COMPUGEN LTD
Form 20-F
March 14, 2012
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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, 2011

OR

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

OR

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

DATE OF EVENT REQUIRING THIS SHELL COMPANY REPORT _____

COMMISSION FILE NO. 005-60609

_____

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

_____

Israel
(Jurisdiction of incorporation or organization)

72 Pinchas Rosen Street, Tel Aviv, 69512 Israel
(Address of principal executive offices)

_____

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:
Ordinary Shares, par value New Israeli Shekels 0.01 per share
(Class of Securities)

NASDAQ
Capital Market
(Name of Exchange)

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:

34,707,622 Ordinary Shares

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

¨ Yes x No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

o Yes x No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days:

x Yes o No

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

x Yes o No

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

Large accelerated filer o Accelerated filer x Non-accelerated filer o

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

U.S. GAAP x

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

Other ¨

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

Item 17 ¨ Item 18 ¨

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

¨ Yes x No

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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”, “expect”, “anticipate” “could”, “project”, “estimate”, “believe”, and “intend”, and describe opinions abo events. We have based these forward-looking statements on information available to us on the date hereof, and on our current 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”.

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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 for and as of the five years ended December 31, 2011, 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, 2011 and 2010 and for the years ended December 31, 2011, 2010 and 2009 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, 2009, 2008 and 2007 and for the years ended December 31, 2008 and 2007 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, | | | | |
|---|---|---|---|---|---|
| | 2007 | 2008 | 2009 | 2010 | 2011 |
| Consolidated Statement of Operations Data | | | | | |
| Revenues | $180 | $338 | $250 | $1,115 | $- |
| Total operating expenses (1) | 12,640 | 13,243 | 7,879 | 8,769 | 11,979 |
| Operating loss | (12,460) | (12,912) | (7,629) | (7,878) | (11,979) |
| Financial and other income (expenses), net | 1,002 | 401 | 3,786 | 675 | (25) |
| Losses from continuing operations | (11,490) | (12,511) | (3,843) | (7,203) | (12,004) |
| Gain (loss) from discontinued operations | (624) | (16) | 12 | - | - |
| Net loss | (12,114) | (12,527) | (3,831) | (7,203) | (12,004) |
| Basic and diluted net loss per share from continuing operations | $(0.41) | $(0.44) | $(0.13) | $(0.22) | $(0.35) |
| Basic and diluted net loss per share | $(0.43) | $(0.44) | $(0.13) | $(0.22) | $(0.35) |
| Weighted average number of ordinary shares used in computing basic and diluted net loss per share | 28,266,273 | 28,434,946 | 28,608,317 | 33,284,017 | 34,276,697 |

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| | Year ended December 31, (US$ in thousands, except share and per share data) | | | | |
|---|---|---|---|---|---|
| | 2007 | 2008 | 2009 | 2010 | 2011 |
| Consolidated Balance Sheet Data | | | | | |
| Cash and cash equivalents, short-term bank deposits, marketable securities and restricted cash | $ 15,200 | $ 7,481 | $ 15,800 | $ 22,508 | $ 22,463 |
| Receivables on account of shares and from funding arrangement (2) | - | - | 7,790 | 5,000 | - |
| Investment in Evogene | 510 | 3,858 | 3,898 | 6,227 | 4,093 |
| Long-term bank deposits and marketable securities | 2,080 | - | - | - | - |
| Total assets | 21,666 | 14,244 | 30,185 | 36,458 | 29,081 |
| Research and development funding arrangements | - | - | - | 4,037 | 6,150 |
| Accumulated deficit | (144,926) | (157,453) | (161,284) | (168,487) | (180,491) |
| Total shareholders' equity | $17,285 | $10,003 | $27,398 | $28,285 | $19,581 |

(1) Includes stock based compensation – see Note 13 of our 2011 consolidated financial statements.
(2) Includes for 2009, receivables from “at-the-market” sales of ordinary shares during such year, and for 2010, receivables with respect to a research and development funding arrangement entered into during such year.

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 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 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.

Risk Factors Related to our 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 and research revenues, milestones and 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 the early, proof of concept stage. Furthermore, these initial collaborations were based on product candidate discoveries, both therapeutics and diagnostics, that were made during the process of establishing our predictive discovery capabilities prior to having a sufficient integrated and broadly applicable infrastructure of such capabilities to allow a "therapeutic needs" driven discovery process. Consistent with this new discovery process, during 2010, a program was initiated to take certain oncology and immunology therapeutic product candidates forward in the preclinical stage prior to licensing or other collaborations for such product candidates (our "Pipeline Program"). To date, revenues related to our initial collaborations have been minimal, and we have no revenues from our new Pipeline Program and no revenue at all during 2011. We cannot be certain this business model will generate a stable or significant revenue stream. The inability to derive adequate revenues from our business model would significantly impede improvement in our operating results and liquidity or even result in the need to limit or even discontinue our business operations.

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

As of December 31, 2011, we had an accumulated deficit of approximately $180 million and had incurred net losses of approximately $4 million in 2009, approximately $7 million in 2010 and approximately $12 million in 2011. The accumulated deficit results in large part from our primary focus from 1997 to 2004 on research and infrastructure building activities and then, beginning in 2005 to 2010, on the development, validation and integration of discovery platforms incorporating predictive modeling of various biological phenomena, with each such platform designed to identify novel biologic molecules of a specific type or for a specific purpose. To date, we have received only minimal current revenues from our commercialization efforts with respect to molecules discovered during this infrastructure building period, and we may continue to incur net losses in the future due to the costs and expenses associated with our research and discovery activities, including our more recently initiated "therapeutic needs" focused product candidate discovery, our increasing Pipeline Program activities, and the development, validation and integration of additional discovery platforms. Commercial arrangements with respect to Pipeline Program molecules are projected at the preclinical stage of such product candidates, and therefore, to date no such arrangements have been established. 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 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 a significant portion of our R&D expenditures to broadening and deepening our scientific infrastructure. We intend to continue to do so, although such allocation was less during 2011 than in previous years due to emphasis during 2011 on furthering our Pipeline Program, as further described herein. If for any reason in the future we are unable to continue to allocate sufficient funding to discovery infrastructure building, our discovery ability relative to others would likely be lessened, with a negative impact on our operating results or even with a need to limit or discontinue our business operations.

Our Pipeline Program will require additional resources that may not be available, as a result of which we may attempt to license out certain molecules at a very early stage, or not be able to license out such molecules at all.

In 2010 we initiated our Pipeline Program pursuant to which we intend to both (i) substantially increase the number of predicted and selected therapeutic candidates being evaluated by us, and (ii) take selected therapeutic candidates beyond their validation stage (of either disease animal model for protein therapeutics or drug target expression profile for monoclonal antibody ("mAb") targets) into preclinical activities for protein therapeutics or to disease animal model for a therapeutic mAb to the targets. Assuming a similar level of success in the initial validation stages as we experienced in the past, 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 may need to raise additional funds in the future. If we do and are unable to raise such needed additional funds, we may need to curtail or cease operations, and if we do raise additional funds, to the extent such funding is based on the sale of equity, our existing shareholders are likely to experience dilution of their shareholdings.

As of December 31, 2011, we had total cash and cash equivalents and short-term bank deposits of approximately $22.4 million, compared with approximately $21.8 million as of December 31, 2010; the amount for December 31, 2011 does not include an amount of $6 million, that we expect to receive from Baize pursuant to the Baize mAb Funding Agreement (each as defined below), and in both cases, the amount does not include the market value of the Evogene Ltd. ordinary shares that we hold. 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.

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. (the "Cantor Sales Agreement"). In accordance with the terms of the Cantor Sales 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. Under the terms of the Cantor Sales Agreement, 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. If we sell shares to Cantor Fitzgerald & Co. as principal, we will enter into a separate agreement setting forth the terms of such transaction, and we will describe the agreement in a separate prospectus supplement or pricing supplement.

As of March 12, 2012 we sold through the Cantor Sales Agreement an aggregate of 551,000 of our ordinary shares, and received gross proceeds of approximately $3.3 million, before deducting issuance expenses.

There is no assurance that we will be able to sell additional shares covered under the Cantor Sales Agreement or raise other capital under this shelf registration. If we raise additional funds by issuing equity securities or convertible securities, we expect that our shareholders will experience dilution of their shareholdings. If we are unable to obtain additional financing on commercially reasonable terms, pursuant to these or other arrangements, we may have to curtail or cease our discovery and validation activities, or restrict or even cease operations.

We cannot provide any assurance that additional funding, if needed, will be available on terms that are favorable to us, if at all. Our ability to obtain additional funding will be subject to a number of factors, including market conditions, our business progress and investor sentiment

Under the Funding Agreements with Baize Investments (Israel) Ltd. ("Baize") entered in December 2010 and December 2011, we may have to share any future economic success of certain product candidates, and may dilute the holdings of our current shareholders.

On December 29, 2010, we entered into a funding agreement with Baize under which Baize provided us with $5 million in support of our Pipeline Program (the "Pipeline Funding Agreement"). In exchange, Baize received (i) the right to receive ten percent (which amount may be reduced under certain circumstances) (the "Pipeline Program Participation Rights") of certain cash consideration received by us pursuant to any licenses for the development and commercialization of products developed from five designated product candidates currently in our Pipeline Program, and (ii) warrants for 500,000 of our ordinary shares, exercisable at $6 per share through June 30, 2013. In addition, at any time through June 30, 2013, Baize may waive in its entirety its right to receive the Pipeline Program Participation Rights in exchange for 833,333 of our ordinary shares.

On December 20, 2011, we entered into a second funding agreement with Baize, under which Baize agreed to provide us with $8 million (the "mAb Investment Amount") in partial support of the monoclonal antibody portion of our Pipeline Program (the "mAb Funding Agreement", and with the Pipeline Funding Agreement, the "Funding Agreements"). In exchange, Baize received the right to receive a financial interest (the "mAb Participation Interest") in certain product candidates that achieve specific milestones or have been licensed out, prior to December 31, 2014. The mAb Investment Amount is to be paid in three installments: $2 million was paid on December 21, 2011, $3 million is to be paid on or before June 30, 2012 and $3 million is to be paid on or before September 30, 2012. In the event such payments are not made, we have the right to cancel in its entirety the mAb Participation Interest by issuing to Baize our ordinary shares, at a value of $6 per share, equivalent to the funds actually invested, to such point. Notwithstanding anything in the second funding agreement, Baize has the right, during the first quarter of 2014, to waive its rights to the mAb Participation Interest in exchange for 1,455,000 of our ordinary shares.

If Baize does not complete its payment obligations by making the two additional installments of the mAb Investment Amount as described above, we will either (a) have to utilize other cash resources to make up the shortfall, thus negatively impacting the financial strength of the Company and/or increasing the probability that the Company will need to raise additional capital or (b) slow down or discontinue certain planned activities for the Pipeline Program or otherwise.

If any one or all five pipeline product candidates designated under the Pipeline Funding Agreement, or any or all of the relevant mAb product candidates under the mAb Funding Agreement are successfully licensed, developed or commercialized, and Baize has not elected to waive its Pipeline Program Participation Rights under the related respective agreement as set forth above, we will need to provide Baize with a percentage of certain related cash consideration received by us, thus reducing the amount of revenues from such transactions remaining for the benefit of our shareholders. On the other hand, in the event that, prior to June 30, 2013, Baize chooses to exchange its Participation Rights for 833,333 ordinary shares according to the Pipeline Funding Agreement and/or in the event that during the first quarter of 2014, Baize chooses to waive its rights to the mAb Participation Interest in exchange for 1,455,000 of our ordinary shares in accordance with the mAb Funding Agreement, our then existing shareholders will be diluted by any such shares issued to Baize.

If we are unable to continue to receive research and development grants, our financial results may be negatively impacted and we may need to restrict certain research activities.

We have received research and development grants from the Office of the Chief Scientist of the Israeli Ministry of Industry, Trade and Labor (the "OCS"), and from the European Community, under the European Union's 6th Framework Program. In 2011, the grants we received totaled approximately $424,000 compared with approximately $1 million in 2010 and approximately $944,000 in 2009. Our entitlement to receive these grants is dependent on, among other things, our compliance with the various grants' respective terms and conditions. In addition, the Office of the Chief Scientist may reduce or eliminate these benefits in the future. Our contingent liability to repay these grants out of future revenues totaled approximately $11.2 million at December 31, 2011. If we do not comply with the terms and conditions of the grants or if we do not succeed in obtaining these or similar grants in the future, we may have to restrict certain research activities.

Risk Factors Related to our Discovery and Development Activities and to the Commercialization of our Discoveries

We are focusing our discovery activities on therapeutic protein and monoclonal antibody drug targets for use in oncology and immunology, including both auto-immune and inflammatory disease. If we fail to create product candidates of industry interest in these fields, or to focus on the most promising 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 therapeutic protein and monoclonal antibody drug targets for use in oncology and immunology, including both auto-immune and inflammatory conditions. By making this decision we have elected not to continue any internal development of diagnostic products and peptide based drugs, and to pursue such opportunities only in collaboration with third parties. In order to successfully focus our discovery efforts on unmet market needs in these fields, we will need to integrate our proprietary discovery platforms, tools and systems towards this end, and will likely need to create in many cases additional infrastructure components that relate to these specific fields. There are many risks associated with this decision of focusing in these areas that include, among others:

- the risk of not using all of our capabilities;
- choosing fields with a very high degree of competition;
- a lack of certain relevant knowledge in the fields of immunology or oncology, in selecting the right unmet needs or candidates, or in integrating our platforms and tools in order to discover novel product candidates in these fields;
- we may not be able to make the necessary enhancements of our capabilities and related technologies in order to compete successfully within the pharmaceutical and biotechnology industries; and
- any or all of our focus decisions may prove to be incorrect and if so, cause us to be unsuccessful in our discovery and development activities, and limit our chances of success have we chosen otherwise.

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

Our predictive discovery capabilities remain unproven with respect to yielding marketable products. If we fail to continue to develop and enhance our discovery capabilities, or we fail to make novel discoveries, or focus on the most promising discoveries, our business will likely be materially harmed.

Our proprietary predictive discovery capabilities are designed to predict and select potential product candidates in many different therapeutic and diagnostic areas of interest. To date, the validation of our initial predicted and selected product candidates has been limited to in-vitro and in-vivo (including animal disease models) testing and no human testing has yet been undertaken. Furthermore, the discovery capabilities utilized to predict and select these product candidates, including the individual discovery platforms, rely on the modeling, by our scientists, of complex biological processes, both physiological and pathological. This modeling is partial and might not be sufficient to result in true predictions to the biological processes as they occur naturally. Even if we make true or partially true predictions, we might be able only to repeat discoveries already made by others and not be able to make novel discoveries. This may result either from relying on data already used by others or by developing capabilities already developed, wholly or partially by others, or from inherent incapacity of such capabilities. In addition, since our research and discovery resources are limited we might be able to progress with only a fraction of our discoveries. During the initial validation activities of our Pipeline Program, we assess on an on-going basis which discoveries to validate based on various scientific and business criteria. If we or our partners fail to select the right candidates to validate and/or progress with, due to either lack of experience or applying the wrong criteria, the selected candidates may never result in a marketable product. Additionally, we may not be able to make the necessary new developments and enhancements to our discovery capabilities in order to compete successfully within the pharmaceutical and biotechnology industries. If any of these risks materialize, our business, financial condition and results of operations may be materially harmed.

If either the predictive discovery approach in general, or our therapeutic 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 therapeutic 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 previously. 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. Each of these platforms incorporates the predictive modeling of various biological phenomena, with each such platform designed to identify novel biologic molecules of a specific type, or for a specific purpose.

Although our therapeutic needs (market) driven approach resulted in the discovery of a number of novel molecules in an area of high industry interest, we have limited experience with this approach for our discovery efforts. Therefore, we cannot predict whether this therapeutic needs (market) driven approach will continue to yield product candidates or that any of our existing discoveries or future discoveries will be suitable for development into therapeutic products. If either the predictive discovery approach in general does not prove to be successful, or this therapeutic 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 early stage licensing.

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. Under the Pipeline Program, the Company has undertaken a substantial increase in the number of molecules being validated, with more than 30 such molecules currently in the pipeline. In addition, certain molecules are now being advanced further towards pre-clinical activities. During 2010, we decided that for the next few years we would emphasize our Pipeline Program and allocate a substantial portion of our R&D activities to this activity. This decision to advance further with certain molecules will require 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, or fewer molecules being available for early stage licensing, due to our available resources being insufficient to advance all programs. If any of these risks materialize, our business, financial condition and results of operations may be materially harmed.

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 therapeutic and diagnostic 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 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.

We rely on the services of various third party service providers, contract research organizations (CRO's), contract manufacturing organizations (CMOs) and academia. If we will fail to identify and obtain quality services from such third parties, our discovery and validation capabilities may be harmed.

In carrying out our discovery and validation of therapeutic and diagnostic product candidates, we rely on the services of various third party service providers, CRO's and academia for production of certain biological reagents and performance of certain in-vitro or animal model validation of our discoveries. In advancing our candidates through certain required preclinical studies towards the generation of an IND-enabling package, we rely on the services of various third party service providers, such as CRO's, CMOs and various regulatory consultants. If we will fail to identify and obtain quality services from such third parties, or if the contractual demands of such third parties become unreasonable and we are not be able to reach satisfactory agreements with such third parties, we may not be able to obtain the required services, in which event our discovery and validation capabilities may be harmed.

We have no experience in conducting, managing, or sponsoring preclinical work for purposes of generating an IND enabling submission package.

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 beyond proof of concept experimental validation towards the generation of an IND enabling package. We have no experience in conducting, managing, or sponsoring the work and efforts required beyond the proof of concept experimental validation stage towards the generation of an IND enabling package, and by doing so we will need to rely on our consultants, and other third party service providers. If we fail to identify the right consultants or service providers, or fail to take the necessary steps towards generating an IND enabling submission package our business may be harmed.

If we are unable to attract and retain qualified scientists, staff consultants and advisors, our ability to implement our research and development capabilities and business plan may be adversely affected.

We are highly dependent upon certain of our scientific and business consultants and advisors. The loss of the service of these persons may significantly delay or prevent our achievement of product development and other business objectives. We may be unable to attract and retain suitably qualified individuals, and our failure to do so could have an adverse effect on our ability to implement our research and development capabilities and business plan.

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 product candidates, 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 all of the required experience and expertise in the development and commercialization of therapeutic product candidates, we may be unsuccessful in our discovery and development activities, and as a result our business may be materially harmed.

A number of the mAb targets we discovered are now approaching the point where further advancement will require the development of mAbs against them. Therefore, we plan to establish our own therapeutic mAbs development capabilities. If we fail to do so our business may be harmed.

In late 2011, we announced that we plan to establish our own therapeutic mAb development capabilities, in order to further develop and validate the mAb targets candidates that we discovered. The establishment of such in-house capabilities contains a number of risks, including, without limitation, our lack of experience in the field of therapeutic mAbs development, the need for additional resources and funding in order to maintain such capabilities and the need to identify qualified and suitable employees and consultants in order to establish and advance these capabilities. If we fail to establish such therapeutic mAb development capabilities, or even if we are successful is establishing these capabilities but are not successful in choosing the right product candidates to be developed, our business is likely to be harmed.

Our business model consists of three commercialization pathways, each of which is at an early stage of implementation and none of which has to date provided significant revenues.

The success of our business model relies on providing, through licensing agreements and other forms of collaboration, drug product candidates to 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 advance payments or research revenues, milestone payments and revenue-sharing amounts from all products developed and commercialized by third parties based on our product candidates. We currently employ three different commercialization approaches. The first commercial pathway involves seeking third parties interested in the development and commercialization of certain product candidates in our Pipeline Program. The second pathway relates to the discovery of future product candidates at the request of third parties in areas of interest to them. The third pathway involves seeking third parties interested in the development and commercialization of product candidates identified by us that are not part of our Pipeline Program. During 2011, we entered into three of such agreements with respect to our platform validation stage discoveries; however, there can be no assurance that these three agreements will be successful or that we will be able to enter into additional arrangements with respect to other platform validation stage discoveries. In addition, each of these commercialization pathways is at an early stage of implementation and none of which has to date provided significant revenues. If we are unable to achieve success with these three pathways or to enter into agreements with sufficient future returns, our business will be materially harmed.

We depend significantly on third parties to carry out the development and commercialization of our therapeutic and diagnostic 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 strategy for the development and commercialization of therapeutic and diagnostic products based on our product candidates depends on the formation of relationships with third parties that have the necessary capabilities to carry out these tasks. We depend on others to carry out and/or finance development and commercialization of therapeutic and diagnostic 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 to be performed by us, and development and commercialization rights granted to others with respect to certain of our validation stage product candidates. None of the product candidates covered by such agreements have, advanced beyond the validation stage of our product candidates. We cannot assure you that any of these agreements will result in the successful development or commercialization of any products based on our discoveries. 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, such as licensing-out or co-development, 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 product candidates to which they have obtained rights from us.

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

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.

We are required to negotiate agreements containing terms unique to each licensee and collaborator and which suit each collaborator's specific discovery, development and business strategies. The accommodation of these requirements mandates a thorough consideration of both the scientific and business aspects of each transaction. The diversity and wide applicability of our discovery capabilities in therapeutics and diagnostics, together with the fact that we are located in Israel, adds a high level of complexity to our business development efforts. As a result, the process of preparing and negotiating our licensing and other agreements may take 12 months or longer, and even then may end in failure to reach a final agreement. These business development and related commercial activities require the input and substantial time and effort of our key scientific and management personnel.

As a result, we believe that we will need to continue to expend substantial funds and substantial management 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.

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

We face a number of risks of failure that are inherent in the process of developing and commercializing therapeutic and diagnostic products. These risks include, among others, the possibility that:

- our therapeutic product candidates will be found to be pharmacologically ineffective;

- our therapeutic product candidates will be found to be toxic or to have other detrimental side effects;

- our diagnostic product candidates will prove to be ineffective in distinguishing between healthy and disease samples or in providing information relating to a patient's response to a drug;
- Our mAb targets will prove to be inappropriate targets for mAb therapeutics;
- we or our collaborators will fail to receive applicable regulatory approvals;
- we or our collaborators will fail to manufacture our product candidates in the quantity or quality needed for preclinical or clinical trials on a large scale in a cost effective manner;
- 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 in the market, there will be little or no demand for it as a result of its exclusion from health funds' reimbursement schemes or as a result of there being alternative products available for sale.

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

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 develop will be subject to extensive governmental regulations, including those relating to development, clinical trials, manufacturing and commercialization. Rigorous preclinical testing and clinical trials and an extensive regulatory review process must be successfully completed in the United States and in many foreign jurisdictions before a new therapeutic product can be sold. 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 ("FDA") and other approvals for therapeutic products is unpredictable but typically exceeds several years. 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 begin selling 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. 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. Therefore, approval by the FDA of a therapeutic product does not assure approval by regulatory authorities outside the United States or vice versa.

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 our ability to market and sell diagnostics and therapeutics and may harm our 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 could be subject to enforcement actions, which could affect the ability to successfully develop, market and sell diagnostic or therapeutic products and could harm our reputation and lead to reduced acceptance of such products by the market. These enforcement actions may include:

- warning letters;

- recalls, public notification 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 approve new or pending applications;
- withdrawal of product approvals;
- product seizures;
- 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. 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 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.

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

The biotechnology and pharmaceutical industries 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 that 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. We also face, and expect to continue to face, competition from entities that seek to develop technologies that enable the discovery of novel therapeutic 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 their tests and products than we, our collaborators, or third party licensees are, which could adversely affect our competitive position and business. For information about the specific competitors with whom we compete, see “Competition” under “Item 4. Information on the Company.”

If we are unable to compete successfully against existing or potential competitors, our financial results and business may 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, will depend in part on the extent to which coverage and reimbursement for the products based on our product candidates will be available from government and health administration authorities, private health insurers and other third-party payors. Changes in healthcare policy, in particular the continuing efforts of the U.S. and foreign governments, insurance companies, managed care organizations and other payors of health care services to contain or reduce health care costs may adversely affect our ability to set consideration for our services which we believe are fair, and our ability to generate revenues and achieve and maintain profitability.

In March 2010, the President of the United States signed the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or the Healthcare Reform Act. This law substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts our industry. 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, reimbursement changes and fraud and abuse, which will impact existing government healthcare programs and will result in the development of new programs.

In addition, other legislative changes have been proposed and adopted since the Healthcare Reform Act was enacted. Most recently, on August 2, 2011, the President of the United States signed into law the Budget Control Act of 2011, which, among other things, creates the Joint Select Committee on Deficit Reduction to recommend proposals in spending reductions to the United States Congress. The Joint Select Committee did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, triggering the United States' legislation's automatic reduction to several government programs, including aggregate reductions to Medicare payments to providers, starting in 2013.

In addition to the Healthcare Reform Act and the Budget Control Act of 2011, 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 will have on our business, current and future healthcare reform legislation and policies could have a material adverse effect on our business and financial condition.

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. This consolidation trend may 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. In addition, if a consolidating company is already doing business with us, we may lose the interest of the consolidating parties in our discovery capabilities or individual discoveries as a result of a modified strategy and new priorities of such consolidated entity.

This trend may adversely affect our ability to enter into agreements for the development and commercialization of our product candidates, and as a result may harm our business.

Risk Factors 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 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 proprietary information or cause interruptions in our operations. A party who has access to our proprietary data could misappropriate such data, make unauthorized use of or unintentionally destroy all or part of such proprietary data. 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 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. We believe our procedures for storing, handling and disposing these materials in our facilities comply with the relevant guidelines of the State of Israel, and since the amounts of hazardous materials that we store and hold are small, we do not believe there is an environmental risk associated with this storing and handling of hazardous materials but rather a risk related to the safety of our employees. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards mandated by applicable regulations, the risk 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.

Risk Factors 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 our 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, 2012 we had a total of 29 issued patents, of which 26 are U.S. patents. We also have pending patent applications which as of January 1, 2012 include 31 patent applications that have been filed in the United States and four 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, including for related inventions such as antibodies and peptides, but we cannot assure you that any of our patent applications will be accepted, or that they will be accepted to the extent that we seek. Additionally, we file for patent protection in selected countries and not in all countries of the world. Therefore, we are exposed to competition in those countries in which we have no patent protection. Also, due to our early stage business model, we may be required to seek patent protection at a very early stage. This may cause 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 genes, we face intense competition from other biotechnology and pharmaceutical companies who have already sought patent protection relating to gene-based discoveries that we may intend to develop and commercialize;
- 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; early stage filing may lead to a shorter commercialization period under patent protection and increased competition;

- even if we succeed in obtaining patent protection, our patents could be partially or wholly invalidated, including by our competitors; and

    - there are significant costs that may need to be incurred in registering and filing 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 will likely be materially harmed.

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

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 and diagnostic 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. If we become aware of the existence 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. 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 US and other countries may affect our ability to obtain and enforce our patents.

Recently, the US 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 US 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.

Increased progress in our 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 knowledge is available for 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 unknown 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.

Timing of filing of our patent applications may result in reduced patent rights.

Filing of a first patent application, or priority application, for a given therapeutic product candidate, controls the life span of any resultant patents. If we file a patent application too early, the resultant patent may expire before the given therapeutic or diagnostic product candidate reaches the market. We may also be unable to obtain a patent due to the inclusion of too little experimental data or we may fail to describe an important feature of the given therapeutic or diagnostic product candidate. If we file a patent application too late, other prior publications may prevent us from obtaining a patent or obtaining a patent of sufficient breadth to protect a given therapeutic or diagnostic product candidate.

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

We also rely on trade secrets, know-how and technology, which are not protected by patents, to maintain our competitive position. In order to protect our proprietary technology and processes, we also 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.

Risk Factors Related to our Ordinary Shares

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

There is a risk that we may be classified as a passive foreign investment company, or PFIC. Our treatment as a PFIC could result in a reduction in the after-tax return of U.S. holders of our ordinary shares and may cause a reduction in the value of our shares. For U.S. federal income tax purposes, we will generally be classified as a PFIC for any taxable year in which either: (i) 75% or more of our gross income is passive income or (ii) at least 50% of the average value (determined on a quarterly basis) of our total assets for the taxable year produce or are held for the production of passive income. Based on our analysis of our income, assets, activities and market capitalization, we do not believe that we were a PFIC for the taxable year ended December 31, 2011. 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 regardless of whether we were a PFIC for 2011. However, if we were not a PFIC for 2011, U.S. holders who acquired our ordinary shares in 2011 will not be subject to the PFIC rules unless we are classified as a PFIC in future years. The tests for determining PFIC status are applied annually and it is difficult to make accurate predictions of our future income, assets, activities and market capitalization, which are relevant to this determination. If we were determined to be a PFIC for U.S. federal income tax purposes, highly complex rules would apply to U.S. holders owning our ordinary shares and such U.S. holders could suffer adverse U.S. tax consequences. For more details on our PFIC status see "Item 10. United States Federal Income Tax Considerations – Tax Consequences if We Are a Passive Foreign Investment Company."

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 predict our revenues.

Our ability to generate revenues from collaboration and licensing activities for current and future product candidate discoveries, primarily in the form of fees, milestones, research revenues and revenue sharing payments remains untested to date and we have received only minimal revenues from our initial collaborations, having recognized $250,000 of such revenue in 2009, $1.1 million of such revenue in 2010 and none in 2011. Furthermore, only in 2010 did we implement our Pipeline Program pursuant to which we intend to advance certain therapeutic product candidates past disease animal model proof of concept or other validation studies further towards pre-IND activities, and have no experience with respect to the financial terms that may be available at this stage of development. 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 fee, milestone, research revenue and revenue sharing payments from the licensing and commercialization of our product candidate discoveries, or from research and discovery collaborations, and therefore on the advisability of investing in our securities.

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 2010 and 2011, our stock price on NASDAQ has traded from a low of $3.04 to a high of $5.80 and trading volume has been 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 revenues and other 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 and will not be 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.

Risk Factors Relating to Operations in Israel

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

Our offices and 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 (“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 2009 and 2010 the dollar devaluated against the NIS (by 0.7% and 6.0%, respectively), however in 2011 the dollar appreciated against the NIS (by 7.7%), and as a result our NIS denominated expenses were lower than anticipated. 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 (3.9%, 2.7% and 2.2% in 2009, 2010 and 2011, respectively) has not had a material adverse effect on our financial condition during 2009, 2010 or 2011. For more information, see Note 2 of our 2011 consolidated financial statements.

We may not continue to be entitled to certain tax benefits.

Our operation has been granted an “Approved Enterprise” and “Privileged Enterprise” status by the Investment Center in the Israeli Ministry of Industry, Trade and Labor that resulted in our currently being eligible for tax benefits under the Israeli Law for Encouragement of Capital Investments, 1959, as amended. The availability of these tax benefits, however, is subject to certain requirements, including, among other things, making specified investments in fixed assets and equipment, financing a percentage of those investments with our capital contributions, compliance with our

marketing program which was submitted to the Investment Center, filing of certain reports with the Investment Center and compliance with Israeli intellectual property laws. If we do not meet these requirements in the future, these tax 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 linkage differentials to the Israeli Consumer Price Index and interest, or other monetary penalty. The tax benefits that we anticipate receiving under our current "Approved Enterprise" and "Privileged Enterprise" programs may not be continued in the future at their current levels or at all.

For more information, see "Item 5. Operating and Financial Review and Prospects; Operating Results; Governmental Economic, Fiscal, Monetary or Political Policies that Materially Affected or Could Materially Affect Our Operations". 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 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 special 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. For example, a merger may not be consummated unless at least 50 days have passed from the date that a merger proposal was filed by each merging company with the Israeli Registrar of Companies and at least 30 days have passed from the date that the shareholders of both merging companies approved the merger. In addition, a majority of each class of securities of the target company must approve a merger. Moreover, a full tender offer can only be completed if (i) the (X) shareholders who decline or do not respond to the offer hold less than 5% of the company's outstanding share capital or of the relevant class of shares offered to be purchased and (Y) the majority of offerees who do not have a personal interest in the acceptance of the offer accept the offer, or (ii) the shareholders who decline or do not respond to the offer hold less than 2% of the company's outstanding share capital or of the relevant class of shares. Generally the shareholders who had their shares so purchased including those who indicated their acceptance of the tender offer, may, at any time within six months following the acceptance of the tender offer, petition the court to alter the consideration for the acquisition.

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. For example, Israeli tax law does not recognize tax-free share exchanges to the same extent as U.S. tax law. With respect to mergers, Israeli tax law allows for tax deferral in certain circumstances but makes the deferral contingent on the fulfillment of various conditions, including a holding period of two years from the date of the transaction during which sales and dispositions of shares of the participating companies are restricted. Moreover, with respect to certain share swap transactions, the tax deferral is limited in time, and when such time expires, the tax becomes payable even if no actual disposition of the shares has occurred.

Furthermore, under the Israeli Encouragement of Research and Development in the Industry Law, 1984 as amended ("R&D Law"), to which we are subject due to our receipt of OCS grants (as described above), 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.

For information about these limitations, see “Anti-Takeover Provisions under Israeli Law” under “Item 10. Additional Information.”

We receive 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 payment of certain percentages to the OCS out of the amounts we receive as a result of the transfer of such rights

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 Securities Exchange Act of 1934, as amended, or 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. Similarly, NASDAQ's rules require that compensation of the chief executive officer and other executive officers must be determined either by independent directors constituting a majority of the board of directors or by a compensation committee comprised solely of independent directors. However, we have opted to follow our home country practice with respect to certain approvals (See Item 16G. "Corporate Governance"). 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.

## ITEM 4. INFORMATION ON THE COMPANY

### A. HISTORY AND DEVELOPMENT OF THE COMPANY

History

We were incorporated under the laws of the State of Israel on February 10, 1993 as Compugen Ltd., an Israeli company. Our legal and commercial name is Compugen Ltd. We were established as a corporation and have operated under the laws of the State of Israel since 1993 and in particular the Israeli Companies Law, 5759-1999, as amended (the "Companies Law"). 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 two wholly owned subsidiaries: Compugen Inc. which was incorporated in Delaware in March 1997 and is qualified to do business in New Jersey and California, and Keddem Ltd. which was established in August 2004.

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, 2011, we held 1,043,397 Evogene ordinary shares representing approximately 2.9% 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 to our wholly owned subsidiary Keddem Ltd. and were then suspended in

2007.

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 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 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'1s commercial arrangements with their current status ranging from in silico selection to post animal model proof of concept validation. In addition, Baize has the right, until June 30, 2013, to waive its right to receive Pipeline 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 sales agreement with Cantor (the "Cantor Sales Agreement") 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 as per our effective shelf registration filed with the Securities and Exchange Commission on Form F-3 (File No. 333-171655). Sales of our ordinary shares under the registration statement and the accompanying prospectus 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.

As of March 12, 2012 we sold through the Cantor Sales Agreement an aggregate of 551,000 of our ordinary shares, and received gross proceeds of approximately $3.3 million, before deducting issuance expenses.

mAb Development Funding Baize Agreement

On December 20, 2011, we entered into the mAb Funding Agreement with Baize, pursuant to which Baize agreed to invest $8 million 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 mAb Investment Amount is to be paid in three installments: $2 million has been paid on December 21, 2011, $3 million is to be paid on or before June 30, 2012 and $3 million to be paid on or before September 30, 2012. In the event such payments are not made, we have the right to cancel in its entirety the mAb Participation Interest by issuing to Baize Compugen ordinary shares at a value of $6 per share, equivalent to the cash actually invested, to such point.

As part of the Compugen Goldman Program, the mAb product candidates are to be developed against 12 specified Compugen-discovered 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 during the next three years 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 12 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, Baize has 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.

Recent Operating Developments

During 2010 we began planning and initiating our Pipeline Program to both substantially increase the number of product candidates in our validation pipeline and to advance selected molecules beyond their proof of concept stage. The Pipeline Program is focused in the field of protein therapeutics and mAb therapy in oncology and immunology and consists of more than 30 product candidates in different stages of validation. Under the Pipeline Program, newly discovered molecules enter the program when they begin experimental evaluation following their in silico prediction and selection. The Pipeline Program consists of in-vitro and in-vivo experimental validation, followed by various

preclinical activities for selected molecules towards the pre-IND stage. As part of our decision to focus our discovery efforts on therapeutic proteins and drug targets for mAb therapy in immunology and oncology, during 2011 we decided to cease such efforts with respect to peptide therapeutics other than to the extent potentially useful in our focus areas.

It is our intent, in general, to license out - or enter into other collaborations with our product candidates - towards the end of these product candidates' Pipeline Program activities, although in specific cases we may choose to further develop some molecules, or enter into collaborations at an earlier stage, as we have done in the past.

Principal Capital Expenditures

In the years ended December 31, 2011, 2010 and 2009, our capital expenditures were $96,000, $46,000 and $48,000, respectively, and were spent primarily on laboratory equipment, computer software and hardware and leasehold improvements. We have no current significant commitments for capital expenditures.

B. BUSINESS OVERVIEW

Overview

We are 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. 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. 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. 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 advanced in our Pipeline Program to the pre-IND stage. 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 more than 30 therapeutic product candidates at various stages, ranging from validation to pre-clinical studies. The aim of the Pipeline Program is to substantially increase the number of in house discovered protein therapeutics and mAb targets in the fields of immunology and oncology in our validation pipeline and to advance selected molecules beyond their 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, eventually with selected molecules being advanced toward pre-IND 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 will be undertaken followed by the generation of a therapeutic mAb 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 activities, will then enter the stage of lead candidate selection and optimization. It is our intent, in general, to license out - or enter into other collaborations with our product candidates - towards the end of these product candidates' Pipeline Program activities, although in specific cases we may choose to either take some molecules for further development, or enter into collaborations at an earlier stage.

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 huge 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 capabilities 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 key discovery infrastructure platforms, LEADS and MED, 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 provides 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 two key infrastructure platforms, LEADS and MED, 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, while MED provides a broad analysis of the expression levels of genes across a wide variety of tissues and disease states. 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 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 public 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.

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. The validation of individual discovery platforms results in a large number of initial technology

driven discoveries discussed below in - Discoveries: Technology Driven Approach and Commercialization. Compugen's current individual discovery capabilities include:

- Disease-Associated Conformation Blockers: This platform utilizes multi-organism proteome-wide sequence and secondary structure information along with certain evolutionary concepts, such as co-evolving mutations, to predict protein regions that should interact with one another in the event of certain disease associated protein conformations. Query algorithms are utilized to predict peptides that should block these interactions.

- GPCR Therapeutic Peptide Ligands: This platform utilizes the LEADS predicted peptidome, which includes tens of thousands of novel peptide sequences predicted to be endogenous human peptides. For this capability, a key query algorithm is a classifier algorithm created to identify peptides related to GPCRs.

- Intracellular Drug Delivery (IDD): This platform utilizes the LEADS predicted proteome and a machine learning classifier to identify novel peptide sequences that are predicted to have the potential to penetrate the cell membrane and therefore may allow drug delivery into the cell.

- mAb Target Discovery: This platform relies on both the LEADS and MED infrastructure platforms and utilizes query algorithms focused on the predicted proteins integrated with statistical analysis of both expression and clinical data provided by these platforms.

- New Indications: This platform integrates the MED infrastructure with additional data sources, such as known or predicted protein networks, gene regulation data, known or predicted associations between genes and pathologies and other experimental results. Specific queries are utilized to predict new indications for existing drugs.

- Non-SNP Drug Response Markers: This platform relies on integrating human genomic data and is based on concepts and tools developed in the building of the LEADS infrastructure. Specific query algorithms are utilized to both predict non-SNP genetic variations in the human genome and to associate them with specific conditions of interest (e.g. response to a drug) that could serve as potential drug response or disease predisposition markers.

- Nucleic-Acid Disease Markers: The LEADS and MED infrastructure platforms are used to create an integrated database of expression data with both predicted and known RNA sequence data. Query algorithms relating to the pathological condition of interest, such as a specific type of cancer, are used to predict RNA sequences as potential disease markers for that condition.

- Nucleic-Acid Preclinical Toxicity Markers: This platform relies on the LEADS infrastructure in combination with specific gene expression experiments. Biomarker specific query algorithms for the toxicity of interest are used to identify potential drug-induced toxicity biomarkers for the early detection of such toxicity in preclinical trials.

- Protein Disease Markers: Data from the LEADS and MED infrastructure platforms are integrated to create a database of all predicted proteins with their expression data. Pathological condition specific query algorithms are used to analyze this database to select proteins that are predicted to be biomarkers for that condition.

- Protein Family Members: 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 or function, the set of query algorithms designed for this platform first discovers 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. Query algorithms were generated to predict peptides to interfere with these 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.

- Viral Peptides: This platform relies on the use of LEADS to create a predicted integrated viral peptidome by combining data from various viral genomes. Query algorithms based on evolutionary concepts are used to identify viral peptides which are predicted to be utilized by viruses in order to subvert the human immune system.

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 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 "therapeutic needs" driven approach, which would harness all of our capabilities against each such unmet medical need, and not rely 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 focus areas whereby they would be developed and commercialized by third parties, but with Compugen sharing in any future revenues. See Commercialization – Third Commercialization pathway – Validation-based discoveries.

Therapeutic Needs (Market) Driven Discovery

Focus Area –Immunology & Oncology

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 immunomodulators.

A key capability for this effort was the development and initial use of our Protein Family Members Discovery Platform for the discovery of novel protein members belonging to various known and clinically important protein families. This discovery platform incorporates two of Compugen's 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. 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 therefore are expected to have significant therapeutic potential in many pathological conditions, including autoimmune diseases and cancer. This analysis resulted in the identification of several putative B7/CD28-like proteins, among those disclosed are CGEN-15001T, CGEN-15022, and CGEN-15092 and their respective fusion proteins consisting of their extracellular region fused to an Fc molecule are CGEN-15001, CGEN-15021 and CGEN-15091 respectively. 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, CGEN-15021 and CGEN-15091, have also been validated and shown to have beneficial effects in animal models of autoimmune diseases. The experimental data on CGEN-15001, CGEN-15021, and CGEN-15091 demonstrate their therapeutic potential in treatment of autoimmune diseases and inflammatory conditions, such as multiple sclerosis and rheumatoid arthritis. The respective membrane proteins CGEN-15001T, CGEN-15022 and CGEN-15092 have also shown initial results as mAb targets for cancer immunotherapy.

Another of our initial therapeutic need driven discovery programs was aimed at the identification of novel cancer targets for mAb therapy, including drug resistant and advanced stage cancer. Novel cancer targets, such as cell signaling receptors 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, which relies heavily on Compugen's LEADS and MED infrastructures and incorporates query algorithms focused on the integrated statistical analysis of both expression and clinical data within the infrastructure and has resulted to date in multiple discoveries. 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.

Pipeline Program

Overview

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. In October 2010, we announced that approximately 20 novel molecules had entered the Pipeline Program, in addition to eight molecules, including CGEN 15001, that had already successfully completed animal disease model or similar therapeutic proof of concept validation studies. Since then additional candidates were added to the program, both novel targets for monoclonal antibody therapeutics and therapy proteins. This brings the current total number of molecules in the Pipeline Program to more than 30 at various stages of evaluation.

The Pipeline Program is focused on protein and mAbs therapeutics in the fields of immunology and oncology. Selection of these focus areas is based on our "therapeutic 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. We are harnessing all of our broad in-silico discovery capabilities using the best approaches and methods against each such discovery objective. This is in contrast to validation based or "technology driven" discoveries that are made as part of the validation of specific discovery platforms, in which we rely on single discovery platforms.

Our initial efforts with respect to "therapeutic needs" (market) driven discovery were focused on the B7/CD28 co-stimulatory family, 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 for the success of this effort. The discovery by Compugen of CGEN-15001T, a new B7/CD28 like protein, created the opportunity to develop a therapeutic protein, CGEN-15001, which demonstrates therapeutic potential in animal models of autoimmune diseases and to use CGEN-15001T as a target for mAb therapy in solid and hematological cancers.

The initial successful results of our immunomodulatory 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 have 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 drug targets in the field of oncology and/or as protein therapeutics in immunology.

As announced during 2011, and consistent with our decision to seek commercial arrangements for certain of our initial technology driven discoveries that were outside our focus areas, certain peptide product candidates in the Pipeline Program were licensed to BiolineRx to advance their development towards Phase II clinical studies. Research on an additional peptide product candidate continues at the University of Pittsburgh with grant support from the Pulmonary Fibrosis Foundation. These "technology driven" discoveries were made as part of the predictive platforms validation process and successfully underwent proof of concept studies in animal models. However, since these, and other product candidates resulting from our initial discoveries, are not in the focus areas of biological therapies for oncology or immunology, they were not selected for further development within the Pipeline Program. Research and development activities on these product candidates will continue without further financial investment by Compugen by organizations with experience and knowhow in the relevant areas. Pursuant to arrangements that the Company enters into, Compugen will share any future revenues related to these product candidates.

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 Fc 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) and ORENCIA® (abatacept). Compugen's therapeutic proteins pipeline includes CGEN-15001 disclosed in 2010, and CGEN-15021 and CGEN-15091, which were disclosed in 2011. 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.

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, fused to an antibody Fc domain. The existence and potential function of CGEN-15001T were predicted in silico by us utilizing the Protein Family Members Discovery Platform. In vitro CGEN-15001 inhibits T cell activation and also the differentiation of the pro-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 an animal model of multiple sclerosis, short term treatment with CGEN-15001 at onset of remission results in dramatic long-term inhibition of disease symptoms and abolishment of 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. 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, CGEN-15001 showed efficacy similar to that observed through TNF-alpha blockade with TNFR-Fc, ENBREL®, a widely used biologic disease modifying anti-rheumatic drug. CGEN-15001 also decreased damage to the inflamed joint as shown by histological analysis suggesting its potential as a disease modifying agent. 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-15021 is a novel fusion protein with demonstrated efficacy in animal models of autoimmune disorders. CGEN-15021 is an Fc fusion protein consists of the extracellular domain of CGEN-15022, a protein discovered by Compugen to be B7/CD28-like 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 animal models of multiple sclerosis and potential in treating additional autoimmune diseases. It is an Fc fusion protein consists 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.

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. 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-928, CGEN-15022 and CGEN-15092. 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.

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 protein. The B7/CD28 protein family is known to be involved in regulation of the immune system in immune related disorders and in cancer. Protein expression studies indicate that CGEN-15001T is expressed on numerous types of cancer, such as carcinomas, sarcomas, melanoma and hematological cancers as well as on immune cells residing within the tumor. An antibody specifically recognizing CGEN-15001T demonstrated CGEN-15001T's expression in various solid cancers such as prostate cancer, melanoma, hepatocellular carcinomas, pancreatic islet cell carcinomas, and also in hematological malignancies such as Hodgkin's lymphoma, and T and B cell lymphomas. Also, the expression of CGEN-15001T was observed in various subpopulations of immune cells, mainly macrophages and mast cells, in both tumor and normal tissue samples. This expression profile suggests a potential immunomodulatory role for CGEN-15001T in cancer therapy. This was further demonstrated by preclinical data obtained with CGEN-15001, which is the extracellular domain of CGEN-15001T fused to an Fc antibody fragment. In these studies CGEN-15001 was shown to inhibit activation of T cells, promote Th1/Th2 shift, and potentially induce immune tolerance, suggesting that this protein may help the cancer "silence" the immune responses towards the cancer cells. Blocking this function of CGEN-15001T through therapeutic antibodies should remove the suggested silencing effect of CGEN-15001T on the tumor, and therefore enable the immune system to attack and destroy the tumor. A therapeutic antibody against CGEN-15001T has the potential to attack cancer cells through three key mechanisms. One mechanism is by direct targeting and killing of the cancer cells expressing CGEN-15001T. Since CGEN-15001T is expressed on numerous cancers, an antibody against CGEN-15001T has therapeutic potential for various cancer indications. Another mechanism of the therapeutic antibody may be achieved by blocking the inhibition of the immune system induced by CGEN-15001T, whether expressed on the cancer cells and/or the immune cells within the tumor. And third, the mAb for CGEN-15001T may promote the immune system component which acts against the tumor (Th1), while inhibiting the component which promotes the cancer (Th2).

CGEN-928, a new drug target for the treatment of multiple myeloma (“MM”) is a membrane protein which was predicted through the use of Compugen’s Monoclonal Antibody 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. A few initial studies demonstrated that a polyclonal antibody which specifically recognizes CGEN-928, decreases MM tumor cell proliferation and induces apoptosis and shows a potential synergistic effect when combining with each of three existing MM standard of care drugs (bortezomib, melphalan, and dexamethasone), compared with the drugs alone. Additional experimental validation results are required in order to support the therapeutic potential of this mAb target.

CGEN-15022 and CGEN-15092 are two novel B7-like proteins which were discovered through the Protein Family Members Discovery Platform. Their immunomodulatory activity with the respective fusion proteins, CGEN-15021 and CGEN-15091, demonstrated inhibition of T cell activation and beneficial effects in animal disease models. Together with the initial results demonstrating that these targets are overexpressed in cancer, makes them appropriate targets for cancer immunotherapy through mAb therapeutics.

CGEN-671 a new drug target for treatment of multiple epithelial tumors, is a membrane splice variant of CD55, a known drug target for gastric cancer. CGEN-671 was predicted in silico through the use Compugen’s Monoclonal Antibody Targets Discovery Platform suggesting a potential role as a drug target for clinical development of various types of mAb drug therapy for epithelial derived tumors. Experimental validation results testing the therapeutic potential of this molecule are inconclusive and warrant further testing, which is currently being completed by the Company.

Commercialization

We are currently employing three pathways for commercialization. The first pathway involves entering into licensing and partnerships, the second involves entering into research and discovery collaborations and the third involves

arrangements with respect to our validation-based or technology driven discoveries made in areas that are currently not in our focus.

First Commercialization pathway – Licensing and Partnerships - This path is comprised of our attempts to enter into licensing and partnering transactions in relation to our Pipeline Program product candidates. In these arrangements we intend to participate in the further development of the partnered programs to the stage of IND-enabling package . Potential revenue sources in such arrangements include upfront fees, research funding, milestones payments and royalties. In some cases these agreements will include an option for license, and option exercise fee and license fees.

Second Commercialization pathway – Research and Discovery Collaborations - This path is aimed at harnessing our infrastructure capabilities towards the partners' discovery needs. In these arrangements we will combine our discovery approaches to identify novel proteins and/or targets according to the specific unmet need of our partner. Potential revenue sources in these types of transactions, may include upfront fees, research funding, option exercise and license fees, milestone payments and royalties.

Third Commercialization pathway – Validation-based discoveries – This path relates to a number of promising discoveries that have significant potential in areas that are not in our focus, which we discover and validate as part of the development and validation activities associated with establishing and expanding our broadly applicable predictive discovery capabilities. During 2011, we have been in various discussions for arrangements with other organizations to advance certain of these discoveries, including a number related to potential peptide therapeutics, largely without the need for further Compugen financial resources. As a result of these discussions, we entered into the following agreements:

- During December 2011 we entered into a collaboration with BiolineRx for the purpose of developing and commercializing mutually selected Compugen discovered drug candidates that are not in our areas of focus, ranging from acute and chronic inflammatory diseases through cardiac diseases, retinopathy and cancer. According to this agreement, we will provide promising drug candidates, primarily peptides, which were identified 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. This collaboration has been initiated with the mutual selection of three peptides discovered by Compugen.

- During November 2011 we entered into a collaborative partnership with DiscoveRx Corporation ("DiscoveRx") for the purpose of commercializing our novel designed peptides to be matched with specific G protein-coupled receptor ("GPCR") targets utilizing DiscoveRx GPCR related technologies. This agreement was entered into following a successful pilot program between the two companies. Under the terms of the collaboration, DiscoveRx will utilize its PathHunter Platform as well as its extensive suite of additional proprietary cell based GPCR assays and related technologies to match individual peptides in the Compugen GPCR targeted peptide library with specific GPCR drug targets of interest to DiscoveRx's pharmaceutical company clients and others. Following these activities, peptides of interest will be available for licensing from Compugen under milestone and royalty bearing agreements. We have agreed with DiscoveRx to a revenue sharing financial model providing different pre-arranged sharing percentages for each category of revenue anticipated by the collaboration.

- During 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. In respect of our therapeutic product candidates, our potential competitors comprise companies that discover and develop therapeutic proteins and/or novel targets for monoclonal antibody therapy, such as FivePrime, Oxford BioTherapeutics, and Aveo.

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 the unique team of scientists from both disciplines who work together for more than eight years on average.

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 therapeutic and diagnostic 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 therapeutic and diagnostic potential product candidates. Subject to the following paragraph, as of January 1, 2012 we had a total of 29 issued patents of which 26 are U.S. patents. Subject to the following paragraph, as of January 1, 2012 we also had 79 pending patent applications, which include 31 patent applications that have been filed in the United States and four 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 therapeutic and diagnostic 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 potential. We routinely abandon patent applications and may choose to abandon maintenance of patents supporting candidates or projects that do not meet these criteria, and in view of the many projects at Compugen, we do not consider any individual patent or patent application, when considered alone, to be material to the Company.

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 Israeli laws and regulations 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 and other regulatory authorities have broad regulatory and enforcement powers, including the ability to suspend or delay issuance of approvals, seize or recall products, withdraw approvals, enjoin violations and institute criminal prosecution, among other things, in connection with such laboratory practices and the use of animals with our research. 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; Israeli Government Research and Development Programs."

Regulation of Therapeutic Product Candidates

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, 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 GCP regulations. 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 and must monitor the study until completed.

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. Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory standards is not maintained or if problems occur after the product reaches the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

Non-U.S. Regulations

In addition to regulations in the United States, we are subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our tests and products 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

Our research and discovery, business development and commercial operations are all carried out primarily from our Tel Aviv offices. In 1997, we incorporated our wholly-owned U.S. subsidiary, Compugen USA, Inc., and in January 2008, we established a wholly-owned UK subsidiary, Compugen UK Ltd. During 2010, our UK subsidiary was dissolved. During 2011, our US subsidiary had no significant activities.

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 in December 31, 2012. 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, 2011, and with any other selected financial data included elsewhere in this annual report.

Background

We are a 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 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 advanced in our Pipeline Program to the pre-IND stage. 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

Overview of Operating Results

We have incurred losses and our revenues may not increase over the next few years.

Since our inception, we have incurred significant losses and, as of December 31, 2011, we had an accumulated deficit of $180 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 $4 million in 2009, approximately $7 million in 2010 and approximately $12 million in 2011. We may continue to incur net losses in the future due in part to the costs and expenses associated with our research and discovery activities, including the building and validation of additional discovery platforms, and due to the delay in entering into commercial collaborations. 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 account for more than 60% of our total operating expenses.

Our net research and development expenses are expected to be our major operating expense in 2012, accounting for more than 60% of our expected total 2012 operating expenses. Our research and development expenses have always comprised a significant portion of our expenses.

In 2009, 2010 and 2011 these expenses continued to be, and we expect will continue to be, our largest operating expense.

Overview of Liquidity and Capital Resources.

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

Compensation expenses attributed to option grants.

We recorded compensation expenses of approximately $1.5 million in 2009, approximately $2.1 million in 2010 and approximately $3.4 million in 2011, in connection with the grant of share options. These expenses are attributable to options that we granted to our employees, management and directors and to those of our consultants to whom we granted stock options with an exercise price at the fair market value known on the date of grant. The fair value of these grants is amortized over the vesting periods of the individual share options. As of December 31, 2011, the total unamortized estimated compensation expenses related to options granted prior to that date was approximately $4.2 million. This estimate is subject to the amount of granted options at any given point in time. Our current policy is to grant options at the fair market value known on the date of grant. For more information, see Note 2n of our 2011 consolidated financial statements.

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"). ASC 718 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 income statement.

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 term "forfeitures" is distinct from "cancellations" or "expirations" and represents only the unvested portion of the surrendered option. We currently expect, based on analysis of our historical forfeitures, that between 90% to 93% of our employee options will actually vest, and therefore as of December 31, 2011, we have applied an annual forfeiture rate between 7% to 10% for all such options, assuming this percentage of options will not actually vest.

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 $1.5 million, $2.1 million and $3.4 million for the years ended December 31, 2009, 2010 and 2011 respectively.

Embedded Derivatives and Fair Value Measurements

ASC 820, “Fair Value Measurements and Disclosures” (“ASC 820”) defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required to be recorded at fair value, we consider the principal or most advantageous market in which it would transact and consider assumptions that market participants would use when pricing the asset or liability, such as inherent risk, transfer restrictions and risk of nonperformance.

ASC 820 also establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. ASC 820 establishes three levels of inputs that may be used to measure fair value:

Level 1 - quoted prices in active markets for identical assets or liabilities;

Level 2 - inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices in active markets for similar assets or liabilities, quoted prices for similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or

Level 3 - unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

We determine that the fair value of the investment in Evogene to be classified under Level 1 since it is based on quoted market prices.

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 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. The income approach 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 and 2011 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.

Commitments and Contingencies

We periodically estimate the impact of various conditions, situations and/or circumstances involving uncertain outcomes to our financial condition and operating results. These events are called “contingencies”, and the accounting treatment for such events is prescribed by the Statement of ASC 450, “Contingencies” (“ASC 450”). ASC 450 defines a contingency as “an existing condition, situation, or set of circumstances involving uncertainty as to possible gain or loss to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur”. Legal proceedings are a form of such contingencies.

We are not currently involved in any legal proceedings and are not required to assess the likelihood of any specific adverse judgments or outcomes of such proceedings or of any potential ranges of probable losses. A determination of the amount of any accruals, if required, for these contingencies would be made after careful analysis. For more information in relation to legal proceedings, see “Item 8. Financial Information; Consolidated Statements and Other Financial Information; Legal Proceedings.” It is possible, however, that future results of operations for any particular quarter or annual period could be materially affected by changes in our assumptions or as a result of the effectiveness of our strategies related to these legal proceedings.

Recently Issued Accounting Standards

In May 2011, the FASB issued ASU No. 2011-04, Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs. This pronouncement is an authoritative guidance to amend certain measurement and disclosure requirements related to fair value measurements to improve consistency with international reporting standards. This guidance is effective prospectively for public entities for interim and annual reporting periods beginning after December 15, 2011, with early adoption prohibited. The Company is currently evaluating the effect of ASU No. 2011-04, but does not expect its adoption will have a material effect on its consolidated financial statements.

In June 2011, the FASB issued ASU No. 2011-05, Comprehensive Income (Topic 220): Presentation of Comprehensive Income, which specifies that the total of comprehensive income, the components of net income and the components of other comprehensive income are to be presented in either a single continuous statement of comprehensive income or in two separate but consecutive statements. This update eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders’ equity. No change has been made in the items to be reported in comprehensive income. ASU No. 2011-05 is effective for the interim and annual periods beginning after December 15, 2011, and should be applied retrospectively. Early adoption is permitted. The Company is currently evaluating the effect of ASU No. 2011-05, but does not expect its adoption will have a material effect on its consolidated financial statements.

In December 2011, the FASB issued Accounting Standards Update 2011-12, “Comprehensive Income (Topic 220)”. The amendments in this Update supersede certain pending paragraphs in Accounting Standards Update 2011-05, Comprehensive Income (Topic 220): Presentation of Comprehensive Income, to effectively defer only those changes in Update 2011—5 that relate to the presentation of reclassification adjustments out of accumulated other comprehensive income. For public entities, the amendments are effective for fiscal years, and interim periods within those years,

beginning after December 15, 2011. The Company is currently evaluating the impact of this update on its consolidated financial statements.

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, | | |
|---|---|---|---|
| | 2009 | 2010 | 2011 |
| | (US$ in thousands, except share and per share data) | | |
| Consolidated Statements of Operations Data | | | |
| Revenues | $250 | $1,115 | $- |
| Cost of revenues | - | 224 | - |
| Research and development expenses | 5,995 | 6,237 | 7,202 |
| Less - governmental and other grants | (944) | (1,010) | (424) |
| Research and development expenses, net | 5,051 | 5,227 | 6,778 |
| Marketing and business development expenses | 681 | 633 | 610 |
| General and administrative expenses | 2,147 | 2,909 | 4,591 |
| Total operating expenses * | 7,879 | 8,769 | 11,979 |
| Operating loss | (7,629) | (7,878) | (11,979) |
| Financial income (expenses), net | 65 | 241 | (306) |
| Other income, net | 3,721 | 434 | 281 |
| Loss from continuing operations | (3,843) | (7,203) | (12,004) |
| Gain from discontinued operations | 12 | - | - |
| Net loss | $(3,831) | $(7,203) | $(12,004) |
| | | | |
| Basic and diluted net loss per share from continuing operations | (0.13) | (0.22) | (0.35) |
| Basic and diluted net loss per share | (0.13) | (0.22) | (0.35) |
| Weighted average number of shares used in computing basic and diluted net loss per share | 28,608,317 | 33,284,017 | 34,276,697 |

(*) Includes stock based compensation – see Note 13 of our 2011 consolidated financial statements.

| | As of December 31, | | |
|---|---|---|---|
| | 2009 | 2010 | 2011 |
| | (US$ in thousands) | | |
| Consolidated Balance Sheet Data: | | | |
| Cash and cash equivalents, short-term bank deposits and restricted cash | $15,800 | $22,508 | $22,463 |
| Receivables on account of shares and from funding arrangement * | 7,790 | 5,000 | - |
| Investment in Evogene | 3,898 | 6,227 | 4,093 |
| Trade receivables, other accounts receivable and pre-paid expenses | 720 | 569 | 546 |
| Total assets | 30,185 | 36,458 | 29,081 |
| Research and development funding arrangements | - | 4,037 | 6,150 |
| Accumulated deficit | (161,284) | (168,487) | (180,491) |
| Total shareholders' equity | 27,398 | 28,285 | 19,581 |

(*) Includes for 2009, receivables from “at-the-market” sales of ordinary shares during such year, and for 2010, receivables with respect to a research and development funding arrangement entered into during such year .

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 none 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 $1.1million 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 (expense), Net. Financial income (expense), 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 2011and 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. 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.

Years Ended December 31, 2010 and 2009

Revenues. Revenues increased from approximately $250,000 in 2009 to approximately $1.1 million in 2010. The increase is due to collaboration research services 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 collaboration research services agreement totaled approximately $224,000 for 2010 and zero for 2009.

Research and Development Expenses, Net. Research and development expenses, net increased by 3%, to approximately $5.2 million for 2010, from approximately $5.1 million for 2009. The increase in our research and development expenses, net, was primarily due to the devaluation of the US dollar against the New Israeli Shekel and increase in non-cash expense related to stock based compensation. Also, governmental and other research and development grants that we received and which are subtracted from research and development expenses when calculating research and development expenses, net, increased in 2010 compared with 2009. Research and development expenses, net, as a percentage of total operating expenses, decreased from 64% in 2009 to 60% in 2010.

Marketing and Business Development Expenses. Marketing and business development expenses decreased by 7% to approximately $633,000 in 2010 from approximately $681,000 in 2009. This decrease was due to the suspension of our US subsidiary activities and termination of our UK subsidiary activities at the beginning of 2009. Marketing and business development expenses, as a percentage of total operating expenses, decreased from 9% in 2009 to 7% in 2010.

General and Administrative Expenses. General and administrative expenses increased by 35% to approximately $2.9 million for 2010 from approximately $2.1 million for 2009. This increase was primarily due to non-cash expenses related to stock based compensation which totaled approximately $1.1 million for 2010 compared with approximately $656,000 for 2009. General and administrative expenses, as a percentage of total operating expenses, increased from 27% in 2009 to 33% in 2010.

Financial Income, Net. Financial income, net, increased to approximately $241,000 for 2010 from approximately $65,000 for 2009. This increase was primarily due to an increase in deposits of cash and cash related account balances generated from the sale of ordinary shares in an "at the market" offering on NASDAQ during the fourth quarter of 2009. This increase was partially offset by issuance expenses and change in fair value of the Funding Agreement signed in December 2010.

Other Income. Other income, net, decreased to $434,000 in 2010 compared to $3.7 million in 2009. This decrease was due to realized gain derived from the sale of a portion of our holdings of Evogene ordinary shares during 2009.

Governmental Policies that Materially Affected or Could Materially Affect Our Operations

In July 2009, the Israeli Parliament (the "Knesset") passed the Economic Efficiency Law (Amended Legislation for Implementing the Economic Plan for 2009 and 2010), 2009, which prescribes, among other things, an additional gradual reduction in Israeli corporate tax rate starting from 2011 to the following tax rates: 2011 - 24%, 2012 - 23%, 2013 - 22%, 2014 - 21%, 2015 - 20%, 2016 and thereafter - 18%. In December 2011, the Knesset passed the Law for Change in the Tax Burden (Legislative Amendments), (the "Tax Burden Law"). According to the Tax Burden Law, the rates of the Israeli corporate tax are as follows: 2010 - 25%, 2011 - 24%, 2012 and continuation - 25%. However, several investment programs have been granted Approved Enterprise or Privileged Enterprise status under which we are eligible for a reduced rate of corporate tax under the Law for the Encouragement of Capital Investments, 1959. Subject to compliance with applicable requirements, the portion of our profits that may be derived from the Approved Enterprise programs will be tax-exempt for a period of two years commencing in the first year in which we generate taxable income from the applicable Approved Enterprise. The portion of our profits that may be derived from our Approved Enterprise programs will be subject, for an additional period of five or eight years, to reduced corporate tax rates of between 10% and 25%. The tax rate within the range of 10% and 25% that may actually become payable is a function of the percentage of non-Israeli investors holding our ordinary shares. These reduced corporate tax rates will cease to apply upon the expiry of the earlier of twelve years from the time at which we attain a prescribed level of investment in our Approved Enterprise (known as "commencement of production") or 14 years from the date on which we received approval for an Approved Enterprise.

In December 2010, the Knesset passed the Law for Economic Policy for 2011 and 2012 (Amended Legislation), 2011, which prescribes, among others, amendments in the Law for the Encouragement of Capital Investments, 1959. 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 period of tax benefits with respect to our Approved Enterprise or Privileged 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, 2011, we had not generated any taxable income. As of December 31, 2011, our net operating loss carry-forwards for Israeli tax purposes amounted to approximately $143 million. Under Israeli law, these net operating losses may be carried forward indefinitely and offset against certain future taxable income.

At December 31, 2011, 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 2031.

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, Patents and Licenses; Research and Development Grants” in this Item 5 below.

Liquidity and Capital Resources

In 2011, our sources of cash came from:

- Cash generated from the sale and issuance of ordinary shares in an "at the market" offering on NASDAQ during the fourth quarter of 2009, a portion of which cash was received in 2010 and was used in 2011
- Proceeds from the research and development funding arrangements signed in December 2010 and December 2011
- Exercise of stock options
- Governmental and other grants
- Proceeds from sale of a portion of our holdings in Evogene's ordinary shares
- Financial income

We used these funds primarily to finance our business operations.

We expect that our sources of cash for 2012 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, 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 sales agreement with Cantor Fitzgerald & Co.

Net Cash Used in Operating Activities

Net cash used in operating activities was approximately $7.5 million in 2009, approximately $4.3 million in 2010 and approximately $9.2 million in 2011. The increase in 2011 was mainly attributed to the growth in research and development expenses for 2011 and relates primarily to increased activities under the Company's Pipeline Program. The main sources of cash used to support the operating activities during 2011 were cash held in our bank accounts, proceeds from research and development funding arrangements, governmental grants and cash from the exercise of stock options.

Net Cash Provided By Investing Activities

Net cash used in investing activities primarily consisted of investment in bank deposits offset by proceeds from maturity of deposits. Net cash generated by investing activities was approximately $5.7 million in 2009, compared with net cash used in investing activities of approximately $13.7 million in 2010 and approximately $1.2 million in 2011.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was approximately $12.2 million in 2009, approximately $10.1 million in 2010 and approximately $9.0 million in 2011. The principal sources of cash provided by financing activities in 2011 were proceeds received from the research and development funding arrangements signed in December 2010 and 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. As of December 31, 2011, we had total cash and cash equivalents and short-term bank deposits of approximately $22.4 million, not including the market value of the 1,043,397 shares of Evogene ordinary shares owned by the Company. 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 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 which became effective on January 21, 2011. On September 1, 2011 we filed a prospectus supplement in relation to the Cantor Sales Agreement.

As of March 12, 2012 we sold through the Cantor Sales Agreement an aggregate of 551,000 of our ordinary shares, and received gross proceeds of approximately $3.3 million, before deducting issuance expenses.

Research and Development, Patents and Licenses

We invest heavily in research and development. Research and development expenses, net, were our major operating expenses, representing approximately 60% of the total operating expenses for each of 2009, 2010 and 2011. Our research and development expenses, net, were approximately $6.8 million in 2011, compared to approximately $5.2 million in 2010, and approximately $5.1 million in 2009. As of December 31, 2011, 28 of our employees were engaged in research and development on a full-time basis. This represents approximately 72% 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 2012 our research and development expenses, net will continue to be our major operating expense, representing more than 60% of our total operating expenses.

We believe that our future success will depend, in large part, on our ability to discover of 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 participate or have participated in programs offered by OCS that supports research and development activities, and by the European Community, under the European Union's 6th Framework Program ("European Union"). We received grants and other forms of consideration from the OCS and European Union of approximately $944,000 in 2009 approximately $1 million in 2010, and approximately $424,000 in 2011. We have applied for an additional grant from the OCS for research and technological development for 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 commencement of receipt of revenue with respect to such products 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, 2011, our contingent obligation for royalties, based on royalty-bearing government grants, net of royalties already paid, totaled approximately $11.2 million payable out of future net sales of 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. Following legislative changes to Israeli legislation in 2005, 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 amount of funds granted. 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. 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 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. We believe that pharmaceutical and biotechnological companies are becoming more open to in-licensing product candidates at earlier stages of development, including at 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, 2011, and should be read together with the accompanying comments that follow.

| | Payments due by period (US$ in thousands) | | | | |
|---|---|---|---|---|---|
| | Total | Less than 1 year | 1-3 years | 3-5 years | More than 5 years |
| Operating Lease Obligations | $ 547 | $ 465 | $ 82 | $ - | $ - |
| Accrued Severance Pay Reflected on our Balance Sheet | 1,643 | - | - | - | 1,643 |
| Total | $ 2,190 | $ 465 | $ 82 | $ - | $ 1,643 |

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 sell products 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 receipt of funds 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 29, 2012:

| Name | Age | Positions |
|---|---|---|
| Prof. Yair Aharonowitz | 71 | Director(1)(2) |
| Prof. Ruth Arnon | 78 | Director |
| Martin S. Gerstel | 70 | Chairman of the board of directors |
| Dov Hershberg | 72 | Director |
| Alex Kotzer | 65 | Director |
| Arie Ovadia, Ph.D | 62 | Director(1)(2) |
| Prof. Joshua Shemer | 64 | Director(1)(2) |
| Anat Cohen-Dayag, Ph.D | 44 | President and Chief Executive Officer |
| Dikla Czaczkes Axselbrad | 38 | Chief Financial Officer |
| Zurit Levine | 44 | Vice President, Research & Discovery |
| Eyal Neria | 48 | Vice President Therapeutic Development |

(1) Qualifies as an external director pursuant to the Israeli Companies Law

(2) Member of our Audit Committee

Yair Aharonowitz, Ph.D. joined Compugen's board of directors as an external director in July 2007. 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 and a member of the Israeli Society 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 has served as Compugen’s Chairman of the board of directors since 1997, other than from February 2009 to February 2010, during which time he served as either CEO or co-CEO and, in both cases, as a member of the board of directors. Prior to Compugen, Mr. Gerstel was co-chairman and CEO of ALZA Corporation, which he helped found in 1968. Mr. Gerstel is the Chairman of Evogene Ltd., Keddem Bioscience, Mada Ltd., the co-founder and co-chairman of Itamar Medical, 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 Foundation. Mr. Gerstel holds a B.S. from Yale University and an MBA from Stanford University.

Dov Hershberg was appointed as a member of the 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. He is currently a founder and executive director of Powermat, a wireless electricity company. Prior to joining BIRD, Mr. Hershberg held various senior management positions in 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. He 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 has been serving as a director of Compugen since September 2005. From September 2005and 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 RegeneraPharma. Prior to joining Compugen, he served for twelve years at Serono (currently Merck Serono), a global biotechnology leader, headquartered in Switzerland. During his tenure at Serono, Mr. Kotzer held several senior positions, first as the Chief Executive Officer of InterPharm, 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. He advises major Israeli companies on finance, accounting and valuations, and is a member of the board of directors of several corporations, including Israel Discount Bank, Strauss Ltd., Israel Petrochemical Industries, ViryaNet and Elron Electronic Industries Ltd. He has taught at New York University, Temple University and, in Israel, at Tel Aviv and Bradford Universities. 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. He is Full Professor of Medicine at the Tel Aviv University. In addition, he is the Chairman of Assuta Medical Centers in Israel and Deputy Chairman 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 5 books and more than 200 peer reviewed articles. Additionally, Prof. Shemer is an external director of El-Al Airlines. He 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, Dr. Cohen-Dayag served as a scientist at the R&D department of Orgenics. 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.

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.

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

Eyal Neria, Ph.D joined Compugen in 2010 as Head of Therapeutic Discovery and in August 2011 he was appointed Vice President, Therapeutic Development. Prior to joining Compugen, he was CEO of Capsutech and of Peptera Pharmaceuticals, Head of R&D at Prochon Biotech, and Vice President R&D of Mindset Biopharmaceuticals. Dr. Neria holds a B.SC. in Chemistry and Computer Science and a Ph.D. in Chemical Physics both from Tel Aviv University and was a postdoctoral research fellow at Harvard University.

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 2011 (11 persons) was approximately $1.2 million. This amount includes approximately $167,000 set aside or accrued to provide pension, severance, retirement or similar benefits.

During 2011, we granted a total of 425,000 options to purchase ordinary shares to the above listed directors and senior management, as a group. These options are exercisable at a range between $4.01 and $4.92 per share, and generally expire ten years after their respective dates of grant. As of December 31, 2011, there were a total of 3,256,750 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. The aggregate amount paid to all of our non-management directors for the year ended December 31, 2011 was approximately $103,000.

Approval Required for Directors' and Officers' Compensation

Under the Companies Law, any arrangement as to the compensation of directors as well as exculpation, indemnification and insurance of directors, generally requires the approval of our audit committee, the board of directors and our shareholders. In addition any arrangement between a company and an office holder who is not a director as to such office holders' terms of office and employment, including the grant of exculpation, indemnification and insurance, shall require prior to the approval of the board of directors, the approval of the audit committee (or of a compensation committee provided that the compensation committee meets all of the requirements applicable to an audit committee under the Companies Law). The amendment of existing employment terms of our office holders who are not directors merely requires the approval of our audit committee, if such committee determines that the amendment is not substantial in relation to the existing terms. In addition, the compensation payable to external directors under the Israeli Companies Law and regulations promulgated pursuant thereto is subject to certain further limitations.

Pursuant to the foregoing procedures, our shareholders 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$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; and

- 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. 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.

Our shareholders have also approved the following compensation to our Chairman of the board of directors Mr. Martin Gerstel:

- a gross monthly salary of NIS 42,000; and

- a grant of options to purchase 125,000 of our ordinary shares. Such options do not vest prior to December 31, 2012 and thereafter vest on a monthly basis during calendar 2013 as follows: 1/12th shall vest on January 31, 2013 and an additional 1/12th shall vest on the last day of each of the remaining 11 months of such year.

Extension of Exercisability of Vested Options

On May 5, 2011 our shareholders extended Mr. Kotzer's (a member of our board of directors and our former CEO) right to exercise 380,000 vested options previously held by him until the first to occur of (i) the 180th day following the termination for any reason of Mr. Kotzer's service as a member of our board of directors, or (ii) April 19, 2015.

On December 12, 2011, our board of directors approved an extension through October 24, 2016 of Mrs. Cohen-Dayag (the Company's CEO) right to exercise 36,945 vested options, all of which had vested as of December 15, 2011, which was the extension date.

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 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 at December 31, 2011. Other than our three external directors, who were elected for a fixed term of three years, our directors are elected by an ordinary resolution at each annual general meeting of our shareholders. 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.

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 shareholder of such company, a relative of such controlling shareholder, or any entity controlled by the company or by a controlling shareholder of the company, or, if the company has no controlling 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.

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 an external 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 an external 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 conditions and criteria for possessing accounting and financial expertise or professional qualifications were determined in regulations promulgated by the Israeli Minister of Justice in consultation with the Israeli Securities Authority. Under the regulations a director having "expertise in finance and accounting" is a person who his or her education, experience and qualifications provide him or her with expertise and understanding in business matters, accounting and financial statements, in a way that allows him or her to understand, in depth, the company's financial statements and to encourage discussion about the manner in which the financial data is presented.

The company's board of directors must evaluate the proposed external director's expertise in finance and accounting, by considering, among other things, his or her education, experience and knowledge in the following: (i) accounting and auditing issues typical to the field in which the company operates and to companies of a size and complexity similar to such company; (ii) the independent auditor's duties and obligations; (iii) preparing company financial statements and their approval in accordance with the Companies Law and the Israeli Securities Law.

Under the regulation a director having "professionally qualified" is a person who meets any of the following criteria: (i) has an academic degree in any of the following professions: economics, business administration, accounting, law or public administration; (ii) has a different academic degree or has completed other higher education in a field that is the company's main field of operations, or a field relevant to his or her position; or (iii) has at least five years of experience in any of the following, or has a total of five years of experience in at least two of the following: (A) a senior position in the business management of a corporation with significant operations, (B) a senior public position or a senior position in public service, or (C) a senior position in the company's main field of operations. The board of directors here too must evaluate the proposed external director's "professional qualification" in accordance with the criteria set forth above.

Following termination of service as 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 person, or his or her relative, as an office holder of such public company or of an entity controlled by a controlling shareholder of such public company, not employing such person or his or her relative and not receiving professional services for pay from such person or his or her relative, either directly or indirectly, including through a corporation controlled by such person, 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.

Election of External Directors

External directors are to be elected at the general meeting of shareholders by a simple majority, provided that either:

- the majority that voted in favor of the election includes a majority of the shares held by non-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 voted at the meeting (abstentions are disregarded in this calculation). A shareholder that has a personal interest in the matter, and who participates in the voting for the election of external directors, must notify the Company prior to the voting in the meeting, or if the voting is via a proxy, on the proxy card, that it has a personal interest in the voting. or

- the total number of shares held by non-controlling shareholders or shareholders that 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 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 abstentions are disregarded, and (ii) the total number of shares of shareholders who do not have a personal interest in the appointment (other than a personal interest which is not the result of an affiliation with a controlling shareholder) and/or who are not controlling shareholders, present and voting in favor of the appointment exceed two percent of the aggregate 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 and the NASDAQ Global Select Market, but not including The NASDAQ Capital Market, 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 years terms (i) the audit committee and 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 of 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 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 not be removed 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 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 knows that he no longer meets the statutory requirements for holding the office he or she must notify the company immediately, and his or her nomination will expire immediately. 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.

Each committee of a company's board of directors that has the right to exercise a power delegated by the board of directors is required to include at least one external director and the audit committee is required to include all of the external directors.

An external director is entitled to compensation as provided in regulations adopted under the Companies Law and is otherwise prohibited from receiving any other compensation, directly or indirectly, in connection with service

provided as an 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.

Qualifications of Directors Generally under the Companies Law

Under the Companies law, the board of directors of publicly traded companies, such as us, is required to make a determination as to the minimum number of directors (not merely external directors) who must have financial and accounting expertise (according to the same criteria described above with the respect to external directors under "External Directors - Qualifications of External Directors"). In accordance with the Companies Law, the determination of the board should be based, among other things, on the type and size of the company and the scope and complexity of its operations, and subject to the number of directors that may be appointed by the company as set forth in its articles of associations.

Based on the foregoing considerations, our board of directors has determined that the number of directors with accounting and financial expertise in our company shall be not less than one. As described above under "External Directors - Qualifications of External Directors" currently Dr. Arie Ovadia has been determined by the board of directors to possess such accounting and financial expertise.

Unaffiliated Directors under the Companies Law

In a 2008 amendment, the Companies Law introduced the concept of unaffiliated directors in addition to external directors. This concept was reinforced in a 2011 amendment to the Companies Law. An unaffiliated 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.

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 and the NASDAQ Global Select Market, but not including The NASDAQ Capital Market, 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 "unaffiliated" director pursuant to the Companies Law provided he or she has not served as a director 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. 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.

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, unaffiliated director or external director, as applicable, and the ability to devote the appropriate time to performing his or her duties as a director.

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

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.

Board Committees

Audit Committee

Under the NASDAQ Listing Rules, a foreign private issuer is required to maintain an audit committee that operates under a formal written charter and has certain responsibilities and authority.

More specifically, under the NASDAQ Listing Rules and the SEC rules, the audit committee (i) has the sole authority and responsibility to select, evaluate, and, where appropriate, replace the company's independent auditors, (ii) is directly responsible for the appointment, compensation and oversight of the work of the independent auditors for the purpose of preparing its audit report or related work, and (iii) is responsible for establishing procedures for (A) the receipt, retention and treatment of complaints received by the company regarding accounting, internal accounting controls or auditing matters, and (B) the confidential, anonymous submission by employees of the company of concerns regarding questionable accounting or auditing matters. The audit committee is required to consult with management but may not delegate these responsibilities. In addition, under the Sarbanes-Oxley Act, the audit committee is responsible, among other things, for the following:

- Review, in advance, and granting any appropriate pre-approvals, of (i) all audit and non-audit services to be provided by the independent auditors and (ii) all fees and other terms of engagement;

- Review and discussion with management and the independent auditors of the company's quarterly financial statements (including the independent auditors' review of the quarterly financial statements) prior to any required submission to shareholders, the Securities and Exchange Commission, or SEC, any stock exchange or the public;

- Review and discussion with management and the independent auditors of the company's annual audited financial statements prior to any required submission to shareholders, the SEC, any stock exchange or the public;

- Recommendation to the board of directors, if appropriate, that the company's annual audited financial statements be included in the company's annual report;

- Review and discussion with management of all disclosures made by the company concerning any material changes in the financial condition or operations of the company;

- Review of disclosures made to the audit committee by the company's chief executive officer and chief financial officer during their certification process for the company's annual report about any significant deficiencies in the design or operation of internal controls or material weaknesses therein and any fraud involving management or other employees who have a significant role in the company's internal controls; and

- Review and approval of all related-party transactions.

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 unaffiliated directors (as described above under -- "Unaffiliated 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 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 unaffiliated directors and at least one of them is an external director.

Under the Companies Law, our audit committee is responsible for (i) determining whether there are deficiencies in the business management practices of the company, including in consultation with the company's internal auditor or the independent auditor, and to propose to the board of directors ways of correcting these deficiencies, (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 and whether such transactions are extraordinary transactions, respectively, all for the purpose of approving such actions or transactions; (iii) determining whether to approve certain related party transactions (including compensation of office holders (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) approving the working plan of the internal auditor, (v) examining the company's internal controls structure and processes and the internal auditor's performance, including whether the internal auditor has sufficient resources and tools to dispose of his responsibilities (taking into consideration the company's special needs and size), (vi) examining the scope of work of the company's independent auditor and compensation and submitting its recommendation with respect thereto to the corporate organ responsible for the appointment and for determining the independent auditor's compensation (either the board of directors or the general meeting of shareholders) and (vii) determining procedures with respect to the treatment of company employees' complaints as to deficiencies in the management of the company's business and the protection to be provided to such employees. Our audit committee also approves our financial statements.

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 the board of directors if so determined in the company's articles of association. 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 recommended to the shareholders or, if so authorized by the shareholders, to the board of directors and approved by either the shareholders or the board of directors, as the case may be.

In compliance with new regulations under the Companies Law, our audit committee also approves our financial statements, thereby fulfilling the requirement that a board committee provide such approval.

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.

Other Committees

Our board of directors does not maintain a nominating committee or a compensation committee. The functions of such committees are performed by the full board of directors (or, in the case of compensation, by our audit committee, as described below under "—Director and Officer Compensation"). 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

In lieu of appointing a separate board committee with responsibility for setting appropriate compensation levels for our executive officers, the audit committee of our board of directors serves as the body with authority for establishing such compensation levels (subject to follow-up approval by the board of directors as a whole). In setting compensation levels, our audit committee and board of directors are 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. The amendment of existing compensation terms of our office holders who are not directors merely requires the approval of our audit committee, if such committee determines that the amendment is not substantial in relation to the existing terms. The compensation levels of executive officers who are also directors requires the approval of the audit committee, the board of directors and our shareholders, except in certain circumstances prescribed in regulations promulgated under the Companies Law.

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, the internal auditor may be an employee of the company but not an interested party or an office holder, or a relative of an interested party or of an office holder, and he or she may not be the company's independent accountant or any one on its behalf. 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 case 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 office,

On February 8, 2010, our board of directors appointed Hila Barr of Brightman Almagor Zohar & Co., a member company of Deloitte Touche Tohmatsu, as Compugen's internal auditor. Hila Barr is not an employee, affiliate or office holder of the company, or affiliated with the company's auditors.

Directors' Severance Benefits upon Termination of Employment

We have not entered into any service contracts with any members of our board of directors that provide for specific benefits upon termination of employment. The only severance pay benefits that may be provided are required under Israeli law and are described below in the section titled "Employees".

D. EMPLOYEES

The following table sets out the number of our employees engaged in specified activities, at the end of the fiscal years 2009, 2010 and 2011:

| | December 31, 2011 | December 31, 2010 | December 31, 2009 |
|---|---|---|---|
| Research & Development | 28 | 27 | 26 |
| Administration, Accounting and Operations | 10 | 11 | 9 |
| Marketing and Business Development | 1 | 1 | 2 |
| Total | 39 | 39 | 37 |

All of our employees are based in Israel.

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.

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 and/or options to purchase ordinary shares. 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 29, 2012, 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 29, 2012.

| Beneficial Owner | Amount Owned | Percent of Class | |
|---|---|---|---|
| Martin S. Gerstel (1) | 2,260,015 | 6.36 | % |
| Anat Cohen-Dayag (2) | 492,264 | 1.39 | % |
| Alex Kotzer (3) | 390,001 | 1.10 | % |
| All directors and senior management as a group (4) (11 persons) | 3,932,961 | 11.07 | % |

(1) Includes 550,000 shares held by Shomar Corporation, an affiliate of Mr. Martin S. Gerstel, 669,033 shares held by Merrill Lynch IRA for Martin Gerstel, of which Martin Gerstel is the beneficiary, 634,735 shares held in various brokerage accounts for the benefit of Martin Gerstel and 406,247 options (of the 500,000 options granted to Martin Gerstel during 2009) that are exercisable within 60 days after February 29, 2012.

(2) Consists of 492,264 options that are exercisable within 60 days after February 29, 2012 with a weighted average exercise price of $2.22 per stock option, and which expire between the periods April 2013 and July 2021.

(3) Consists of 390,001 options that are exercisable within 60 days after February 29, 2012 with a weighted average exercise price of $3.18 per stock option, and which expire between the period July 2015 and July 2020.

(4) Includes (i) a total of 3,142,280 shares and options that are beneficially owned by Martin S. Gerstel, Anat Cohen-Dayag and Alex Kotzer, as noted in the first three rows of the above table, (ii) 785,681 options that are beneficially owned by other officers and directors, with a weighted average exercise price of $2.28 per stock option and which expire between July 2013 and July 2021 and (iii) 5,000 ordinary shares held by other officers and 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 13 of our 2011 consolidated financial statements.

Our board of directors administers our share option plans and 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 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 then remaining "available for grant" options remaining under the 2000 Option Plan. As of December 31, 2011, options to purchase 4,774,100 ordinary shares at a weighted average exercise price of approximately $2.76 per share were outstanding (i.e., were granted but not canceled, expired or exercised) under the 2000 Plan. Options to purchase 2,939,236 ordinary shares under the plan have previously been exercised at a weighted average exercise price of approximately $2.75.

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. In addition, the board of directors 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' resolution any options granted prior to the adoption of the 2010 Options Plan which terminate unexercised, will also be made available for future grants under the 2010 Options Plan.

If a grantee leaves his or her employment or other relationship with us, or if his or her relationship with us is terminated without cause, 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, 2011, options to purchase 1,169,300 ordinary shares at a weighted average exercise price of approximately $4.35 per share were outstanding (i.e., were granted but not canceled, expired or exercised) under the 2010 Options Plan. Options to purchase 4,311,875 ordinary shares remain available for future grant as of December 31, 2011.

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 or the "Tax Ordinance") for the grant of options to Israeli grantees. Generally, under the Capital Gains Track, the tax liability to a Grantee resulting from the grant and exercise of options will be postponed until the time that shares that are acquired upon the exercise of options will be sold or released from trust, subject to fulfillment of the requirements of Section 102 of the Tax Ordinance. Entitlement to the benefits under the Capital Gains Track is contingent upon the trustee holding the options or the shares issued upon their exercise on behalf of the grantee of options for a period of at least 24 months from the time of grant. Under the Capital Gains Track, generally a rate of 25% applies to gains that are realized from the sale of shares issued upon exercise of options (i.e., for sales proceeds in excess of the exercise price of the options, assuming that the exercise price is equal to the fair market value of the shares on the date of the award), and provided that the sale occurs after the required holding period.

If a grantee sells shares or releases them from trust prior to expiration of the required holding period, the grantee will be subject to income tax on his or her gains at a rate which is his or her marginal income tax rate (up to 45% in 2011 ), as well as payment of associated health tax and national insurance payments. Additionally, in such circumstances, withholding requirements will apply and be carried out by the employing company in accordance with applicable laws, regulations and rules.

Neither we nor the grantee will be liable to pay social benefits payments in connection with the granting or exercise of options that are exercised under the Capital Gains Track mechanism, or upon the sale of the shares underlying such options or upon the release of such shares from the trust, provided that such sale or release occurs after the required holding period. However, if such sale or release occurs before expiry of the required holding period, for which our consent is required, both we and the grantee will bear our respective liabilities to pay social benefits payments.

We will not be entitled to a tax deduction for Israeli income tax purposes with respect to options granted under the Capital Gains Track.

## 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 29, 2012 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.

| Beneficial Owner | Number of Ordinary Shares Beneficially Owned | Percent of Ownership |
|---|---|---|

| | | | |
|---|---|---|---|
| ClearBridge Advisors, LLC (1) | 2,211,586 | 6.23 | % |
| Martin Gerstel (2) | 1,853,768 | 5.22 | % |
| Morgan Stanley (3) | 1,912,327 | 5.38 | % |

(1) This disclosure is based on information disclosed by ClearBridge Advisors, LLC on a Schedule 13G/A, filed with the SEC on February 14, 2012 reflecting holdings as of December 31, 2011. Based solely on information contained in the Schedule 13G/A, ClearBridge Advisors, LLC reported sole voting power over 1,734,496 shares and sole dispositive power over 2,211,586 shares.

(2) Includes 550,000 shares held by Shomar Corporation, an affiliate of Mr. Martin S. Gerstel, 669,033 shares held by Merrill Lynch IRA for Martin Gerstel, of which Martin Gerstel is the beneficiary and 634,735 shares held in various brokerage accounts for the benefit of Martin Gerstel. This disclosure is based on information provided by Martin Gerstel directly to the Company.

(3) This disclosure is based on information disclosed by Morgan Stanley on a Schedule 13G/A, filed with the SEC on February 10, 2012 reflecting shareholdings as of December 31, 2011. Based solely on information contained in the Schedule 13G/A, Morgan Stanley and Morgan Stanley Smith Barney LLC each reported sole voting power over 1,505,000 shares, shared voting power over 7,300 shares and sole dispositive power over 1,912,327 shares.

As of February 29, 2012, there were a total of 75 holders of record of our ordinary shares, of which 50 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.

B. RELATED PARTY TRANSACTIONS

Exculpation, Indemnification and Insurance

Our Articles permit us, subject to the provisions of the Companies Law, to exculpate, indemnify and insure our directors and officers to the extent permitted therein. Our directors and officers are currently covered by a directors' and officers' liability policy. We have also resolved to provide 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 our standard indemnification undertaking.

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 on pages F-1 through F-40 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 Privileged 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 16 of our 2011 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.

Significant Changes

Except as described in this annual report, no significant changes have occurred since the date of the consolidated financial statements included herein.

ITEM 9. THE OFFER AND LISTING

A. OFFER AND LISTING DETAILS

The principal trading market for our ordinary shares is now the NASDAQ Capital Market. Our shares were listed and traded on the NASDAQ Global Market from our initial public offering in August, 2000 until June 17, 2009. As of June 17, 2009, we received approval to transfer the trading of our ordinary shares to the NASDAQ Capital Market where they are listed and continue to be traded under the symbol "CGEN". Our ordinary shares have also been traded on the Tel Aviv Stock Market under the Hebrew symbol which is equivalent to "CGEN" since January 7, 2002. The following table sets forth, for the periods indicated, the high and low reported sales prices, in United States Dollars, of the ordinary shares on NASDAQ and on the Tel Aviv Stock Exchange:

| | NASDAQ | | *TASE | |
|---|---|---|---|---|
| | High | Low | High | Low |
| Last Six Calendar Months | | | | |
| March 2012 (through March 12) | $6.150 | $5.620 | $6.183 | $5.733 |
| February 2012 | $6.470 | $5.140 | $6.248 | $5.071 |
| January 2012 | $5.710 | $4.960 | $5.699 | $4.952 |
| December 2011 | $5.350 | $4.250 | $5.229 | $4.242 |
| November 2011 | $4.540 | $3.940 | $4.368 | $3.881 |
| October 2011 | $4.450 | $3.780 | $4.500 | $3.758 |
| September 2011 | $4.670 | $3.340 | $4.711 | $3.353 |
| | | | | |
| Financial Quarters During the Past Two Full Fiscal Years | | | | |
| Fourth Quarter 2011 | $5.350 | $3.780 | $5.229 | $3.758 |
| Third Quarter 2011 | $4.670 | $3.320 | $4.711 | $3.272 |
| Second Quarter 2011 | $5.150 | $3.750 | $5.209 | $3.803 |
| First Quarter 2011 | $5.800 | $4.640 | $5.917 | $4.638 |
| Fourth Quarter 2010 | $5.180 | $3.720 | $5.199 | $3.693 |
| Third Quarter 2010 | $4.850 | $3.040 | $4.866 | $3.083 |
| Second Quarter 2010 | $5.300 | $3.260 | $5.351 | $3.303 |
| First Quarter 2010 | $5.320 | $3.800 | $5.642 | $3.808 |
| | | | | |
| Last Five Full Financial Years | | | | |
| 2011 | $5.800 | $3.320 | $5.917 | $3.272 |
| 2010 | $5.320 | $3.040 | $5.642 | $3.083 |
| 2009 | $5.860 | $0.390 | $6.064 | $0.424 |
| 2008 | $2.800 | $0.340 | $2.811 | $0.415 |
| 2007 | $3.400 | $1.560 | $3.529 | $1.641 |

*the currency in which our stock is traded on the Tel Aviv Stock Exchange is the New Israeli Shekel. The above United States dollar amounts represent a conversion from New Israeli Shekels to dollars in accordance with the New Israeli Shekel – Dollar conversion rate as of the relevant date of trade.

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 registered under the Companies Law as a public company under the name Compugen Ltd. and public company number 51-177-963-9. The objective stated in our Articles is to engage in any lawful activity for which companies may be organized under the Companies Law.

Fiduciary Duties of Office Holders

An "office holder" is defined in the Companies Law as a general manager, chief business manager, deputy general manager, vice general manager, 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.

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 role in the company and the fulfillment of any other role 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, our general counsel Tami Fishman Jutkowitz and our executive director Business Development Tsipi Keren-Lehrer is an office holder.

Disclosure of Personal Interests of an Officer Holder

The Companies Law requires that an office holder promptly disclose any personal interest that he or she may have, and all related material information and documents known to him or her, in connection with any existing or proposed transaction by the company. The disclosure is required to be made promptly and in any event, no later than the board of directors meeting in which the transaction is first discussed. A “personal interest” is defined by the Companies Law as a personal interest of a person in an act or transaction of the company, including a personal interest of his or her relative or of a corporate body in which that person or a relative of that person is a holder of 5% or more of that corporate body’s outstanding shares or voting rights, is a director or general manager, or in which he or she has the right to appoint one or more directors or the general manager. “Personal interest” does not apply to a personal interest stemming merely from holding shares in the company. The term ”personal Interest” also includes the personal interest of a person voting under a proxy given by another person, even if such appointing person has no personal interest in the proposed act or transaction and the vote of a person voting under a proxy given by a person having a personal interest in the proposed act or transaction, even if the person voting under the proxy has no personal interest. The Companies Law defines a “relative” as a person’s spouse, sibling, parent, grandparent, or descendent, as well as the descendant, sibling or parent of a person’s spouse, or the spouse of any of the foregoing.

Transactions Requiring Special Approval

Under the Companies Law, certain transactions require special approvals, provided however that in addition to such approval, such transactions are not adverse to the company's interest. A transaction between the company and an office holder, or a transaction between the company and a third party in which the office holder has a personal interest, must be approved by the board of directors, subject to the provisions of the company's articles of association. If the transaction is an extraordinary transaction, or if the transaction relates to the terms of office or employment of an office holder, including with respect to the grant of exculpation, indemnification or insurance, then it also must be approved by the audit committee, prior to the approval by the board of directors. The amendment of existing compensation terms of our office holders who are not directors merely requires the approval of our audit committee, if such committee determines that the amendment is not substantial in relation to the existing terms. Any engagement between a company and any one of its directors with respect to terms of office and/or employment, including with respect to the grant of exculpation, indemnification or insurance of a director generally also requires shareholder approval, in addition to the approval of the audit committee and the board of directors. Under the Companies Law an extraordinary transaction is a transaction:

- not in the company's ordinary course of business;
- not on market terms; or
- likely to have a material impact on the company's profitability, assets or liabilities.

Generally, any person having a personal interest in the approval of a transaction which is considered at a meeting of the board of directors or the audit committee, may not be present at such meeting or participate in the vote on such transaction, provided however that an office holder having a personal interest in such transaction, may be present in order to present such transaction, if the chairman of the audit committee or of the board of directors, as applicable, determine that the presence of such office holder is required for the presentation thereof. Notwithstanding the foregoing, a director may be present at a meeting and may participate in the vote on a transaction in which he or she has a personal interest, if the majority of the board of directors or the audit committee, as applicable, have a personal interest in the approval of such transaction. In case the majority of the board of directors have a personal interest in the approval of such transaction, shareholder approval is also required for the transaction.

Under the Companies Law, the same disclosure requirements which apply to an office holder also apply to a controlling shareholder of a public company. For these purposes, a controlling shareholder is any shareholder who has the ability to direct the activities of the company, including a shareholder who holds 25% or more of the voting rights if no other shareholder owns more than 50% of the voting rights in the company, but excluding a shareholder whose power derives solely from his or her position on the board of directors or any other position with the company. If two or more shareholders are interested parties in the same transaction, their shareholdings are combined for the purposes of calculating percentages.

Under the Companies Law, extraordinary transactions of a public company with a controlling shareholder or in which a controlling shareholder has a personal interest, as well as any engagement between a public company and a controlling shareholder thereof or such controlling shareholder's relative, whether directly or indirectly, including through a company controlled by such person 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 or employment, 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 requires the approval of the audit committee, the board of directors and the shareholders of the company.

If such shareholder approval is required, the shareholders approval must satisfy either of the following criteria:

- the approving majority must include the majority of shareholders who are present at the meeting and have no personal interest in the transaction (the abstaining votes are not counted towards this determination); or

- the total number of votes cast against the proposal by shareholders having no personal interest in the transaction may not exceed 2% of the aggregate voting rights in the company.

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.”

In addition, a private placement of securities (or a series of related private placements during a 12-month period or that are part of one continuous transaction or transactions conditioned upon each other) that (i) includes the issuance of twenty percent (20%) or more of the company’s outstanding voting rights (prior to such issuance) in which the consideration, in whole or in part, is not in cash or registered securities or is not at market value, and as a result of which a person holding five percent (5%) of more of the company’s share capital or voting rights will increase or that will cause any person to become, as a result of the issuance, a holder of more than five percent (5%) of the company’s outstanding share capital, or (ii) will cause any person to become, as a result of the issuance, a controlling shareholder of the company (as defined above), requires approval by the board of directors and the shareholders of the company.

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 preferred shares.

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 distribute a dividend, as long as the court is convinced that there is no reasonable concern that such 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 ordinary shares that represent more than 50% of the voting power represented at a shareholders meeting in person or by proxy and voting 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.

We may also hold special general meetings of shareholders from time to time, in accordance with the provisions of our Articles. Under our Articles and the Companies Law, our board of directors may, convene special general meetings whenever it sees fit and must convene a special general meeting, upon the demand of two of the directors or one quarter of the directors then in office, or upon the demand of one or more shareholders holding at least 5% of the outstanding share capital and at least 1% of the voting power in our company, or upon the demand of one or more shareholders holding at least 5% of the voting power in our company. 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 chairman of the board of directors is not entitled to a vote at a general meeting in his or her capacity as chairman nor is the chairman entitled to a second or casting vote.

Generally, notices of our shareholders meetings must be provided not less than twenty-one (21) days, or thirty-five (35) days if certain proposals are on the agenda for the meeting, as required in regulations promulgated under the Companies Law, prior to the general meeting. Each such notice shall specify the place and the time of the meeting and the general nature of each item to be acted upon thereat, as well as any other information required by the Companies Law or any regulation promulgated thereunder, said notice to be given to all shareholders who will be entitled to attend and vote at such meeting and delivered or publicized in any manner permitted under the Companies Law.

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 less than 50% 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 reconvened meeting, the required quorum consists of any two shareholders present, in person, 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.

Under the Companies Law, each and every shareholder has a duty to act in good faith and in customary manner in exercising his or her rights and in fulfilling his or her obligations towards the company and other shareholders, and to refrain from abusing his or her power in the company, including while voting at a general meeting of shareholders on any of the following matters:

- any amendment to the articles of association;

- an increase of the authorized share capital;
- a merger; or
- approval of interested party transactions and actions involving conflict of interest that require shareholder approval.

In addition, each and every shareholder has the general duty to refrain from discriminating against other shareholders. In addition, any controlling shareholder, any shareholder who knows that it possesses the power to determine the outcome of a shareholder or share class vote and any shareholder who, pursuant to the company's articles of association has the power to appoint or prevent the appointment of an office holder or has any other power towards the company, is under a duty to act with fairness towards the company. The Companies Law does not describe the substance of this duty of fairness.

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.

Mergers and Acquisitions and Tender Offers under Israeli Law

Tender Offers

The Companies Law provides that, subject to certain exceptions, an acquisition of shares of a public company must be made by means of a special tender offer if, as a result of such acquisition, the purchaser would become a holder of 25% or more of the voting rights in the company, and there is no existing holder of 25% or more of the voting rights in the company or become a holder of 45% or more of the voting rights in the company if there is no other holder of 45% or more of the voting rights in the company.

A special tender offer must be made to all of the offerees, and the offerees may notify their acceptation or rejection of the offer. A special tender offer may be consummated only if (i) shares constituting at least 5% of the voting rights of the company have been purchased pursuant to such offer, and (ii) such offer is accepted by a majority of the offerees who have provided a notice of their position in respect of the offer. For purposes of calculating whether the offer has been accepted under the foregoing clause (ii) shares held by a controlling shareholder of the oferror, or any person with a personal interest (as defined under the Companies Law) in the acceptance of the offer, or who holds 25% or more of the voting rights in the company, or any person acting on their behalf or on behalf of the offeror, including their relatives or corporations under their control, are not taken into account. An offeree who has a personal interest in the offer must notify the company of such personal interest prior to the vote thereon.

The Companies Law also provides that a person may not acquire shares in a public company if, following the acquisition, the acquirer will hold more than 90% of the company's shares or voting rights, or any class of its shares (or voting rights thereof), other than by means of a full tender offer to acquire all of the shares or class of shares, as applicable. 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 voting rights, or any class of its shares (or voting rights thereof), that shareholder shall be precluded from purchasing any additional shares.

In order that all of the shares that the acquirer offered to purchase be transferred to him by operation of law, one of the following needs to have occurred: (i) the shareholders who decline or do not respond to the 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 the acceptance of the offer accept the offer, or (ii) the shareholders who decline or do not respond to the offer hold less than 2% of the company's outstanding share capital or of the relevant class of shares.

A shareholder that had his shares so transferred, whether such shareholder accepted the offer or not, has the right, within six months from the date of acceptance of the offer, to exercise appraisal rights with respect to the price paid in the offer by petitioning an Israeli court. However, the acquirer may provide in its offer that shareholders who accept the offer will not be entitled to such rights.

If the conditions set forth above are not met, the acquirer may not acquire additional shares of the company from shareholders who accepted the tender offer to the extent that following such acquisition the acquirer would own more than 90% of the company's (or a class of the company's) issued and outstanding share capital or voting power.

Merger

The Companies Law provides that merger transactions are generally required to be approved by each of the merging companies' board of directors and shareholders, at a shareholders' meeting called with at least 35-days' prior notice. 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.

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, held by any person holding 25% or more of the voting rights or the means of appointing directors of the other party to the merger, or held by any person or entity acting on behalf of any of them, including by their relatives or entities controlled by any of them. If the transaction would have been approved, but for the separate approval of each class or exclusion of the votes of certain shareholders as provided above, a court may still approve the merger upon the request of holders of at least 25% of the voting rights of a merging company, provided that the court shall not approve the merger unless it is convinced that the merger is fair and reasonable, taking into account the merging companies' valuation and the consideration offered to the shareholders. Notwithstanding the foregoing, a merger that is also an extraordinary transaction with a controlling shareholder or with another person in which a controlling shareholder has a personal interest, requires approval as an extraordinary transaction with a controlling shareholder. See “Transactions Requiring Special Approval” above.

The Companies Law further provides that a shareholders' approval will not be required from the company that will not be the surviving company if such company is wholly-owned subsidiary of the surviving company of the merger, or from the shareholders of the surviving company if:

- the transaction does not involve an amendment to the surviving company's memorandum or articles of association;

- the transaction does not contemplate the issuance of more than 20% of the voting rights of the surviving company or would result in any shareholder becoming a controlling shareholder or hold more than 25% of the voting rights of the surviving company if there is so other shareholder that holds more than 25% of the voting rights of such company; and

    - there is no “cross ownership” of shares of the merging companies as described above.

Under the Companies Law and the regulations promulgated thereunder, each merging company must inform its creditors of the proposed merger plans. 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, and may further give instructions to secure the rights of creditors.

In addition, a merger may not be completed unless at least 50 days have passed from the time that a proposal for approval of the merger was filed by each party with the Israeli Registrar of Companies and at least 30 days have passed from the time that the approval of the merging parties’ shareholders has been received.

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, no dividend shall be paid otherwise than out of the profits of the company.

C. MATERIAL CONTRACTS

Please see “Item 4. Information on the Company — A. History and Development of the Company — Recent Funding Agreements” for a discussion of our material agreements.

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

We urge shareholders and prospective purchasers of our ordinary shares to consult their own tax advisers as to the U.S., Israeli, or other tax consequences of the purchase, ownership and disposition of our ordinary shares, including, in particular, the effect of any foreign, state or local taxes.

Israeli Taxation and Investment Programs

The following is a summary of the current tax law applicable to companies in Israel, with special reference to its effect on our subsidiaries and us. The following also contains a discussion of specific Israeli tax consequences to our shareholders and government programs from which we, and some of our subsidiaries, benefit. To the extent that the discussion is based on tax legislation that has not been subject to judicial or administrative interpretation, there can be no assurance that the views expressed in the discussion will be accepted by the tax authorities in question.

The discussion is not intended, and should not be construed, as legal or professional tax advice and is not exhaustive of all possible tax considerations

General Corporate Tax Structure Applicable to Our Company

Generally, in 2011, Israeli companies were subject to a corporate tax at the rate of 24% of their taxable income for such year. The corporate tax rate was scheduled to decline to 23% in 2012, 22% in 2013, 21% in 2014, 20% in 2015 and 18% in 2016 and onwards. Recently, the Tax Burden Law, was published by the Government of Israel. The Tax Burden Law canceled the scheduled progressive reduction of the corporate tax rate and instead fixed the corporate tax rate at 25% from 2012 and onwards. However, the effective tax rate payable by a company which derives income from an Approved Enterprise, a Privileged Enterprise or a Preferred Enterprise (each, as defined and as further discussed below) may be considerably less.

Tax Benefits for Research and Development

Israeli tax law allows, under specified conditions, a tax deduction for R&D expenditures, including capital expenditures, for the year in which they are incurred. These expenses must relate to scientific research and development projects and must be approved by the relevant Israeli government ministry, determined by the field of research. Furthermore, the research and development must be for the promotion of the company and carried out by or on behalf of the company seeking such tax deduction. However, the amount of such deductible expenses is reduced by the sum of any funds received through government grants for the finance of such scientific research and development projects. Expenditures not so approved are deductible over a three-year period. The OCS has approved some of our research and development programs and we have been able to deduct, for tax purposes, a portion of our research and development expenses net of the grants received. Other research and development expenses that are not approved may be deducted for tax purposes in 3 equal installments during a 3-year period.

Tax Benefits under the Law for the Encouragement of Industry (Taxes), 1969

The Law for the Encouragement of Industry (Taxes), 1969, or the “Industry Encouragement Law”, provides several tax benefits for “Industrial Companies”. Under the law, an “Industrial Company” is defined as a company resident in Israel, which at least 90% of its income in any given tax year determined in Israeli currency exclusive of income from government loans, capital gains, interest and dividends, is generated from an “Industrial Enterprise” that it owns. An Industrial Enterprise is defined as an enterprise whose major activity in a given tax year, is industrial production activity (other than certain industrial production activity that has been excluded). Under the Industry Encouragement Law, Industrial Companies are entitled to certain tax benefits, including:

- Deduction of purchases of know - how and patents, over an eight-year period for tax;

- Right to elect, under specified conditions, to file a consolidated tax return with additional related Israeli Industrial Companies; and

- Deduction over a three year period of expenses involved with the issuance and listing of shares on a stock market.

Under some tax laws and regulations, an Industrial Enterprise may be eligible for special depreciation rates for machinery, equipment and buildings. These rates differ based on various factors, including the date the operations begin and the number of work shifts. An Industrial Company owning an Approved Enterprise a Privileged Enterprise or Preferred Enterprise may choose between these special depreciation rates and the depreciation rates available to the Approved Enterprise Privileged Enterprise or Preferred Enterprise.

Eligibility for benefits under the Industry Encouragement Law is not subject to receipt of prior approval from any governmental authority.

We believe that we currently qualify as an Industrial Company within the definition of the Industry Encouragement Law. We cannot assure you that the Israeli tax authorities will agree that we qualify, or, if we qualify, that we will continue to qualify as an Industrial Company or that the benefits described above will be available to us in the future.

Special Provisions Relating to Taxation under Inflationary Conditions

The Income Tax Law (Inflationary Adjustments), 5745-1985, or the Inflationary Adjustments Law, represents an attempt to overcome the problems presented to a traditional tax system by an economy with high inflation rates. Under the Inflationary Adjustments Law, taxable results of Israeli companies through, and including, the year 2007 were measured on a real basis, taking into account the rate of change in the Israeli consumer price index, or CPI. Subject to certain transitional provisions, the Inflationary Adjustments Law was repealed as of January 1, 2008.

Tax Benefits under the Law for the Encouragement of Capital Investments, 1959

The Law for the Encouragement of Capital Investments, 1959 or the "Investment Law" provides certain incentives for capital investments in a production facility (or other eligible assets). Generally, an investment program that is implemented in accordance with the provisions of the Investment Law, referred to as an "Approved Enterprise", is entitled to benefits. These benefits may include cash grants from the Israeli government and tax benefits, based upon, among other things, the location of the facility in which the investment is made or the election of the grantee.

The Investment Law has been amended several times over the last years, with the two most significant changes effective as of April 1, 2005, which we refer to as the 2005 Amendment, and as of January 1, 2011, which we refer to as the 2011 Amendment. Pursuant to the 2005 Amendment, tax benefits granted in accordance with the provisions of the Investment Law prior to its revision by the 2005 Amendment, remain in force, but any benefits granted subsequently are subject to the provisions of the amended Investment Law. Similarly, the 2011 Amendment introduced new benefits instead of the benefits granted in accordance with the provisions of the Investment Law prior to the 2011 Amendment, yet companies entitled to benefits under the Investment Law as in effect up to January 1, 2011, may choose to continue to enjoy such benefits, provided that certain conditions are met, or elect instead to forego such benefits and elect for the benefits of the 2011 Amendment.

The following discussion is a summary of the Investment Law prior to its amendments as well as the relevant changes contained in the new legislations.

Tax benefits prior the 2005 Amendment

The Investment Law prior to the 2005 Amendment provides that a proposed capital investment in eligible facilities may, upon application to the Investment Center of the Ministry of Industry and Commerce of the State of Israel (the "Investment Center"), be designated as an Approved Enterprise.

The Investment Law provides that a company is eligible for tax benefits on taxable income derived from its Approved Enterprise programs. The tax benefits under the Investment Law also apply to income generated by a company from the grant of a right of use with respect to know-how developed by the Approved Enterprise, income generated from royalties, and income derived from a service which is ancillary to such right of use or royalties, provided that such income is generated within the Approved Enterprise's ordinary course of business. If a company has more than one approval or only a portion of its capital investments are approved, its effective tax rate is the result of a weighted average of the applicable rates. The tax benefits under the Investment Law are not, generally, available with respect to

income derived from products manufactured outside of Israel. In addition, the tax benefits available to an Approved Enterprise are contingent upon the fulfillment of conditions stipulated in the Investment Law and regulations and the criteria set forth in the specific certificate of approval, as described above. In the event that a company does not meet these conditions, it would be required to refund the amount of tax benefits, plus a consumer price index linkage adjustment and interest.

The Investment Law also provides that an Approved Enterprise is entitled to accelerated depreciation on its property and equipment that are included in an Approved Enterprise program in the first five years of using the equipment.

Taxable income of a company derived from an Approved Enterprise is subject to reduced corporate tax at the rate of 10%-25%, rather than the regular corporate tax rate, for the benefit period. This period is ordinarily seven years commencing with the year in which the Approved Enterprise first generates taxable income, and is limited to 12 years from commencement of production or 14 years from the date of approval, whichever is earlier which we refer to as “The year's limitation”. The year’s limitation does not apply to the exemption period.

However, a company may elect to receive an alternative package of benefits under which (a) its undistributed income derived from the Approved Enterprise will be exempt from corporate tax for a period of between two and ten years from the first year it derives taxable income under the program, depending on the geographic location of the Approved Enterprise within Israel, and (b) it will be eligible for reduced tax rates for the remainder of the benefits period. We have elected the alternative benefits package.

A company that has elected the alternative package of benefits that subsequently pays a dividend out of income derived from the Approved Enterprise during the tax exemption period will be required to recapture the deferred corporate income tax applicable to the amount distributed (grossed up to reflect such tax) at the rate which would have been applicable had such company not elected the alternative route. This rate is generally 10% to 25%, depending on the extent to which non-Israeli shareholders hold such company's shares. The dividend recipient is subject to withholding tax at the rate of 15% applicable to dividends from Approved Enterprises, if the dividend is distributed during the tax exemption period or within twelve years thereafter. The company must withhold this tax at source.

A company that has an Approved Enterprise program is eligible for further tax benefits if it qualifies as a Foreign Investors' Company or FIC. An FIC is a company which more than 25% of its share capital and combined share and loan capital is owned by non-Israeli residents. A company that qualifies as an FIC and has an Approved Enterprise program is eligible for tax benefits for a ten-year benefit period. As specified above, depending on the geographic location of the Approved Enterprise within Israel, income derived from the Approved Enterprise program may be exempt from tax on its undistributed income for a period of between two to ten years, and will be subject to a reduced tax rate for the remainder of the benefits period. The tax rate for the remainder of the benefits period will be 25%, unless the level of foreign investment exceeds 49%, in which case the tax rate will be 20% if the foreign investment is more than 49% and less than 74%; 15% if more than 74% and less than 90%; and 10% if 90% or more.

Subject to applicable provisions concerning income under the alternative package of benefits, dividends paid by a company are considered to be attributable to income received from the entire company and the company's effective tax rate is the result of a weighted average of the various applicable tax rates, excluding any tax-exempt income. Under the Investment Law, a company that has elected the alternative package of benefits is not obligated to distribute retained profits, and may generally decide from which year's profits to declare dividends. We currently intend to reinvest any income derived from our Approved Enterprise program and not to distribute such income as a dividend.

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.

Tax benefits under the 2005 Amendment

Although our company will continue to enjoy its current tax benefits in accordance with the provisions of the Investment Law prior to the 2005 Amendment, the following is a short summary of the tax benefits granted under the 2005 Amendment.

The 2005 Amendment applies to new investment programs and investment programs commencing after 2004, and does not apply to investment programs approved prior to December 31, 2004. The 2005 Amendment provides that terms and benefits included in any certificate of approval that was granted before the 2005 Amendment came into effect will remain subject to the provisions of the Investment Law as in effect on the date of such approval. Pursuant to the 2005 Amendment, the Investment Center will continue to grant Approved Enterprise status to qualifying investments. However, the 2005 Amendment limits the scope of enterprises that may be approved by the Investment Center by setting criteria for the approval of a facility as an Approved Enterprise, such as provisions generally requiring that at least 25% of the Approved Enterprise's income will be derived from export.

An enterprise that qualifies under the new provisions is referred to as a “Privileged Enterprise”, rather than “Approved Enterprise”. The 2005 Amendment provides that the approval of the Investment Center is required only for Approved Enterprises that receive cash grants. As a result, a company is no longer required to obtain the advance approval of the Investment Center in order to receive tax benefits. Rather, a company may claim the tax benefits offered by the Investment Law directly in its tax returns, provided that its facilities meet the criteria for tax benefits set out by the 2005 Amendment. A company that has a Privileged Enterprise may, at its discretion, approach the Israeli Tax Authority for a pre-ruling confirming that it is in compliance with the provisions of the Investment Law.

Tax benefits are available under the 2005 Amendment to production facilities (or other eligible facilities), which are generally required to derive more than 25% of their business income from export to specific markets with a population of at least 12 million. In order to receive the tax benefits, the 2005 Amendment states that the company must make an investment in the Benefited Enterprise exceeding a certain percentage or a minimum amount specified in the Investment Law. Such investment entitles a company to a Privileged Enterprise status with respect to the investment, and may be made over a period of no more than three years ending at the end of the year in which the company requested to have the tax benefits apply to the Benefited Enterprise. Where the company requests to have the tax benefits apply to an expansion of existing facilities, then only the expansion will be considered a Benefited Enterprise and the company’s effective tax rate will be the result of a weighted combination of the applicable rates. In such case, the minimum investment required in order to qualify as a Benefited Enterprise must exceed a certain percentage or a minimum amount of the company’s production assets before the expansion.

The tax benefits granted to a Benefited Enterprise are determined according to one of the following new tax routes, which may be applicable to us:

- Tax "holiday" package for Benefited Enterprise - a tax, exemption from corporate tax on undistributed income for a period of two to ten years, depending on the geographic location of the Benefited Enterprise within Israel, and a reduced corporate tax rate of 10% to 25% for the remainder of the benefits period, depending on the level of foreign investment in each year, as explained above. Benefits may be granted for a term of seven to ten years, depending on the level of foreign investment in the company. If the company pays a dividend out of income derived from the Benefited Enterprise during the tax exemption period, such income will be subject to corporate tax at the applicable rate (10%-25%) in respect of the gross amount of the dividend that we may distribute. The company is required to withhold tax at the source at a rate of 15% from any dividends distributed from income derived from the Benefited Enterprise; or

    - A special tax route, which enables companies owning facilities in certain geographical locations in Israel to pay corporate tax at the rate of 11.5% on income of the Benefited Enterprise. The benefits period is ten years. Upon payment of dividends, the company is required to withhold tax at source at a rate of 15% for Israeli residents and at a rate of 4% for foreign residents.

The benefits available to a Privileged Enterprise are subject to the fulfillment of conditions stipulated in the Investment Law and its regulations. If a company does not meet these conditions, it may be required to refund the amount of tax benefits, together with consumer price index linkage adjustment and interest, or other monetary penalty.

Tax benefits under the 2011 Amendment

The 2011 Amendment cancels the availability of the benefits granted in accordance with the provisions of the Investment Law prior to 2011 and, instead, introduced new benefits for income generated by a "Preferred Company" through its Preferred Enterprise (as such term is defined in the Investment Law) effective as of January 1, 2011 and onward. A Preferred Company is defined as either (i) a company incorporated in Israel and not fully owned by a governmental entity or (ii) a limited partnership that: (a) was registered under the Partnerships Ordinance; (b) all of its limited partners are companies incorporated in Israel, but not all of them are governmental entities, which, among other things, has Preferred Enterprise status and are controlled and managed from Israel. Pursuant to the 2011 Amendment, a Preferred Company is entitled to a reduced corporate tax rate of 15% with respect to its preferred income derived by its Preferred Enterprise in 2011-2012, unless the Preferred Enterprise is located in a certain development zone, in which case the rate will be 10%. Such corporate tax rate will be reduced to 12.5% and 7%, respectively, in 2013-2014 and to 12% and 6% in 2015 and thereafter. Income derived by a Preferred Company from a 'Special Preferred Enterprise' (as such term is defined in the Investment Law) would be entitled, during a benefits period of 10 years, to further reduced tax rates of 8%, or to 5% if the Special Preferred Enterprise is located in a certain development zone.

Taxation of Our Shareholders

The following is a short summary of certain provisions of the tax environment to which our shareholders may be subject. This summary is based on the current provisions of tax law. To the extent that the discussion is based on new tax legislation that has not been subject to judicial or administrative interpretation, we cannot assure you that the views expressed in the summary will be accepted by the appropriate tax authorities or the courts.

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 adviser as to the United States, Israel or other tax consequences of the purchase, ownership and disposition of ordinary shares. The following is not intended, and should not be construed, as legal or professional tax advice and is not exhaustive of all possible tax considerations. Each individual should consult his or her own tax or legal adviser.

Capital Gains Tax on Sales of Our Ordinary Shares

Israeli law generally imposes a capital gains tax on the sale of any capital assets by residents of Israel, as defined for Israeli tax purposes, and on the sale of assets located in Israel, including shares in Israeli companies, by both residents and non-residents of Israel, unless a specific exemption is available or unless a tax treaty between Israel and the shareholder's country of residence provides otherwise. The law distinguishes between "Real Capital Gain" and "Inflationary Surplus". The Inflationary Surplus is a portion of the total capital gain which is equivalent to the increase of the relevant asset's purchase price which is attributable to the increase in the Israeli consumer price index or, in certain circumstances, a foreign currency exchange rate, between the date of purchase and the date of sale. The Real Capital Gain is the excess of the total capital gain over the Inflationary Surplus.

Israeli Resident Individuals

Pursuant to the Tax Burden Law, effective as of January 1, 2012, the capital gain tax rate applicable to individuals upon the sale of shares 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 is such individual's marginal tax rate but not more than 25% (or 30% if the selling individual shareholder is a Significant Shareholder on the date of the sale of the shares or at any time during the 12-month period preceding the sale). A shareholder is considered a "Significant Shareholder" if such shareholder holds, directly or indirectly, alone or together with another, 10% or more of any of the company's "means of control" (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. Dealers in securities in Israel are taxed at the marginal tax rates applicable to business income (up to 45% in 2011).

Dividend Income

Pursuant to the Tax Burden Law, as of January 1, 2012, the income tax rate for dividends paid on our ordinary shares for Israeli residents who are individuals is 25%, or 30% if the dividend recipient is a Significant Shareholder at the time of distribution or at any time during the preceding 12-month period. However, dividends distributed from taxable income accrued during the period of receiving benefit as an Approved Enterprise, a Privileged Enterprise or a Preferred Enterprise, dividends distributed from Preferred Income would be subject to tax at the rate of 15%, if the dividend is distributed during the tax benefit period under the Investment Law or within 12 years after such period.

Israeli Resident Companies

Capital Gain

Under Israeli current tax legislation, the tax rate applicable to Real Capital Gain derived by Israeli resident corporations from the sale of shares of an Israeli company is the general corporate tax rate. As described in "Governmental Policies that Materially Affected or Could Materially Affect Our Operations" in Item 5 above, recent changes in the law abolished the scheduled progressive reduction of the corporate tax rate and set the corporate tax rate at 25% from 2012 and onwards.

Dividend Income

Generally, Israeli resident companies are exempt from Israeli corporate tax on the receipt of dividends paid on shares of Israeli resident companies. However, dividends distributed from taxable income accrued during the period of benefit of an Approved Enterprise, or a Privileged Enterprise, dividends distributed from Preferred Income would

be taxable at the rate of 15%, if the dividend is distributed during the tax benefit period under the Investment Law or within 12 years after that period.

Non-Israeli Residents

Capital Gain

Israeli capital gains tax is imposed on the disposal of capital assets by a non-Israeli resident if such assets are either (i) located in Israel; (ii) shares or rights to shares in an Israeli resident company, or (iii) represent, directly or indirectly, rights to assets located in Israel, unless a tax treaty between Israel and the seller's country of residence provides otherwise. As mentioned above, Real Capital Gain applicable upon the sale of shares 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 is generally subject to tax at the corporate tax rate which as of January 1, 2012 is 25%, if generated by a company, or at the rate of 25% or 30% if generated by a Significant Shareholder. Dealers (both individual and corporate) in securities in Israel are taxed at the tax rates applicable to business income (a corporate tax rate of 25% for a corporation and a marginal tax rate for an individual).

Notwithstanding the foregoing, shareholders who are non-Israeli residents (individuals and corporations) are generally exempt from Israeli capital gains tax on any gains derived from the sale, exchange or disposition of shares publicly traded on a recognized stock exchange outside of Israel, provided, among other things, that (i) such gains are not generated through a permanent establishment that the non-Israeli resident maintains in Israel, (ii) the shares were purchased after being listed on a recognized stock exchange outside of Israel, and (iii) such shareholders are not subject to the Inflationary Adjustment Law. However, non-Israeli corporations will not be entitled to the foregoing exemptions if an Israeli resident (a) has a controlling interest of 25% or more in such non-Israeli corporation, or (b) is the beneficiary of or is entitled to 25% or more of the revenues or profits of such non-Israeli corporation, whether directly or indirectly. Such exemption is not applicable to a person whose gains from selling or otherwise disposing of the shares are deemed to be business income.

In addition, a sale of securities may be exempt from Israeli capital gains tax under the provisions of an applicable tax treaty. For example, under the Convention Between the government of the United States of America and the government of Israel with Respect to Taxes on Income, as amended or the" U.S.-Israel Tax Treaty", the sale, exchange or disposition of shares of an Israeli company by a person who (i) holds the ordinary shares as a capital asset, (ii) qualifies as a resident of the United States within the meaning of the U.S.-Israel Tax Treaty and (iii) is entitled to claim the benefits afforded to such person by the U.S.-Israel Tax Treaty, generally, will not be subject to the Israeli capital gains tax. Such exemption will not apply if (i) such shareholder holds, directly or indirectly, shares representing 10% or more of such company's voting capital during any part of the 12-month period preceding such sale, exchange or disposition, (ii) such shareholder, being an individual, has been present in Israel for a period or periods of 183 days or more in the aggregate during the applicable taxable year; or (iii) the capital gains arising from such sale, exchange or disposition are attributable to a permanent establishment of the shareholder which is maintained in Israel. In such case, the sale, exchange or disposition of ordinary shares would be subject to Israeli tax, to the extent applicable; however, under the U.S.-Israel Tax Treaty, U.S. resident would be permitted to claim a credit for the Israeli taxes against the U.S. federal income tax imposed with respect to the sale, exchange or disposition, subject to the limitations in U.S. laws applicable to foreign tax credits. The U.S.-Israel Tax Treaty does not relate to U.S. state or local taxes.

Dividend Income.

Non-Israeli residents (whether individuals or corporations) are generally subject to Israeli income tax on the receipt of dividends paid for our ordinary shares at the rate 25% as of January 1, 2012 and 30% if the dividend recipient is a Significant Shareholder, at the time of distribution or at any time during the preceding 12-month period or 15% if the dividend is distributed from Preferred Income attributed to our Approved Enterprise or Privileged Enterprise, unless a reduced rate is provided under an applicable tax treaty. However, such distribution of dividends is subject to withholding tax at source at a rate of 25% as of January 1, 2012, so long as the shares are registered with a nominee company (whether the recipient is a Significant Shareholder or not) or 15% if the dividend is distributed from Preferred Income attributed to our Approved Enterprise, unless a reduced tax rate is provided under an applicable tax treaty. For example, under the U.S.-Israel Tax Treaty, the maximum rate of tax withheld in Israel on dividends paid to a holder of our ordinary shares who is a U.S. resident (for purposes of the U.S.-Israel Tax Treaty) is 25%. However, generally, the maximum rate of withholding tax on dividends that are paid to a U.S. corporation that holds 10% or more of our outstanding voting capital from the start of the tax year preceding the distribution of the dividend up until (and including) the distribution of the dividend is 12.5%, provided that not more than 25% of our gross income for such preceding year consists of certain types of dividends and interest. Notwithstanding the foregoing, dividends distributed from income attributed to an Approved Enterprise, a Privileged Enterprise or a Preferred Enterprise, dividends distributed from Preferred Income would be subject to a withholding tax rate of 15% for such a U.S. corporation shareholder, provided that the condition related to our gross income for the previous year (as set forth in the previous sentence) is met. If the dividend is attributable partly to income derived from an Approved Enterprise, a Privileged Enterprise or a Preferred Enterprise, and partly to other sources of income, the withholding rate will be a

blended rate reflecting the relative portions of the two types of income. U.S residents who are subject to Israeli withholding tax on a dividend may be entitled to a credit or deduction for United States federal income tax purposes in the amount of the taxes withheld, subject to detailed rules contained in United States tax legislation.

A non-Israeli resident who receives dividends from which tax was withheld is generally exempt from the obligation to file tax returns in Israel with respect to such income, provided that (i) such income was not generated from 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.

For information with respect to the applicability of Israeli capital gains taxes on the sale of ordinary shares by United States residents, see above "Capital Gains Tax on Sales of Our Ordinary Shares."

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 which we refer to as the TP Regulations. Section 85A of the Tax Ordinance and the TP Regulations 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 Regulations are not expected to have a material effect on us.

United States Federal Income Tax Considerations

Subject to the limitations described below, the following discussion summarizes certain U.S. federal income tax consequences of the purchase, ownership and disposition of our ordinary shares to a U.S. holder that owns our ordinary shares as a capital asset (generally, for investment). A "U.S. holder" is a holder of our ordinary shares that is:

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

Certain aspects of U.S. federal income taxes relevant to a holder of our ordinary shares that is not a U.S. holder (a "Non-U.S. holder") are also discussed below.

This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended (the "Code"), current and proposed Treasury Regulations, and administrative and judicial decisions as of the date of this annual report, all of which are subject to change, possibly on a retroactive basis. This discussion does not address all aspects of U.S. federal income taxation that may be relevant to any particular U.S. holder in light of the holder's individual circumstances. In particular, this discussion does not address the potential application of the alternative minimum tax or the U.S. federal income tax consequences to U.S. holders that are subject to special treatment, including U.S. holders that:

- are holders of our warrants;
- are broker-dealers or insurance companies;
- have elected mark-to-market accounting;
- are tax-exempt organizations or retirement plans;
- are grantor trusts;

- are certain former citizens or long-term residents of the United States;
- are financial institutions;
- hold ordinary shares as part of a straddle, hedge or conversion transaction with other investments;
- acquired their ordinary shares upon the exercise of stock options or otherwise as compensation;
- are real estate investment trusts or regulated investment companies;
- own directly, indirectly or by attribution at least 10% of our voting power; or
- have a functional currency that is not the U.S. dollar.

If a partnership (or any other entity treated as a partnership for U.S. federal income tax purposes) holds our ordinary shares, the tax treatment of the partnership and a partner in such partnership will generally depend on the status of the partner and the activities of the partnership. Such a partner or partnership should consult its tax advisor as to its tax consequences.

This discussion is not a comprehensive description of all of the tax considerations that may be relevant to each person's decision to purchase our ordinary shares. For example, this discussion does not address any aspect of state, local or non-U.S. tax laws or the possible application of United States federal gift or estate taxes.

Each holder of our ordinary shares is advised to consult his or her own tax advisor with respect to the specific tax consequences to him or her of purchasing, owning or disposing of our ordinary shares, including the applicability and effect of federal, state, local and foreign income and other tax laws to his or her particular circumstances.

Taxation of Distributions Paid on Ordinary Shares

Subject to the discussion below under "Tax Consequences if We Are a Passive Foreign Investment Company," a U.S. holder will be required to include in gross income as dividend income the amount of any distribution paid on our ordinary shares, including any non-U.S. taxes withheld from the amount paid, to the extent the distribution is paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes. Distributions in excess of earnings and profits will be treated as a return of capital that will be applied against and will reduce the U.S. holder's tax basis in its ordinary shares and, to the extent in excess of that basis, will be treated as gain from the sale or exchange of ordinary shares. The dividend portion of such distribution generally will not qualify for the dividends received deduction otherwise available to corporations.

Dividends that are received by U.S. holders that are individuals, estates or trusts will be taxed at the rate applicable to long-term capital gains (currently a maximum rate of 15% for taxable years beginning on or before December 31, 2012), provided that such dividends meet the requirements of "qualified dividend income." Dividends that fail to meet such requirements, and dividends received by corporate U.S. holders, are taxed at ordinary income rates. In order for our dividends to qualify as "qualified dividend income," we need to be considered a "qualified foreign corporation," which generally is either a non-U.S. corporation that is eligible for the benefits of a comprehensive income tax treaty with the United States that includes an information exchange program and which the IRS determines is satisfactory or a non-U.S. corporation the stock of which is readily tradable on an established securities market in the U.S. Furthermore, a dividend received by a U.S. holder will not be a qualified dividend if (1) the U.S. holder held the ordinary share with respect to which the dividend was paid for less than 61 days during the 121-day period beginning on the date that is 60 days before the ex-dividend date with respect to such dividend, excluding for this purpose, under the rules of Code Section 246(c), any period during which the U.S. holder has an option to sell, is under a contractual obligation to sell, has made and not closed a short sale of, is the grantor of a deep-in-the-money or otherwise nonqualified option to buy, or has otherwise diminished its risk of loss by holding other positions with respect to, such ordinary share (or substantially identical securities) or (2) the U.S. holder is under an obligation (pursuant to a short sale or otherwise) to make related payments with respect to positions in property substantially similar or related to the ordinary share with respect to which the dividend is paid. If we were to be a "passive foreign investment company" (as such term is defined in the Code) for any taxable year, dividends paid on our ordinary shares in such year or in the following taxable year would not be qualified dividends. See the discussion below regarding our passive foreign investment company status under "Tax Consequences if We Are a Passive Foreign Investment Company." In addition, a non-corporate U.S. holder will be able to take a qualified dividend into account in determining its deductible investment interest (which is generally limited to its net investment income) only if it elects to do so; in such case the dividend will be taxed at ordinary income rates.

Distributions of current or accumulated earnings and profits paid in foreign currency to a U.S. holder (including any non-U.S. taxes withheld from the distributions) will generally be includible in the income of a U.S. holder in a U.S. dollar amount calculated by reference to the spot NIS/U.S. Dollar exchange rate on the date of the distribution, regardless of whether the payment is in fact converted into U.S. Dollars. A U.S. holder that receives a foreign currency distribution and converts the foreign currency into U.S. dollars after the date of distribution may have foreign exchange gain or loss based on any appreciation or depreciation in the value of the foreign currency against the U.S. dollar, which will generally be U.S. source ordinary income or loss.

U.S. holders will have the option of claiming the amount of any non-U.S. income taxes withheld at source either as a deduction from gross income or as a dollar-for-dollar credit against their U.S. federal income tax liability. Individuals who do not claim itemized deductions, but instead utilize the standard deduction, may not claim a deduction for the amount of the non-U.S. income taxes withheld, but the amount may be claimed as a credit against the individual's U.S. federal income tax liability. The amount of non-U.S. income taxes that may be claimed as a credit in any taxable year is subject to complex limitations and restrictions, which must be determined on an individual basis by each U.S. holder. These limitations include rules which generally limit foreign tax credits allowable for specific classes of income to the U.S. federal income taxes otherwise payable on each such class of income. The total amount of allowable foreign tax credits in any taxable year generally cannot exceed the pre-credit U.S. tax liability for the taxable year attributable to non-U.S. source taxable income. Dividends paid with respect to our ordinary shares will generally be income from sources outside the United States for foreign tax credit limitation purposes and will generally be "passive income" which is a type of income that is treated separately from other types of income for foreign tax credit limitation purposes.

A U.S. holder will be denied a foreign tax credit for non-U.S. income taxes withheld from a dividend received on our ordinary shares (i) if the U.S. holder has not held the ordinary shares for at least 16 days of the 31–day period beginning on the date which is 15 days before the ex-dividend date with respect to such dividend or (ii) to the extent the U.S. holder is under an obligation to make related payments with respect to positions in substantially similar or related property. Any days during which a U.S. holder has substantially diminished its risk of loss on the ordinary shares are not counted toward meeting the required 16-day holding period.

Taxation of the Disposition of Ordinary Shares

Subject to the discussion below under "Tax Consequences if We Are a Passive Foreign Investment Company," upon the sale, exchange or other disposition of our ordinary shares, a U.S. holder will recognize capital gain or loss in an amount equal to the difference between the U.S. holder's basis in the ordinary shares, which is usually the cost to the U.S. holder of the ordinary shares, and the amount realized on the disposition. In the case of non-corporate U.S. holders, capital gain from the sale, exchange or other disposition of ordinary shares held more than one year will be long-term capital gain and may be subject to a reduced rate of taxation (long-term capital gains are currently taxable at a maximum rate of 15% for taxable years beginning on or before December 31, 2012). Gain or loss recognized by a U.S. holder on a sale, exchange or other disposition of ordinary shares will generally be treated as U.S. source income for U.S. foreign tax credit purposes. The deductibility of a capital loss recognized on the sale, exchange or other disposition of ordinary shares may be subject to limitations.

A U.S. holder that uses the cash method of accounting calculates the dollar value of the proceeds received on the sale as of the date that the sale settles. However, a U.S. holder that uses the accrual method of accounting is required to calculate the value of the proceeds of the sale as of the trade date and may therefore realize foreign currency gain or loss. A U.S. holder may avoid realizing foreign currency gain or loss by electing to use the settlement date to determine the proceeds of sale for purposes of calculating the foreign currency gain or loss. In addition, a U.S. holder that receives foreign currency upon disposition of ordinary shares and converts the foreign currency into dollars after the settlement date or trade date (whichever date the U.S. holder is required to use to calculate the value of the proceeds of sale) may have foreign exchange gain or loss based on any appreciation or depreciation in the value of the foreign currency against the dollar, which will generally be U.S. source ordinary income or loss.

Tax Consequences if We Are a Passive Foreign Investment Company

For U.S. federal income tax purposes, we will be classified as a passive foreign investment company, or PFIC, for any taxable year in which either, after applying certain look-thru rules, (i) 75% or more of our gross income is passive income or (ii) at least 50% of the average value (determined on a quarterly basis) of our total assets for the taxable year produce or are held for the production of passive income. For this purpose, cash is considered to be an asset which produces passive income. Passive income includes dividends, interest, royalties, rents, annuities and the excess of gains over losses from the disposition of certain assets which produce passive income.

Based on our analysis of our gross income, assets, activities and market capitalization, we do not believe we were a PFIC for the taxable year ended December 31, 2011. However, there can be no assurances that the IRS will not challenge our analysis or our conclusions regarding our PFIC status. There is 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 that acquired or held our ordinary shares during such years generally will be subject to the PFIC rules regardless of whether we are a PFIC for 2011. However, if we were not a PFIC for 2011, U.S. holders who acquired our ordinary shares in 2011 will not be subject to the PFIC rules unless we are classified as a PFIC in future years. 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.

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If we are a PFIC, a U.S. holder of our ordinary shares could be subject to increased tax liability upon the sale or other disposition (including gifts) of its ordinary shares or upon the receipt of amounts treated as "excess distributions," which could result in a reduction in the after-tax return to such U.S. holder. In general, an excess distribution is the amount of distributions received during a taxable year that exceed 125% of the average amount of distributions received by a U.S. holder in respect of the ordinary shares during the preceding three taxable years, or if shorter, during the U.S. holder's holding period prior to the taxable year of the distribution. Under these rules, the excess distribution and any gain on the disposition of ordinary shares would be allocated ratably over the U.S. holder's holding period for the ordinary shares. The amount allocated to the current taxable year and any taxable year prior to the first taxable year in which we were a PFIC would be taxed as ordinary income. The amount allocated to each of the other taxable years would be subject to tax at the highest marginal rate in effect for the applicable class of taxpayer for that taxable year, and an interest charge for the deemed deferral benefit would be imposed on the resulting tax allocated to such other taxable years. The tax liability with respect to the amount allocated to taxable years prior to the year of the disposition or distribution cannot be offset by net operating losses. In addition, holders of stock in a PFIC may not receive a "step-up" in basis on PFIC shares acquired from a decedent. Furthermore, if we are a PFIC, each U.S. holder will generally be required to file an annual report with the IRS for taxable years beginning on or after March 18, 2011.

As an alternative to the tax treatment described above, a U.S. holder could elect to treat us as a "qualified electing fund" ("QEF"), in which case the U.S. holder would be required to include in income, for each taxable year that we are a PFIC, its pro rata share of our ordinary earnings as ordinary income and its pro rata share of our net capital gains as long-term capital gain, subject to a separate election to defer payment of taxes which deferral is subject to an interest charge. Any income inclusion will be required whether or not such U.S. holder owns our ordinary shares for an entire taxable year or at the end of our taxable year. The amount so includable will be determined without regard to our prior year losses or the amount of cash distributions, if any, received from us. Special rules apply if a U.S. holder makes a QEF election after the first taxable year in its holding period in which we are a PFIC. We will supply U.S. holders that make a request in writing with the information needed to report income and gain under a QEF election if we are a PFIC. A U.S. holder's tax basis in its ordinary shares will increase by any amount included in income and decrease by any amounts not included in income when distributed because such amounts were previously taxed under the QEF rules. So long as a U.S. holder's QEF election is in effect with respect to the entire holding period for its ordinary shares, generally, any gain or loss realized by such holder on the disposition of its ordinary shares held as a capital asset ordinarily would be capital gain or loss. The QEF election is made on a shareholder-by-shareholder basis, applies to all ordinary shares held or subsequently acquired by an electing U.S. holder and can be revoked only with the consent of the IRS.

As an alternative to making a QEF election, a U.S. holder of PFIC stock which is "marketable stock" (e.g., "regularly traded" on the NASDAQ Capital Market) may in certain circumstances avoid certain of the tax consequences generally applicable to holders of stock in a PFIC by electing to mark the stock to market as of the beginning of such U.S. holder's holding period for the ordinary shares. As a result of such an election, in any taxable year that we are a PFIC, a U.S. holder would generally be required to report gain or loss to the extent of the difference between the fair market value of the ordinary shares at the end of the taxable year and such U.S. holder's tax basis in its ordinary shares at that time. Any gain under this computation, and any gain on an actual disposition of the ordinary shares in any year in which we are a PFIC, would be treated as ordinary income. Any loss under this computation, and any loss on an actual disposition of the ordinary shares in any year in which we are a PFIC, generally would be treated as ordinary loss to the extent of the cumulative net-mark-to-market gain previously included. Any remaining loss from marking ordinary shares to market will not be allowed, and any remaining loss from an actual disposition of ordinary shares in any year in which we are a PFIC generally would be capital loss. A U.S. holder's tax basis in its ordinary shares is adjusted annually for any gain or loss recognized under the mark-to-market election. There can be no assurances that there will be sufficient trading volume with respect to the ordinary shares for the ordinary shares to be considered "regularly traded" or that our ordinary shares will continue to trade on the NASDAQ Capital Market. Accordingly, there are no assurances that the ordinary shares will be marketable stock for these purposes. As with a QEF election, a

market-to-market election is made on a shareholder-by-shareholder basis, applies to all ordinary shares held or subsequently acquired by an electing U.S. holder and can only be revoked with consent of the IRS (except to the extent the ordinary shares no longer constitute “marketable stock”).

The U.S. federal income tax consequences to a U.S. holder if we were to be a PFIC are complex. In view of the uncertainty regarding our determination as a PFIC for past years and possibly for subsequent years, U.S. Shareholders are urged to consult their own tax advisors for guidance as to our status as a PFIC. For those U.S. shareholders who determine that we are a PFIC and, after consultation with their advisors, wish to make the QEF or the market-to-market election described above, such shareholders may notify us in writing and we will promptly make any such necessary information available to them.

A U.S. holder should consult with his or her own advisor with regard to those consequences, as well as with regard to whether he or she should make either of the elections described above.

Tax Consequences for Non-U.S. Holders of Ordinary Shares

Except as described in "Information Reporting and Backup Withholding" below, a Non-U.S. holder of our ordinary shares generally will not be subject to U.S. federal income or withholding tax on the payment of dividends on, and the proceeds from the disposition of, our ordinary shares, unless, in the case of U.S. federal income taxes:

- the dividend or proceeds, as the case may be, are effectively connected with the conduct by the Non-U.S. holder of a trade or business in the United States and, in the case of a resident of a country which has a treaty with the United States, the item is attributable to a permanent establishment in the United States, or in the case of an individual, the item is attributable to a fixed place of business in the United States; or

- the Non-U.S. holder is an individual who holds the ordinary shares as a capital asset and is present in the United States for 183 days or more in the taxable year of the dividend or disposition and certain other conditions are met.

Information Reporting and Backup Withholding

U.S. holders (other than exempt recipients such as corporations) generally are subject to information reporting requirements with respect to dividends paid in the United States on, or proceeds from the disposition of, our ordinary shares. In addition, a U.S. holder may be subject, under certain circumstances, to backup withholding at a rate of up to 28% with respect to dividends paid on, or proceeds from the disposition of, our ordinary shares unless the U.S. holder provides proof of an applicable exemption or correct taxpayer identification number and otherwise complies with applicable requirements of the backup withholding rules. A U.S. holder of our ordinary shares who provides an incorrect taxpayer identification number may be subject to penalties imposed by the IRS.

Non-U.S. holders generally are not subject to information reporting or backup withholding with respect to dividends paid on, or proceeds from the disposition of, our ordinary shares, provided that the Non-U.S. holder provides its taxpayer identification number, certifies to its foreign status, or establishes another exemption to the information reporting or back-up withholding requirements.

Amounts withheld under the backup withholding rules are not an additional tax and may be refunded or credited against the U.S. holder's federal income tax liability, provided the required information is furnished to the IRS.

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.W., 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 from the Public Reference Section of the SEC, 100 F Street, N.W., 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, 2011, we had $22.4 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 4 of our 2011 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 2.2%, 2.7% and 3.9% in 2011, 2010 and 2009, respectively. The appreciation (devaluation) of the NIS against the U.S. dollar amounted to (7.7%), 0.7% and 6.0% in 2011, 2010 and 2009, respectively. Assuming a 10% appreciation of the NIS against the U.S. dollar, we would experience exchange rate losses of approximately $1 million, while assuming a 10% devaluation of the NIS against the U.S. dollar, we would experience an exchange rate gain of approximately $870,000, in both case excluding the effect of our hedging transactions (as described below).

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. We have entered at the beginning of 2011 into several derivative instrument arrangements to hedge a portion of our anticipated NIS employee compensation-related and certain operation expenses and starting in July 2011, following a board decision we maintain available NIS cash for between 6-10 months of expected NIS expenditures (depending on the then existing exchange rates) For more information, see Note 2s to our 2011 consolidated financial statement

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, 2011 that are included in this annual report, has issued an attestation report on our internal control over financial reporting as of December 31, 2011.

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, 2011 is provided on page [F-2], 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 there were no 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, 2011.

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, 2011 and 2010:

| | | 2011 | | 2010 |
|---|---|---|---|---|
| Audit Fees | $ | 75,000 | $ | 75,000 |
| Audit Related Fees | $ | 26,000 | $ | 20,000 |
| Tax Fees | $ | 5,000 | $ | 10,500 |
| All Other Fees | $ | - | $ | 10,500 |
| Total | $ | 106,000 | $ | 116,000 |

"Audit Fees" are fees for professional services rendered by our principal accountant in connection with the audit 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, relating to internal accounting functions and procedures including review of internal control over financial reporting.

"Tax Fees" are fees for services rendered by our principal accountant in connection with tax compliance tax advice and tax planning which in year 2011 and 2010 were related to Annual Israeli tax reports, Approved Enterprise request submission and request to discontinue Tax reports submission for Keddem following its operation suspension; and

"All Other Fees" are fees for other consulting services rendered by our principal accountant to us including consultancy and consents with respect to Form S-8 and Form 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 2010 and 2011 were pre-approved by the audit committee in accordance with these procedures.

In May 2011, 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, 2011 and until the next annual shareholder meeting. Such approval followed the pre-approval by our board of directors and audit committee 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 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 Executive Officer Compensation: Under Israeli law, the compensation of executive officers is approved by the board of directors and the audit committee, and there is no requirement for a recommendation or determination of such compensation by independent directors or a compensation committee of the board, as NASDAQ Listing Rule 5605(d) requires. If the chief executive officer or any other executive officer is also a director, then the Companies Law requires that the terms of compensation of the officer must be approved by the audit committee, the board of directors and shareholders of a company, and that generally such officer may not be present when the audit committee or board of directors discusses or votes on the terms of his or her compensation.

- 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 the 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.

- Review of Related Party Transactions: Under Israeli law, related party transactions involving our company require the approval of the board of directors and, if involving an extraordinary transaction (as such term is defined under the Companies Law) with an office holder, or with a third party in which the office holder has a personal interest, by our audit committee as well, and if involving a controlling shareholder or a third party where the controlling shareholder has a personal interest, or an engagement between a public company and a controlling shareholder thereof or such controlling shareholder's relative, whether directly or indirectly, with respect to the provision of

services to the company, generally requires also the approval of the shareholders, including a special majority, rather than approval by the audit committee or other independent body of our board of directors as required under NASDAQ Listing Rule 5630. See "Item 10. Additional Information— Memorandum and Articles of Association— Transactions Requiring Special Approval" in this annual report.

- 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. |
| 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. |
| 4.2 | Funding Agreement entered into on December 20, 2011 between Compugen and Baize Investments (Israel) Ltd. incorporated by reference to Exhibit to Compugen's 6-K filed on December 22, 2011. |
| 12.1 | Certification by Chief 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 Chief Financial 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 Chief Executive 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. |
| 13.2 | Certification by Chief Financial 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, dated March 14, 2012. |
| 101 | The following financial information from Compugen Ltd.'s Annual Report on Form 20-F for the year ended December 31, 2011, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Statements of Operations for the years ended December 31, 2011, 2010 and 2009; (ii) Consolidated Balance Sheets |

at December 31, 2011 and 2010; (iii) Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2011, 2010 and 2009; (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2011, 2010 and 2009; and (v) Notes to Consolidated Financial Statements, tagged as blocks of text. 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 14, 2012

COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2011

U.S. DOLLARS IN THOUSANDS

INDEX

Kost Forer Gabbay &
Kasierer
3 Aminadav St.
Tel-Aviv 67067, Israel

Tel: 972 (3)6232525
Fax: 972 (3)5622555
www.ey.com

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of

COMPUGEN LTD. AND SUBSIDIARIES

We have audited the accompanying consolidated balance sheets of Compugen Ltd. (the "Company") and subsidiaries as of December 31, 2011 and 2010, and the related consolidated statements of operations, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2011. 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 subsidiaries as of December 31, 2011 and 2010, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2011, 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, 2011, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated XXX, 2012 expressed an unqualified opinion thereon.

Tel-Aviv, Israel
March 14, 2012

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

Kost Forer Gabbay &
Kasierer
3 Aminadav St.
Tel-Aviv 67067, Israel

Tel: 972 (3)6232525
Fax: 972 (3)5622555
www.ey.com

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

To the Shareholders and Board of Directors of

COMPUGEN LTD. AND SUBSIDIARIES

We have audited Compugen Ltd.'s (the "Company") and subsidiaries internal control over financial reporting as of December 31, 2011, 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 and subsidiaries 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. Our responsibility is to express an opinion on the Company's 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.

Kost Forer Gabbay &
Kasierer
3 Aminadav St.
Tel-Aviv 67067, Israel

Tel: 972 (3)6232525
Fax: 972 (3)5622555
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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 subsidiaries maintained in all material respects, effective internal control over financial reporting as of December 31, 2011, 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 subsidiaries as of December 31, 2011 and 2010, and the related consolidated statements of operations, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2011 and our report dated , 2012 expressed an unqualified opinion thereon.

Tel-Aviv, Israel
March 14, 2012

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

COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

U.S. dollars in thousands

| | Note | December 31, 2011 | 2010 |
|---|---|---|---|
| ASSETS | | | |
| CURRENT ASSETS: | | | |
| Cash and cash equivalents | 4 | $ 5,846 | $ 7,300 |
| Short-term bank deposits | | 16,525 | 14,524 |
| Restricted cash | | 92 | 684 |
| Trade receivables | | - | 21 |
| Other accounts receivable and prepaid expenses | 7 | 546 | 548 |
| Receivables from funding arrangement | 8,12 | - | 5,000 |
| Total current assets | | 23,009 | 28,077 |
| LONG-TERM INVESTMENTS: | | | |
| Investment in Evogene | 5 | 4,093 | 6,227 |
| Long-term prepaid expenses | | 17 | 64 |
| Severance pay fund | | 1,465 | 1,510 |
| Total long-term investments | | 5,575 | 7,801 |
| PROPERTY AND EQUIPMENT, NET | 9 | 497 | 580 |
| Total assets | | $ 29,081 | $ 36,458 |

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

COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

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

| | Note | December 31, 2011 | 2010 |
|---|---|---|---|
| LIABILITIES AND SHAREHOLDERS' EQUITY | | | |
| CURRENT LIABILITIES: | | | |
| Trade payables | | $ 248 | $ 507 |
| Other accounts payable and accrued expenses | 10 | 1,459 | 1,934 |
| Total current liabilities | | 1,707 | 2,441 |
| LONG-TERM LIABILITIES: | | | |
| Research and development funding arrangements | 12 | 6,150 | 4,037 |
| Accrued severance pay | | 1,643 | 1,695 |
| Total long-term liabilities | | 7,793 | 5,732 |
| COMMITMENTS AND CONTINGENCIES | 3, 11 | | |
| SHAREHOLDERS' EQUITY: | 13 | | |
| Share capital: | | | |
| Ordinary shares of NIS 0.01 par value: 100,000,000 shares authorized at December 31, 2011 and 2010; 34,707,622 and 33,915,545 shares issued and outstanding at December 31, 2011 and 2010, respectively | | 94 | 92 |
| Additional paid-in capital | | 195,714 | 190,275 |
| Accumulated other comprehensive income | | 4,264 | 6,405 |
| Accumulated deficit | | (180,491) | (168,487) |
| Total shareholders' equity | | 19,581 | 28,285 |
| Total liabilities and shareholders' equity | | $ 29,081 | $ 36,458 |

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

COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

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

| | Note | Year ended December 31, 2011 | 2010 | 2009 |
|---|---|---|---|---|
| Revenues | 14 | $ - | $ 1,115 | $ 250 |
| Cost of revenues | | - | 224 | - |
| Gross profit | | - | 891 | 250 |
| Research and development expenses, net of Government and other grants amounting to $ 424, $ 1,010 and $ 944 for the years ended December 31, 2011, 2010 and 2009, respectively | 3 | 6,778 | 5,227 | 5,051 |
| Marketing and business development expenses | | 610 | 633 | 681 |
| General and administrative expenses | | 4,591 | 2,909 | 2,147 |
| Total operating expenses | | 11,979 | 8,769 | 7,879 |
| Operating loss | | (11,979) | (7,878) | (7,629) |
| Financial income (expenses), net | 15 | (306) | 241 | 65 |
| Other income | 2g | 281 | 434 | 3,721 |
| Loss from continuing operations | | (12,004) | (7,203) | (3,843) |
| Gain from discontinued operations | | - | - | 12 |
| Net loss | | $ (12,004) | $ (7,203) | $ (3,831) |
| Basic and diluted net loss per share from continuing operations | | $ (0.35) | $ (0.22) | $ (0.13) |
| Basic and diluted net loss per share from discontinued operations | | $ - | $ - | $ *) - |

| | | | |
|---|---|---|---|
| Basic and diluted net loss per share | $ (0.35) | $ (0.22) | $ (0.13) |
| Weighted average number of Ordinary shares used in computing basic and diluted net loss per share | 34,276,697 | 33,284,017 | 28,608,317 |

*) Less than $ 0.01

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

COMPUGEN LTD. AND ITS SUBSIDIARIES

STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

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

| | Ordinary shares | | Additional paid-in capital | Accumulated other comprehensive income | Accumulated deficit | Total shareholders' equity | Total comprehensive loss |
|---|---|---|---|---|---|---|---|
| | Number | Amount | | | | | |
| Balance as of January 1, 2009 | 28,512,440 | $ 77 | $ 163,181 | $ 4,198 | $ (157,453) | $ 10,003 | |
| Employee options exercised | 283,772 | *) - | 750 | - | - | 750 | |
| Issuance of shares | 4,071,700 | 11 | 19,063 | - | - | 19,074 | |
| Stock-based compensation relating to options and warrants issued to consultants | - | - | 225 | - | - | 225 | |
| Stock-based compensation relating to options issued to employees | - | - | 1,304 | - | - | 1,304 | |
| Realized gain on the investment in Evogene | - | - | - | (3,721) | - | (3,721) | $ (3,721) |
| Unrealized gain on the investment in Evogene | - | - | - | 3,594 | - | 3,594 | 3,594 |
| Net loss | - | - | - | - | (3,831) | (3,831) | (3,831) |
| Total comprehensive loss | | | | | | | $ (3,958) |
| Balance as of December 31, 2009 | 32,867,912 | 88 | 184,523 | 4,071 | (161,284) | 27,398 | |
| Employee options | 1,047,633 | 4 | 2,416 | - | - | 2,420 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| exercised | | | | | | | |
| Issuance of warrants in connection with research and development funding arrangement, net | - | - | 999 | - | - | 999 | |
| Stock-based compensation relating to options and warrants issued to consultants | - | - | 461 | - | - | 461 | |
| Stock-based compensation relating to options issued to employees | - | - | 1,876 | - | - | 1,876 | |
| Realized gain on the investment in Evogene | - | - | - | (382) | - | (382) | $ (382) |
| Unrealized gain on the investment in Evogene | - | - | - | 2,716 | - | 2,716 | 2,716 |
| Net loss | - | - | - | - | (7,203) | (7,203) | (7,203) |
| | | | | | | | |
| Total comprehensive loss | | | | | | | $ (4,869) |
| | | | | | | | |
| Balance as of December 31, 2010 | 33,915,545 | $ 92 | $ 190,275 | $ 6,405 | $ (168,487) | $ 28,285 | |

*) Represents an amount lower than $ 1.

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

COMPUGEN LTD. AND ITS SUBSIDIARIES

STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

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

| | Ordinary shares | | Additional paid-in capital | Accumulated other comprehensive income | Accumulated deficit | Total shareholders' equity | Total comprehensive loss |
|---|---|---|---|---|---|---|---|
| | Number | Amount | | | | | |
| 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 consultants | - | - | 457 | - | - | 457 | |
| Stock-based compensation relating to options issued to employees | - | - | 2,943 | - | - | 2,943 | |
| Realized gain on the investment in Evogene | - | - | - | (239) | - | (239) | $ (239) |
| Unrealized loss on the investment in Evogene | - | - | - | (1,902) | - | (1,902) | (1,902) |
| Net loss | - | - | - | - | (12,004) | (12,004) | (12,004) |
| Total comprehensive loss | | | | | | | $ (14,145) |
| Balance as of December 31, 2011 | 34,707,622 | $94 | $195,714 | $ 4,264 | $ (180,491) | $ 19,581 | |

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

COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

| | Year ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Cash flows from operating activities: | | | |
| Net loss | $(12,004) | $(7,203) | $(3,831) |
| Adjustments required to reconcile net loss to net cash used in operating activities: | | | |
| Gain from discontinued operations | - | - | (12) |
| Non-cash stock-based compensation | 3,400 | 2,337 | 1,529 |
| Depreciation | 179 | 201 | 264 |
| Severance pay, net | (7) | 92 | (117) |
| Gain from sale of Evogene shares | (239) | (419) | (3,721) |
| Changes in fair value of the embedded derivatives in the research and development funding arrangement | 113 | 97 | - |
| Decrease in trade receivables and other accounts receivable and prepaid expenses | 43 | 192 | 58 |
| Increase (decrease) in trade payables and other accounts payable and accrued expenses | (734) | 562 | (1,534) |
| Increase (decrease) in deferred revenue | - | (113) | 13 |
| Gain from the sale of property and equipment | - | (25) | (102) |
| Net cash used in operating activities | (9,249) | (4,279) | (7,453) |
| Cash flows from investing activities: | | | |
| Proceeds from redemption of deposits and maturities of marketable securities, net | 14,524 | 500 | 2,612 |
| Investment in bank deposits | (16,525) | (14,524) | (500) |
| Changes in restricted cash | 592 | (1) | (96) |
| Purchase of property and equipment | (96) | (46) | (48) |
| Decrease (increase) in long-term prepaid expenses | 47 | (46) | 23 |
| Proceeds from sale of investment in Evogene | 232 | 424 | 3,557 |
| Proceeds from sale of property and equipment | - | 25 | 185 |
| Net cash provided by (used in) investing activities | (1,226) | (13,668) | 5,733 |

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

COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

| | Year ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Cash flows from financing activities: | | | |
| Warrants issuance expenses in connection with funding arrangement | - | (61) | - |
| Proceeds from issuance of shares, net | - | 7,790 | 12,013 |
| Proceeds from research and development funding arrangements | 7,000 | - | - |
| Exercise of options | 2,021 | 2,379 | 196 |
| Net cash provided by financing activities | 9,021 | 10,108 | 12,209 |
| Increase (decrease) in cash and cash equivalents | (1,454) | (7,839) | 10,489 |
| Cash and cash equivalents at the beginning of the year | 7,300 | 15,139 | 4,650 |
| Cash and cash equivalents at the end of the year | $5,846 | $7,300 | $15,139 |
| Supplemental disclosure of non-cash investing and financing activities: | | | |
| Receivables on account of shares and from funding arrangement | $- | $5,000 | $7,790 |
| Receivables for other finance proceeds | $20 | $41 | $- |

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

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

NOTE 1:- GENERAL

a. Compugen Ltd. (the "Company") and its subsidiaries 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 us with potential milestone payments and royalties on product sales or other forms of revenue sharing.

The Company's headquarters and research facilities are located in Israel.

b. In 1997, the Company established a wholly-owned U.S. subsidiary, Compugen USA, Inc. and in 2008, a wholly-owned UK subsidiary, Compugen UK Ltd. During 2010, the UK subsidiary had been dissolved. As of December 31, 2011, the U.S. subsidiary had no significant operations.

c. Following a shelf registration filed in September 2009, the Company signed in November 2009 an agreement with an underwriter, to issue and sell Ordinary shares under an At The Market offering ("ATM") with gross proceeds of up to $ 20,000. During November and December 2009, the Company raised approximately $ 19,100, net of issuance expenses from the issuance of 4,071,700 of its Ordinary shares.

Following a second shelf registration filed in January 2011, the Company signed in August 2011 agreement with an underwriter, to issue and sell Ordinary shares under an ATM with gross proceeds of up to $ 40,000 (see Note 17).

d. On December 29, 2010, the Company entered into a research and discovery funding arrangement with an investor. Under the funding arrangement, the Company received $ 5,000 in support of its Pipeline Program (see Notes 8 and 12).

On December 20, 2011, the Company entered into a second research and discovery funding arrangement with an investor. According to the arrangement, the Company will receive a total of $ 8,000 in support of certain research and development activities. As of December 31, 2011, the Company received $ 2,000 with respect to the agreement (see Note 12).

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

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").

a. 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 and its subsidiaries is the U.S. dollar, as the Company's management believes that the U.S. dollar is the currency of the primary economic environment in which the Company and its subsidiaries have operated and expect to continue to operate in the foreseeable future. A majority of the Company's sales are expected to be made outside Israel in U.S. dollars and also the Company's 2011 financing transactions were made outside Israel in U.S. dollars. The majority of the Company and its subsidiaries' operations are currently conducted in Israel and most of the expenses in Israel are currently paid in new Israeli shekels ("NIS").

Accordingly, monetary accounts maintained in currencies other than the dollar are remeasured into U.S. dollars in accordance with ASC 830, "Foreign Currency Matters".

All transaction gains and losses of the remeasured monetary balance sheet items are reflected in the statement of operations 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 subsidiaries Compugen USA Inc. and Compugen UK Ltd. Intercompany transactions and balances have been eliminated upon consolidation.

d. Cash and cash equivalents:

The Company and its subsidiaries 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 short-term credit and in 2010 also for consortium funds under European grant.

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, 2011 and 2010 bear an annual average interest rate of 1.77% and 0.97%, respectively.

Bank deposits in NIS for the years ended December 31, 2011 and 2010 bear an annual average interest rate of 2.56% and 1.35%, respectively.

g. Marketable securities:

The Company accounts for investment in Evogene in accordance with ASC 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. Available-for-sale securities 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 are included in other income and are derived using the specific identification method for determining the cost of securities. As of December 31, 2011, the Company holds 1,043,397 shares representing 2.9% of Evogene outstanding Ordinary shares.

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

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

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. For securities that are deemed other-than-temporarily impaired, the amount of impairment is recognized in "other than temporary impairment, net of gain on sale of marketable securities previously impaired" in the statement of operations and is limited to the amount related to credit losses, while impairment related to other factors is recognized in other comprehensive income.

During 2009, 2010 and 2011, no other-than-temporary impairment was recorded.

h. Long-term prepaid expenses:

Long-term prepaid expenses consist of long-term lease deposits as security for motor vehicles leases.

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 subsidiaries 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 2011, 2010 and 2009, 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.

The Company views its collaboration research agreements as service arrangements and follows the revenue recognition criteria in ASC 650-10. Under these arrangements, revenue is being recognized when the Company completes its performance obligations.

The Company believes that the customer realizes value from the transaction only when and if the final act is performed and, therefore, performance should be deemed to have occurred and revenue recognized, when that act takes place. During 2010 and 2009, the Company recognized revenues from product candidate collaboration agreements, under which the Company performs research services. As of the balance sheet date, no milestones payments and royalties have been received

l. Research and development expenses, net:

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

Royalty and non-royalty bearing grants from the Office of the Chief Scientist of the Israel Ministry of Industry, Trade and 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.

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 these policies, and includes profits or losses accumulated up to the balance sheet date.

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

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Some employee arrangements are under section 14 to the Israeli Severance Pay Law, 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, 2011, 2010 and 2009, amounted to approximately $ 257, $ 231 and $ 250, respectively.

n. Accounting for stock-based compensation:

The Company accounts for stock-based compensation in accordance with ASC 718, "Compensation - Stock Compensation" ("ASC 718"). ASC 718 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 operations.

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 subsidiaries to concentration of credit risk consist principally of cash and cash equivalents, short-term 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 and its subsidiaries account for income taxes in accordance with ASC 740, "Income Taxes" and its related guidance on accounting for uncertain tax positions previously issued as FIN 48, "Accounting for Uncertainty in Income Taxes". ASC 740 prescribes the use of the liability method whereby deferred tax assets 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 and its subsidiaries provide a valuation allowance to reduce deferred tax assets to their estimated realizable value. ASC 740 provides detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in an enterprise's financial statements in accordance with 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."

All outstanding stock options and warrants have been excluded from the calculation of the diluted net loss per share because all such securities are anti-dilutive for all periods presented. The total number of shares related to outstanding options excluded from the calculations of diluted net loss per share was 5,943,400, 5,863,457 and 5,670,997 for the years ended December 31, 2011, 2010 and 2009, respectively. The total number of shares related to conversion rights of the research and development funding arrangements' embedded derivatives excluded from the calculations of diluted net loss per share was 1,166,666 and 833,333 for the years ended December 31, 2011 and 2010, respectively, and none for the year ended December 31, 2009. The total number of shares related to warrants excluded from the calculations of diluted net loss per share was 500,000 for the years ended December 31, 2011 and 2010 and none for the year ended December 31, 2009.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

r. Fair value of financial instruments:

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

The Company measures its investment in Evogene and embedded derivatives at fair value. Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. A three-tier fair value hierarchy is established as a basis for considering such assumptions and for inputs used in the valuation methodologies in measuring fair value:

Level 1 - quoted prices in active markets for identical assets or liabilities;

Level 2 - inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or

Level 3 - unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

s. Derivative instruments:

As of 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 operations and included in financial income or expenses.

In the year ended December 31, 2011, the Company recorded net gain from derivatives transactions in the amount of $ 134 compare with net losses in the years ended December 31, 2010 and 2009 in the amount of $ 15 and $ 41, respectively (not including change in fair value of embedded derivatives in 2011 mentioned in Note 6).

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

t. Recently issued accounting pronouncements:

In May 2011, the FASB issued ASU 2011-04, Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP. This pronouncement is an authoritative guidance to amend certain measurement and disclosure requirements related to fair value measurements to improve consistency with international reporting standards. This guidance is effective prospectively for public entities for interim and annual reporting periods beginning after December 15, 2011, with early adoption prohibited. The Company is currently evaluating the effect of ASU 2011-04, but does not expect its adoption will have a material effect on its consolidated financial statements.

In June 2011, the FASB issued ASU 2011-05, Comprehensive Income (Topic 220): Presentation of Comprehensive Income, which specifies that the total of comprehensive income, the components of net income and the components of other comprehensive income are to be presented in either a single continuous statement of comprehensive income or in two separate but consecutive statements. This update eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders' equity. No change has been made in the items to be reported in comprehensive income. ASU 2011-05 is effective for the interim and annual periods beginning after December 15, 2011, and should be applied retrospectively. The Company is currently evaluating the effect of ASU 2011-05, but does not expect its adoption will have a material effect on its consolidated financial statements.

In December 2011, the FASB issued Accounting Standards Update 2011-12, Comprehensive Income (Topic 220). The amendments in this Update supersede certain pending paragraphs in Accounting Standards Update 2011-05, Comprehensive Income (Topic 220): Presentation of Comprehensive Income, to effectively defer only those changes in Update 2011-5 that relate to the presentation of reclassification adjustments out of accumulated other comprehensive income. For public entities, the amendments are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company is currently evaluating the effect of this update on the consolidated financial statements.

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

## NOTE 3:- GOVERNMENT AND OTHER GRANTS

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, 2011, 2010 and 2009, the Company has an aggregate of paid and accrued royalties to the OCS recorded in the consolidated statement of operations in the amount of none, $ 39 and $ 10, respectively. As of December 31, 2011, 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 $ 11,192. Under the BIRD program, the Company is not obligated to repay any amounts received from BIRD if it does not generate any income from the results of the funded research program. As of December 31, 2011 the Company does not expect any income to be generated from the results of the funded research BIRD program and as such no contingent obligation for payments to BIRD was recorded (see Note 2l).

## NOTE 4:- CASH AND CASH EQUIVALENTS

| | December 31, | |
|---|---|---|
| | 2011 | 2010 |
| Bank deposits in U.S. dollars (bearing an annual average interest rate of 1.37% and 0.75% for 2011 and 2010, respectively) | $ 1,300 | $ 2,300 |
| Bank deposits in NIS (bearing an annual average interest rate of 2.95% and 1.7% for 2011 and 2010, respectively) | 2,924 | 3,832 |
| Cash in banks | 1,622 | 1,168 |
| | $ 5,846 | $ 7,300 |

## NOTE 5:- INVESTMENT IN EVOGENE

As discussed in Note 2g, the Company presents its investment in Evogene's shares as of December 31, 2011 and 2010, as available-for-sale.

The total amount of unrealized gain of $ 4,264, $ 6,405 and $ 4,071 was included as a separate component of shareholders' equity under accumulated other comprehensive income for the years ended December 31, 2011, 2010 and 2009, respectively.

COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 6:- FAIR VALUE MEASUREMENTS

In accordance with ASC 820, the Company measures its Investment in Evogene and embedded derivatives at fair value. The carrying amounts of cash and cash equivalents, trade receivables, 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. This is 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, 2011 | | | |
|---|---|---|---|---|
| | | Fair value measurements | | |
| Description | Fair value | Level 1 | Level 2 | Level 3 |
| Marketable securities: | | | | |
| Investment in Evogene | $ 4,093 | $ 4,093 | $ - | $ - |
| Embedded derivatives | 5,707 | - | - | 5,707 |
| Total financial assets | $ 9,800 | $ 4,093 | $ - | $ 5,707 |

| | December 31, 2010 | | | |
|---|---|---|---|---|
| | | Fair value measurements | | |
| Description | Fair value | Level 1 | Level 2 | Level 3 |
| Marketable securities: | | | | |
| Investment in Evogene | $ 6,227 | $ 6,227 | $ - | $ - |
| Embedded derivatives | 4,037 | - | - | 4,037 |
| Total financial assets | $ 10,264 | $ 6,227 | $ - | $ 4,037 |

The following table presents the changes in Level 3 instruments measured on a recurring basis for the year ended December 31, 2011. The Company's Level 3 instruments consist of embedded derivatives (see Note 12).

COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 6:- FAIR VALUE MEASUREMENTS (Cont.)

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

| | Fair value of embedded derivatives |
|---|---|
| Balance at December 31, 2010 | $ 4,037 |
| Fair value of exchange option within research and development arrangement (see Note 12) | 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 |

NOTE 7:- OTHER ACCOUNTS RECEIVABLE AND PREPAID EXPENSES

| | December 31, | |
|---|---|---|
| | 2011 | 2010 |
| Grants receivable from the Office of the Chief Scientist and others | $ 198 | $ 178 |
| Government authorities | 18 | 20 |
| Prepaid expenses | 186 | 185 |
| Accrued interest | 42 | 85 |
| Other | 102 | 80 |
| | $ 546 | $ 548 |

NOTE 8:- RECEIVABLES FROM FUNDING ARRANGEMENT

As of December 31, 2010, the total proceeds of $ 5,000 from the Company's research and development funding arrangement (see also Notes 1d and 12) were not yet received by the Company. These proceeds were received on January 17, 2011.

COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 9:- PROPERTY AND EQUIPMENT, NET

| | December 31, | |
|---|---|---|
| | 2011 | 2010 |
| Cost: | | |
| Computers, software and related equipment | $ 4,948 | $ 4,874 |
| Laboratory equipment and office furniture | 3,184 | 3,167 |
| Leasehold improvements | 514 | 509 |
| | 8,646 | 8,550 |
| Accumulated depreciation: | | |
| Computers, software and related equipment | 4,859 | 4,818 |
| Laboratory equipment and office furniture | 2,823 | 2,709 |
| Leasehold improvements | 467 | 443 |
| | 8,149 | 7,970 |
| Depreciated cost | $ 497 | $ 580 |

For the years ended December 31, 2011, 2010 and 2009, depreciation expenses were approximately $ 179, $ 201 and $ 264, respectively.

NOTE 10:- OTHER ACCOUNTS PAYABLE AND ACCRUED EXPENSES

| | December 31, | |
|---|---|---|
| | 2011 | 2010 |
| Employees and related accruals | $ 606 | $ 793 |
| Pre-payment from the European Commission | - | 587 |
| Consultants and Board members | 178 | 262 |
| Accrued expenses | 269 | 184 |
| Research and Development funding arrangement related liability | 374 | - |
| Other | 32 | 108 |
| | $ 1,459 | $ 1,934 |

COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 11:- COMMITMENTS AND CONTINGENCIES

a. The Company's headquarters and research facilities are located in Israel.

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

| December 31, | |
|---|---|
| 2012 | $ 465 |
| 2013 | 69 |
| 2014 | 13 |
| | $ 547 |

Operating lease expenses for the Company were approximately $ 383, $ 397 and $ 552 in the years ended December 31, 2011, 2010 and 2009, respectively.

b. The Company provided bank guarantees in the amount of $ 97 in favor of its offices' lessor in Israel.

NOTE 12:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENTS

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

| | December 31, 2011 | 2010 |
|---|---|---|
| Embedded Derivatives (a) | $ 4,041 | $ 4,037 |
| mAb Participation Interest (b) | 443 | - |
| Embedded Derivatives (b) | 1,666 | - |
| | $ 6,150 | $ 4,037 |

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,

NOTE 12:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENT (Cont.)

(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 certaindesignated product candidates ("Participation Rights"). This right is contingent to successful commercialization of the targets which as of December 31, 2011 for accounting treatment purpose is not probable. In addition, the investor had an option to exchange its Participation Rights for a fixed amount of 833,334Ordinary shares at any time through June 30, 2013 (the "Conversion Alternative").

As of the Issuance Date, each of the five designated product candidates was currently and actively being 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, "Derivatives 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.

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

NOTE 12:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENT (Cont.)

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.
- 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.

As of December 31, 2011, the Company re-measured the embedded derivatives in the Research and Development Component. Consequently, during the year ended December 31, 2011 the Company recorded $ 4 as financial expenses mainly as a result of a change in the Company's share price.

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 31, | |
|---|---|---|
| | 2011 | 2010 |
| Risk-free interest rate (1) | 0.18% | 0.82% |
| Expected volatility (2) | 46.83% | 92.87% |
| Expected life (in years) (3) | 1.5 | 2.5 |
| 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.

NOTE 12:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENT (Cont.)

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 will 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 achieve specific milestones or have been licensed out, until December 31, 2014 ("mAb Participation Interest"). This right is contingent to successful commercialization of the targets which as of December 31, 2011for accounting treatment purpose is not probable.

According to the mAb Funding Arrangement the Funding Amount is to be paid in three installments, $ 2,000 has been paid on December 21, 2011. The investor is committed to invest additional $ 3,000 on June 30, 2012 and additional $ 3,000 on September 30, 2012. Pursuant to the mAb Funding Arrangement, in the event the remaining unpaid Funding Amounts are not transferred based on the above schedule, the Company has the right to exchange the paid Funding Amount for Company's Ordinary shares, at the price of $ 6 per share (the "Company Option"), and the Company will then have no obligations towards the investor under the mAb Funding Arrangement.

The mAb Participation Interest from the Products, will be 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 Research and Development Products, provided that the investor will be entitled to not less than ten percent of such future payments related to any qualifying Products. Notwithstanding anything in the mAb Funding Arrangement, 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").

In accordance with ASC 730-20, "Research and Development Arrangements" and ASC 815, "Derivatives 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.

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

NOTE 12:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENT (Cont.)

As per the above, the first payment 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.

As part of issuance expenses the Company granted, and committed to grant, up to 100,000 options to an agent and cash payment of $ 80. The Company recorded $ 453 as finance expenses related to these awards, based on its fair value.

As of December 31, 2011, the Company re-measured the embedded derivatives in the Research and Development Component. Consequently, during the year ended December 31, 2011, the Company recorded $ 109 as financial expenses mainly as a result of a change in the Company's share price.

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 31, 2011 | Date of issuance |
|---|---|---|
| Risk-free interest rate (1) | 0.28% | 0.3% |
| Expected volatility (2) | 61.73% | 61.54% |
| Expected life (in years) (3) | 2.25 | 2.28 |
| 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.

NOTE 12:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENT (Cont.)

(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.

NOTE 13:- 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.

b. 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 1,500,000 Ordinary shares to employees and consultants 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. 1,953,851 shares were initially reserved for grant, under the 2010 Options Plan to employees and consultants of the Company and its subsidiaries. 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.

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. 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. Subject to the 2010 Options Plan, there were 4,264,631 options to purchase shares available for future grants as of December 31, 2011.

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

COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 13:- SHAREHOLDERS' EQUITY (Cont.)

Transactions related to the grant of options to employees, directors and consultants under the above plans during the year ended December 31, 2011, were as follows:

| | Number of options | Weighted average exercise price $ | Weighted average remaining contractual life Years | Intrinsic value $ |
|---|---|---|---|---|
| Options outstanding at beginning of year | 5,863,457 | 2.75 | | - |
| Options granted | 1,171,800 | 4.19 | | 937,807 |
| Options exercised | (792,077 ) | 2.58 | | 1,738,596 |
| Options expired | (4,631 ) | 3.76 | | 5,525 |
| Options forfeited | (295,149 ) | 2.51 | | 721,635 |
| Options outstanding at end of year | 5,943,400 | 3.04 | 6.54 | 11,298,881 |
| Options vested and expected to vest at end of year (*) | 5,752,883 | 3.05 | 6.47 | 11,088,759 |
| Exercisable at end of year | 3,438,663 | 2.48 | 5.08 | 8,610,167 |

*) The options expected to vest are based on the Company's historical forfeiture rate.

Weighted average fair value of options granted during the years 2011, 2010 and 2009 was $ 2.33, $ 2.51 and $ 1.97, respectively.

As of December 31, 2011, the total unrecognized estimated compensation cost related to non-vested stock options granted prior to that date was $ 4,162 which is expected to be recognized over a weighted average period of approximately 2.56 years.

The Company estimates the fair value of stock options granted using the Black-Scholes option-pricing model.

COMPUGEN LTD. AND ITS SUBSIDIARIES

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NOTE 13:- SHAREHOLDERS' EQUITY (Cont.)

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

| | Year ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Volatility | 83% | 79% | 88% |
| Risk-free interest rate | 1.49% | 2.31% | 2.15% |
| Dividend yield | 0% | 0% | 0% |
| Expected life (years) | 4.7 | 5.0 | 5.3 |

The stock-based compensation expenses with respect to employees, directors and consultants are included in the following expense categories:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Research and development expenses | $ 1,003 | $ 883 | $ 790 |
| Selling and marketing expenses | 178 | 91 | 83 |
| General and administrative expenses | 2,219 | 1,124 | 656 |
| | $ 3,400 | $ 2,098 | $ 1,529 |

c. Options to consultants:

| | Year ended December 31, 2011 | | |
|---|---|---|---|
| | Number of options | Weighted average exercise price $ | Weighted average remaining contractual life Years |
| Options outstanding at beginning of year | 310,000 | 4.06 | |
| Options granted | 99,500 | 5.39 | |
| Options exercised | (34,000 ) | 4.13 | |
| Options expired | - | - | |
| Options outstanding at end of year | 375,500 | 4.41 | 3.84 |
| Options vested and expected to vest at end of year | 375,500 | 4.41 | 3.84 |

| | | | |
|---|---|---|---|
| Exercisable at end of year | 321,371 | 4.24 | 3.62 |

NOTE 13:- SHAREHOLDERS' EQUITY (Cont.)

The Company accounts for its options and warrants to consultants 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 fair value of these options was estimated using a Black-Scholes option-pricing model with the following weighted-average assumptions for 2011, 2010 and 2009: risk-free interest rates of 2.56%, 2.25% and 2.54%, respectively, dividend yield of 0%, volatility factors of the expected market price of the Company's Ordinary shares of 78%, 81% and 93%, respectively and a weighted-average contractual life of the options of six years. 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 with respect to the above mentioned unvested options held by the former Chairman of the Board.

The total compensation cost related to this grant is $ 494. As of December 31, 2011, the Company fully recognized those compensation costs.

e. On May 12, 2011, the shareholders approved a new grant to its former CEO (and currently a director) of 380,000 fully vested options. The options shall expire at the earlier of (i) 180 days after the former CEO terminates his service as Board member for any reason (ii) April 19, 2015. The total compensation cost related to this new grant was $ 1,264. As of December 31, 2011, the Company fully recognized those compensation costs.

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f. On December 12, 2011, the Board approved to extend the exercise period of options vested as of December 15, 2010, which previously granted to the Company's CEO, till 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, 2011, the Company fully recognized those compensation costs.

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

NOTE 14:- 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, 2011, 2010 and 2009 and long-lived assets as of December 31, 2011 and 2010:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Revenues from sales to unaffiliated customers: | | | |
| United States | $ - | $ 750 | $ 25 |
| Europe | - | 365 | 225 |
| Total revenues | $ - | $ 1,115 | $ 250 |

| | December 31, | |
|---|---|---|
| | 2011 | 2010 |
| Long-lived assets: | | |
| Israel | $ 497 | $ 580 |

| | Year ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Sales to a single customer exceeding 10%: | | | |
| Customer A | - | 67 | - |
| Customer B | - | 13 | - |
| Customer C | - | 11 | - |
| Customer D | - | - | 90 |

COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 15:- FINANCIAL INCOME (EXPENSES), NET

| | Year ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Interest income | $ 421 | $ 266 | $ 34 |
| Bank fees | (15) | (15) | (42) |
| Change in fair value of funding arrangement | (113) | (97) | - |
| Funding arrangements issuance expenses | (463) | (228) | - |
| Derivatives transactions loss (gain) | 134 | (15) | (41) |
| Exchange rate differences | (270) | 330 | 114 |
| Net income (expense) | $ (306) | $ 241 | $ 65 |

NOTE 16:- 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.

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

NOTE 16:- INCOME TAXES (Cont.)

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 its 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 2008 as its "year of election".

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).

NOTE 16:- INCOME TAXES (Cont.)

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.

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 has examined the potential effect of the adoption of the Amendment on its financial statements, and as of the date of the publication of the financial statements, the Company estimates that it will not apply the Amendment.

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

(3) Accelerated depreciation rates on equipment and buildings.

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

NOTE 16:- INCOME TAXES (Cont.)

d. Net operating losses carryforward:

As of December 31, 2011, the Company's net operating losses carryforward for tax purposes in Israel amounted to approximately $ 143 million. 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 USA, Inc. ("Inc.") is subject to U.S. income taxes. As of December 31, 2011, Inc. has net operating loss carryforward for federal income tax purposes of approximately $ 15 million which expires in the years 2018 to 2031. Inc. also has net operating loss carryforward for state income tax purposes of approximately $ 0.7 million which expires in the years 2013 to 2031. 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, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Domestic (Israel) | $ 12,004 | $ 7,203 | $ 3,760 |
| Foreign | - | - | 71 |
| | $ 12,004 | $ 7,203 | $ 3,831 |

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NOTE 16:- 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 subsidiaries' deferred tax assets are comprised of operating loss carryforward and other temporary differences. Significant components of the Company and its subsidiaries deferred tax assets are as follows:

| | December 31, | |
|---|---|---|
| | 2011 | 2010 |
| Accrued social benefits | $ 99 | $ 80 |
| Research and development credit | 1,686 | 1,370 |
| Capital funding raise credit | 14 | 89 |
| Operating loss carryforward | 40,890 | 30,909 |
| | | |
| Net deferred tax asset before valuation allowance | 42,689 | 32,448 |
| Valuation allowance | (42,689 ) | (32,448 ) |
| | | |
| Net deferred tax asset | $ - | $ - |

The Company and its subsidiaries have provided 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 subsidiaries 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 subsidiaries due to the uncertainty of the realization of such tax benefits and the effect of "approved" and "beneficiary" enterprise.

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

NOTE 16:- INCOME TAXES (Cont.)

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

The Israeli corporate tax rate was 26% in 2009, 25% in 2010 and 24% in 2011.

A company is taxable on its real (non-inflationary) capital gains at the corporate tax rate in the year of sale. A temporary provision for 2006-2009 stipulates that the sale of an asset other than a quoted security (excluding goodwill that was not acquired) that had been purchased prior to January 1, 2003, and sold by December 31, 2009, is subject to corporate tax as follows: the part of the real capital gain that is linearly attributed to the period prior to December 31, 2002 is subject to the corporate tax rate in the year of sale as set forth in the Israeli Income Tax Ordinance, and the part of the real capital gain that is linearly attributed to the period from January 1, 2003, through December 31, 2009, is subject to tax at a rate of 25%.

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.

i. The Company adopted the provisions of ASC 740 for uncertain tax positions on January 1, 2007. Consequently, as of December 31, 2010, an accumulated amount of $ 58 was recorded as unrecognized tax benefits. During 2011, following tax exposure aging the accrual was reversed. As of December 31, 2011, there is no unrecognized tax benefits amount.

NOTE 17:- SUBSEQUENT EVENTS

Following a second shelf registration filed in January 2011, the Company filed a prospectus supplement in September 2011 in relation to a sales agreement signed with an underwriter in August 2011, to issue and sell Ordinary shares under an At The Market offering ("ATM") with gross proceeds of up to $ 40,000. Until March 12, 2012, the Company raised approximately $ 3,080, net of issuance expenses from the issuance of 551,000 of its Ordinary shares.