operations in multiple locations, which could adversely affect the progress of our development programs and business prospects;
- · local regulations or intellectual property requirements that may restrict or impair our ability to conduct pharmaceutical and biotechnology-based research and development;
- foreign protectionist laws and business practices that favor local competition;
- laws and regulations governing U.S. immigration and entry into the United States that may restrict free movement of our employees between Israel and the United States;
- laws and regulations governing U.S. immigration and entry into the United States that may restrict employment of Israeli citizens in our U.S. facilities; and
- fluctuations in foreign currency exchange rates that may increase the U.S. dollar cost of our operations in either country.

#### 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 therapeutic and diagnostic product candidates as well as aspects of some of our technologies, 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 product candidates. As of January 1, 2013 we had a total of 30 issued patents, of which 27 are U.S. patents. We also have pending patent applications, which as of January 1, 2013, included 21 patent applications that have been filed in the United States, 15 patent applications that have been filed in Europe, 12 patent applications that have been filed in Israel, seven patent applications that have been filed in China and six 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 therapeutic and diagnostic inventions, but we cannot assure you that any of our patent applications 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 not 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 issuance of a patent at an earlier stage creating a shorter commercialization period under patent protection, possibly enabling others to compete with us.

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

- the patenting of our inventions involves complex legal issues, 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 molecule-based patents;
- in view of the finite number of human proteins, we face intense 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 specifically binding these proteins, and their utilities based discoveries that we may intend to develop and
  commercialize; such prior patents may negatively affect our ability to obtain protein-based and antibody-based patents, may hinder our ability to obtain sufficiently broad patent claims for our
  inventions, and/or may limit our freedom to operate for our inventions;
- publication of large amounts of genomic data 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 using our patented inventions;
- even if we succeed in obtaining patent protection, our patents could be partially or wholly invalidated, including by our competitors;
- there are significant costs that may need to be incurred in registering and filing patents; and
- our data may support others in strengthening their patents.

If we do not succeed in obtaining patent protection for our inventions to the fullest extent for which we seek protection, our business and financial results could be materially harmed.

We may find that we file patent applications too early, thus having our proprietary information in the public too early which will may allow competition and shorten our programs' lead time. In addition, such premature filings could result in insufficient enablement of our inventions and consequently may hinder our ability to obtain valid patent claims for our inventions.

Because patent applications filed in the United States and Patent Cooperation Treaty countries publish 18 months after the priority date, the sooner an application is filed, the sooner a potential competitor will be able to access the information disclosed therein. Thus, early filing and subsequent early publication allows a potential competitor to begin developing competing work-around or generic products. Further, once a US application publishes, the file history becomes publicly available at the United States Patent and Trademark Office's patent application information retrieval (PAIR) website. Thus, potential competitors may access any statements we make in arguing patentability with the United States Patent and Trademark Office.

Additionally, prematurely filed applications may not be enabled for all that we wish to claim. The purpose of the enablement requirement that the specification describe the invention in such terms that one skilled in the art can make and use the claimed invention is to ensure that the invention is communicated to the interested public in a meaningful way. The information contained in the disclosure of an application must be sufficient to inform those skilled in the relevant art how to both make and use the claimed invention. Additionally, the written description requirement, separate and distinct from the enablement requirement, necessitates that a patent specification describe the claimed invention in sufficient detail such that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. Early-filed applications may fail the enablement or written description requirement, or both, if they lack enabling or supporting data because it was not available at the time the application was filed. Such applications may not mature into patents.

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

Aside from our patented information, we also rely on our proprietary know-how and trade secrets that we develop and that are not protectable or protected by patents. 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.

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.

# 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 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. 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 therapeutic 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 assure you 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. As a result, we can never be certain that development projects that we commence will be free of third party intellectual property rights only after we have commenced a particular development project, 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 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 we are not able to obtain such a license at a reasonable cost, if at all, 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 9 months after grant of a patent. 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 could not 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.

In a recent decision of the Israeli Supreme Court, the court has discussed whether an employee may waive his or her right to royalties or other compensation in respect of, or in connection with, service inventions created by such employee in the course of his or her employment, irrespective of such employee's employment agreement and/or undertaking for assignment of inventions. This question is currently pending before the Israeli Courts and ruling in this matter may expose us to royalty or other compensation payments to our employees (including former employees) the amount of which cannot be estimated at this point.

## 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 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 also prevent us from obtaining new patents.

#### Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information.

In addition to patents, we rely on trade secrets, know-how and technology, not protected by patents, to maintain our competitive position. In order to protect our proprietary technology and processes, we rely in part on confidentiality agreements with our collaborators, employees, consultants, outside scientific collaborators and sponsored researchers and other advisors. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. 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.

#### Risks Related to Operations in Israel

#### 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 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, 2012. 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. 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.

#### Conditions in the Middle East and in Israel may harm our operations.

Our headquarter offices and part of our research and development facilities are located in Israel. Accordingly, political, economic and military conditions in Israel may directly affect our operations. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors, as well as incidents of civil unrest, military conflicts and terrorist actions. In addition, Israel and companies doing business with Israel, have in the past, been the subject of an economic boycott. Any future armed conflicts or political instability in the region, as we have recently seen in Egypt, Syria and other neighboring Arab countries, may negatively affect business conditions and adversely affect our results of operations. In addition, Iran has threatened to attack Israel and is widely believed to be developing nuclear weapons. Iran is also believed to have a strong influence among extremist groups in the region. These situations may potentially escalate in the future and turn violent which could affect Israel and us. Parties with whom we do business have sometimes declined to travel to Israel during periods of heightened unrest or tension, forcing us to make alternative arrangements when necessary. In addition, the political and security situation in Israel may result in parties with whom we have agreements involving performance in Israel claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions in the agreements. We cannot give you any assurance that this will not continue to be the case. Additionally, if there were to be emergency conditions, some of our key employees may be called to active army duty for extended periods of time and that could adversely affect our operations.

Our insurance does not cover losses that may occur as a result of events associated with the security situation in the Middle East. Although the Israeli government currently covers the reinstatement value of direct damages that are caused by terrorist attacks or acts of war, we cannot assure you that such government coverage will be maintained. Any losses or damages incurred by us could have a material adverse effect on our business. Any armed conflicts or political instability in the region would likely negatively affect business conditions and could harm our results of operations.

## Our results of operations may be adversely affected by the devaluation of the dollar against the New Israeli Shekel.

We hold most of our cash, cash equivalents and short-term bank deposits in U.S. dollars but incur a significant portion of our expenses, principally salaries and related personnel expenses and administrative expenses, in New Israeli Shekels, or NIS. As a result, we are exposed to the risk that if the U.S. dollar devaluates against the NIS our NIS denominated expenses will be greater than anticipated when reported in U.S. dollars. In 2010 the dollar devaluated against the NIS by 6.0%, in 2011 the dollar appreciated against the NIS by 7.7%, in 2012, again the dollar devaluated against the NIS by 2.3%, and as a result our NIS denominated expenses were affected by these fluctuations. Inflation in Israel compounds the adverse impact of any devaluation by further increasing the amount of our Israeli expenses. Israeli inflation may also (in the future) outweigh the positive effect of any appreciation of the U.S. dollar relative to the NIS, if, and to the extent that, it outpaces such appreciation or precedes such appreciation. The Israeli rate of inflation (2.7%, 2.2% and 1.6% in 2010, 2011 and 2012, respectively) has not had a material adverse effect on our financial condition during 2010, 2011 or 2012.

#### We may not continue to 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 our operation by the Investment Center in the Israeli Ministry of Industry, Trade and Labor and the 'Benefiting Enterprise' status that resulted in our currently being eligible for tax benefits under the Israeli Law for Encouragement of Capital Investments, 1959, as amended (the "Encouragement Law"). The availability of these tax benefits, however, is subject to certain requirements, as set forth in the Encouragement Law including, among other things, making specified investments in fixed assets and equipment, and financing a percentage of those investments with our capital contributions, as well as pursuant to Israeli intellectual property laws. The tax benefits that we anticipate receiving under our current 'Approved Enterprise' and 'Benefiting Enterprises' programs may not be continued in the future at their current levels or at all. To date we have not 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.

It may be difficult to obtain, within the United States, service of process upon us, since we are incorporated in Israel, and upon our directors and officers and our Israeli auditors, almost all of whom reside outside the United States. In addition, because substantially all of our assets and all of our directors and officers, except for one, are located outside the United States, it may be difficult to enforce a judgment obtained in the United States against us or any of our directors and officers in United States or Israeli courts based on the civil liability provisions of the U.S. federal securities laws and it may be difficult to enforce civil liabilities under United States federal securities laws in original actions instituted in Israel.

#### Provisions of Israeli law may delay, prevent or affect a potential acquisition of all or a significant portion of our shares or assets and therefore depress the price of our shares.

Israeli corporate law regulates mergers, requires that acquisitions of shares above specified thresholds be conducted through tender offers, requires special approvals for transactions involving directors, officers or significant shareholders and regulates other matters that may be relevant to these types of transactions. Israeli tax considerations may also make potential transactions unappealing to us or to our shareholders whose country of residence does not have a tax treaty with Israel exempting such shareholders from Israeli tax or who are not exempt under the provisions of the Israeli Income Tax Ordinance from Israeli capital gains tax on the sale of our shares.

Furthermore, under the Israeli Encouragement of Research and Development in Industry Law, 1984 as amended ("R&D Law"), to which we are subject due to our receipt of grants from the Office of the Chief Scientist of the Israeli Ministry of Industry, Trade and Labor ("OCS"), a recipient of OCS grants such as us must report to the applicable authority of the OCS any change in the holding of the means of control of our company which transforms any non-Israeli citizen or resident into a direct interested party in our company.

These and other similar provisions could delay, prevent or impede an acquisition of us or our merger with another company, even if such an acquisition or merger would be beneficial to us or to our shareholders, and it may therefore 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. The transfer of know-how developed under the programs submitted to the OCS and as to which we received the grants, or rights to manufacture based on and/or incorporating such know-how to third parties, might require the consent of the OCS, and may require certain payments 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 or customers outside Israel, involving product or other asset transfers, which might otherwise be beneficial to us.

#### 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, under the rules and regulations of The NASDAQ Stock Market, a foreign private issuer may follow its home country practice in lieu of certain NASDAQ listing requirements. For example, under NASDAQ's rules a company traded on the NASDAQ market is required to select director nominees either by independent directors constituting a majority of the board of directors or by a nominations committee comprised solely of independent directors. However, we have opted to follow our home country practice with respect to certain NASDAQ requirements. Because of these SEC and NASDAQ exemptions, investors are not afforded the same protections or information generally available to investors holding shares in public companies organized in the United States.

#### Risks Related to our Ordinary Shares

## Sales of ordinary shares under our existing sales agreement with Cantor Fitzgerald & Co. or under our recently filed shelf registration statement will dilute existing shareholders.

On January 11, 2011 we filed a shelf registration with the SEC covering the offering and sale of up to \$40 million of our securities, which became effective on January 21, 2011. On September 1, 2011 we filed a prospectus supplement in relation to a sales agreement with Cantor Fitzgerald & Co. In accordance with the terms of this agreement, we may offer and sell an aggregate of up to 6,000,000 of our ordinary shares, from time to time through Cantor Fitzgerald & Co., as our sales agent, provided that gross proceeds from the offering do not exceed \$40 million. We may also sell our ordinary shares to Cantor Fitzgerald & Co., as principal for its own account, at a price agreed upon at the time of sale. From January 10, 2012 through March 15, 2013, we had sold an aggregate of 2,411,050 of our ordinary shares and received gross proceeds of approximately \$13.4 million under this agreement. While there is no assurance that we will be able to sell additional shares covered under this agreement, any such additional sales will result in dilution to existing shareholders.

In addition, 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 million. This registration statement was declared effective by the SEC on January 16, 2013. While there is no assurance that we will sell any shares under this shelf registration statement, any such sales will result in dilution to existing shareholders.

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

During the calendar years 2011 and 2012, our stock price on NASDAQ has traded from a low of \$2.96 to a high of \$6.47 and trading volume is volatile from time to time. The volatile price of our stock 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:

- negative global macroeconomic developments;
- our success (or lack thereof) in entering into collaboration agreements and achieving certain developmental milestones thereunder;
- our need to raise additional capital and our success or failure in doing so;
- · achievement or denial of regulatory approvals by our competitors or us;
- 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 pre-clinical 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;
- our inability to disclose the commercial terms of, or progress under, our collaborations;
- · our ability (or lack thereof) to show and accurately predict revenues; and
- · sales of our ordinary shares.

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, has been experiencing 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 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 have operated under the laws of the State of Israel, in particular the Israeli Companies Law, 5759-1999, as amended (the "Companies Law") since then. Our principal offices are located at 72 Pinchas Rosen Street, Tel Aviv 69512, Israel, and our telephone number is +972-3-765-8585. Our primary Internet address is www.cgen.com. None of the information on our website is incorporated by reference into this annual report.

We have a wholly owned subsidiary, Compugen USA, Inc., which was incorporated in Delaware in March 1997 and is qualified to do business in California. This subsidiary did not have any significant operations between 2008 and March 2012.

In 1999, we established a division to utilize our *in silico* predictive discovery capabilities in the agricultural biotechnology field. On January 1, 2002, we transferred this business to Evogene Ltd. ("Evogene"), a newly formed corporation in exchange for 1,640,000 ordinary shares of Evogene, representing 82% of such company's initial capital. Since 2002, Evogene has had several financing transactions whereby our shareholdings were diluted, and we extended certain licenses for which we were compensated in Evogene ordinary shares. Since June 2009, we sold a total of 1,106,603 of our Evogene ordinary shares for approximately \$4.2 million. As of December 31, 2012, we held 1,043,397 Evogene ordinary shares representing approximately 2.8% of Evogene's then outstanding ordinary shares.

Also 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.

In June 2012, we established together with Merck KGaA and Merck Holdings Netherlands B.V. (collectively, "Merck") a new start-up company - Neviah Genomics Ltd. ("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.

## **Principal Capital Expenditures**

In the years ended December 31, 2012, 2011 and 2010, our capital expenditures were \$1 million, \$96,000, and \$46,000, respectively, and for the year 2012 were spent primarily on laboratory equipment, general computer software and hardware and leasehold improvements for our U.S. subsidiary. We have no current significant commitments for capital expenditures.

## B. BUSINESS OVERVIEW

#### Overview

We are a leading therapeutic product discovery company focused on Fc fusion therapeutic proteins and monoclonal antibodies (mAbs), with novel mechanisms of action, to address important unmet needs in the fields of immunology and oncology. Our business model primarily involves early-stage collaborations covering the further development and commercialization of our discovered product candidates and various forms of research and discovery agreements, in both cases providing us with potential fees, research revenues, milestones, royalties and other revenue sharing payments. Oncology and immunology are both areas of complex and challenging diseases with significant unmet medical needs. Therefore, these are areas of high industry interest with numerous efforts to identify novel therapeutic solutions. Our science-driven predictive capabilities are well suited for the identification of novel therapeutic candidates for these complex, multi-factorial and challenging therapeutic fields. Our discovery efforts are based on systematic and continuously improving in silico (by computer) product candidate prediction and selection followed by experimental validation, with selected product candidates being advanced in our Pipeline Program. Our in silico predictive models utilize a broad and continuously growing infrastructure of proprietary scientific understandings and predictive platforms, algorithms, machine learning systems and other computational biology capabilities.

Our Pipeline Program, which was initiated in late 2010, consists of therapeutic product candidates at various stages ranging from target validation to pre-clinical studies. The aim of the Pipeline Program is to substantially increase the number of in-house discovered Fc fusion protein therapeutics and mAb targets in the fields of immunology and oncology in our validation pipeline and to advance selected molecules beyond their animal proof of concept stage. The newly discovered molecules enter the Pipeline Program when they begin experimental evaluation following their in silico prediction and selection. These molecules then undergo in-vitro and in-vivo experimental validation, with selected molecules eventually being advanced toward pre-clinical, and in selected cases possibly clinical activities. The experimental validation studies are conducted at the Company's facilities, or at leading expert laboratories, selected specifically for each relevant field. With respect to therapeutic protein product candidates that have either been or will be successfully validated in-vitro, these molecules are further advanced to in vivo proof of concept studies in disease animal models followed by the selection of the final therapeutic form of the molecule to be used at later development stages. In the case of drug targets for mAbs, additional target characterization and validation studies confirming the target's therapeutic potential are undertaken followed by the generation of a therapeutic mAb to be used for in vivo proof of concept studies in disease animal models. mAb molecules, either humanized or fully-human, selected to be advanced to Pre-IND studies, will then enter the stage of lead candidate selection and optimization. It is our intent, in general, to license out - or enter into other types of collaborations with our product candidates – during or towards the end of these product candidates' Pipeline Program activities, although in specific cases we may choose to retain certain molecules for further clinical develop

## Our Discovery Infrastructure

Our proprietary underlying and growing predictive discovery infrastructure has been shown to be applicable for the discovery of product candidates in many different therapeutic and diagnostic areas. This infrastructure incorporates predictive understandings of numerous biological phenomena at the molecular level, including how genes express transcripts, how transcripts become proteins, and how proteins are cleaved to create peptides. These predictive understandings were accomplished during a decade-long and on-going research effort at Compugen and are based on sophisticated analyses of large amounts of data of various types, such as genetic, molecular, structural, clinical, biological pathways and others. This effort is performed on an on-going basis by an experienced multidisciplinary research team of scientists who on average have been employed by Compugen for eight years, and over time have generated more than 70 peer reviewed publications of certain of our findings and canabilities in scientific journals.

A key aspect of our capabilities is the increasing set of building block algorithms and other proprietary technologies for the accurate integration of the enormous amount of data from different sources which form the basis for our infrastructures, such as our core discovery infrastructure platforms, LEADS, MED and NexGen as described below. This has resulted in the ability to utilize this discovery infrastructure to provide output in the form of meaningful biological information, in addition to continuing the development and enhancement of the infrastructure itself. A further requirement of our discovery capabilities is the development of a set of query algorithms specifically designed for the prediction and selection of molecules that should address specific areas or needs. Such query algorithms are different for each of our growing list of individual discovery capabilities.

Following the prediction and selection of potential product candidates through use of this infrastructure, which is accomplished entirely by computer, the resulting predicted candidates are validated utilizing well-accepted laboratory experimental procedures, which in addition to providing validation of the candidates, also provide key information for further refining the query algorithms and other aspects of the infrastructure.

#### Infrastructure Platforms

An important aspect of our infrastructure development efforts was the creation of our three key infrastructure platforms, LEADS, MED and NexGen, which integrate our scientific understandings and predictive models. LEADS provides a comprehensive predictive view of the human transcriptome and proteome and enables the discovery of novel genes and proteins. MED provides a broad analysis of the expression levels of genes across a wide variety of tissues and disease states, and NexGen is designed to efficiently and accurately integrate and analyze a vast amount of Next Generation Sequencing data. These infrastructure platforms serve as key components first in the creation of our individual discovery platforms described below, and then in allowing us to approach unmet clinical needs through the integrated use of these infrastructure platforms with the discovery platforms, systems and tools developed by us during the last decade.

LEADS provides a comprehensive view of the human transcriptome, proteome, and peptidome and serves as a rich infrastructure for the discovery of novel genes, transcripts and proteins. This is 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. LEADS serves as a rich and accurate database of thousands of proprietary and novel genes and proteins. The infrastructure is 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, through a multistep predictive analysis process. LEADS includes proprietary algorithms developed at Compugen and proprietary input data. This combination of proprietary algorithm tools and data, public and proprietary, allows us to identify previously unknown proteins and transcripts.

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, through MED the results from all 70,000 microarray experiments are integrated via a sophisticated procedure that we developed and are then unified into a "virtual" or *in silico* chip. The "virtual" chip allows us to analyze the expression of genes across all 1,400 conditions and tissues based on the results from the 70,000 experiments simultaneously. This integrated analysis allows a broad view of the expression profile of a single gene over thousands of experiments and multiple tissue types. It also allows the identification and elimination of exceptional expression results obtained from various data sources, resulting in a system with an improved signal-to-noise ratio and thus superior accuracy. The fact that the platform integrates data from many sources and experiments gives robust results. MED's *in silico* discoveries have been experimentally validated repeatedly over the years with expression data obtained in-house by a quantitative expression assay system, qRT-PCR, on established controlled and independent mRNA tissue panels.

NexGen is designed to analyze Next Generation Sequencing data which is now beginning to be generated worldwide through RNA-Seq methodology. RNA-Seq is a new and powerful ultra-high throughput approach to provide raw data for transcriptome analysis and expression profiling. Although this new approach provides a massive amount of data in the form of very short partial transcript sequences, it also creates an extremely challenging environment for obtaining meaningful and accurate information. Our NexGen Platform, which incorporates advanced algorithms and other proprietary tools, is designed to efficiently and accurately integrate and analyze this vast amount of short sequence data. The integration of this capability with our discovery infrastructure, mainly our predictive transcriptome and proteome, is expected to provide us with both enhanced identification of novel genes and splice variants, and a broader view of the expression levels of RNA transcripts, facilitating new associations to pathological or healthy conditions. These new integrated capabilities should provide us with further substantial advantages in predictive discovery of potential drugs and drug targets, and also in the discovery of potential diagnostic product candidates.

## Discovery Platforms

Each of our individual discovery platforms targets a specific area or type of molecule and consists of three modules: prediction, selection and validation. The first two modules are accomplished by computer, while the third module involves laboratory based *in-vitro* and *in-vivo* experimental validation of selected candidates. In general, the prediction and selection modules utilize our discovery infrastructure to predict putative product candidates for a defined unmet need.

Our current key individual discovery capabilities are:

- mAb Target Discovery: This platform relies on both the LEADS and MED infrastructure platforms and utilizes query algorithms focused on the discovery of targets suitable for mAb technology based on statistical analysis of expression data provided by these platforms. Compugen's mAb Target Discovery capability has been expanded beyond the initial focus on various solid tumors such as lung, ovarian, breast, colorectal and hematological cancers. New field extension modules have been added, which are now enabling the discovery of drug targets involved in drug response, metastatic stage cancer, and additional cancers such as melanoma, renal, liver, and pancreatic.
- Protein Family Members Discovery Platform: This platform incorporates both LEADS and MED infrastructure capabilities for the discovery of novel protein members belonging to various
  known and clinically important protein families. Since most traditional approaches for identifying such novel members are largely based on sequence homology, the set of query algorithms
  designed for this platform first identifies other types of characteristics that are shared between known members of the family of interest, and then selects proteins from the LEADS proteome that
  share these characteristics and therefore could potentially be unknown family members.
- Protein-Protein Interaction Blockers (PPI Blockers): This platform integrates both protein sequence information and protein structural data from protein-protein interaction structures. Key algorithms and machine learning predictors are used to create a predicted protein-protein interaction map for the protein target of interest and for identifying key protein-protein interaction sites.
- Splice Variant Based Therapeutic Proteins: This platform relies on the LEADS infrastructure platform to analyze databases of sequence data, mainly ESTs (Expressed Sequence Tags short sub-sequences of a transcribed nucleotide sequence) to predict the full collection of human transcripts and proteins (Compugen's predictive proteome), among them many potential novel splice variants. A set of query algorithms is used to select potential therapeutic proteins.

#### Validation Based (Technology Driven) Discoveries

A result of the decade long and continuing establishment of our discovery infrastructure was the validation of each of our discovery platforms as listed above. This validation, and in some cases only initial runs of the discovery platform, resulted in the "technology driven" discovery of multiple novel molecules in a broad range of therapeutic and diagnostic fields, such as oncology, immunology, cardiovascular, ocular diseases and more. Although individual discovery capabilities are in general broad and not limited to a certain indication or therapeutic field, during 2010, we elected to focus our discovery efforts on novel product candidates for unmet medical needs in oncology and immunology through a "Therapeutics Needs (market) driven" approach. The aim of this approach is to harness all of our capabilities against each such unmet medical need, instead of relying on a single discovery platform as was the case with our platform validation stage discoveries. In addition, at that time, a decision was made to seek arrangements for certain of our initial technology driven discoveries that were outside our then elected focus areas whereby they would be developed and commercialized by third parties, but with Compugen sharing in any future revenues. See "Commercialization".

## Therapeutic Needs (Market) Driven Discovery

Focus Area - Immune checkpoints

Immunology and oncology are two medical fields with significant unmet medical needs. Biological drugs have already revolutionized patients' treatment in these areas and have gained significant commercial successes. Compugen has therefore elected to address the unmet needs in these areas by development of therapeutic proteins and mAbs based on the company's predictive capabilities.

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 clinical significance is the basis for the increasing interest in the discovery and development of immunomodulators for therapeutic uses, and the rationale behind Compugen's first therapeutic needs driven efforts: the identification of novel immune checkpoint proteins that can be engineered to produce therapeutic proteins candidates or serve as targets for therapeutic mAbs discovery.

Immune checkpoints: Immune checkpoints are inhibitory receptors and their ligands, which are crucial for the maintenance of self-tolerance (that is, the prevention of autoimmunity) and for the protection of tissues from damage when the immune system is responding to pathogenic infection. In several autoimmune diseases, including for example multiple sclerosis and rheumatoid arthritis, self-reactive T cells escape immune checkpoints and autoimmune responses ensue. Therefore, restoring immunologic balance by activating immune checkpoints and regulatory immune cells is a promising avenue for the treatment of autoimmunity.

Immune checkpoints also play critical roles in cancer development as they are "highjacked" by tumors to block the ability of the immune system to destroy the tumor ("immune resistance"). Immune checkpoints have lately emerged as potential "game changers" and promising targets for cancer immunotherapy. Clinical studies employing mAb blockade of immune checkpoints, such as PD-1 and CTLA4, have shown unprecedented durable responses. Antibodies targeting immune checkpoints have been thus termed "the next frontier" in the treatment of cancer.

A key capability in this field was the development and use of our Protein Family Members Discovery Platform for the discovery of novel protein members belonging to various known and clinically important protein familites. This discovery platform incorporates two key Compugen proprietary infrastructure capabilities: LEADS and MED. 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. New proteins of this family could have significant therapeutic potential in many pathological conditions, including autoimmune diseases and cancer. Applying the Protein Family Members Discovery Platform resulted in the identification of several putative immune checkpoint B7/CD28-like membrane proteins. Among those disclosed are CGEN-15001T, CGEN-15022, and CGEN-15091 are genetically engineered proteins consisting of the extracellular region of the immune checkpoint membrane proteins fused to an Fc antibody domain. CGEN-15001 was the first of these predicted molecules to undergo extensive *in-vitro* and *in-vivo* validation, demonstrating robust efficacy in animal models, pointing to its therapeutic potential for treatment of multiple autoimmune diseases. Two additional proteins disclosed in 2011, CGEN-15091 and CGEN-15091, have also been validated and shown to have beneficial effects in animal models of autoimmune diseases. In 2012, Compugen disclosed two additional Fc fusion proteins, CGEN-15051 with positive initial results in animal models of aut

Compugen newly discovered immune checkpoints have been shown to be expressed in cancer tumors substantiating their potential as mAb targets for cancer immunotherapy. CGEN-15001T is expressed on numerous types of solid cancers and hematological malignancies, such as prostate cancer, melanoma, Hodgkin's lymphoma and Non-Hodgkin's lymphoma. CGEN-15022 is expressed in numerous types of epithelial cancers with significant unmet clinical needs, such as liver, colorectal, lung and ovarian cancers. The different expression profiles of CGEN-15022 and CGEN-15001T not only provide important differentiating characteristics between these two novel targets, but also offer promising potential to utilize these proteins as mAb targets to treat a broad set of key cancer indications with significant unmet targets and the provided provided in the provided provided in the provided pro

Compugen disclosed in 2012 that two additional immune checkpoint targets have been shown to be expressed in multiple types of tumors. These immune checkpoint proteins were shown to have an immunomodulatory activity affecting both innate and adaptive immune responses, thus providing additional opportunities for an efficient targeted approach in cancer treatment. By offering a different mode of action from Compugen's other immune checkpoint candidates, these protein targets further broaden the scope of the Company's Pipeline Program for monoclonal antibody treatment of cancer.

#### Additional oncology targets

Our therapeutic need driven discovery program is also aimed at the identification of additional novel cancer targets for mAb therapy, including drug resistant and advanced stage cancer. Novel cancer targets, such as membrane proteins found on cancer tumors, provide attractive targets for antibody therapeutics. A major challenge is the discovery of such targets that are appropriate for mAb therapy, for example those proteins that are highly expressed in tumor tissue but show low expression in normal tissues. This is accomplished by the use of the mAb Target Discovery Platform. Implementation of the platform has resulted to date in multiple discoveries. These include CGEN-928 which is uniquely expressed in advanced, drug-resistant or aggressive multiple myeloma and CGEN-671, a mAb target for multiple epithelial cancers including colorectal, breast and lung carcinomas.

## Pipeline Program

#### Overview

During 2010, we broadened our approach to drug target and drug discovery, moving from a "technology driven" individual platform capability approach to a "Therapeutics Needs (market) driven" approach. In this "Therapeutics Needs (market) driven" approach we harness all of our relevant platforms and other capabilities towards a selected unmet need in order to predict and validate novel molecules that we believe have the highest probability of leading to successful targeted medicines for that need. In late 2010 we initiated our Pipeline Program, pursuant to which we have both (i) accelerated the number of predicted and selected product candidates being evaluated by us, primarily in our fields of focus, and (ii) taken certain product candidates further beyond their proof of concept into preclinical activities, and in selected cases possibly clinical activities.

The Pipeline Program is now focused on protein and mAbs therapeutics in the fields of immunology and oncology. Selection of these focus areas is based on our "Therapeutics Needs (market) driven" approach, as both are of high industry interest with significant unmet medical needs. Moreover, these complex disease areas are well suited for our broad *in-silico* capabilities and therefore we can make significant innovative discoveries in these areas.

Our initial efforts with respect to "Therapeutics Needs (market) driven" discovery were focused on immune checkpoints, specifically the B7/CD28 co-stimulatory/co-inhibitory family of proteins, that are of high interest to the industry and have therapeutic potential in autoimmune diseases and/or cancer. CGEN-15001 and CGEN-15001T are examples of this effort. The discovery by Compugen of CGEN-15001T, a new B7/CD28 like immune checkpoint protein, created the opportunity to develop a therapeutic protein, CGEN-15001, which has demonstrated therapeutic potential in animal models of autoimmune diseases. CGEN-15001T is being used by Compugen as a target for mAb therapy with a potential for treating various cancers.

The initial results of our immune checkpoint candidates and the high industry interest in this class of proteins, have led us to expand our discovery efforts in this area to the identification of additional sets of immunomodulatory proteins, beyond the B7/CD28-like family. In 2011, we developed two, as yet undisclosed, discovery platforms based on new approaches and algorithms to predict such novel immunomodulatory proteins. These platforms completed their in silico validation stage and have already predicted several novel immunomodulatory proteins, which have entered initial validation studies as protein therapeutics in immunology.

## Therapeutic proteins in the Pipeline Program

Therapeutic proteins are large biological molecules usually produced by recombinant technologies. Therapeutic proteins are clinically used to treat a wide range of diseases including cancer, autoimmune diseases, infectious diseases, blood-related disorders and others. Compugen's therapeutic proteins are created by fusing the extracellular domain of a newly discovered membrane protein to an Ec fragment of an antibody. This class of therapeutic proteins is known as Fc fusion proteins. Therapeutic Fc fusion proteins have gained significant clinical and commercial success as exemplified by the anti-rheumatic biologics ENBREL® (etanercept) with sales of about \$8.53 billion in 2012, and ORENCIA® (abatacept) with about \$1.2 billion in sales in 2012. Compugen's therapeutic proteins pipeline includes CGEN-15001, CGEN-15021, CGEN-15031 and CGEN-15051. Additional undisclosed product candidates in the Pipeline Program are based on the B7/CD28-like family proteins discovered by Compugen, and additional immunomodulatory proteins, which are undergoing validation studies.

Selected therapeutic pipelines products include:

CGEN-15001 is a novel protein which has shown therapeutic potential for the treatment of autoimmune disorders. CGEN-15001 is an Fc fusion protein consisting of the extracellular region of CGEN-15001T, a B7/CD28-like protein discovered by Compugen, fused to an antibody Fc domain. *In vitro*, CGEN-15001 inhibits naïve and effector T cell activation and also the differentiation of the proint inflammatory T helper cells Th1 and Th17. It also promotes anti-inflammatory Th2 responses. This phenomenon, known as Th1/Th2 shift, can be therapeutically beneficial in the treatment of T cell mediated autoimmune diseases such as multiple sclerosis, rheumatoid arthritis, diabetes type 1, psoriasis and others. *In vitro*, CGEN-15001 was also shown to promote differentiation of induced regulatory T cells (iTregs), which can be beneficial for treatment of autoimmunity. In an animal model of multiple sclerosis, short term treatment with CGEN-15001 at onset of remission resulted in long-term inhibition of disease symptoms and relapses. Further research on the effect of CGEN-15001 in multiple sclerosis animal models suggests that it exerts its beneficial therapeutic effect by modulating the immune system through the Th1/Th2 shift, inhibiting epitope spreading, the underlying phenomenon which causes the relapsing nature of the disease, and preventing infiltration of reactive immune T cells into the central nervous system. Treatment with CGEN-15001 did not promote viral infection in a viral induced EAE model suggesting lack of global immunosuppression. Overall, these results indicate that CGEN-15001 may prevent disease progression by immune tolerance induction, a process whereby the immune system no longer attacks the self-antigens that cause the disease. Modifying such diseases through immune tolerance induction is a promising mode of action that may result in more effective drugs for autoimmune diseases. CGEN-15001 was also demonstrated to have a therapeutic effect in an animal model of rheumatoid arthritis. In this animal model, C

The only FDA approved therapeutic agent for autoimmune diseases based on the B7/CD28 protein family is ORENCIA® (abatacept). Abatacept, approved for treatment of rheumatoid arthritis, is an Fc fusion protein consisting of the extracellular domain of the T cell receptor CTLA4 fused to antibody Fc domain (CTLA4-Ig). Abatacept is targeting two known B7 proteins on antigen presenting cells (APCs) thus blocking their interaction with the CD28 receptor on T cells. Interaction of CD28 with the B7 proteins on APCs is required for activation of T cells. Blockade of this interaction leads to attenuation of immune responses. CGEN-15001 is believed to act differently than abatacept by directly interacting with T cells through as yet unidentified receptor to deliver a negative signal. This leads to inhibition of T cells activation and downstream inflammatory responses. In an EAE multiple sclerosis model similar efficacy of CGEN-15001 and murine CTLA4-Ig were observed following therapeutic administration of the proteins. Taken together, the results obtained for CGEN-15001 indicate its therapeutic potential for treatment of multiple autoimmune diseases and inflammatory conditions, such as multiple sclerosis and rheumatoid arthritis. CGEN-15001 is currently in lead candidate selection stage.

CGEN-15021 is a novel fusion protein with demonstrated efficacy in animal models of autoimmune disorders. CGEN-15021 is an Fc fusion protein consisting of the extracellular domain of CGEN-15022 discovered by us to be a B7/CD28-like immune checkpoint protein using the *in-silico* Protein Family Members Discovery Platform. In cell-based experiments, CGEN-15021 was demonstrated to inhibit activation of immune T cells. CGEN-15021 was further successfully tested in animal disease models of both multiple sclerosis and rheumatoid arthritis. In the multiple sclerosis model, short-term treatment with CGEN-15021 of animals with an established disease resulted in long-term amelioration of clinical symptoms. Treatment with CGEN-15021 also inhibits epitope spreading that underlies the relapsing nature of the disease. In the rheumatoid arthritis model, CGEN-15021 reduced clinical symptoms and histological damage to the diseased joints similarly to ENBREL®. This data suggests the potential utility of CGEN-15021 for the treatment of multiple sclerosis, rheumatoid arthritis and other autoimmune diseases.

CGEN-15091 is a novel fusion protein with demonstrated efficacy in an animal model of multiple sclerosis and potential in treating additional autoimmune diseases. It is an Fc fusion protein consisting of the extracellular domain of CGEN-15092, a protein discovered by Compugen to be B7/CD28-like using the *in-silico* Protein Family Members Discovery Platform. *In vitro*, CGEN-15091 was demonstrated to inhibit activation of immune T cells. CGEN-15091 was further successfully tested in an animal model of multiple sclerosis. Short-term treatment with CGEN-15091 at onset of remission provided long-term amelioration of clinical symptoms and inhibited epitope spreading underlying the relapsing nature of this experimental disease. These results suggest the therapeutic potential of CGEN-15091 for the treatment of multiple sclerosis and potentially additional autoimmune diseases.

CGEN-15031 and CGEN-15051 are two Fc fusion protein candidates with initial validation in animal models of autoimmune diseases. These two novel Fc fusion proteins are based on two distinct B7/CD28-like proteins discovered by Compugen. Each fusion protein combines the extracellular domain of one of the membrane proteins and an Fc antibody fragment. CGEN-15031 was tested in an animal disease model of multiple sclerosis and CGEN-15051 in a model of rheumatoid arthritis. Each of these fusion proteins ameliorated disease symptoms in the respective model.

#### Monoclonal Antibody Therapy

Monoclonal antibody (mAb) therapy is a class of biological drugs that bind with high specificity to target cells or proteins. Due to the versatility and specificity of this approach, mAb therapies are being intensively researched and developed as treatments for numerous serious diseases with the expectation of higher efficacy and fewer side effects compared to traditional chemical drugs. During the past two decades, mAbs have emerged as an important new and rapidly growing drug class, with over 20 mAbs already approved for therapeutic use in the U.S. 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 as ADC technology, Antibody Drug Conjugate). DataMonitor estimated the global monoclonal antibodies market to surpass \$65 billion by 2016. Moreover, according to an analysis done 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 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 is the identification of novel targets for mAb therapy. To this end, we have developed several proprietary target discovery queries through the focusing and integration of various aspects of our unique predictive discovery capabilities to identify novel drug targets.

The Pipeline Program consists of mAb targets discovered by our Monoclonal Antibody (mAb) Targets Discovery Platform and our Protein Family Members Discovery Platform. Disclosed candidates include CGEN-15001T, CGEN-15022, CGEN-671, and CGEN-928. Additional undisclosed mAb targets in the Pipeline Program are based on the B7/CD28-like family proteins as targets for cancer immunotherapy and additional cancer targets, which are undergoing validation studies.

#### Selected mAb targets include:

CGEN-15001T is a membrane protein which was predicted by Compugen through use of the Protein Family Members Discovery Platform to be a B7/CD28-like immune checkpoint protein. CGEN-15001T was shown to be expressed in solid cancers and hematological malignancies, such as prostate cancer, melanoma, Hodgkin's lymphoma and Non-Hodgkin's lymphoma, such as T and B cell lymphomas. CGEN-15001T is also expressed on immune cells residing within the tumor. This expression profile suggests a potential immunomodulatory role for CGEN-15001T in cancer therapy that is further supported by the immunomodulatory results obtained with CGEN-15001, suggesting that CGEN-15001T may help the cancer "silence" the immune responses towards the cancer cells. Blocking this function of CGEN-15001T through therapeutic antibodies has the potential to remove the suggested silencing effect of CGEN-15001T on the tumor, and could therefore enable the immune system to attack and destroy the tumor, thus serving as a promising potential approach for cancer immunotherapy.

CGEN-15022, is a membrane protein which was predicted by Compugen through use of the Protein Family Members Discovery Platform to be a B7/CD28-like immune checkpoint target for treatment of multiple cancers. Protein expression studies indicate that CGEN-15022 is expressed on numerous types of epithelial cancers with significant unmet clinical needs, such as liver, colorectal, lung and ovarian cancers. This expression profile, together with previously disclosed results pointing to its negative costimulatory activity, through preclinical data obtained for CGEN-15021, support CGEN-15022's potential as a drug target for treatment of these cancers through mAb therapy.

CGEN-671, a novel drug target for treatment of multiple epithelial tumors, is a membrane splice variant of CD55, a GPI-anchored protein that is involved in the regulation of the complement cascade. The potential application of CGEN-671 as a drug target was initially predicted *in silico* through the use our of mAb Targets Discovery Platform. Protein expression studies performed on colon, breast, lung and gastric cancers demonstrated high overexpression of CGEN-671 in the cancer tissues, while CGEN-671 exhibited low expression levels in most of the normal tissues. The expression levels of CGEN-671 as a drug target for clinical development of mAb drug therapy for various types of epithelial cancers such as colorectal, breast and lung carcinomas.

CGEN-928, a new drug target for the treatment of multiple myeloma, or MM, is a membrane protein which was predicted through the use of our mAb Targets Discovery Platform. CGEN-928 is uniquely present in advanced disease stages of MM as well as in drug-resistant and aggressive MM, indicating potential targeting of the more aggressive disease stages and types, currently an unmet medical need. Initial studies demonstrated that a polyclonal antibody which specifically recognizes CGEN-928 decreases MM tumor cell line proliferation and induces apoptosis, at certain antibody concentrations, alone and in combination studies with standard of care drugs. The overall results of the studies done to date for CGEN-928, both of expression and functional studies, support its potential to serve as a drug target for mAb-based therapy for MM.

#### Commercialization

We are currently focusing our main commercialization efforts on entering into licensing and partnership arrangements with respect to our Pipeline Program product candidates, in which we may also participate in the further development of the partnered candidates. Potential revenue sources in such arrangements could include fees, research revenues, milestones and royalties. In some cases we expect these agreements may include an option for license, option exercise fees and license fees.

Additionally, we intend to seek research and discovery collaborations aimed at harnessing our infrastructure capabilities towards the partners' discovery needs. In these arrangements we would combine our discovery approaches to identify and prioritize novel proteins and/or targets according to the specific unmet need of our partner. Potential revenue sources in these types of transactions could include upfront fees, research funding, option exercise and license fees, milestone payments and royalties.

In view of the wide applicability of our predictive biology capabilities, we have in the past formed, or participated in the formation, of companies to utilize certain of these capabilities in other fields, and have entered into other arrangements for the further development and commercialization of various non-focus specific discoveries of interest, most of which resulted from our infrastructure development and validation activities. In all such cases, these arrangements provide the potential for future financial gain to Compugen without any further financial commitment for either development or commercialization from us. This commercialization pathway is anticipated to be of lesser importance in the future.

In 2012, we entered into two such arrangements: (i) the joint establishment of a new Israeli company, Neviah Genomics Ltd., with Merck Serono, a division of Merck, Darmstadt, Germany, in the field of toxicity biomarkers, and (ii) a financing arrangement with a United States investment company to allow the further development of Keddem Bioscience Ltd., previously a wholly owned, but inactive, subsidiary of Compugen, in the field of small molecule drugs.

In December 2011 we entered into a collaboration with BiolineRx for the purpose of developing and commercializing mutually selected Compugen discovered peptide drug candidates that are not in our areas of focus. According to this agreement, we will provide promising drug candidates, primarily peptides, which were identified by us in the past using our predictive drug discovery platforms, while BioLineRx will develop these candidates through Phase II clinical trials, with the goal of ultimately licensing them to pharmaceutical companies for advanced clinical development and commercialization. We have been advised by BiolineRx that at present they are continuing to pursue one of the three peptides initially identified by the parties to be of possible interest.

In October 2011, we entered into an agreement with the Pulmonary Fibrosis Foundation and the University of Pittsburgh, according to which the Pulmonary Fibrosis Foundation has agreed to provide a grant to scientists at the University of Pittsburgh to independently evaluate the therapeutic potential of CGEN-25009 for the treatment of idiopathic pulmonary fibrosis (IPF), a devastating disease with no current effective treatment and which is estimated to affect more than five million people worldwide.

## 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 companies, the research and discovery groups of pharma companies, academic and research institutions and governmental and other publicly funded agencies.

We face, and expect to continue to face, competition from entities that discover and develop products that have a function similar or identical to the function of our therapeutic product candidates or a product that acts in a different, but successful, manner addressing the same unmet need. With respect to our therapeutic product candidates, our potential competitors comprise companies that discover and develop therapeutic proteins and/or novel targets for monoclonal antibody therapy. Specifically in the immune checkpoint field for cancer immunotherapy there are several leading pharma and biotechnology companies as well as smaller biotech companies that are developing biological therapies to enhance immune response towards tumors. The product candidates being developed by the smaller companies 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.

Our discovery program depends, in large part, on our discovery platforms and other technologies and our proprietary data to make inventions and establish intellectual property rights in genes and gene-based products, including mRNAs and proteins. There are a number of other means by which such inventions and intellectual property can be generated. We believe that our computational technologies, and specifically our discovery platforms, provide us with a competitive advantage in the field of predicting gene-based products. 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 of significant biological phenomena and the resultant better research capabilities that we have developed, as well as our unique team of scientists from both biology and exact sciences disciplines who work together for more than eight years on average.

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 the commercialization. Accordingly, our competitors may be more successful than we may be in identifying product candidates, developing them, obtaining FDA approval 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, and the copyrights subsisting in our software and related documentation. 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 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. Subject to the following paragraph, as of January 1, 2013 we had a total of 30 issued patents, of which 27 are U.S. patents. We also have pending patent applications, which as of January 1, 2013, included 21 patent applications that have been filed in the United States, 15 patent applications that have been filed in Europe, 12 patent applications that have been filed in Israel, seven patent applications that have been filed in Japan, three patent applications that have been filed in India, two patent applications that have been filed in China and six 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 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 intend to rely on contract manufacturers or our collaborative partners to produce materials and drug substances for drug products required for preclinical studies and clinical trials. We plan to continue to rely upon contract manufacturers and collaboration partners to manufacture commercial quantities of these materials for any marketed therapeutic products.

#### **Government Regulation**

#### **Environmental Regulation**

Some of our research and development activities involve the controlled use of biological 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 biological 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 other organisms' tissue samples for the purpose of development and or validation of some of our products. 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. 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 experimental use of animals with our research. In the United States, the FDA Regulates describe good laboratory practices for various types of non-human studies that are performed to support an IND. Further, preclinical animal studies conducted by us or third parties on our behalf may be subject to the 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 it works 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; Research and Development, Patents and Licenses.

## Regulation of Therapeutic Product Candidates

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, biologics under the Public Health Service Act, and implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate 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, animal studies and drug manufacturing in compliance with the FDA's Good Laboratory Practices or other applicable regulations;
- submission to the FDA of an investigational new drug application, or IND, which must become effective before human clinical trials may begin;
- approval by an institutional review board, or IRB, at each institution participating in a clinical trial, which must review and approve the plan for any clinical trial before it commences at that institution;
- 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 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, and applicable clinical data or literature, among other things, to the FDA as part of the IND. The sponsor will also include a 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 studies due to, among other things, safety concerns or non-compliance.

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 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 approves the information regarding the trial and the consent form that must be provided to each trial subject or his or her legal representative

Each new clinical protocol must be submitted for FDA review, and to the IRBs for approval. 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.

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 is often 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 study 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 must be submitted to the FDA and the investigators for serious and unexpected adverse events. 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 IRB's 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, preclinical 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 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 may 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, including Phase 4 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 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 problems occur after the product reaches the market. Drugs may be promoted for use only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to criminal and civil penalties.

### Diagnostic Products

In the United States, IVDs are regulated by the FDA as medical devices. Medical devices are classified into one of three classes on the basis of the controls deemed by the FDA to be necessary to reasonably ensure their safety and effectiveness. Class I devices are subject to general controls, including labeling, premarket notification and adherence to FDA's quality system regulations, which are device-specific good manufacturing practices. Class II devices are subject to general controls and special controls, including performance standards and postmarket surveillance. Class III devices are subject to most of the previously identified requirements as well as to premarket approval. Class I devices are exempt from premarket submissions to the FDA; most Class II devices require submission of a 510(k) premarket notification to the FDA; and Class III devices require submission of a premarket approval application, or PMA. Most in vitro diagnostic kits are regulated as Class I or Class II devices and are either exempt from premarket notification or require a 510(k) submission.

A 510(k) notification must demonstrate that a medical device is substantially equivalent to another legally marketed device, termed a "predicate device," that is legally marketed in the United States and for which a PMA was not required. A device is substantially equivalent to a predicate device if it has the same intended use and technological characteristics as the predicate, or has the same intended use but different technological characteristics, where the information submitted to the FDA does not raise new questions of safety and effectiveness and demonstrates that the device is at least as safe and effective as the legally marketed device. Most 510(k)s do not require clinical data for clearance, but a minority will. The FDA is supposed to issue a decision letter within 90 days of receipt of the 510(k) if it has no additional questions or send a first action letter requesting additional information within 75 days. Requests for additional data, including clinical data, will increase the time necessary to review the notice. If the FDA does not agree that the new device is substantially equivalent to the predicate device, the new medical device is automatically classified as a Class III device for which a PMA will be required. However, the sponsor may petition the FDA to make a risk-based determination that the device does not pose the type of risk associated with Class III devices and down-classify the device to Class II.

Class III devices require the submission and approval of a PMA prior to product sale. The PMA process is more complex, costly and time consuming than the 510(k) process. A PMA must be supported by more detailed and comprehensive scientific evidence, including clinical data, to demonstrate the safety and efficacy of the medical device for its intended purpose. If the device is determined to present a "significant risk," the sponsor may not begin a clinical trial until it submits an investigational device exemption, or IDE, to the FDA and obtains approval from the FDA to begin the trial. After the PMA is submitted, the FDA has 45 days to make a threshold determination that the PMA is sufficiently complete to permit a substantive review. If the PMA is complete, the FDA will file the PMA. The FDA is subject to a performance goal review time for a PMA of 180 days from the date of filing, although in practice this review time is longer. Questions from the FDA, requests for additional data and referrals to advisory committees may delay the process considerably. The total process may take several years, and the FDA may also request additional clinical data as a condition of approval or after the PMA is approved. Product changes after approval typically require a supplemental submission with FDA review cycles ranging from 30 to 180 days.

Any products manufactured or distributed pursuant to FDA clearances or approvals are subject to pervasive and continuing regulation by the FDA, including recordkeeping requirements, reporting of adverse experiences with the use of the device, and restrictions on advertising and promotion. Device manufacturers are required to register their establishments and list their devices with the FDA and are subject to periodic inspections by the FDA and certain state agencies. Noncompliance with applicable FDA requirements can result in, among other things, warning letters, fines, injunctions, civil penalties, recalls or seizures of products, total or partial suspension of production, refusal of the FDA to grant 510(k) or PMA approval for devices, withdrawal of 510(k) clearances and/or PMA approvals, or criminal prosecution.

# 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 by the 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. The requirements governing the conduct of clinical trials, the approval process, product licensing, pricing and reimbursement vary greatly from country to country.

### 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

We currently lease an aggregate of approximately 15,380 square feet of office and biology laboratory facilities in Tel Aviv, Israel, under a lease that expires on December 31, 2015. In addition, Compugen USA, Inc. currently subleases an aggregate of approximately 4,410 square feet of office and biology laboratory facilities in South San Francisco, California, under a sublease that expires on June 30, 2014. We believe that the facilities that we currently lease are sufficient for at least the next 12 months. There are no encumbrances on our rights in these leased properties or on any of the equipment that we own.

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

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, 2012, and with any other selected financial data included elsewhere in this annual report.

### Background

We are a therapeutic products discovery company focused on therapeutic proteins and monoclonal antibodies to address important unmet needs in the fields of immunology and oncology, either for ourselves or our partners. Unlike traditional high throughput trial and error experimental based drug candidate discovery, our discovery efforts are based on systematic and continuously improving in silico (by computer) product candidate prediction and selection followed by experimental validation, with selected product candidates being further advanced in our Pipeline Program. Our in silico predictive models utilize a broad and continuously growing infrastructure of proprietary scientific understandings and predictive platforms, algorithms, machine learning systems and other computational biology capabilities. Our business model primarily involves collaborations covering the further development and commercialization of in house-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.

# OPERATING RESULTS

#### Overview

Since our inception, we have incurred significant losses and, as of December 31, 2012, we had an accumulated deficit of \$194 million. We may continue to incur net losses in the foreseeable future.

In late 2004, we began to focus a significant portion of our research and discovery efforts on the creation of field specific discovery platforms intended to identify novel drug and diagnostic product candidates and discontinued commercialization of our computational biology software products, with a resulting decrease in revenues. We incurred net losses of approximately \$12 million in 2011 and approximately \$14 million in 2012. We may continue to incur net losses in the 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 further 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. To date, such collaborations with respect to existing product candidates have only been entered into at the early, proof of concept stage. During 2010, we initiated our Pipeline Program the aim of which is to substantially increase the number of in house discovered molecules in our validation pipeline and to advance selected molecules beyond their proof of concept stage.

Our net research and development expenses are expected to be our major operating expense in 2013, accounting for more than 60% of our expected total 2013 operating expenses. Our research and development expenses have always comprised a significant portion of our expenses.

In 2010, 2011 and 2012 these expenses continued to be, and we expect will continue to be, our largest operating expense.

We currently have sufficient working capital in order to sustain our operations for at least the next 12 months. For a detailed description of our cash and cash equivalents position, see "Liquidity and Capital Resources" in this Item 5.

# **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 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 income.

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 and 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 realized historical stock price volatility as well as historical volatility of our stock starting from our IPO date. 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 according to the actual life term method, using the average of vesting and the contractual term of the option.

We apply ASC 718 and ASC 505-50, "Equity-Based Payments to Non-Employees" with respect to options and warrants issued to non-employees. ASC 718 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 \$2.1 million, \$3.4 million and \$2.5 million for the years ended December 31, 2010, 2011 and 2012 respectively.

### Embedded Derivatives and Fair Value Measurements

Under the Funding Agreements with Baize and in accordance with ASC 730-20, "Research and Development Arrangements" and ASC 815, "Derivative and Hedging," we considered for the Pipeline Funding Agreement and the Pipeline Program Participation Rights as well as the conversion alternative of the instrument issued and for the mAb Funding Agreement, the mAb Participation Interest as well as the exchange Option, to be a research and development arrangement coupled with embedded derivatives as those instruments do not have fixed settlement provisions. Consequently, we determined that the embedded derivatives 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 value reported in the statement of operations (as part of financial income or expenses). In addition, under the Pipeline Funding Agreement we issued detachable warrants to the investor. (See Item 4. "Information on the Company – Recent Funding Agreements").

We determine the fair value of the Pipeline Funding Agreement embedded derivatives using a multi period binomial model with monthly observations, while the exercise price used in the binomial model is the expected cash consideration from certain molecules which value was estimated using the income approach. Following the second amendment to the mAb Funding agreement and the need to calculate the mean average closing market price of the shares on NASDAQ within the twenty trading days prior to the Actual Exchange Date we used Monte Carlo simulation paths of the Company's stock prices when determine the fair value of the mAb Funding Agreement embedded derivatives. The income approach for both agreements utilizes a discounted cash flow model, as we believe that this approach best approximates the fair value of the expected income from certain molecules in the pipeline program that are underlying the Pipeline Funding Agreement and certain therapeutic mAb products that are underlying the mAb Funding Agreement. Judgments and assumptions related to revenues, future short-term and long-term growth rates, weighted average cost of capital, interest, capital expenditures, cash flows, and market conditions are inherent in developing the discounted cash flow model. The material assumptions used for the income approach for 2010, 2011 and 2012 were years of projected net cash flows, a discount rate and the market growth rate. We considered historical and current market research and conditions when determining the discount and growth rates to use in our analyses. If these estimates or their related assumptions change in the future it may affect the fair value of our results. We determine that the fair value of the embedded derivatives is to be classified under Level 3 according to the fair value hierarchy mentioned above.

We determine the fair value of the Pipeline Funding Agreement detachable warrants using Monte Carlo simulation paths of the Company's stock prices. The Monte Carlo Model was chosen following the need to calculate the mean average closing market price of the shares on NASDAQ within the ten consecutive trading days.

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.

# Investment in affiliates

We account for our investments in Neviah and Keddem (both "affiliated companies") under the equity method in accordance with ASC 323, "Investments-Equity Method". For the purpose of these financials, an affiliated company is a company held to the extent of 20% or more, or a company less than 20% held, in which we can exercise significant influence over operating and financial policy of the affiliate company.

Based on ASC 845, "Nonmonetary Transactions", ("ASC 845"), we elected the carryover basis for our investments in the affiliated companies.

### Recently Issued Accounting Standards

In February 2013, the FASB issued ASU No. 2013-02, "Reporting of Amounts Reclassified out of Accumulated Other Comprehensive Income." Under ASU 2013-02, an entity is required to provide information about the amounts reclassified out of Accumulated Other Comprehensive Income ("AOCI") by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. ASU 2013-02 does not change the current requirements for reporting net income or other comprehensive income in the financial statements. ASU 2013-02 is effective for us as of January 1, 2013. Since this standard only impacts presentation and disclosure requirements, its adoption will not have a material impact on our consolidated results of operations or financial condition.

# Results of Operations

# 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,					
	2010	2011			2012	
	(US\$ in thousands, except share and per share data)			re data)		
Consolidated Statements of Operations Data						
Revenues	\$ 1,115	\$	-	\$	242	
Cost of revenues	224		-		201	
Research and development expenses, net	5,227		6,778		9,442	
Marketing and business development expenses	633		610		684	
General and administrative expenses	 2,909		4,591		3,457	
Total operating expenses (*)	8,769		11,979		13,583	
Operating loss	(7,878)		(11,979)		(13,542)	
Financial and other income (loss), net	 675		(25)		(86)	
Net loss	\$ (7,203)	\$	(12,004)	\$	(13,628)	
Unrealized gain (loss) on Investment in Evogene	2,716		(1,902)		1,103	
Total comprehensive loss	\$ (4,487)	\$	(13,906)	\$	(12,525)	
Basic and diluted net loss per share	(0.22)		(0.35)		(0.38)	
Weighted average number of shares used in computing basic net loss per share	33,284,017		34,276,697		35,844,496	
Weighted average number of shares used in computing diluted net loss per share	33,284,017		34,276,697		36,249,262	

(\*) Includes stock based compensation – see Note 10 of our 2012 consolidated financial statements.

As of December 31,					
	2010	2011			2012
	(US\$ in thousands)				
\$	22,508	\$	22,463	\$	19,685
	5,000		-		-
	6,227		4,093		5,196
	569		546		690
	36,458		29,081		28,909
	4,037		6,434		7,872
	(168,487)		(180,491)		(194,119)
	28,285		19,581		17,672
	\$	5,000 6,227 569 36,458 4,037 (168,487)	\$ 22,508 \$ 5,000 6,227 569 36,458 4,037 (168,487)	2010         2011 (US\$ in thousands)           \$ 22,508         \$ 22,463           5,000         -           6,227         4,093           569         546           36,458         29,081           4,037         6,434           (168,487)         (180,491)	2010   2011   (US\$ in thousands)

# Years Ended December 31, 2012 and 2011

Revenues. Revenues totaled approximately \$242,000 in 2012. No revenues were recognized in 2011. The revenues for 2012 were due to product candidate research and collaboration agreement under which we performed research services and recognized revenues according to the proportional performance method.

Cost of Revenues. Cost of revenues attributable to product candidate research and collaboration agreements totaled approximately \$201,000 for 2012 and \$0 for 2011.

Research and Development Expenses, Net. Research and development expenses, net increased by 38%, to approximately \$9.4 million for 2012, from approximately \$6.8 million for 2011. The increase was primarily due to the establishment and initiation of activities at our U.S. based operation as well as increasing levels of activity in our Pipeline Program.

Governmental and other research and development grants received by us, which are subtracted from research and development expenses in the calculation of research and development expenses, net decreased to approximately \$93,000 for 2012 from approximately \$424,000 for 2011. Research and development expenses, net, as a percentage of total operating expenses, increased to 70% in 2012 from 57% in 2011.

Marketing and Business Development Expenses. Marketing and business development expenses increased by 12% to approximately \$684,000 in 2012 from approximately \$610,000 in 2011. This increase was primarily due to new engagements we entered into with public relations and investors relations firms to support our marketing and business development activities worldwide and especially in the U.S. Marketing and business development expenses, as a percentage of total operating expenses, were 5% for both 2012 and 2011.

General and Administrative Expenses. General and administrative expenses decreased by 24% to approximately \$3.5 million for 2012 from approximately \$4.6 million for 2011. The decrease was primarily due to non-cash expense related to stock based compensation which totaled approximately \$979,000 for 2012 compared with approximately \$2.2 million for 2011. Included in the non-cash expense of \$2.2 million for 2011 was a \$1.3 million one-time charge relating to an extension of the time to exercise certain previously outstanding and vested options previously issued to a director (the Company's former CEO), which extension was approved by our shareholders. General and administrative expenses, as a percentage of total operating expenses, decreased to 25% in 2012 from 38% in 2011.

Financial Income (loss), Net. Financial income (loss), net, increased to a net loss of approximately \$86,000 for 2012 from a net loss of approximately \$306,000 for 2011. This increase was primarily due to non-cash finance expenses mainly derived from the re-measurement of the embedded derivatives and exchange options components under the research and development funding arrangements signed in late 2010 and 2011 and the effect of changes in currency rates. This increase was partially offset by decreased interest income in deposits between the relative periods.

Other Income, net. Other income, net, decreased to none in 2012 compared to \$281,000 in 2011. Other income, net in 2011 includes realized gain derived from the sale of a portion of our holdings of Evogene ordinary shares.

# Years Ended December 31, 2011 and 2010

Revenues. No revenues were recognized in 2011 compared with approximately \$1.1 million in 2010. The revenues for 2010 were primarily due to revenue recognition under certain product candidate research and collaboration agreements for which all of the conditions required to recognize revenues were met and accordingly recognized during 2010.

Cost of Revenues. Cost of revenues attributable to certain product candidate research and collaboration agreements were \$0 for 2011 compared with approximately \$224,000 for 2010.

Research and Development Expenses, Net. Research and development expenses, net increased by 30%, to approximately \$6.8 million for 2011, from approximately \$5.2 million for 2010. The increase was primarily due to an increase in lab activity related expenses associated with the Company's Pipeline Program and an increase in non-cash expense related to stock based compensation. Governmental research and development grants received by us, which are subtracted from research and development expenses in the calculation of research and development expenses, net decreased to approximately \$424,000 for 2011 from approximately \$1 million for 2010. Research and development expenses, net, as a percentage of total operating expenses, decreased from 60% in 2010 to 57% in 2011.

Marketing and Business Development Expenses. Marketing and business development expenses decreased by 4% to approximately \$610,000 in 2011 from approximately \$633,000 in 2010. This decrease was primarily due to a change in headcount which resulted in a decrease in payroll and related costs, offset by an increase in non-cash expense related to stock based compensation, from approximately \$91,000 for 2010 to approximately \$178,000 for 2011. Marketing and business development expenses, as a percentage of total operating expenses, decreased from 7% in 2010 to 5% in 2011.

General and Administrative Expenses. General and administrative expenses increased by 58% to approximately \$4.6 million for 2011 from approximately \$2.9 million for 2010. The increase was primarily due to non-cash expense related to stock based compensation which totaled approximately \$2.2 million for 2011 compared with approximately \$1.1 million for 2010. Included in the non-cash expense of \$2.2 million for 2011 was a \$1.3 million one-time charge relating to an extension of the time to exercise certain previously outstanding and vested options previously issued to a director, which extension was approved by the Company's shareholders. General and administrative expenses, as a percentage of total operating expenses, increased from 33% in 2010 to 38% in 2011.

Financial Income (loss), Net. Financial income (loss), net, decreased to a net loss of approximately \$306,000 for 2011 from a net income of approximately \$241,000 for 2010. This decrease was primarily due to non-cash finance expenses mainly deriving from the re-measurement of the embedded derivatives and exchange options components under the research and development funding arrangements signed in late 2010 and 2011 and from related issuance expenses pertaining to the funding arrangements. This decrease was partially offset by increased interest income in deposits between the relative periods.

Other Income, net. Other income, net, decreased to \$281,000 in 2011 compared to \$434,000 in 2010. This decrease was due to lower realized gain in 2011 compared with 2010 deriving from the sale of a portion of our holdings of Evogene ordinary shares.

# Governmental Policies that Materially Affected or Could Materially Affect Our Operations

Our income tax obligations consist of those of Compugen in Israel and its subsidiary in its taxing jurisdictions.

The corporate tax rate in Israel from January 1, 2012 and onwards is 25%, compared with 24% in 2011, 25% in 2010, 26% in 2009 and 27% in 2008. In the future, if and when we generate taxable income, our effective tax rate will be primarily influenced by: (a) the portion of our income which is entitled to tax benefits due to our Approved Enterprises or Benefiting Enterprises programs; (b) the changes in the exchange rate of the U.S. dollar to the NIS. We benefit from certain government programs and tax legislation, particularly as a result of the 'Approved Enterprise' or 'Benefiting Enterprise' status under the Law for the Encouragement of Capital Investments, 1959 (an "Approved Enterprise", a "Benefiting Enterprise" and the "Investment Law", respectively). 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 tax benefits previously received, if any, together with interest and linkage differences to the Israeli CPI, or other monetary penalty. 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 (particularly those available to us as a result of the Approved Enterprise or Benefiting Enterprise status) could have a material adverse effect on our business, financial condition and results of operations.

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 the Company's facilities, such tax exemption on undistributed income applies for a limited period of two years. During the remainder of the benefits period applicable to us (generally until the expiration of ten years) a corporate tax rate not exceeding 25% will apply. In the event such tax exempt income is thereafter distributed as a dividend, we will be required to pay the applicable corporate tax that would otherwise have been payable on such income. Our entitlement to such benefits is conditional upon our compliance with the terms and conditions prescribed in the Investment Law. In the event of our failure to do so, these benefits may be cancelled and we may be required to refund the amount of the benefits already received, in whole or in part, with the addition of Israeli CPI linkage differentials and interest, or other monetary penalty.

Currently we have two Approved Enterprises programs under the Investment Law. Both are under the alternative benefits program and in both cases, the tax benefits period has not yet begun.

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 preapproval from the Investment Center of the Ministry of Industry, Trade and Labor 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 taxes. 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. To date, we have not generated tax exempt income from Benefiting Enterprises.

Additional amendments to the Investment Law became effective in January 2011 (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 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 2013-2014, and 6% and 12%, 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 Zone A and 8% elsewhere. As with dividends distributed from taxable income derived from an Approved Enterprise or Benefiting Enterprise during the applicable benefits period, dividends distributed from Preferred Income would be subject to a 15% 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 during the next years. Should a company elect to implement the 2011 Amendment with respect to its existing Approved and Benefiting Enterprises prior to June 30, 2015 dividends distributed from taxable income derived from Approved or Benefiting Enterprises to another

The period of tax benefits with respect to our Approved Enterprise or Benefiting Enterprise programs has not yet commenced, because 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. There can be no assurance that such tax benefits will continue in the future at their current levels, if at all.

As of December 31, 2012, we had not generated any taxable income. As of December 31, 2012, our net operating loss carry-forwards for Israeli tax purposes amounted to approximately \$152 million. Under Israeli law, these net operating losses may be carried forward indefinitely and offset against certain future taxable income.

At December 31, 2012, the net operating loss carry-forwards of our U.S. subsidiary for federal income tax purposes amounted to approximately \$15 million. These losses are available to offset any future U.S. taxable income of our U.S. subsidiary and will expire between the years 2018 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 "Research and Development Grants; and The Office of Chief Scientist" in this Item 5 below.

### Liquidity and Capital Resources

#### Recent Funding Agreements

#### Pipeline Funding Baize Agreement

On December 29, 2010, we entered into the Pipeline Funding Agreement with Baize under which Baize provided us with \$5 million in support of our Pipeline Program. In exchange, Baize received (i) with respect to five (5) designated product candidates that are currently in the Pipeline Program, the right to receive ten percent (which amount may be reduced under certain circumstances) of certain cash consideration (including both development and post-marketing fees) that may be received by Compugen in the future pursuant to any licenses covering the development and commercialization of products developed from these five designated product candidates, provided that, in all cases, any such Pipeline Program Participation Rights are to be reduced by certain pass-through amounts; and (ii) warrants for 500,000 of our ordinary shares, exercisable at \$6.00 per share through June 30, 2013. Currently, all five designated product candidates are either in active research in the Pipeline Program, or in third party's commercial arrangements with their current status ranging from experimental validation to post animal model proof of concept studies. In addition, Baize has the right, until June 30, 2013, to waive its right to receive Pipeline Program Participation Rights, in exchange for 833,334 of our ordinary shares.

# Cantor Sales Agreement

On August 30, 2011, we entered into a sales agreement with Cantor Fitzgerald & Co. (the "Cantor Sales Agreement"), which enables us to offer and sell an aggregate of up to 6,000,000 of our ordinary shares, from time to time through Cantor Fitzgerald & Co., as our sales agent. The gross proceeds from all sales made pursuant to the Cantor Sales Agreement may not exceed \$40 million in the aggregate. Sales of our ordinary shares under the Cantor Sales Agreement are made in sales deemed to be "at-the-market" equity offerings as defined in Rule 415 promulgated under the Securities Act of 1933, as amended. Cantor Fitzgerald & Co. is entitled to receive a commission rate of 3.0% of gross sales in connection with the sale of our ordinary shares on our behalf.

From January 10, 2012 through March 15, 2013 we had sold through the Cantor Sales Agreement an aggregate of 2,411,050 of our ordinary shares, and received gross proceeds of approximately \$13.4 million, before deducting issuance expenses.

# mAb Development Funding Baize Agreement

On December 20, 2011, we entered into the mAb Funding Agreement (the "Original mAb Funding Agreement") with Baize, pursuant to which Baize agreed to invest \$8 million (the "Investment Amount") in Compugen in connection with certain research funding in exchange for the "mAb Participation Interest" in certain mAb product candidates that achieve specific milestones or have been licensed out by December 31, 2014, as further described below (the "Compugen Goldman Program"). The Investment Amount was to be paid in three installments: \$2 million was paid on December 21, 2011, \$3 million was to be paid on or before June 30, 2012 and \$3 million was to be paid on or before September 30, 2012. According to the Original mAb Funding Agreement, in the event such payments were not made, we had the right to cancel in its entirety the mAb Participation Interest by issuing to Baize Compugen ordinary shares at a value of \$6.00 per share, equivalent to the cash actually invested, to such point.

As part of the Compugen Goldman Program, the mAb product candidates were to be developed against twelve (12) specified Compugen-discovered targets ("CGP Targets") in the field of oncology.

Baize is entitled to receive the mAb Participation Interest if such mAb product candidate either achieves a successful animal disease model prior to December 31, 2014 and/or is licensed out to third parties for further development and commercialization prior to such time. In each such case, the mAb Participation Interest will consist of the right to receive from Compugen a percentage of certain future payments received by Compugen from third parties from any out-licensing for further development and/or commercialization. The percentage for each such qualifying mAb product candidate will be calculated on the date of out-licensing in accordance with a sliding scale, which takes into account the total mAb Investment amount spent for the development of therapeutic mAbs against the specified Compugen targets to such date, relative to the total amount spent by both Baize and Compugen on such mAbs, provided that Baize will be entitled to no less than ten percent of such future payments related to any qualifying mAb product candidates. Notwithstanding anything in the agreement, under the Original mAb Funding Agreement Baize had the right, during the first quarter of 2014, to waive its rights to the Participation Interest in exchange for 1,455,000 Compugen ordinary shares.

On July 24, 2012 we entered into an amendment with Baize to the Original mAb Funding Agreement, pursuant to which the number of CGP Targets was reduced from twelve (12) to eight (8), and the payment dates for the \$6 million of the Investment Amount remaining to be paid on such date were amended such that \$1 million was to be paid on or before July 31, 2012 and \$5 million was to be paid on or before December 31, 2012. Baize paid the \$1 million on July 27, 2012.

On December 27, 2012 we entered into a second amendment to the Original mAb Funding Agreement (the "Second Amendment"), pursuant to which we agreed to reduce the number CGP Targets from eight (8) to six (6) and changed the payment due date for the remaining Investment Amount to April 30, 2013. In addition the remaining Investment Amount was changed to either \$5 million or \$7.5 million at Baize's discretion, bringing the total Investment Amount to either \$8 million or \$10.5 million, as the case may be. In the event that the total Investment Amount is \$10.5 million, the number of CGP Targets will revert back to eight (8).

Pursuant to the Second Amendment, we also agreed that if the final payment of \$5 million or \$7.5 million is not made on or prior to April 30, 2013, we will have the right to terminate the Original mAb Funding Agreement, as amended, and Baize will not be entitled to any mAb Participation Interest, other than a cumulative maximum total of \$1.5 million on or after May 1, 2013 and Baize will not receive any Compugen shares.

Under the terms of the Second Amendment, Baize's right to exchange the mAb Participation Interest for our ordinary shares, has been amended as follows:

- (i) the time period during which Baize has such right of exchange, which was from January 1, 2014 through March 31, 2014, has been amended to January 1, 2015 through March 31, 2015, and
- (ii) in the event Baize exercises this right, the number of Compugen ordinary shares to be received by Baize has been amended from 1,455,000 shares to such number of shares determined by dividing the Net Baize Investment (as defined below), without interest, by the average closing price of the ordinary shares for the twenty (20) trading days prior to the date of such election by Baize, provided however, that if such average closing price is less than \$5.5 per share, we will have the right, but not the obligation, to pay Baize in cash such amount in lieu of any Compugen shares. "Net Baize Investment" shall mean the total Investment Amount, without interest, reduced by the full amount of any mAb Participation Interest received by Baize prior to such exchange.

In 2012, our sources of cash came from:

- cash generated from the sale and issuance of ordinary shares under the Cantor Sales Agreement;
- proceeds from the research and development funding arrangement signed in December 2011 with Baize;
- exercise of stock options;
- income from product candidate research and collaboration agreement;
- governmental and other grants; and
- financial income.

We used these funds primarily to finance our business operations.

We expect that our sources of cash for 2013 will be cash held in our bank accounts, proceeds generated from license, collaborative and/or research agreements, remaining proceeds from a research and development funding arrangement signed in December 2011, as amended and proceeds received from the issuance of ordinary shares as a result of the exercise of stock options or from the sale of shares pursuant to the Cantor Sales Agreement.

### Net Cash Used in Operating Activities

Net cash used in operating activities was approximately \$4.3 million in 2010, approximately \$9.2 million in 2011 and approximately \$10.9 million in 2012. The increase in 2012 was mainly attributed to the establishment and initiation of activities at our south San Francisco operation in April 2012, as well as increasing levels of research and development activity in our Pipeline Program. The main sources of cash used to support the operating activities during 2012 were cash held in our bank accounts, proceeds from sale and issuance of ordinary shares, proceeds from research and development funding arrangements, governmental grants and cash from the exercise of stock options.

# Net Cash Provided By (Used In) Investing Activities

Net cash used in investing activities primarily consisted of investment in bank deposits offset by proceeds from maturity of deposits and investment in property and equipment primarily in our south San Francisco operation. Net cash provided by investing activities primarily consisted of proceeds from maturity of short-term bank deposits. Net cash used in investing activities was approximately \$13.7 million in 2010 and approximately \$1.2 million in 2011, compared with net cash provided by investing activities of approximately \$12.3 in 2012.

### Net Cash Provided by Financing Activities

Net cash provided by financing activities was approximately \$10.1 million in 2010, approximately \$9.0 million in 2011 and approximately \$9.1 million in 2012. The principal sources of cash provided by financing activities in 2012 were proceeds received from sale and issuance of ordinary shares in an "at the market" under the Cantor Sales Agreement, proceeds received from the research and development funding arrangement signed in December 2011 and proceeds received from the issuance of ordinary shares as a result of 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 and marketable securities. As of December 31, 2012, we had total cash and cash equivalents and short-term bank deposits of approximately \$19.6 million, not including either the market value of the 1,043,397 shares of Evogene ordinary shares owned by us, nor the \$5 million due on or before April 30, 2013 under the revised payment schedule for the December 2011 research and development funding arrangement, as amended. We believe that our existing cash and cash equivalents, and short-term bank deposits will be sufficient to fund our operations for at least the next 12 months.

On January 11, 2011, 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, rights, warrants and units having an aggregate offering price up to \$40 million. This registration statement was declared effective by the SEC on January 21, 2011. On September 1, 2011 we filed a prospectus supplement in relation to the Cantor Sales Agreement.

In addition, 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 million. This registration statement was declared effective by the SEC on January 16, 2013.

# Research and Development, Patents and Licenses

We invest heavily in research and development. Research and development expenses, net, were our major operating expenses, representing between 57% - 69% of the total operating expenses for each of 2010, 2011 and 2012. Our research and development expenses, net, were approximately \$9.4 million in 2012, compared to approximately \$6.8 million in 2011, and approximately \$5.2 million in 2010. As of December 31, 2012, 38 of our employees were engaged in research and development on a full-time basis. This represents approximately 75% of our entire work force.

We focus our research efforts on the development of our discovery platforms and related technologies, and the discovery validation and early stage development of our therapeutic proteins and monoclonal antibody therapy 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 candidates beyond the successful animal disease model proof of concept stage, towards pre-IND studies. We expect that in 2013 our research and development expenses, net will continue to be our major operating expense, representing more than 70% of our total operating expenses.

We believe that our future success will depend, in large part, on our ability to discover promising 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 thereafter 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 OCS that support research and development activities, and by the European Community, under the European Union's 6th Framework Program ("European Union") and under the Bi-national Industrial Research and Development Foundation ("BIRD"). We also receive or have received certain investment amounts under the mAb Funding Agreement ("Baize") to support our research and development activities. We received grants and other forms of consideration from the OCS, the European Union, BIRD and Baize of approximately \$1 million in 2010, approximately \$424,000 in 2011 and approximately \$93,000 in 2012. We did not apply for an additional grant from the OCS for research and technological development in 2012.

### The Office of the Chief Scientist

We received or may receive grants from the OCS for several projects. Under the terms of these grants, we will be required to pay royalties ranging between 3% to 5% of the revenues we generate from our products developed with funds received from the OCS, beginning with the sale of the first product developed with funds received from the OCS and ending when 100% of the dollar value of the grant is repaid (100% plus LIBOR interest applicable to grants received on or after January 1, 1999). As of December 31, 2012, our contingent obligation for royalties, based on royalty-bearing government grants, net of royalties already paid, totaled approximately \$8.7 million payable out of future revenues derived from products that were developed under OCS funded projects.

The R&D Law requires that the manufacture of products developed with government grants will be carried out in Israel, unless the OCS provides its approval to the contrary. This approval, if provided, is generally conditioned on an increase in the total amount to be repaid to the OCS, to up to 300% of the dollar value of the grant. 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 outside of Israel is prohibited, unless conducted in accordance with the restrictions set forth under Israeli law. This approval, if provided, is generally conditioned on a redemption payment which is calculated according to a formula set in the R&D Law up to an amount equal to six (6) times the total amount of grants received under the R&D Law and from the OCS in general. Therefore, our flexibility in commercializing some of our technologies may be reduced. We believe that this restriction may not apply to the commercialization through licensing of product candidates that we discover by using our knowhow developed with funds received from the OCS.

### Trend Information

#### 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.

Recently, a growing 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 product candidates that have reached a further stage of development than our candidates. 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 pre-clinical 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.

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 product candidates 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 diagnostic and therapeutic product candidates, we are successful in commercializing our 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.

# Off-Balance Sheet Arrangements

We are not a party to any material off-balance-sheet arrangements.

### **Tabular Disclosure of Contractual Obligations**

The table below summarizes our contractual obligations as of December 31, 2012, and should be read together with the accompanying comments that follow.

						ients due by period	1			
					(US	S\$ in thousands)				
	<u> </u>	Total	Less	than 1 year		1-3 years		3-5 years	M	lore than 5 years
Operating Lease Obligations(1)	\$	1,604	\$	698	\$	906	\$	-	\$	-
Purchasing Obligations(2)		778		778		-		-		-
Accrued Severance Pay, net		253		-		-		-		253
Total	\$	2,635	\$	1.476	\$	906	\$	-	\$	253

(1) Consists of operating leases for our facilities and for motor vehicles.

(2) Consists of outstanding purchase orders for materials and services from our vendors.

The above table does not include royalties that we may be required to pay to the OCS or under the Funding Agreements. For more information, see "Research and Development, Patents and Licenses" in this Item 5. We are unable to reasonably estimate the time and the amounts that we will eventually be required to pay to the OCS, if at all, since these amounts and times depend on our ability to generate revenues based on the OCS-funded technologies and the timing of any such sales.

The above table also does not include contingent contractual obligations or commitments that may crystallize in the future, such as the payments under the Pipeline Funding Agreement, mAb Funding Agreement and other 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 our directors and executive officers as of February 28, 2013:

Name	Age	Positions
Prof. Yair Aharonowitz	72	Director(1)(2)(3)(4)
Prof. Ruth Arnon	79	Director <sup>(4)</sup>
Martin S. Gerstel	71	Chairman of the board of directors <sup>(4)</sup>
Dov Hershberg	73	Director <sup>(4)</sup>
Alex Kotzer	66	Director
Arie Ovadia, Ph.D	63	Director(1)(2)(3)(4)
Prof. Joshua Shemer	65	Director(1)(2)(3)(4)
Anat Cohen-Dayag, Ph.D	46	President and Chief Executive Officer
Dikla Czaczkes Axselbrad	39	Chief Financial Officer
John Hunter	50	Vice President Antibody Research and Development

- (1) Qualifies as an external director pursuant to the Israeli Companies Law
- (2) Member of our Audit Committee
- (3) Member of our Compensation Committee
- $(4) \ Standing \ for \ re-election \ at \ Compugen's \ for thcoming \ annual \ general \ meeting \ of \ shareholders \ scheduled \ for \ April \ 15, \ 2013$

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 15, 2010. 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 presently serves as its President. 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 and she received an Honorary Doctorate from Ben-Gurion University and from the Tel Aviv University. In addition, Prof. Arnon is the incumbent of the Paul Ehrlich Chair in Immunochemistry at the Weizmann Institute.

Martin S. Gerstel joined Compugen's board of directors in 1997, and has served as the Chairman of the board of directors, 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. Mr. Gerstel is the Chairman of Evogene Ltd., Keddem Bioscience Ltd., the co-founder and co-chairman of Itamar Medical Ltd., and serves as a director of Yissum Ltd., Yeda Ltd. and the U.S. Foundation for the National Medals of Science and Technology. He is a member of the Board of Governors and the Executive Committee of the Weizmann Institute of Science and the Board of Governors of The Hebrew University of Jerusalem, and is an advisor to the Burrill Life Science Funds and the board of the Israel-U.S. Binational Industrial Research and Development ("BIRD") Foundation. Mr. Gerstel holds a B.S. from Yale University and an MBA from Stanford University.

Dow Hershberg joined Compugen's board of directors in February 2009, prior to which he served as a consultant to the board of directors. From February 2009 through February 2010, Mr. Hershberg served as Chairman of the board of directors. Mr. Hershberg previously managed the Israel-U.S. Binational Industrial Research and Development ("BIRD") Foundation from 1997 through 2006. Mr. Hershberg is currently a founder and executive director of Powermat Technologies Ltd., a wireless electricity company. Prior to joining BIRD, Mr. Hershberg held various senior management positions of software development, marketing and sales. He was the founder and CEO, with colleagues from Stanford University, of Molecular Applications Group which created software in biomedical research. Mr. Hershberg spent eleven years at Digital Equipment Corporation in various senior management positions in product development, marketing and sales and worked as a mathematician in the Israeli Aircraft Industry. 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

Alex Kotzer joined Compugen's board of directors in September 2005. From September 2005 and until December 2008 he served also as President and Chief Executive Officer of the Company. Since February, 2010, Mr. Kotzer has served as the CEO and Chairman of the Board of Regenera Pharma Ltd. Prior to joining Compugen, he served for twelve years at Serono (currently Merck Serono S.A.), a global biotechnology leader, headquartered in Switzerland. During his tenure at Serono, Mr. Kotzer held several senior positions, first as the CEO of InterPharm Laboratories, Ltd., Serono's Israeli affiliate and then after relocating to Switzerland, as Vice President of Biotechnology Manufacturing. Before joining Serono, he held a variety of managerial positions in the food and chemical industries. Mr. Kotzer received his B.Sc. in Chemical Engineering from the Technion, Israel Institute of Technology, of Haifa, Israel.

Arie Ovadia, Ph.D. joined Compugen's board of directors as an external director in July 2007 and was reappointed as an external director on April 15, 2010. 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., ViryaNet Ltd., Bazan Ltd., Scailex Corporation Ltd., Maxtech Technologies Ltd., Carmel Olefins 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 on April 15, 2010. Prof. Shemer is Full Professor of Medicine 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. Prof. Shemer teaches Medical Technology Management at the Faculty of Business Administration 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. Most recently, Prof. Shemer was 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 in Israel.

Anat Cohen-Dayag, Ph.D. 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 an external director of Ramot at Tel Aviv University Ltd., and a director of the IATI (Israeli Advanced Technologies Industries).

Dikla Czaczkes Axselbrad became Chief Financial Officer of Compugen in 2008. Prior to her current position, Ms. Czaczkes Axselbrad served as director of finance for Compugen from 2002 through 2007. Before joining Compugen, Ms. Czaczkes Axselbrad was chief financial officer of Packet Technologies Ltd., a mobile internet security hardware and software startup company and before that an audit manager at Ernst & Young Israel. She holds an MBA in finance and a BA in accounting and economics, both from the Tel Aviv University, and is a certified public accountant in 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 16 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.

### Arrangements Involving Directors and Senior Management

There are no arrangements or understandings of which we are aware pursuant to which any of our directors or executive officers have been selected for their positions with our company. In addition, there are no family relationships among any of our directors and executive officers.

### B. COMPENSATION

The aggregate compensation paid or accrued by us to all persons listed above who served as directors or senior management for the year 2012 (10 persons) was approximately \$1 million. This amount includes approximately \$78,000 set aside or accrued to provide pension, severance, retirement or similar benefits.

During 2012, we granted a total of 417,500 options to purchase ordinary shares to the above listed directors and senior management, as a group. These options are exercisable at a range between \$3.23 and \$5.99 per share, and generally expire ten years after their respective dates of grant. As of December 31, 2012, there were a total of 2,912,348 outstanding options to purchase ordinary shares that were held by our directors and senior management.

All non-management members of our board of directors are entitled to receive fees in connection with their participation in board meetings as well as meetings of committees of the board and are also eligible to receive options to purchase ordinary shares on an annual basis. For additional information on the compensation paid to our non-management directors please see Compensation to our Office Holders under "Item 6 – Directors, Senior Management and Employees." The aggregate amount paid to all of our non-management directors for the year ended December 31, 2012 was approximately \$102,000.

# Approval Required for Directors' and Officers' Compensation

Prior to a recent amendment to the Companies Law, which became effective on December 12, 2012 (the "2012 Amendment"), arrangements with respect to office holder's terms of office and employment required the approval of the audit committee and the board of directors and, with respect to the terms of office and employment of directors, also the approval of the shareholders by a simple majority. Following the 2012 Amendment, public companies are required to appoint a compensation committee that meets certain independence criteria as described below, and that replaces the audit committee with respect to the approval of these matters.

Pursuant to the 2012 Amendment, any arrangement between a public company and an office holder of the company as to such office holder's terms of office and employment, including the grant of exculpation, an undertaking to indemnify the office holder, post factum indemnification or insurance, any grant, payment, remuneration, compensation, or other benefit provided in connection with such office holder's termination of service, and any benefit, other payment or undertaking to provide any such payment ("Terms of Office and Employment"), now generally requires the approval of the company's compensation committee and the board of directors and, with respect to directors and the chief executive officer, also the company's shareholders.

The term "office holder" as defined in the Companies Law includes a general manager, chief executive officer, executive vice president, vice president, any other person fulfilling or assuming any of the foregoing positions without regard to such person's title, as well as a director or a manager directly subordinate to the general manager or chief executive officer.

In addition, pursuant to the 2012 Amendment, such office holder's Terms of Office and Employment are to meet the provisions of a compensation policy for office holders, which the Company is required to adopt by September 11, 2013 (the "Compensation Policy"). The Compensation Policy must be based on those considerations, must include those provisions and needs to reference those matters as are detailed in the Companies Law. The Compensation Policy must be approved by the board of directors, after considering the recommendations of the compensation committee. In addition, the Compensation Policy needs to be approved by the company's shareholders by a simple majority, provided that (i) such majority includes at least a majority of the shareholders who are not controlling shareholders and who do not have a personal interest in the matter, present and voted against the election, hold two percent or less of the voting power of the company (the "Compensation Majority").

The board of directors and the compensation committee may override the resolution of the shareholders following a re-discussion of the matter and for specified reasons.

A Compensation Policy that is for a period of more than three years generally needs to be brought for approval in accordance with the above procedure every three years.

Notwithstanding the above, the amendment of existing Terms of Office and Employment of office holders (other than directors) merely requires the approval of the compensation committee, if the committee determines that the amendment is not material in relation to the existing terms.

During the transition period, until a Compensation Policy is adopted, the Terms of Office and Employment of an office holder, including any amendment thereof, are required to be approved as described below with respect to the different categories of office holders and must be based on, must include and need to reference the same matters as those required with respect to the Compensation Policy described above.

### Directors

Pursuant to the 2012 Amendment, any arrangement between a company and a director as to his/her Terms of Office and Employment should be in line with the Compensation Policy and requires the approval of the compensation committee, the board of directors and the general meeting by a simple majority.

Under certain circumstances and conditions, the compensation committee and the board of directors may approve an arrangement that deviates from the Compensation Policy, provided that such arrangement is approved by the company's shareholders by the Compensation Majority. Such approval will also be required in the transition period until the company adopts a Compensation Policy.

Under the Companies Law and regulations promulgated pursuant thereto, the compensation payable to external directors and independent directors is subject to certain further limitations.

# Chief Executive Officer

Pursuant to the 2012 Amendment, any arrangement between a company and its chief executive officer who is not a director as to his other Terms of Office and Employment must be in line with the Compensation Policy and requires the approval of the compensation committee, the board of directors and the company's shareholders by the Compensation Majority.

Under certain circumstances and conditions, the compensation committee and the board of directors may approve an arrangement that deviates from the Compensation Policy provided it is approved by the shareholders by the Compensation Majority. Such approval will also be required during the transition period until the company adopts a Compensation Policy. In addition, under certain circumstances, a company may be exempt from receiving the shareholders' approval with respect to the Terms of Office and Employment of a new candidate for chief executive officer.

In special circumstances the board of directors and the compensation committee may override the resolution of the shareholders following a re-discussion of the matter and for specified reasons.

### Other Office Holders

Pursuant to the 2012 Amendment, any arrangement between a company and an office holder (other than a director or the chief executive officer) as to his or her Terms of Office and Employment must be in line with the Compensation Policy and requires the approval of the compensation committee and the board of directors.

Under certain circumstances and conditions, the compensation committee and the board of directors may approve an arrangement that deviates from the Compensation Policy, provided that such arrangement is approved by the company's shareholders by the Compensation Majority. In special circumstances the board of directors and the compensation committee may override the resolution of the shareholders following a re-discussion of the matter and for specified reasons. During the transition period until the company adopts a Compensation Policy, the compensation committee and the board of directors may approve the Terms of Office and Employment of such office holder.

# Compensation to our Office Holders

Our shareholders previously approved that all non-management members of our board of directors (including external directors) are entitled to receive fees in connection with their participation in board of directors meetings as well as meetings of committees of the board of directors and are also eligible to receive options to purchase our ordinary shares on an annual basis. The Company's shareholders previously approved the following compensation for each of our non-management directors:

- an annual amount of \$10,000, and an additional annual amount of \$5,000 to be paid to non-management board members who serve on one or more of the board committees;
- a payment of \$1,000 per participation in each board meeting, provided that if such participation is both by telephone and less than 4 hours in total, then such "per meeting day" fee shall be \$500;
- an initial grant of options to purchase 40,000 of our ordinary shares was granted on July 31, 2007 to our non-management directors that were in office at that time. Such options are fully vested;
- an additional grant of options to purchase 10,000 of our ordinary shares per year on each annual anniversary of the initial grant, to each non-management director then serving on the board of directors, at an exercise price equal to the closing price on the date of such grant, as reported by The NASDAQ Capital Market. Such additional options vest as follows: 3,333 of the options vest on each of the first two anniversary dates of such grant and 3,334 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 Compugen or otherwise: (a) a sale of all or substantially all of our 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 our equity or voting power by any shareholder or group of shareholders. Notwithstanding the terms of the relevant plan, all options granted which shall be vested as of the date of termination of services by a non-management director, may be exercised within one year after the cessation of his or her term as a director of Compugen;
- VAT is added to the above compensation in accordance with applicable law.

On February 28, 2010, Mr. Dov Hershberg provided our board of directors with a letter under which he voluntarily and irrevocably (i) waived all Compugen stock options held by him solely to the extent that such options would vest after December 31, 2010; and (ii) waived any and all additional cash or additional stock options that would otherwise be due to him as a director of the Company for service prior to January 1, 2011.

Mr. Martin Gerstel, our active chairman of the board of directors, is not entitled to receive the above compensation. Effective as of March 1, 2010, and following the approval of our Audit Committee, Board and shareholders, we entered into an employment agreement with Mr. Gerstel, according to which he is entitled to employment terms as required by Israeli law. The employment agreement may be terminated by either party by providing 90 days prior written notice. As part of his employment agreement, our shareholders have approved the following compensation to Mr. Gerstel:

- a gross monthly salary of NIS 42,000 (approximately \$11,410 pursuant to the exchange rate of \$1.00= NIS 3.681 as of March 15, 2013); and
- a grant of options to purchase 125,000 of our ordinary shares at an exercise price of \$5.00 per share. Such options are subject to the terms and conditions of the Company's 2010 Share Incentive Plan except that the options vest as follows: beginning on January 31, 2013 and ending on December 31, 2013, 1/12 of the options vest on the last day of each month during 2013. These options shall expire on July 26, 2020, unless they expire earlier in accordance with the terms of the Company's 2010 Share Incentive Plan.

In addition to the above on July 3, 2012 our shareholders approved for Mr. Gerstel a one-time grant of options to purchase 62,500 of our ordinary shares at an exercise price of \$4.01 per share. Such options are subject to the terms and conditions of the Company's 2010 Share Incentive Plan except that the options shall vest as follows: beginning on January 31, 2014 and ending on December 31, 2014, 1/12 of the options shall vest on the last day of each month during 2014. These options shall expire on July 26, 2021, unless they expire earlier in accordance with the terms of the Company's 2010 Share Incentive Plan.

Indemnification, Insurance and exemption

The Company's Articles of Association (the "Articles") permit the Company, subject to the provisions of the Companies Law and the Articles, to exculpate, indemnify (in advance and retrospectively) and insure its directors and officer holders to the fullest extent permitted therein. The Company's directors and officers are currently covered by a directors' and officers' liability policy. The Company's shareholders previously resolved to provide the Company's directors and certain other office holders with indemnification from any liability for damages caused as a result of a breach of duty of care to the fullest extent permitted by law, and to provide such directors and other office holders with an exemption, all in accordance with and pursuant to the terms set forth in the Company's standard indemnification undertaking.

### C. BOARD PRACTICES

We are incorporated in Israel, and, therefore, are subject to various corporate governance practices under Israeli law relating to such matters as external directors, independent directors, the audit committee, the compensation committee and the internal auditor. These matters are in addition to the requirements of the NASDAQ Capital Market and other relevant provisions of U.S. securities laws. Under the NASDAQ Listing Rules of the NASDAQ Stock Market, which we refer to as the NASDAQ Listing Rules, a foreign private issuer may generally follow its home country practices for corporate governance in lieu of the comparable NASDAQ Capital 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. We currently comply with this requirement. In addition, under the Companies Law, we are required to appoint at least two external directors, with which we comply, as described below under "External Directors".

# **Board of Directors**

Our board of directors consisted of seven members as of February 28, 2013, 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 for a term of approximately one year, ending at the annual general meeting immediately following the annual general meeting at which they were elected or upon the election or appointment of a new director in his or her place. Our Articles of Association, which we refer to as 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. We have entered into an employment agreement with our active chairman of the board of directors Mr. Martin Gerstel, according to which he is entitled to employment terms required by Israeli law, including severance payments (for additional information on the employment agreement entered into with Mr. Martin Gerstel, please see Compensation to our Office Holders under "Item 6 – Directors, Senior Management and Employees."

# **External Directors**

# Qualifications of External Directors

The Companies Law requires Israeli companies with shares that have been offered to the public either in or outside of the State of Israel to appoint at least two external directors. The Companies Law provides that no person may be appointed as an external director of a company if such person is a relative of a controlling shareholder or if such person, a relative, partner or employer, of that person or anyone to whom such person is directly or indirectly subordinate, or any entity under the person's control, has or had, on or within the two years preceding the date of that person's appointment to serve as an external director, any affiliation with the company to whose board the external director is proposed to be appointed, with any controlling of such company, a relative of such controlling shareholder, or any entity controlled, on the date of that person's appointment to within the two years preceding the date of the appointment, by the company or by a controlling shareholder or shareholder or shareholder holding 25% or more of the company's voting rights, any affiliation, at the time of the appointment, with the chairman of the board of directors, the chief executive officer, 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;
- · control: and
- service as an office holder as such term is defined under the Companies Law (which term includes a director).

In addition, no person may serve as an external director if: (a) the person's position or other activities create, or may create, a conflict of interest with the person's responsibilities as a director or interfere with the person's ability to serve as a director; (b) at the time such person serves as a non-external director of another company on whose board of directors a director of the reciprocal company serves as an external director; (c) the person is an employee of the Israel Securities Authority or of an Israeli stock exchange; (d) such person or such person's relative, partner, employer or anyone to whom such person is directly or indirectly subordinate, or any entity under such person's control, has business or professional relations with any person or entity he or she should not be affiliated with, as described in the previous paragraph, unless such relations are negligible; or (e) such person received compensation directly or indirectly, in connection with such person's services as a director, other than as permitted under the Companies Law and the regulations promulgated thereunder. If, at the time of election of an external director, all other directors who are not controlling shareholders of the company or their relatives, are of the same gender, the external director to be elected must be of the other gender.

The Companies Law requires that an external director have either accounting and financial expertise or professional qualifications according to criteria set forth in regulations promulgated by the Israeli Minister of justice, provided that at least one of the external directors has 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.

### Election of External Directors

External directors are elected at the general meeting of shareholders by a simple majority, provided that the majority includes at least a majority of the shareholders who are not controlling shareholders and who do not have a personal interest in the matter (other than a personal interest which is not the result of an affiliation with a controlling shareholder) who are present and voting at the meeting (abstentions are disregarded in this calculation) or that the non-controlling shareholders or shareholders who do not have a personal interest in the matter (other than a personal interest which is not the result of an affiliation with a controlling shareholder), who are present and voted against the election did not exceed two percent of the total voting power of the company.

External directors are elected for a term of three years and may be re-elected for two additional terms of three years each, provided that with respect to the appointment for each such additional three year term one of the following has occurred: (a) the reappointment of the external director has been proposed by one or more shareholders holding together one percent or more of the aggregate voting rights in the company and the appointment was approved by a majority at the general meeting, provided that: (i) in calculating the majority, votes of controlling shareholders or shareholders having a personal interest in the appointment (other than a personal interest which is not the result of an affiliation with a controlling shareholder) and steen and steen and interest in the appointment of the appointment exceed two percent of the total voting rights in the company; or (b) the reappointment of the external director has been proposed by the board of directors and the appointment was approved by the majority required for the initial appointment of an external director.

However, under regulations promulgated pursuant to the Companies Law, companies whose shares are also registered for trading on specified exchanges outside of Israel, including the NASDAQ Global Market on which the Company's ordinary shares are listed, may elect external directors for additional terms that do not exceed three years each, beyond the three three-year terms generally applicable, provided that, if an external director is being re-elected for an additional term or terms beyond the three three-year terms (i) the audit committee and the board of directors must determine that, in light of such external director's expertise and special contribution to the board of directors and its committees, the re-election for an additional term is for the company's benefit; (ii) the external director must be re-elected by the required majority of shareholders and subject to the terms specified in the Companies Law; and (iii) the term during which the nominee has served as an external director and the reasons given by the audit committee and the board of directors for extending his or her term of office must be presented to the shareholders prior to their approval.

An external director may receive compensation solely as provided in regulations promulgated pursuant to the Companies Law governing the terms of compensation payable to external directors.

Each committee of a company's board of directors that has the right to exercise powers of the board of directors must include at least one external director and its audit committee and compensation committee must include all of the external directors.

An external director can not be dismissed from office unless: (i) the board of directors determines that the external director no longer meets the statutory requirements for holding the office, or that the external director is in breach of his or her fiduciary duty of loyalty to the company, and the shareholders vote, by the same majority of shareholders as is required for his or her appointment, to remove the external director after the board of directors' reasoning have been brought before the shareholders and the external director has been given the opportunity to present his or her position; (ii) a court determines, upon a request of a director or a shareholder, that the external director ceases to meet the statutory requirements for his or her appointment or that the external director is in breach of his or her fiduciary duty of loyalty to the company; or (iii) a court determines, upon a request of the company or a director, shareholder or creditor of the company, that the external director is unable to fulfill his or her duty, or has been convicted of specified crimes. If an external director no longer meets the statutory requirements for holding the office he or she must notify the company to that effect immediately, and his or her service will expire immediately upon submission of such notice. If an external directorship becomes vacant and the number of external directors serving in the company is less than two, then a company's board of directors is required under the Companies Law to call a shareholders' meeting as soon as possible to appoint a new external director.

Following termination of service of an external director, a public company, a controlling shareholder thereof and any entity controlled by a controlling shareholder, may not grant any benefit, directly or indirectly, to such external director, or to his or her relative, including, not appointing such external director, or his or her relative, as an office holder of such company or of an entity controlled by a controlling shareholder of such public company, not employing such external director or his or her relative and not receiving professional services for pay from such external director or his or her relative, all until the lapse of two years from termination of office with respect to the external director, his or her spouse or child and until the lapse of one year from termination of office with respect to other relatives of the former external director.

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 on April 15, 2010 for an additional three year term that expires on April 14, 2013.

### Independent Directors under the Companies Law

The Companies Law also defines 'independent directors'. 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 subject 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. An independent director may be removed from office in the same manner that an external director may be removed.

Pursuant to the Companies Law, a public company, such as us, may include in its articles of association a provision providing that a specified number of its directors be independent directors or may adopt a standard provision providing that a majority of its directors be independent directors or, if there is a controlling shareholder or a 25% or more shareholder, that at least one-third of its directors be independent directors.

The company has not included in its Articles a provision providing that a specified number of its directors must be independent directors.

Pursuant to the Companies Law, independent directors shall receive the same compensation as an external director. In addition and similarly to an external director, following termination of service as an independent director, a company, a controlling shareholder thereof and any entity controlled by a controlling shareholder, may not grant any benefit, directly or indirectly, to such director, or to his or her relative, including, not appointing such independent director, or his or her relative, as an office holder of such company or of an entity controlled by a controlling shareholder of such company, not employing such independent director or his or her relative and not receiving professional services for pay from such independent director or his or her relative, either directly or indirectly, including through a corporation controlled by such independent director, or his or her relative, all until the lapse of two years from termination of office with respect to the director, his or her spouse or child and until the lapse of one year from termination of office with respect to other relatives of the former director.

Regulations promulgated pursuant to the Companies Law provide that a director in a company whose shares are listed for trading on specified exchanges outside of Israel, including the NASDAQ Global Market on which the Company's ordinary shares are listed, who qualifies as an independent director under the relevant non-Israeli rules relating to independence standards for audit committee membership and who meets certain non-affiliation criteria, which are less stringent than those applicable to external directors, would be deemed an independent director pursuant to the Companies Law provided (i) he or she has not served as a director for more than nine consecutive years, (ii) he or she has been approved as such by the audit committee, and (iii) his or her remuneration shall be the same as that applicable to external directors. 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. Furthermore, pursuant to these regulations, such company may re-appoint a person as an independent director for additional terms, beyond nine years, which do not exceed three years each, if the audit committee and the board of directors determine that in light of the independent director's expertise and special contribution to the board of directors and its committees, the re-appointment for an additional term is to the company's benefit.

The Company has not included in its Articles a provision providing that a specified number of its directors must be independent directors.

# 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 Capital 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 four of the seven members of our board of directors - Professor Yair Aharonowitz, Dr. Arie Ovadia, Professor Joshua Shemer and Professor Ruth Arnon-have been determined by our board of directors to meet the NASDAQ independence requirements.

### 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 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 and 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 such will expire upon submission of such notice.

#### **Board Committees**

### Audit Committee

Under the listing requirements of The NASDAQ Capital Market, a foreign private issuer is 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 the issuer's independent auditors. 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 Companies Law also requires public companies such as ours to appoint an audit committee comprised of at least three directors, including all of the external directors, and the majority of the members of the audit committee must be independent directors (as described above under -- "Independent Directors under the Companies Law").

The Companies Law further stipulates that the following may not be members of the audit committee: (a) the chairman of the board of directors; (b) any director employed by or providing services on an ongoing basis to the company, to a controlling shareholder of the company or an entity controlled by a controlling shareholder of the company; (c) a director whose livelihood depends on a controlling shareholder; or (d) a controlling shareholder or any relative of a controlling shareholder.

The Companies Law further requires that: (i) the chairman of the audit committee be an external director; (ii) generally, any person who is not entitled to be a member of the audit committee may not attend the audit committees meetings; and (iii) the quorum required for the convening of meetings of the audit committee and for adopting resolutions by the audit committee be a majority of the members of the audit committee provided that the majority of the members present are independent directors and at least one of them is an external director.

Under the Companies Law, our audit committee is responsible for (i) identifying flaws in the management of a company's business and making recommendations to the board of directors as to how to correct them, (ii) with respect to certain actions involving conflicts of interest and with respect to certain related party transactions, deciding whether such actions are material actions are material actions and whether such transactions are extraordinary transactions, respectively, all for the purpose of approving such actions or transactions; (iii) reviewing and deciding whether to approve certain related party transactions (as defined under "Item 10. Additional Information— Memorandum and Articles of Association— Fiduciary Duties of Office Holders" below) or certain actions involving conflict of interest, (iv) reviewing the internal auditor's work program, (v) examining the company's internal control structure and processes, the performance of the internal auditor and whether the internal auditor has at his or her disposal the tools and resources required to perform his or her duties, considering, inter alia, the special needs of the company and its size, (vi) examining the external auditor's scope of work as well as the external auditor's fees and providing the corporate organ responsible for determining the external auditor's fees with its recommendations, and (vii) providing for arrangements as to the manner in which the company will deal with employee complaints with respect to deficiencies in the administration of the company's business and the protection to be provided to such employees.

Our audit committee also oversees our accounting and financial reporting processes as well as pre-approve our financial statements. It also provides assistance to our board in fulfilling its legal and fiduciary obligations with respect to matters involving the accounting, auditing, financial reporting and internal control functions of the Company. The audit committee also monitors generally 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 the Company's external auditors the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments and the clarity of disclosures in the Company's financial statements, as and when it deems it appropriate to do so.

Under the NASDAQ Listing Rules the audit committee is responsible for the appointment, compensation, retention and oversight of the work of the company's independent auditors, among other things. However, under Israeli law, the appointment of independent auditors and their compensation require the approval of the shareholders of the company, or, with respect to their compensation, the approval of the board of directors if so determined in the company's articles of association or by the shareholders. Our Articles have authorized our board of directors to determine the compensation of our independent auditors. In addition, pursuant to the Companies Law, the audit committee is required to examine the independent auditors' fees and to provide its recommendations with respect thereto to the appropriate corporate organ. Accordingly, the appointment of the independent auditors will be required to be approved and recommended to the shareholders by the audit committee and approved by the shareholders. The compensation of the independent auditors will be required to be approved by the audit committee and approved by the board of directors and approved by the board of directors.

We have an audit committee consisting of three independent directors, all of whom are financially literate and one of whom has accounting or related financial management expertise. The members of the audit committee are Dr. Arie Ovadia, who serves as the chairman of our audit committee, Professor Yair Aharonowitz, and Professor Joshua Shemer. All of the members of our audit committee qualify as independent directors under the current NASDAQ Listing Rules and as 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 under the above-described legal requirements.

### **Compensation Committee**

Under the 2012 Amendment, the Companies Law requires public companies to appoint a compensation committee comprised of at least three directors, including all of the external directors, who must generally also constitute a majority of the members. All other members of the compensation committee, who are not external directors, must be directors who receive compensation that is in compliance with the regulations promulgated pursuant to the Companies Law governing the terms of compensation payable to external directors. In addition, the chairperson of the compensation committee must be an external director.

The Companies Law further stipulates that the following may not be members of the compensation committee: (a) the chairman of the board of directors; (b) any director employed by or providing services on an ongoing basis to the company, to a controlling shareholder of the company or an entity controlled by a controlling shareholder of the company; (c) a director whose livelihood depends on a controlling shareholder; and (d) a controlling shareholder or any relative of a controlling shareholder.

The Companies Law further provides that similar to the audit committee, generally, any person who is not entitled to be a member of the compensation committee may not attend the compensation committee's meetings

The responsibilities of the compensation committee under the Companies Law include: (i) making recommendations to the board of directors with respect to the approval of the Compensation Policy and any extensions thereto, (ii) periodically reviewing the implementation of the Compensation Policy and providing the board of directors with recommendations with respect to any amendments or updates thereto, (iii) reviewing and resolving whether or not to approve arrangements as to the terms of service and/or employment of office holders or a controlling shareholder or such controlling shareholder's relative, and (iv) resolving whether or not to exempt a transaction with a candidate for chief executive officer from shareholder approval.

We have recently established a compensation committee consisting of our three external directors. The members of the compensation committee are Dr. Arie Ovadia, who serves as the chairman of our compensation committee, Professor Yair Aharonowitz, and Professor Joshua Shemer.

#### Other Committees

Our board of directors does not maintain a nominating committee. The functions of such committee is performed by the full board of directors. This practice is compliant with Israeli law and, as a foreign private issuer under the SEC's rules, we have elected, pursuant to NASDAQ Listing Rule 5615(a)(3), to follow Israeli practice, in lieu of compliance with the NASDAQ Listing Rules 5602(d) or 5602(e).

### Director and Officer Compensation

Until the appointment of our compensation committee recently, our audit committee served as the body with authority for establishing appropriate compensation levels for our executives officers (subject to follow-up approval by the board of directors as a whole). In setting compensation levels, our audit committee and board of directors were guided by the levels of compensation provided to executives in other companies in our industry and our home country, as adjusted to account for differences in size and other relevant distinguishing factors.

Pursuant to the 2012 Amendment the Company's compensation levels for executives officers will need to be reevaluated and gathered into a Compensation Policy.

For additional information on the approval procedure of compensation to office holders, please see Approval Required for Directors' and Officers' Compensation under "Item 6. Directors, Senior Management and Employees."

### 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 procedure. Under the Companies Law, an interested party or an office holder, or a relative of an interested party or of an office holder, as well as the company's independent auditors or any one on such person's behalf 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. "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 director or more 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 Hila Barr of Brightman Almagor Zohar & Co., a member company of Deloitte Touche Tohmatsu, as its internal auditor. Hila Barr is not an employee, affiliate or office holder of the Company, or affiliated with the Company's independent auditors.

### D. EMPLOYEES

The following table sets out the number of our employees engaged in specified activities, at the end of the fiscal years 2012, 2011 and 2010 (the numbers include employees of our wholly owned U.S. subsidiary Compugen USA Inc.:

	December 31,	December 31,	December 31,
	2012	2011	2010
Research & Development	*38	28	27
Administration, Accounting and Operations	*12	10	11
Marketing and Business Development	2	1	1
Total	52	39	39

<sup>\*</sup> includes one employee on a part-time basis

For the years ended December 31, 2010 and 2011 all of our employees were based in Israel. 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, 2012, 42 of our employees were located in Israel and 9 were located in the U.S.

The Israeli labor laws govern the employment of our employees. These statutes cover a wide range of subjects and provide certain minimum employment standards including the length of the workday, minimum wage, hiring and dismissal procedures, determination of severance pay, annual leave, sick days and other terms of employment. In addition we have entered into an employment agreement with our active chairman of the board, Mr. Martin Gerstel, according to which he is entitled to employment terms required by Israeli law. The employment agreement may be terminated by either party by the providing 90 days, prior written notice (for additional information on the employment agreement entered into with Mr. Martin Gerstel, please see Compensation to our Office Holders under "Item 6 – Directors, Senior Management and Employees").

We contribute monthly amounts for the benefit and on behalf of all our employees located in Israel to a managers insurance plan and/or a pension plan on account of remuneration and severance pay. Our severance pay liability to our employees is based upon the number of years of their employment and their latest monthly salary and is partly covered by the amounts contributed to the managers insurance plan and the pension plan.

Our employees are not represented by a labor union. We have written employment contracts with each of our employees. We have never experienced labor-related work stoppages and we believe that our relations with our employees are good.

### E. SHARE OWNERSHIP

# Share Ownership by Directors and Senior Management

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 February 28, 2013, 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 February 28, 2013. The information in this table is based on 37,265,679 ordinary shares outstanding as of February 28, 2013.

Beneficial Owner	Amount Owned	Percent of Class
Martin S. Gerstel (1)	2,385,015	6.31%
Anat Cohen-Dayag (2)	654,768	1.73%
All directors and senior management as a group (10 persons) (3)	3,936,533	10.01%

- (1) Includes (i) 500,000 shares held by Shomar Corporation, an affiliate of Mr. Gerstel, (ii) 619,033 shares held by Merrill Lynch IRA for Martin S. Gerstel, of which Martin S. Gerstel is the beneficiary, and (iii) 734,735 shares held in a trust for which Martin S. Gerstel and his immediate family are the beneficiaries. Also includes 531,247 shares subject to options that are currently exercisable or that become exercisable within 60 days after February 28, 2013 with a weighted average exercise price of \$0.76 per share and which expire between January 2019 and February 2020.
- (2) Consists of 654,768 shares subject tooptions that are exercisable within 60 days after February 28, 2013 with a weighted average exercise price of \$2.58 per share, and which expire between April 2013 and February 2020.
- (3) Includes (i) a total of 3,039,783 shares and shares subject options that are beneficially owned by Martin S. Gerstel and Anat Cohen-Dayag as noted in Notes 1 and 2, (ii) 891,750 shares subject to options that are beneficially owned by other officers and directors, with a weighted average exercise price of \$2.58 per share and which expire between July 2013 and January 2022 and (iii) 5,000 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 10 of our 2012 consolidated financial statements.

Our board of directors administers our share option plans and subject 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, please see Approval Required for Directors' and Officers' Compensation under "Item 6. Directors, Senior Management and Employees"), has the authority to designate all 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 shares then remaining available for grant under the 2000 Option Plan. As of December 31, 2012, options to purchase 4,065,915 ordinary shares at a weighted average exercise price of approximately \$2.77 per share were outstanding (i.e., were granted but not canceled, expired or exercised) under the 2000 Plan. Options to purchase 3,636,224 ordinary shares under the plan have previously been exercised at a weighted average exercise price of approximately \$2.74.

### Compugen 2010 Share Incentive Plan

On July 25, 2010, our board of directors adopted the Compugen 2010 Share Incentive Plan or the "2010 Option Plan", and determined to cease making grants under the 2000 Option Plan. The adoption of the 2010 Option 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 Options 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 Options Plan. 1,953,851 shares were initially reserved for the grant under the 2010 Options Plan. In keeping with our board of directors' and shareholders' resolution any shares subject to options granted under the 2000 Option Planprior to the adoption of the 2010 Options Plan which terminate unexercised, will also be made available for future grants under the 2010 Options Plan. On August 06, 2012 our board of directors adopted certain amendments to the 2010 Option Plan which, among other things, provided for additional types of awards, namely restricted share and restricted share unit awards.

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 Option 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, 2012, options to purchase 2,523,300 ordinary shares at a weighted average exercise price of approximately \$4.26 per share were outstanding (i.e., were granted but not canceled, expired or exercised) under the 2010 Options Plan. No options under this plan have previously been exercised. Options to purchase 2,969,072 ordinary shares remain available for future grant as of December 31, 2012.

# 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 Israeli Income Tax Ordinance (New Version), 1961 (the "Tax Ordinance") or the "Tax Ordinance") for the grant of options to Israeli grantees.

As a result of an amendment to Section 102 of the Tax Ordinance and pursuant to an election made by our board of directors thereunder, gains derived by employees (which term includes directors) in Israel arising from the sale of Restricted Shares or shares delivered in settlement of RSUs or 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 may also include a salary income component. 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 regarding beneficial ownership of our ordinary shares as of February 28, 2013 by each person who is known by us to own beneficially more than 5% of our outstanding ordinary shares. The voting rights of our major shareholders do not differ from the voting rights of other holders of our ordinary shares.

	Number of	
	Ordinary Shares	
	Beneficially	Percent of
Beneficial Owner	Owned	Ownership
Martin Gerstel (1)	2,385,015	6.31%

Includes (i) 500,000 shares held by Shomar Corporation, an affiliate of Mr. Gerstel, (ii) 619,033 shares held by Merrill Lynch IRA for Martin S. Gerstel, of which Martin S. Gerstel is the beneficiary, and (iii) 734,735 shares held in a trust for which Martin S. Gerstel and his immediate family are the beneficiaries. Also includes 531,247 shares subject to options that are currently exercisable or that become exercisable within 60 days after February 28, 2013 with a weighted average exercise price of \$0.76 per share and which expire between January 2019 and February 2020.

As of February 28, 2013, there were a total of 71 holders of record of our ordinary shares, of which 49 were registered with addresses in the United States. Such United States holders were, as of such date, the holders of record of approximately 99% of the outstanding ordinary shares. Our ordinary shares are traded on the NASDAQ Capital Market in the United States. A significant portion of our shares are held in street name, therefore we generally have no way of determining 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:

	Percentage of		
	Outstanding	Percentage of	Percentage of
	Ordinary	Outstanding	Outstanding
	Shares Owned	Ordinary Shares	Ordinary Shares
	as of	Owned as of	Owned as of
Name of Beneficial Owner	December 31, 2010	Fenruary 29, 2012	February 28, 2013
Martin Gerstel	6.21%	6.29%	6.31%
Clearbridge Advisors LLC (2)	6.06%	6.23%	(1)
Morgan Stanley (3)	5.18%	5.38%	(1)

- (1) Percentage of outstanding shares as of such date is unknown, but is less than 5%.
- (2) Percentage of outstanding shares owned as of December 31, 2010 is based solely on a Schedule 13G/A filed with the SEC on February 11, 2011. Percentage of shares outstanding as of February 29, 2012 is based solely on a Schedule 13G/A filed with the SEC on February 14, 2012.
- (3) Percentage of outstanding shares owned as of December 31, 2010 is based solely on a Schedule 13G/A filed with the SEC on February 14, 2011. Percentage of shares outstanding as of February 29, 2012 is based solely on a Schedule 13G/A filed with the SEC on February 10, 2012.

### B. RELATED PARTY TRANSACTIONS

Martin Gerstel, our Chairman of the board of directors has an employment agreement with the Company pursuant to which he serves as active Chairman of the board of directors. For additional information on the employment agreement entered into with Mr. Martin Gerstel, please see Compensation to our Office Holders under "Item 6 – Directors, Senior Management and Employees").

In addition, our shareholders approved that all non-management members of our board of directors are entitled to receive fees in connection with their participation in board of directors meetings as well as meetings of committees of the board of directors and are also eligible to receive options to purchase our ordinary shares on an annual basis.

Furthermore, our directors and officers are currently covered by a directors' and officers' liability policy and our directors and certain other office holders have been provided with indemnification and exemption. For additional information on the compensation paid to our non-management directors, please see Compensation to our Office Holders under "Item 6 – Directors, Senior Management and Employees").

# 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.

### 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 Enterprise and/or Benefiting Enterprise program, we would be required to recapture the deferred corporate income applicable to the amount distributed (grossed up to reflect such tax) at the rate that would have been applicable had such income not been tax-exempted (up to 25%), which would be in addition to the tax payable by the dividend payee. See Note 11 of our 2012 consolidated financial statements and "Item 10. Taxation." Cash dividends may be paid by an Israeli company only out of profits as defined for such purpose under Israeli law and provided that the distribution does not create a reasonable concern that the company will be unable to meet its existing and anticipated obligations as they become due. We currently have no retained earnings and do not expect to have any retained earnings in the foreseeable future.

# **B.** SIGNIFICANT CHANGES

See Note 16 of our 2012 consolidated financial statements.

### 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, 2010, we transferred the listing of our ordinary shares from The NASDAQ Global Market to The NASDAQ Capital Market. The high and low sales prices per share of our ordinary shares for the periods indicated are set forth below:

Year Ended	Н	igh	L	ow
December 31, 2008	\$	2.80	\$	0.34
December 31, 2009	\$	5.86	\$	0.39
December 31, 2010	\$	5.32	\$	3.04
December 31, 2011	\$	5.80	\$	3.32
December 31, 2012	\$	6.47	\$	2.96
Quarter Ended				
March 31, 2011	\$	5.80	\$	4.64
June 30, 2011	\$	5.15	\$	3.75
September 30, 2011	\$	4.67	\$	3.32
December 31, 2011	\$	5.35	\$	3.78
March 31, 2012	\$	6.47	\$	4.96
June 30, 2012	\$	6.19	\$	3.33
September 30, 2012	\$	4.50	\$	2.96
December 31, 2012	\$	5.86	\$	3.53
Month Ended				
September 30, 2012	\$	4.50	\$	3.45
October 31, 2012	\$	4.43	\$	3.53
November 30, 2012	\$	4.60	\$	3.59
December 31, 2012	\$	5.86	\$	4.50
January 31, 2013	\$	5.88	\$	4.84
February 28, 2013	\$	5.66	\$	4.97

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	H	gh*	Low*	
December 31, 2008	\$	2.81	\$ 0	0.41
December 31, 2009	\$	6.06	\$ 0	.42
December 31, 2010	\$	5.64	\$ 3	8.08
December 31, 2011	\$	5.92	\$ 3	.27
December 31, 2012	\$	6.35	\$ 3	.03
Quarter Ended				
March 31, 2011	\$	5.92		.64
June 30, 2011	\$	5.21		.80
September 30, 2011	\$	4.71		.27
December 31, 2011	\$	5.23	\$ 3	.76
March 31, 2012	\$	6.25	\$ 4	.95
June 30, 2012	\$	6.35	\$ 3	.30
September 30, 2012	\$	4.47	\$ 3	.03
December 31, 2012	\$	5.81	\$ 3	.59
Month Ended				
September 30, 2012	\$	4.47	\$ 3	.41
October 31, 2012	\$	4.38	\$ 3	.59
November 30, 2012	\$	4.66	\$ 3	.62
December 31, 2012	\$	5.81	\$ 4	.57
January 31, 2013	\$	6.05	\$ 4	.82
February 28, 2013	\$	5.83	\$ 4	.94

# B. PLAN OF DISTRIBUTION

Not applicable

# C. MARKETS

Our ordinary shares are traded in the United States on The NASDAQ Capital Market, and on the Tel Aviv Stock Exchange.

# 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

# Objects and Purposes

We are incorporated under the Companies Law under the name Compugen Ltd., public company number 51-177-963-9. The Memorandum of Association of Compugen Ltd. (the "Memorandum") was registered on January 29, 1993. On August 4, 2000, the shareholders of the Company adopted new articles of association which constitute the Company's effective Articles of Association as of the date hereof. The objective of the Company as stated in our incorporation documents is to engage in any lawful activity for which companies may be organized under the Companies Law.

### Fiduciary Duties of Office Holders

The Companies Law imposes on all office holders of a company fiduciary duties which 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 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.

Each person listed in the table under "Directors and Senior Management" which is displayed under "Item 6. Directors, Senior Management and Employees", along with our VP Human Resources Dorit Amitay, VP Research and Discovery Zurit Levine, VP Development Eyal Neria, VP Business Development Tsipi Keren-Lehrer, and our general counsel Tami Fishman Jutkowitz is considered an office holder under the Companies Law.

# Conflict of interest

### Approval of Related Party Transactions

The Companies Law requires that transactions between a company and its office holders or that benefit its office holders be approved as provided for in the Companies Law and the company's articles of association. The approval of a majority of the disinterested members of the audit committee and of the board of directors is generally required and, in some circumstances, shareholder approval may also be required.

The Companies Law further requires that any arrangement between a company and its office holders as to such office holder's terms of office and employment be approved as provided for in the Companies Law and the company's articles of association and generally requires the approval of the compensation committee and the board of directors and, in some circumstances, shareholder approval may also be required. For additional information on the approval procedure of compensation to office holders, please see Approval Required for Directors' and Officers' Compensation under "Item 6. Directors, Senior Management and Employees-Approval required for Directors' and Officers' Compensation."

### Disclosure by Office Holders

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 in an existing or proposed transaction by the company. The office holder must falso disclose related material information and documents that the office holder has about the existing or proposed transaction. The office holder must further disclose the interests of any entity in which he or she is a 5% or greater shareholder, director or general manager, or in which the office holder has the power to appoint one or more directors or the general manager. If the transaction is an extraordinary transaction, the office holder must also disclose any personal interest of his or her spouse, siblings, parents, grandparents, descendants, spouse's descendants, siblings and parents and the spouses of any of these people. This disclosure must be made no later than the first meeting of the board of directors at which the transaction is discussed. The disclosure is made to the board of directors and to the audit committee if it must approve the transaction. In those circumstances in which shareholder approval is also required, shareholders have the right to review any documents in the company's possession related to the proposed transaction. However, the company may prohibit a shareholder from reviewing the documents if the company believes the request was made in bad faith, the documents include trade secrets or patents or their disclosure could otherwise harm the company's interests.

### Approval procedure

After the office holder complies with these disclosure requirements, the company may approve the transaction under the provisions of applicable law and its articles of association. If the transaction is with an office holder or with a third party in which the office holder has a personal interest, the approval must confirm that the transaction is not adverse to the company's interest. If the transaction is an extraordinary transaction, it must be approved as required by the articles of association and must also be approved by the audit committee and the board of directors. An extraordinary transaction is a transaction: (i) other than in the ordinary course of business; (ii) on terms other than on market terms; or (iii) that is likely to have a material impact on the company's profitability, assets or liabilities

In some circumstances, shareholder approval is required. A person with a personal interest in any matter may not generally be present at any audit committee or board of directors meeting where the matter is being considered, and if a member of the committee or a director, may not generally vote on the matter.

### Transactions with controlling shareholders

The Companies Law extends the disclosure requirements applicable to an office holder to a controlling shareholder in a public company. A shareholder that holds 25% or more of the voting rights in a company would be considered a controlling shareholder for the purposes of these disclosure requirements if no other shareholder holds more than 50% of the voting rights. If two or more shareholders are interested parties in the same transaction, their shareholdings are combined for the purposes of calculating percentages. Extraordinary transactions of a public company with a controlling shareholder or in which a controlling shareholder is such controlling shareholder or of such company with a controlling shareholder or of such company of a controlling shareholder or of such company of 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 service 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 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. If required, shareholder approval must include at least a majority of the shareholders who do not have a personal interest in the transaction and are present and voting at the meeting. Alternatively, the total shareholdings of the disinterested shareholders who vote against the transaction must not represent more than two percent of the voting rights in the company. The Israeli Minister of Justice may determine a different percentage. Transactions that are for a period of more than three years generally need to be brought for approval in accordance with the above procedure every three years.

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."

# 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, the ordinary shares of the company confer on the holders thereof rights to receive notice of, attend, and vote in meetings of the shareholders, rights to receive dividends and rights to receive a distribution of assets upon liquidation. These rights may be affected by the grant of preferential, deferred or other special rights to the shareholders of a class of shares that may be authorized in the future. No preferred shares are currently authorized. All outstanding ordinary shares are validly issued and fully paid. Pursuant to Israel's securities laws, a company registering its shares for trade on the Tel Aviv Stock Exchange (TASE) may not have more than one class of shares for a period of one year following registration, after which it is permitted to issue shares having preferred rights to receive dividends.

# Transfer of Shares

Our ordinary shares are issued in registered form and may be freely transferred pursuant to our Articles unless such transfer is prohibited by another instrument or by applicable securities laws.

# Dividend and Liquidation Rights

Our Articles provide that our board of directors, may, subject to the applicable provisions of 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, holders of ordinary shares are entitled to receive dividends according to their rights and interests in our profits. Dividends, to the extent declared, are distributed according to the proportion of the nominal (par) value paid up on account of the shares held at the date so appointed by the Company, without regard to the premium paid in excess of the nominal (par) value, if any. Under the Companies Law, a company may distribute a dividend only if the distribution does not create a reasonable concern that the company will be unable to meet its existing and anticipated obligations as they become due. A company may only distribute a dividend out of its profits, as defined under the Companies Law. If the company does not meet the profit requirement, a court may nevertheless allow the company to distribution might prevent the company from being able to meet its existing and anticipated obligations as they become due. However, pursuant to our Articles, no dividend shall be paid otherwise than out of the profits of the company.

Under the Companies Law, the declaration of a dividend does not require the approval of the shareholders of the company, unless the company's articles of association require otherwise. Our Articles provide that the board of directors may declare and distribute dividends without the approval of the shareholders.

To date, we have not declared or distributed any dividend.

# 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 or by proxy. 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. Our ordinary shares do not have cumulative voting rights in the election of directors. As a result, 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 as described under the section entitled "Item 6. Directors, Senior Management and Employees; Board Practices; External and Independent Directors".

# Liquidation Rights.

In the event of our liquidation, winding up 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 their respective percentage holdings. This liquidation right may be affected by the grant of preferential dividends or distribution rights 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 and the Companies Law, 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 Rights

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, by a resolution of the shareholders, 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.

### Shareholders Meetings and Resolutions

Our annual general meeting is 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. The Board may, in its discretion, convene additional shareholder meetings and, pursuant to the Companies Law, must convene a meeting upon the demand of two directors or one quarter of the directors in office or upon the demand of the holder or holders of five percent of the Company's issued share capital and one percent of its voting rights or upon the demand of the holder or holders of five percent of the Company's voting rights. The chairman of the board of directors shall preside as chairman at each of our general meetings. If there is no such chairman, or if at any meeting such chairman is not present within fifteen (15) minutes after the time fixed for holding the meeting or is unwilling to act as chairman, then the shareholders present shall choose someone of their number to be chairman. The office of chairman shall not, by itself, entitle the holder thereof to vote at any general meeting nor shall it entitle a second or casting vote. Pursuant to the Companies Law, the holder or holders of one percent of the Company's voting rights may request the inclusion of an item on the agenda of a future shareholder meeting, provided the item is appropriate for discussion at a shareholder meeting. The agenda for a shareholder meeting was demanded and any matter requested to be included by holder(s) of one percent of the Company's voting rights, as detailed above.

Pursuant to the Companies Law and regulations promulgated thereunder with respect to the convening of general meetings in a public company, shareholder meetings generally require prior notice of not less than 21 days. The function of the annual general meeting is to elect directors in accordance with the Articles, receive and consider the profit and loss account, the balance sheet and the ordinary reports and accounts of the directors and auditors, appoint auditors and transact any other business which under the Articles or applicable law may be transacted by the shareholders of a company in general meeting.

Pursuant to our Articles, the quorum required for a meeting of shareholders consists of at least two shareholders, present in person, by proxy or by proxy card and holding shares conferring in the aggregate thirty-three and a third percent (33.3%) or more of the voting power of our company. If within an hour from the time appointed for the meeting a quorum is not present, the meeting, if convened upon the requisition of shareholders or upon the demand of two directors or one quarter of the directors then in office as detailed above, shall be dissolved, but in any other case it shall stand adjourned to the same day in the following week at the same time and place or any time and place as the chairman may determine with the consent of the holders of a majority of the voting power represented at the meeting in person or by proxy and voting on the question of adjournment. At the adjourned meeting, the required quorum consists of any two shareholders present, in person, by proxy or by proxy or by proxy card.

Under the Companies Law and our Articles, all resolutions of our shareholders require a simple majority of the shares present, in person by proxy or by proxy card, and voting on the matter, for approval, except with respect to matters which require the approval of a special majority under the Companies Law.

#### 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 of nationals of countries which are in a state of war with Israel.

# Changes in Control

Under the Companies Law, a merger is generally required to be approved by the shareholders and board of directors of each of the merging companies. If the share capital of the company that will not be the surviving company is divided into different classes of shares, the approval of each class is also required, unless determined otherwise by the court. Similarly, unless an Israeli court determines otherwise, a merger will not be approved if it is objected to by shareholders holding a majority of the voting rights participating and voting at the meeting, after excluding the shares held by the other party to the merger, by any person who holds 25% or more of the other party to the merger or by anyone on their behalf, including by the relatives of or corporations controlled by these persons. In addition, upon the request of a creditor of either party to the proposed merger, an Israeli court may delay or prevent the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations of any of the parties to the merger. Further, a merger can be completed only after all approvals have been submitted to the Israeli Companies Registrar and 30 days have passed from the time that shareholder resolutions were adopted in each of the merging companies and 50 days have passed from the time that a proposal for approval of the merger was filed with the Israeli Companies Registrar. In addition, subject to certain exceptions, an acquisition of shares in a public company must be made by means of a tender offer to the extent that as a result of such acquisition the acquirer will hold 25% or more of the voting rights in the company if there is no other holder of 25% or more of the company's voting rights, or hold more than 45% of the voting rights in the company if there is no other holder of fer requirements do not apply to companies whose shares are listed for trading outside of Israel if, under local law or the rules of the stock exchange

Under the Companies Law, a person may not acquire shares in a public company if, after the acquisition, he will hold more than 90% of the shares or more than 90% of any class of shares of that company, unless a tender offer is made to purchase all of the shares or all of the shares of the particular class. The Companies Law also provides (subject to certain exceptions with respect to shareholders who held more than 90% of a company's shares or of a class of its shares as of February 1, 2000) that as long as a shareholder in a public company holds more than 90% of the company's shares or of a class of shares, that shareholder shall be precluded from purchasing any additional shares. In order that all of the shares that the purchaser offered to purchase be transferred to him by operation of law, one of the following needs to have occurred: (i) the shareholders who declined or did not respond to the tender offer hold less than 5% of the company's outstanding share capital or of the relevant class of shares and the majority of offerees who do not have a personal interest in accepting the tender offer accepted the offer, or (ii) the shareholders who declined or did not respond to the tender offer hold less than 2% of the company's outstanding share capital or of the relevant class of shares

A shareholder that had his or her shares so transferred, whether he or she accepted the tender offer or not, has the right, within six months from the date of acceptance of the tender offer, to petition the court to determine that the tender offer was for less than fair value and that the fair value should be paid as determined by the court. However, the purchaser may provide in its offer that shareholders who accept the tender offer will not be entitled to such right.

If the conditions set forth above are not met, the purchaser may not acquire additional shares of the company from shareholders who accepted the tender offer to the extent that following such acquisition, the purchaser would own more than 90% of the company's shares or of a class of shares. The above restrictions apply, in addition to the acquisition of shares, to the acquisition of voting power.

## 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 our shareholders at a general meeting by voting on such change in the capital. In addition, the declaration and payment of dividends in the absence of sufficient retained earnings and profits requires the approval of both our board of directors and an Israeli court. However, pursuant to our Articles, no dividend shall be paid otherwise than out of the profits of the company.

### C. MATERIAL CONTRACTS

Please see "Item 5. Operating and Financial Review and Prospects — Results of Operations — Recent Funding Agreements" for a discussion of our material contracts.

## D. EXCHANGE CONTROLS

Under Israeli Law, Israeli non-residents who purchase ordinary shares with certain non-Israeli currencies (including dollars) may freely repatriate in such non-Israeli currencies all amounts received in Israeli currency in respect of the ordinary shares, whether as a dividend, as a liquidating distribution, or as proceeds from any sale in Israel of the ordinary shares, provided in each case that any applicable Israeli income tax is paid or withheld on such amounts.

#### E. TAXATION

To the extent that the following discussion is based on new or existing tax or other legislation that has not been subject to judicial or administrative interpretation, there can be no assurance that the views expressed herein will be accepted by the tax or other authorities in question. The summary below does not address all of the tax consequences that may be relevant to all purchasers of our ordinary shares in light of each purchaser's particular circumstances and specific tax treatment. For example, the summary below does not address the tax treatment of residents of Israel and traders in securities who are subject to specific tax regimes. As individual circumstances may differ, holders of our ordinary shares should consult their own tax advisors as to United States, Israeli or other tax consequences of the purchase, ownership and disposition of our ordinary shares. This discussion is not intended, nor should it be construed, as legal or professional tax advice and it is not exhaustive of all possible tax considerations. Each individual should consult his or her own tax or legal advisor.

#### Israeli Taxation

#### (i) Taxation of Capital Gains Applicable to Non-Israeli Shareholders

Israeli law generally imposes a capital gains tax on the sale of securities of an Israeli company traded on the TASE, on an authorized stock exchange outside Israel or on a regulated market (which includes a system through which securities are traded pursuant to rules prescribed by the competent authority in the relevant jurisdiction) in or outside Israel. Pursuant to amendments to the Tax Ordinance, effective as of January 1, 2012, the capital gains tax rate applicable to individuals upon the sale of such securities is such individual's marginal tax rate but not more than 25% (or 30% with respect to a Substantial Shareholder). A 30% tax rate will apply to an individual who meets the definition of a 'Substantial Shareholder' on the date of the sale of the securities or at any time during the 12 months preceding such date. A 'Substantial Shareholder' is defined as a person who, either alone or together with any other person, holds, directly or indirectly, at least 10% of any of the means of control of a company (including, among other things, the right to receive profits of the company, voting rights, the right to receive the company's liquidation proceeds and the right to appoint a director). Different tax rates apply to capital gains accrued from the sale by individuals of securities that are not publicly traded as aforesaid.

With respect to corporate investors, effective January 1, 2012, capital gain tax equal to the corporate tax rate (as of January 1, 2012 - 25%) will be imposed on the sale of traded shares.

These rates are subject to the provisions of any applicable bilateral double taxation treaty. The treaty concerning double taxation between the United States and Israel (the Convention between the Government of the State of Israel and the Government of the United States of America With Respect to Taxes on Income (the "Treaty")) is discussed below.

In addition, if our ordinary shares are traded on the TASE, on an authorized stock exchange outside Israel or on a regulated market (which includes a system through which securities are traded pursuant to rules prescribed by the competent authority in the relevant jurisdiction) in or outside Israel, gains on the sale of our ordinary shares held by non-Israeli tax resident investors will generally be exempt from Israeli capital gains tax. Notwithstanding the foregoing, dealers in securities in Israel are taxed at regular tax rates applicable to business income. In addition, persons paying consideration for shares, including purchasers of shares, Israeli securities dealers effecting a transaction, or a financial institution through which securities being sold are held, are required, subject to any applicable exemptions and the demonstration of the selling shareholder of its non-Israeli residency, to withhold tax upon the sale of publicly traded securities at a rate of 25% for a corporation and 25% for an individual.

Israeli law generally exempts non-resident individuals and entities from capital gains tax on the sale of securities of Israeli companies, provided that the securities were acquired on or after January 1, 2009.

#### (ii) Income Taxes on Dividend Distribution to Non-Israeli Shareholders

Non-Israeli residents (whether individuals or corporations) are generally subject to Israeli income tax on the receipt of dividends paid on the shares of companies that are not publicly traded at the rate of 25% (30% if the dividend recipient is a Substantial Shareholder, at the time of distribution or at any time during the preceding 12-month period), which tax is to be withheld at source, unless a different rate is provided under an applicable tax treaty. Dividends paid on the shares of companies that are publicly traded, like our ordinary shares, to non-Israeli residents, although generally subject to the same tax rates applicable to dividends paid on the shares of companies that are not publicly traded, are generally subject to Israeli withholding tax at a rate of 25% (whether or not the recipient is a Substantial Shareholder), unless a different rate is provided under an applicable tax treaty. The distribution of dividends to non-Israeli residents (either individuals or corporations) from income derived from an Approved Enterprise or a Benefiting Enterprise during the applicable benefits period or from Preferred Income is subject to withholding tax at a rate of 15%, unless a different tax rate is provided under an applicable tax treaty.

A non-resident of Israel who has dividend income derived from or accrued in Israel, from which the full amount of tax was withheld at source, is generally exempt from the duty to file tax returns in Israel in respect of such income, provided that: (i) such income was not derived from a business conducted in Israel by the taxpayer; and (ii) the taxpayer has no other taxable sources of income in Israel with respect to which a tax return is required to be filed.

Residents of the United States generally will have withholding tax in Israel deducted at source. As discussed below, they may be entitled to a credit or deduction for U.S. federal income tax purposes in the amount of the taxes withheld, subject to detailed rules contained in U.S. tax legislation.

## (iii) U.S. - Israel Tax Treaty

The Treaty is generally effective as of January 1, 1995. Under the Treaty, the maximum Israeli withholding tax on dividends paid to a holder of our ordinary shares who is a Treaty U.S. Resident (as defined below) is generally 25%. However, pursuant to the Investment Law, dividends distributed by an Israeli company and derived from income eligible for benefits under the Investment Law will generally be subject to a reduced 15% dividend withholding tax rate, subject to the conditions specified in the Treaty. The Treaty further provides that a 12.5% Israeli dividend withholding tax will apply to dividends paid to a U.S. corporation owning 10% or more of an Israeli company's voting shares during, in general, the current and preceding tax year of the Israeli company. The lower 12.5% rate applies only on dividends distributed from income not derived from an Approved Enterprise or a Benefiting Enterprise in the applicable period or, presumably, from a Preferred Enterprise, and does not apply if the company has certain amounts of passive income.

Pursuant to the Treaty, the sale, exchange or disposition of our ordinary shares by a person who qualifies as a resident of the United States within the meaning of the Treaty and who is entitled to claim the benefits afforded to such residents under the Treaty (a "Treaty U.S. Resident") generally will not be subject to the Israeli capital gains tax unless such Treaty U.S. Resident holds, directly or indirectly, shares representing 10% or more of the voting power of the Company during any part of the 12-month period preceding such sale, exchange or disposition subject to certain conditions. A sale, exchange or disposition of our ordinary shares by a Treaty U.S. Resident who holds, directly or indirectly, shares representing 10% or more of the voting power of the Company at any time during such preceding 12-month period would not be exempt under the Treaty from such Israeli tax; however, under the Treaty U.S. Resident would be permitted to claim a credit for such taxes against U.S. federal income tax imposed on any gain from such sale, exchange or disposition, under the circumstances and subject to the limitations specified in the Treaty.

## (iv) Estate Taxes

Israel presently has no estate tax.

### (v) Israeli Transfer Pricing Regulations

On November 29, 2006, Income Tax Regulations (Determination of Market Terms), 2006, promulgated under Section 85A of the Tax Ordinance, came into effect (the "TP Regs"). Section 85A of the Tax Ordinance and the TP Regs generally requires that all cross-border transactions carried out between related parties be conducted on an arm's length principle basis and will be taxed accordingly. The TP Regs have not had a material effect on the Company.

## Certain Material U.S. Federal Income Tax Considerations

#### General

The following is a summary of certain material U.S. federal income tax consequences to U.S. persons holding our ordinary shares (referred to herein as U.S. holders) of purchasing, owning, and disposing of such shares. For this purpose, a U.S. person is, in each case as defined for U.S. federal income tax purposes: (a) an individual who is a citizen or resident of the United States; (b) a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia; (c) an estate the income of which is subject to U.S. federal income tax regardless of its source; or (d) a trust that is subject to the primary supervision of a court over its administration and one or more U.S. persons control all substantial decisions, or a trust that has validly elected to be treated as a domestic trust under applicable Treasury Regulations. This summary does not address any tax consequences to persons other than U.S. holders.

This discussion is a general summary and does not address all aspects of U.S. federal income taxation that may be relevant to particular U.S. holders based on their particular investment or tax circumstances. It does not address any tax consequences to certain types of U.S. holders that are subject to special treatment under U.S. federal income tax laws, such as insurance companies, tax-exempt organizations, financial institutions, broker-dealers, dealers in securities or currencies, traders in securities that elect to use the mark-to-market method of accounting for their securities, partnerships or other pass-through entities for U.S. federal tax purposes, regulated investment companies, real estate investment trusts, expatriates, persons liable for alternative minimum tax, persons owning, directly or by attribution, 10% or more, by voting power or value, of our ordinary shares, persons whose "functional currency" is not the U.S. dollar, persons holding ordinary shares as part of a hedging, constructive sale or conversion, straddle, or other risk-reducing transaction, or persons acquiring an interest in our shares in exchange for services.

This summary addresses only ordinary shares that (a) are held as capital assets, and (b) were acquired upon original issuance at their initial offering price.

This summary relates only to U.S. federal income taxes. With the exception of the discussion below under "- Tax on Net Investment Income, " this summary does not address any other tax, including but not limited to, state, local, or foreign taxes, or any other U.S. federal taxes other than income taxes.

The statements in this summary are based on the current U.S. federal income tax laws as contained in the Internal Revenue Code, Treasury Regulations, and relevant judicial decisions and administrative guidance. U.S. federal tax laws are subject to change, and any such change may materially affect the U.S. federal income tax consequences of purchasing, owning, or disposing of our ordinary shares. We cannot assure you that new laws, interpretations of law or court decisions, any of which may take effect retroactively, will not cause any statement in this summary to be inaccurate. No ruling or opinions of counsel will be sought in connection with the matters discussed herein. There can be no assurance that the positions we take on our tax returns will be accepted by the Internal Revenue Service.

This summary is not a substitute for careful tax planning. Prospective investors are urged to consult their own tax advisors regarding the specific U.S. federal, state, foreign and other tax consequences to them, in light of their own particular circumstances, of the purchase, ownership and disposition of our ordinary shares and the effect of potential changes in applicable tax laws.

#### Dividends

A U.S. holder will be required to take into account as dividends any distributions with respect to our ordinary shares made out of our current or accumulated earnings and profits. The dividends received deduction will not be available to a U.S. holder that is taxed as a corporation. With certain exceptions (including but not limited to dividends treated as investment income for purposes of investment interest deduction limitations or dividends taxed as "excess distributions" as described under "Passive Foreign Investment Company" below), qualified dividends received by a non-corporate U.S. holder during a year that is not a year in which the Company is a Passive Foreign Investment Company (a "PFIC Year") or preceded by a PFIC Year generally will be subject to tax at the maximum tax rate accorded to capital gains, if certain holding period and other conditions are satisfied. Dividends will generally be from a non-U.S. source and treated as "passive income" for U.S. foreign tax credit purposes.

Although, to the extent we pay dividends in the future, we intend to pay dividends to U.S. holders in U.S. dollars, the amount of any dividend paid in Israeli currency will equal its U.S. dollar value for U.S. federal income tax purposes, calculated by reference to the exchange rate in effect on the date the dividend is received by the U.S. holder, regardless of whether the Israeli currency is converted into U.S. dollars. If the Israeli currency is not converted into U.S. dollars on the date of receipt, the U.S. holder will have a basis in the Israeli currency equal to its U.S. dollar value on the date of receipt. Any subsequent gain or loss upon the conversion or other disposition of the Israeli currency will be treated as ordinary income or loss, and generally will be income or loss from U.S. sources.

A U.S. holder will not incur tax on a distribution with respect to our ordinary shares in excess of our current and accumulated earnings and profits if the distribution does not exceed the adjusted basis of the U.S. holder's ordinary shares. Instead, the distribution will reduce the adjusted basis of the shares. Any such distribution in excess of both our current and accumulated earnings and profits and the U.S. holder's adjusted basis will be treated as capital gain, long-term if the U.S. holder has held the shares for more than one year, and generally will be gain or loss from U.S. sources. See "Disposition of Ordinary Shares" below for a discussion of capital gains tax rates and limitations on deductions for losses.

#### Disposition of Ordinary Shares

In general, a U.S. holder must treat any gain or loss recognized upon a taxable disposition of our ordinary shares as capital gain or loss, long-term if the U.S. holder has held the shares for more than one year. In general, a U.S. holder will recognize gain or loss in an amount equal to the difference between the sum of the fair market value of any property and the amount of cash received in such disposition and the U.S. holder's adjusted tax basis generally will equal the U.S. holder's acquisition cost less any return of capital. Subject to certain exceptions (including but not limited to those described under "Passive Foreign Investment Company" below), long-term capital gain realized by a non-corporate U.S. holder generally will be subject to a reduced maximum rate of 20%. The deduction of capital losses is subject to limitations, as are losses upon a taxable disposition of our ordinary shares if the U.S. holder purchases, or enters into a contract or option to purchase, substantially identical stock or securities within 30 days before or after any disposition. Gain or loss from the disposition of our ordinary shares will generally be from U.S. sources, but such gain or loss may be from a non-U.S. source under some circumstances under the U.S.-Israel Tax Treaty. U.S. holders should consult their own independent tax advisors regarding the sourcing of any gain or loss on the disposition of our ordinary shares, as well as regarding any foreign currency gain or loss in connection with such a disposition.

## Credit for Foreign Taxes Paid or Withheld

Payments to U.S. holders as dividends or consideration for ordinary shares may in some circumstances be subject to Israeli withholding taxes. See "Israeli Taxation, U.S. – Israel tax Treaty" above. Generally, such withholding taxes in lieu of Israeli income taxes imposed on such transactions are creditable against the U.S. holder's U.S. tax liability, subject to numerous U.S. foreign tax credit limitations, including additional limitations in the case of qualified dividends eligible for the maximum rate accorded to capital gains. A corporate U.S. holder may also be eligible for an "indirect" foreign tax credit on dividends to take account of certain Israeli taxes we previously paid to Israel. A U.S. holder should consult its own independent tax advisor regarding use of the U.S. foreign tax credit and its limitations. A U.S. holder (except an individual who does not itemize deductions) may elect to take a deduction rather than a credit for foreign taxes paid.

### Controlled Foreign Corporation

For U.S. federal income tax purposes, a "controlled foreign corporation" is a foreign corporation in which U.S. holders who own at least 10% of the voting power (directly or by constructive ownership through certain related persons) collectively own more than 50% of the voting power or value. If we are or become a controlled foreign corporation, such 10% U.S. holders must include in their current U.S. taxable income their share of the corporation's undistributed "Subpart F income" (i.e., certain passive income, sales or service income, insurance, ocean activity, or oil-related income, and income from specified disfavored activities or from ostracized foreign countries) and the amount of the corporation's investments in U.S. property. These income inclusions are not eligible for the maximum capital gains tax rate on qualified dividends to non-corporate tax payers. We believe that the corporation is not and has not been, and we expect that the corporation will not become, a controlled foreign corporation. There can be no assurance, however, that the corporation will not become a controlled foreign corporation in the future.

### Passive Foreign Investment Company

Based on our analysis of our gross income, assets, activities and market capitalization, we do not believe we were a "passive foreign investment company," or PFIC, for the taxable year ended December 31, 2012. We nevertheless recognize that there are significant areas of uncertainty in the PFIC rules and the IRS may not agree with our belief. We are a PFIC if 75% or more of our gross income in a taxable year, including the pro rata share of the gross income of any company in which we are considered to own 25% or more of the shares by value, is passive income. Alternatively, we are a PFIC if at least 50% of our assets in a taxable year, averaged over the year and ordinarily determined based on fair market value, including the pro rata share of the assets of any company in which we are considered to own 25% or more of the shares by value, are held for the production of, or produce, passive income.

PFIC status is determined annually and cannot be definitively determined until the close of the year in question. If we qualify as a PFIC at any time during a U.S. holder's holding period of our ordinary shares, any subsequent distributions to, or disposition of the shares by, the U.S. holder will be subject to the excess distribution rules (described below), regardless of whether we are a PFIC in the year of distribution or disposition, unless the U.S. holder: (1) made the qualified electing fund ("QEF") election (described below); (2) made the mark-to-market election (described below); or (3) during a year in which the corporation is no longer a PFIC, elected to recognize all gain inherent in the shares on the last taxable year in which the corporation was a PFIC. If a U.S. holder holds our ordinary shares in a PFIC Year, such ordinary shares will henceforth be considered shares in a PFIC, regardless of whether we meet the PFIC tests in future years, unless the U.S. holder makes a timely QEF or mark-to-market election, or makes the deemed-gain election in a year in which the corporation is no longer a PFIC.

If we are a PFIC, each U.S. holder, upon certain "excess distributions" by us and upon disposition of our ordinary shares at a gain, would be liable to pay tax at the highest then-prevailing income tax rate on ordinary income plus interest on the tax, as if the distribution or gain had been recognized ratably over the holder's holding period for the ordinary shares. Additionally, if we are a PFIC, a U.S. holder who acquires ordinary shares from a deceased person who was a U.S. holder would not receive the step-up of the income tax basis to fair market value for such ordinary shares. Instead, such U.S. holder would have a tax basis equal to the deceased's tax basis, if lower.

If a U.S. holder has made a QEF election covering all taxable years during which the holder holds ordinary shares and in which we are a PFIC, distributions and gains will not be taxed as described above, nor will denial of a basis step-up at death described above apply. Instead, a U.S. holder that makes a QEF election is required for each taxable year to include in income the holder's pro rata share of the ordinary earnings of the QEF as ordinary income and a pro rata share of the net capital gain of the QEF as capital gain, regardless of whether such earnings or gain have in fact been distributed. Undistributed income is subject to a separate election to defer payment of taxes. If deferred, the taxes will be subject to an interest charge. Where earnings and profits that were included in income under this rule are later distributed, the distribution is not a dividend. The basis of a U.S. shareholder's shares in a QEF is increased by amounts that are included in income, and decreased by amounts distributed but not taxed as dividends. In addition, if a U.S. holder makes a timely QEF election, our ordinary shares will not be considered shares in a PFIC in years in which we are not a PFIC, even if the U.S. holder had held ordinary shares in prior years in which we were a PFIC.

In order to comply with the requirements of a QEF election, a U.S. holder must receive certain information from us. The QEF election is made on a shareholder-by-shareholder basis and can be revoked only with the consent of the IRS. A shareholder makes a QEF election by attaching a completed IRS Form 8621, including the information provided in the PFIC annual information statement, to a timely filed U.S. federal income tax return and by filing a copy of the form with the IRS. There is no assurance that we will provide such information as the IRS may require in order to enable U.S. holders to make the QEF election. Moreover, there is no assurance that we will have timely knowledge of our status as a PFIC in the future. Even if a shareholder in a PFIC does not make a QEF election, if such shareholder is a U.S. holder, such shareholder must annually file with the shareholder's tax return and with the IRS a completed Form 8621.

If our ordinary shares are "regularly traded" on a "qualified exchange or other market," as provided in applicable Treasury Regulations, a U.S. holder of our shares may elect to mark the shares to market annually, recognizing as ordinary income or loss each year an amount equal to the difference between the shareholder's adjusted tax basis in such shares and their fair market value. Losses would be allowed only to the extent of net mark-to-market gain previously included by the U.S. holder under the election in previous taxable years. The adjusted tax basis of a U.S. holder's ordinary shares is increased by the amount included in gross income under the mark-to-market regime, or is decreased by the amount of the deduction allowed under the regime. As with the QEF election, a U.S. holder who makes a mark-to-market election would not be subject to the general excess distribution rules and the denial of basis step-up at death described above.

If we are a PFIC and, at any time, have a non-U.S. subsidiary that is classified as a PFIC, U.S. holders of our ordinary shares generally would be deemed to own, and also would be subject to the PFIC rules with respect to, their indirect ownership interests in that lower-tier PFIC, the U.S. holder of our ordinary shares does not make a QEF election in respect of a lower-tier PFIC, the U.S. holder could incur liability for the deferred tax and interest charge described above if either (1) we receive a distribution from, or dispose of all or part of our interest in, the lower-tier PFIC or (2) the U.S. holder disposes of all or part of its ordinary shares. There is no assurance that any lower-tier PFIC will provide to a U.S. holder the information that may be required to make a QEF election with respect to the lower-tier PFIC. A mark-to-market election under the PFIC rules with respect to our ordinary shares would not apply to a lower-tier PFIC, and a U.S. holder would not be able to make such a mark-to-market election in respect of its indirect ownership interest in that lower-tier PFIC. Consequently, U.S. holders of our ordinary shares could be subject to the PFIC rules with respect to income of the lower-tier PFIC the value of which already had been taken into account indirectly via mark-to-market adjustments. Similarly, if a U.S. holder made a mark-to-market election under the PFIC rules in respect of our ordinary shares and made a QEF election in respect of a lower-tier PFIC, that U.S. holder could be subject to current taxation in respect of income from the lower-tier PFIC the value of which already had been taken into account indirectly via mark-to-market adjustments. U.S. holders are urged to consult their own tax advisors regarding the issues raised by lower-tier PFICs.

THE RULES DEALING WITH PFICS AND WITH THE QEF AND MARK-TO-MARKET ELECTIONS ARE VERY COMPLEX AND ARE AFFECTED BY VARIOUS FACTORS IN ADDITION TO THOSE DESCRIBED ABOVE, INCLUDING OUR OWNERSHIP OF ANY NON-U.S. SUBSIDIARIES. AS A RESULT, U.S. HOLDERS OF ORDINARY SHARES ARE STRONGLY ENCOURAGED TO CONSULT THEIR TAX ADVISORS ABOUT THE PFIC RULES IN CONNECTION WITH THEIR PURCHASING, HOLDING OR DISPOSING OF ORDINARY SHARES.

Backup Withholding and Information Reporting

A U.S. holder (excepting most corporations) may, under certain circumstances, be subject to information reporting requirements and backup withholding at a rate of 28% on payments of dividends, interest, and other reportable payments. A non-corporate U.S. holder should consult its own independent tax advisor regarding the possibility of information reporting and backup withholding on payments in connection with the purchase, ownership, or disposition of our ordinary shares.

Foreign Account Tax Compliance Act

The recently enacted Foreign Account Tax Compliance Act ("FATCA") will impose a 30% withholding tax on any "withholdable payment" to (i) a "foreign financial institution," unless such institution enters into an agreement with the U.S. government to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which would include certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with United States owners) or (ii) a foreign entity that is not a financial institution, unless such entity provides the withholding agent with a certification identifying the substantial U.S. owners of the entity, which generally includes any U.S. person who directly or indirectly owns more than 10% of the entity. For this purpose, we expect to be treated as a foreign entity that is not a financial institution.

"Withholdable payments" to us subject to FATCA will include U.S.-source payments otherwise subject to nonresident withholding tax, and also include the entire gross proceeds from the sale of any equity or debt instruments of U.S. issuers (in either case to exclude payments made on "obligations" that were outstanding on March 18, 2012). The withholding tax will apply regardless of whether the payment would otherwise be exempt from U.S. nonresident withholding tax (e.g., under the portfolio interest exemption or as capital gain). The IRS is authorized to provide rules for implementing the FATCA withholding regime with the existing nonresident withholding tax rules.

Under the applicable Treasury Regulations, this withholding will apply to U.S.-source payments otherwise subject to nonresident withholding tax made on or after January 1, 2014 and to the payment of gross proceeds from the sale of any equity or debt instruments of U.S. issuers made on or after January 1, 2015.

We intend to, but provide no assurance that we will, provide information to the U.S. government sufficient to avoid FATCA withholding taxes on payments to us. U.S. holders are urged to consult with their tax advisors regarding the effect, if any, of FATCA to them based on their particular circumstances.

Tax on Net Investment Income

For tax years beginning after December 31, 2012, certain U.S. Holders that are individuals, estates or trusts whose income exceeds certain thresholds with be required to pay an additional 3.8% tax on "net investment income", which includes, among other things, dividends and net gain from the sale or other disposition of property (other than property held in a trade or business), which may include the ordinary shares. U.S. Holders should consult their own tax advisors regarding the application of the tax on net investment income to their particular circumstances.

#### F. DIVIDENDS AND PAYING AGENTS

Not applicable.

## G. STATEMENT BY EXPERTS

Not applicable.

### H. DOCUMENTS ON DISPLAY

We are required to file reports and other information with the SEC under the Securities Exchange Act of 1934 (the "Exchange Act") and the regulations thereunder applicable to foreign private issuers. You may inspect and copy reports and other information filed by us with the SEC at the SEC's public reference facilities described below. Although as a foreign private issuer we are not required to file periodic information as frequently or as promptly as United States companies, we generally announce publicly our quarterly and year-end results promptly and furnish periodic information to the SEC under cover of Form 6-K. As a foreign private issuer, we are also exempt from the rules under the Exchange Act prescribing the furnishing and content of proxy statements and our officers, directors and principal shareholders are exempt from the reporting, short-swing profit and other rules and provisions under Section 16 of the Exchange Act.

You may review a copy of our filings with the SEC, including any exhibits and schedules, at the SEC's public reference facilities in 100 F Street N.E., Washington, D.C. 20549 and at offices of the Israel Securities Authority at 22 Kanfei Nesharim St., Jerusalem, Israel. You may also obtain copies of such materials by writing to the Public Reference Section of the SEC, 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. You may call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. As a foreign private issuer we were only required to file through the SEC's EDGAR system as of November 2002. Our periodic filings are therefore available on the SEC's Website www.sec.gov from that date. You may read and copy any reports, statements or other information that we file with the SEC, through the SEC's EDGAR system available on the SEC's website and at the SEC facilities listed above. These SEC filings are also available to the public on the Israel Securities Authority's website at www.isa.gov.il and from commercial document retrieval services.

Any statement in this annual report about any of our contracts or other documents is not necessarily complete. If the contract or document is filed as an exhibit to this annual report, the contract or document is deemed to modify the description contained in this annual report. We urge you to review the exhibits themselves for a complete description of the contract or document.

### I. SUBSIDIARY INFORMATION

Not applicable.

## ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to a variety of risks, including changes in interest rates and foreign currency exchange risk and inflation.

## Interest Rate Risk

As of December 31, 2012, we had \$19.6 million in cash, cash equivalents and short-term bank deposits. We mostly invest our cash surplus in bank deposits. Since these investments typically carry fixed interest rate, financial income over the holding period is not sensitive to changes in interest rates. For more information, see Note 3 of our 2012 consolidated financial statements.

## Foreign Currency Exchange Risk and Inflation

The cost of our Israel operations, as expressed in U.S. dollars, is influenced by the extent to which any increase in the rate of inflation in Israel is not offset (or is offset on a lagging basis) by a devaluation of the NIS in relation to the U.S. dollar. The inflation rate in Israel was 1.6%, 2.2% and 2.7% in 2012, 2011 and 2010, respectively. The appreciation (devaluation) of the NIS against the U.S. dollar amounted to 2.3%, (7.7%) and 0.7% in 2012, 2011 and 2010, respectively. For 2012 assuming a 10% appreciation of the NIS against the U.S. dollar, we would experience exchange rate losses of approximately \$949,000, while assuming a 10% devaluation of the NIS against the U.S. dollar, we would experience an exchange rate gain of approximately \$777,000.

A significant portion of our expenditures is employee compensation-related. Salaries are paid in NIS and may be adjusted for changes in the Israeli consumer price index, or CPI, through salary increases or adjustments. These upward adjustments increase salary expenses in U.S. dollar terms. The devaluation/appreciation of the NIS against the U.S. dollar decreases/increases employee compensation expenditures as expressed in dollars proportionally. Some of our other NIS-based expenses are either currently adjusted to U.S. dollars or are adjusted to the CPI. Starting July 2011, following a board decision, we maintain available NIS cash for between six to ten months of expected NIS expenditures (depending on the then existing exchange rates).

## ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Not applicable.

#### PART II

## ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None

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

#### Material Modifications to the Rights of Security Holders

None.

Use of Proceeds

None.

#### ITEM 15. CONTROLS AND PROCEDURES

## A. DISCLOSURE CONTROLS AND PROCEDURES

Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we are required to file are recorded, processed, summarized and reported on a timely basis. Under the supervision of our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) and 15d-15(e) promulgated under the Exchange Act. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

## B. MANAGEMENT'S ANNUAL REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management, with the involvement of our board of directors and audit committee, is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system has been designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our consolidated financial statements for external purposes in accordance with generally accepted accounting principles.

Under the supervision of our Chief Executive Officer and Chief Financial Officer, our management conducted an evaluation of the effectiveness of our internal control over financial reporting, as such term is defined under Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act. In making this assessment, our management used the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our internal control over financial reporting was effective as of the end of the period covered by this annual report.

Notwithstanding the foregoing, all internal control systems no matter how well designed have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, an independent registered public accounting firm in Israel, which has audited our financial statements for the year ended December 31, 2012 that are included in this annual report, has issued an attestation report on our internal control over financial reporting as of December 31, 2012.

## C. ATTESTATION REPORT OF THE REGISTERED PUBLIC ACCOUNTING FIRM

The attestation report of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, an independent registered public accounting firm in Israel, on internal control over financial reporting as of December 31, 2012 is provided on page F-3, as included under Item 18 of this annual report.

#### D. CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

Based on the evaluation conducted by our management, with the participation of our Chief Executive Officer and Chief Financial Officer, pursuant to Rules 13a-15(d) and 15d-15(d) promulgated under the Exchange Act, our management (including such officers) have concluded that, except for implementation of internal control over financial statement for our U.S. subsidiary, Compugen USA, Inc., during 2012, there were no other changes in our internal control over financial reporting that occurred during the period covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## ITEM 16. RESERVED

## ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that Mr. Arie Ovadia, who serves on the audit committee of our board of directors and who meets the "independence" definition under the NASDAQ Listing Rules, qualifies as an "audit committee financial expert" as defined under the rules and regulations of the SEC.

## ITEM 16B. CODE OF ETHICS

We have adopted a Code of Conduct that applies to all of our employees, officers and directors as well as a Code of Ethics for Senior Financial Officers that applies to our chief executive officer, chief financial officer, director of finance, controller, assistant controller and subsidiaries' controllers.

The Code of Ethics and the Code of Conduct of Ethics for Senior Financial Officers are posted on our website, www.cgen.com.

Disclosure regarding any amendments to, or waivers from, provisions of the Code of Ethics for Senior Financial Officers will be included in a Form 6-K following the date of the amendment or waiver, unless website posting of such amendments or waivers is then permitted by the rules of the NASDAQ Stock Market, in which case we will post it on our website. No such amendment was adopted, nor waiver provided, by us during the fiscal year ended December 31, 2012.

## ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents the fees billed to us by our principal accountant for professional services rendered in the years ended December 31, 2012 and 2011:

	2012	2011
Audit Fees	\$ 104,000	\$ 94,000
Audit Related Fees	\$ -	\$ -
Tax Fees	\$ 15,000	\$ 6,000
All Other Fees	\$ 51,000	\$ 6,000
Total	\$ 170,000	\$ 106,000

"Audit Fees" are fees for professional services rendered by our principal accountant in connection with the integrated audit (including review of internal control over financial reporting) of our consolidated annual financial statements and review of our unaudited interim financial statements;

"Audit Related Fees" are fees for professional services rendered by our principal accountant in connection with the audit and other assignments.

"Tax Fees" are fees for services rendered by our principal accountant in connection with tax compliance tax advice and tax planning which in year 2012 and 2011were Annual Israeli tax reports, Approved Enterprise request submission, Foreign vendors withholding tax exempt request and consultancy relating to Israeli tax withholding assessment; and

"All Other Fees" are fees for other consulting services rendered by our principal accountant to us including consultancy and consents with respect to Forms F-3 filed with the SEC.

## Policy on Audit Committee Pre-Approval of Audit and Non-Audit Services of Independent Auditors

The audit committee of our board of directors is responsible for the oversight of our independent auditors' scope of work. The audit committee's policy is to pre-approve all audit and non-audit services provided by our independent auditors, Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global. These services may include audit services, tax services and other consulting services, as described above. Our audit committee sets forth the basis for its pre-approval in detail, listing the particular services or categories of services which are pre-approved, and setting forth a specific budget for such services. Additional services may be pre-approved by the audit committee on an individual basis. Once services have been pre-approved, our independent auditor and management then report to the audit committee on a periodic basis regarding the extent of services actually provided in accordance with the applicable pre-approval, and regarding the fees for the services performed. Such fees for 2011 and 2012 were pre-approved by the audit committee in accordance with these procedures.

On July 3, 2012, our shareholders approved the engagement of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, as our independent auditors for the fiscal year ended December 31, 2012 and until the next annual shareholder meeting. Such approval followed the pre-approval by our audit committee and board of directors of such engagement (in the case of the audit committee, as described above).

## ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not Applicable.

## ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Not applicable.

## ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

## ITEM 16G. CORPORATE GOVERNANCE

The NASDAQ Listing Rules require companies with securities listed thereon to comply with its corporate governance standards. As a foreign private issuer, we are not required to comply with all of the rules that apply to listed domestic U.S. companies. Pursuant to NASDAQ Listing Rule 5615(a)(3), we have notified NASDAQ that with respect to the corporate governance practices described below, we follow Israeli law and practice following in lieu of compliance with the corresponding NASDAQ Listing Rules. Except for the differences described below, we do not believe there are any significant differences between our corporate governance practices and those that apply to a U.S. domestic issuer under the NASDAQ Stock Market corporate governance rules.

- Independent Director Oversight of Nominations: Under Israeli law, there is no requirement to have an independent nominating committee or the independent directors of a company select (or recommend for selection) director nominees, as is required under NASDAQ Listing Rule 5605(e) for a U.S. domestic issuer. Our board of directors handles this process, as is permitted under our Articles and the Companies Law. We also need not adopt a formal board resolution or charter addressing the director nominations process and such related matters as may be required under the U.S. federal securities laws, as NASDAQ requires for a U.S. issuer.
- Shareholder Approval: Pursuant to Israeli law, we seek shareholder approval for all corporate actions requiring such approval under the requirements of the Companies Law, which are different from the requirements for seeking shareholder approval under NASDAQ Listing Rule 5635. See "Item 10. Additional Information— Memorandum and Articles of Association— Transactions Requiring Special Approval" in this annual report for a description of the transactions requiring shareholder approval under the Companies Law.

# PART III

# ITEM 17. FINANCIAL STATEMENTS

See Item 18.

# ITEM 18. FINANCIAL STATEMENTS

Our consolidated financial statements and related notes are included in this Annual Report beginning on page F-1.

# ITEM 19. EXHIBITS

# Index to Exhibits

Exhibit Number	Description
1.1	Articles of Association of Compugen, as amended (incorporated by reference to Exhibit 1.1 to Compugen's annual report on Form 20-F for the year ended December 31, 2011, filed with the SEC on March 14, 2012 (File No. 000-30902)).
1.2*	Memorandum of Association of Compugen, as registered on January 29, 1993.
4.1	Funding Agreement entered into on December 29, 2010 between Compugen and Baize Investments (Israel) Ltd. (incorporated by reference to Exhibit 10.1 to Compugen's annual report on Form 20-F for the year ended December 31, 2010, filed with the SEC on March 21, 2011 (File No. 000-30902)).
4.2	Funding Agreement entered into on December 20, 2011 between Compugen and Baize Investments (Israel) Ltd. (incorporated by reference to Exhibit 1 to Compugen's 6-K filed on December 22, 2011 (File No. 000-30902)).
4.2.1	Amendment, dated July 24, 2012, to the Funding Agreement entered into on December 20, 2011 between Compugen and Baize Investments (Israel) Ltd. (incorporated by reference to Exhibit 10.1 to Compugen's 6-K filed on July 25, 2012 (File No. 000-30902)).
4.2.2	Amendment No. 2, dated December 27, 2012, to the Funding Agreement entered into on December 20, 2011 between Compugen and Baize Investments (Israel) Ltd. (incorporated by reference to Exhibit 10.1 to Compugen's 6-K filed on December 27, 2012 (File No. 000-30902)).
4.3*	Unprotected Lease Agreement, dated April 21, 1998, by and between Ofer Miretsky (Shikun Dan) Ltd. and Compugen Ltd., as amended by addenda dated December 16, 2002, March 5, 2003, May 2004, August 31, 2005, April 23, 2006, August 2009, April 30, 2012 and May 14, 2012.
4.4*	Sublease, dated March 1, 2012, by and between Kalobios Pharmaceuticals, Inc. and Compugen USA, Inc.
4.5	Compugen Ltd. Share Option Plan (2000) (incorporated by reference to Exhibit 10.17 to Compugen's Registration Statement on Form F-1 filed on August 2, 2000 (File No. 333-12316)).

4.6*	Compugen Ltd. 2010 Share Incentive Plan (incorporated by reference to Exhibit 4.1 to Compugen's Registration Statement on Form S-8 filed on September 7, 2010 (File No. 333-169239)).
8.1*	Subsidiaries.
12.1*	Certification by Principal Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) under the Exchange Act and Section 302 of the Sarbanes-Oxley Act of 2002.
12.2*	Certification by Principal Financial and Accounting Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) under the Exchange Act and Section 302 of the Sarbanes-Oxley Act of 2002.
13.1*	Certification by Principal Executive Officer and Principal Financial and Accounting Officer pursuant to Rule 13a-14(b)/Rule 15d-14(b) under the Exchange Act and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
15.1*	Consent of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global.
101*@	The following financial information from Compugen Ltd.'s Annual Report on Form 20-F for the year ended December 31, 2012, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Statements of Operations for the years ended December 31, 2012, 2011 and 2010; (ii) Consolidated Balance Sheets at December 31, 2012 and 2011; (iii) Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2012, 2011 and 2010; (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2012, 2011 and 2010; and (v) Notes to Consolidated Financial Statements.

<sup>\*</sup> Filed herewith.

Users of this data are advised, in accordance with Rule 406T of Regulation S-T promulgated by the SEC, that this Interactive Data File is deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of Section 18 of the Exchange Act, and otherwise is not subject to liability under these sections.

# SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

# COMPUGEN LTD.

| Signature: /s/ Dr. Anat Cohen-Dayag |
| Name: Dr. Anat Cohen-Dayag |
| Title: President and Chief Executive Officer |
| Date: March 21, 2013 |

# COMPUGEN LTD. AND ITS SUBSIDIARY

# CONSOLIDATED FINANCIAL STATEMENTS

# AS OF DECEMBER 31, 2012

# U.S. DOLLARS IN THOUSANDS

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## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

#### To the Shareholders and Board of Directors of

## COMPUGEN LTD.

We have audited the accompanying consolidated balance sheets of Compugen Ltd. (the "Company") and its subsidiary as of December 31, 2012 and 2011, and the related consolidated statements of comprehensive loss, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above, present fairly, in all material respects, the consolidated financial position of the Company and its subsidiary as of December 31, 2012 and 2011, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2012, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 21, 2013 expressed an unqualified opinion thereon.

Tel-Aviv, Israel March 21, 2013 /s/ KOST FORER GABBAY & KASIERER A Member of Ernst & Young Global



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#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

#### To the Shareholders and Board of Directors of

## COMPUGEN LTD.

We have audited Compugen Ltd.'s (the "Company") and its subsidiary internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying management's report on internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.



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Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company and its subsidiary maintained in all material respects, effective internal control over financial reporting as of December 31, 2012, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company and subsidiary as of December 31, 2012 and 2011, and the related consolidated statements of comprehensive loss, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2012 and our report dated March 21, 2013 expressed an unqualified opinion thereon.

March 21, 2013

/s/ KOST FORER GABBAY & KASIERER A Member of Ernst & Young Global

# CONSOLIDATED BALANCE SHEETS

# U.S. dollars in thousands

		Decen	iber 31,
	Note	2012	2011
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents	3	\$ 16,374	\$ 5,846
Restricted cash	9b	96	92
Short-term bank deposits		3,215	16,525
Investment in Evogene	5	5,196	
Other accounts receivable and prepaid expenses	4, 9d	690	546
Total current assets		25,571	23,009
NON- CURRENT INVESTMENTS:			
Investment in Evogene	5	-	4,093
Long-term lease deposits		59	17
Severance pay fund		1,728	1,465
Total non- current investments		1,787	5,575
LONG-TERM PREPAID EXPENSES	9d	301	
PROPERTY AND EQUIPMENT, NET	6	1,250	497
,			
Total assets		\$ 28,909	\$ 29,081
2.22		= 20,707	- 25,001

 $\label{eq:U.S.} \textbf{dollars in thousands (except share and per share data)}$ 

		Decei	nber 31,
	Note	2012	2011
LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES:			
Trade payables		\$ 443	\$ 248
Other accounts payable and accrued expenses	7	941	1,175
<u>Total</u> current liabilities		1,384	1,423
NON- CURRENT LIABILITIES:			
Research and development funding arrangements and others	8	7,872	6,434
Accrued severance pay		1,981	1,643
Total non-current liabilities		9,853	8,077
COMMITMENTS AND CONTINGENT LIABILITIES	9		
SHAREHOLDERS' EQUITY:	10		
Share capital:			
Ordinary shares of NIS 0.01 par value: 100,000,000 shares authorized at December 31, 2012 and 2011; 36,590,478 and 34,707,622 shares issued and outstanding at December 31, 2012			
and 2011, respectively		99	94
Additional paid-in capital		206,325	195,714
Accumulated other comprehensive income		5,367	4,264
Accumulated deficit		(194,119)	(180,491)
Total should also society		17.672	10.501
<u>Total</u> shareholders' equity		17,672	19,581
<u>Total</u> liabilities and shareholders' equity		\$ 28,909	\$ 29,081

# $\ \, \textbf{U.S. dollars in thousands (except share and per share data)} \\$

	Year ended December 31,			,			
	Note	- =	2012	2011		2010	
Revenues	13, 15	\$	242	\$ -	\$	1,115	
Cost of revenues			201			224	
Gross profit			41	 <u> </u>		891	
Research and development expenses, net of Government and other grants amounting to \$ 93, \$ 424 and \$ 1,010 for the years ended							
December 31, 2012, 2011 and 2010, respectively	9с		9,442	6,778		5,227	
Marketing and business development expenses			684	610		633	
General and administrative expenses			3,457	 4,591	_	2,909	
<u>Total</u> operating expenses			13,583	 11,979		8,769	
Operating loss			(13,542)	(11,979)		(7,878)	
Financial income (loss), net	14		(86)	(306)		241	
Other income, net			<u>-</u>	 281		434	
Net loss		\$	(13,628)	\$ (12,004)	\$	(7,203)	
Unrealized gain (loss) on Investment in Evogene		\$	1,103	\$ (1,902)	\$	2,716	
Total comprehensive loss		\$	(12,525)	\$ (13,906)	\$	(4,487)	
Basic and diluted net loss per share		\$	(0.38)	\$ (0.35)	\$	(0.22)	
Weighted average number of ordinary shares used in computing basic net loss per share			35,844,496	34,276,697		33,284,017	
Weighted average number of ordinary shares used in computing diluted net loss per share			36,249,262	34,276,697		33,284,017	

# STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

# U.S. dollars in thousands (except share data)

	Ordinar Number	y shares Amount	Additional paid-in capital	Accumulated other comprehensive income	Accumulated deficit	Total shareholders' equity
Balance as of January 1, 2010	32,867,912	\$ 88	184,523	\$ 4,071	\$ (161,284)	\$ 27,398
Employee options exercised	1,047,633	4	2,416	-	-	2,420
Issuance of warrants in connection with research and development funding arrangement, net			999			999
Stock-based compensation relating to options and warrants issued to non-employees			461			461
Stock-based compensation relating to options issued to employees and directors	_	_	1,876	-	-	1,876
Other comprehensive income	-	-	-	2,334	(7.202)	2,334
Net loss					(7,203)	(7,203)
Balance as of December 31, 2010	33,915,545	92	190,275	6,405	(168,487)	28,285
Employee options exercised	792,077	2	2,039	-	-	2,041
Stock-based compensation relating to options and warrants issued						
to non-employees Stock-based compensation relating to options issued	-	-	457	-	-	457
to employees and directors	_	_	2,943	_	_	2,943
Other comprehensive loss	-	-	-	(2,141)	-	(2,141)
Net loss	<u> </u>				(12,004)	(12,004)
Balance as of December 31, 2011	34,707,622	\$ 94	\$ 195,714	\$ 4,264	\$ (180,491)	\$ 19,581

# $U.S.\ dollars\ in\ thousands\ (except\ share\ data)$

	Ordinar	y shar	res	A	dditional paid-in		cumulated other comprehensive	A	Accumulated	Total	shareholders'
	Number	_	Amount	_	capital	_	income	_	deficit		equity
Balance as of December 31, 2011	34,707,622	\$	94	\$	195,714	\$	4,264	\$	(180,491)	\$	19,581
Employee options exercised	696,988		2		1,878		-		-		1,880
Issuance of shares	1,185,868		3		6,264		-		-		6,267
Stock-based compensation relating to options and warrants issued											
to non-employees	-		-		145		-		-		145
Stock-based compensation relating to options issued to employees and directors	-		-		2,324		-		-		2,324
Other comprehensive income	-		-		-		1,103		-		1,103
Net loss			<u>-</u>				<u> </u>		(13,628)		(13,628)
Balance as of December 31, 2012	36,590,478	\$	99	\$	206,325	\$	5,367	\$	(194,119)	\$	17,672

# CONSOLIDATED STATEMENTS OF CASH FLOWS

# U.S. dollars in thousands

	Year ended December 31,		
	2012	2011	2010
Cash flows from operating activities:			
Net loss	\$ (13.628)	\$ (12.004)	\$ (7,203
Adjustments required to reconcile net loss to net cash used in operating activities:	(13,020)	Ψ (12,001)	(7,200
Non-cash stock-based compensation	2,469	3,400	2,337
Depreciation	299	179	201
Severance pay, net	75	(7)	92
Gain from sale of Evogene shares	-	(239)	(419
Changes in fair value of exchange option and embedded derivatives in the research and development funding arrangements	588	113	97
Amortization of the cash consideration of the second research and development funding arrangement	(130)		
Decrease (increase) in trade receivables and other accounts receivable and prepaid expenses	(112)	43	192
Increase in long-term prepaid expenses	(301)		
Change in the fair value of liability with respect to outstanding options to non-employee	(20)		
Increase (decrease) in trade payables and other accounts payable and accrued expenses	(86)	(734)	562
Decrease in deferred revenue	-	-	(113
Gain from the sale of property and equipment			(25
Net cash used in operating activities	(10,846)	(9,249)	(4,279
Cash flows from investing activities:			
	16 525	14.524	500
Proceeds from maturity of short-term bank deposits  Investment in short-term bank deposits	16,525		
	(3,215)	(16,525) 592	(14,524
Changes in restricted cash Purchase of property and equipment	(1,005)	(96)	(1
		. ,	(46
Decrease (increase) in long-term lease deposits Proceeds from sale of investment in Evogene	(42)	47 232	(46 424
	•	232	
Proceeds from sale of property and equipment			25
Net cash provided by (used in) investing activities	12,263	(1,226)	(13,668

## U.S. dollars in thousands

	Y	Year ended December 31,		
	2012	2011	2010	
Cash flows from financing activities:				
			(61)	
Warrants issuance expenses in connection with funding arrangement	- (211	-	(61)	
Proceeds from issuance of ordinary shares, net	6,211	7.000	7,790	
Proceeds from research and development funding arrangements	1,000	7,000	2.270	
Proceeds from exercise of options	1,900	2,021	2,379	
Net cash provided by financing activities	9,111	9,021	10,108	
Increase (decrease) in cash and cash equivalents	10,528	(1,454)	(7,839)	
Cash and cash equivalents at the beginning of the year	5,846	7,300	15,139	
Cash and cash equivalents at the end of the year	\$ 16,374	\$ 5,846	\$ 7,300	
Cash and cash equivalents at the end of the year	Ψ 10,574	ψ 5,0 <del>1</del> 0	7,500	
Supplemental disclosure of non-cash investing and financing activities:				
Receivables from research and development funding arrangement	\$ -	\$ -	\$ 5,000	
Receivables on account of shares	\$ 56	\$ -	<u> - </u>	
Receivables for other finance proceeds	\$ -	\$ 20	\$ 41	
	<del></del>			
Purchase of property and equipment	\$ 47	\$ -	\$ -	

## NOTE 1:- GENERAL

- a. Compugen ltd. ("the Company") and its subsidiary is a leading therapeutic product discovery company focused on therapeutic proteins and monoclonal antibodies to address important unmet needs in the fields of immunology and oncology, either for us or our partners. Unlike traditional high throughput trial and error experimental based drug candidate discovery, the Company's discovery efforts are based on systematic and continuously improving in silico (by computer) product candidate prediction and selection followed by experimental validation, with selected product candidates being advanced in our Pipeline Program to the pre-IND stage. The Company's in silico predictive models utilize a broad and continuously growing infrastructure of proprietary scientific understandings and predictive platforms, algorithms, machine learning systems and other computational biology capabilities. The Company's business model primarily involves collaborations covering the further development and commercialization of in house-discovered product candidates and various forms of research and discovery agreements, in both cases providing the Company with potential milestone payments and royalties on product sales or other forms of revenue sharing.
  - The Company's headquarters are located in Israel, with research and development facilities in Israel and California.
- b. In 1997, the Company established a wholly-owned U.S. subsidiary, Compugen USA, Inc. ("Compugen Inc."). During 2011, Compugen Inc. had no significant operations. In March 2012, the Company renewed its U.S. subsidiary's activity by establishing a new monoclonal antibody (mAb) research and development operation in South San Francisco, California for the development of oncology and immunology mAb drug candidates against the Company's identified targets.
- c. Following a shelf registration filed in January 2011, the Company signed in August 2011 an agreement with an underwriter, to issue and sell up to 6,000,000 Ordinary shares under an At-the-Market offering ("ATM") program with gross proceeds not to exceed \$40,000. As of December 31, 2012 the Company had raised approximately \$6,267, net of issuance expenses, under this program from the issuance of 1,185,868 of its Ordinary shares.
  - Subsequent to December 31, 2012 the Company raised additional capital through the ATM program in total amount of \$6,868 from the issuance of 1,225,182 of its Ordinary shares.
- d. The Company established together with Merck KGaA ("Merck") and Merck Holdings Netherlands B.V. ("Merck Holdings") on June 25, 2012 ("Initial Date"), a start-up company, Neviah Genomics ("Neviah"), focused on the discovery and development of novel biomarkers for the prediction of drug-induced toxicity. According to the agreement with Merck and Merck Holdings, Neviah is expected to receive its initial funding from Merck Holdings in three installments subject to milestones as defined in the agreement. According to the agreement, concurrent with the establishment of Neviah, the Company licensed to Neviah biomarker candidates and in consideration received an equity ownership and a right for future royalties from potential successful commercialization of the product candidates.

## NOTE 1:- GENERAL (Cont.)

Pursuant to the collaboration agreement between the parties, Neviah shall pay the Company royalties on net sales (as defined in the agreement) of a licensed product ("License"), until the later of (a) the date on which such License ceases to be covered by a claim in the country in which such License is made and in the country in which such License is sold; and (b) fifteen years following the date of the first commercial sale of such License in such country.

In addition, Neviah will pay Compugen a certain amount of all sublicense income arising by Neviah from such License.

Based on ASC 845, "Nonmonetary Transactions", ("ASC 845"), the Company has elected the carryover basis at the Initial Date of the biomarker candidates in consideration of a non-controlling ownership interest in Neviah.

The Company does not have control over Neviah, however the Company has significant influence over Neviah. Therefore, subject to ASC 323, "Investments-Equity Method and Joint Ventures", ("ASC 323"), the Company accounts for its investment in Neviah under the equity method. For the period since its establishment until December 31, 2012 Neviah has accumulated losses and because the Company has no commitment to fund Neviah's operation, no investment account was recorded in the Company's financial statements.

In addition, according to the agreement, the Company is providing research and development services to Neviah in consideration for a fee as defined in the agreement (see also Note 15).

e. In August 2004, the Company spun off its computational chemistry activity into a wholly-owned subsidiary, Keddem BioScience Ltd. ("Keddem") which was, until mid-2007, in the phase of validating its technology and building the extensive infrastructure required to implement it. In 2007, Keddem operations were terminated and it was a dormant entity.

On November 19, 2012 ("Effective Date"), the Company signed an agreement with a private U.S.-based investment company pursuant to which up to \$ 15,000 in milestone related equity financing will be made available to Keddem. 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.

As of December 31, 2012 and based on initial investment of \$ 3,000, the holding rights of the Company in Keddem's ordinary share were reduced to less than 50% interest.

As part of the above transaction, warrants have been granted to the Company to purchase from Keddem up to 83,333 ordinary shares of a nominal value of NIS 0.01 each, at an exercise price which might be adjusted subject to terms set forth in the warrant agreement, during the exercise period which expires on the ten-year anniversary of the Effective Date.

## NOTE 1:- GENERAL (Cont.)

Based on ASC 845 the Company has elected the carryover basis for its investment in Keddem. Since the Company does not have control over Keddem, and subject to ASC 323, the Company accounts for its investment in Keddem under the equity method. For the period since Effective Date until December 31, 2012 Keddem has accumulated losses and because the Company has no commitment to fund Keddem's operation, no investment account was recorded in the Company's financial statements.

## NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States ("U.S. GAAP").

### Use of estimates:

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

### b. Financial statements in U.S. dollars:

The functional currency of the Company is the U.S. dollar, as the Company's management believes that the U.S. dollar is the primary currency of the economic environment in which the Company and its subsidiary have operated and expect to continue to operate in the foreseeable future. The Company's 2012 financing transactions were made outside Israel in U.S. dollars. The majority of the Company operations are currently conducted in Israel and most of the expenses in Israel are currently paid in new Israeli shekels ("NIS").

Transactions and balances denominated in U.S. dollars are presented at their original amounts. Monetary accounts denominated in currencies other than the dollar are re-measured into dollars in accordance with ASC No. 830, "Foreign Currency Matters". All transaction gains and losses of the re-measurement of monetary balance sheet items are reflected in the consolidated statement of loss as financial income or expenses, as appropriate.

## c. Basis of consolidation:

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Compugen USA Inc. Intercompany transactions and balances have been eliminated upon consolidation.

### d. Cash and cash equivalents:

The Company and its subsidiary consider all highly liquid investments that are convertible to cash with original maturities of three months or less at their acquisition date as cash equivalents.

## NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

### e. Restricted cash:

Restricted cash is an interest bearing saving account which is used as a security for the Company's Israeli facilities leasehold bank guarantee.

#### f. Short-term bank deposits

Bank deposit with maturities of more than three months but less than one year is included in short-term deposit. Such short-term deposits are stated at cost which approximates market values.

Bank deposits in U.S. dollars for the years ended December 31, 2012 and 2011 bear an annual average interest rate of 1.32% and 1.77%, respectively.

Bank deposits in NIS for the years ended December 31, 2012 and 2011 bear an annual average interest rate of 2.40% and 2.56%, respectively.

### g. Marketable securities:

The Company accounts for investment in Evogene in accordance with ASC No. 320, "Investments - Debt and Equity Securities".

Management determines the appropriate classification of its investments at the time of purchase and reevaluates such determinations at each balance sheet date.

The Company classifies its investment in Evogene as available-for-sale securities which are carried at fair value, with the unrealized gains and losses, net of tax, reported in "accumulated other comprehensive income (loss)" in shareholders' equity. Realized gains and losses on sale of investments are included in "financial income (loss), net" and are derived using the specific identification method for determining the cost of securities.

The Company recognizes an impairment charge when a decline in the fair value of its investments in debt securities is below the cost basis of such securities is judged to be other-than-temporary. Factors considered in making such a determination include the duration and severity of the impairment, the reason for the decline in value, the potential recovery period and the Company's intent to sell, including whether it is more likely than not that the Company will be required to sell the investment before recovery of cost basis.

## NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

The Company periodically reviews its marketable securities for impairment. If the Company concludes that any of these investments are impaired, the Company determines whether such impairment is "other-than-temporary" as defined under ASC 320-10-35. On April 1, 2009, the Company adopted a new guidance, ASC 320-10-65-1, "Recognition and Presentation of Other-Than-Temporary Impairments", that changed the impairment and presentation model for debt securities. Under the amended impairment model, an other-than-temporary impairment loss is recognized in earnings if the entity has the intent to sell the debt security, or if it is more likely than not that it will be required to sell the debt security before recovery of its amortized cost basis. However, if an entity does not expect to sell a debt security, it still needs to evaluate expected cash flows to be received and determines if a credit loss exists. In the event of a credit loss, only the amount of impairment associated with the credit loss is recognized currently in earnings. During 2010, 2011 and 2012, no other-than-temporary impairment was recorded.

As of December 31, 2012, the Company holds 1,043,397 shares representing 2.8% of Evogene outstanding Ordinary shares.

## h. Long-term prepaid expenses:

Long-term prepaid expenses consist of long-term lease deposits as security for the subsidiary's facility lease, motor vehicles leases and non-refundable payments for research and developments services (see also Note 9d).

## i. Property and equipment, net:

Property and equipment are stated at cost, net of related investment grants and accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets at the following annual rates:

Computers, software and related equipment	33
Laboratory equipment and office furniture	6 - 30 (mainly 30)
Leasehold improvements	shorter of the term of the lease or
	useful life

## j. Impairment of long-lived assets:

The long-lived assets of the Company and its subsidiary are reviewed for impairment in accordance with ASC 360, "Property, Plant, and Equipment", whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset with the future undiscounted cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. During the years 2012, 2011 and 2010, no impairment losses have been identified.

## NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

## k. Revenue recognition:

The Company generates revenues from collaboration research agreements under which the Company delivers novel product candidates and professional services and may receive future milestones and royalties on successful products. As of December 31, 2012 the Company did not receive upfront payments nor milestones and royalties under its collaboration agreements.

The Company views the research and development services in its agreements as service arrangements and follows the revenue recognition criteria in ASC 650-10.

In 2010, all of the Company's customers realized value from the transaction only when and if the final act was performed and, therefore, performance should be deemed to have occurred and revenue recognized. In 2012, the Company earns revenue on time and material basis and recognizes revenue accordingly to the proportional performance method. During 2012 and 2010, the Company recognized revenues from product candidate collaboration agreements, under which the Company performed research services (see also Notes 13 and 15).

### l. Research and development expenses, net:

Research and development expenses are charged to the statement of comprehensive loss as incurred.

Royalty and non-royalty bearing grants from the Office of the Chief Scientist of the Israel Ministry of Industry, Trade & Labor ("OCS"), the Bi-national Industrial Research and Development Foundation ("BIRD") and the European 6th framework for funding approved research and development projects, are recognized at the time the Company is entitled to such grants, on the basis of the research and development expenses incurred. Such grants are presented as a reduction from research and development expenses.

### m. Severance pay:

The Company's liability for severance pay for its Israeli employees is calculated pursuant to Israeli Severance Pay Law based on the most recent salary of the employees multiplied by the number of years of employment, as of the balance sheet date. Employees are entitled to one month's salary for each year of employment or a portion thereof. The Company's liability for all of its employees is fully provided by monthly deposits with insurance policies and by an accrual. The value of these policies is recorded as an asset in the Company's balance sheet.

## NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

The deposited funds may be withdrawn only upon the fulfillment of the obligation pursuant to Israeli Severance Pay Law or labor agreements. The value of the deposited funds is based on the cash surrendered value of the insurance policies, and includes profits or losses accumulated up to the balance sheet date.

Some employee arrangements are under section 14 to the Israeli Severance Pay Law, 1963, pursuant to which the severance pay liability is fully covered by the deposits with the severance pay funds.

Regarding employees that have signed section 14, related obligation and amounts deposited on behalf of such obligation are not stated on the balance sheet as the Company is legally released from obligation to such employees once the deposited amounts have been paid.

Severance expenses for the years ended December 31, 2012, 2011 and 2010 amounted to approximately \$ 252, \$ 257 and \$ 231, respectively.

#### n. Accounting for stock-based compensation:

The Company accounts 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 the Company's consolidated statement of loss.

The Company recognizes compensation expenses for the value of its awards granted 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. Estimated forfeitures are based on actual historical pre-vesting forfeitures.

The Company selected the Black-Scholes-Merton ("Black-Scholes") option-pricing model as the most appropriate fair value method for the majority of its stock-options awards and values stock based on the market value of the underlying shares at the date of grant. The option-pricing model requires a number of assumptions, of which the most significant are the expected stock price volatility and the expected option term. Expected volatility was calculated based on actual historical stock price movements over a term that is equivalent to the expected term of granted options. The expected term of options granted is based on historical experience and represents the period of time that options granted are expected to be outstanding. The risk-free interest rate is based on the yield from U.S. treasury bonds with an equivalent term. The Company has historically not paid dividends and has no foreseeable plans to pay dividends.

The Company applies ASC 718 and ASC 505-50, "Equity-Based Payments to Non-Employees" with respect to options and warrants issued to non-employees. ASC 718 requires the use of option valuation models to measure the fair value of the options and warrants at the measurement date.

## NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

### o. Concentration of credit risks:

Financial instruments that potentially subject the Company and its subsidiary to concentration of credit risk consist principally of cash and cash equivalents, short-term bank deposits, marketable securities and long-term lease deposits.

Cash and cash equivalents are invested in U.S. dollar deposits with major banks in Israel. Generally, these deposits may be redeemed upon demand and bear minimal risk. The Company has no significant off-balance-sheet concentration of credit risk such as foreign exchange contracts, option contracts or other foreign hedging arrangements.

## p. Income taxes:

The Company accounts for income taxes in accordance with ASC No. 740, "Income Taxes", ("ASC 740") which prescribes the use of the liability method whereby deferred tax asset and liability account balances are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company provides a valuation allowance, if necessary, to reduce deferred tax assets to their estimated realizable value. As of December 31, 2012 and December 31, 2011, a full valuation allowance was provided by the Company.

ASC 740 contains a two-step approach to recognizing and measuring a liability for uncertain tax positions. The first step is to evaluate the tax position taken or expected to be taken in a tax return by determining if the weight of available evidence indicates that it is more likely than not that, on an evaluation of the technical merits, the tax position will be sustained on audit, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. As of December 31, 2012 and 2011 no liability for unrecognized tax benefits was recorded as a result of the implementation of ASC 740.

## q. Net loss per share:

Basic net loss per share is calculated based on the weighted average number of Ordinary shares outstanding during each year. Diluted net loss per share is calculated based on the weighted average number of Ordinary shares outstanding during each year, plus dilutive potential in accordance with ASC 260, "Earnings per Share."

## NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

All outstanding stock options, warrants and shares under the exchange option under the second research and development funding arrangement, as amended (see also Note 8b) have been excluded from the calculation of the diluted net loss per share because all such securities are anti-dilutive for all periods presented. As of December 31, 2012, 2011 and 2010 the total number of shares related to outstanding options excluded from the calculations of diluted net loss per share was 6,589,215, 5,943,400 and 5,863,457, respectively. The total number of shares related to warrants under the first research and development funding arrangement excluded from the calculations of diluted net loss per share was, 500,000 for the years ended December 31, 2012, 2011 and 2010. As of December 31, 2012 and 2011 the total number of shares related to the exchange option under the second research and development funding arrangement excluded from the calculations of diluted net loss per share was 599,340, and 1,455,000, respectively.

## r. Fair value of financial instruments:

The Company applies ASC 820, "Fair Value Measurements and Disclosures" ("ASC 820"), pursuant to which fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date.

In determining fair value, the Company uses various valuation approaches. ASC 820 establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

The hierarchy is broken down into three levels based on the inputs as follows:

- Level 1 Valuations based on quoted prices in active markets for identical assets that the Company has the ability to access. Valuation adjustments and block discounts are not applied to Level 1 instruments. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these products does not entail a significant degree of judgment.
- Level 2 Valuations based on one or more quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.
- Level 3 Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

## NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

The availability of observable inputs can vary from investment to investment and is affected by a wide variety of factors, including, for example, the type of investment, the liquidity of markets and other characteristics particular to the transaction. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment and the investments are categorized as Level 3.

The following methods and assumptions were used by the Company and its subsidiary in estimating their fair value disclosures for financial instruments:

The carrying amounts of cash and cash equivalents, restricted cash, short-term bank deposits, other accounts receivable, trade payables, and other accounts payable approximate their fair values due to the short-term maturities of such instruments.

The Company measures its investment in Evogene and embedded derivatives with respect to research and development funding arrangement at fair value (see also Note 12).

#### s. Derivative instruments:

As of the balance sheet date, none of the Company's derivatives qualify for hedge accounting under ASC 815, "Derivatives and Hedging" ("ASC 815"). As a result all derivatives are recognized on the balance sheet at their fair value, with changes in the fair value carried to the statement of loss and included in financial income (loss), net.

In the year ended December 31, 2012, the Company did not record net gain or loss from derivatives transactions compared with net gain (loss) in the years ended December 31, 2011 and 2010 in the amount of \$ 134 and \$ 15, respectively.

## t. Investment in affiliates:

The Company accounts for its investment in affiliated companies under the equity method in accordance with ASC 323, "Investments-Equity Method". For the purpose of these financial statements, an affiliated company is a company held to the extent of 20% or more, or a company less than 20% held, in which the Company can exercise significant influence over operating and financial policy of the affiliate.

## u. Comprehensive income:

The Company accounts for comprehensive income in accordance with ASC topic 220, "Comprehensive Income". This statement establishes standards for the reporting and display of comprehensive income and its components in a full set of general purpose financial statements. Comprehensive income generally represents all changes in stockholders' equity during the period except those resulting from investments by, or distributions to, stockholders. As of December 31, 2012 and 2011, Accumulated other Comprehensive income amounted to \$ 5,367 and \$ 4,264, respectively, related to unrealized gains from available-for-sale securities.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## U.S. dollars in thousands (except share and per share data)

## NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

### v. Reclassification:

Certain amounts in prior years consolidated balance sheets have been reclassified to conform to the current year presentation. In prior years, the fair value of liability with respect to outstanding options to a non- employee related to Research and Development funding arrangement was presented as a current liability while in 2012 it was decided to reclassify it and present it as a non- current liability.

## w. Impact of recently issued accounting standards:

In February 2013, the FASB issued ASU No. 2013-02, "Reporting of Amounts Reclassified out of Accumulated Other Comprehensive Income." Under ASU 2013-02, an entity is required to provide information about the amounts reclassified out of Accumulated Other Comprehensive Income ("AOCI") by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. ASU 2013-02 does not change the current requirements for reporting net income or other comprehensive income in the financial statements. ASU 2013-02 is effective for the Company as of January 1, 2013. Since this standard only impacts presentation and disclosure requirements, its adoption will not have a material impact on the Company's consolidated results of operations or financial condition.

## NOTE 3:- CASH AND CASH EQUIVALENTS

December 31,			
	2012		2011
\$	9,091	\$	1,300
	6,575		2,924
	708		1,622
\$	16,374	\$	5,846
	\$	\$ 9,091 6,575 708	\$ 9,091 \$ 6,575 708

## NOTE 4:- OTHER ACCOUNTS RECEIVABLE AND PREPAID EXPENSES

	December 31,				
20	2012		2012 2		2011
¢	16	¢	198		
\$		Э			
	60		18		
	516		186		
	26		42		
	72		102		
\$	690	\$	546		
	\$	\$ 16 60 516 26 72	\$ 16 \$ 60 516 26 72		

(\*) See also Note 9d.

### NOTE 5:- INVESTMENT IN EVOGENE

As discussed in Note 2g, the Company accounts for its investment in Evogene's shares as of December 31, 2012 and 2011, as available-for-sales securities.

The total amount of unrealized gain of \$ 5,367, \$ 4,264 and \$ 6,405 was included as a separate component of shareholders' equity under accumulated other comprehensive income for the years ended December 31, 2012, 2011 and 2010, respectively.

## NOTE 6:- PROPERTY AND EQUIPMENT, NET

	Decen	aber 31,
	2012	2011
Cost:		
Computers, software and related equipment	\$ 5,023	\$ 4,948
Laboratory equipment and office furniture	4,032	3,184
Leasehold improvements	643	514
	9,698	8,646
Accumulated depreciation:		
Computers, software and related equipment	4,885	4,859
Laboratory equipment and office furniture	3,060	2,823
Leasehold improvements	503	467
	8,448	8,149
Depreciated cost	<u>\$</u> 1,250	\$ 497

 $For the years ended \, December \, 31, 2012, 2011 \, and \, 2010, depreciation \, expenses \, were \, approximately \, \$ \, 299, \, \$ \, 179 \, and \, \$ \, 201, \, respectively.$ 

## NOTE 7:- OTHER ACCOUNTS PAYABLE AND ACCRUED EXPENSES

		December 31,					
	20	2012		2012 20		2011	
Employees and related accruals	\$	442	\$	606			
Consultants and Board members		298		178			
Accrued expenses		148		269			
Other		53		122			
	\$	941	\$	1,175			

## NOTE 8:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENTS AND OTHERS

The following table summarizes the balances recorded on the Company's financial statements with respect to the research and development funding arrangements:

		December 31,		
	2	012		2011
Embedded Derivatives (a)	\$	4,025	\$	4,041
mAb Participation Interest (b)		744		443
Embedded Derivatives (b)		2,839		1,666
Liability with respect to outstanding options to non-employee (c)		264		284
	\$	7,872	\$	6,434

- a. On December 29, 2010 (the "Issuance Date") the Company signed a funding arrangement with an investor in partial support of its research and development activities with respect to novel therapeutic product candidates. According to the arrangement the Company received \$ 5,000 in consideration of:
  - (1) Warrants to purchase 500,000 Ordinary shares at a fixed exercise price of \$ 6 per share until June 30, 2013 ("Detachable Warrants") and,
  - (2) An entitlement to receive a portion of future income received by Compugen related to possible commercialization and post-marketing fees that are related to certain designated product candidates ("Participation Rights"). In addition, the investor had an option to exchange its Participation Rights for a fixed amount of 833,334 Ordinary shares at any time through June 30, 2013 (the "Conversion Alternative").

## NOTE 8:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENTS (Cont.)

As of the Issuance Date, all of the five designated product candidates were pursued in the Company's validation pipeline. Furthermore, the Company has an obligation to continue the research and developments activities on a best effort basis and to issue to the investor an "Annual Report" containing a summary report for each such designated product candidate, providing general information with respect to what research was conducted by Compugen since the Issuance Date or the prior Annual Report (as applicable).

As part of the arrangement, in the event that prior to June 30, 2011 the Company would have entered into new similar arrangement whereby it obtains \$ 15,000 or more, the Company had the right to exchange the investor's Participation Rights for investment in the new arrangement. Since during the above time frame such qualifying finance round did not take place this right of exchange expired.

In accordance with ASC 730-20, "Research and Development Arrangements" and ASC 815, "Derivative and Hedging" the Company considered the Participation Rights as well as the New Arrangement Rights of the instrument issued to be a research and development arrangement ("Research and Development Component") coupled with embedded derivatives (that are the Conversion Alternative and the New Arrangement Rights) as those instruments do not have fixed settlement provisions.

Consequently, the Company 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.

The Company has further determined that the Detachable Warrants should be accounted for and classified as an equity component since the warrants have fixed settlement provisions as stated above.

As per the above, at the issuance date the consideration of \$5,000 was allocated as determined by the Company assisted by the work of a third party valuator:

- An amount of \$ 999 was allocated to the equity component net of \$ 61 issuance expenses.
- (2) An amount of \$ 3,940 was allocated to the Research and Development Component and it was entirely assigned to the Participation Rights and the Conversion Alternative measured at fair value. Issuance expenses that were allocated to this component, amounted to \$ 228, were expensed immediately and are included as part of financial expenses in the consolidated statements of operations.

## NOTE 8:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENTS (Cont.)

As of December 31, 2012, the Company re-measured the embedded derivatives in the Research and Development Component. Consequently, during the year ended December 31, 2012 the Company recorded \$ 16 as financial income.

The Company selected the Multi Period Binomial model as the methodology for determining the fair value for the embedded derivatives. This option-pricing model requires a number of assumptions, of which the most significant are the expected stock price volatility and the expected term.

In estimating the Participation Rights' fair value, the Company used the following assumptions:

	December	r <b>31</b> ,
	2012	2011
Risk-free interest rate (1)	0.11%	0.18%
Expected volatility (2)	48.02%	46.83%
Expected life (in years) (3)	0.5	1.5
Expected dividend yield (4)	0	0

- (1) Risk-free interest rate based on the yields from U.S. treasury bonds with different periods to maturity (according to different projection periods).
- (2) Expected volatility was calculated based on actual historical stock price movements of the Company over a term that is equivalent to the expected term of the option.
- (3) Expected life the expected life of the conversion feature was based on the term of the derivative.
- (4) Expected dividend yield was based on the fact that the Company has not paid dividends to Ordinary shareholders in the past and does not expect to pay dividends to Ordinary shareholders.
- b. On December 20, 2011 (the "Effective Date"), the Company entered into an additional funding arrangement ("mAb Funding Arrangement") with an investor, pursuant to which the Company was to receive a total of \$8,000 (the "Funding Amount") in order to fund certain research and development activities preformed on a best effort basis, in consideration for an entitlement to receive a portion of future income derived from certain monoclonal antibody ("mAb") product candidates ("Products") that are successfully commercialized or are licensed out as defined in the agreement ("mAb Participation Interest").

## NOTE 8:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENTS (Cont.)

According to the mAb Funding Arrangement the Funding Amount should have been paid in three installments, \$2,000 was paid on December 21, 2011. The investor was committed to invest additional \$3,000 on or before June 30, 2012 and additional \$3,000 on or before September 30, 2012. Pursuant to the mAb Funding Arrangement, in the event the remaining funds are not transferred, the Company had the right to exchange the relative Funding Amount for Company's Ordinary Shares, at the price of \$6 per share (the "Company Option"), and the Company would then have no obligations towards the investor under the mAb Funding Arrangement.

The mAb Participation Interest from the Products, is calculated on a sliding scale mainly as fraction of the Funding Amount, relative to total amount invested both by the investor and the Company in the Products, provided that the investor will be entitled to no less than ten percent of such future payments related to any qualifying Products. The investor has the right, during the first quarter of 2014, to waive its rights to the mAb Participation Interest in exchange for a fixed amount of 1,455,000 Ordinary Shares (the "Exchange Option").

On July 24, 2012 the Company entered into an amendment ("First Amendment") to the mAb Funding Agreement, pursuant to which the number of specified Compugen-identified targets in the field of oncology against which mAb product candidates that are subject to the mAb Participation Interest was reduced from twelve to eight, and the payment dates for the \$ 6,000 of the Funding Amount remaining to be paid were amended such that \$ 1,000 was to be paid on or before July 31, 2012 and \$ 5,000 was to be paid on or before December 31, 2012. \$ 1,000 was paid on July 27, 2012.

On December 27, 2012, the Company entered into a second amendment ("Second Amendment") to the mAb Funding Arrangement, pursuant to which:

- (1) The number of specified Compugen-identified targets in the field of oncology against which mAb product candidates that are subject to the mAb Participation Interest was reduced from eight to six. However, according to this Amendment, in the event the investor increases its funding in the Company's research and development activities to an aggregate of \$ 10,500 the number of targets that are subject to the mAb Participation Interest will revert to eight.
- (2) The term for the remaining payment of between \$5,000 and \$7,500 has been revised and this amount is due to be paid no later than April 30, 2013. In the event that the minimum remaining \$5,000 investment is not made by April 30, 2013, the Company has the right to terminate the mAb Funding Arrangement, and the investor shall have no further rights with regards to the targets, including without limitation, the Exchange Option or the mAb Participation Interest other than a cumulative maximum total of \$1,500, to be paid on or after May 1, 2013.

## NOTE 8:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENTS (Cont.)

(3) The Exchange Option was postponed to the first quarter of 2015. In addition, the exchange shares amount has been modified and will now be determined by dividing the funding amount that was paid by the investor and the average closing price of the Company's Ordinary shares during twenty trading days prior the actual exchange date as described in the Second Amendment.

The First Amendment and the Second Amendment do not trigger any change in the accounting treatment as mentioned below.

In accordance with ASC 730-20, "Research and Development Arrangements" and ASC 815, "Derivative and Hedging" the Company considered the mAb Participation Interest to be a research and development arrangement ("Research and Development Component") coupled with embedded derivatives (the Exchange Option and the Company Option) as those instruments do not have fixed settlement provisions. Consequently, the Company 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. In measuring the fair value the Company considered the various amendments in the terms of the embedded derivatives.

As per the above, the first payment in 2011 of \$ 2,000 was allocated as determined by the Company assisted by the work of a third party valuator:

- An amount of \$ 443 was allocated as Cash Consideration to liability component.
- An amount of \$ 1,557 was allocated to the Research and Development Component and it was entirely assigned to the mAb Participation Interest and the Exchange Option measured at fair value. Issuance expenses that were allocated to this component, amounted to \$ 463, were expensed immediately and are included as part of financial expenses in the consolidated statements of operations.

The second payment in 2012 of \$ 1,000 was allocated as determined by the Company assisted by the work of a third party valuator:

- An amount of \$ 431 was allocated as Cash Consideration to liability component.
- An amount of \$569 was allocated to the Research and Development Component and it was entirely assigned to the mAb Participation Interest and the Exchange Option
  measured at fair value. No additional Issuance expenses were allocated to this component.

## NOTE 8:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENTS (Cont.)

As of December 31, 2012, the Company re-measured the embedded derivatives in the Research and Development Component and recorded an accumulated \$ 604 as financial expenses.

As of December 31, 2011 the Company selected the Multi Period Binomial model as the methodology for determining the fair value for the embedded derivatives. Following the Second Amendment, as of December 31, 2012, the Company selected the Monte Carlo Simulation model as the methodology for determining the fair value for the embedded derivatives. These option-pricing models require a number of assumptions, of which the most significant are the expected stock price volatility and the expected term.

In estimating the Participation Rights' fair value, the Company used the following assumptions:

	December 31, 2012	December 31, 2011
Risk-free interest rate (1)	0.28%	0.28%
Expected volatility (2)	47.46%	61.73%
Expected life (in years) (3)	2.25	2.25
Expected dividend yield (4)	0	0

- (1) Risk-free interest rate based on the yields from U.S. treasury bonds with different periods to maturity (according to different projection periods).
- (2) Expected volatility was calculated based on actual historical stock price movements of the Company over a term that is equivalent to the expected term of the option.
- (3) Expected life the expected life of the conversion feature was based on the term of the derivative.
- (4) Expected dividend yield was based on the fact that the Company has not paid dividends to Ordinary shareholders in the past and does not expect to pay dividends to Ordinary shareholders.
- c. As part of issuance expenses the Company granted, and committed to grant upon execution of the remaining payments by the investor, up to 100,000 options to an agent and cash payment of \$80. As of December 31, 2011, the Company recorded \$453 as finance expenses related to these awards, based on its fair value. Based on ASC 505, the Company remeasured the above options and recorded \$20 as financial income during the year ended December 31, 2012.

## NOTE 9:- COMMITMENTS AND CONTINGENCIES

a. The Company and its subsidiary lease their facilities and motor vehicles under various operating lease agreements that expire on various dates.

Annual minimum future rental commitments under non-cancelable operating leases are approximately as follows:

December 31,		
2013	\$	698
2014		522
2015		384
	<u>\$</u>	1,604

Operating lease expenses for the Company and its subsidiary were approximately \$551, \$383 and \$397 in the years ended December 31, 2012, 2011 and 2010, respectively.

- b. The Company provided bank guarantees in the amount of \$ 96 and check deposit in the amount of \$ 40 in favor of its offices' lessor in Israel and California, U.S, respectively.
- c. Under the OCS royalty-bearing programs, the Company is not obligated to repay any amounts received from the OCS if it does not generate any income from the results of the funded research program. If income is generated from a funded research program, the Company is committed to pay royalties at a rate of between 3% to 5% of future revenues arising from such research programs, and up to a maximum of 100% of the amount received, linked to the U.S. dollar (for grants received under programs approved subsequent to January 1, 1999, the maximum to be repaid is 100% plus interest at LIBOR). For the years ended December 31, 2012 and 2011 the Company incurred no obligation to pay or accrue any amounts to the OCS. For the year ended December 31, 2010, the Company has an aggregate of paid and accrued royalties to the OCS recorded in the consolidated statement of comprehensive loss in the amount of \$ 39. As of December 31, 2012, the Company's aggregate contingent obligations for payments to OCS, based on royalty-bearing participation received or accrued, net of royalties paid or accrued, totaled approximately to \$ 8,695.

Under the BIRD plan, the Company is not obligated to repay any amounts previously received from BIRD if it does not generate any income from the outcome of the funded research program. As of December 31, 2012 the Company does not expect any income to be generated from the outcome of the funded research BIRD plan and as such no correlated contingent obligation was recorded (see also Note 2I).

## NOTE 9:- COMMITMENTS AND CONTINGENCIES (Cont.)

d. On June 25, 2012 the Company and its U.S subsidiary added to its mAb enabling technology base by entering into an Antibodies Discovery Collaboration Agreement (the "Agreement") with a U.S. antibody technology company ("mAb Technology Company"), providing an established source for fully human mAbs. The agreement includes time based research and commercial licenses to use specific mAb Technology Company proprietary collections of polynucleotides encoding antibodies, and their associated biological materials, together with the systems and/or licensed know how and/or to practice patent rights to identify, isolate, and modify discovery Fabs (the "Technology"), and to develop and exploit discovery products. According to the Agreement (i) the Company paid \$ 600 in consideration for a three-year access right to the Technology, of which \$ 400 was recorded as long-term prepaid expenses and will be charged to the statement of comprehensive loss over three years and (ii) \$ 150 in consideration for the associated biological materials which was recorded as other accounts receivables and prepaid expenses and will be charged to the statement of comprehensive loss in accordance with actual use of materials during each measured period (iii) in the event any Compugen mAb programs utilize the Technology, the Company would pay additional fees upon the occurrence of certain development and commercialization milestone up to a maximum cumulative total of \$ 3,250 for each antibody drug product that achieved all such milestone events. In addition, the mAb Technology Company will be entitled to certain royalties that could be eliminated, upon payment of certain one-time fees (all payments referred together as "Contingent Fees"). As of December 31, 2012 the Company did not incur any obligation for such Contingent Fees.

In December 2012, the Company replenished the associated biological materials to support the research and development activities performed under the Agreement in the amount of \$ 100 which was recorded as other accounts receivables and prepaid expenses.

During the period from June 25, 2012 to December 31, 2012 the Company charged expenses to the statement of comprehensive loss in the amount of \$109 related to the Agreement.

e. As mentioned in Note 8 the investor is entitle to receive Participation Rights and mAb Participation Interest under the research and development funding arrangement and the mAb Funding Arrangement, respectively. As of December 31, 2012 the Company did not incur any obligation under these arrangements.

## NOTE 10:- SHAREHOLDERS' EQUITY

### a. Ordinary shares:

The ordinary shares confer upon their holders the right to receive notice to participate and vote in general shareholders meetings of the Company to receive dividends, if declared, and to have certain rights upon liquidation of the Company.

#### Share option plans

In March 2000, the Company adopted the Compugen Ltd. Share Option Plan (2000) (the "2000 Options Plan"), which provides for the grant of options to purchase up to 1,500,000 ordinary shares to employees and non-employees of the Company and its subsidiaries. The number of shares authorized for issuance under the 2000 Options Plan automatically increased each January 1 by the lesser of 1,500,000 or 4% of the total number of the Company's then outstanding shares or such lower amount as shall be determined by the Board. On July 25, 2010, the Board resolved to cease making grants under the 2000 Options Plan.

In July 2010, the Company adopted the Compugen Ltd. 2010 Share Incentive Plan (the "2010 Options Plan"), which replaced the 2000 Options Plan. Up to 1,953,851 shares were initially reserved for grant, under the 2010 Options Plan to employees and non-employees of the Company and its subsidiaries. The options shares available for grant under the 2000 Options 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 Options Plan.

In general, options granted under the 2000 Options Plan and the 2010 Options Plan vest over a four-year period and expire 10 years from the date of grant and are granted at an exercise price of not less than the fair market value of the Company's ordinary shares on the date of grant, unless otherwise determined by the board of directors. The exercise price of the options granted under the plans may not be less than the nominal value of the shares into which such options are exercised and the expiration date may not be later than 10 years from the date of grant. Any options that are cancelled or forfeited before expiration become available for future grants. Under the 2010 Options Plan, there were 2,969,072 options to purchase shares available for future grant as of December 31, 2012.

All information below relates to options granted to employees, directors (including Chairman of the Board (see Note 10d below)) and non-employees (see Note 10c below).

## NOTE 10:- SHAREHOLDERS' EQUITY (Cont.)

Transactions related to the grant of options to employees, directors and non-employees under the above plans during the year ended December 31, 2012, were as follows:

	Number of options	Weighted average exercise price	Weighted average remaining contractual life Years	Intrinsic value
Options outstanding at beginning of year	5,943,400	3.04	6.54	11,298,881
Options granted	1,358,000	4.18		1,391,720
Options exercised	(696,988)	2.70		2,049,848
Options expired	(5,197)	3.86		5,489
Options forfeited	(10,000)	4.13		7,900
Options outstanding at end of year	6,589,215	3.34	6.63	10,958,989
Options vested and expected to vest at end of year	6,326,283	3.31	6.55	10,712,527
Exercisable at end of year	3,717,320	1.54	2.87	8,301,318

Weighted average fair value of options granted during the years 2012, 2011 and 2010 was \$ 2.72, \$ 2.33 and \$ 2.51 per share, respectively.

The aggregate intrinsic value in the table above represents the total intrinsic value (the difference between the Company's closing stock price on the last trading day of fiscal 2012 and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on December 31, 2012. This amount is impacted by the changes in the fair market value of the Company's shares.

As of December 31, 2012, the total unrecognized estimated compensation cost related to non-vested stock options granted prior to that date was \$5,314 which is expected to be recognized over a weighted average period of approximately 2.40 years.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

# U.S. dollars in thousands (except share and per share data)

## NOTE 10:- SHAREHOLDERS' EQUITY (Cont.)

The Company used the following weighted-average assumptions for granted options:

	Year	Year ended December 31,			
	2012	2011	2010		
Volatility	82%	83%	79%		
Risk-free interest rate	0.69%	1.49%	2.31%		
Dividend yield	0%	0%	0%		
Expected life (years)	4.5	4.7	5.0		

The stock-based compensation expenses are included as follows in the expense categories:

		Year ended December 31,			
	2012		2011		2010
Research and development expenses, net	\$	1,298 \$	1,003	\$	883
Marketing and business development expenses		192	178		91
General and administrative expenses		979	2,219		1,124
	·				_
	<u>\$</u>	2,469 \$	3,400	\$	2,098

## c. Options to non-employees:

	Year	Year ended December 31, 2012			
	Number of options	Weighted average exercise price	Weighted average remaining contractual life		
Options outstanding at beginning of year	375,500	4.41	3.84		
Options granted	25,000	5.50			
Options exercised	(79,000)	3.53			
Options expired		-			
Options outstanding at end of year	321,500	4.71	3.52		
Options vested and expected to vest at end of year	321,500	4.71	3.52		
Exercisable at end of year	317,337	4.64	3.47		

## NOTE 10:- SHAREHOLDERS' EQUITY (Cont.)

The Company accounts for its options and warrants to non-employees under the ASC 505-50 "Equity Based Payments to Non-Employees". The options are re-measured using a Black-Scholes option-pricing model at their then-current fair value at the last date of each reporting period and compensation cost is adjusted for the changes for those fair values. The Company recognized the compensation cost using the straight-line method.

The Company used the following weighted-average assumptions for the fair value calculation of these options:

	Year	Year ended December 31,				
	2012	2012 2011				
Volatility	78%	78%	81%			
Risk-free interest rate	1.12%	2.56%	2.25%			
Dividend yield	0%	0%	0%			
Expected life (years)	6.6	6.0	6.0			

As for compensation expenses, see also b above.

d. On February 28, 2010 the former Chairman of the Board provided the Board with a letter under which he voluntary and irrevocably waives all options held by him solely to the extent that such options would vest after December 31, 2010. As a consequence, the Company recognized the remaining unrecognized compensation costs in total of \$ 494 with respect to the above mentioned unvested options held by the former Chairman of the Board.

As of December 31, 2012, the Company fully recognized those compensation costs.

- e. On May 12, 2011, the shareholders approved a new grant to the former CEO and a current director on the Company's board of directors of a fully vested option to purchase 380,000 shares, exercisable until the earlier to occur of: (i) 180 days after the former CEO and current board member terminates his service as board member for any reason (ii) the date when the options expire had he remained CEO (i.e. after April 19, 2015). The total compensation cost related to this new grant was \$ 1,264. As of December 31, 2012, the Company fully recognized those compensation costs.
- f. On December 12, 2011, the Board approved to extend the exercise period of options vested as of December 15, 2010, which were previously granted to the Company's CEO, until October 24, 2016. The Company accounted for the extension of options' terms pursuant to ASC 718 as a modification. Accordingly, additional compensation was calculated by the Company as the fair value of the modified award in excess of the fair value of the original award measured immediately before its terms have been modified based on current circumstances. The total incremental compensation cost related to this modification was \$61. As of December 31, 2012, the Company fully recognized those compensation costs.

### NOTE 11:- INCOME TAXES

a. Measurement of taxable income under the Income Tax (Inflationary Adjustments) Law, 1985:

Results for tax purposes are measured in terms of earnings in NIS after certain adjustments for increases in Israeli Consumer Price Index (the "Israeli CPI"). As explained in Note 2b, the financial statements are measured in U.S. dollars. The difference between the annual change in Israeli CPI and in the NIS/dollar exchange rate causes a further difference between taxable income and the income before taxes shown in the financial statements. In accordance with paragraph 9(f) of ASC 740, the Company has not provided deferred income taxes on the difference between the functional currency and the tax basis of assets and liabilities.

According to the law, until 2007 the results for tax purposes were adjusted for changes in the Israeli CPI.

In February 2008 the "Knesset" (Israeli parliament) passed an amendment to the Income Tax (Inflationary Adjustments) Law, 1985, which limits the scope of the law starting 2008 and thereafter. Starting 2008 the results for tax purposes are measured in nominal values, excluding certain adjustments for changes in the Israeli CPI carried out in the period up to December 31, 2007. The amendment to the law includes, inter alia, the elimination of the inflationary additions and deductions and the additional deduction for depreciation starting 2008.

b. Tax benefits under the Law for the Encouragement of Capital Investments, 1959 (the "Law"):

According to the Law, the Company is entitled to various tax benefits by virtue of the "approved enterprise" and/or "beneficiary enterprise" status granted to part of their enterprises, as implied by this Law. The principal benefits by virtue of the Law are:

According to the provisions of the Law, the Company has chosen to enjoy the "Alternative" track. Under this track, the Company is tax exempt in the first two years of the benefit period and subject to tax at the reduced rate of 10%-25% for a period of several years for the remaining benefit period.

Another condition for receiving the benefits under the alternative track is a minimum qualifying investment. This condition requires an investment in the acquisition of productive assets such as machinery and equipment which must be carried out within three years. The minimum qualifying investment required for setting up a plant is NIS 300 thousand. As for plant expansions, the minimum qualifying investment is the higher of NIS 300 thousand and an amount equivalent to the "qualifying percentage" of the value of the productive assets. Productive assets that are used by the plant but not owned by it will also be viewed as productive assets. The Company was eligible under the terms of minimum qualifying investment and elected 2006 and 2009 as its "years of election".

### NOTE 11:- INCOME TAXES (Cont.)

The qualifying percentage of the value of the productive assets is as follows:

The value of productive assets before the expansion (NIS in millions)	The new proportion that the required investment bears to the value of productive assets
Up to NIS 140	12%
NIS 140 - NIS 500	7%
More than NIS 500	5%

The income qualifying for tax benefits under the alternative track is the taxable income of a company that has met certain conditions as determined by the Law ("a beneficiary company"), and which is derived from an industrial enterprise. The Law specifies the types of qualifying income that is entitled to tax benefits under the alternative track with respect of an industrial enterprise, whereby income from an industrial enterprise includes, among others, revenues from the production and development of software products and revenues from industrial research and development activities performed for a foreign resident (and approved by the Head of the Administration of Industrial Research and Development).

The benefit period starts with the first year the beneficiary enterprise earns taxable income, provided that 14 years have not passed since the approval was granted and 12 years have not passed since the enterprise began operating. In respect of expansion programs pursuant to Amendment No. 60 to the Law, the benefit period starts at the later of the year elected and the first year the Company earns taxable income provided that 12 years have not passed since the beginning of the year of election. The respective benefit period has not yet begun.

The above benefits are conditional upon the fulfillment of the conditions stipulated by the Law, regulations published thereunder and the letters of approval for the investments in the approved enterprises, as above. Non-compliance with the conditions may cancel all or part of the benefits and refund of the amount of the benefits, including interest. The management believes that the Company is meeting the aforementioned conditions.

The Company is also a "foreign investors' company", as defined by the Capital Investments Law, and, as such, is entitled to a 10-year period of benefits and may be entitled to reduced tax rates of between 10% to 25% (depending on the percentage of foreign ownership in each tax year).

Income from sources other than the "Approved Enterprise" and "Beneficiary Enterprise" during the benefit period will be subject to the tax at the regular tax rate.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. dollars in thousands (except share and per share data)

### NOTE 11:- INCOME TAXES (Cont.)

Amendments to the Law:

In December 2010, the "Knesset" (Israeli Parliament) passed the Law for Economic Policy for 2011 and 2012 (Amended Legislation), 2011, which prescribes, among others, amendments to the Law. The amendment became effective as of January 1, 2011. According to the amendment, the benefit tracks in the Law were modified and a flat tax rate applies to the Company's entire preferred income. The Company will be able to opt to apply (the waiver is non-recourse) the amendment and from then on it will be subject to the amended tax rates that are: 2011 and 2012 - 15% (in development area A - 10%), 2013 and 2014 - 12.5% (in development area A - 7%) and in 2015 and thereafter - 12% (in development area A - 6%).

The Company examined the possible effect of the amendment on the financial statements, if at all, and at this time do not believe it will opt to apply the amendment.

In November 2012, the Knesset passed Amendment No. 69 to the Investment Law (the "Trapped Earnings Law") which provides a temporary, partial, relief from taxation on a distribution from exempt income for companies which elect the relief through November 2013. The Trapped Earnings Law allows a company to qualify a portion of its exempt income ("Elected Earnings") for a reduced tax rate ranging between 17.5% and 6%. While the reduced tax is payable within 30 days of election, an electing company is not required to actually distribute the Elected Earnings within a certain period of time. The applicable rate is based on a linear formula involving the portion of Elected Earnings to exempt income and the applicable tax rate prescribed in the Investment Law. A company electing to qualify its exempt income must undertake to make designated investments in productive fixed assets, research and development, or wages of new employees ("Designated Investment"). The Designated Investment amount is defined by a formula which considers the portion of Elected Earnings to the exempt income and the applicable tax rate prescribed by the Investment Law.

In addition to the reduced tax rate a distribution of Elected Earnings would be subject to a 15% withholding tax. The Trapped Earnings Law provides an exemption from the 15% withholding tax for a distribution to an Israeli resident company from companies which have elected the Privileged Enterprise status and waived their Approved Enterprise and privileged Enterprise Status through June 2015.

At this time the Company does not believe the amendment has any possible effect on the financial statements.

## NOTE 11:- INCOME TAXES (Cont.)

c. Tax benefits under the Law for the Encouragement of Industry (Taxation), 1969:

Management believes that the Company currently qualifies as an "industrial company" under the above law and as such, enjoys tax benefits, including:

- (1) Deduction of purchase of know-how and patents and/or right to use a patent over an eight-year period;
- (2) The right to elect, under specified conditions, to file a consolidated tax return with additional related Israeli industrial company and an industrial holding company; and
- Accelerated depreciation rates on equipment and buildings.

The Company currently qualifies as an "industrial company" under the above law and, as such, is entitled to certain tax benefits, mainly accelerated depreciation of machinery and equipment, and the right to claim public issuance expenses over three years, as a deduction for tax purposes.

d. Net operating losses carryforward and capital loss:

As of December 31, 2012, the Company's net operating losses carryforward and capital loss for tax purposes in Israel amounted to approximately \$ 152 and \$ 4 million, respectively. These net operating losses may be carried forward indefinitely and may be offset against future taxable income. The Company expects that during the period in which these tax losses are utilized its income will be substantially tax-exempt.

Compugen Inc. is subject to U.S. income taxes. As of December 31, 2012, Compugen Inc. has net operating loss carryforwards for federal income tax purposes of approximately \$ 15 million which expires in the years 2018 to 2032. Compugen Inc. also has net operating loss carryforwards for state income tax purposes of approximately \$ 659 which expires in the years 2013 to 2032. Utilization of the 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.

e. Loss before taxes is comprised as follows:

	_	Year ended December 31,					
	-	2012		2011		2010	
Domestic (Israel)	\$	13,370	\$	12,004	\$	7,203	
Foreign	<u>-</u>	258					
	\$	13,628	\$	12,004	\$	7,203	

## NOTE 11:- INCOME TAXES (Cont.)

#### f. Deferred taxes:

Deferred taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company and its subsidiary's deferred tax assets are comprised of operating loss carryforward and other temporary differences. Significant components of the Company and its subsidiary's deferred tax assets are as follows:

		December 31,		
	2012		2011	
Accrued social benefits	\$	124	\$	99
Research and development credit		2,300		1,686
Capital funding raise credit		12		14
Operating loss carryforward		43,297		40,890
Net deferred tax asset before valuation allowance		45,733		42,689
Valuation allowance		(45,733)		(42,689)
Net deferred tax asset	\$	-	\$	-

The Company and its subsidiary have provided full valuation allowances in respect of deferred tax assets resulting from operating loss carryforward and other temporary differences. Management currently believes that since the Company and its subsidiary have a history of losses it is more likely than not that the deferred tax regarding the loss carryforward and other temporary differences will not be realized in the foreseeable future.

g. Reconciliation of the theoretical tax expense (benefit) to the actual tax expense (benefit):

The main reconciling items between the statutory tax rate of the Company and the effective tax rate are the non-recognition of tax benefits from accumulated net operating losses carryforward among the Company and subsidiary due to the uncertainty of the realization of such tax benefits and the effect of "approved" and "beneficiary" enterprise.

h. Tax rates applicable to the income of the Company:

On December 5, 2011, the Israeli Parliament (the Knesset) passed the Law for Tax Burden Reform (Legislative Amendments), 2011 ("the Law") which, among others, cancels effective from 2012, the scheduled progressive reduction in the corporate tax rate. The Law also increases the corporate tax rate to 25% in 2012. In view of this increase in the corporate tax rate to 25% in 2012, the real capital gains tax rate and the real betterment tax rate were also increased accordingly.

## NOTE 12:- FAIR VALUE MEASURMENTS

In accordance with ASC 820 "Fair Value Measurements and Disclosures", the Company measures its Investment in Evogene and embedded derivatives at fair value. The carrying amounts of cash and cash equivalents, other accounts receivable, trade payables and other accounts payable approximate their fair value due to the short-term maturity of such instruments. Investment in Evogene is classified within Level 1 because this asset is valued using quoted market prices or alternative pricing sources and models utilizing market observable inputs. Embedded derivatives are classified within Level 3 because they are valued using valuation techniques. Some of the inputs to these models are unobservable in the market and are significant.

The Company's financial assets measured at fair value on a recurring basis, excluding accrued interest components, consisted of the following types of instruments as of the following dates:

December 31, 2012						2		
	Fair value measurements							
Description	Fa	ir value		Level 1	Level 2			Level 3
Marketable securities:								
Investment in Evogene	\$	5,196	\$	5,196	\$	-	\$	-
Embedded Derivatives		6,864		-		-		6,864
Liability with respect to outstanding options to non- employee		264						264
Total financial assets	\$	12,324	\$	5,196	\$	-	\$	7,128
				December	31, 2011	1		
				Fair value m	easureme	ents		
Description	Fa	ir value		Level 1	L	evel 2		Level 3
Marketable securities:								
Investment in Evogene	\$	4,093	\$	4,093	\$	-	\$	-
Embedded Derivatives		5,707		-		-		5,707
Liability with respect to outstanding options to non- employee		284						284
Total financial assets	•	10,084	\$	4,093	•		¢	5,991

## NOTE 12:- FAIR VALUE MEASURMENTS (Cont.)

Fair value measurements using significant unobservable inputs (Level 3):

	of E	ir value mbedded rivatives
Balance at January 1, 2011	\$	4,037
Fair value of Exchange Option within second research and development arrangement		1,557
Change in fair value of Exchange Option and embedded derivatives within research and development arrangements		113
Balance at December 31, 2011 *)		5,707
Fair value of Exchange Option within the 2012 proceeds under the second research and development arrangement		569
Change in fair value of Exchange Option and embedded derivatives within research and development arrangements		588
		,
Balance at December 31, 2012 *)	\$	6,864

\*) The amount on the balance sheet of the research and development funding arrangements and others includes also a cash consideration of \$744 and \$443 as of December 31, 2012 and December 31, 2011, respectively, and Fair value of liability with respect to outstanding options to non-employee, as mentioned below, in amount of \$264 and \$284 as of December 31, 2012 and December 31, 2011, respectively.

	of out	r value standing as to non- ployee
Balance at January 1, 2011	\$	-
Fair value of liability with respect to outstanding options to non-employee		353
Classification of portion liability with respect to outstanding options to non-employee to additional paid in capital		(89)
Change in fair value of liability with respect to outstanding options to non-employee		20
Balance at December 31, 2011		284
Change in fair value of liability with respect to outstanding options to non-employee		(20)
Balance at December 31, 2012	\$	264

## NOTE 13:- GEOGRAPHIC INFORMATION AND MAJOR CUSTOMERS

The Company's business is currently comprised of one operating segment, the research, development and commercialization of therapeutic and diagnostic biomarker product candidates. The nature of the products and services provided by the Company and the type of customers for these products and services are similar. Operations in Israel and the United States include research and development, sales and business development. The Company follows ASC 280, "Segment Reporting." Total revenues are attributed to geographic areas based on the location of the end customer.

The following represents the total revenues for the years ended December 31, 2012, 2011 and 2010 and long-lived assets as of December 31, 2012 and 2011:

		Year ended December 31,				
	<u> </u>	2012	2	011	20	)10
Revenues from sales to unaffiliated customers:						
United States	\$	_	S	_	\$	75
Europe	· ·	-		-		36
Israel						
Total revenues	\$	-	\$		\$	1,11
				Decem		
			2	012	2(	)11
Long-lived assets:						
Israel			\$	483	\$	497
United States				767		
Total long-lived assets			\$	1,250	\$	497
		Y	ear ended	December 3	1,	
	<u></u>	2012	2	011	20	10
Sales to a single customer exceeding 10%:						
Customer A		-		-		67
Customer B		-		-		13
Customer C		-		-		11

## NOTE 14:- FINANCIAL INCOME (LOSS), NET

	Year ended December 31,					
	201	2	2	011	_	2010
Interest income	\$	301	\$	421	\$	266
Bank fees and other finance expenses		(61)		(15)		(15)
Change in fair value of research and development funding arrangements		(588)		(113)		(97)
Change in fair value of liability with respect to outstanding options to non-employee		20		-		-
Funding arrangements issuance expenses		-		(463)		(228)
Derivatives transactions loss (gain)		-		134		(15)
Exchange rate differences		242		(270)		330
Net income (loss), net	\$	(86)	\$	(306)	\$	241

## NOTE 15:- RELATED PARTY BALANCES AND TRANSACTIONS

The Company provides research and development services to Neviah in consideration for pre-scheduled determined fees. As of December 31, 2012 the Company recognized revenues from the agreement with Neviah of \$ 242 (see also Note 1d).

## NOTE 16:- SUBSEQENT EVENTS

On February 19, 2013, the Company's Board of directors approved a grant to employees and non-employees of options to purchase a total of 90,000 and 10,000 ordinary shares, respectively, at an exercise price of \$ 5.08 per share. Such options to employees and non-employees shall vest over a period four years commencing on the above date and a period of twelve months commencing January 1, 2013, respectively.

# **Companies Ordinance** Memorandum of Association a Company Limited in Shares

# Compugen Ltd.

- 1. Company's Name: Compugen Ltd.
- Company's Objectives:
  - Development and marketing of electronic cards for acceleration of computations in the field of biological research.
  - b.

  - To engage in any lawful business and activity.

    To engage in all of the above in any and all manner and form.

    To engage in all of the above, whether by itself or by others, in any legal form of engagement and association. d.
  - To engage in all of the above both in Israel and worldwide.
- Members Liability:

The liability of the members is limited.

Share Capital:

The share capital of the company is NIS 20,800, divided into the following classes: 20,789 ordinary shares of nominal value of NIS 1.00 each.

1 special share of nominal value of NIS 1.00.

10 deferred shares of nominal value of NIS 1.00 each.

The rights attached to each class of shares shall be set forth in the Company's Regulations.

We, the undersigned, wish to associate the Company according to this Memorandum of Association, and each of us agrees to take the number of shares in the share capital of the Company, as listed henceforth next to our names.

	Names and I.D. No. of the Undersigned	Address and Description	No. of Shares Taken	Signature
1.	"Am-Shev" Entrepreneurship and Technological Applications Ltd. Registration No. 51-176138-9	Technologies Development Center Medreshet Sde Boker 84993	99 ordinary shares	/s/ and stamp
2	Avraham Sarussi I.D. No. 45082415	Negba 62 Beer Sheva	1 Special Share	/s/

Total of shares taken: 100

January 29, 1993

/s/ Naomi Shalev Naomi Shalev, Advocate Witness of signature:

Exhibit 4.3

# **Unprotected Lease Agreement**

Made and signed in Tel Aviv on April 21, 1998

#### Between

1. Pinadis/Finadis [פֿינאדיס] Corporation Ltd.

(Registered lessor in Panama)

Shatil Real Estate Investments Ltd. 2.

P.C. 51-2106741

**Ofer Miretzky (Shikun Dan) Ltd.** P.C. 51-1602682 3.

4. Dorel/Doral [דוראל] International Ltd.

(Registered lessor in Panama)

5. E.G.C.S. Investments Ltd.

P.C. 51-212578-0

Peled & Sons Accounting and Management Ltd. 6.

P.C. 51-1416190

7. Livneh Stirrex[סטירקס] Investments Ltd.

P.C. 51-15086812

All jointly and each severally by Ofer Miretzky (Shikun Dan) Ltd. P.C. 51-1602682 by virtue of a power of attorney of 17 HaMa'ayan Street, Givatayim hereinafter, for the sake of brevity, referred to as the "Lessor"

of the first part;

and

Compugen Ltd.

P.C. 51-177963-9 of 15 HaMaccabim Street, Petach Tikva Hereinafter, for the sake of brevity, referred to as the "Lessee"

of the second part;

[Signature] [stamp]
Ofer Miretzky (Shikun Dan) Ltd.

[Signature]
[stamp]
Compugen Ltd. 17 Hamacabim Street Petach Tikva 49220 Israel

Whereas the Lessor hereby represents that it holds the rights to be registered with the Israel Land Administration (the "ILA") as the perpetual lessee under a fully capitalized perpetual lease contract (for a 49-year period ending on August 10, 2040) and it is entitled to hold and is the exclusive holder of the real property known as Temporary Lot no. 1 according to city zoning plan 2589/TA, Parcel 94 in Block 6623, which are situated on 72 Pinchas Rosen Street, Tel Aviv (the "Property"); and

the Lessor is building on the Property, with the consent of the owners thereof in accordance with the approval of the competent authorities, a building that shall include, *inter alia*, commercial areas on the ground floor and on the first floor, office floors, underground parking, storage facilities and an area for public purposes (hereinafter, for the sake of brevity: the "Building"); and

Whereas

Whereas

Whereas

the Lessor wishes to let to the Lessee, in an unprotected lease, a unit, which includes all of the first floor above the Building's floors that are designated for commercial use, in a total area of approx. 1,205 sqm (net), which is marked in the color yellow on the floor plan attached hereto and marked as Annex A (the "Floor Plan") and subject to the terms and conditions of this agreement (the "Leased Property"); and

Whereas the Lessor's aforesaid right is pledged in favor of Bank Leumi LeIsrael Ltd. for the purpose of securing the fulfillment of financial obligations thereto (the "Pledge") (the "Bank"). The agreement of the Lessee and Lessor for the pledge and assignment of the Lessor's rights under this agreement in favor of the Bank is attached as Annex E hereto (Section 11.4.1 below); and

a caveat note is registered on the Lessor's right in the Property in favor of Ashdar Construction Company Ltd., but such neither refers to nor applies to the Lessor's rights in the Property and the structure. At the end of the parceling process of Parcel 94 in Block 6623, the caveat note registered in favor of Ashdar shall be conclusively stricken-off from the Property; and

the Lessor represents that, subject to the Pledge, it holds the rights to be registered with the ILA as the perpetual lessee of the Property on which the Building is built, including Whereas the Leased Property, and such rights thereof are full and clear of any third party right, including procedural rights, and there is no impediment or restriction by virtue of law or agreement that prevent it from engaging in this agreement and undertaking obligations vis-à-vis the Lessee hereunder. It is hereby represented by the Lessor that the caveat notes in favor of the Municipal Court of Tel Aviv Jaffa, the Municipality of Tel Aviv Jaffa and the District Zoning Commission for the Tel Aviv Jaffa planning zone, which are stated in Annex A3, do not constitute prejudice to the Lessee's rights under this contract; and

Whereas the Lessee has seen and examined the plans of the Building, the unit under construction, the building permit and the Floor Plan and is interested in leasing the Leased Property

from the Lessor in order to use it as specified below; and

Whereas the Lessor represents that the Building is being constructed as required under the Zoning Law, including the regulations thereof, and according to any law; and that, insofar as

known thereby, there is no claim on behalf of any of the authorities with respect to the construction of the structure; and

Whereas the Lessor represents that it is entitled under any law to engage in this lease contract; and

Whereas Ofer Miretzky (Shikun Dan) Ltd. represents that it acts as the authorized representative of each of the Lessor individuals for all intents and purposes pertaining to this lease

agreement, including receipt of notices; it is further agreed that in case the power of attorney given to Ofer Miretzky (Shikun Dan) Ltd. expires, the Lessor shall deliver a written

notice to the Lessee with respect to the new authorized representative; and

Whereas the parties wish to define and regulate their legal relationship as specified in this lease agreement below;

### It is therefore stipulated and agreed by and between the parties as follows:

The Lessor hereby undertakes to let to the Lessee, and the Lessee undertakes to lease from the Lessor, the Leased Property as specified in the terms and conditions of this lease agreement. The preamble to this lease agreement, including the representations included therein and the annexes hereto constitute an integral part hereof.

#### 2. The Leased Property and the Construction thereof

2.1. The Leased Property to be leased to the Lessee shall consist of an area of approx. 1,205 sqm (net) in the location marked on the Building's plans, as specified in the Floor Plan attached as Annex A and subject to Paragraph 5.2 below.

On the premises of the Leased Property, an area of approx. 200 sqm shall be allotted, pursuant to the construction plans to be submitted by the Lessee to the Lessor, for the purpose of setting-up a biotechnological laboratory (the "Laboratory"), which shall be set-up by the Lessee and/or anyone on behalf thereof and at the expense thereof, excluding the company's undertakings according to the specification (Annex B). There is an apartment protected space (APS) in the Leased Property, which, for all intents and purposes, comprises part of the Leased Property's premises. The APS shall serve the Lessee solely for the purposes thereof. The Lessee undertakes to comply with all of the instructions and guidelines of Civil Defense or any other governmental entity with respect to the use of the APS.

The Lessee shall be entitled to place ventilation systems on the roof of the unit or the roof of the Building, in coordination with the Lessor and subject to the technical possibilities.

2.2. The Lessor undertakes that the Leased Property shall be built by the Lessor and at the expense thereof according to the technical specification attached hereto as an integral part hereof and marked as <u>Annex B</u>, in accordance with the timetable set forth in this agreement, in accordance with the building permit and in accordance with plans of construction, electricity and air conditioning to be prepared by the Lessee and at the expense thereof (the "Lessee's Plans") and as shall approved by the Lessor in accordance with the provisions of Subsection 2.4 below

A deviation of up to 3% of the unit's area (upward or downward) between the result of the measurement according to Subsection 5.2 below and the area of the Leased Property as stated in Subsection 2.1 above, will be permitted. In the event of a deviation exceeding 3% of the unit's area, the Lessee shall be exempt from paying rent due to the area in excess of the permitted deviation as stated.

2.3. The Lessor undertakes to complete the performance of the work of constructing the Building and the Leased Property therein and to hand-over possession of the Leased Property to the Lessee by October 15, 1998 or 90 days as of the date of the approval of the Lessee's Plan "for execution", the later of the two, and, in any event, no earlier than the end of six months as of the date of the signing of this contract. The provisions of this section shall not apply to the area of the Laboratory and as specified in Subsection 2.3.1 below.

Handing-over possession to the Lessee is subject to the Lessee complying with all of its undertakings to the Lessor until that date, including, but not limited to, payment of the Deposit or the deposit of a bank guarantee as specified in Section 7.5 below to the Management Company, the timely submittal of construction, electricity and plumbing plans for approval by the Lessor and the provision of securities as stated in Section 14 below.

- 2.3.1. Notwithstanding the provision of this Subsection 2.3, it is agreed that the area of the Laboratory will be handed-over to the Lessee within 45 days of the date on which the construction plans of the Laboratory's area are submitted to the Lessor by the Lessee and, in any event, no earlier than July 1, 1998. The Lessee shall perform, at its own expense and under its responsibility, all of the work required for setting-up the Laboratory, with the exception of such that are imposed on the Lessor under the technical specification. Due to the Laboratory's area to be handed-over thereto, the Lessee shall pay the Lessor Rent, Management Fees and any other payment according to this contract as of the day on which the Lessee begins to use the Laboratory and, in any event, no later than the date of handing-over possession of the Leased Property. For the avoidance of doubt, the Term of the Lease under this agreement, as defined in Section 4 below, shall commence on the date of handing-over possession of the entire Leased Property. The Lessee undertakes to take out and maintain the insurance policies specified in Section 9 below and in the insurance annex (Annex C) as of the date of the handing-over of the Laboratory area thereto.
- 2.4. The Lessee undertakes to deliver the Lessee's Plans for the Lessor's approval within 90 (ninety) days of the date of the signing of this agreement. This undertaking by the Lessee is fundamental to the agreement.

The Lessor can, within 7 days of the date of receipt of the Lessee's Plans, reject or approve the Plans subject to conditions or clarifications as per its professional discretion and/or the discretion of consultants on behalf thereof (a list of the Lessor's consultants is attached as Annex D hereto). In case the Plans are rejected by the Lessor, the Lessee shall submit amended plans, in accordance with the Lessor's instructions and the Lessor shall approve the plans within 7 days.

In case the Lessee does not submit the Lessee's Plans to the Lessor on the aforesaid date, the date of handing-over possession of the unit shall be deferred by the period in which the Lessee was late in submitting the Lessee's Plan plus 15 (fifteen) days.

Without derogating from any relief and remedy of the Lessor under this agreement, in the event of a delay in the submittal of the Lessee's Plans for the Lessor's approval, which shall lead to a postponement of the handing-over date that exceeds 15 (fifteen) days, the Lessee undertakes to pay the Lessor a pecuniary compensation equal to the Rent for the premises of the Leased Property and expenses and Management Fees to the Management Company; the Lessee further undertakes to bear the expenses and ongoing taxes due to the Leased Property, all throughout the period of the delay in the handing-over of possession, apart from the first 15 days of the delay.

2.5. The Lessor shall be entitled, at any time, without need for any consent by the Lessee, to perform any change or addition in the Building, as per its sole discretion, both before and the Term of the Lease and thereafter, including, but not limited to, the addition or reduction of areas, joining of floors, areas or wings to the Building, transformation of closed or open public areas to areas for exclusive use by various users, change in openings and passageways, any and all types of building additions and any other change in the structure or the plans of the Building, provided that the Leased Property, the location of the Leased Property in the Building, the ways of access to the Leased Property, the rights of use of the Leased Property and the ability of the Lessee to use the Leased Property for the purposes thereof throughout the Term of the Lease are unchanged and provided that unreasonable disturbances are not caused to the Lessee as a result of such change or addition in the Building.

Without derogating from the generality of the aforesaid, the Lessee is aware that the Lessor intends to convert some of the areas of the underground floors, which are presently designated for parking spaces, into other uses such as: storage rooms, archives, a fitness and/or health center, a medical clinic and/or any other use as the Lessor deems fit and the Lessee shall have no objection thereto.

The Lessee is also aware that the Lessor intends to add construction areas beyond as currently permitted under the city zoning plan and the Lessee agrees to all of the construction additions to be made.

The Lessee undertakes not to interfere with and not to oppose to any such change or addition for any reason whatsoever, including, but not limited to, disturbances caused thereto, if any, during the execution of the addition or change. The Lessor undertakes that such changes and additions, if any, shall be done subject to receipt of building permits, if required, and that they shall be done in a manner such that the disturbance caused to the Lessee is as minimal as reasonably possible and the wholeness of the Leased Property is not compromised.

2.6. The handing-over date stated in Paragraph 2.3 above, shall be automatically postponed on grounds of *force majeure*, including, but not limited to, a state of war, irregular recruit of reserve forces, irregular natural phenomenon, decrees preventing or prohibiting construction (apart from decrees issued at the Lessor's fault), regulations or laws that shall delay the construction or extend the duration of the execution thereof, construction freezes as a result of governmental decrees, national strikes or nation-wide sanctions that are not contingent upon the Lessor, or any other factor over which the Lessor has no control. In any such case, the handing-over date shall be postponed for the period of time compelled by the existence of the aforesaid conditions or any of them, as the case may be.

For the avoidance of doubt, a curfew preventing the entry of workers from the areas of Judea and Samaria shall not constitute force majeure for the purpose of this section.

It is agreed that in the event of a delay in the handing-over of possession, as a result of delays as specified in this Subsection 2.6 for a period exceeding six (6) months, the Lessee shall be entitled to notify the Lessor of the termination of this contract. In such case, the Lessee shall not be entitled to any remedy and/or compensation and shall have no right or claim against the Lessor. The Lessor shall return the bank guarantees as defined in Section 14 below to the Lessee.

It is expressly agreed and stipulated by and between the parties, in addition to the provisions of this Section 2.6, that a delay in the handing-over of the unit, which shall not have exceeded fourteen (14) days, shall not be deemed a breach of any obligation by the Lessor and shall not constitute a cause for an action and/or a demand of any type whatsoever by the Lessee against the Lessor and shall not entitle the Lessee to any compensation and/or damage and/or other legal remedy.

#### Changes and Improvements in the Leased Property

2.7. The Lessor shall be entitled to order, at reasonable times to be set by the Lessor in a manner such that they do not hinder the continuous progress of the work in the unit and the structure, work for changes, internal additions or reductions in the unit, compared with the technical specification (the "Changes"), provided that the Changes are compatible with the building permit of the Building and the unit, that they do not change the structure or external appearance of the Building, that they do not compromise and are compatible with the planning of the construction and/or fundamental walls and columns and/or the location of the common systems of the office floors of the structure and/or the unit. The Changes shall only be executed through the Lessor, at the times, for the consideration and on the terms and conditions to be determined thereby and subject to approval by the Lessor's consultants, to the extent necessary.

- 2.7.1. For the avoidance of doubt it is clarified that any addition to and/or change in the unit beyond the technical specification and the plans attached to this contract, shall be deemed a Change and all of the provisions of the contract pertaining to Changes shall apply thereto, such even if the addition and/or change are included in the Lessee's Plans.
- 2.8. Notwithstanding Section 2 above, the Lessor shall not be obligated to accept the interior planning as per the Lessee's order and/or to receive from the Lessee an order for the execution of work for Changes or any part thereof, provided that such refusal by the Lessor is due to relevant and professional reasons. It is clarified that the order for the execution of unusual work for office buildings and/or requirement of materials the use of which is uncommon in office buildings, as well as no agreement as to the consideration due to the Lessor and postponement of the handing-over date as a result of the execution of the Changes and additions, shall each be deemed separately as a sufficient relevant reason for the purpose of the Lessor's refusal.
- 2.9. Work for the Changes shall be ordered according to a special order form, which shall be signed by the Lessee or by a professional on behalf thereof and shall include a specification of the ordered work and a detailed plan with respect to the Changes and shall only bind the Lessor after it is signed thereby.
- 2.10. The Lessee must order, if it desires the Changes, at an early stage of the construction, so that the execution thereof does not interfere with the proper course of the work in the structure and the completion thereof.
- 2.11. In case the Lessee's demand for changes and additions exceeds the contents of the technical specification, the price of the Changes, additions and credits shall be determined according to the Lessor's price list, which is attached as <u>Annex B1</u> hereto, compared with the technical specification, and the Lessee undertakes to pay the Lessor the consideration for the work for the Changes in advance, immediately upon the order thereof.

- 2.12. The Lessee confirms that it is aware that the availability of the unit thereto may be postponed as a result of the order of the work for the Changes, and, accordingly, the handing-over date will be postponed for a period as determined by the Lessor on the date of the order of the Changes. Nothing in the aforesaid shall derogate from the provisions of Subsection 2.8 above.
- 2.13. The Lessee shall not be entitled to hand the execution of the Changes in the unit to another contractor or service provider other than the Lessor, except as per the Lessor's express written consent in advance. For the avoidance of doubt, the provisions of this section shall not apply to the construction of the Laboratory.

### **Determinative Expert**

2.14. In any and all disputes pertaining to the approval of the Lessee's Plans and/or the compatibility of the construction of the Leased Property with specifications and plans and/or any dispute pertaining to a delay on the Lessee's part in providing specifications and plans and/or their compatibility with the requirements of the Lessor as stated in Section 2 above including the sub-paragraphs thereof and/or to the duration of the delay caused as a result thereof in handing-over possession of the Leased Property to the Lessee and/or in the commencement of the Term of the Lease and/or on any other matter pertaining to the existence of the conditions stated in Paragraph 2.6 above and to the duration of the postponement required as a result thereof, as the case may be and/or on any other matter pertaining to the performance of the work of construction of the Building and the Leased Property, an engineer to be determined in agreement by the parties, and in the absence of agreement – to be appointed by the Chairman of the Architects and Engineers Association (the "Engineer"), shall rule as an expert, not as an arbitrator, and his decision shall be final and shall bind the parties, on the aforesaid matters, for all intents and purposes.

### 3. Purpose of the Lease

- 3.1. The Lessee leases the Leased Property solely for the purpose of operating therein offices in the field of software, hardware and computers as well as an electronics laboratory and a biotechnological laboratory (the "Purpose of the Lease") and for this purpose alone.
- 3.2. Omitted.

- 3.3. Any change or expansion of the Purpose of the Lease requires the advance written consent of the Lessor. The Lessor shall not object to such change, but for reasonable and relevant reasons only.
- 3.4. The Lessee represents and undertakes that it shall have no objection to the other places of business and offices in the Building, all or any of them, operating their business at times and hours as they shall deem fit and that it shall have no claim with respect thereto.
- 3.5. The Lessee represents and undertakes that it is aware that other businesses and offices, *inter alia*, will operate in the Building and it represents and undertakes that it shall have no claim with respect thereto against the Lessor, including with respect to their operating hours, the arrangements of entry and exit therefrom, nuisances of noise, crowds, smells or any other nuisance caused due to their activity, provided that such are no more than reasonable according to their occupations.
  - Insofar as the activity of any business in the Building causes a nuisance to the Lessee, the Lessee shall be entitled to bring such matter to the Lessor's attention, but such shall not obligate the Lessor to act for the prevention of such nuisance or grant the Lessee any right vis-à-vis the Lessor.
- 3.6. For the avoidance of doubt is hereby agreed and clarified that the Lessee alone shall be responsible for receipt of any and all permits required under any law for the opening of its business in the Leased Property and the operation thereof.

The Lessee undertakes to fulfill any and all conditions required for the purpose of receipt of such permits, to run its business according to their terms and conditions and to maintain such in force throughout the Term of the Lease.

#### 4. Term of the Lease

- 4.1. Without derogating from the force of the provisions of Paragraphs 2.3 and 2.6 above, the term of the lease under this agreement shall commence on the date of handing-over possession of the Leased Property. Nothing in the aforesaid shall derogate from the provisions of Subsection 2.3.1 above.
- 4.2. The lease period shall discontinue at the end of five years as of the date of commencement thereof as stated in Paragraph 4.1 above (the "First Lease Period"). Subject to the Fulfillment of All of the Obligations Thereof according to this agreement, the Lessee shall have the right, and the Lessor the obligation, to extend the lease period at the end of the First Lease Period for an additional five-year period (the "Additional Lease Period"). Any reference herein to the "Term of the Lease" shall mean both the First Lease Period and the Additional Lease Period, if any, as the case may be.

It is agreed by and between the parties that the First Lease Period shall automatically be extended for the Additional Lease Period, unless the Lessee shall have notified the Lessor, in an unconditional unrestricted notice that shall have been received by the Lessor at least 6 (six) months prior to the end of the First Lease Period, of its wish to discontinue the lease at the end of the First Lease Period.

The "Fulfillment of All of the Obligations Thereof" – for the purposes of this section shall mean: any undertaking the breach of which constitutes a fundamental breach as defined in Section 12.3 above and any undertaking that shall not have been complied with and shall not have been rectified despite such rectification having been demanded by the Lessor, all of such up to 6 (six) months prior to the end of the Term of the Lease.

- 4.2.1. Notwithstanding all of the provisions of Subsection 4.2 above, it is agreed that the Lessee is entitled to notify the Lessor, in an unconditional unrestricted notice that shall have been received by the Lessor at least 6 (six) months prior to the end of the third or fourth year of the lease, of its wish to discontinue the lease at the end of the third or fourth year of the lease, as the case may be (the "Shortening Notice"). In the event of a dispatch of the Shortening Notice, the Term of the Lease under this agreement shall be terminated at the end of the third or fourth year, as the case may be and the following provisions shall apply:
  - 4.2.1.1. In the event of a dispatch of the Shortening Notice toward the end of the third year, the Lessee shall pay the Lessor liquidated damages due to the shortening of the Term of the Lease in an amount in NIS that is equal to \$75 plus V.A.T. for each sqm of the Area of the Leased Property for the purpose of Rent Payment, as such term is defined in Subsection 5.2 below.
  - 4.2.1.2. In the event of a dispatch of the Shortening Notice toward the end of the fourth year, the Lessee shall pay the Lessor liquidated damages due to the shortening of the Term of the Lease in an amount in NIS that is equal to \$45 plus V.A.T. for each sqm of the area of the Leased Property for the purpose of Rent Payment as such term is defined in Subsection 5.2 below.

- 4.2.1.3. The liquidated damages stated in Subsections 4.2.1.1 and 4.2.1.2 shall be paid in addition to any and all payments applicable to the Lessee under this agreement with respect to the Term of the Lease and the use of the Leased Property.
- 4.2.1.4. The liquidated damages stated above shall be converted into NIS according to the representative rate known on the date of the signing of this agreement and shall be linked to the Index, all in accordance with the provisions of Subsection 5.1 below.
- 4.2.1.5. The Lessee shall attach to the Shortening Notice, as an integral part thereof and as a condition for the validity thereof, a cashier's check for the amount of the liquidated damages. Alternatively, the Lessee shall deposit with the Lessor on the same occasion a bank guarantee in the amount of the liquidated damages in force until 30 days after the end of the Term of the Lease. At the end of the Term of the Lease, the Lessee shall pay the Lessor the liquidated damages and the Rent until the date of vacation of the Leased Property and the Lessor shall return the bank guarantee thereto.
- 4.2.2. In the event of a dispatch of a discontinuing notice six months prior to the end of the First Lease Period and/or a dispatch of a Shortening Notice as specified in Subsection 4.2.1 above, the Lessee shall vacate the Leased Property at the end of the First Lease Period, at the end of the third year or at the end of the fourth year, as the case may be (the "Vacation Date") on the terms stated in Subsection 10.4 below. In the event that the Lessee delays the vacation of the Leased Property for a period not to exceed 60 days (the "Delay Period"), the Lessee shall pay the Lessor Rent and the other payments according to this agreement for the Delay Period and such shall not constitute a breach of the agreement on the Lessee's part, all provided that the Lessee shall have notified the Lessor, in a written notice three months prior to the Vacation Date, of its intention to delay the vacation of the unit and of the duration of the anticipated Delay Period.

4.3. It is agreed that at the time of handing-over possession, the Lessor shall hold a Form 4 with respect to the Leased Property and that the handing-over of possession of the Leased Property to the Lesse as stated in Paragraph 2.3 above shall be done upon the completion of the execution of the work applicable to the Lessor under this lease agreement. Furthermore, on the handing-over date, the unit shall be connected to the operating common systems of the Building (water, electricity, air conditioning and sewage) and at least one elevator shall operate in the Building.

In a punch list to be prepared upon handing-over possession of the Leased Property by representatives on behalf of both parties, the work that the Lessor must perform and complete and/or the deficiencies it must repair shall be specified and the Lessor shall repair the same deficiencies within 14 days of the date of handing-over possession of the Leased Property.

For the avoidance of doubt it is clarified that the Lessee's refrainment from cooperating with the Lessor in the preparation of such punch list and/or the existence of any deficiencies and/or the need for the completion of work in the Leased Property by the Lessor, shall not serve as a hindrance to non receipt of possession of the Leased Property and the Lessee shall have to receive possession of the Leased Property, provided that nothing in such deficiencies or such need for the completion of work shall prevent the Lessee from reasonably using the Leased Property.

- 4.4. It is agreed by the parties that 60 days prior to handing-over possession of the Leased Property (apart from the Laboratory) to the Lessee and the commencement of the lease as aforesaid, the Lessor shall allow the Lessee to enter the Leased Property solely as licensee, and to perform interior work in the Leased Property in order to render the Leased Property suitable to the designation thereof (the "Interior Work").
  - 4.4.1. The Lessee's entry into the Leased Property as a licensee shall be contingent upon provision of the securities specified in Section 14 below.
  - 4.4.2. The Lessee shall coordinate the performance of the Interior Work with the Lessor's on-site representative, in order to ensure that the performance of the Interior Work does not disrupt the course of the performance of construction work at the site.

- 4.4.3. The Lessee alone shall be responsible for the execution of the Interior Work and it undertakes that the work shall be performed according to any law concerning the execution thereof, including safety instructions.
- 4.4.4. Omitted.
- 4.4.5. The Lessee shall be liable for any damage caused during the performance of the Interior Work or resulting therefrom, to the persons executing the work, the Lessor and the employees thereof, third parties and also damage to the Lessed Property, units in the vicinity thereof and the project.
- 4.4.6. Without derogating from the Lessee's liability according to this Section 4, the Lessee undertakes that the workers on behalf thereof abide by the safety instructions, if any, of the Lessor's on-site work manager.
- 4.4.7. If the Lessee completes the preparation work prior to the end of 60 days and begins using the Lessed Property, the Lessee shall pay the Lessor and/or the Management Company Rent, Management Fees and additional payments as specified in Sections 5, 6 and 7 below.

#### 5. <u>**Rent**</u>

The Lessee shall pay rent to the Lessor throughout the Term of the Lease as specified in the provisions of Section 4 above, in accordance with the following provisions:

5.1. The Lessee shall pay the Lessor, throughout the Term of the Lease, rent in an amount in New Shekels equal to \$17 (seventeen U.S. dollars) for each sqm of the Area of the Leased Property for the purpose of Rent Payment as defined in Section 5.2 below plus V.A.T. per month, according to the representative rate to be released on the date of the signing of the agreement (\$1 = NIS \_\_\_\_).

From the second year of the lease forth, the rent for each sqm of the area of the Leased Property shall be gradually increased, year to year, by 2% (real, beyond the rise of the Index).

The aforesaid rent shall be paid while linked, per their value in New Shekels as stated, to the Consumer Price Index which is released by the Central Bureau of Statistics, including fruit and vegetable (and insofar as such index is no longer released in an ongoing and up-to-date manner, any index to come in lieu thereof and to be determined by Bank HaPoalim Trust Company Ltd.) (hereinabove and hereinafter: the "Index") that was last known from the date of the signing of the agreement (\_\_\_ = points) to the last known Index on the actual payment date of any payment on account of the rent. Linkage differentials as stated shall be deemed as part of the rent for all intents and purposes (the "Rent").

- 5.1.1. If the Lessee notifies the Lessor six months prior to the end of the First Lease Period, as specified in Subsection 4.2 above, of its wish for the Rent for the Additional Lease Period to be determined by an agreed appraiser, an authorized real estate appraiser shall be appointed in agreement by and between the parties, who shall determine the amount of appropriate rent for the Leased Property in its condition on the date of the appraisal ("as is"), within thirty days of the date of his appointment. The Rent in the Additional Lease Period shall be the appropriate rent determined by the appraiser in his aforesaid appraisal. It is further agreed that all of the provisions regarding payment of Rent in the First Lease Period shall also apply to the Rent in the Additional Lease Period, mutatis mutandis, and in particular, a real increase of 2% per annum, beyond the rise of the Index.
- 5.1.2. In the event that the parties fail to appoint an agreed appraiser within 14 days of the date of a request by either party to the other, the parties' counsel at such time shall appoint an authorized appraiser in agreement and the provisions of this section shall apply.
- 5.1.3. The determination of the appraiser shall be final and conclusive, provided that he acted with reasonable proficiency and good faith, and he shall rule as an expert, not an arbitrator.
- 5.1.4. The Lessee shall bear the fee of the appraiser to be appointed.
- 5.1.5. For the avoidance of doubt, if the Lessee does not demand that the Rent for the Additional Period be determined by the appraiser, the provisions concerning payment of Rent, including the amount of Rent, shall continue to apply also with respect to the Additional Lease Period.
- 5.2. "Net Unit Area" the area of the Leased Property as specified in the preamble and in Paragraph 2.1 above is a presumed estimate only and the accurate area shall be conclusively determined in a measurement to be conducted by an authorized surveyor. A signed confirmation by the authorized surveyor with respect to the area of the Leased Property as determined in the said measurement shall be considered *prima facie* evidence of the results of the measurement and shall become final and conclusive evidence, unless the Lessee disputes the results of the measurement within 10 days of the day on which it was delivered thereto, through an authorized surveyor on behalf thereof. In such case, the surveyors shall reach an agreement between them and the agreement shall bind the parties.

Such measurement would take into account the area of the Leased Property's floor, including areas of columns, internal walls, external walls, APS, internal shafts in the unit and the space of the internal stairwell inside the unit.

"Area of the Leased Property for the purpose of Rent Payment" shall be the area of the unit as determined in the measurement plus 17.5% of the Net Unit Area due to public areas.

- 5.3. Rent for the Leased Property shall be paid on the first Business Day of the calendar month on which the Rent payment is due, as stated in paragraphs 5.4-5.5 below. "Business Day" shall mean one of the weekdays Sunday through Thursday between the hours 08:30 and 12:00.
- 5.4. Subject to the provisions of Paragraphs 5.2 and 4.3 above, the Lessee shall pay the Lessor the Rent for the Leased Property for the first three months of lease in the first year of the lease upon the handing-over of possession of the Leased Property. Nothing in the aforesaid shall derogate from the provisions of Subsection 2.3.1 above.
- 5.5. The Rent for the Leased Property after the first three months of lease in the first year of the lease, and throughout the entire Term of the Lease, shall be paid by the Lessee to the Lessor for each three months of lease in advance.
- 5.6. V.A.T. for the Rent or any tax to come *in lieu* thereof or any tax that, under the law imposing it shall apply to the Rent and be collected separately therefrom, at the lawful rate as it shall be from time to time, shall apply to the Lessee and be paid thereby with every payment on account of the Rent against a lawful tax invoice according to the upcoming lawful date for payment of the tax. For the avoidance of doubt, the Lessee shall not bear the payment of any tax applicable under law to the Lessor, including income tax.
- 5.7. The Lessor shall be entitled to request from the Lessor that the payment of Rent due to the Leased Property be made by wire transfer to an account as the Lessor shall instruct from time to time, all according to the Lessor's instructions, and the Lessee shall comply with such demand, according to the details thereof, within 15 days of receipt thereof.
- 5.8. The Lessee undertakes to pay the Rent to the Lessor and the Management Fees to the Lessor or the Management Company as stated in Sections 7-8 below throughout the Term of the Lease, unconditionally, whether it made use of the Leased Property or not, for any reason whatsoever, other than as a result of a negligent or deliberate act or omission of the Lessor.

### 6. <u>Further Payments</u>

6.1. Throughout the entire Term of the Lease the Lessee shall pay, in addition to the Rent, all of the payments, levies, municipality taxes, taxes and mandatory payments of any type whatsoever, municipal and/or governmental or others, including any fee, licensing fees and licenses of any type whatsoever pertaining to the Leased Property and/or the operation and/or upkeep thereof. Taxes or levies in respect of the Leased Property, the operation thereof, up-keeping thereof or in respect of the rent which will be imposed in the future and which do not exist on the date of execution of this Lease Agreement, will apply to the Lessee.

The Lessor will bear the payment of property tax and other taxes, if imposed in the future in respect of ownership rights in the Leased Property, as well as income tax in respect of the Rent.

6.2. Without derogating from the generality of the aforesaid, the Lessee will bear throughout the entire Term of the Lease all of the payments for the supply of water, electricity, phone, municipal taxes, business tax, signage tax or any other expense pertaining to the use of the Leased Property and the operation thereof.

The Lessee is aware that the Lessor requested the Electric Corporation the supply of electricity on a bulk basis for the entire building and the Lessor will supply electricity to the Lessee.

The Lessee will pay the Lessor for electricity consumption, same as all of the lessees and occupants, for actual consumption, according to kilowatt hour price determined by the Electric Corporation, according to an ordinary consumer price list, plus 10% and plus VAT according law.

The Lessee hereby undertakes that it will not be entitled to request direct electricity supply from the Electric Corporation and that it will have no claim against the Electric Corporation for non-supply of electricity or interruptions to the electricity supply.

For avoidance of doubt, the Lessor will be responsible for regular electricity supply to the Leased Property. The Lessee had notified the Lessor that sensitive systems will be operating in the Leased Property and processes dependant on regular electricity supply will be carried out.

- 6.3. The Lessee will bear throughout the entire Term of the Lease payments due for the maintenance and management of the Building as specified in the provisions of Section 7 below, and for the use of the Parking Lots according to the provisions of Section 8 below.
- 6.4. The Lessor will notify in writing the City of Jaffa-Tel Aviv and the other entities related to the matter of the lease thereby of the Leased Property.

Soon after the date of commencement of the lease, the Lessee undertakes, if the Lessor shall so instruct it, to transfer the water and/or telephone and/or electricity and/or municipality bills and/or any other bill pertaining to a payment and/or tax applicable to the Leased Property, to the name of the Lessee. In the end of the Term of the Lease onwards the Lessee shall return the same bills to the name of the Lessor.

#### 7. Management of the Building

7.1. The Lessor shall cause the appointment or incorporation from time to time of a corporation which will engage in the management of the building and maintenance thereof (the "Management Company"). The Lessor intends to retain a subcontractor whether directly or through the Management Company which will be incorporated to provide the management services in the Building. The Lessor will not be affiliated with the subcontractor, the ownership and/or management. The aforesaid may not derogate from the Lessor's right to provide the management services itself. For so long as the corporation had not been appointed or incorporated or for so long it had not began engaging in the management of the building and maintenance thereof, or if the appointment had expired as aforesaid, the Lessor shall serve as the Management Company for the purposes of this Agreement.

The Management Company will lay down the arrangements and procedures pertaining to the management of the building and the maintenance thereof and will set up bylaws as stipulated in paragraph 7.6 below which will apply in respect of all of the lessees and users of the Building and will follow up on the performance thereof.

In addition, the Management Company itself and/or through subcontractors shall provide management and maintenance services for the Building including cleaning and lighting of the interior public areas, gardening of the public areas, maintenance, repairs of the electricity, lighting, air-conditioning systems, the elevators and the other systems and facilities serving all of the users of the Building, assembly, use and maintenance of various facilities for the use and benefit of all of the Lessees and/or visitors to the Building, signage, property insurance for the construction of the Building (not including the contents of the leased properties) third party insurances pertaining to the public areas, payment of municipal and governmental taxes applicable to the interior public areas (the "Services").

It is further agreed that the inspection and repairs included in the Services definition above include also, but are not limited to, the renewal and/or replacement of equipment and fixtures according to need, and the Management Company will be entitled, if it shall so choose, to finance them, partially or fully through a fund for renewal and/or replacement of equipment, the funds for which will be collected on an ongoing basis from the various lessees within the maintenance and management expenses.

The Services in whole or in part, according to the discretion of the Management Company will be provided by the Management Company at an appropriate frequency and level suitable for a modern building of the Building's type.

- 7.2. The Management Company shall have access to the Leased Property upon prior coordination with the Lessee (except for emergencies), for the performance of any work in the Leased Property for the purpose of providing the Services or any of them, and subject to the work being performed in a manner which will not cause the Lessee interference for the management of the business thereof in the Leased Property more than necessary, and that upon the completion of the work the prior condition will be restored.
- 7.3. The Management Company will retain as necessary employees, subcontractors, consultants, accountants, lawyers etc. as it shall deem fit for the purpose of performing its duty.
  - 7.4.1 The Lessee undertakes to bear management fees *pro rata* calculated according to the area of the Leased Property for payment of Rent as shall be determined according to Section 5.2 above together with the other occupants all of the expenses involved in the management and provision of the Services and including VAT (the "Expenses").

- 7.4.2 In addition to the provisions of Section 7.4.1 and in consideration for the performance of the undertakings of the Management Company and/or the Lessor regarding the management of the Building, the Lessee shall pay the Lessor or the Management Company a management fee in an amount equal to 10% (ten out of a hundred) out of its share in the Expenses (the "Management Fee").
- 7.4.3 The Management Fee will be added to any bill paid by the Lessee and will be paid thereby simultaneously with the payment of the Expenses and they shall be deemed for all intents and purposes as part of the Expenses and it will be submitted for payment in one account.
- 7.4.4 The payments will be made throughout the entire Term of the Lease, every three months in advance and lawful VAT will be paid in respect of each payment on the legal date.
- 7.4.5 The Management Company will attribute, to the extent possible, its expenses to the "Office Building" as distinguished from the "Commercial Center". Expenses which may not be attributed specifically to the Office Building or to the commercial center will be attributed according to a key to be set by the Lessor or the Management Company for the two parts of the Building according to the actual costs within six (6) months from the date of population of the project. Until such determination, the distribution of unattributed expenses will be as follows: 50% to the Office Tower and 50% to the Commercial Center.

For allowing the implementation of the aforesaid principle, the Management Company will keep a ledger system in respect of all of its expenses for performance of the Services. Any expenses which may be specifically attributed to the Office Building or the Commercial Center will be fully attributed to such wing and will be borne by the occupants and/or lessees of the Units in such wing (for example: electricity consumption and water consumption). Expenses which cannot be attributed specifically (such as the employment cost of the maintenance workers who will operate in the context of providing the Services to the entire project) will be charged and attributed to the Office Tower and the Commercial Center according to a key which will be set[]].

The "Office Tower" for the purpose of this Section means - the entire building except for the commercial floors, the exterior plaza and the parking lot.

The "Commercial Center" for the purpose of this Section means – the entire Building except for the Office Tower and the parking lot.

The Office Tower is marked with the letter \_\_\_ and the Commercial Center is marked with the letter \_ on the floor plan of the entire Building. The floor plan will be placed at the Lessor's offices for the inspection of the lessees and occupants during ordinary working hours and with prior coordination.

7.5. Prior to the receipt of possession of the Leased Property, the Lessee will transfer as a deposit to the Management Company, the amount of \$9 multiplied by the number of square meters included in the area of the Leased Property for the purpose of payment of Rent, linked to the last known index from until the date of the deposit thereof (the "Deposit").

Alternatively, the Lessee will deposit with the Lessor at the same time a bank guarantee in the agreed Deposit amount, valid until 30 days following the expiration of the Term of the Lease or for a shorter period, contingent upon ensuring the extension thereof, 30 days prior to the expiration of the guarantee accordingly, and in any case, the guarantee will be given for a period which is no less than one year.

The Deposit or the amount of the bank guarantee, as applicable, will be increased from time to time by the Lessee within 15 days from the demand by the Management Company occasionally, so that it will cover the Lessee's pro rata share in the maintenance and management expenses for a period of at least 3 months.

The Deposit will be held by the Management Company in accounts and/or securities linked to the US Dollar or to the index, according to its discretion. The Management Company will be entitled to withdraw funds out of the Deposit or out of the bank guarantee any time that it will be entitled to any funds from the Lessee which were not paid on time and in such case, the Lessee will be obligated to immediately supplement the Deposit or the bank guarantee amount at the rate of the funds withdrawn therefrom.

After the expiration of the Term of the Lease, the Deposit or the bank guarantee, as applicable, or the remaining balance thereof, will be returned to the Lessee linked to the index.

7.6. The Management Company will be entitled but not obligated to set up, from time to time, according to its discretion bylaws and/or procedures and/or provisions pertaining to the use of the Building, including but not limited to any matter related to the arrangements for entrance, exit, security, access, passage for the public and for vehicles, prevention of nuisances and disturbances of different types according to its discretion, the opening and closing times of businesses, operation hours of the lighting and the lighting level in the various leased properties and the store windows, the use of the Parking Lots and the public areas, operation of the air-conditioning systems, the heating and/or cooling in the public areas in the Building and/or the leased properties themselves, operation of audio or music systems in the Building and in the leased properties themselves, signage, posting notices or signs etc.

[Signature]
[stamp]
Ofer Miretzky (Shikun Dan) Ltd.

For avoidance of doubt, the Lessee may use the Leased Property 24 hours a day on business days, holidays and Saturdays except for Yom Kippur.

[signature]
[stamp]
Compugen Ltd.
17 Hamacabim Street
Petach Tikva 49220
Israel

Without derogating from the generality of the aforesaid, the Lessee is aware that there is a prohibition on using the public parking bays in the Building for long term parking purposes for the benefit of the visitors of the Commercial Center. The Management Company will be permitted to lay down procedures and provisions in the matter and to operate for the enforcement of such provisions in any means which it shall deem fit.

The Lessee undertakes that it and anyone on its behalf will meticulously fulfill all of the bylaws and/or the procedures and/or provisions which will be set up by the Management Company as aforesaid, as customary in commercial centers similar in size and character.

Nothing in this Section 7.6 will allow obstruction to the access routes to the Leased Property.

It is agreed that the operation hours of the air-conditioning system will be at least:

On business days from 8:00 to 24:00.

On Fridays and holiday eves from 8:00 to 14:00.

On Saturdays and holidays and any hour deviating from the hours specified above, the use of the air-conditioning system will be deemed as a special service as defined in subsection 7.7 below.

7.7. The Management Company will be entitled according to its discretion to provide special services to any of the residents of the Building and/or the users thereof, and in such case, such resident or user will be responsible alone for the payment for such Services, if provided. Without derogating from the generality of the aforesaid, the Lessee agrees that if the Services or any part thereof will be effected according to the Lessee's request in hours or days during which the other businesses in the Building or most of them, are not operating, the Management Company will be entitled to charge the Lessee and/or the other lessees – if any – to operate their businesses on hours or dates as aforesaid, to bear on their own the special expenses related to the provisions of the Services on such dates or hours, plus 15% profit.

- 7.8. The Management Company will retain workers, subcontractors, consultants, service providers, accountants, lawyers for the purpose of performing its duty, all subject to reasonable discretion and for the purpose of maintaining and managing the building alone. For avoidance of doubt, the Management Company will not retain advertising and/or marketing consultants. The Management Company also undertakes to reduce its expenses to the extent possible and when necessary it will hold tenders for the purpose of receipt of services from subcontractors and/or for the purpose of receipt of insurance offers. The level and scope of the Services which will be provided by the Management Company will be similar to the level of services provided in buildings of the type and character of the project.
- 7.9. The execution by the Lessee of this Lease Agreement constitutes a direct undertaking towards the Management Company when such will be appointed or incorporated, insofar as such is related thereto, as well as an undertaking of the Lessee towards the Lessor to fulfill all of its undertakings towards the Management Company whether as specified in this Agreement or as shall be specified in the Management Agreement described below. For so long as the Management Company had not been yet appointed or incorporated the Lessor will stand in its place.

According to the Lessor's request, the Lessee will sign a management agreement with the Management Company in the form which will be prepared by the Management Company and approved by the Lessor and which will reflect in principle the agreements in this Section 7, Section 8 below and the other provisions of this Lease Agreement.

In case of contradiction between the provisions of this Contract and the provisions of the Management Agreement, the provisions of this Contract shall prevail, unless otherwise explicitly stipulated and agreed. It is further agreed that the Lessee will not be subject to further liabilities by virtue of the provisions of the Management Agreement beyond its liabilities pursuant to this Agreement.

#### 7.10. The Management Company's Books

Ledgers, records, expenses accounts, reports, account and expense collection documents and so forth shall be held and kept at the Management's Company's offices. The Management Company undertakes to keep orderly and separate books of account in respect of all of its expenses and income, including a separate sub-ledger per occupant and for any Unit occupant in the Building.

The Management Company will retain a certified accountant to audit/review its books of account and prepare its balance sheets. The accountant's fee will be deemed as an expense.

The Management Company's books and accounts will be deemed and will be acceptable to the occupant and will serve at any time as conclusive proof pertaining to the payments due from the occupant and/or which were paid by the occupant to the Management Company.

#### 7.11. Accounts and Inquiries

The occupant is entitled to receive an explanation regarding the expenses of the Services management in the Building and to inspect the books of account referring thereto. The dates for holding the inquiries will be scheduled by the Management Company, according to its discretion, within 14 days. The holder together with the other Unit holders in the Building will establish a representative body for matters of the Building maintenance and provision of the Services therein, and the Management Company will conduct ongoing contacts with the said representative body for optimization and improvement of the Services on the one hand, and saving in the expenses of the Services management on the other.

7.12. The parties agree that within the context of the Management Agreement the Management Company will agree that according to the demand of at least 75% of the occupants of areas in the Building – the Commercial Center and the Office Building – (which are not affiliated to the Lessor or the individuals thereof) the Lessor will replace the Management Company within 6 months from the date of such demand and will appoint instead another management company or will provide the management services itself. This provision will also apply to the management company which will be appointed (if any) according to this subsection or the Lessor itself will provide the management services and so on and so forth.

#### 8. Parking Lots

There will be a parking lot in the Building which will not be part of the common property. The Lessor undertakes to ensure that the Building will include roofed parking spaces in several parking places as required by the competent authorities for the operation of the businesses in the Building (the "Parking Lots").

The Lessor will be entitled according to its absolute discretion from time to time to operate the Parking Lots by the Lessor and/or the Management Company and/or an external operator as paid parking lots, to lease them to subcontractors for operation as parking lots for payment and/or to operate them and maintain them by the Management Company and part of the Services as defined in Paragraph 7.1 above, that too for payment or payment, and/or to determine in the Parking Lots arrangements for use, operation, parking, entrance and exit, and to change all of those from time to time, in a manner according to its discretion as aforesaid.

The Lessee is entitled to order by a written notice within three months from the date of handing over possession in the Leased Property up to 30 specific marked parking spaces in one cluster in the building's parking lot, at a price of \$90 plus VAT for each parking space per month. The conditions which will apply to the visitors of the Parking Lot and the subscribers thereof will apply equally to the Lessee, except for the payment issue. The option for parking in the parking lot will be provided simultaneously with the handing over of possession in the Leased Property.

The consideration for such parking spaces will be paid as aforesaid and according to the rules stipulated in Subsections 5.1, 5.3 and 5.6 above, mutatis mutandis.

#### 9. Liability, Indemnification and Insurance

The Lessee and only it, will be responsible for any damage to body and/or property which will be caused and to any wrong which will occur at the Leased Property – all in respect of the holding of the Leased Property and/or the use which will be carried out therein, all subject to the damage not having occurred maliciously and/or intentionally and/or negligently by the Lessor and/or the Management Company and/or anyone on their behalf.

The Lessee releases the Lessor from any liability for damage to the assets placed in the Leased Property (its own assets or those of others – including a car brought into the Building's parking lot) and also to any indirect or consequential damage (loss of profits, loss of goodwill etc.) if such is caused during the Term of the Lease – whatever the reason causing such is, subject to the damage not having occurred due to a malicious act or intentionally and/or negligently by the Lessor and/or the Management Company and/or anyone on their behalf.

The Lessor will not bear any liability for bodily harm to the Lessee itself, the Lessee's employees, clients, visitors, invitees or any other person who arrived at the Building by the Lessee's order or for any purpose related to the Lessee, the business and/or the Leased Property and which will be caused in the Leased Property, the passage thereto or therefrom or in the Building or in its close vicinity, during the Term of the Lease except for cases in which the Lessor caused the damage maliciously and/or intentionally and/or negligently.

The Lessee will indemnify the Lessor and/or the Management Company for any damage and/or claim and/or charge which the Lessor and/or the Management Company will require the payment of in respect of damage originating in a negligent act of the Lessee which will occur in the Leased Property and/or in respect of and/or deriving from the holding of the Leased Property and/or in respect of the use which will be done therein and which the Lessee is responsible for as aforesaid, all immediately upon the receipt of the Lessor's first demand in writing.

The Lessee's duty to indemnify the Lessor and/or the Management Company as aforesaid, is contingent upon the Lessor and/or the Management Company allowing the Lessee to defend against the claim and/or demand as aforesaid, and in any case, the Lessee will not indemnify the Lessor and/or the Management Company in an amount exceeding the amount which it was charged to pay for damage under the liability of the Lessee according to this Agreement.

Without derogating from the provisions of Section 9 above, the provisions of the liability and indemnification insurance are included in <u>Annex C</u> attached herein which constitutes an integral part hereof.

#### 10. Upkeep and Management of the Leased Property

- 10.1. The Lessee alone will be responsible to obtain and keep in effect the licenses required according to any law for use of the Leased Property.
  - The Lessor is aware that the Lessee intends to install sensitive electronic equipment in the Leased Property.
- 10.2. The Lessee will manage the business thereof according to the provisions of any law which applies to the matter and without causing any nuisance including, but not limited to noise, odors, pollution etc. and not to bother the occupants of the other businesses and offices and the surroundings and not to interfere their peace and quiet.
- 10.3. The Lessee will conduct its business in the Leased Property while adhering to all of the procedures and provisions which will be laid down by the Management Company by virtue of its authority as specified in Section 7 above including all of its subparagraphs.

- 10.4. The Lessor as the developer who constructed the Building is responsible for repairing any defects which will be discovered in the Leased Property and which derive, inter alia, from defective construction or use of defected materials. The Lessor is responsible and undertakes to repair in the Leased Property or the Building anything which precludes or limits the reasonable use and enjoyment in the Leased Property as soon as possible. The Lessee undertakes to keep the Leased Property throughout the entire Term of the Lease in good and proper order. Should the Lessee not do so, the Lessor and/or the Management Company will be entitled to enter the Leased Property and to do so in its place and on its account, without derogating from the Lessor's right to any other remedy.
  - The Lessee will return possession in the Leased Property to the Lessor upon the expiration of the Term of the Lease or upon the shortening thereof due to the termination of this Lease Agreement, in the same condition which it had received it and subject to reasonable wear and tear. Until the vacation of the Leased Property the Lessee will remove from the Leased Property, on its account, any object and any addition or permanent facility installed by it and will restore the prior condition, unless the Lessor had explicitly agreed in writing to the leaving of any of them in the Leased Property, in which case they shall become its property for no consideration.
- 10.5. The Lessor and/or the Management Company will be entitled, if they so desire, to enter the Leased Property from time to time, on reasonable dates and with prior coordination, for examining the fulfillment of the provisions of this Lease Agreement and/or for performance of work and repair.
- 10.6. The Lessee will not be entitled to carry out any changes and/or additions in the Leased Property without the prior written consent of the Lessor, and according to the conditions of such consent if granted, all according to the Lessor's absolute discretion, and provided that such consent will not be withheld other than on pertinent grounds. Notwithstanding the aforesaid, the Lessee may perform internal changes in the Leased Property, without receiving the Lessor's consent and subject to no change being carried out to the Building's common infrastructures. In such case Subsections 4.4.2, 4.4.3, 4.4.5 shall apply mutatis mutandis.
- 10.7. The Lessee will not put up signs or notices on the exterior walls of the Leased Property or the Building without the prior written approval of the Lessor and/or the Management Company and payment of signage taxes according to law.

#### 11. Endorsement of Rights

- 11.1. The Lessee will not transfer the Leased Property or any part thereof to another, will not hand over possession to another therein or in any part thereof and will not permit therein or in any part thereof use for another for consideration or for no consideration, and will not pledge nor mortgage any right of the rights thereof pursuant to this Lease Agreement, unless received the Lessor's explicit prior written consent.
- 11.2. The Lessee will not lease the Leased Property or any part thereof through sub-lease unless received the Lessor's explicit prior written consent. The Lessor will not refuse to the sub-leasing of the Leased Property other than on reasonable pertinent grounds.

In case that the Lessee will sub-lease the Leased Property as aforesaid, its priority right granted thereto in Section 15 below and its right to extent the Term of the Lease granted thereto in Section 4 above will be automatically and immediately revoked.

- 11.2.1. In any case the sub-lessee will make use of the area of the Lessed Property in whole or in part for a purpose suitable for the nature and the level of the Building as a high level office building. Also, it is agreed that all of the Lessee's undertakings pursuant to this Contract towards the Lessor and the Management Company will not be prejudiced.
- 11.2.2. In case of termination of this Lease Contract the sub-lessee's right will expire and it will have no claim or right towards the Lessor.
- 11.2.3. The sub-lessee will undertake to fulfill all of the provisions and procedures binding all of the occupants of areas in the Building including all of the instructions of the Management Company.
- 11.2.4. The Lessee undertakes to include such provisions in the lease agreement made thereby with the sub-lessee.
- 11.3. The Lessor hereby grants its prior consent that the Lessee will be entitled, if it wishes to, transfer and/or assign and/or lease the Leased Property to a subsidiary and/or to a associated company and/or to an affiliated company of the Lessee (as such are defined in the Securities Law, 5728-1968) under the condition that throughout the entire Term of the Lease such companies shall remain subsidiaries, associated or affiliated companies of the Lessee and under the condition that all of the undertakings of the Lessee towards the Lessor and the Management Company according to this Agreement will not be prejudiced.

- 11.4. The Lessor will be entitled to transfer and/or endorse and/or pledge and/or mortgage in whole or in part its rights in the Building and/or the Leased Property and/or any part thereof and/or its rights pursuant to this Agreement, in whole or in part, provided that the Lessee's rights will not be prejudiced. The Lessee undertakes to cooperate and sign any document required, if any, by the Lessor for approval and/or performance of the aforesaid.
  - Without derogating from the aforesaid, the Lessee will sign upon the execution of this Agreement, an assignment of the Lessor's rights to the financing bank of the project construction in the form attached hereto as <u>Annex E</u>. If and to the extent that the Lessor will choose to change or replace the financial entity for financing the project, the Lessee undertakes to sign the documents required for such assignment of rights.

#### Remedies and Relief

- 12.1. Should a party to this Lease Agreement breach any of its provisions, the injured party will be entitled to all of the remedies stipulated in the Contracts Law (Remedies for Breach of Agreement), 5731-1970; without derogating from the provisions of this Agreement or the provisions of any law.
- 12.2. Cancelled
- 12.3. Any breach of any provision of the provisions specified below of the Agreement will be deemed as fundamental breach thereof:
  - 12.3.1. Any breach of the provisions of paragraph[s] 3.1 and Sections 11, 14 of this Agreement.
  - 12.3.2. Delay in any payment which the Lessee is obligated to pay according to the provisions of Sections 5, 6 (including their subparagraphs), and paragraphs 7.4, 7.5, 7.7 of this Agreement for a period exceeding 21 days in respect of any delay and/or over 3 accrued delays of any payments which the Lessee must perform towards the Lessor and/or the Management Company as aforesaid, throughout another year of lease.
  - 12.3.3. Breach of material provisions which the Management Company shall determine five times or more during one year of lease, and in case of a continued breach its continuation for 7 consecutive days or more.
  - 12.3.4. Any other breach which had not been remedied within 30 days from the date on which the Lessor required the Lessee in writing to remedy such breach.

- 12.4. The Lessor will be entitled to terminate this Lease Agreement and to demand that the Lessee immediately vacate the Leased Property (the "Demand to Vacate") and return the possession therein to its hands under the terms stipulated in Paragraph 10.4 above in any of the following cases:
  - 12.4.1. The Lessee fundamentally breached this Lease Agreement.
  - 12.4.2. The Lessee breached any breach of the provisions of this Lease Agreement and did not remedy the breach within 30 days from the date on which required.
  - 12.4.3. A petition had been filed to a competent court for the dissolution of the Lessee or any of its individuals, as applicable, or declare it as bankrupt, appoint a trustee, liquidator, temporary liquidator, preliminary liquidator, receiver for a material part of its assets and an order had been granted according to the petition and such order was not cancelled within 90 days from the date of filing the petition to the court and/or if the Lessee had filed a petition for its dissolution or declaration as bankrupt and/or for the making of a creditors' arrangement.

The Lessee shall be entitled, in coordination with the Lessor, to enter the Leased Property for the purpose of orderly vacation thereof, within 14 days from the date of receipt of the Demand to Vacate.

If a due termination notice had been given, the following provisions shall apply:

- 12.4.4. Cancelled.
- 12.4.5. Cancelled.
- 12.4.6. The Lessee will have no right to object in any manner and/or to try to delay or prevent the engagement between the Lessor and any other lessee and/or to try and prevent or delay performance of the leasing of the Lessed Property to any alternative lessee. All of the aforesaid will apply both in the relations between the Lessor and the Lessee and the relations between the Lessee and will be deemed *inter alia* as contractual provisions for the benefit of a third party.
- 12.4.7. In case that the Lessor will provide the Lessee with a notice of termination of this Contract and the Lessee will dispute such notice and require the decision of the Arbitrator as such is defined in Section 16 below, the parties shall act according to the judgment of the Arbitrator, which will be issued no later than the expiration of 30 days from the date on which any of the parties had applied to him. The other provisions of Section 16 below will apply *mutatis mutandis* to such arbitration.

- 12.5. Any delinquency in payment by any party will bear arrears interest at the rate charged by Bank Hapoalim Ltd. for an overdraft at such time in respect of the delinquency period.
- 12.6. In the event that the Lessee shall fail to timely make any payment that it is required to make to the Lessor or the Management Company and the Lessor shall have sent the Lessee a notice of termination, the Lessor will be entitled, by a written warning of 60 (sixty) days in advance to the Lessee, which shall not be sent before the date on which the breach became a fundamental breach, and without derogating from its right to any other remedy, to immediately stop supplying to the Lessee and/or to the Leased Property and/or to instruct the Management Company, which shall be obligated to comply with such instruction, to stop supplying to the Lessee and/or to the Leased Property, electricity, water, air-conditioning or any other services, at its discretion, and the Lessee shall entertain no claim or suit in connection therewith.
- 12.7. For each day of delay in the vacation of the Leased Property under the conditions set forth in Section 10.4 above upon expiration of the Term of the Lease and/or upon termination of this Agreement, the Lessee will pay the Lessor liquidated damages, an amount equal to the rent due to the Lessor for the last lease month, divided by 15, all subject to the linkage provisions in this lease agreement.
  - The Parties represent that the said amount constitutes appropriate compensation for the damage that the Parties deem as a likely consequence of a delay in vacation of the Leased Property as aforesaid, all without derogating from the Lessor's right to any other remedy and/or to compensation in a higher amount.
- 12.8. In any case of failure to timely vacate the Leased Property by the Lessee upon expiration of the Term of the Lease or upon termination of this lease agreement, the Lessor will be entitled, without derogating from its right to any other remedy, and after written warning of 30 (thirty) days is given:
  - 12.8.1. To immediately stop supplying to the Lessee and/or to the Leased Property and/or to instruct the Management Company, which shall be obligated to comply with such instruction, to stop supplying to the Lessee and/or to the Leased Property, electricity, water, air-conditioning or any other services, at its discretion, and the Lessee shall entertain no claim or suit in connection therewith.

12.8.2. To enter the Leased Property, itself and/or through others, and use, for such purpose, reasonable force and to vacate the Leased Property of any and all objects or chattels that shall be located therein and to change the locks or prevent access thereto by the Lessee or anyone on its behalf in any manner that it shall deem fit.

In any case of failure to timely vacate the Leased Property as aforesaid by the Lessee, the Lessee or anyone on its behalf shall be deemed as "new trespassers" on the Leased Property, and it shall entertain no claim or suit against the Lessor or anyone on its behalf in respect of the damage caused thereto or to its chattels as a result of such action

The Lessee will be liable for payment to the Lessor of any and all expenses that shall be incurred by the Lessor or anyone on its behalf in such actions.

- 12.9. No waiting or refrainment from exercising any right of the Lessor and/or the Management Company under this lease agreement shall be deemed in any way and under any circumstances as a "waiver" or as grounds for a claim of estoppel against them on the part of the Lessee.
- 12.10. The Lessee will be entitled to terminate this contract by written notice in the event that the Lessor and/or the Management Company shall commit a fundamental breach of the provisions of this contract. "Fundamental breach" for purposes of this subsection means: any breach by the Lessor and/or the Management Company which shall deny the Lessee reasonable use and/or enjoyment of the Leased Property and/or the access routes to the Leased Property and which is not remedied within 30 days from the date on which it was required by the Lessee in writing to be remedied, or in the event that as a result of a negligent omission or act of the Lessor, the Lessee shall be denied use of the air-conditioning system in the Leased Property or the Leased Property shall be disconnected from the electricity system for 20 cumulative days during one lease year. [Text in italics added in handwriting and signed by the parties] The Lessor is aware that in order to operate the business, the Lessee requires a stable electricity system. Failure to fulfill this condition will prevent the operation of the business and will constitute a fundamental breach of the agreement on the part of the Lessor.

#### 13. Absence of Tenant Protection Rights

- 13.1. It is explicitly represented that the Leased Property will be located in a building whose construction was completed after August 20, 1968, and that this lease is made under the explicit condition that the tenant protection laws shall not apply to the lease. The Lessee represents that it has neither paid nor will pay the Lessor key money or any other consideration that is not rent, and neither the Lessee nor anyone acting on its behalf will be a protected tenant in the Leased Property pursuant to law, and it will be barred from raising any claims or suits in connection with its being a protected tenant or that it has in the Leased Property more rights than as explicitly conferred thereon in this Agreement.
- 13.2. The Lessee represents that any and all investments that shall be made thereby in the Leased Property, including equipment and fixtures, shall be made for its needs only and it will be barred from claiming that such investments constitute key money or a substitute for key money or a payment pursuant to Section 82 of the Tenant Protection Law (Consolidated Version), 5732-1972, or any payment which grants it any rights in the Leased Property and it will be barred from demanding of the Lessor a full or partial contribution or reimbursement in respect of the said investments.

#### 14. Securities

- 14.1. As security for fulfillment of all of its undertakings under this lease agreement, the Lessee shall provide Caspi & Co. (the "Trustee"), within 7 days from the date of execution of this Agreement, with an unconditional bank guarantee, endorsable to the financial body financing the project or to whomever shall purchase only the Leased Property from the Lessor, made out in favor of the Lessor as payee, exercisable in installments, duly stamped at the Lessee's expense, in the language attached hereto as Annex F, valid until 90 days after the end of the Term of the Lease and in the sum of NIS 110,000, the sum of the guarantee being linked to the index from the base index until the index known on the payment date.
- 14.2. In addition, before and as a condition to its entry into the Leased Property for the purpose of performance of the interior work, as specified in Section 4.4 above or 2.3.1 above, whichever is earlier, the Lessee shall provide the Trustee with an additional unconditional bank guarantee, endorsable to the financial body financing the project or to whomever shall purchase only the Leased Property from the Lessor, made out in favor of the Lessor as payee, exercisable in installments, duly stamped at the Lessee's expense, in the language attached hereto as Annex G. valid until 90 days after the end of the Term of the Lease and in the sum of NIS 110,000, the sum of the guarantee being linked to the index from the base index until the index known on the payment date.

- 14.3. In the event that this Agreement confers on the Lessee a right to extend the Term of the Lessee and the Lessee exercises its said right, the Lessee shall provide the Trustee, together with its notice of the exercise of its right and as a precondition to the validity of its notice, with one bank guarantee in lieu of the two guarantees as specified above, valid until 90 days after the end of the term of the lease as it requests to extend the same in its notice.
- 14.4. The Lessee will bear any and all expenses of the bank guarantees, including the guarantor's bank fee.
- 14.5. The aforesaid notwithstanding, it is agreed that the Lessee will be entitled to provide the Trustee with a bank guarantee for a shorter period of time, provided that the Lessee shall ensure to extend the validity of the guarantee from time to time, at least twenty-one (21) days before the expected date of expiration thereof.
- 14.6. If the Lessee shall not have provided the Trustee with a substitute bank guarantee on the said date, the same shall be deemed as a fundamental breach of the Agreement and the provisions of Subsection 14.7 shall apply, *mutatis mutandis*.
- 14.7. The Trustee shall release the bank guarantees deposited therewith to the Lessor upon fulfillment of the following conditions:
  - 14.7.1. An affidavit of the manager of the Lessor or anyone on its behalf shall have been delivered thereto, whereby the Lessee has committed a fundamental breach of this contract, with a specification of the circumstances of the breach and the date on which it was committed.
  - 14.7.2. The Trustee shall have given the Lessee written notice of receipt of the affidavit thereby and of its intention to deliver the bank guarantees to the Lessor within 5 business days.
  - 14.7.3. The Trustee shall not have been provided with any judicial order not to do so.

The Lessee's signing of this contract shall be deemed as the giving of irrevocable instructions to the Trustee to act as aforesaid. It is further agreed that the Trustee will not be liable for any damage that shall be caused to the Lessee as a result of the exercise of the bank guarantees unless it shall have acted in bad faith when delivering the guarantees to the Lessor.

14.8. Once the bank guarantees are delivered to the Lessor by the Trustee, the Lessor will be entitled, at its discretion, to exercise the guarantee/s in any case of a breach of this lease agreement by the Lessee or in any case in which the Lessor shall be due any money from the Lessee which shall not have been timely paid, and in any event the bank guarantee will not be exercised for an amount exceeding the amount of the damage caused to the Lessor.

#### 15. Right of Priority

In the event that the Lessor shall build on the balcony attached to the Leased Property and/or on the roof of the Leased Property (on an area which is not built-up on the date of execution of this contract) during the "Term of the Lease" and the Lessor shall decide to lease the same to a third party (the "New Area"), the Lessee will have a right of priority to lease the New Area, all as specified and stipulated below:

- 15.1. The Lessor shall give the Lessee written notice of its intention to lease the New Area. The Lessor's notice shall specify the size of the New Area, its location and the date of commencement of the lease (subject to the provisions of Subsections 15.4-15.6 below) (the "Lessor's Notice").
- 15.2. In the event that the Lessee shall be interested in leasing the New Area as aforesaid, it shall be required to give unconditional and unqualified notice to the Lessor, within 10 (ten) business days from the date of receipt of the Lessor's Notice (the "Waiting Period"), that it is interested in leasing the New Area under the conditions stated in the Lessor's Notice (the "Acceptance Notice"). If an Acceptance Notice is sent within the Waiting Period, the Lessor and the Lessee will sign an addendum to the lease agreement in language that shall be drafted based on this contract, with the required changes as specified in the Lessor's Notice (the "Addendum to the Lease Agreement").
- 15.3. If the Lessee does not send the Acceptance Notice within the Waiting Period, then the Lessor will be free to engage with any entity that it shall deem fit, at any price and for any period that it shall deem fit.
- 15.4. The rent that shall be specified in the Lessor's Notice will be as the rent according to this Agreement.
- 15.5. The term of the lease shall begin on the date of commencement of the lease as stated in the Lessor's Notice until the end of the term of the lease stated in this Agreement, and the provisions of Subsection 4.2 above shall apply thereto, and in any event shall be no less than two years.

- 15.6. Fit-out of the New Area the vacated area shall be handed over to the Lessee according to the standard specification of the Lessor, and the provisions of Section 2.4 above shall apply mutatis mutatis mutatis
- 15.7. Securities the Lessee shall give the Lessor another bank guarantee to which the provisions of Section 14 above shall apply, in such amount as shall be determined according to the size of the New Area relative to the area of the Lessed Property.
- 15.8. For the avoidance of doubt, it is hereby clarified that the right of priority shall bind the Lessor insofar as the area is new and it has the legal right and capacity to lease it and/or cause it to be leased.
- 15.9. "Third party" for purposes of this section means any person or corporation with the exception of an interested party of the Lessor individuals, immediate relatives of an interested party of the Lessor individuals, a subsidiary and/or an associated and/or sister company of one of the Lessor individuals on the relevant date.
- 15.10. All of the provisions of this contract will apply to the New Area, mutatis mutandis.
- 15.11. The Lessee undertakes not to register any of its rights under this Agreement, and in particular its rights under this Section 15, with the Land Registrar. It is further agreed that an action contrary to this Section 15.11 will constitute a fundamental breach of this Agreement on the part of the Lessee. This provision is a main provision of this Agreement.

### 16. <u>Arbitration</u>

In the event that disputes and/or disagreements shall arise between the Parties on any matter pertaining to the execution and/or validity and/or breach and/or performance and/or interpretation of this Agreement, the Parties shall refer the disputes and/or disagreements to an arbitrator, whose identity shall be determined by consent between the Parties, and in the absence of consent, the arbitrator will be appointed within (5) five days by the chairman of the Israel Bar Association, according to an application of one of the Parties after a written warning of three days in advance shall have been given to the other party (the "Arbitrator").

16.1. The Arbitrator will act as a single arbitrator and his decision will be final.

- 16.2. The provisions of this Section 15 will be deemed as an arbitration agreement between the Parties and the provisions of the Schedule to the Arbitration Law, 5728-1968 will apply to the arbitration contemplated in this Agreement as well as to the Arbitrator.
- 16.3. It is agreed that the Arbitrator's authority will be explicitly subject to all of the provisions of this Agreement, including the annexes hereto, and that the Arbitrator will be entitled to issue interim orders and other provisional remedies, and he will be bound by and subject to the substantive law, but not the laws of evidence and procedure.
- 16.4. The Arbitrator will have no authority to hear, whether directly or by any way of contestation or appeal, matters which, according to the provisions of this Agreement, are to be decided by the other Engineer or an expert (as defined in Section 2.14 above).
- 16.5. Neither an application to the Arbitrator nor the conduct of arbitration proceedings shall delay and/or postpone and/or exempt any of the Parties from performing any of its undertakings by virtue of the provisions of this Agreement, including an undertaking to make any payment, so long as the Term of the Lease continues.
- 16.6. All of the provisions of this Section 15 notwithstanding, the Lessor is entitled to sue the Lessee at the competent court in Tel Aviv-Jaffa in respect of the eviction or removal of the Lessee from the Leased Property upon expiration of the Term of the Lease and/or upon termination or expiration of this Agreement, provided that no application shall have been made for the appointment of an arbitrator.

#### Miscellaneous

17.1. The Lessor undertakes to allocate and hand over to the Lessee, at its request and throughout the Term of the Lease, an area of approx. 100 sqm on the basement floor in the Building which the Lessee shall use as a storeroom. The location of the area will be chosen at the Lessor's sole discretion. The Lessor, at the Lessee's request, will divide the said area into four storerooms. Each storeroom as aforesaid will have a separate entrance, an electricity socket and one light socket. The Lessee will bear any and all current expenses in respect of the maintenance and operation of the area allocated. For the avoidance of doubt, the Lessee will not be charged with payment to the Lessor and/or the Management Company of management fees in respect of the area of the storerooms. The current expenses in respect of the use of the storerooms will be determined in accordance with the area of the storerooms that shall be allocated to the Lessee versus the area of all of the storerooms on the basement floor of the Building. It is hereby agreed that the Lessee will pay the Lessor, for the area of the storerooms, an amount in NIS equal to \$8 per sqm of the area of the storerooms. The area of the storerooms of the storerooms will be determined in accordance with the area of the storerooms including exterior walls and with nothing added for common areas.

The provisions of Sections 5.1 and 5.2 of this contract will apply to the usage fees for the storerooms, *mutatis mutandis*. For the avoidance of any doubt, the storerooms will be used by the Lessee throughout the Term of the Lease, as defined in Section 4 above.

- 17.2. This Agreement fully reflects all of the agreements between the Parties and supersedes any negotiations, MOU, representation or document which preceded the execution hereof. No modification of the provisions of this Agreement will be valid and binding unless drawn up in writing and duly signed by both Parties.
- 17.3. The Parties will bear the expenses of stamping this Agreement in equal shares, and each party will bear its attorney's fees.
- 17.4. Debts that the Parties to this Agreement owe to one another and/or that the Lessee and the Management Company owe to one another may be offset by prior written consent only.
- 17.5. The section headings in this Agreement are for convenience purposes only and will serve as no reference or aid for the interpretation and/or construction of this Agreement.
- 17.6. For the avoidance of doubt, it is clarified that use of the definition "Building" in this Agreement is made for convenience purposes only. The Lessor will be entitled to determine the name of the Building in which the Leased Property is located, as it shall deem fit and/or to change the same from time to time, all at its absolute discretion.
- 17.7. No modification of and/or waiver of and/or deviation from the provisions of this Agreement will be valid unless made in writing and signed by the Parties to the Agreement.
- 17.8. Consent on behalf of one of the Parties to a deviation from the terms and conditions of this Agreement in a specific case will not constitute a precedent, nor will an analogy be drawn therefrom to any other case. In the event that a party shall not have exercised a right conferred thereon by this Agreement in a specific case, the same shall not be deemed as a waiver of such right in the same case and/or in another similar or dissimilar case, and no waiver of any right of such party shall be inferred therefrom.

- 17.9. No analogy shall be drawn from a waiver made in one case to another case.
- This Agreement does not create a partnership and/or agency relationship between the Parties nor does it confer rights on any third party who is not mentioned in the Agreement, and the Agreement does not derogate from or prejudice any obligation or undertaking of any third party. 17.10.
- The Parties' addresses for the purpose of giving notices will be as stated at the top of the Agreement. Any notice according to this contract shall be sent by one party to the other by registered mail and/or by hand delivery. Any notice that shall be sent by registered mail shall be deemed as having reached the addressee and its knowledge within 5 days from dispatch thereof, and in the case of hand delivery, within 12 hours from delivery. From the date of handing over of possession of the Leased Property to the Lessee, the Lessee's address will be the address of the Leased Property.

### In witness whereof, the Parties have hereto set their hands:

[signature + stamp]	[signature + stamp]
The Lessor	The Lessee
20	

#### 2002 Addendum to the Lease Agreement

Made signed in Tel Aviv on 16 of December 2002

#### Between:

Migdal Insurance Company Ltd. Hamagen Insurance Company Ltd. From 26 Saadia Gaon St., Tel Aviv (hereinafter – the "Lessor")

#### On the first part

And between:
Compugen Ltd.
51-177963-9
From 72 Pinhas Rosen St., Tel Aviv
(hereinafter – the "Lessee")

#### On the second part

Whereas On April 21, 1998, a lease agreement was signed between the previous owners of the land (hereinafter – "Previous Owners") and the Lessee, which was endorsed to the Lessor on

January 10, 2000 as well as addendums to the agreement (hereinafter – "Basic Lease Agreement"); and

Whereas Warehouses were made available to the Lessee in accordance with the letter dated July 28, 98; and

Whereas The have agreed, that the Lessee shall return the warehouse areas made available to it and in their stead shall receive another warehouse – all in accordance with the conditions and

arrangement as set forth hereunder in this Addendum;

### Therefore it has been declared, stipulated and agreed between the parties as follows:-

1. The preamble of this Addendum constitutes an integral part thereof.

- 2. The warehouses subject of the letter dated July 28, 1998, shall be returned to the Lessor no later than December 31, 2002, and as of such date the Lessee shall receive a warehouse with an area of 146m2 according to the blueprint attached hereto as Appendix A of this Addendum that is located on level -2 of the building basement. The parties shall coordinate between them clearing out of the warehouses and transfer of their contents to the new warehouse as set forth above.
- 3. In consideration for the warehouse the Lessee shall pay to the Lessor monthly rent in the amount in NIS equal to NIS 3094.34 + VAT (hereinafter: "Use Fee"), linked to the base index of June 1998 (156.5 points). The Use Fee shall be paid on dates and according to the same arrangements whereby rent is paid as set forth in the Basic Lease Agreement. The Lessee shall not be required to pay management fees for the warehouse however it shall bear all ongoing expenses for maintenance and operation of the warehouse such as, municipal tax, water and electricity.

- 4. The Lessee undertakes to pay its proportional part in the municipal tax the water and the electricity bills, while its proportional part shall be calculated according to the area of the warehouse compared with the area of the other warehouses on the floor. The bills shall be paid within 7 days of demand.
- 5. The lease period of the warehouse shall be until the end of the lease period as set forth in the Basic Lease Agreement.
- 6. The warehouse shall be deemed an integral part of the Leased Property subject of the Basic Lease Agreement, and all conditions that apply to the Leased Property shall apply mutatis mutandis also to the warehouse as set forth in this Addendum. Any place in the Basic Lease Agreement referring to the Leased Property shall include the warehouse subject of this Addendum.

### In witness the parties have signed

 $\begin{array}{l} [signature + stamp] \\ The \ Lessor \end{array}$ 

[signature + stamp] The Lessee

### A 2003 ADDENDUM TO A LEASE CONTRACT

Which was made and signed in Tel-Aviv on the  $5\ensuremath{^{th}}$  day of March 2003

### BETWEEN:

# MIGDAL INSURANCE COMPANY LTD HAMAGEN INSURANCE COMPANY LTD

of 26 Sa'adia Gaon Street, Tel Aviv (hereinafter: "the Lessor")

of the first part

AND:

COMPUGEN LTD 51-177963-9

of 72 Pinchas Rosen Street, Tel-Aviv (hereinafter: "the Lessee")

of the second part

WHEREAS
On April 21, 1998 a Lease Contract was signed between the previous owners of the land (hereinafter - "the Previous Owners") and the Lessee, as amended on April 4, 2000 and again on December 16, 2002, and which was assigned by the previous owners to the Lessor on January 10, 2000 (hereinafter- "the

Basic Lease Contract");

AND WHEREAS The parties wish to introduce changes into the Basic Lease Contract all as detailed hereunder in this Addendum;

### IT HAS THEREFORE BEEN DECLARED, STIPULATED AND AGREED BETWEEN THE PARTIES AS FOLLOWS:

1. The preamble to this Addendum constitutes an integral part of it.

### 2. The Lease Period

The lease period under the Basic Lease Contract is extended and will terminate on December 31, 2006, this instead of the additional lease period specified in the Basic Lease Contract (hereinafter-"the New Lease Period") and the Lessee will not be entitled to terminate the New Lease Period prior to its expiration as aforesaid.

#### 3. The Leased Property

- 3.1 The Leased property, under the Basic Lease Contract, covers an area of 1428.78 square meters on the first floor of the building and an area of 354.45 square meters on the third floor of the building (hereinafter- "the Basic Leased Property"). In addition there is available at the disposal and for the exclusive use of the Lessee, the storerooms covering an area of 146 square meters as detailed in the Addendum to the Basic Lease Contract dated December 16, 2002 (hereinafter- "the Storerooms"). The Lessee undertakes to lease from the Lessor and the Lessor undertakes to lease to the Lessee, the Basic Leased Property and the storerooms, for the whole of the New Lease Period.
- 3.2 In addition, the Lessee undertakes to lease direct from the Lessor and the Lessor undertakes to lease direct to the Lessee on the terms and conditions set out in the Basic Lease Contract, commencing from February 1, 2004, the area that the Lessee is currently leasing on a sub-lease from Ex Libris Ltd. (hereinafter "Ex Libris") (under a lease contract signed between the Lessee and Ex Libris), all in accordance with the plan attached to this Addendum as Appendix 1 (hereinafter "the Ex Libris Area").

  The Ex Libris Area for the purpose of payment of the rent, the management fees and for any other purpose shall be calculated as an area of 540.32 square meters. The Ex Libris Area shall be deemed to have been delivered to the Lessee AS IS on February 1, 2004.
- 3.3 Commencing from February 1, 2004, wherever in this Addendum and/or in the Basic Lease Contract reference is made to "the Leased Property" it shall also include the Ex Libris Area and all provisions of the Basic Lease Contract including this Addendum shall apply, mutatis mutandis, also to the Ex Libris Area, as if the Ex Libris Area had been leased to the Lessee by the Lessor from the beginning. In light of the contents of this section, commencing from February 1, 2004, the Leased Property Area for the purposes of payment of the rent and management fees and for any other purpose shall be 2,323.55 square meters (excluding the area of the storerooms).

#### The Rent

4.1 The monthly rent for the Leased Property shall be a sum in NIS equivalent to NIS 61.97 per square meter of the area of the Leased Property and linked to the index as detailed hereunder, and with the addition of VAT. Commencing from February 1, 2004, the area of the Leased Property shall also include, in addition to the area of the Basic Leased Property, the Ex Libris Area as stated in this Addendum and commencing from the said date the monthly rent shall also be paid in respect of the Ex Libris Area as provided in this section. For the removal of doubt, the rent in respect of the area of the storerooms shall be as detailed in the Addendum of December 16, 2002, namely NIS 3,094.34 per month.

4.2 The aforementioned rent shall be linked to the Consumer Prices Index with the base index being that of December 2002, and this instead of the index as provided in Section 5 of the Basic Lease Contract.

#### Guarantees

- 5.1 On January 31, 2004 the Lessee undertakes to furnish the Lessor, as a fundamental term of this Addendum, with a further unconditional bank guarantee of an amount equivalent to NIS 118,525 (with this amount being linked to the index as stated above in Section 4.2) instead of the bank guarantee furnished to the Lessor by Ex Libris, which shall be returned to Ex Libris as against the furnishing of the said guarantee.
- 5.2 The Lessee shall also furnish to the Lessor confirmation of the existence of the insurance policies in reference to the Ex Libris Area pursuant to the insurance certificates attached to the Basic Lease Contract.
- 5.3 The Lessee may, furnish the Lessor on the dates specified above in Section 5.1, with a total single guarantee for all the area of the Leased Property which includes the area of the Basic Leased Property and the Ex Libris Area, and this instead of all the guarantees that have been provided and are to be provided in the future by the Lessee in respect of the area of the Leased Property. The Lessor shall return all the guarantees to the Lessee that are in its possession on the date of delivery of the total single guarantee as stated in this section, including the guarantee required in respect of the Ex Libris Area. The guarantees provided under the Basic Lease Contract and also under this Addendum shall be security for the due performance of all the Lessee's obligations under the Basic Lease Contract.

## 6. <u>Lessee's Right to lease other areas in the building</u>

- 6.1 The Lessee is granted a preemptive right to lease from the Lessor during the lease period as stated in this Addendum, areas in the building that become vacant in the future as provided hereunder in this section (hereinafter- "right of preemption").
- 6.2 The Lessor shall notify the Lessee in writing of any area that becomes vacant in the building and shall state in the said notification the date on which the leased property is being vacated and the size of its area and location (hereinafter "the vacated area") and the Lessee undertakes to notify the Lessor in writing within 21 days of receipt of the Lessor's notice whether he wishes to lease the vacated area.
- 6.3 Where the Lessee has not given notice to the Lessor by the expiration of the period stated above in Section 6.2 and/or the Lessee has notified the Lessor that he is not interested in the vacated area, the Lessee's said right of preemption shall lapse and the Lessor shall be entitled to and be free to lease the vacated area to any third party and the Lessee shall have no claim or argument against the Lessor.

- 6.4 Where the Lessee has given notice to the Lessor of his wish to lease the vacated area, the terms and conditions of the Basic Lease Contract shall apply to the vacated area, and the following conditions shall also apply:
  - 6.4.1 The Lessee undertakes to accept the vacated area on such date as shall be specified in the Lessor's notice as provided above in Section 6.1 (hereinafter "the delivery date").
  - 6.4.2 The vacated area shall be delivered to the Lessee on the delivery date in its condition AS IS without the Lessor carrying out any alterations or renovations.
  - 6.4.3 The rent for the vacated area shall be as provided in this Addendum.
  - The Lessee, on the delivery date, shall furnish the Lessor with an unconditional bank guarantee of an amount equivalent to three months rent multiplied by the number of square meters of the vacated area with the addition of VAT (or alternatively he shall provide the Lessor with a total single guarantee, as provided above in Section 5.3).
  - 6.4.5 All the terms and conditions of the Basic Lease Contract shall apply to the vacated area commencing from the delivery date as if the vacated area constitutes an integral part of the Lease Contract.

#### 7. Further construction of new building

- 7.1 If during the lease period a Town Planning scheme is approved which permits the Lessor to build additional areas in the building, the Lessee shall have a preemptive right to conduct negotiations with the Lessor for the leasing of an area of at least 3000 square meters of the areas scheduled for building under the New Town Planning scheme (hereinafter "the new section") for a lease period of not less than five years, under the following terms and conditions as detailed hereunder:
  - 7.1.1 Shortly after the date of submission of the application for a building permit for the new section (hereinafter "the effective date") the Lessor shall notify the Lessee in writing that it intends to build additional areas in the building (hereinafter- "the Lessor's Notice").
  - 7.1.2 The Lessee undertakes to notify the Lessor within 21 days of the date of receipt of the Lessor's Notice as to whether he wishes to enter into negotiations for a Lease Contract for the leasing of areas in the new section (hereinafter "the Lessee's Notice").
  - 7.1.3 Where the Lessee has not served the Lessee's Notice by the expiration of the period stated above in Section 7.1.2 and/or the Lessee has notified the Lessor that he does not wish to lease areas in the new section, the Lessee's aforesaid right shall lapse and the Lessee shall have no claim or argument against the Lessor.

- 7.1.4 Where the Lessee has given notice to the Lessor that he wishes to conduct negotiations as aforesaid, the parties shall have 60 days from the date of the Lessee's Notice to formulate the terms for the leasing of the additional areas in the new section and to sign a lease contract in respect of the additional areas in the new section all as shall be agreed upon by the parties.
- 7.1.5 It is hereby emphasized and clarified that the parties are not committing themselves to leasing and/or taking a lease, as the case may be, of areas in the new section, and they have merely undertaken to conduct negotiations with the commercial terms and conditions not yet having been agreed and/or discussed between them. If for any reason a lease contract between them is not signed by the expiration of the time specified above in Section 7.1.4, the Lessee's right as stated in this section shall lapse with neither of the parties having any claim or argument against the other in relation thereto.
- 7.2 Notwithstanding what is stated above in Section 7.1, in the event of the Lessor signing, prior to the effective date, an agreement under which it has undertaken to transfer and/or assign and/or sell its rights in the new section, in any way, including by way of non-acquisition of the said rights, either wholly or partially, from the previous owners, the Lessee's right stated above in Section 7.1 shall lapse. Any party in whom rights are vested as aforesaid (including the previous owners) in the manner prescribed in Section 7.2 above prior to the effective date, shall not be subject to the Lessee's rights as stated above in Section 7.1, and the Lessee shall have no claim or argument in relation thereto against the Lessor and/or whoever in whom such rights are vested. Where the Lessor's said rights have been conferred after the effective date, then the rights of whoever in whom such rights are vested as aforesaid (including the previous owners) shall be subject to the right to conduct negotiations with the Lessee pursuant to the provisions of Section 7.1.
- 7.3 Where the Lessee has signed a lease contract with the Lessor in connection with leasing of the areas in the new section, the Lessee will not be charged any penalties whatsoever deriving from the Lessee having vacated the present leased property and/or because of the Lessee moving to the new section.

### 8. Changes in the Basic Lease Contract

8.1 In Section 2 of the Basic Lease Contract, in the third paragraph - the payment for the consumption of electricity: the addition of 10% shall be cancelled and instead the following shall be inserted "In addition of an amount of not more than 5% which includes the effective interest and any payment, addition and other interest that may be required, in so far as is required in respect of the payment for the consumption of electricity for a period of credit of 15 days from the date of the Lessor's demand".

- 8.2 Section 15 of the Basic Lease Contract is cancelled. Jurisdiction shall lie with the competent court in Tel Aviv -Jaffa.
- 8.3 Section 7 of the Addendum to the Agreement dated April 4, 2000 is cancelled.
- 9. The Lessor undertakes to request, as soon as possible, bids from a number of management companies in the market (of financial solidity, experience and seniority in similar projects and of a scope of areas similar to the building including the new section), for the management of the building based on a specification that shall be forwarded to the Lessee for scrutiny, with the aim of reducing the cost of the management expenses of the building. The Lessor undertakes to examine the bids that are submitted to it by the said management companies and to hire the services of that management company whose bid is the most feasible (both in terms of price and in terms of the services offered by it and the quality thereof) for the management of the building, this within a reasonable period that shall not exceed 3 months from the date of signature of this Addendum. The date of commencement of the operation of the management company that is selected shall be subject to service of the requisite notification under the management agreement with the management company.
- 10. This Addendum constitutes an integral part of the basic lease contract. Subject to what is stated in this Addendum, in the other terms of the Basic Lease Contract, no variation shall apply. Wherever there may be a conflict between what is stated in this Addendum and what is stated in the Basic Lease Contract, what is stated in this Addendum shall prevail.

#### AND IN WITNESS WHEREOF THE PARTIES HAVE SIGNED

Migdal Insurance Company Ltd Hamagen Insurance Company Ltd (-) Compugen Ltd

#### 2004 Addendum to the Lease Agreement

Made signed in Tel Aviv on \_

#### Between:

Migdal Insurance Company Ltd. Hamagen Insurance Company Ltd. From 26 Saadia Gaon St., Tel Aviv  $(hereinafter-the\ ``Lessor")$ 

#### On the first part

And between: Compugen Ltd. From 72 Pinhas Rosen St., Tel Aviv  $(herein after-the\ ``Lessee")$ 

On the second part Whereas O On April 21, 1998, a lease agreement was signed between the previous owners of the land (hereinafter – "Previous Owners") and the Lessee, as amended on April 4, 2000, December 16, 2002 and March 5, 2003 (and endorsed by the Previous Owners to the Lessor on January 10, 2000) (hereinafter – "Basic Lease Agreement"); and

Whereas The parties wish to introduce changes to the Basic Lease Agreement, all as set forth hereunder in this Addendum;

#### Therefore it has been declared, stipulated and agreed between the parties as follows:

The preamble of this Addendum constitutes an integral part thereof.

#### Period of the lease

The period of the lease according to the Basic Lease Agreement is extended and shall end on December 31, 2009, instead of the additional lease period set forth in the Basic Lease Agreement (hereinafter - "New Lease Period") and the Lessee shall not be entitled to end the New Lease Period prior to the end of the lease period as set forth above.

#### Increase of the leased area

- As of June 1, 2004, the Lessor shall make available to the Lessee an additional area of approximately 150m2 on the second floor of the building in accordance with the blueprint attached as Appendix A to this Addendum (hereinafter - "Additional Area").
- 3.2. The Additional Area shall be delivered to the Lessee in its condition as is.

- 3.3. The Lessee shall be entitled to perform in the Additional Area modification work in accordance with the conditions set forth in Appendix B of this Addendum.
- 3.4. It is hereby agreed that during the lease period from June 1, 2004 until June 30, 2004, the Lessee shall not be required to pay rent for the Additional Area.
- 3.5. Pursuant to the Additional Area as set forth in this Addendum as of June 1, 2004, the area of the leased property shall be 2473.55m2.
- 3.6. At the time of making the Additional Area available to the Lessee and as condition for delivering the Additional Area to the Lessee, the Lessee shall present to the Lessor an additional bank guarantee in the amount of NIS 28957.50 in accordance with the conditions set forth in the Basic Lease Agreement.
- 3.7. The Additional Area shall constitute an integral part of the leased property subject of the Basic Lease Agreement and the Additional Area shall be deemed an integral part of the leased property for all intents and purposes.

#### Rent

- 4.1. As of June 1, 2004, monthly rent for the leased property shall be NIS 55 per m2 of the area of the Leased Property while the aforementioned amount is linked to the index as set forth hereunder and with the addition of VAT.
- 4.2. Rent as set forth above shall be linked to the consumer price index while the basic index is the index for the month of February 2004, and this instead of the index set forth in the Basic Lease Agreement.
- 5. Section 7.3 as set forth in the addendum to the lease agreement dated March 5, 2004, is hereby cancelled.
- 6. This Addendum constitutes an integral part of the Basic Lease Agreement. Subject to the provisions of this Addendum the rest of the conditions of the Basic Lease Agreement shall not be affected. In any event of discrepancy between the provisions of this Addendum and the provisions of the Basic Lease Agreement, the provisions of this Addendum shall prevail.

In witness the parties have signed	
The Lessor	The Lessee

#### Modification Work Appendix

- The Lessee shall be entitled to perform in the Addition Area, as of the delivery date, work and changes for modifying the Additional Area to its needs (hereinafter "Modification Work"), subject to fulfilling all the following conditions as set forth hereunder.
- 2. The Lessee will submit for approval of the Lessor the plans and technical specifications of the Modification Work including internal division of the Additional Area and specifications of the basic work it wishes to perform in the Additional Area in order to modify the Additional Area to its needs including bills of quantities (hereinafter "Lessee's Plans"). The Lessor shall not refuse granting its approval to the Lessee's Plans without reasonable cause. The Lessor shall not approve changes that may damage construction and/or columns and/or systems of the Additional Area and/or openings of the Additional Area and/or changes requiring a building permit. In the event the Lessor and/or the advisors of the Lessor require adjustments or changes for purpose of fitting them to the building and its systems, the Lessee shall act to revise the plans within 14 days of receiving the revision request. The Lessor shall provide its comments to the Lessee's Plans no later than the end of 4 business days from the date these were presented to it by the Lessee.
- 3. In the event the Lessor approves the Lessee's Plans, the approval of the Lessor shall not impose on it any liability in connection with the plans and the Lessee shall be liable for the design and performance of the modifications according to the Lessee's Plans.
- 4. For purpose of performing the Modification Work the Lessee undertakes to use only certified and skilled professionals, standard equipment and materials and shall be liable according to applicable law for the equipment and materials brought by it or by any person on its behalf for purpose of performing the Modification Work that it performs during the entire time they are located in the Additional Area and it undertakes to remove them upon conclusion of performing the Modification Work.
- 5. The Lessee undertakes that Modification Work shall be carried out only after obtaining all permits required according to applicable law, if such permits are required, and it undertakes to comply with all requirements according to applicable law necessary for performance of the Modification Work including compliance with safety instructions required according to applicable law for performance of the Modification Work.
- 6. The Lessee shall be entitled to commence performance of the Modification Work only after presenting to the Lessor a signed confirmation regarding preparation of the insurances it is required to make as set forth in Appendix of the Agreement.
- 7. The Lessee shall be liable according to applicable law, towards the Lessor and towards any third party for performing the Modification Work and it shall be liable according to applicable law, including and towards any authority for damages caused to the Lessor and/or third parties and/or the building and/or the Additional Area and/or other lessees as result of the Modification Work or in connection thereto.

- 8. The Lessee hereby undertakes to perform the Modification Work in a manner that shall not cause unreasonable disturbance and/or nuisance to the activity in other leased properties and/or the operation of other leased properties. The Lessee must coordinate performance of the Modification Work with the management company.
- 9. Any change and/or addition permanently connected to the structure of the Additional Area performed by the Lessee according to the plans, shall remain at the end of the lease period in the leased property and shall transfer to possession of the Lessor, without additional consideration, unless the Lessor requests return of the original state of affairs.
- 10. The Lessor shall be entitled to appoint, at its own expense, a representative on its behalf in order to make sure no damage is caused to the Additional Area and/or to supervise performance of the Modification Work including the basic work, however appointment of such representative on its behalf as set forth above shall not release the Lessee from any undertaking or liability imposed on it according to applicable law and according to this Agreement for performing the Modification Work.
- 11. After performance of the work and no later than 45 days after performance of the work, the Lessee shall present to the Lessor, as made plans of all the modifications made by it in the Additional Area.
- 12. Delay in completion of the Modification Work shall not cause deferment of any of the Lessee's obligations according to the Agreement.
- 13. It is hereby clarified that the Lessee shall not make any modification to the external appearance of the Additional Area without receiving the advance written consent of the Lessor thereto. The Lessor shall be entitled to remove or destroy, according to its discretion, any modification or addition to the external appearance of the Additional Area, if made without its advance written consent and this at the expense and liability of the Lessee.
- 14. The Lessor shall bear the costs of the work specified hereunder, provided they does not exceed and amount in NIS equal to NIS 130,000 + VAT (hereinafter "Participation Amount"), as follows:
  - 14.1. Acoustic ceilings, plaster walls, electrical piping and plumbing, flooring including carpets, light fixtures, painting, air conditioning (hereinafter "Basic Work") all in the Additional Area.
  - 14.2. It is hereby agreed that in the framework of the Modification Work that the Lessee shall perform in the Additional Area for its needs in accordance with the provisions of this Appendix, the contractor on behalf of the Lessee shall perform the Basic Work, while the Basic Work shall remain in the Additional Area and the work contractor shall be liable both towards the Lessee and towards the Lessor for performing the Basic Work.
  - 14.3. The Lessor shall pay the cost of the Basic Work provided it does not exceed the Participation Amount as set forth above directly to the contractor that shall perform the Basic Work, in accordance with arrangements made between the Lessor and the contractor and after the supervisor on behalf of the Lessor has approved performance of the Basic Work.

August 31, 2005 To Compugen Ltd. Asaf Elis

# Re: Addendum to the lease agreement dated December 16, 2002

Pursuant to agreements between us I hereby confirm that as of September 1, 2005, warehouse no. 27 is added to the area of the existing warehouse on parking level -2.

The aforementioned in lieu of the area deducted from the existing warehouse in favor of constructing the elevator shaft of the new building.

Total area of the warehouses according to the lease agreement remains an area of 146m2.

Sincerely,

/s/ Tzahi Hertz

April 23, 2006
To
Compugen Ltd.
Eric Aris

# Re: Addendum to the lease agreement dated December 16, 2002 and our letter dated August 31, 2005

Pursuant to our telephone conversation on April 23, 2006, and the contract in subject I hereby confirm a rent discount at a rate of 33% of the rent for the warehouse in subject.

The aforementioned in lieu of your request to reduce the area of the warehouse at a corresponding rate.

Municipal tax shall apply for the actual area of the warehouse.

Sincerely,

/s/ Tzahi Hertz

# Addendum to the Lease Agreement Made signed in Petah Tikva on of August 2009

### Between: Migdal Insurance Company Ltd. Company no. 52-000489-6

From 4 Efal Street Petah Tikva (hereinafter – the "**Lessor**")

### On the first part

And between: Compugen Ltd.
Company no. 51-177963-9
From 72 Pinhas Rosen St., Tel Aviv
(hereinafter – the "Lessor")

### On the second part

Whereas

Between the Lessee and the previous owners of the property known as parcel 929 in block 6623 located at 72 Pinhas Rosen Street in Tel Aviv, a lease agreement was signed on April 21, 1998 (endorsed by the previous owners to the Lessor on January 10, 2000) including addendums to the agreement dated April 4, 2000, and dated December 16, 2002, and dated March 5, 2003, and dated May 2004, and another addendum dated May 2004, as well as letters dated August 31, 2005 and April 23, 2006 for lease of the Leased Property as defined in the lease agreement (hereinafter collectively: "Basic Lease Agreement"). And

Whereas

The parties wish to introduce changes to the Basic Lease Agreement, all as set forth hereunder in this Addendum.

### Therefore it has been agreed between the parties as follows:

- The preamble of this Addendum constitutes an integral part thereof.
- 2. It is clarified that as the Lessee returned an area of 690.32m2 on the 2nd floor on July 15, 2009, and the Lessor shall return an area of 354.45m2 on December 31, 2009, so that the area of the leased property as of January 1, 2010, shall be 1428.78m2 (hereinafter: "Leased Property").
- 3. The lease period is hereby extended for an additional period of 36 months, as of January 1, 2010 until December 31, 2012 (hereinafter: "Extended Lease Period").
- 4. Rent for the Extended Lease Period as of January 1, 2010, shall be in the amount of NIS 55 per m2 of the Leased Property, while such amount is linked to the consumer price index plus VAT.
- The base index is the index for the month of June 2009, which was known on July 15, 2009.

- 6. The Lessor hereby undertakes to bear the cost of replacing the fire extinguishing pump in the building, in accordance with the requirements of the fire department for purpose of obtaining the Lessee's business license.
- 7. This Addendum constitutes an integral part of the Basic Lease Agreement. Any term defined in the Basic Lease Agreement shall have the same meaning in this Addendum, unless the context requires otherwise. In any event of discrepancy between the provisions of this Addendum and the provisions of the Basic Lease Agreement the provisions of this Addendum shall prevail.
- 8. Subject to the provisions of this Addendum, all other conditions of the Basic Lease Agreement remain unaffected.

In witness the parties have signed [signature + stamp]
Migdal Insurance Company Ltd.
The Lessor

[signature + stamp] Compugen Ltd. The Lessee

### AN ADDENDUM TO A LEASE CONTRACT

Which was made and signed in Petach Tikva on the 30th day of April 2012

#### BETWEEN:

### MIGDAL INSURANCE COMPANY LTD Company Registration No. 520004896

of 4 Efal Street, Petach Tikva (hereinafter: "the Company")

of the first part

AND:

MIGDAL HAPRAKLITIM LTD

Company Registration No. 513686634 (hereinafter: "the Lessee")

of the second part

WHEREAS The Company owns the leasehold title rights in the land known as Parcel Nos. 824, 826, 831 and 832 in Block 6111 and situated at Berkovitz Street in

Tel Aviv (hereinafter - "the Plot")

AND WHEREAS An Unprotected Lease Contract was signed between the Parties on May 15, 2005, and an addendum to the agreement in July 2005 (hereinafter - "the

Basic Lease Contract"), for the leasing of the leased property, on the 7th Floor, as such is defined in the Lease Contract;

AND WHEREAS The Parties wish to introduce changes into the Lease Contract, all as detailed hereunder in this Addendum.

# IT HAS THEREFORE BEEN AGREED BETWEEN THE PARTIES AS FOLLOWS:

- 1. The preamble to this Addendum constitutes an integral part of it.
- 2. Notwithstanding what is stated in the Lease Contract and in its appendices, Section 9 as to rent shall be recorded in the following form:
  - \* Commencing from January 1, 2012, the Lessee shall pay the Lessor an addition to the basic rent of NIS 9 per square meter, with such amount being linked to the January 2012 index, with the addition of VAT.
  - \* Commencing from January 1, 2015 and until the date of termination of the first lease period, the Lessee shall pay the Lessor an addition to the basic rent of NIS 11 per square meter, with such amount being linked to the January 2012 index, with the addition of VAT.
  - \* Commencing from January 1, 2018 and until the date of termination of the second lease period, the Lessee shall pay the Lessor an addition to the basic rent of NIS 13 per square meter, with such amount being linked to the January 2012 index, with the addition of VAT.

- 3. Notwithstanding what is stared in the Lease Contract and in its appendices, commencing from January 1, 2012, the Lessee will not be charged with payment of additional rent as a percentage of turnover, as defined in the Lease Contract and its appendices.
- 4. This Addendum constitutes an integral part of the Lease Contract. Any term that is defined in the Lease Contract shall have the same meaning in this Addendum unless the context thereof otherwise requires. Wherever herein, a conflict appears between the provisions of the Lease Contract and the provisions of this Addendum, the provisions of this Addendum shall prevail.
- 5. Subject to what is stated in this Addendum, no change shall apply in respect of the remaining terms and conditions of Lease Contract.

# AND IN WITNESS WHEREOF THE PARTIES HAVE SIGNED

(-)	(-)
Migdal Insurance Company Ltd The Lessor	Migdal Hapraklitim Ltd The Lessee

### AN ADDENDUM TO A LEASE CONTRACT Which was made and signed in Petach Tikva on the 14th day of May 2012

### BETWEEN:

### MIGDAL INSURANCE COMPANY LTD

of 4 Efal Street, Petach Tikva (hereinafter: "the Company")

#### of the first part

### AND:

## COMPUGEN LTD

Company Registration No. 51-177963-9 of 72 Pinchas Rosen Street, Tel Aviv (hereinafter: "the Lessee")

### of the second part

WHEREAS On April 21, 1998 a lease contract was signed between the previous owners of the property known as Parcel No. 929 in Block 6623 and situated at 72 Pinchas Rosen Street in Tel

Aviv (and which was assigned to the Lessor by the previous owners on February 10, 2000), and includes Addenda to the Lease Contract of April 4, 2000, of December 16, 2002, March 5, 2003, two Addenda of May 2004, a further Addendum of August 2009, and also letters dated August 31, 2005, April 23, 2006, and May 12, 2009, for the leasing of the leased property as defined in the Lease Contract (hereinafter together: "the Basic Lease Contract")

AND WHEREAS The Parties wish to introduce changes into the Basic Lease Contract, all as detailed hereunder in this Addendum.

### IT HAS THEREFORE BEEN AGREED BETWEEN THE PARTIES AS FOLLOWS:

- 1. The preamble to this Addendum constitutes an integral part of it.
- The lease and management period is hereby extended for a further period of 36 months commencing from January 1, 2013 and until December 31, 2015 (hereinafter: "the further extended lease 2.
- The rent during the extended lease period commencing from January 1, 2013 shall be NIS 60 per meter of the area of the leased property, with the said amount being linked to the Consumer Prices 3.

- 4. The base index is that of November 2012, as shall be known on December 15, 2012.
- 5. The Lessor shall allocate to the Lessee a sum of NIS 120 thousand + VAT for renovation works to be carried out by the Lessee in the Leased Property at his expense and responsibility after it has forwarded architect's plans to the Lessor for the work and has received the Lessor's approval thereof.
- 6. This Addendum constitutes an integral part of the Basic Lease Contract. Any term that is defined in the Basic Lease Contract shall have the same meaning in this Addendum unless the context thereof otherwise requires. Wherever herein, a conflict appears between the provisions of the Basic Lease Contract and the provisions of this Addendum, the provisions of this Addendum shall prevail.
- 7. Subject to what is stated in this Addendum, no change shall apply in respect of the remaining terms and conditions of Basic Lease Contract.

### AND IN WITNESS WHEREOF THE PARTIES HAVE SIGNED

(-)	(-)
Migdal Insurance Company Ltd The Lessor	Compugen Ltd The Lessee

Exhibit 4.4

### SUBLEASE AGREEMENT

This Sublease Agreement ("Sublease") is made effective as of the first day of March, 2012, (the "Effective Date") by and between KALOBIOS PHARMACEUTICALS, INC., a Delaware corporation ("Sublandlord agrees to sublease to Subtenant, and Subtenant agrees to sublease from Sublandlord, those certain premises situated in the City and County of San Francisco, State of California, consisting of approximately 4,410 square feet of space on the first floor in that certain building located at 260 East Grand Avenue, as more particularly set forth on Exhibit "A" hereto (the "Subleased Premises").

### ARTICLE 1

### MASTER LEASE AND OTHER AGREEMENTS

1.1 Subordinate to Master Lease. Except as specifically set forth herein, this Sublease is subject and subordinate to all of the terms and conditions of that certain Lease dated as of January 19, 2011 (the "Master Lease") between Britannia Pointe Grand Limited Partnership, a Delaware corporation ("Master Landlord") and Sublandlord as "Tenant". Subtenant hereby assumes and agrees to perform the obligations of Tenant under the Master Lease to the extent incorporated herein. Unless otherwise defined, all capitalized terms used herein shall have the same meanings as given them in the Master Lease. A copy of the Master Lease is attached hereto as Exhibit "B" and incorporated herein by this reference. Subtenant shall not commit or permit to be committed any act or omission which would violate any term or condition of the Master Lease. Subtenant shall neither do nor permit anything to be done which would cause the Master Lease to be terminated or forfeited by reason of any right of termination or forfeiture reserved or vested in Master Landlord under the Master Lease, [and Subtenant shall indemnify and hold Sublandlord harmless from and against all claims, liabilities, judgments, costs, demands, penalties, expenses, and damages of any kind whatsoever, including, without limitation, attorneys' fees, consultants' fees and costs and court costs, ("Claims") by reason of any failure on the part of Subtenant to perform any of the obligations of Lessee under the Master Lease which Subtenant has become obligated hereunder to perform, and such indemnity and hold harmless shall survive the expiration or sooner termination of this Sublease, except to the extent any such Claims directly or indirectly arise out of or are attributable to the the gross negligence or willful misconduct of Sublandlord or Master Landlord. In the event of the termination of the Master Lease for any reason, then this Sublease shall terminate automatically upon such termination without any liability owed to Subtenant by Master Landlord, or by Sublandlord

- Applicable Provisions. All of the terms and conditions contained in the Master Lease as they may apply to the Subleased Premises are incorporated herein and shall be terms and conditions of this Sublease, except those directly contradicted by the terms and conditions contained in this document, and specifically except for the following Paragraphs of the Master Lease which are not incorporated or are incorporated as modified herein: the Basic Lease Information and Definitions that have different terms or definitions from those set forth in this Sublease and Sections 1.1.1, 1.1.4, 1.2, 1.3, 2, 3, 4, 6.1, 7.1 as to Building Systems and routine maintenance to the load bearing and exterior walls (which shall continue to be maintained by Sublandlord), 7.2, 15.4, 16, 21, 23, 28, 29.18, 29.18, 29.21, 29.24, 29.27, Exhibits A and C. Each reference therein to "Landlord", "Tenant" and "Lease" to be deemed to refer to Sublandlord, Subtenant, and Sublease, respectively, as appropriate. However, the following provisions that are incorporated herein, the reference to Landlord shall mean Master Landlord only or both Master Landlord and Sublandlord if stated as "(both)": 5.3.1.1 (both), 5.3.1.2 (both), 5.3.1.3 (both), 5.3.1.3 (both), 5.3.1.3 (both), 5.3.1.4 (both), 5.3.1.5 (both), 27 (both), 29.13 (first sentence), 29.29, Exhibits D and E. All of the incorporated terms of the Master Lease as referenced and qualified above along with all of the following terms and conditions set forth in this document shall constitute the complete terms and conditions of this Sublease.
- 1.3 Obligations of Sublandlord. Notwithstanding anything herein contained, the only services or rights to which Subtenant is entitled hereunder are those to which Sublandlord is entitled under the Master Lease or which Sublandlord agrees to provide pursuant to the express terms of this Sublease. The parties acknowledge that Subtenant has no privity of contract with Master Landlord and therefore Sublandlord shall use its reasonable good faith efforts to obtain the performance by Master Landlord of its obligations under the Master Lease (including, without limitation all repair and maintenance obligations pursuant to Section 7.4 thereof). Subtenant shall reimburse Sublandlord for all reasonable costs incurred by Sublandlord in such efforts. Sublandlord shall have no liability to Subtenant or any other person for damage of any nature whatsoever as a result of the failure of Master Landlord to perform said obligations except where such failure is the result of Sublandlord's breach of the Master Lease. With respect to any obligation of Subtenant to be performed under this Sublease, when the Master Lease grants Sublandlord a specific number of days to perform its obligations thereunder, Subtenant shall have two (2) fewer days to perform. With respect to approval required to be obtained by "Landlord" under the Master Lease, such consent must be obtained from Master Landlord and Sublandlord and the approval of Sublandlord will be deemed withheld if Master Landlord's consent is not obtained. Sublandlord will duly notice Master Landlord of requests for consent by Subtenant, but retains the right to make its own independent determination of consent pursuant to the terms of this Sublease.

#### **TERM**

2.1 Term. The term of this Sublease shall commence on the date on which the Sublandlord obtains the consent of Master Landlord set forth in Article 10 below and delivers exclusive possession of the Subleased Premises to Subtenant. This shall be referred to as the "Commencement Date." The term of this Sublease shall end on June 30, 2014, unless sooner terminated pursuant to any provision of the Master Lease applicable to the Subleased Premises (the "Expiration Date"). Sublandlord shall have no obligation to Subtenant to exercise any of its options to extend under the Master Lease. In the event the Commencement Date has not occurred on or before March 1, 2012, Subtenant shall have the right to terminate this Sublease without penalty by delivery of written notice to Sublandlord, and Sublandlord will promptly return all monies paid to Sublandlord by Subtenant on account of this Sublease.

### **RENT**

3.1 Rent. Subtenant shall pay to Sublandlord each month during the term of this Sublease, rent, in advance, on execution hereof for the first month and on or before the first of each month thereafter ("Base Rent"). Rent for partial months at the commencement or termination of this Sublease shall be prorated. Rent shall be paid to the Sublandlord at its business address noted herein, or at any other place Sublandlord may from time to time designate by written notice mailed or delivered to Subtenant. Base Rent schedule is as follows:

Months	Base Rent per month	Total
Effective date $-6/30/2012$	\$19,845.00	\$79,380.00
7/1/2012-6/30/2013	\$19,845.00	\$238,140.00
7/1/2013-6/30/2014	\$19,845.00	\$238,140.00

All measurements noted in this Section are included in the Master Lease. Subtenant acknowledges all square footage measurements noted and relied on in this Sublease and the Master Lease are estimates, and no adjustments shall be made based upon any actual measurements which may be made.

3.2 Sublandlord Services. The parties agree that the monthly Base Rent is also inclusive of all services provided by Sublandlord as set forth in Section 7.5.

### ARTICLE 4

### SECURITY DEPOSIT

4.1 Security Deposit. Upon execution hereof, Subtenant shall deposit with Sublandlord the sum of thirty-nine thousand six-hundred ninety and 00/100 Dollars (\$39,690.00) as and for a Security Deposit to secure Subtenant's full and timely performance of all of its obligations hereunder, representing first two months base rent. If Subtenant fails to pay Rent or any other sums as and when due hereunder, or otherwise defaults and/or fails to perform with respect to any provision of this Sublease, Sublandlord may (but shall not be obligated to) use, apply, or retain all or any portion of the Security Deposit for payment of any sum for which Subtenant is obligated or which will compensate Sublandlord for any foreseeable or unforeseeable loss or damage which Sublandlord may suffer thereby including, without limitation, any damage that will result in the future through the Sublease Term, to repair damage to the Subleased Premises, to clean the Subleased Premises at the end of the Sublease Term or for any loss or damage caused by the act or omission of Subtenant or Subtenant's officers, agents, employees, independent contractors or invitees. Subtenant waives the provisions of California Civil Code Section 1950.7 and all other provisions of law now in force or that become in force after the date of execution of this Sublease that provide that Sublandlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Subtenant or to clean the Subleased Premises. Any such use, application, or retention shall not constitute a waiver by Sublandlord of its right to enforce its other remedies hereunder, at law, or in equity. If any portion of the Security Deposit is so used, applied, or retained, Subtenant shall, within ten (10) days after delivery of written demand from Sublandlord, restore the Security Deposit to its original amount. Subtenant's failure to do so shall constitute a material breach of this Sublease, and in such event Sublandlord may e

### CONDITION OF SUBLEASED PREMISES

5.1 Condition of the Subleased Premises. Subtenant acknowledges that as of the Commencement Date, Subtenant shall have inspected the Subleased Premises, and every part thereof, and by taking possession shall have acknowledged that the Subleased Premises is in good condition and without need of repair, and Subtenant accepts the Subleased Premises "as is", Subtenant having made all investigations and tests it has deemed necessary or desirable in order to establish to its own complete satisfaction the condition of the Subleased Premises. Subtenant accepts the Subleased Premises in their condition existing as of the Commencement Date, subject to all applicable zoning, municipal, county and state laws, ordinances, and regulations governing and regulating the use of the Subleased Premises and any covenants or restrictions of record. Notwithstanding the foregoing, Sublandlord will ensure that all systems and equipment (including the Building Systems) serving the Subleased Premises and the Building are in good working order as of the Commencement Date and that the Building is in compliance with applicable laws, codes and ordinances in effect as of such date and that Sublandlord's current use is in compliance with applicable zoning ordinances. Except as set forth above, Subtenant acknowledges that neither Sublandlord nor Master Landlord have made any representations or warranties as to the condition of the Subleased Premises or its present or future suitability for Subtenant's purposes. Sublandlord hereby grants to Subtenant, for the benefit of Subtenant and its employees, suppliers, shippers, contractors, customers and invitees, during the term of this Sublease, the non-exclusive right to use, in common with others entitled to such use, the Common Areas as they exist from time to time, subject to any rights, powers, and privileges reserved by Sublandlord under the terms hereof.

5.2 Surrender. Subtenant shall keep the Subleased Premises, and every part thereof in good order and repair. In addition to Subtenant's requirements under the Master Lease, Subtenant shall surrender the Subleased Premises in the same condition as received, ordinary wear and tear excepted, provided Subtenant performs all necessary maintenance, repair and cleaning to maintain the Subleased Premises in the condition it was delivered at the Commencement Date.

### ARTICLE 6

### INSURANCE

- 6.1 <u>Subtenant's Insurance</u> With respect to the Tenant's insurance under the Master Lease, the same is to be provided by Subtenant as described in the Master Lease, and such policies of insurance shall include as additional insureds Master Landlord, Sublandlord and any lender as required by Master Landlord.
  - 6.2 Sublandlord's Insurance. Sublandlord will carry, or for purposes of this Sublease will be treated as if it carried, rental interruption insurance.
- 6.3 <u>Waiver of Subrogation</u>. With respect to the waiver of subrogation contained in Section 10.5 of the Master Lease, such waiver shall be deemed to be modified to constitute an agreement by and among Master Landlord, Sublandlord and Subtenant (and Master Landlord's consent to this Sublease shall be deemed to constitute its approval of this modification).

#### ARTICLE 7

### USE OF SUBLEASED PREMISES; PARKING; IMPROVEMENTS

- 7.1 <u>Use of Subleased Premises</u>. Subtenant shall use the Subleased Premises only for those purposes permitted in the Master Lease.
- 7.2 Alterations; Improvements. Subtenant shall not make any alterations, improvements, or modifications to the Subleased Premises without the express prior written consent of Sublandlord and of Master Landlord, which consent by Sublandlord shall not be unreasonably withheld. Subtenant shall reimburse Master Landlord and Sublandlord for all costs which Master Landlord and Sublandlord may incur in connection with granting approval to Subtenant for any alterations and additions, including, without limitation, Master Landlord's and Sublandlord's reasonable attorneys' fees and costs. Subtenant shall provide Master Landlord and Sublandlord with a set of "as-built" drawings for any such work, together with copies of all permits obtained by Subtenant in connection with performing any such work, within fifteen (15) days after completing such work. Sublandlord may impose as a condition of its consent to such alterations, improvements, or modifications, such requirements as Sublandlord may deem reasonable and desirable, including, but not limited to the requirement that Subtenant utilize for such purposes only contractor(s), materials, mechanics and materialmen approved by Sublandlord and that Subtenant, and/or Subtenant's contractor(s) post a payment and/or completion bond to guarantee the performance of its construction obligations hereunder. On termination of this Sublease, Subtenant shall remove any or all of such improvements and restore the Subleased Premises (or any part thereof) to the same condition as of the Commencement Date of this Sublease, reasonable wear and tear excepted or as otherwise instructed in writing by either Sublandlord or Master Landlord. Should Subtenant fail to remove such improvements and restore the Subleased Premises on termination of this Sublease unless instructed otherwise in writing as set forth above, Sublandlord shall have the right to do so, and charge Subtenant therefor, plus a service charge of ten percent (10%) of the costs incurred by Sublandlord.

- 7.3 Parking. So long as Subtenant is not in default and subject to the rules and regulations imposed from time to time by Master Landlord or Sublandlord, Subtenant shall have the right to the non-exclusive use of ten (10) parking spaces in the common parking areas at no additional cost to Subtenant.
- 7.4 Covenant of Quiet Enjoyment. Sublandlord represents that (i) the Master Lease is in full force and effect and (ii) there are no defaults, as defined in the Master Lease, on Sublandlord's part under the Master Lease as of the Commencement Date and (iii) that Sublandlord has the full right, power and authority to enter into this Sublease (subject to the consent of Master Landlord). Subject to this Sublease terminating in the event the Master Lease is terminated, if Subtenant performs all the provisions in this Sublease to be performed by Subtenant prior to the expiration of all applicable notice and cure periods, Subtenant will have and enjoy throughout the term of this Sublease the quiet and undisturbed possession of the Subleased Premises.
- 7.5 Services to be provided by Sublandlord. Sublandlord shall provide, at no additional cost to Subtenant, the following services: (i) natural gas, electricity and water associated with chemistry laboratory use; (ii) garbage and janitorial services (non-biohazard) consistent with the service provided at the time of this Sublease; (iii) general building system maintenance (lighting, HVAC, plumbing and electrical), performed by Sublandlord's facility personnel within the Sublease Premises; (iv) use of the existing RO/DI water system (at standard lab DI water quality); (v) storage of Hazardous Materials (as defined in the Master Lease) used or generated by Subtenant in the Subleased Premises ("Subtenant Haz Mat"); provided, however, that Subtenant shall contract directly with (and be solely responsible for payment to) Sublandlord's provider for pick-up and disposal of such Subtenant Haz Mat; and further provided that Sublandlord shall not be deemed an owner, operator, generator or transporter of such Subtenant Haz Mat and Subtenant shall indemnify Sublandlord for any claims, liabilities, judgments, costs, demands, penalties, expenses, and damages of any kind whatsoever, including, without limitation, attorneys' fees and costs and court costs, relating to any claim that Sublandlord is the owner, operator, or transporter of such Subtenant Haz Mat (such indemnity shall survive the expiration or earlier termination of this Sublease); (vi) shipping, receiving, and handling and incoming materials management; (vii) use of the existing security card system. Any other services provided to Subtenant not expressly provided above, shall be at the sole cost and expense of Subtenant.

### ASSIGNMENT, SUBLETTING & ENCUMBRANCE

- 8.1 Consent Required. Subtenant shall not assign this Sublease or any interest therein nor shall Subtenant sublet, license, encumber or permit the Subleased Premises or any part thereof to be used or occupied by others, without Sublandlord's and Master Landlord's prior written consent. Sublandlord's consent shall not be unreasonably withheld provided, however, Sublandlord's withholding of consent shall in all events be deemed reasonable if for any reason Master Landlord's consent is not obtained. The consent by Sublandlord and Master Landlord to any assignment or subletting shall not waive the need for Subtenant (and Subtenant's assignee or subtenant) to obtain the consent of Sublandlord and Master Landlord to any different or further assignment or subletting. All conditions and standards set forth in the Master Lease regarding assignments and subletting shall apply, and to the extent there are any Bonus Rents, (Rent paid by such Assignee or SubSubtenant in excess of Rent paid by Subtenant hereunder) subtenant shall provide the Master Landlord with the amounts it is entitled to under the Master Lease.
- 8.2 Form of Document. Every assignment, agreement, or sublease shall (i) recite that it is and shall be subject and subordinate to the provisions of this Sublease, that the assignee or subtenant assumes Subtenant's obligation hereunder, that the termination of this Sublease shall at Sublandlord's sole election, constitute a termination of every such assignment or sublease, and (ii) contain such other terms and conditions customary for a sub-sublease of this type as shall be reasonably requested or provided by Sublandlord's attorneys.
- 8.3 No Release of Subtenant. Regardless of Sublandlord's consent, no subletting or assignment shall release Subtenant of Subtenant or Subtenant's obligation or alter the primary liability of Subtenant to pay the Rent and to perform all other obligations to be performed by Subtenant hereunder except to the extent that Sublandlord and Master Landlord consent to such release in writing. The acceptance of Rent by Sublandlord from any other person shall not be deemed to be a waiver by Sublandlord of any provision hereof. In the event of default by any assignee, subtenant or any other successor of Subtenant, in the performance of any of the terms hereof, Sublandlord may proceed directly against Subtenant without the necessity of exhausting remedies against such assignee, subtenant or successor.
- 8.4 Default. An involuntary assignment shall constitute a default and Sublandlord shall have the right to elect to terminate this Sublease, in which case this Sublease shall not be treated as an asset of Subtenant.

#### ARTICLE 9

#### DEFAULT

9.1 <u>Default Described.</u> The occurrence of any of the following shall constitute a material breach of this Sublease and a default by Subtenant: (i) failure to pay Rent or any other amount within three (3) days after notice the same is past due; (ii) all those items of default set forth in the Master Lease where the obligation is incorporated in this Sublease which remain uncured after the cure period provided in the Master Lease; or (iii) Subtenant's failure to perform timely and remain uncured after fifteen (15) days written notice of the default, any other material provision of this Sublease.

- 9.2 <u>Sublandlord's Remedies</u>. Sublandlord shall have the remedies set forth in the Master Lease as if Sublandlord is Master Landlord in the event of a default by Subtenant of any obligation of Sublandlord assumed by Subtenant under this Sublease that constitutes a default under Section 19 of the Master Lease. These remedies are not exclusive; they are cumulative and in addition to any remedies now or later allowed by law.
- 9.3 <u>Subtenant's Right to Possession Not Terminated.</u> Sublandlord has the remedy described in California Civil Code Section 1951.4 (lessor may continue lease in effect after lessee's breach and abandonment and recover rent as it becomes due, if lessee has right to sublet or assign, subject only to reasonable limitations). Sublandlord may continue this Sublease in full force and effect, and Sublandlord shall have the right to collect rent and other sums when due. During the period Subtenant is in default, Sublandlord may enter the Subleased Premises and relet them, or any part of them, to third parties for Subtenant's account and alter or install locks and other security devices at the Subleased Premises. Subtenant shall be liable immediately to Sublandlord for all costs Sublandlord incurs in reletting the Subleased Premises, including, without limitation, attorneys' fees, brokers' commissions, expenses of remodeling the Subleased Premises required by the reletting, and like costs. Reletting may be for a period equal to, shorter or longer than the remaining term of this Sublease and rent received by Sublandlord shall be applied to (i) first, any indebtedness from Subtenant to Sublandlord other than rent due from Subtenant; (ii) second, all costs incurred by Sublandlord in reletting, including, without limitation, brokers' fees or commissions and attorneys fees, the cost of removing and storing the property of Subtenant or any other occupant, and the costs of repairing, altering, maintaining, remodeling or otherwise putting the Subleased Premises into condition acceptable to a new Subtenant or Subtenants; (iii) third, rent due and unpaid under this Sublease. After deducting the payments referred to in this subsection 9.3, any sum remaining from the rent Sublandlord receives from reletting shall be held by Sublandlord and applied in payment of future rent and other amounts as rent and such amounts become due under this Sublease. In no event shall Subtenant be entitled to any excess rent received by Sublandlord.
- 9.4 All Sums Due and Payable as Rent. Subtenant shall also pay without notice, or where notice is required under this Sublease, immediately upon demand without any abatement, deduction, or setoff, as additional rent all sums, impositions, costs, expenses, and other payments which Subtenant in any of the provisions of this Sublease assumes or agrees to pay, and, in case of any nonpayment thereof, Sublandlord shall have all the rights and remedies provided for in this Sublease or by law in the case of nonpayment of rent.
- 9.5 No Waiver. Sublandlord may accept Subtenant's payments without waiving any rights under the Sublease, including rights under a previously served notice of default. No payment by Subtenant or receipt by Sublandlord of a lesser amount than any installment of rent due or other sums shall be deemed as other than a payment on account of the amount due, nor shall any endorsement or statement on any check or accompanying any check or payment be deemed an accord and satisfaction; and Sublandlord may accept such check or payment without prejudice of Sublandlord's right to recover the balance of such Rent or other sum or pursue any other remedy provided in this Sublease, at law or in equity. If Sublandlord accepts payments after serving a notice of default, Sublandlord may nevertheless commence and pursue an action to enforce rights and remedies under the previously served notice of default without giving Subtenant any further notice or demand. Furthermore, Sublandlord's acceptance of Rent from Subtenant when the Subtenant is holding over without express written consent does not convert Subtenant's tenancy from a tenancy at sufferance to a month-to-month tenancy. No waiver of any provision of this Sublease shall be implied by any failure of Sublandlord to enforce any remedy for the violation of that provision, even if that violation continues or is repeated. Any waiver by Sublandlord or Subtenant of any provision of this Sublease must be in writing. Such waiver shall affect only the provisions, even if the time and in the manner stated in the writing. No delay or omission in the exercise of any right or remedy by Sublandlord or Subtenant shall impair such right or remedy or be construed as a waiver thereof. No act or conduct of Sublandlord, including, without limitation the acceptance of keys to the Subleased Premises shall constitute acceptance or the surrender of the Subleased Premises by Subtenant to approval of any act by Subtenant which requires Sublandlord's consent to or approval of any subsequent act by Subte

- 9.6 Sublandlord Default. For purposes of this Sublease, Sublandlord shall not be deemed in default hereunder unless and until Subtenant shall first deliver to Sublandlord thirty (30) days' prior written notice, and Sublandlord shall fail to cure said default within said thirty (30) day period, or in the event Sublandlord shall reasonably require in excess of thirty (30) days to cure said default, shall fail to commence said cure with said thirty (30) day period, and thereafter diligently prosecute the same to completion. If Sublandlord (a) does not commence performance within such thirty (30) calendar day period, or (b) fails to diligently commence and pursue such performance to completion, and the effect of such failure associated with such non-performance materially interferes with Subtenant's use of the Subleased Premises, Subtenant may perform Sublandlord's obligation, at Sublandlord's expense (if the cost of such performance obligations are included in Base Rent), and Sublandlord shall reimburse Subtenant within thirty (30) days of Subtenant's delivery to Sublandlord of written proof that such performance costs have been paid by Subtenant.
- 9.7 Notice of Event of Default under Master Lease. Sublandlord shall notify Subtenant of any Event of Default under the Master Lease, or of any other event of which Sublandlord has actual knowledge which will impair Subtenant's ability to conduct its normal business at the Subleased Premises, as soon as reasonably practicable following Sublandlord's receipt of notice from Master Landlord of an Event of Default or Sublandlord's actual knowledge of such impairment.
- 9.8 No Default of Master Lease. Sublandlord will not voluntarily do, or fail to do, anything which will constitute a default under the Master Lease or permit the Master Lease to be terminated for any reason. Sublandlord hereby agrees to defend, indemnify and hold harmless Subtenant from and against any and all claims, actions, liabilities, losses, damages, costs and expenses (including, without limitation, reasonable attorneys' fees and disbursements) arising from Sublandlord's breach of any provisions of this Sublease, including, without limitation, the provisions of this Section 9.8. The foregoing indemnity shall survive the expiration or earlier termination of this Sublease.

### CONSENT OF MASTER LANDLORD

10.1 <u>Precondition</u>. The Master Lease requires that Sublandlord obtain the consent of Master Landlord to any subletting by Sublandlord. This Sublease shall not be effective unless and until Master Landlord signs a consent to this subletting satisfactory to Sublandlord. Subtenant will sign such consent if required by Master Landlord as reasonably presented by Master Landlord.

### ARTICLE 11

### HAZARDOUS MATERIALS

#### 11.1 Hazardous Materials.

- 11.1.1 Environmental Questionnaire. Prior to occupying Subleased Premises, Subtenant shall provide to Sublandlord a fully and accurately completed. Pre-leasing Environmental Exposure Questionnaire ("Environmental Questionnaire"; Exhibit E to the Master Lease), which Sublandlord will deliver to Landlord in accordance with the terms and conditions of Section 5.3.1.1 of the Master Lease. Upon Sublandlord's request or in the event of any material change in the use of Hazardous Materials at the Subleased Premises, Subtenant shall deliver to Sublandlord an updated Environmental Questionnaire at least once per year. Subtenant shall comply with all other terms, conditions, obligations, representations and warranties of Subtenant to Landlord and Sublandlord (as applicable) under Section 5.3.1 of the Master Lease, as incorporated by Section 1.2 herein.
- 11.1.2 Subtenant Indemnity. Subtenant shall be solely responsible for and shall defend, indemnify and hold Sublandlord and its partners, officers, directors, employees and agents harmless from and against all Claims arising out of or caused in whole or in part, directly or indirectly, by or in connection with Subtenant's storage, use, disposal or discharge of Hazardous Materials at the Subleased Premises, whether in violation of this section or not, or Subtenant's failure to comply with any applicable laws governing the storage, use disposal or discharge of Hazardous Materials. Subtenant shall further be solely responsible for and shall defend, indemnify and hold Sublandlord harmless from and against any and all Claims arising out of or in connection with the removal, cleanup, detoxification, decontamination and restoration work and materials necessary to return the Subleased Premises to their condition existing prior to Subtenant's storage, use or disposal of the Hazardous Materials on the Subleased Premises. For the purposes of this indemnity provision, any acts or omissions of Subtenant or by employees, agents, assignees, contractors of Subtenant (whether or not they are negligent, intentional or unlawful) shall be strictly attributable to Subtenant. Subtenant's obligations under this section shall survive the termination of this Sublease. Notwithstanding the foregoing, nothing in this Sublease will be construed or is intended to impose any liability, obligation or responsibility on Subtenant for any Hazardous Materials existing in the Subleased Premises prior to the Commencement Date or which was brought onto the Building by Sublandlord, Master Landlord, or any third party.

11.1.3 <u>Sublandlord Indemnity.</u> Sublandlord shall be solely responsible for and shall defend, indemnify and hold Subtenant and its partners, officers, directors, employees and agents harmless from and against all Claims arising out of or caused in whole or in part, directly or indirectly, by or in connection with Sublandlord's storage, use, disposal or discharge of Hazardous Materials at the Premises, whether in violation of this section or not, or Sublandlord's failure to comply with any applicable laws governing the storage, use disposal or discharge of Hazardous Materials. Sublandlord shall further be solely responsible for and shall defend, indemnify and hold Subtenant harmless from and against any and all Claims arising out of or in connection with the removal, cleanup, detoxification, decontamination and restoration work and materials necessitated by Sublandlord's use of Hazardous Materials. For the purposes of this indemnity provision, any acts or omissions of Sublandlord or by employees, agents, assignees, contractors or subcontractors of Sublandlord (whether or not they are negligent, intentional or unlawful) shall be strictly attributable to Sublandlord. Sublandlord's obligations under this section shall survive the termination of this Sublease.

#### ARTICLE 12

### MISCELLANEOUS

- 12.1 Conflict with Master Lease; Interpretation. In the event of any conflict between the provisions of the Master Lease and this Sublease, the Master Lease shall govern and control except to the extent directly contradicted by the terms of this Sublease. No presumption shall apply in the interpretation or construction of this Sublease as a result of Sublandlord having drafted the whole or any part hereof.
  - 12.2 Remedies Cumulative. The rights, privileges, elections, and remedies of Sublandlord in this Sublease, at law, and in equity are cumulative and not alternative.
- 12.3 <u>Waiver of Redemption</u>. Subtenant hereby expressly waives any and all rights of redemption to which it may be entitled by or under any present or future laws in the event Sublandlord shall obtain a judgment for possession of the Subleased Premises.
- 12.4 <u>Damage and Destruction; Condemnation.</u> In the event of any damage, destruction, casualty, condemnation or threat of condemnation affecting the Subleased Premises, Rent payable hereunder shall be abated but only to the extent that Rent is abated under the Master Lease with respect to the Subleased Premises. Subtenant shall have no right to terminate this Sublease in connection with any damage, destruction, casualty, condemnation or threat of condemnation except to the extent the Master Lease is also terminated as to the Premises or any portion thereof.

- 12.5 Holding Over. Subtenant shall have no right to Holdover. If Subtenant does not surrender and vacate the Subleased Premises at the Expiration Date of this Sublease, Subtenant shall be a tenant at sufferance, or at the sole election of Sublandlord, a month to month tenancy, and the parties agree in either case that the reasonable rental value, if at sufferance, or the Rent if a month to month tenancy shall be the monthly rate of one hundred and fifty percent (150%) of the monthly Rent set forth in Article 3, and if the definition of Rent in either case does not include additional rent, then with any additional rent due and payable during such holdover period of time. In connection with this Paragraph 12.5, Sublandlord and Subtenant agree that the reasonable rental value of the Subleased Premises following the Expiration Date of the Sublease shall be the amounts set forth above per month. Sublandlord and Subtenant acknowledge and agree that, under the circumstances existing as of the Effective Date, it is impracticable and/or extremely difficult to ascertain the reasonable rental value of the Subleased Premises on the Expiration Date and that the reasonable rental value established herein is a reasonable estimate of the damage that Sublandlord would suffer as the result of the failure of Subtenant to timely surrender possession of the Subleased Premises. The parties acknowledge that the liquidated damages established herein is not intended as a forfeiture or penalty within the meaning of California Civil Code sections 3275 or 3369, but is intended to constitute liquidated damages to Sublandlord pursuant to California Civil Code sections 1671, 1676, and 1677. Notwithstanding the foregoing, and in addition to all other rights and remedies on the part of Sublandlord if Subtenant fails to surrender the Subleased Premises upon the termination or expiration of this Sublease, in addition to any other liabilities to Sublandlord accruing therefrom, Subtenant shall indemnify, defend and hold Sublandlord harmless from a
- 12.6 Furniture. Subtenant may use certain furniture and fixtures located in the Subleased Premises as set forth on Exhibit C ("Furniture"). Subtenant accepts the Furniture in its "as is" condition and Sublandlord makes no warranty as to the condition of the Furniture or its present or future suitability for Subtenant's purposes. Upon termination of this Sublease, Subtenant shall return the Furniture to Sublandlord in the same condition as received, ordinary wear and tear excepted conditioned on the obligation of Subtenant to use the Furniture in a careful and proper manner and to clean and repair the Furniture in the manner necessary to maintain the Furniture in the condition it was initially provided to Subtenant, ordinary wear and tear excepted. Subtenant shall be liable for any damage to the Furniture and solely responsible for all costs associated with the maintenance, cleaning and repair of the Furniture, ordinary wear and tear excepted.
- 12.7 Signage. Subtenant shall not place any other signs on or about the Subleased Premises without Sublandlord's and Master Landlord's prior written consent. All signs shall be at Subtenant's sole cost and shall comply with the terms of the Master Lease and with all local, federal and state rules, regulations, statutes, and ordinances at all times during the Sublease Term. Subtenant acknowledges and agrees that its request for consent to signage shall be limited to signage at the Subleased Premises. Subtenant, at Subtenant's cost, shall remove all such signs and graphics prior to the termination of this Sublease and repair any damage caused by such removal.

- 12.8 Offer. Preparation of this Sublease by either Sublandlord or Subtenant or either parties' agent and submission of same to Sublandlord or Subtenant shall not be deemed an offer to Sublease. This Sublease is not intended to be binding until executed and delivered by all Parties hereto.
- 12.9 <u>Due Authority</u>. If Subtenant signs as a corporation, Subtenant represents and warrants that the person(s) signing below have the authority to bind Subtenant, Subtenant has been and is qualified to do business in the State of California, and the corporation has full right and authority to enter into this Sublease. If Subtenant signs as a partnership, trust or other legal entity, each of the persons executing this Sublease on behalf of Subtenant represent and warrant that they have the authority to bind Subtenant, Subtenant has complied with all applicable laws, rules and governmental regulations relative to its right to do business in the State of California and such entity has full right and authority to enter into this Sublease. Subtenant agrees to furnish promptly upon request a corporate resolution, proof of due authorization by partners, or other appropriate documentation evidencing the authorization of Subtenant to enter into this Sublease.
- 12.10 <u>Multiple Counterparts</u>. This Sublease may be executed in two or more counterparts, which when taken together shall constitute one and the same instrument. The parties contemplate that they may be executing counterparts of this Sublease transmitted by facsimile and agree and intend that a signature by facsimile machine shall bind the party so signing with the same effect as though the signature were an original signature.
- 12.11 <u>Building Contaminants.</u> To prevent the contamination, growth, or deposit of any mold, mildew, bacillus, virus, pollen, or other micro-organism (collectively, "Biologicals") and the deposit, release or circulation of any indoor contaminants including emissions from paint, carpet and drapery treatments, cleaning, maintenance and construction materials and supplies, pesticides, pressed wood products, insulation, and other materials and products (collectively with Biologicals, "Contaminants") that could adversely affect the health, safety or welfare of any tenant, employee, or other occupant of the Building or their invitees (each, an "Occupant"), Sublandlord and Subtenant shall, at their sole cost and expense, at all times during the term hereof (1) operate the Premises and Subleased Premises (respectively) in such a manner to reasonably prevent or minimize the accumulation of stagnant water and moisture in planters, kitchen applicances and vessels, carpeting, insulation, water coolers, and any other locations where stagnant water or moisture could accumulate, and (2) otherwise operate the Premises and Subleased Premises (as applicable) to prevent the generation, growth, deposit, release or circulation of any Contaminants.
- 12.12 Effect of Conveyance: As used in this Sublease, the term "Sublandlord" means the holder of the Tenant's/Lessee's interest under the Master Lease. In the event of any assignment or transfer of the Tenant's/Lessee's interest under the Master Lease, which assignment or transfer may occur at any time during the Term hereof in Sublandlord's sole discretion, Sublandlord shall be and hereby is entirely relieved of the future performance of all covenants and obligations of Sublandlord hereunder if such future performance is assumed by the transfere in a writing and a copy thereof is delivered to Subtenant. Sublandlord may transfer and deliver any security of Subtenant to the transferee of the Tenant's/Lessee's interest under the Master Lease, and thereupon Sublandlord shall be discharged from any further liability with respect thereto if such transferee assumes in writing Sublandlord's obligations with regard to such security in a writing delivered to Subtenant.

### BROKER'S COMMISSIONS

13.1 <u>Commission.</u> Sublandlord and Subtenant represent and warrant to each other that each has not dealt with any broker and with no other agent, finder, or other such person with respect to this Sublease.

### ARTICLE 14

# NOTICES AND PAYMENTS

14.1 <u>Certified Mail</u>. Any notice, demand, request, consent, approval, submittal or communication that either party desires or is required to give to the other party or any other person shall be in writing and either served personally or sent by prepaid, first-class certified mail or commercial overnight delivery service. Such Notice shall be effective on the date of actual receipt (in the case of personal service or commercial overnight delivery service) or two days after deposit in the United States mail, to the following addresses:

To the Sublandlord: 260 East Grand Ave.

South San Francisco, CA 94080

Attention: Jeanne Jew

with a copy to: Hopkins & Carley, ALC

70 South First Street San Jose, CA 95113

Attention: Garth E. Pickett, Esq.

To the Subtenant: At the Subleased Premises, whether or not Subtenant has abandoned or vacated the Subleased Premises or notified the Sublandlord of any other address

With a copy to: Compugen Ltd.

Pinchas Rosen 72, Tel Aviv 69512

Tel: 972-765-8546 Fax: 972-3-765-8555

Attn: Dikla Czaczkes Axselbrad with a copy to General Counsel

14.2 When this Sublease requires service of a notice, that notice shall replace rather than supplement any equivalent or similar statutory notice, including any notices required by Code of Civil Procedure Section 1161 or any similar or successor statute. When a statute requires service of a notice in a particular manner, service of that notice (or a similar notice required by this Sublease) shall replace and satisfy the statutory service-of-notice procedures, including those required by Code of Civil Procedure Section 1162 or any similar or successor statute

### ATTORNEYS' FEES AND COSTS

- 15.1 <u>Sublandlord Made Party to Litigation</u>. If Sublandlord becomes a party to any litigation brought by someone other than Subtenant and concerning this Sublease, the Subleased Premises, or Subtenant's use and occupancy of the Subleased Premises to the extent, based upon any real or alleged act or omission of Subtenant or its authorized representatives, Subtenant shall be liable to Sublandlord for reasonable attorneys' fees and court costs incurred by Sublandlord in the litigation.
- 15.2 <u>Certain Litigation Between the Parties.</u> In the event any action or proceeding at law or in equity or any arbitration proceeding be instituted by either party, for an alleged breach of this Sublease, to recover rent, to terminate the tenancy of Subtenant at the Subleased Premises, or to enforce, protect, or establish any right or remedy of a party to this Sublease Agreement, the prevailing party (by judgment or settlement (it being understood that for the purpose of any settlement, the prevailing party shall be the party receiving substantially the relief requested) in such action or proceeding shall be entitled to recover as part of such action or proceeding such reasonable attorneys' fees, expert witness fees, and court costs as may be fixed by the court or jury. The Prevailing Party, for the purpose of any settlement, dismissal or summary judgment, shall be the party receiving substantially the relief requested
- 15.3 <u>Sublandlord's Costs.</u> In any case where Subtenant requests permission from Sublandlord to assign, sublet, make alterations, or receive any other consent or obtain any waiver from or modification to the terms of this Sublease, Subtenant shall pay to Sublandlord Sublandlord's reasonable attorney's fees incurred by Sublandlord in reviewing such request.

ARTICLE 16

#### **EXHIBITS**

16.1 <u>Exhibits and Attachments</u>. All exhibits and attachments to this Sublease are a part hereof.

IN WITNESS WHEREOF, Sublandlord and Subtenant have executed and delivered this Sublease on the date first set forth above.

# SUBLANDLORD

KALOBIOS PHARMACEUTICALS, INC., a Delaware corporation

ks/ David W. Pritchard
By: David W. Pritchard
Its: Chief Executive Officer

# SUBTENANT

COMPUGEN, INC., a Delaware corporation

/s/ Anat Cohen-Dayag
By: Anat Cohen-Dayag
Its: President and CEO

# EXHIBIT A

# SUBLEASED PREMISES

[attached]

# EXHIBIT B

# MASTER LEASE

[attached]

# EXHIBIT C

# FURNITURE

# Conference Room (Market)

Conference table with 6 conference chairs Conference size refrigerator Projector with screen All cabinets upper and lower White board

# Eight R&D Offices/Five cubicles

13 task chairs
4 bookcases
2- 2dl files
All modular furniture within each office (two offices are for multi use tenant)/cubicle

# Labs:

All upper and lower cabinetry; drying racks 9 task lab chairs 6 ergo rubber mats Barnstead water system; chemical cabinet 3 tables

COMPUGEN LTD.	EXHIBIT 4.
2010 SHARE INCENTIVE PLAN	
Adopted: July 25, 2010	

### COMPUGEN LTD. 2010 SHARE INCENTIVE PLAN

Unless otherwise defined, terms used herein shall have the meaning ascribed to them in Section 2 hereof.

### PURPOSE; TYPES OF AWARDS; CONSTRUCTION.

- 1.1. Purpose. The purpose of this 2010 Share Incentive Plan (as amended, the "Plan") is to afford an incentive to existing and potential employees, directors, officers, consultants, advisors, and any other person or entity whose services are considered valuable (collectively, the "Service Providers") to Compugen Ltd., an Israeli company (the "Company"), or any Affiliate of the Company, which now exists or hereafter is organized or acquired by the Company, to become or continue as Service Providers, to increase their efforts on behalf of the Company or Affiliate and to promote the success of the Company's business, by providing such Service Providers with opportunities to acquire a proprietary interest in the Company by the grant of options to purchase Shares, the issuance of Shares of the Company, the issuance of restricted share awards ("Restricted Shares") and other Awards pursuant to the Plan, provided that if any such Award is provided to a potential Service Provider, in no event shall the vesting of such Award commence prior to such person becoming a Service Provider.
- 1.2. Types of Awards. The Plan is intended to enable the Company to issue Awards under varying tax regimes, including, without limitation:
  - (i) pursuant and subject to the provisions of Section 102 of the Ordinance, including without limitation the Income Tax Rules (Tax Benefits in Stock Issuance to Employees) 5763-2003 (the "Rules") or such other rules published by the Israeli Income Tax Authorities (the "ITA") (such Awards, "102 Awards"). 102 Awards may either be granted to a Trustee or without a trustee;
  - (ii) pursuant to Section 3(9) of the Ordinance (such Awards, "3(9) Awards");
  - (iii) Incentive Stock Options within the meaning of Section 422 of the Code, or the corresponding provision of any subsequently enacted United States federal tax statute, as amended from time to time, to be granted to Service Providers who are deemed to be residents of the U.S. for purposes of taxation;
  - (iv) Nonqualified Stock Options to be granted to Service Providers who are deemed to be residents of the U.S. for purposes of taxation;
  - (v) Restricted Share Awards pursuant to Section 11 hereof;
  - (vi) Restricted Share Unit Awards pursuant to Section 12 hereof; and
  - (vii) other share-based Awards pursuant to Section 13 hereof.

In addition to the issuance of Awards under the relevant tax regimes in the United States of America and the State of Israel, the Plan contemplates issuances to Grantees in other jurisdictions with respect to which the Committee is empowered to make the requisite adjustments in the Plan and set forth the relevant conditions in the Company's agreement with the Grantee in order to comply with the requirements of the tax regimes in any such jurisdictions.

The Plan contemplates the issuance of Awards by the Company, both as a private company and as a publicly traded company.

1.3. <u>Construction</u>. To the extent any provision herein conflicts with the conditions of any relevant tax law or regulation which are relied upon for tax relief in respect of a particular Award to a Grantee, the provisions of such law or regulation shall prevail over those of the Plan and the Committee is empowered hereunder to interpret and enforce the said prevailing provisions.

### DEFINITIONS.

- 2.1. Terms Generally. The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation". Unless the context requires otherwise (i) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, restated, supplemented or otherwise modified (subject to any restrictions on such amendments, restatements, supplements or modifications set forth therein or herein), (ii) references to any law, constitution, statute, treaty, regulation, rule or ordinance, including any section or other part thereof shall refer to that it as amended from time to time and shall include any successor law, (iii) reference to a person shall means an individual, partnership, corporation, limited liability company, association, trust, unincorporated organization, or a government or agency or political subdivision thereof, (iv) the words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Plan in its entirety and not to any particular provision hereof and (v) all references herein to Sections shall be construed to refer to Sections to this Plan.
- 2.2. <u>Defined Terms</u>. The following terms shall have the meanings ascribed to them in this Section 2:
  - 2.2.1. "Affiliate" shall mean an affiliate of, or person affiliated with, a specified person or company or other trade or business that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such person within the meaning of Rule 405 of Regulation C under the Securities Act, including, without limitation, any Subsidiary. For the purpose of Options granted pursuant to Section 102 shall mean also an "employing company" within the meaning of Section 102(a) of the Ordinance.
  - 2.2.2. "Applicable Law" shall mean any applicable law, rule, regulation, statute, pronouncement, policy, interpretation, judgment, order or decree of any federal, provincial, state or local governmental, regulatory or adjudicative authority or agency, of any jurisdiction, and the rules and regulations of any stock exchange or trading system on which the Shares are then traded or listed.
  - 2.2.3. "Award" shall mean any Option, Share, Restricted Share, RSU or any other Share-based award, granted to a Grantee under the Plan and any shares issued pursuant to the exercise thereof.
  - 2.2.4. "Board" shall mean the Board of Directors of the Company.
  - 2.2.5. "Code" shall mean the United States Internal Revenue Code of 1986, as amended.
  - 2.2.6. "Committee" shall mean a committee established by the Board to administer the Plan, subject to Section 3.1.

- 2.2.7. "Companies Law" shall mean the Israel Companies Law-1999 and the regulations promulgated thereunder, all as amended from time to time.
- 2.2.8. "Controlling Shareholder" shall have the meaning set forth in Section 32(9) of the Ordinance.
- 2.2.9. "Disability" shall mean (i) the inability of a Grantee to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months, as determined by a medical doctor satisfactory to the Committee or, if applicable, (ii) as "permanent and total disability" as defined in Section 22(e)(3) of the Code, as amended from time to time.
- 2.2.10. "Employee" shall mean a person who is employed by the Company or any of its Affiliates, including, for the purpose of Section 102, an individual who is serving as an "office holder" as defined under the Companies Law, but excluding any Controlling Shareholder.
- 2.2.11. "Exercise Period" shall mean the period, commencing on the date of grant of an Option, during which an Option shall be exercisable, subject to any vesting provisions thereof and the termination provisions hereof.
- 2.2.12. "Exercise Price" shall mean the exercise price for each Share covered by an Option.
- 2.2.13. "Fair Market Value" per share as of a particular date shall mean (i) the closing sales price per Share on the securities exchange on which the Shares are principally traded for the last preceding date on which there was a sale of such Shares on such exchange; or (ii) if the Shares are listed on Nasdaq, the last reported price per Share on Nasdaq on the last preceding date on which there was a sale of such Shares on Nasdaq; or (iii) if the Shares are then traded in an over-the-counter market, the average of the closing bid and asked prices for the Shares in such over-the-counter market for the last preceding date on which there was a sale of such Shares in such market; (iv) if the Shares are not then listed on a securities exchange or market or traded in an over-the-counter market, such value as the Committee, in its sole discretion, shall determine, with full authority to determine the method for making such determination (which may be Black-Scholes model or any other method), and which determination shall be conclusive and binding on all parties, and shall be made after such consultations with outside legal, accounting and other experts as the Committee may deem advisable. The Committee may maintain a written record of its method of determining such value. If the Shares are listed or quoted on more than one established stock exchange or national market system, the Committee shall determine the appropriate exchange or system for the purpose of determination of Fair Market Value.
- 2.2.14. "Grantee" shall mean an existing or potential Service Provider who receives a grant of Award under the Plan.
- 2.2.15. "Incentive Stock Option" shall mean any Option granted to a U.S. Employee in accordance with Section 422 of the Code.
- 2.2.16. "Non-Employee" shall mean a Service Provider who is not an Employee.
- 2.2.17. "Nonqualified Stock Option" shall mean any Option granted to a Service Provider who is either (i) a citizen of the U.S. or (ii) deemed to be a resident of the U.S. and not a resident of Israel for tax purposes, which Option is not designated as, or does not meet the conditions for, an Incentive Stock Option.

- 2.2.18. "Options" shall mean all options to purchase Shares granted as 102 Awards, 3(9) Awards, Incentive Stock Options and Nonqualified Stock Options, as well as options to purchase Shares issued under other tax regimes.
- 2.2.19. "Ordinance" shall mean the Israeli Income Tax Ordinance (New Version) 1961, and the regulations promulgated thereunder, all as amended from time to time.
- 2.2.20. "Parent" shall mean any company (other than the Company), which now exists or is hereafter organized, (i) in an unbroken chain of companies ending with the Company, provided that at the time of granting an Award, each of the companies (other than the Company) in such chain owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other companies in such chain, or, if applicable, (ii) as defined in Section 424(e) of the Code.
- 2.2.21. "Retirement" shall mean a Grantee's retirement (i) pursuant to applicable law or in accordance with the terms of any tax-qualified retirement plan maintained by the Company or any of its affiliates in which the Grantee participates, or (ii) after both (a) attaining sixty (60) years of age and (b) having been a Service Provider for the Company for at least twenty (20) years.
- 2.2.22. "Securities Act" shall mean Securities Act of 1933, as amended.
- 2.2.23. "Shares" shall mean Ordinary Shares, par value NIS 0.01 of the Company, or shares of such other class of shares of the Company as shall be designated by the Board in respect of the relevant Award.
- 2.2.24. "Subsidiary" shall mean any company (other than the Company), which now exists or is hereafter organized or acquired by the Company, (i) in an unbroken chain of companies beginning with the Company if, at the time of granting an Award, each of the companies other than the last company in the unbroken chain owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other companies in such chain, or, if applicable, (ii) as defined in Section 424(f) of the Code.
- 2.2.25. "Ten Percent Shareholder" shall mean a Grantee who, at the time an Incentive Stock Option is granted, owns shares possessing more than ten percent (10%) of the total combined voting power of all classes of shares of the Company or any Parent or Subsidiary.
- 2.2.26. "Trustee" shall mean the trustee appointed by the Committee or the Board, as the case may be, to hold the respective Options and/or Shares (and, in relation with 102 Awards, approved by the Israeli tax authorities), if so appointed.
- 2.3. Other Defined Terms. The following terms shall have the meanings ascribed to them in the Sections set forth below:

Term	Section
102 Awards	1.2(i)
102 Capital Gains Track Options	9.1
102 Non-Trustee Options	9.2
102 Ordinary Income Track Options	9.1
102 Trustee Options	9.1
3(9) Awards	1.2(ii)
Cause	6.7.3
Company	1.1
Effective Date	25.1
Election	9.2
Eligible 102 Grantees	4.2
ISO Shares	8.6
ITA	1.2(i)
Market Stand-Off	17
Merger/Sale	14.2
Option Agreement	6
Plan	1.1
Required Holding Period	9.4
Restricted Period	11.4
Restricted Share Agreement	11
Restricted Share Unit Agreement	12.1
Restricted Shares	1.1
RSU	12.1
Rules	1.2(i)
Service Provider(s)	1.1
Successor Corporation	14.2.1
Withholding Obligations	18.3

### 3. **ADMINISTRATION**.

- 3.1. To the extent permitted under Applicable Law and the Memorandum of Association, Articles of Association and any other governing document of the Company, the Plan shall be administered by the Committee. In the event that the Board does not create a committee to administer the Plan, the Plan shall be administered by the Board in its entirety. In the event that an action necessary for the administration of the Plan is required under law to be taken by the Board, then such action shall be so taken by the Board. In any such event, all references herein to the Committee shall be construed as references to the Board.
- 3.2. The Committee shall consist of two or more directors of the Company, as determined by the Board. The Board shall appoint the members of the Committee, may from time to time remove members from, or add members to, the Committee, and shall fill vacancies in the Committee however caused, provided that the composition of the Committee shall at all times be in compliance with any mandatory requirements of Applicable Law. The Committee may select one of its members as its Chairman and shall hold its meetings at such times and places as it shall determine. The Committee may appoint a Secretary, who shall keep records of its meetings and shall make such rules and regulations for the conduct of its business, as it shall deem advisable and subject to requirements of Applicable Law.
- 3.3. Subject to the terms and conditions of this Plan and any mandatory provisions of Applicable Law, and in addition to the Committee's powers contained elsewhere in this Plan, the Committee shall have full authority in its discretion, from time to time and at any time, to determine any of the following, or to recommend to the Board any of the following if it is not authorized to take such action according to Applicable Law:
  - (i) eligible Grantees,

- (ii) grants of Awards and setting the terms and provisions of option agreements (which need not be identical) and any other agreements or instruments under which Awards are made, including, but not limited to, the type of Award to be granted (as per 3.4 below) and the number of Shares underlying each Award,
- (iii) the time or times at which Awards shall be granted,
- (iv) the schedule and conditions on which Awards may be exercised,
- (v) the Exercise Price,
- (vi) to interpret the Plan,
- (vii) prescribe, amend and rescind rules and regulations relating to and for carrying out the Plan, as it may deem appropriate,
- (viii) the Fair Market Value of the Shares,
- (ix) the tax track (capital gains, ordinary income track or any other track available under the Section 102 of the Ordinance) for the purpose of 102 Awards, and
- (x) any other matter which is necessary or desirable for, or incidental to, the administration of the Plan and any Award thereunder.
- 3.4. Grants of Awards shall be made pursuant to written notice to Grantees setting forth the terms of the Award. Such notice shall designate the type of Award as one of the following: (i) a 102 Award granted to a Trustee (either as a 102 Award (capital gain track) with Trustee or a 102 Award (ordinary income track) with Trustee), (ii) a 102 Award without a 102 Trustee, (iii) a 3(9) Award, (iv) an Incentive Stock Option, (v) a Nonqualified Stock Option, or (vi) any other type of Award.
- 3.5. Subject to the mandatory provisions of Applicable Law, the grant of any Award, whether by the Committee or the Board, shall be deemed to include an authorization of the issuance of Shares upon the due exercise thereof.
- 3.6. The authority granted hereunder includes the authority to modify Awards to eligible individuals who are foreign nationals or are individuals who are employed outside Israel to recognize differences in local law, tax policy or custom, in order to effectuate the purposes of the Plan but without amending the Plan. The Committee shall have the authority to grant, in its discretion, to the holder of an outstanding Award, in exchange for the surrender and cancellation of such Award, a new Award having an exercise price lower than provided in the Award so surrendered and canceled and containing such other terms and conditions as the Committee may prescribe in accordance with the provisions of the Plan or to set a new exercise price for the same Award lower than that previously provided in the Award.
- 3.7. All decisions, determination and interpretations of the Committee shall be final and binding on all Grantees of any Awards under this Plan, unless otherwise determined by the Board. No member of the Committee shall be liable for any action taken or determination made in good faith with respect to the Plan or any Award granted hereunder.

## 4. **ELIGIBILITY**.

4.1. Awards may be granted to Service Providers of the Company and any Affiliate thereof, taking into account the qualification under each tax regime pursuant to which such Awards are granted. A person who has been granted an Award hereunder may be granted additional Awards, if the Committee shall so determine, subject to the limitations herein. In determining the persons to whom Awards shall be granted and the number of Shares to be covered by each Award, the Committee shall take into account the duties of the respective persons, their present and potential contributions to the success of the Company and such other factors as the Committee shall deem relevant in connection with accomplishing the purpose of the Plan.

- 4.2. Subject to Applicable Law, 102 Awards may only be granted to Employees (including, for the purpose of clarification, directors) who are Israeli residents ("Eligible 102 Grantees"). For the purpose of clarification, 102 Awards may not be granted to Controlling Shareholders. Eligible 102 Grantees may receive only 102 Awards, which may either be grants to a Trustee or grants under Section 102 without a trustee. Unless otherwise permitted by the Ordinance and the Rules, no 102 Awards to a Trustee may be granted until the expiration of thirty (30) days after the requisite filings under the Ordinance and the Rules have been appropriately made with the ITA.
- 4.3. Subject to Applicable Law, Non-Employees who are Israeli residents may only be granted 3(9) Awards under this Plan.

## SHARES.

The initial number of Shares reserved for the grant of Awards under the Plan shall be four million, nine hundred and fifty three thousand, eight hundred and fifty one (4,953,851) Shares. In addition, any available pool of shares under prior option plans, including any additional options that may return to such pool in connection with the termination of options granted under such prior option plans but not exercised prior to their termination, will be made available for future grants under the Plan. However, in no event shall more than 4 953,851 shares be issued as Incentive Stock Options. The class of said Shares shall be designated by the Board with respect to each Award and the notice of grant shall reflect such designation. Any Shares underlying an Award granted hereunder which has expired, or was cancelled or terminated or forfeited for any reason without having been exercised, shall be automatically, and without any further action on the part of the Company or any Grantee, returned to the "pool" of reserved Shares hereunder and shall again be available for grant for the purposes of this Plan (unless this Plan shall have been terminated) or unless the Board determines otherwise. Any changes in the "pool" of reserved Shares shall be updated with the relevant body (Tax Authority, Company Registrar and/or the Trustee, as applicable). The Board may, subject to any other approvals required under any Applicable Law, increase or decrease the number of Shares to be reserved under the Plan. Such Shares may, in whole or in part, be authorized but unissued Shares, or Shares that shall have been or may be reacquired by the Company (to the extent permitted pursuant to the Companies Law) or by a trustee appointed by the Board under the Plan. Such Shares to be reserved for the purpose of the Plan, but until termination of the Plan, the Company shall at all times reserve a sufficient number of Shares to meet the requirements of the Plan.

## 6. TERMS AND CONDITIONS OF OPTIONS.

Each Option granted pursuant to the Plan shall be evidenced by a written agreement between the Company and the Grantee or a written notice delivered by the Company and accepted by the Grantee (the "Option Agreement"), in such form and containing such terms and conditions as the Committee shall from time to time approve, which Option Agreement shall comply with and be subject to the following terms and conditions, unless otherwise specifically provided in such Option Agreement or the terms referred to in Sections 9 and 10 below.

6.1. Number of Shares. Each Option Agreement shall state the number of Shares covered by the Option.

- 6.2. Type of Option. Each Option Agreement shall specifically state the type of Option granted thereunder and whether it constitutes an Incentive Stock Option, Nonqualified Stock Option, 102 Option Award and the relevant track, 3(9) Option Award, or otherwise.
- 6.3. Exercise Price. Each Option Agreement shall state the Exercise Price, which, in the case of an Incentive Stock Option or a Nonqualified Stock Option, shall not be less than one hundred percent (100%) of the Fair Market Value of the Shares covered by the Option on the date of grant. In the case of any other Option, the per-share Exercise Price shall be equal to the amount determined by the Committee. In the case of an Incentive Stock Option granted to any Ten-Percent Shareholder, the Exercise Price shall be no less than 110% of the Fair Market Value of the Shares covered by the Option on the date of grant as determined pursuant to the Code. In no event shall the Exercise Price of an Option be less than the par value of the shares for which such Option is exercisable. Subject to Section 3 and to the foregoing, the Committee may reduce the Exercise Price of any outstanding Option. The Exercise Price shall also be subject to adjustment as provided in Section 14 hereof.
- 6.4. Manner of Exercise. An Option may be exercised, as to any or all Shares as to which the Option has become exercisable, by written notice delivered in person or by mail to the Secretary of the Company or to such other person as determined by the Committee, specifying the number of Shares with respect to which the Option is being exercised, accompanied by payment of the Exercise Price for such Shares in the manner specified in the following sentence. The Exercise Price shall be paid in full with respect to each Share, at the time of exercise, either in (i) cash, (ii) if the Company's shares are publicly traded, all or part of the Exercise Price and any withholding taxes may be paid by the delivery (on a form prescribed by the Company) of an irrevocable direction to a securities broker approved by the Company to sell Shares and to deliver all or part of the sales proceeds to the Company or the Trustee, or (iii) in such other manner as the Committee shall determine, which may include procedures for cashless exercise, all subject to relevant tax considerations.
- 6.5. Term and Vesting of Options. Each Option Agreement shall provide the vesting schedule for the Option as determined by the Committee. To the extent permitted under Applicable Law, the Committee shall have the authority to determine the vesting schedule and accelerate the vesting of any outstanding Option at such time and under such circumstances as it, in its sole discretion, deems appropriate. Unless otherwise resolved by the Committee and stated in the Option Agreement, and subject to Sections 6.7 and 6.8 hereof, Options shall vest and become exercisable under the following schedule: For the initial options granted: twenty-five percent (25%) of the Shares covered by the Option shall vest and become exercisable on the first anniversary of the date on which such Option is granted, provided that the Grantee remains continuously a Service Provider for that one year, and 1/48th of the Shares covered by the Option shall vest and become exercisable each month, provided that the Grantee remains continuously a Service Provider for each such month, over the course of the following 36 months. For follow-on grants (after the initial grant): 1/48th of the Shares covered by the Option shall vest and become exercisable at the end of each month following the date of grant, provided that the Grantee remains continuously a Service Provider for each such month, over the course of the such 48 months. The Option Agreement may contain performance goals and measurements, and the provisions with respect to any Option need not be the same as the provisions with respect to any other Option. The Exercise Period of an Option will be (i) with respect to Employees, six (6) years from the date of grant of the Option unless otherwise determined by the Committee, but in either case, subject to the vesting provisions described above and the early termination provisions set forth in Sections 6.7 and 6.8 hereof; provided, however, that in the case of an Incentive Stock Option granted to a Ten Percent Shareholder, such Exercise Period shall

6.6. Indexation Base. Each Option Agreement will be subject to the indexation base of the Value of Benefit, as defined on Section 102(a) of the Ordinance, as determined by the Committee, pursuant to the Rules and/or such other rules published by the ITA (as may be amended from time to time). In the event that the Company completes an initial public offering in any stock market outside of Israel, the Committee shall be entitled to amend retroactively the indexation base, pursuant to the Rules and/or such other rules published by the ITA (as may be amended from time to time), without the Grantee's consent.

#### 6.7. <u>Termination</u>.

- 6.7.1. Unless determined otherwise by the Committee and except as provided in this Section 6.7 and in Section 6.8 hereof, an Option may not be exercised unless the Grantee is at such time of exercise a Service Provider. In the event that a Grantee's engagement as a Service Provider shall terminate (other than by reason of death, Disability or Retirement), all Options of such Grantee that are vested and exercisable at the time of such termination may, unless earlier terminated in accordance with their terms, be exercised within ninety (90) days after the date of such termination (or such different period as the Committee shall prescribe which may cause an Incentive Stock Option to become a Nonqualified Stock Option as described in Section 6.7.2 below); provided, however, that if the Company (or the Subsidiary or Affiliate, when applicable) shall terminate the engagement of the Grantee as a Service Provider for Cause (as defined below) or if, whether or not the Grantee's engagement as a Service Provider is terminated by either party, circumstances arise or are discovered with respect to the Grantee that would have constituted Cause for termination of his or her employment or service, all Options theretofore granted to such Grantee (whether vested or not) shall, to the extent not theretofore exercised, terminate on the date of such termination (or on which such circumstance arise or are discovered, as the case may be) unless otherwise determined by the Committee.
- 6.7.2. In the case of a Grantee engaged as a Service Provider to a Subsidiary or Affiliate, such engagement shall also be deemed terminated for purposes of this Section 6.7 as of the date on which such principal employer ceases to be a Subsidiary or Affiliate. Notwithstanding anything to the contrary, the Committee, in its absolute discretion may, on such terms and conditions as it may determine appropriate, extend the periods for which the Options held by any individual may continue to vest and be exercisable; provided, that such Options may lose their status as Incentive Stock Options under applicable law and be deemed Nonqualified Stock Options in the event that the period of vesting and/or exercisability of any Incentive Stock Option occurs beyond the later of: (i) ninety (90) days after the date of cessation as an Employee; or (ii) the applicable period under Section 6.8 below.
- 6.7.3. For purposes of this Plan, the term "Cause" shall mean any of the following: (a) fraud, embezzlement or felony or similar act by the Grantee; (b) an act of moral turpitude by the Grantee, or any act that causes significant injury to the reputation, business, assets, operations or business relationship of the Company (or a Subsidiary or Affiliate, when applicable); (c) any material breach by the Grantee of an agreement between the Company or any Subsidiary or Affiliate and the Grantee (including material breach of confidentiality, non-competition or non-solicitation covenants) or of any duty of the Grantee to the Company or any Subsidiary or Affiliate thereof; or (d) any circumstances that constitute grounds for termination for cause under the Grantee's employment, consulting or service agreement with the Company or Subsidiary or Affiliate, to the extent applicable.

- 6.8. Death, Disability or Retirement of Grantee. If a Grantee shall die while engaged as a Service Provider, or within the ninety (90) days after the date of termination of such, (or within such different period as the Committee may have provided pursuant to Section 6.7 hereof), or if the Grantee's engagement as a Service Provider shall terminate by reason of Disability, all Options theretofore granted to such Grantee may (to the extent otherwise vested and exercisable and unless earlier terminated in accordance with their terms), be exercised by the Grantee or by the Grantee's estate or by a person who acquired the right to exercise such Options by bequest or inheritance or otherwise by result of death or Disability of the Grantee, at any time within one (1) year after the death or Disability of the Grantee (or such different period as the Committee shall prescribe which may cause an Incentive Stock Option to become a Nonqualified Stock Option as described below). In the event that an Option granted hereunder shall be exercised by the legal representatives of a deceased or former Grantee, written notice of such exercise shall be accompanied by a certified copy of letters testamentary or equivalent proof of the right of such legal representative to exercise such Option. In the event that the employment or service of a Grantee shall terminate on account of such Grantee's Retirement, all Options of such Grantee that are exercisable at the time of such Retirement may, unless earlier terminated in accordance with their terms, be exercised at any time within the ninety (90) day period after the date of such Retirement (or such different period as the Committee shall prescribe which may cause an Incentive Stock Option to become a Nonqualified Stock Option as described below). Incentive Stock Options shall lose their status as Incentive Stock Options under applicable law and be deemed Nonqualified Stock Options in the event that they are exercised more than one (1) year from Disability or more than ninety (90) days af
- 6.9. Suspension of Vesting. Unless the Board or the Committee provides otherwise, vesting of Options granted hereunder shall be suspended during any unpaid leave of absence, other than in the case of any (a) leave of absence which was pre-approved by the Company for purposes of continuing the vesting of Options, or (b) transfers between locations of the Company or between the Company, any Affiliate, or any respective successor thereof. However, for Incentive Stock Options, any leave of absence granted by the Board or Committee of greater than ninety days, unless pursuant to a contract or statute that guarantees the right to reemployment, shall cause such Incentive Stock Option to become a Nonqualified Option on the 181st day following such leave of absence.
- 6.10. Other Provisions. The Option Agreement evidencing Awards under the Plan shall contain such other terms and conditions not inconsistent with the Plan as the Committee may determine, at or after the date of grant, including without limitation, provisions in connection with the restrictions on transferring the Awards, which shall be binding upon the Grantees and other terms and conditions as the Committee shall deem appropriate.

#### 7. NONOUALIFIED STOCK OPTIONS

Options granted pursuant to this Section 7 are intended to constitute Nonqualified Stock Options and shall be subject to the general terms and conditions specified in Section 6 hereof and other provisions of the Plan, except for any provisions of the Plan applying to Options under different tax laws or regulations.

No adjustment shall be made to a Nonqualified Stock Option that would cause any adverse tax consequences for the holders of Nonqualified Stock Options, including, but not limited to, pursuant to Section 409A of the Code. If the Board or the Committee determines that such adjustments made with respect to Options would constitute a modification or other adverse tax consequence, it may refrain from making such adjustments, unless the holder of a Nonqualified Stock Option specifically agrees in writing that such adjustment be made and such writing indicates that the holder has full knowledge of the consequences of such "modification" on his or her income tax treatment with respect to the Option.

#### 8. INCENTIVE STOCK OPTIONS

Options granted pursuant to this Section 8 are intended to constitute Incentive Stock Options and shall be granted subject to the following special terms and conditions, the general terms and conditions specified in Section 6 hereof and other provisions of the Plan, except for any provisions of the Plan applying to Options under different tax laws or regulations:

- 8.1. <u>Value of Shares.</u> The aggregate Fair Market Value (determined as of the date the Incentive Stock Option is granted) of the Shares with respect to which all Incentive Stock Options granted under this Plan and all other option plans of any Subsidiary or Affiliate become exercisable for the first time by each Grantee during any calendar year shall not exceed one hundred thousand United States dollars (\$100,000) with respect to such Grantee. To the extent that the aggregate Fair Market Value of Shares with respect to which the Incentive Stock Options are exercisable for the first time by any Grantee during any calendar years exceeds one hundred thousand United States dollars (\$100,000), such Options shall be treated as Nonqualified Stock Options. The foregoing shall be applied by taking options into account in the order in which they were granted, with the Fair Market Value of any Share to be determined at the time of the grant of the Option. In the event the foregoing results in the portion of an Incentive Stock Option exceeding the one hundred thousand United States dollars (\$100,000) limitation, only such excess shall be treated as a Nonqualified Stock Option.
- 8.2. <u>Ten Percent Shareholder</u>. In the case of an Incentive Stock Option granted to a Ten Percent Shareholder, (i) the Exercise Price shall not be less than one hundred and ten percent (110%) of the Fair Market Value of the Shares on the date of grant of such Incentive Stock Option, and (ii) the Exercise Period shall not exceed five (5) years from the date of grant of such Incentive Stock Option.
- 8.3. <u>Approval</u>. The status of any Incentive Stock Options shall be subject to approval of the Plan by the Company's shareholders, such approval to be provided 12 months before or after the date of adoption of the Plan by the Board.
- 8.4. Exercise Following Termination. Notwithstanding anything else in this Plan to the contrary, Incentive Stock Options that are not exercised within ninety (90) days following termination of Grantee's employment in the Company or its Affiliates and Subsidiaries, or within one year in case of termination of Grantee's employment in the Company or its Affiliates and Subsidiaries due to a disability (within the meaning of section 22(e)(3) of the Code), shall be deemed to be Nonqualified Stock Options.
- 8.5. Adjustments to Incentive Stock Options. Any Option Agreement providing for the grant of Incentive Stock Options shall indicate that adjustments made pursuant to the Plan with respect to Incentive Stock Options could constitute a "modification" of such Incentive Stock Options (as that term is defined in Section 424(h) of the Code) or could cause adverse tax consequences for the holder of such Incentive Stock Options and that the holder should consult with his or her tax advisor regarding the consequences of such "modification" on his or her income tax treatment with respect to the Incentive Stock Option.

8.6. Notice to Company of Disqualifying Disposition. Each Grantee who receives an Incentive Stock Option must agree to notify the Company in writing immediately after the Grantee makes a Disqualifying Disposition of any shares received pursuant to the exercise of Incentive Stock Options ("ISO Shares"). A "Disqualifying Disposition" is any disposition (including any sale) of such ISO Shares before the later of (i) two years after the date the Grantee was granted the Incentive Stock Option, or (ii) one year after the date the Grantee acquired Shares by exercising the Incentive Stock Option. If the Grantee dies before such ISO Shares are sold, these holding period requirements do not apply and no disposition of the ISO Shares will be deemed a Disqualifying Disposition.

## 102 OPTION AWARDS.

- 9.1. Options granted pursuant to this Section 9 are intended to be granted pursuant to Section 102 of the Ordinance pursuant to either (a) Section 102(b)(2) thereof as capital gains track options ("102 Capital Gains Track Options"), or (b) Section 102(b)(1) thereof as ordinary income track options ("102 Ordinary Income Track Options"); together with 102 Capital Gains Track Options, "102 Trustee Options"). 102 Trustee Options shall be granted subject to the following special terms and conditions contained in this Section 9, the general terms and conditions specified in Section 6 hereof and other provisions of the Plan, except for any provisions of the Plan applying to Options under different tax laws or regulations.
- 9.2. The Company may grant only one type of 102 Trustee Option at any given time to all Grantees who are to be granted 102 Trustee Options pursuant to this Plan, and shall file an election with the ITA regarding the type of 102 Trustee Option it elects to grant before the date of grant of any 102 Trustee Options (the "Election"). Such Election shall also apply to any bonus shares received by any Grantee as a result of holding the 102 Trustee Options. The Company may change the type of 102 Trustee Option that it elects to grant only after the passage of at least 12 months from the end of the year in which the first grant was made in accordance with the previous Election, or as otherwise provided by Applicable Law. Any Election shall not prevent the Company from granting Options, pursuant to Section 102(c) of the Ordinance without a Trustee ("102 Non-Trustee Options").
- 9.3. Each 102 Trustee Option will be deemed granted on the date stated in a written notice to be provided by the Company, provided that on or before such date (i) the Company has provided such notice to the Trustee and (ii) the Grantee has signed all documents required pursuant to Applicable Law and under the Plan.
- 9.4. Each 102 Trustee Option, each Share issued pursuant to the exercise of any 102 Trustee Option, and any rights granted thereunder, including, without limitation, bonus shares, shall be allotted and issued to and registered in the name of the Trustee and shall be held in trust for the benefit of the Grantee for a period of not less than the requisite period prescribed by the Ordinance and the Rules or such longer period as set by the Committee (the "Required Holding Period"). In the event that the requirements under Section 102 to qualify an Option as a 102 Trustee Option are not met, then the Option may be treated as a 102 Non-Trustee Option, all in accordance with the provisions of Section 102 and the Rules. After termination of the Required Holding Period, the Trustee may release such 102 Trustee Option and any such Shares, provided that (i) the Trustee has received an acknowledgment from the ITA that the Grantee has paid any applicable taxes due pursuant to the Ordinance or (ii) the Trustee and/or the Company and/or its Affiliate withholds any applicable taxes due pursuant to the Ordinance arising from the 102 Trustee Options and/or any Shares allotted or issued upon exercise of such 102 Trustee Options. The Trustee shall not release any 102 Trustee Options or Shares issued upon exercise thereof prior to the payment in full of the Grantee's tax liabilities arising from such 102 Trustee Options and/or Shares or the withholding referred to in (ii) above.

- 9.5. Each 102 Trustee Option shall be subject to the relevant terms of the Ordinance and the Rules, which shall be deemed an integral part of the 102 Trustee Option and shall prevail over any term contained in the Plan or Option Agreement which is not consistent therewith. Any provision of the Ordinance, the Rules and any approvals by the Income Tax Commissioner not expressly specified in this Plan or Option Agreement which, as determined by the Committee, are necessary to receive or maintain any tax benefit pursuant to Section 102 shall be binding on the Grantee. The Grantee agrees to execute any and all documents, which the Company and the Trustee. The Grantee agrees to execute any and all documents, which the Company and/or its Affiliates and/or the Trustee may reasonably determine to be necessary in order to comply with the Ordinance and the Rules.
- 9.6. During the Required Holding Period, the Grantee shall not release from trust or sell, assign, transfer or give as collateral, the Shares issuable upon the exercise of a 102 Trustee Option and/or any securities issued or distributed with respect thereto, until the expiration of the Required Holding Period. Notwithstanding the above, if any such sale or release occurs during the Required Holding Period it will result in adverse tax consequences to the Grantee under Section 102 of the Ordinance and the Rules, which shall apply to and shall be borne solely by such Grantee. Subject to the foregoing, the Trustee may, pursuant to a written request from the Grantee, release and transfer such Shares to a designated third party, provided that both of the following conditions have been fulfilled prior to such release or transfer: (i) payment has been made to the ITA of all taxes required to be paid upon the release and transfer of the Shares, and confirmation of such payment has been received by the Trustee has received written confirmation from the Company that all requirements for such release and transfer have been fulfilled according to the terms of the Company's corporate documents, the Plan, the Option Agreement and any Applicable Law.
- 9.7. If a 102 Trustee Option is exercised during the Required Holding Period, the Shares issued upon such exercise shall be issued in the name of the Trustee for the benefit of the Grantee. If such 102 Trustee Option is exercised after the expiration of the Required Holding Period, the Shares issued upon such exercise shall, at the election of the Grantee, either (i) be issued in the name of the Trustee, or (ii) be issued to the Grantee, provided that the Grantee first complies with all applicable provisions of the Plan and all taxes with respect thereto shall have been fully paid to the ITA.
- 9.8. The foregoing provisions of this Section 9 relating to 102 Trustee Options shall not apply with respect to 102 Non-Trustee Options, which shall, however, be subject to the relevant provisions of Section 102 and the Rules.
- 9.9. Upon receipt of a 102 Trustee Option, the Grantee will sign an undertaking to release the Trustee from any liability with respect to any action or decision duly taken and executed in good faith by the Trustee in relation to the Plan, or any 102 Trustee Option or Share granted to such Grantee thereunder.

## 10. 3(9) OPTION AWARD.

- 10.1. Options granted pursuant to this Section 10 are intended to constitute a 3(9) Option Award and shall be granted subject to the general terms and conditions specified in Section 6 hereof and other provisions of the Plan, except for any provisions of the Plan applying to Options under different tax laws or regulations.
- 10.2. To the extent required by the Ordinance or the ITA or otherwise deemed by the Committee prudent or advisable, the 3(9) Option Awards granted pursuant to the Plan shall be issued to a Trustee nominated by the Committee in accordance with the provisions of the Ordinance and the ITA. In such event, the Trustee shall hold such Options in trust, until exercised by the Grantee, pursuant to the Company's instructions from time to time as set forth in a trust agreement, which will be entered into between the Company and the Trustee. If determined by the Board or the Committee, and subject to such trust agreement the Trustee shall be responsible for withholding any taxes to which a Grantee may become liable upon the exercise of Options.

#### 11. RESTRICTED SHARES.

The Committee may award Restricted Shares to any eligible Grantee, including under Section 102 of the Ordinance. Each Award of Restricted Shares under the Plan shall be evidenced by a written agreement between the Company and the Grantee (the "Restricted Share Agreement"), in such form as the Committee shall from time to time approve. The Restricted Share Agreement shall comply with and be subject to the following terms and conditions, unless otherwise specifically provided in such Agreement:

- 11.1. Number of Shares. Each Restricted Share Agreement shall state the number of Shares covered by an Award.
- 11.2. Purchase Price. Each Restricted Share Agreement may state an amount of purchase price to be paid by the Grantee in consideration for the issuance of the Restricted Shares and the terms of payment thereof, which may include, payment by issuance of promissory notes or other evidence of indebtedness on such terms and conditions as determined by the Committee
- 11.3. Vesting. Each Restricted Share Agreement shall provide the vesting schedule for the Restricted Shares as determined by the Committee, provided that (to the extent permitted under Applicable Law) the Committee shall have the authority to determine the vesting schedule and accelerate the vesting of any outstanding Restricted Share at such time and under such circumstances as it, in its sole discretion, deems appropriate, Unless otherwise resolved by the Committee and stated in the Restricted Share Agreement, Restricted Shares shall vest in the same vesting schedule as set forth in Section 6.5 hereof.
- Restrictions. Restricted Shares may not be sold, assigned, transferred, pledged, hypothecated or otherwise disposed of, except by will or the laws of descent and distribution, for such period as the Committee shall determine from the date on which the Award is granted (the "Restricted Period"). The Committee may also impose such additional or alternative restrictions and conditions on the Restricted Shares, as it deems appropriate, including the satisfaction of performance criteria. Such performance criteria may include, but are not limited to, sales, earnings before interest and taxes, return on investment, earnings per share, any combination of the foregoing or rate of growth of any of the foregoing, as determined by the Committee. Certificates for shares issued pursuant to Restricted Share Awards shall bear an appropriate legend referring to such restrictions, and any attempt to dispose of any such shares in contravention of such restrictions shall be null and void and without effect. Such certificates may, if so determined by the Committee, be held in escrow by an escrow agent appointed by the Committee, or, if a Restricted Share Award is made pursuant to Section 102, by the Trustee. In determining the Restricted Period of an Award the Committee may provide that the foregoing restrictions shall lapse with respect to specified percentages of the awarded Restricted Shares on successive anniversaries of the date of such Award. To the extent required by the Ordinance or the ITA, the Restricted Shares issued pursuant to Section 102 of the Ordinance shall be issued to the Trustee in accordance with the provisions of the Ordinance and the Restricted Shares shall be held for the benefit of the Grantee for such period as may be required by the Ordinance.

- 11.5. Adjustment of Performance Goals. The Committee may adjust performance goals to take into account changes in law and accounting and tax rules and to make such adjustments as the Committee deems necessary or appropriate to reflect the inclusion or the exclusion of the impact of extraordinary or unusual items, events or circumstances. The Committee also may adjust the performance goals by reducing the amount to be received by any Grantee pursuant to an Award if and to the extent that the Committee deems it appropriate.
- 11.6. Forfeiture. Subject to such exceptions as may be determined by the Committee, if the Grantee's continuous employment with the Company or any Subsidiary or Affiliate shall terminate for any reason prior to the expiration of the vesting date or Restricted Period of an Award or prior to the payment in full of the purchase price of any Restricted Shares with respect to which the vesting date or the Restricted Period has expired, any shares remaining subject to vesting or restrictions or with respect to which the purchase price has not been paid in full, shall thereupon be forfeited and shall be deemed transferred to, and reacquired by, or cancelled by, as the case may be, the Company or a Subsidiary at no cost to the Company or Subsidiary, subject to all Applicable Laws. Upon forfeiture of Restricted Shares, the Grantee shall have no further rights with respect to such Restricted Shares.
- 11.7. Ownership. During the Restricted Period the Grantee shall possess all incidents of ownership of such Restricted Shares, subject to Section 11.4, including the right to receive dividends with respect to such shares. All distributions, if any, received by a Grantee with respect to Restricted Shares as a result of any stock split, stock dividend, combination of shares, or other similar transaction shall be subject to the restrictions applicable to the original Award.

## 12. RESTRICTED SHARE UNITS.

- 12.1. A Restricted Share Unit (an "RSU") is an Award covering a number of Shares that is settled by issuance of those Shares. An RSU may be awarded to any eligible Grantee, including under Section 102 of the Ordinance. Each grant of RSUs under the Plan shall be evidenced by a written agreement between the Company and the Grantee (the "Restricted Share Unit Agreement"), in such form as the Committee shall from time to time approve. Such RSUs shall be subject to all applicable terms of the Plan and may be subject to any other terms that are not inconsistent with the Plan. The provisions of the various Restricted Share Unit Agreements entered into under the Plan need not be identical. RSUs may be granted in consideration of a reduction in the recipient's other compensation.
- 12.2. Other than the par value of the Shares, no payment of cash shall be required as consideration for RSUs. RSUs may or may not be subject to vesting. Vesting shall occur, in full or in installments, upon satisfaction of the conditions specified in the Restricted Share Unit Agreement.
- 12.3. No voting or dividend rights as a shareholder shall exist prior to the actual issuance of Shares in the name of the Grantee. Notwithstanding anything else in this Plan (as may be amended from time to time) to the contrary, unless otherwise specified by the Committee, each RSU awarded to an Employee shall be for a term of ten (10) years and each RSU awarded to a Non-Employee shall be for a term of six (6) years. Each Restricted Share Unit Agreement shall specify its term and any conditions on the time or times for settlement, and provide for expiration prior to the end of its term in the event of termination of employment or service providing to the Company, and may provide for earlier settlement in the event of the Grantee's death, Disability or other events.

12.4. Settlement of vested RSUs shall be made in the form of Shares. Distribution to a Grantee of an amount (or amounts) from settlement of vested RSUs can be deferred to a date after settlement as determined by the Committee. The amount of a deferred distribution may be increased by an interest factor or by dividend equivalents. Until the grant of RSUs is settled, the number of such RSUs shall be subject to adjustment pursuant hereto.

## 13. OTHER SHARE OR SHARE-BASED AWARDS.

The Committee may grant other Awards under the Plan pursuant to which Shares (which may, but need not, be Restricted Shares pursuant to Section 11 hereof), cash or a combination thereof, are or may in the future be acquired or received, or Awards denominated in stock units, including units valued on the basis of measures other than market value. The Committee may also grant stock appreciation rights without the grant of an accompanying option, which rights shall permit the Grantees to receive, at the time of any exercise of such rights, cash equal to the amount by which the Fair Market Value of all Shares in respect to which the right was granted exceeds the exercise price thereof. The Committee may, and it is hereby deemed to be an Award under the terms of the Plan, grant to Grantees (including employees) the opportunity to purchase Shares of the Company in connection with any public offerings of the Company's securities. Such other Share based Awards may be granted alone, in addition to, or in tandem with any Award of any type granted under the plan and must be consistent with the purposes of the Plan.

The Company intends that the Plan and any Share-Based Awards granted hereunder to a U.S. citizen be exempt from the application of Section 409A of the Code or meet the requirements of paragraphs (2), (3) and (4) of subsection (a) of Section 409A of the Code, to the extent applicable, and be operated in accordance with Section 409A so that any compensation deferred under any Share-Based Award (and applicable investment earnings) shall not be included in income under Section 409A of the Code. Any ambiguities in the Plan shall be construed to affect the intent as described in this Section 13.

## 14. EFFECT OF CERTAIN CHANGES.

- 14.1. General. In the event of a subdivision of the outstanding share capital of the Company, any payment of a stock dividend (distribution of bonus shares), a recapitalization, a reorganization (which may include a combination or exchange of shares), a consolidation, a stock split, a reverse stock split, a spin-off or other corporate divestiture or division, a reclassification or other similar occurrence, the Committee shall make such adjustments as determined by the Committee to be appropriate in order to adjust (i) the number of Shares available for grants of Awards, (ii) the number of Shares covered by outstanding Awards, and (iii) the exercise price per share covered by any Award; provided, however, that any fractional shares resulting from such adjustment shall be rounded up to the nearest whole share.
- 14.2. Merger and Sale of Company. In the event of (i) a sale of all or substantially all of the assets of the Company; or (ii) a sale (including an exchange) of all or substantially all of the shares of the Company, or an acquisition by a shareholder of the Company or by an Affiliate of such shareholder, of all the shares of the Company held by other shareholders or by other shareholders who are not Affiliated with such acquiring party; (iii) a merger, consolidation, amalgamation or like transaction of the Company with or into another corporation; (iv) a scheme of arrangement for the purpose of effecting such sale, merger or amalgamation; or (v) such other transaction that is determined by the Committee to be a transaction having a similar effect (all such transactions being herein referred to as a "Merger/Sale"), then, without the Grantee's consent and action:

14.2.1. unless otherwise determined by the Committee in its sole and absolute discretion, any Award then outstanding shall be assumed or an equivalent Award shall be substituted by such successor corporation of the Merger/Sale or any parent or Affiliate thereof as determined by the Board in its discretion (the "Successor Corporation"), under substantially the same terms as the Award;

For the purposes of this Section 14.2.1, the Award shall be considered assumed if, following a Merger/Sale, the Award confers on the holder thereof the right to purchase or receive, for each Share underlying an Award immediately prior to the Merger/Sale, either (i) the consideration (whether stock, cash, or other securities or property) distributed to or received by holders of Shares in the Merger/Sale for each Share held on the effective date of the Merger/Sale (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares), which may be subject to vesting and other terms as determined by the Committee in its discretion, or (ii) regardless of the consideration received by the holders of Shares in the Merger/Sale, solely shares (or their equivalent) of the Successor Corporation at a value to be determined by the Committee in its discretion, which may be subject to vesting and other terms as determined by the Committee in its discretion. The foregoing shall not limit the Committee authority to determine, in its sole discretion, that in lieu of such assumption or substitution of Awards for Awards of the Successor Corporation, such Award will be substituted for any other type of asset or property, including under Section 14.2.2 hereunder.

- 14.2.2. In the event that the Awards are not assumed or substituted by an equivalent Award, then the Committee may (but shall not be obligated to), in lieu of such assumption or substitution of the Award and in its sole discretion, (i) provide for the Grantee to have the right to exercise the Award, or otherwise for the acceleration of vesting of such Award, as to all or part of the Shares, including Shares covered by the Award which would not otherwise be exercisable or vested, under such terms and conditions as the Committee shall determine, including the cancellation of all unexercised Awards upon closing of the Merger/Sale; and/or (ii) provide for the cancellation of each outstanding Award at the closing of such Merger/Sale, and payment to the Grantee of an amount in cash as determined by the Committee to be fair in the circumstances (with full authority to determine the method for making such determination, which may be Black-Scholes model or any other method, and which determination shall be conclusive and binding on all parties), and subject to such terms and conditions as determined by the Committee.
- 14.2.3. Notwithstanding the foregoing, in the event of a Merger/Sale, the Committee may determine, in its sole discretion, that upon completion of such Merger/Sale, the terms of any Award be otherwise amended, modified or terminated, as the Committee shall deem in good faith to be appropriate, and if an Option Award, that the Option Award shall confer the right to purchase or receive any other security or asset, or any combination thereof, or that its terms be otherwise amended, modified or terminated, as the Committee shall deem in good faith to be appropriate. Neither the authorities and powers of the Committee under this Section 14.2.3, nor the exercise or implementation thereof, shall (i) be restricted or limited in any way by any adverse consequences (tax or otherwise) that may result to any holder of an Award, and (ii) as, inter alia, being a feature of the Award upon its grant, be deemed to constitute a change or an amendment of the rights of such holder under this Plan, nor shall any such adverse consequences (as well as any adverse tax consequences that may result from any tax ruling or other approval or determination of any relevant tax authority) be deemed to constitute a change or an amendment of the rights of such holder under this Plan.

14.3. Reservation of Rights. Except as expressly provided in this Section 14, the Grantee of an Award hereunder shall have no rights by reason of any subdivision or consolidation of shares of any class or the payment of any stock dividend (bonus shares), any other increase or decrease in the number of shares of any class or by reason of any dissolution, liquidation, Merger/Sale, or consolidation, divestiture or spin-off of assets or shares of another company. Any issue by the Company of shares of any class, or securities convertible into shares of stock of any class, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number, type or price of shares subject to an Award. The grant of an Award pursuant to the Plan shall not affect in any way the right of power of the Company to make adjustments, reclassifications, reorganizations or changes of its capital or business structures or to merge or to consolidate or to dissolve, liquidate or sell, or transfer all or part of its business or assets or engage in any similar transactions.

## 15. NON-TRANSFERABILITY OF AWARDS; SURVIVING BENEFICIARY.

- 15.1. All Awards granted under the Plan shall not be transferable otherwise than by will or by the laws of descent and distribution. Awards may be exercised or otherwise realized, during the lifetime of the Grantee, only by the Grantee or by his guardian or legal representative, to the extent provided for herein. Any transfer of an Award not permitted hereunder (including transfers pursuant to any decree of divorce, dissolution or separate maintenance, any property settlement, any separation agreement or any other agreement with a spouse) and any grant of any interest in any Award by, any party other than the Grantee shall be null and void and shall not confer upon any party or person, other than the Grantee, any rights. A Grantee may file with the Committee a written designation of a beneficiary on such form as may be prescribed by the Committee and may, from time to time, amend or revoke such designation. If no designated beneficiary survives the Grantee, the executor or administrator of the Grantee's estate shall be deemed to be the Grantee's beneficiary. Notwithstanding the foregoing, upon the request of the Grantee and subject to Applicable Law the Committee, at its sole discretion, may permit to transfer the Award (other than an Incentive Stock Option) to a family trust.
- 15.2. As long as the Shares are held by the Trustee in favor of the Grantee, all rights possessed by the Grantee over the Shares are personal, and may not be transferred, assigned, pledged or mortgaged, other than by will or laws of descent and distribution.

#### 16. CONDITIONS UPON ISSUANCE OF SHARES

16.1. Legal Compliance. Shares shall not be issued pursuant to the exercise of an Award, unless the exercise of such Award and the issuance and delivery of such Shares shall comply with Applicable Laws as determined by counsel to the Company. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, and the inability to issue Shares hereunder due to non-compliance with any Company policies with respect to the sale of Shares, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority or compliance shall not have been obtained or achieved. Shares issued pursuant to an Awards shall be subject to the Articles of Association of the Company and any other governing documents of the Company, including all policies, manuals and internal regulations adopted by the Company from time to time, as may be amended from time to time, including, without limitation, any provisions included therein concerning restrictions or limitations on transferability of Shares or grant of any rights with respect thereto and any provisions concerning restrictions on the use of inside information and other provisions deemed by the Company to be appropriate in order to ensure compliance with Applicable Laws, statutes and regulations.

16.2. <u>Investment Representations.</u> As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares, and make other representations as may be required under applicable securities laws if, in the opinion of counsel for the Company, such representations are required, all in form and content specified by the Company.

## 17. MARKET STAND-OFF

- 17.1. In connection with any underwritten public offering by the Company of its equity securities pursuant to an effective registration statement filed under the United States Securities Act of 1933, as amended or equivalent law in another jurisdiction, the Grantee shall not directly or indirectly, without the prior written consent of the Company or its underwriters, (i) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any Shares acquired under this Plan or any securities of the Company (whether or not such Shares acquired under this Plan), or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Shares acquired under this Plan, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Shares acquired under this Plan or such other securities, in cash or otherwise. Such restriction (the "Market Stand-Off") shall be in effect for such period of time following the effective date of the registration statement relating to such offering, as may be requested by the Company or such underwriters, however in any event, such period shall not exceed 180 days (in the case of the Company's first underwritten offering of its Shares) following the effective date of such registration statement; or 90 days (in the case of a registration statement thereafter).
- 17.2. In the event of a subdivision of the outstanding share capital of the Company, the declaration and payment of a stock dividend (distribution of bonus shares), the declaration and payment of an extraordinary dividend payable in a form other than stock, a recapitalization, a reorganization (which may include a combination or exchange of shares or a similar transaction affecting the Company's outstanding securities without receipt of consideration), a consolidation, a stock split, a spin-off or other corporate division, a reclassification or other similar occurrence, an adjustment in conversion ratio, any new, substituted or additional securities which are by reason of such transaction distributed with respect to any Shares subject to the Market Stand-Off, or into which such Shares thereby become convertible, shall immediately be subject to the Market Stand-Off.

- 17.3. In order to enforce the Market Stand-Off, the Company may impose stop-transfer instructions with respect to the Shares acquired under this Plan until the end of the applicable stand-off period.
- 17.4. The underwriters in connection with a registration statement so filed are intended <u>to be</u> third party beneficiaries of this Section 17 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

## 18. AGREEMENT BY GRANTEE REGARDING TAXES.

- 18.1. If the Committee shall so require, as a condition of exercise of an Award, the release of Shares by the Trustee or the expiration of the Restricted Period, a Grantee shall agree that, no later than the date of such occurrence, he will pay to the Company or make arrangements satisfactory to the Committee and the Trustee (if applicable) regarding payment of any applicable taxes of any kind required by Applicable Law to be withheld or paid.
- 18.2. ALL TAX CONSEQUENCES UNDER ANY APPLICABLE LAW WHICH MAY ARISE FROM THE GRANT OF ANY AWARDS OR THE EXERCISE THEREOF, THE SALE OR DISPOSITION OF ANY SHARES GRANTED HEREUNDER OR ISSUED UPON EXERCISE OF ANY AWARD OR FROM ANY OTHER ACTION OF THE GRANTEE IN CONNECTION WITH THE FOREGOING SHALL BE BORNE AND PAID SOLELY BY THE GRANTEE, AND THE GRANTEE SHALL INDEMNIFY THE COMPANY, ITS SUBSIDIARIES AND AFFILIATES AND THE TRUSTEE, AND SHALL HOLD THEM HARMLESS AGAINST AND FROM ANY LIABILITY FOR ANY SUCH TAX OR PENALTY, INTEREST OR INDEXATION THEREON. EACH GRANTEE AGREES TO, AND UNDERTAKES TO COMPLY WITH, ANY RULING, SETTLEMENT, CLOSING AGREEMENT OR OTHER SIMILAR AGREEMENT OR ARRANGEMENT WITH ANY TAX AUTHORITY IN CONNECTION WITH THE FOREGOING WHICH IS APPROVED BY THE COMPANY.

THE GRANTEE IS ADVISED TO CONSULT WITH A TAX ADVISOR WITH RESPECT TO THE TAX CONSEQUENCES OF RECEIVING OR EXERCISING AWARDS HEREUNDER. THE COMPANY DOES NOT ASSUME ANY RESPONSIBILITY TO ADVISE THE GRANTEE ON SUCH MATTERS, WHICH SHALL REMAIN SOLELY THE RESPONSIBILITY OF THE GRANTEE.

- 18.3. The Company or any Subsidiary or Affiliate may take such action as it may deem necessary or appropriate, in its discretion, for the purpose of or in connection with withholding of any taxes which the Company or any Subsidiary or Affiliate is required by any Applicable Law to withhold in connection with any Awards (collectively, "Withholding Obligations"). Such actions may include, without limitation, (i) requiring a Grantees to remit to the Company in cash an amount sufficient to satisfy such Withholding Obligations; (ii) subject to Applicable Law, allowing the Grantees to provide Shares to the Company, in an amount that at such time, reflects a value that the Committee determines to be sufficient to satisfy such Withholding Obligations; (iii) withholding Shares otherwise issuable upon the exercise of an Award at a value which is determined by the Committee to be sufficient to satisfy such Withholding Obligations; or (iv) any combination of the foregoing. The Company shall not be obligated to allow the exercise of any Award by or on behalf of a Grantee until all tax consequences arising from the exercise of such Award are resolved in a manner acceptable to the Company.
- 18.4. Each Grantee shall notify the Company in writing promptly and in any event within ten (10) days after the date on which such Grantee first obtains knowledge of any tax bureau inquiry, audit, assertion, determination, investigation, or question relating in any manner to the Awards granted or received hereunder or Shares issued thereunder and shall continuously inform the Company of any developments, proceedings, discussions and negotiations relating to such matter, and shall allow the Company and its representatives to participate in any proceedings and discussions concerning such matters. Upon request, a Grantee shall provide to the Company any information or document relating to any matter described in the preceding sentence, which the Company, in its discretion, requires.

18.5. With respect to 102 Non-Trustee Options, if the Grantee ceases to be employed by the Company or any Affiliate, the Grantee shall extend to the Company and/or its Affiliate with whom the Grantee is employed a security or guarantee for the payment of taxes due at the time of sale of Shares, all in accordance with the provisions of Section 102 of the Ordinance and the Rules.

## 19. RIGHTS AS A STOCKHOLDER; VOTING AND DIVIDENDS.

- 19.1. Subject to Section 11.7, a Grantee shall have no rights as a shareholder of the Company with respect to any Shares covered by the Award until the date of the issuance of a share certificate to the Grantee for such Shares. In the case of 102 Option Awards or 3(9) Option Awards (if such Share Options are being held by a Trustee), a the Trustee shall have no rights as a shareholder of the Company with respect to any Shares covered by such Award until the date of the issuance of a share certificate to the Grantee for such Shares for the Grantee's benefit, and the Grantee shall have no rights as a shareholder of the Company with respect to any Shares covered by the Award until the date of the release of such Shares from the Trustee to the Grantee and the issuance of a share certificate to the Grantee for such Shares. No adjustment shall be made for dividends (ordinary or extraordinary, whether in cash, securities or other property) or distribution of other rights for which the record date is prior to the date such share certificate is issued, except as provided in Section 14 hereof.
- 19.2. With respect to all Shares issued in the form of Awards hereunder or upon the exercise of Awards hereunder, the Grantee shall be entitled to receive dividends distributed with respect to such Shares, subject to the provisions of the Company's Articles of Association, as amended from time to time, and subject to any Applicable Law.
- 19.3. The Company may, but shall not be obligated to, register or qualify the sale of Shares under any applicable securities law or any other applicable law.

## 20. NO REPRESENTATION BY COMPANY.

By granting the Awards, the Company is not, and shall not be deemed as, granting any representation or warranties to the Grantee regarding the Company, its business affairs, its prospects or the future value of its Shares.

#### 21. NO RETENTION RIGHTS.

Nothing in the Plan or in any Award granted or agreement entered into pursuant hereto shall confer upon any Grantee the right to continue in the employ of, or be in a consultant, advisor, director, officer or supplier relationship with, the Company or any Subsidiary or Affiliate or to be entitled to any remuneration or benefits not set forth in the Plan or such agreement or to interfere with or limit in any way the right of the Company or any such Subsidiary or Affiliate to terminate such Grantee's employment or service. Awards granted under the Plan shall not be affected by any change in duties or position of a Grantee as long as such Grantee continues to be employed by, or be in a consultant, advisor, director, officer or supplier relationship with, the Company or any Subsidiary or Affiliate.

#### 22. PERIOD DURING WHICH AWARDS MAY BE GRANTED

Awards may be granted pursuant to the Plan from time to time within a period of ten (10) years from the Effective Date. From the tenth (10th) anniversary of the Effective Date no grants of Awards may be made and the Plan shall continue to be in full force and effect solely with respect to such Awards that remain outstanding. The Plan shall terminate at such time after the tenth (10th) anniversary of the Effective Date that no Awards remain outstanding.

## 23. TERM OF AWARD

Anything herein to the contrary notwithstanding, but without derogating from the provisions of Sections 6.7, 6.8 or 8.2 hereof, if any Award, or any part thereof, has not been exercised and the Shares covered thereby not paid for within the term of the Award as determined by the Committee, which in any event shall not exceed ten (10) years after the date on which the Award was granted, as set forth in the Notice of Grant in the Grantee's Award, such Award, or such part thereof, and the right to acquire such Shares shall terminate, and all interests and rights of the Grantee in and to the same shall expire. In the case of Shares held by a Trustee, the Grantee shall elect whether to release such Shares from trust or sell the Shares and upon such release or sale such trust shall expire.

## 24. AMENDMENT AND TERMINATION OF THE PLAN.

The Board at any time and from time to time may suspend, terminate, modify or amend the Plan, whether retroactively or prospectively; provided, however, that, unless otherwise determined by the Board, an amendment which requires shareholder approval in order for the Plan to continue to comply with any Applicable Law shall not be effective unless approved by the requisite vote of shareholders, and provided further that except as provided herein, no suspension, termination, modification or amendment of the Plan may adversely affect any Award previously granted, unless the written consent of the respective Grantee is obtained.

#### APPROVAL.

- 25.1. The Plan shall take effect upon its adoption by the Board (the "Effective Date"), except that solely with respect to grants of Incentive Stock Options the Plan shall also be subject to approval within one year of the Effective Date, by a majority of the votes cast on the proposal at a meeting or a written consent of shareholders. Failure to obtain approval by the shareholders shall not in any way derogate from the valid and binding effect of any grant of an Award, which is not an Incentive Stock Option. Upon approval of the Plan by the shareholders of the Company as set forth above, all Incentive Stock Options granted under the Plan on or after the Effective Date shall be fully effective as if the shareholders of the Company had approved the Plan on the Effective Date. Notwithstanding the foregoing, in the event that approval of the Plan by the shareholders of the Company is required under Applicable Law, in connection with the application of certain tax treatment or pursuant to applicable stock exchange rules or regulations or otherwise, such approval shall be obtained within the time required under the Applicable Law.
- 25.2. The 102 Awards are subject to the approval, if required, of the ITA and receipt by the Company of all approvals thereof.

## 26. RULES PARTICULAR TO SPECIFIC COUNTRIES

Notwithstanding anything herein to the contrary, the terms and conditions of the Plan may be amended with respect to a particular country by means of an appendix to the Plan, and to the extent that the terms and conditions set forth in any appendix conflict with any provisions of the Plan, the provisions of the appendix shall govern. Terms and conditions set forth in the Appendix shall apply only to Award granted to a Grantee under the jurisdiction of the specific country that is the subject of the appendix and shall not apply to Awards issued to a Grantee not under the jurisdiction of such country. The adoption of any such appendix shall be subject to the approval of the Board or Committee, and if required in connection with the application of certain tax treatment, pursuant to applicable stock exchange rules or regulations or otherwise, then also the approval of the shareholders of the Company at the required majority.

#### 27. GOVERNING LAW; JURISDICTION.

The Plan and all determinations made and actions taken pursuant hereto shall be governed by the laws of the State of Israel, except with respect to matters that are subject to tax laws, regulations and rules in any specific jurisdiction, which shall be governed by the respective laws, regulations and rules of such jurisdiction. Certain definitions, which refer to laws other than the laws of such jurisdiction, shall be construed in accordance with such other laws. The competent courts located in Tel-Aviv-Jaffa, Israel shall have exclusive jurisdiction over any dispute arising out of or in connection with this Plan and any Award granted hereunder, and by signing any agreement relating to an Award hereunder each Grantee irrevocably submits to such exclusive jurisdiction.

## 28. NON-EXCLUSIVITY OF THE PLAN.

Neither the adoption of the Plan by the Board nor the submission of the Plan to shareholders of the Company for approval (to the extent required under Applicable Law), shall be construed as creating any limitations on the power or authority of the Board to adopt such other or additional incentive or other compensation arrangements of whatever nature as the Board may deem necessary or desirable or preclude or limit the continuation of any other plan, practice or arrangement for the payment of compensation or fringe benefits to employees generally, or to any class or group of employees, which the Company or any Subsidiary now has lawfully put into effect, including, without limitation, any retirement, pension, savings and stock purchase plan, insurance, death and disability benefits and executive short-term or long-term incentive plans.

## MISCELLANEOUS.

- 29.1. <u>Additional Terms.</u> Each Award awarded under the Plan may contain such other terms and conditions not inconsistent with the Plan as may be determined by the Committee, in its sole discretion.
- 29.2. Severability. If any provision of the Plan or any Award Agreement shall be determined to be illegal or unenforceable by any court of law in any jurisdiction, the remaining provisions hereof and thereof shall be severable and enforceable in accordance with their terms, and all provisions shall remain enforceable in any other jurisdiction. In addition, if any particular provision contained in this Agreement shall for any reason be held to be excessively broad as to duration, geographic scope, activity or subject, it shall be construed by limiting and reducing such provision as to such characteristic so that the provision is enforceable to fullest extent compatible with the applicable law as it shall then appear.
- 29.3. <u>Captions and Titles</u>. The use of captions and titles in this Plan or any Option Agreement, Restricted Share Agreement or other Award related agreement is for the convenience of reference only and shall not affect the meaning of any provision of the Plan or such agreement.

Exhibit 8.1

# SUBSIDIARIES

SubsidiaryJurisdictionCompugen USA, Inc.Delaware

Exhibit 12.1

#### CERTIFICATION PURSUANT TO RULE 13a-14(a)/RULE 15d-14(a) UNDER THE EXCHANGE ACT AND SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

#### I, Dr. Anat Cohen-Dayag, certify that:

- 1. I have reviewed this annual report on Form 20-F of Compugen Ltd.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
- a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- c. evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d. disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
- a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 21, 2013

/s/ Dr. Anat Cohen Dayag Title: President and Chief Executive Officer

Exhibit 12.2

### CERTIFICATION PURSUANT TO RULE 13a-14(a)/RULE 15d-14(a) UNDER THE EXCHANGE ACT AND SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

#### I. Dikla Czaczkes Axselbrad, certify that:

- 1. I have reviewed this annual report on Form 20-F of Compugen Ltd.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
- a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- c. evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d. disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
- a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 21, 2013

/s/ Dikla Czaczkes Axselbrad Title: Chief Financial Officer

Exhibit 13.1

# CERTIFICATION PURSUANT TO RULE 13a-14(b)/RULE 15d-14(b) UNDER THE EXCHANGE ACT AND 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report of Compugen Ltd. (the "Company") on Form 20-F for the fiscal year ended December 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company, certify, pursuant to Rule 13a-14(b)/Rule 15d-14(b) under the Securities Exchange Act of 1934, as amended and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to such officer's knowledge:

- The Report fully complies with the requirements of Sections 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and 1.
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date:

/s/ Dr. Anat Cohen-Dayag
Title: President and Chief Executive Officer

/s/ Dikla Czaczkes Axselbrad Chief Financial Officer March 21, 2013 Title: Date:

March 21, 2013

Exhibit 15.1

## Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-13144 and 333-169239) pertaining to the Employee's stock option plan of Compugen Ltd. and Registration Statement on Form F-3 (Nos. 333-171655 and 333-185910) of our report dated March 21, 2013, with respect to the consolidated financial statements of Compugen Ltd. and the effectiveness of internal control over financial reporting of Compugen Ltd. included in the Annual Report on Form 20-F of Compugen Ltd. for the year ended December 31, 2012.

March 21, 2013 Tel-Aviv, Israel /s/ KOST FORER GABBAY & KASIERER A Member of Ernst & Young Global