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

FORM 20-F

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

OR

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

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2010

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:

33,915,545 Ordinary Shares

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to 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).

☐ Yes ☐ No

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

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐

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

U.S. GAAP ☒

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

Other ☐

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

Item 17 ☐ Item 18 ☐

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

☐ Yes ☒ No

TABLE OF CONTENTS

<u>PART I.</u>		6
<u>ITEM 1.</u>	<u>IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS</u>	6
<u>ITEM 2.</u>	<u>OFFER STATISTICS AND EXPECTED TIMETABLE</u>	6
<u>ITEM 3.</u>	<u>KEY INFORMATION</u>	6
<u>ITEM 4.</u>	<u>INFORMATION ON THE COMPANY</u>	22
<u>ITEM 4A.</u>	<u>UNRESOLVED STAFF COMMENTS</u>	37
<u>ITEM 5.</u>	<u>OPERATING AND FINANCIAL REVIEW AND PROSPECTS</u>	37
<u>ITEM 6.</u>	<u>DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</u>	49
<u>ITEM 7.</u>	<u>MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS</u>	58
<u>ITEM 8.</u>	<u>FINANCIAL INFORMATION</u>	59
<u>ITEM 9.</u>	<u>THE OFFER AND LISTING</u>	60
<u>ITEM 10.</u>	<u>ADDITIONAL INFORMATION</u>	60
<u>ITEM 11.</u>	<u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	78
<u>ITEM 12.</u>	<u>DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</u>	78
<u>PART II</u>		78
<u>ITEM 13.</u>	<u>DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</u>	78
<u>ITEM 14.</u>	<u>MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS</u>	78
<u>ITEM 15.</u>	<u>CONTROLS AND PROCEDURES</u>	79
<u>ITEM 16.</u>	<u>RESERVED</u>	79
<u>ITEM 16A.</u>	<u>AUDIT COMMITTEE FINANCIAL EXPERT</u>	80
<u>ITEM 16C.</u>	<u>PRINCIPAL ACCOUNTANT FEES AND SERVICES</u>	80
<u>ITEM 16D.</u>	<u>EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES</u>	80
<u>ITEM 16E.</u>	<u>PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS</u>	81
<u>ITEM 16F.</u>	<u>CHANGES IN REGISTRANT'S CERTIFYING ACCOUNTANT</u>	81
<u>ITEM 16G.</u>	<u>CORPORATE GOVERNANCE</u>	81
<u>PART III</u>		82
<u>ITEM 17.</u>	<u>FINANCIAL STATEMENTS</u>	82
<u>ITEM 18.</u>	<u>FINANCIAL STATEMENTS</u>	82
<u>ITEM 19.</u>	<u>EXHIBITS</u>	82



**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 about future 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”.

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.

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

The following selected consolidated financial data for and as of the five years ended December 31, 2010, 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, 2010 and 2009 and for the years ended December 31, 2010, 2009 and 2008 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, 2008, 2007 and 2006 and for the years ended December 31, 2007 and 2006 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,				
	2006	2007	2008	2009	2010
	(US\$ in thousands, except share and per share data)				
Consolidated Statement of Operations Data					
Revenues	\$ 215	\$ 180	\$ 338	\$ 250	\$ 1,115
Total operating expenses ⁽¹⁾	13,213	12,640	13,243	7,879	8,769
Operating loss	(13,004)	(12,460)	(12,912)	(7,629)	(7,878)
Financial and other income, net	955	1,002	401	3,786	675
Losses from continuing operations	(12,049)	11,490	(12,511)	(3,843)	(7,203)
Gain (loss) from discontinued operations	(971)	(624)	(16)	12	-
Net loss	(13,020)	(12,114)	(12,527)	(3,831)	(7,203)
Basic and diluted net loss per share from continuing operations	\$ (0.44)	\$ (0.41)	\$ (0.44)	\$ (0.13)	\$ (0.22)
Basic and diluted net loss per share	\$ (0.47)	\$ (0.43)	\$ (0.44)	\$ (0.13)	\$ (0.22)
Weighted average number of ordinary shares used in computing basic and diluted net loss per share	27,985,957	28,266,273	28,434,946	28,608,317	33,284,017

Year ended December 31,
(US\$ in thousands, except share and per share data)

	2006	2007	2008	2009	2010
Consolidated Balance Sheet Data					
Cash and cash equivalents, short-term bank deposits, marketable securities and restricted cash ⁽²⁾	\$ 25,102	\$ 15,200	\$ 7,481	\$ 15,800	\$ 22,508
Receivables on account of shares and from funding arrangement ⁽³⁾	-	-	-	7,790	5,000
Investment in Evogene	-	510	3,858	3,898	6,227
Long-term bank deposits and marketable securities	1,000	2,080	-	-	-
Total assets	30,856	21,666	14,244	30,185	36,458
Research and development funding arrangement	-	-	-	-	4,037
Accumulated deficit	(132,754)	(144,926)	(157,453)	(161,284)	(168,487)
Total shareholders' equity	\$ 25,738	\$ 17,285	\$ 10,003	\$ 27,398	\$ 28,285

(1) Includes stock based compensation – see Note 12 of our 2010 consolidated financial statements.

(2) The amounts set forth for 2006 have been reclassified.

(3) Includes for 2009, receivables from “at-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”.

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.

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 their 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. During 2010, a new program was initiated to take certain 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, totaling \$40,000, \$250,000 and \$1.1 million in 2008, 2009 and 2010 respectively, and we have no revenues from our new Pipeline Program. We cannot be certain this business model will generate a stable or significant revenue stream. The inability to derive adequate revenues 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, 2010, we had an accumulated deficit of approximately \$168 million and had incurred net losses of approximately \$13 million in 2008, approximately \$4 million in 2009 and approximately \$7 million in 2010. 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 the present, on the creation and validation of discovery platforms incorporating 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. To date, we have received only minimal current revenues from our commercialization efforts with respect to such molecules 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 both product candidate discovery and validation and the creation of additional discovery platforms. We cannot be certain that we will ever 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 advantage in predictive discovery, in 2010, we allocated a significant portion of our expenditures, to broadening and deepening our scientific infrastructure and we intend to continue to do so in the future, although such allocation was less than in previous years due to emphasis during 2010 on our Pipeline Program. If for any reason we are unable to continue to do so, our discovery ability relative to others would likely be lessened, with the result that our operating results would be negatively impacted or even result in the need to limit or even discontinue our business operations.

We may not be able to provide the resources that may be required in the future with respect to our Pipeline Program, requiring us to attempt to license out certain molecules at a very early stage, and therefore negatively impacting the potential returns from such products.

In 2010 we initiated our Pipeline Program pursuant to which we intend to both (i) substantially increase the number of predicted and selected product candidates being evaluated by us, and (ii) take selected product candidates beyond their proof of concept stage (either disease animal model for peptide and protein therapeutics or drug target full expression profile for monoclonal antibody ("mAb") targets) into preclinical activities for protein and peptide therapeutics or for mAb targets, *to in vivo* proof of concept with a mAb. 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 activities, we may be required to abandon, postpone, or attempt to license out certain molecules at a very early stage, which may result in a substantial reduction in the potential returns from such products.

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, 2010, we had total cash and cash equivalents, short-term bank deposits, and receivables from a Funding Arrangement of approximately \$26.8 million, compared with approximately \$23.4 million as of December 31, 2009, including receivables on account of shares, and in both cases, not including the market value of the Evogene ordinary shares that we hold. We do not anticipate that we will achieve profitability in the near future and may need additional funds to continue financing our discovery, validation, development and commercialization activities.

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 operating performance and investor sentiment. 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. There is no assurance that we will be able to raise 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, we may have to curtail or cease our discovery and validation activities, or restrict or even cease operations.

Under the Funding Agreement with Baize Investments (Israel) Ltd. (“Baize”) entered in December 2010, we may have to share in 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 has provided us with \$5,000,000 in support of our Pipeline Program (the “Funding Agreement”). In exchange, Baize received (i) the right to receive ten percent (which amount may be reduced under certain circumstances) (the “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 \$6.00 per share through June 30, 2013. If, prior to June 30, 2011, we receive commitments from third parties for an investment in us of an aggregate of at least \$15,000,000, which investment includes financial participation rights in ten or more Compugen-discovered molecules (a “Subsequent Financing”), Baize must either (i) exchange its rights to Participation Rights for consideration on the same terms and conditions as would be received by third parties for a \$5,000,000 investment in such Subsequent Financing, or (ii) waive its rights to Participation Rights and have the \$5,000,000 investment amount refunded to it. The June 30, 2011 deadline for Compugen to receive commitments for a Subsequent Financing may be extended by us on a month to month basis, but not past December 31, 2011, by issuing to Baize a warrant for 83,333 additional Compugen ordinary shares, on the same terms as the original warrant, for each such month of extension. In addition, at any time through June 30, 2013 (including in the event of a Subsequent Financing), Baize may waive its right to receive Participation Rights in exchange for 833,333 Compugen ordinary shares.

If any one or all five designated product candidates are successfully licensed, developed or commercialized, and Baize has not elected to waive its Participation Rights as set forth above, we will need to provide Baize with up to 10% of certain related cash consideration received by us. If in the event of a Subsequent Financing, Baize chooses (i) to exchange its rights to Participation Rights and participate in such Subsequent Financing, we will have to provide Baize with the same, currently unknown, terms as other investors will receive, or (ii) to not participate in such Subsequent Financing whereby it will give up its rights to Participation Rights and receive a refund of its investment, we will have to refund such \$5,000,000 investment. If in the event that prior to June 30, 2013, Baize chooses to exchange its Participation Rights for 833,333 ordinary shares, we will have to provide such ordinary shares and dilute our current shareholders. In addition, if we choose to extend the deadline for a commitment for a Subsequent Financing, we may have to provide additional warrants for ordinary shares to Baize, thereby diluting our current shareholders.

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, and from the European Community, under the European Union's 6th Framework Program. In 2010, the grants we received totaled approximately \$1 million compared with approximately \$944,000 in 2009 and approximately \$544,000 in 2008. 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 \$7.2 million at December 31, 2010. 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.

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

The success of our business largely depends on our predictive discovery capabilities which remain unproven with respect to yielding marketable products, and may never lead to 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. We currently assess which discoveries to validate based on various 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.

Most of our initial product candidates have been the result of our validation efforts for our predictive discovery platforms, each of which was designed to identify novel biologics of a specific type or for a specific purpose. In late 2009 we shifted the focus of our discovery efforts from this “technology driven” basis to a “market-need driven” basis. If either the predictive discovery approach in general, or this new focus, 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 or diagnostic need where we believe our predictive capabilities would be relevant, or could be modified to be relevant. In this market need driven approach, our goal is to harness all of our relevant capabilities in order to address the specific unmet need, rather than relying on 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 synthesized 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 initial “market need” driven program resulted in the discovery of a number of novel molecules in an area of high industry interest, we have limited experience with this new focus for our discovery efforts. Therefore, we cannot predict whether this market-need driven focus will continue to yield product candidates or that any of such existing discoveries or future discoveries will be suitable for development into therapeutic or diagnostic products. If either the predictive discovery approach in general does not prove to be successful, or this new focus does not lead to successful product candidates, our business will be significantly harmed.

The success of our business largely depends on our ability to integrate our discovery platforms and related technologies to focus on areas of high industry interest within the fields of immunology and oncology, which we have selected as our initial fields of focus. The predictive capabilities of our discovery platforms with respect to these fields is largely unproven and may never lead to marketable products. If we fail to create additional discoveries of industry interest in these fields, or to focus on the most promising discoveries, our business will likely be materially harmed.

In spite of our broad abilities, in recent years we have chosen to focus our discovery activities in the fields of immunology and oncology. There are many risks associated with this decision to focus, including the risk involved in not using all of our capabilities, and the risk of choosing fields with such a very high degree of competition. 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. We might be unsuccessful due to a lack of certain relevant knowledge in the fields of immunology or oncology, or 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, or in creating the required additional components. Additionally, we are focusing almost exclusively on development of therapeutic products. With respect to diagnostic products, we have decided to pursue such opportunities only in collaboration with third parties. Any or all of these decisions may prove to be incorrect and if so, cause us to be unsuccessful in our discovery and development activities. 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 results in licensed or marketable products in these fields. Additionally, 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. If any of these risks materialize, our business, financial condition and results of operations may be materially harmed.

During 2010 we decided that for the next few years we would emphasize our newly designated Pipeline Program and allocate a substantial portion of our R&D activities to this activity. This emphasis has resulted in a substantial increase in the number of molecules under validation and the initiation of post animal model pre-proof of concept activities for certain molecules, including pre-IND activities. 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, 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 similar testing. 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, and 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, or fewer molecules being available for early stage licensing. 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, and if we are denied access to these databases for any reason or if the quality of available information is poor, or if the quantity of the available information is insufficient, our operations and business may be harmed.

In the development and validation of our discovery platforms and other tools, and of 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, 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, 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, our discovery and validation capabilities may be harmed.

We rely on the services of various third party service providers, contract research organizations (CRO's) and academia for production of certain biological reagents and performance of certain in-vitro and/or animal model validation of our discoveries. 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. 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 will 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. In addition, we have no experience in conducting, managing, or sponsoring preclinical work to IND submission.

We rely on the services of various third party service providers, such as CRO's, contract manufacturing organizations (CMOs) and regulatory consultants for further development of our candidates in preclinical activities towards Investigational New Drug (IND) submission, such as manufacturing of the biological molecule, toxicity testing and regulatory submission. If we will fail to identify and obtain quality services from such third parties, the advancement of our selected candidates may be harmed.

In advancing our candidates through certain required preclinical studies towards IND submission, 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 the most professional third parties, or if the contractual demands of such third parties become unreasonable and we are not able to reach satisfactory agreements with such third parties, we may not be able to obtain the required services, in which event our discovery and validation capabilities may be harmed. In addition, we have no experience in conducting, managing, or sponsoring preclinical work for purposes of IND submission.

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;
- 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 limited experience in the development of therapeutic and diagnostic product candidates, and if we fail to maintain and/or acquire the appropriate experience, our business may be materially harmed.

Our experience in the development of therapeutic and diagnostic product candidates is limited. In order to successfully develop and commercialize therapeutic and diagnostic 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 and diagnostic product candidates, we may be unsuccessful in our discovery and development activities, and as a result our business 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 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.

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 and diagnostic 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 and diagnostic product candidates. We also face, and expect to continue to face, competition from entities that seek to develop technologies that enable the discovery of novel therapeutic and diagnostic product candidates.

Many of our competitors benefit from greater market recognition, and have substantially greater financial, technical, human, research and development, and marketing resources than we do. Since we are a small company with limited human resources, we are not able to work with a large number of collaborators in parallel. Our competitors may discover and develop product candidates or market and sell products based on their discoveries, in advance of us or of our collaborators or licensees. 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. 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.

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.

We depend significantly on collaborators for 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 collaborators in the future, our business will likely be materially harmed.

Our strategy for the development and commercialization of therapeutic and diagnostic product candidates depends on the formation of collaborations or licensing relationships with third parties that have complementary capabilities. We depend significantly on our collaborators and licensees to carry out and/or finance product development and commercialization of our therapeutic and diagnostic product candidates. Potential collaborators and licensees include pharmaceutical, biotechnology and diagnostic companies and other healthcare related organizations,

To date, we have entered into a small number of collaborations covering discovery, development and commercialization rights with respect to certain of our product candidates and none of the product candidates covered by such collaborations have, to date, advanced beyond the validation stage. 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 collaborators or entering into any other additional agreements with collaborators for the discovery, development and/or commercialization of our therapeutic and diagnostic product candidates. If we are unable to identify such additional suitable collaborators or enter into new collaborations, our business will likely be materially harmed.

We may not be able to find collaborators that will agree to license or otherwise commercialize our discoveries at an early stage, and if we do not find such collaborators, our business will likely be materially harmed.

Our strategy for the development and commercialization of therapeutic and diagnostic product candidates is based on our discovery and initial validation and in some cases, pursuant to our Pipeline Program begun in 2010, pre-clinical development of those product candidates. We consider initial validation of a therapeutic product candidate to be a stage at which we show biological activity of that candidate in animal models and in some cases, will undertake certain pre-clinical development of those product candidates. We consider initial validation of drug target candidates to be a stage at which we show differential expression in physiological or disease conditions and in some cases, show therapeutic potential of that target, or a molecule such as a monoclonal antibody addressing such candidate target, in animal models. We consider initial validation of diagnostic product candidates to be a stage where we may demonstrate that the product candidate is differentially present in different physiological or disease conditions. We either carry out such initial validation ourselves or we engage third parties to provide such validation and then we ordinarily seek to rely on our collaborators and licensees to carry out further product development.

Pharmaceutical and diagnostic companies may be reluctant or refuse to in-license or otherwise collaborate with us with respect to our therapeutic and diagnostic product candidates at these early stages when there remains, based on industry experience, a high likelihood of failure. An additional barrier to our success in obtaining collaborators at such very early stage is the existence of skepticism in the industry about the value of *in silico* predictive modeling in life science discovery due to largely unsuccessful past attempts by them or other organizations, most of which were significantly larger than Compugen. Even if we are successful in commercializing our product candidates at an early stage, our collaborators 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.

If we are unable to enter into collaborations for the commercialization of our discoveries at an early stage, we may need to validate and develop our discoveries ourselves until the candidates attain a more mature stage of development. Such development activities may require us to expend substantial additional financial and other resources. If we are unable to raise or spend these additional resources, we may have to curtail or cease our discovery and development activities, and as a result 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 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 will fail to design and implement appropriate clinical trials
- our collaborators will fail to manufacture our product candidates to clinical trials on a large scale in a cost effective manner;
- our collaborators will fail to develop and market products based on our discoveries due to various regulatory restrictions;
- our collaborators will 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;
- our collaborators may fail to develop or commercialize successfully any products based on product candidates to which they have obtained rights from us; and

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 efforts 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.**

Factors Related to our Operations Generally

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.

As a result of a restructuring that was completed in early 2009 to refocus efforts and reduce cash burn, the Company's headcount was reduced from 57 as of December 31, 2008 to 37 as of December 31, 2009 and as of December 31, 2010, was 39. While the reductions during 2009 impacted our capacity in certain areas, we believe that these headcount reductions have not and will not impact any of the Company's discovery capabilities or its ability to develop new platforms. However, we cannot be certain of this and such reductions (as well as potential future reductions) may have a material adverse effect on our employee retention ability.

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 for seven 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.

Revenues that we may generate from commercialization of our technologies or discoveries may be reduced because of obligations to pay back Israeli governmental grants or other grants that we receive, and related restrictions may be imposed with respect to products developed with the help of such grants. In addition, revenues that we may generate on the specific Pipeline Products covered by the Baize Funding Agreement may be reduced because of obligations to pay Baize a percentage of any revenues or other consideration we may receive.

The development of some of our technologies and of the discoveries that we make have been and may, in the future, be partially funded by governmental grants that we received or may receive from the Office of the Chief Scientist of the Israeli Ministry of Industry, Trade and Labor. According to Israeli law, certain restrictions and obligations are imposed on us in relation to the development and commercialization of discoveries that are financed by these grants. These obligations and restrictions would be imposed if we were to seek to manufacture the technologies outside of Israel or to transfer certain of our know-how within or outside of Israel. Therefore, our flexibility in commercializing some of our technologies that are so funded may be reduced. In addition, revenues that we may generate on the five designated product candidates covered by the Baize Funding Agreement may be reduced due to the obligations to pay Baize a up to ten percent of any revenues or other consideration we may receive with respect to such designated product candidates.

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.

We may be subject to claims related to hazardous chemicals and biological materials that we use, and these claims may harm our business.

Our research and development activities in some cases may involve the controlled use of biological and chemical materials, a small amount of which could be hazardous. We cannot eliminate the risk of accidental contamination or discharge of any of these materials. If hazardous biological or chemical materials in our possession were to be improperly used, that could result in harm to persons or property we could be subject to both civil damages and criminal penalties. In such event, our liability may exceed our insurance coverage.

Factors Related to Intellectual Property

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

We rely heavily 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.

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.

The success of our business depends, to a large extent, on our ability to obtain and maintain patents that cover our therapeutic and diagnostic product candidates. We have applied for patents covering our therapeutic and diagnostic product candidates as well as aspects of some of our technologies. We have a total of 25 issued patents, of which 23 are U.S. patents. We also have pending patent applications which include 32 patent applications that have been filed in the United States (two of which have, to date, been allowed for issuance) and three 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.

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 therapeutic and diagnostic products 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 remain unavailable to the public for a period of approximately 18 months from their filing date. In some instances, the content of U.S. patent applications remain 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, the effect of which may be even more adverse than in the past due to the recent reduction in the size of our workforce. 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 and 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.

Factors Related to our Ordinary Shares

Holders of our ordinary shares who are U.S. residents may be required to pay additional U.S. federal income taxes.

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 income, assets, activities and market capitalization, we do not believe that we were a PFIC for the taxable year ended December 31, 2010; however, there can be no assurances that the United States Internal Revenue Service ("IRS") will not challenge this conclusion. 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 2010. However, if we were not a PFIC for 2010, U.S. holders who acquired our ordinary shares in 2010 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 to base an investment decision or upon which to 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, we have received only minimal current revenues from our initial collaborations, having recognized \$40,000 of such revenue in 2008, \$250,000 of such revenue in 2009 and \$1.1 million of such revenue in 2010. Furthermore, only in 2010 did we implement our Pipeline Program pursuant to which we intend to advance certain therapeutic product candidates 12-18 months past disease animal model proof of concept or similar validation 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 "discovery on demand" 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 last two fiscal years, our stock price on Nasdaq has traded from a low of \$0.39 to a high of \$5.86 and trading volume is volatile from time to time. The volatile price of our stock and periodic volatile trading volume may make it difficult for investors to predict the value of their investment, to sell shares at a profit at any given time, or to plan purchases and sales in advance. A variety of factors may affect the market price of our ordinary shares including:

- negative global macroeconomic developments
- our success (or lack thereof) in entering into collaboration agreements and achieving certain developmental milestones thereunder;
- our need to raise additional capital and our success or failure in doing so ;
- achievement or denial of regulatory approvals by our competitors or us;
- announcements of technological innovations or new commercial products by our competitors;
- developments concerning proprietary rights, including patents;
- developments concerning our existing or new collaborations;
- regulatory developments in the United States, Israel and other countries;
- delay or failure by us or our partners in initiating, completing or analyzing pre-clinical or clinical trials or the unsatisfactory design or results of such trials;
- period to period fluctuations in our 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 difficulties in raising additional financing required to effectively operate and grow their businesses. Such difficulties and the volatility of the securities market in general, and our share price in particular, may affect our ability to raise additional financing in the future. Thus, market and industry-wide fluctuations may adversely affect the trading price of our ordinary shares, regardless of our actual operating performance.

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 the acquiror owns, following consummation of the tender offer, at least 95% of the issued share capital, and the shareholders, including those who indicated their acceptance of the tender offer, may, at any time within three months following the completion 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 Research 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. The OCS Guidelines interpretation issued by the OCS provides that prior OCS approval is required for such change in the holding of the means of control.

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.”

Risks 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 and other neighboring Arab countries, may negatively affect business conditions and adversely affect our results of operations. 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. As a result, we are exposed to the risk that if the U.S. dollar devaluates against the NIS, as it did in 2008, 2009 and 2010 (by 1.1%, 0.7% and 6.0%, respectively) our NIS denominated expenses will be greater than anticipated when reported in U.S. dollars. Inflation in Israel compounds the adverse impact of such 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 (3.8%, 3.9% and 2.7% in 2008, 2009 and 2010, respectively) has not had a material adverse effect on our financial condition during 2008, 2009 or 2010. The failure of our currency hedging arrangements to protect us from fluctuations in the exchange rates of the NIS in relation to the U.S. dollar, may expose us to material adverse effects from such movements. For more information, see Note 2s of our 2010 consolidated financial statements.

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

We are entitled to certain tax benefits under Israeli government programs.

The tax benefits are a function of the “Approved Enterprise” and “Privileged Enterprise” status of our existing facilities in Israel as such terms are defined under the Israeli tax law and regulations. 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. To maintain our eligibility for such tax benefits, we must continue to meet certain conditions, including making specified investments in fixed assets and financing a percentage of investments with share capital.

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 in the Law for the Encouragement of Capital Investments, 1959 (“the Law”). The amendment became effective as of January 1, 2011. For more information, see Item 5, “Governmental Policies that Materially Affected or Could Materially Affect Our Operations”

Based on our current “Approved Enterprise” and “Privileged Enterprise” status, we remain entitled to such tax benefits, but if we cease to maintain this status, we may be required to pay increased taxes on the taxable income that we may generate in the future.

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, any judgment obtained in the United States against us or any of our directors and officers may not be collectible within the United States and may not be enforced by an Israeli court.

ITEM 4. INFORMATION ON THE COMPANY

History and Development of the 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. 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.

Compugen is a leading drug and diagnostic discovery company providing novel product candidates addressing important unmet therapeutic and diagnostic needs to pharmaceutical, biotech and diagnostic companies under milestone and royalty bearing – or other revenue sharing – agreements. Unlike traditional high throughput trial and error experimental based discovery, Compugen's discovery efforts consist of *in silico* (by computer) hypothesis-driven product candidate prediction and selection followed by *in vitro* and *in vivo* experimental validation. Compugen's unique *in silico* prediction and selection capabilities are based on a broad and continuously growing infrastructure of proprietary scientific understandings and predictive platforms, algorithms, machine learning systems and other computational biology tools. Industry collaborations may be entered into before product candidate discovery is undertaken pursuant to “discovery on demand” type arrangements, or with respect to existing product candidates, can be initiated prior to, or at the proof of concept stage, or after selected preclinical activities have been undertaken by Compugen.

Our method of discovering novel product candidates involves first selecting – either on our own or with a partner company - an unmet therapeutic or diagnostic need where we believe our predictive capabilities would be relevant, or could be modified to be relevant. 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. in computers) 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 being success for such specified need. Selected molecules are then synthesized and undergo *in vitro* and/or *in vivo* validation testing. Currently included in our computational biology capabilities are more than ten discovery platforms that have been created and validated, largely during the past several years, and continue to be enhanced with new scientific knowledge and findings from each discovery run. 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. Prior to 2010, validation efforts of each of our individual platforms and initial platform specific discovery runs (i.e., technology-driven approach) resulted in the discovery of novel molecules in a broad range of therapeutic and diagnostic fields and these earlier discoveries represent the majority of the product candidates we have discovered to date, all of which are currently at an early stage.

Our initial business beginning in 1994 was to develop and commercialize a computer hardware system and software applications to accelerate homology searches of biological sequences under the name “Bioccelerator” in order to facilitate an understanding of the human genome and proteins. Thereafter, we began to develop better algorithms to increase the speed of processing and to cope with the high level of complexity of life at the molecular level. The initial result of this effort was an early understanding that the majority of human genes can express multiple transcripts (i.e. alternative splicing) and therefore multiple proteins.

Beginning with this understanding of alternative splicing, our research efforts from 1997 through 2005 were largely directed to obtaining additional predictive understandings of selected biological phenomena at the molecular level, including how genes express transcripts, how transcripts become proteins, and how proteins are cleaved to create peptides. During this period, and based on these scientific understandings, predictive discovery platforms, algorithms, machine learning systems and other computational biology tools were created which were designed to enable accurate and broadly applicable *in silico* drug and diagnostic candidate prediction and selection. These efforts, over more than 10 years, created a core infrastructure of scientific understandings, computational biology systems and tools, and an experienced multidisciplinary research team. We obtained revenues during this period by providing certain of these capabilities to third parties (including multi-million dollar collaborations with Abbott Laboratories, Human Genome Sciences Inc., Novartis Pharma AG, Warner-Lambert Company, and the United States Patent and Trademark Office) in the form of services and software products; these activities were discontinued in 2005.

Beginning in 2005, an increasing portion of our R&D effort was committed to initial product candidate discovery via our unique *in silico* prediction and selection approach, while continuing to expand and enhance our discovery infrastructure, which remains an on-going primary objective. From 2006-2009, increasing activities, mainly in the form of *in vitro* and *in vivo* studies, were undertaken in order to validate certain of our initial product candidates and we entered into a number of initial industry collaborations based on certain of our discoveries.

Prior to 2010, Compugen's *in vitro* and *in vivo* validation studies concluded with disease animal model proof of concept or similar testing. At the completion of such activities, or earlier, Compugen initiated its efforts to enter into collaborations for such molecules. During 2010 we began planning and initiating our “Pipeline Program” pursuant to which the Company has undertaken a substantial increase in the number of molecules being validated, with more than 30 such molecules currently in the Program, and in addition certain molecules are now being advanced further in pre-clinical activities. Newly discovered molecules enter the Program when they begin experimental evaluation following their *in silico* prediction and selection, and then the Program consists of *in vitro* and *in vivo* experimental validation, including animal disease model or similar testing, with selected molecules continuing for up to an additional 18 months with various preclinical activities. It is our intent, in general, to license out - or enter into other collaborations with our product candidates - towards the end of their 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.

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., 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 1,066,603 of our Evogene ordinary shares for approximately \$3.9 million. As of December 31, 2010, we held 1,083,397 Evogene ordinary shares representing approximately 3.6% 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 a wholly owned subsidiary and then suspended in 2007.

In August 2000, we sold 5,000,000 of our ordinary shares in an initial public offering of our shares on the Nasdaq Market at \$10.00 per share. In September 2000, we sold an additional 750,000 ordinary shares upon the exercise by our underwriters of their over-allotment option. In January 2002, we listed our shares for trading on the Tel Aviv Stock Exchange (TASE). In November and December 2009 we sold 4,071,700 of our ordinary shares on the Nasdaq Market in an “at the market” offering, at a weighted average price of approximately \$4.91 per share.

Recent Funding Agreement

On December 29, 2010, we entered into a Funding Agreement with Baize under which Baize has provided us with \$5,000,000 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 Participation Rights are to be reduced by certain pass-through amounts; and (ii) warrants for 500,000 Compugen ordinary shares, exercisable at \$6.00 per share through June 30, 2013. Currently, all five designated product candidates are in active research in the Pipeline Program, with their current status ranging from *in silico* selection to post animal model validation. In addition, Baize has the right, until June 30, 2013, to waive its right to receive Participation Rights, in exchange for 833,334 Compugen ordinary shares.

If, prior to June 30, 2011, we receive commitments from third parties for an investment in us of an aggregate of at least \$15,000,000, which investment includes financial participation rights in ten or more Compugen-discovered molecules (including at least three of the five designated product candidates identified in the Funding Agreement), the Funding Agreement provides that Baize will be required to elect to either (i) exchange in total its rights to receive Participation Rights as described above for such consideration on the same terms and conditions as would be received by third parties for a \$5,000,000 investment in such Subsequent Financing, or (ii) waive in total its rights to receive Participation Rights as described above and have the \$5,000,000 investment amount refunded to it, or (iii) exercise its right, as described above, to waive its right to receive Participation Rights in exchange for 833,333 Compugen ordinary shares. The June 30, 2011 deadline for Compugen to receive the future commitments for a new investment may be extended by us on a month to month basis, but not past December 31, 2011, by issuing to Baize a warrant for 83,333 additional Compugen ordinary shares, on the same terms as the original warrant, for each such month of extension.

Recent Operating Developments

During 2009 and 2010 and up to the current time, we have given priority in our research efforts to (i) therapeutic peptides, proteins and monoclonal antibody drug targets, primarily in the areas of oncology and immunology, and (ii) improvement and modification of existing platforms and the development of new platforms.

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. Under this 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, including animal disease model or similar testing, followed by various preclinical activities for selected molecules for up to an additional 18 months. In October 2010, Compugen 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. We have since added an additional five molecules, all of which are recently discovered novel targets for monoclonal antibody therapeutics, bringing the current total number of molecules in the Pipeline Program to more than 30 at various stages of evaluation. These molecules consist of candidates for protein and peptide therapeutics and drug target candidates for monoclonal antibody therapy, with a focus primarily in the fields of oncology and immunology, including, autoimmune and inflammatory conditions.

It is our intent, in general, to license out - or enter into other collaborations with our product candidates - towards the end of their 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, 2010, 2009 and 2008, our capital expenditures were \$46,000, \$48,000, and \$120,000, respectively, and were spent primarily on laboratory equipment, computer software and hardware and leasehold improvements. We have no current material commitments for capital expenditures.

Business Overview

Compugen's mission is to be the world leader in the discovery and providing of novel product candidates to the therapeutic and diagnostic industries under various forms of milestone and revenue sharing agreements. Our extensive and continuously growing discovery infrastructure, currently including more than 10 specific discovery platforms, algorithms, machine learning systems and other computational biology tools is now enabling the predictive discovery of such product candidates.

Recently, 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 12-18 months beyond proof of concept experimental validation. With respect to increasing the number of product candidates, during 2010, approximately 20 additional novel molecules entered our validation pipeline. With respect to advancing selected molecules, we anticipate that the candidates selected for these preclinical activities will continue to be primarily protein, peptide and monoclonal antibody therapeutics in the fields of immunology and oncology. To date, there are over 30 product candidates included in Pipeline Program, which are currently at various stages from *in silico* selection to post animal model validation

Research and Discovery Activities

Our research and discovery activities consist of three primary and overlapping components. The first component is our continuing effort to obtain deeper predictive understandings of important biological phenomena at the molecular level through the analysis and integration of biological data of various types such as DNA, RNA, protein and peptide sequences, gene expression data, protein network data, and drug-related data. The second component utilizes these scientific understandings, in order to continuously expand and enhance our underlying discovery infrastructure through the development of predictive platforms, algorithms, machine learning systems and other computational biology tools. The third component is the utilization of this infrastructure, for ourselves and our partners, for the *in silico* prediction and selection of multiple novel molecules of interest as potential drugs, drug targets or diagnostics, followed by experimental *in vitro* and *in vivo* validation.

Infrastructure Platforms

We develop predictive biological computer based models and platforms that better enable us to discover potential therapeutic or diagnostic product candidates by analyzing biological data of various types such as DNA and RNA sequences, gene expression data, protein-related data and data related to drugs in development and to drugs already being commercialized.

As stated above, for more than a decade, we focused our efforts on obtaining predictive understandings of key biological phenomenon at the molecular level. An important aspect of these efforts was the creation of two key infrastructure platforms - LEADS and MED - integrating our scientific understandings and predictive models. These infrastructure platforms have played a key role in the creation of our more than ten existing product candidate discovery platforms.

- LEADS is Compugen's proprietary bioinformatic platform that provides a comprehensive view of the human transcriptome, proteome, and peptidome which enables the systematic discovery of novel genes, transcripts, proteins and peptides. It includes extensive gene information and annotations, such as splice variants, antisense genes, SNPs, novel genes and RNA editing. At the protein level, LEADS provides full protein annotations, including homologies, domain information, subcellular localization, peptide prediction, and novelty status.
- MED is an integrated database recently increased to more than 70,000 public and proprietary microarray experiments representing about 1,400 conditions (i.e. normal tissues, malignant tissues, tissues from drug treated patients, etc.). This is an open platform, and pursuant to collaboration, additional proprietary expression data could be integrated into the platform. All microarray experiments are normalized and unified into a "virtual" chip in which the expression of genes and pathways can be examined across all conditions and tissues simultaneously. To the best of our knowledge this is the only platform that normalizes all such publicly available data. The wealth of the data 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. MED findings were found to highly correlate with expression data obtained in house by qRT-PCR assays on well established tissue RNA panels.

Product Discovery Platforms

In general, each Compugen discovery platform targets a specific area or type of molecule and consists of three modules: prediction, selection and validation. The first two modules are largely *in silico* (i.e. performed by computer) while the third involves laboratory based in-vitro and *in vivo* experimental validation of selected candidates. The prediction module utilizes our computational biology capabilities and predictive models with field specific information to predict *in silico* a large number of putative product candidates for the specific purpose or field of interest. Next, the selection module utilizes proprietary algorithms and tools and other methodologies, including an expert review, to select from this large number of putative product candidates a smaller number of molecules (typically in the low tens to hundreds) that we believe have the highest probability of being product candidates for that specific purpose or field of interest. Some or all of these selected molecules produced and undergo initial experimental validation and thereafter additional *in vitro* and/or *in vivo* validation testing in the third module. By using this systematic approach, we have successfully validated the predictive capabilities of a number of discovery platforms, and in addition have discovered numerous product candidates in a number of diagnostic and therapeutic areas that were first predicted *in silico* and then experimentally validated. In addition, this procedure provides additional data for the continued improvement of the predictive capabilities incorporated in the discovery platforms.

As demonstrated by our over ten validated discovery platforms, our core predictive capabilities are broadly applicable across many therapeutic and diagnostic areas. However, at present, our research and discovery efforts are focused primarily on therapeutic proteins and peptides, and monoclonal antibodies, and primarily in the therapeutic fields of immunology (including autoimmune and inflammatory) and oncology. Our business model for pursuing these product candidate discoveries focuses on our Pipeline Program and on “discovery on demand” collaborations.

Therapeutic Peptides and Proteins: Platforms and Product Candidates

Peptides are short proteins, usually of less than 40 amino acid residues. Such molecules have been used as drugs (therapeutic peptides) for almost two decades, but only in recent years have pharmaceutical and biotechnology companies begun making major investments in these drugs. This recent revival of the therapeutic peptide field is mainly due to improvements in chemical synthesis techniques that allow the synthesis of longer peptides to become almost standard practice. A major advantage of therapeutic peptides over low-molecular-weight drugs is their high specificity for their targets. Consequently, therapeutic peptides tend to have high efficacy and fewer side effects. Today, the number of peptides approved by the FDA in the U.S. and EMEA in the European Union is increasing annually at a much higher rate than that of any other therapeutic class. Further advances in peptide synthesis and peptide drug delivery methods are expected to result in an even higher impact of therapeutic peptides on the drug market.

Therapeutic proteins are proteins that are either extracted from human cells or engineered in the laboratory for pharmaceutical use. The majority of biopharmaceuticals marketed to date are recombinant therapeutic protein drugs. Therapeutic proteins are used to treat various diseases like cancer, infectious diseases, immune-related disorders, blood-related disorders etc.

In utilizing our discovery infrastructure, we independently, or with a partner company, seek to predict, select and validate novel candidates that answer unmet medical needs and that may be suitable for further development as therapeutic or diagnostic products. Our discovery infrastructure is broadly applicable to numerous applications and fields in both diagnostics and therapeutics, with our current focus being therapeutics, and within therapeutics, the fields of oncology and immunology. Our therapeutic candidates are biologics and include peptide therapeutics, protein therapeutics and drug targets for monoclonal antibody therapy. Among these are novel peptides which modulate known clinically relevant targets and/or pathways, novel proteins which belong to clinically important protein families and/or pathways, and drug targets which reside on the cell surfaces of tissues involved with particular diseases, such as cancer. Although not a current focus for discovery by the Company, our novel diagnostic candidates include protein and nucleic based biomarkers which can indicate the presence or absence of a condition, such as a disease, or a person’s predisposition to either acquire a disease or to respond to a therapeutic treatment.

Therapeutic Peptide and Protein Related Platforms:

- **Protein Family Members Discovery Platform:** This platform is designed for the discovery of novel protein members belonging to various known and clinically important protein families. Analysis of the *in silico* prediction and selection results for the B7/CD28 protein family, the first of three such families selected for validation activities for the new platform, resulted in the identification of nine molecules predicted to be currently unknown members of this intensely and widely studied protein family. Proteins belonging to the B7/CD28 co-stimulatory family are known to play a key role in regulating immune response, and therefore are expected to have significant clinical potential in many pathological conditions, including autoimmune diseases and cancer. CGEN-15001 was one of the nine molecules predicted to be members of the B7/CD28 family, and was the first of these predicted molecules to undergo extensive validation, demonstrating significant therapeutic potential for multiple sclerosis.
- **Protein-Protein Interaction Blockers (PPI Blockers):** This platform is designed for the prediction of peptides to block disease associated protein-protein interactions. The PPI Blockers Discovery Platform consists of two main components: The first component creates a predicted protein-protein interaction map for the protein target of interest in a selected biological pathway, based on the target's known protein partners and additional proteins predicted by Compugen as potential partners through the analysis of human and non-human proteomes and interaction data. The second component, applied to all relevant key proteins of the pathway, is based on identifying computationally the predicted protein-protein binding segments through sequence and structural characteristics. The identification of these segments allows the design and selection of peptides that could serve as drugs by blocking all or a portion of the interacting site. These peptide blockers may either serve as therapeutic peptides or be used as epitopes for the development of therapeutic antibodies.
- **GPCR Therapeutic Peptide Ligands:** GPCRs are desirable drugs targets – with at least 40% of drugs currently in the market thought to modulate GPCRs. Our GPCR platform aims at finding novel peptide ligand agonists to GPCRs that could become drug candidates and is based on our capability to identify GPCR activating peptides from our predicted peptidome. Our underlying peptidome is a collection of thousands of novel human peptide sequences which are expected to be endogenous peptides, and was created by predicting novel cleavage sites in precursor proteins. Using this proprietary platform we have to date, identified eight novel peptides that activate six different GPCRs and have advanced three peptides into *in vivo* studies.
- **Disease-Associated Conformation Blockers:** This discovery platform is designed to identify segments in proteins of interest that, if introduced therapeutically as synthetic peptides, would block specific conformational changes of such proteins, thereby preventing them from adopting disease-associated conformations and related activities. A key capability of this platform is that it enables a proteome wide search for conformational change blocking peptides in human, viral and bacterial proteomes based only on sequence information. Using this platform we have identified several such peptides for three different targets and have advanced them into *in vivo* studies.
- **Intracellular Drug Delivery (IDD):** This platform identifies cell penetrating peptides, which can provide intracellular therapeutic targeting, either by delivery of a therapeutic molecule as “cargo”, or by the peptide itself. Compugen's IDD discovery platform enables the *in silico* identification of novel peptide sequences that are predicted to have the potential to penetrate the cell membrane. In a validation run of the platform, a number of peptides having various physico-chemical properties potentially relevant for different specific uses were predicted and experimentally evaluated. Their ability to penetrate cells was assessed by two independent well-accepted in-vitro assay systems. In these evaluations, more than 20 of these peptides were shown to possess cell penetrating activity both by visual image analysis through confocal microscopy and quantitative measures performed by flow cytometry analysis.
- **Viral Peptides:** This platform is aimed at the discovery of novel therapeutic peptides from viral genomes for potential human therapeutic use against inflammatory and immune related diseases. The rationale of the platform is based on the concept of utilizing knowledge gained from viruses to subvert the human immune system. The initial run of this platform identified two viral peptides that were shown in *in vitro* studies on activated immune cells to suppress secretion of various cytokines and chemokines, suggesting anti-inflammatory properties.
- **Splice Variant Based Therapeutic Proteins:** Alternative splicing is a biological phenomenon that enables multiple protein products from a single gene. Our historical platform, the “LEADS infrastructure platform”, models this phenomenon by analyzing databases of sequence data, mainly ESTs (Expressed Sequence Tags – short sub-sequences of a transcribed spliced nucleotide sequence) and predicts the collection of human proteins (proteome), among them many potential novel splice variants. In some cases, splice variants could be drug candidates. The LEADS infrastructure platform is used in other discovery platforms as well. In addition, we have also utilized it to discover splice variants for therapeutic peptides.

Therapeutic Peptide and Protein Product Candidates

The product candidates listed below are among those discovered or further validated largely as a result of validation activities with respect to our various discovery platforms. However, during 2010 we shifted the focus of our discovery efforts from this “technology driven”, platform by platform approach to a “market-need driven” basis, pursuant to which we, either on our own or with a partner company, will identify an unmet therapeutic need where we believe our predictive capabilities would be relevant, or could be modified to be relevant. In this market need driven approach, our goal is to harness all of our relevant capabilities towards the specific unmet need, rather than relying on a single discovery platform as was the case previously. CGEN 15001 was one of the first discoveries having this new focus, and was one on nine novel molecules discovered in that initial “market-need” driven effort. In addition, during 2010 we initiated our Pipeline Program, pursuant to which certain molecules, including CGEN-15001, are now being advanced further for up to an additional 18 months with various preclinical activities.

- CGEN-15001 is a novel protein which has shown potential for the treatment of autoimmune disorders. CGEN-15001 is a fusion protein consisting of the extracellular region of a previously unknown membrane protein in the B7/CD28 family, CGEN-15001T, fused to an Fc domain. The existence and potential utility of the newly discovered parent protein from which CGEN-15001 is derived, was predicted *in silico* utilizing Compugen’s Protein Family Members Discovery Platform. CGEN-15001 inhibits T cell activation and Th1 and Th17 differentiation, and promotes Th2 differentiation. In an animal model of multiple sclerosis, short term treatment with CGEN-15001 at onset of remission results in long-term inhibition of disease, dramatic amelioration of disease symptoms and abolishment of relapses. This was accompanied with inhibition of infiltration of reactive T lymphocytes into the central nervous system. The significant beneficial effect of CGEN-15001 in the disease is due to induction of immune tolerance, demonstrated by the inhibition of epitope spreading, the underlying phenomenon which causes the relapsing nature of the disease. 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 (DMARD). 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-25017 is a novel peptide antagonist of the Angiopoietin/Tie-2 pathway that has shown positive therapeutic effects in an animal model of retinopathy, a very serious eye condition characterized by over-growth of blood vessels. In a further study of this disease model, CGEN-25017 was shown to have an additive effect in combination with a VEGF inhibitor. CGEN-25017, which was initially discovered using Compugen’s Disease-Associated Conformation (DAC) Blockers Discovery Platform, had previously demonstrated significant inhibitory activity in two other models of angiogenesis. Based on its anti-angiogenic properties, CGEN-25017 has potential therapeutic utility for other diseases involving pathological angiogenesis such as cancer and inflammatory conditions, including psoriasis and rheumatoid arthritis.
- CGEN-855 is a novel peptide agonist of the FPRL1 GPCR receptor, discovered by Compugen’s GPCR peptide ligand discovery platform. CGEN-855 has shown anti inflammatory activity when tested in animal models of acute inflammation (air pouch model) and exhibited a cardioprotective effect following reperfusion-injury in models of acute myocardial infarction in mice and rats. CGEN-855 was also shown to be beneficial in an animal model of inflammatory bowel disease. These results support the therapeutic potential of CGEN-855 in treatment of acute and chronic inflammation, as well as cardiovascular diseases.
- CGEN-856 and CGEN-857 are novel MAS GPCR peptide agonists, discovered by Compugen’s GPCR Peptide Ligand Discovery Platform. CGEN-856 induced relaxation of rat and murine aorta, reduced in-vivo cardiac remodeling induced by isoproterenol or ischemia, and displayed anti-hypertensive effects as well as cardiac and renal anti-fibrotic effects. CGEN-856 may thus be a useful therapeutic agent in conditions benefiting from an increase in the activity of the MAS receptor, such as hypertension, heart failure, cardiac remodeling, myocardial infarction, renal fibrosis and other cardiovascular pathologies.
- CGEN-25007 is a novel peptide antagonist of gp96 discovered using Compugen’s Disease-Associated Conformation (DAC) Blockers Discovery Platform which is designed for the prediction and selection of peptides that block proteins from adopting their disease-associated conformations. CGEN-25007 exhibited anti-inflammatory activity in both human PBMCs and murine splenocytes challenged with various inflammatory stimuli as well as in an animal model of endotoxemia. CGEN-25007 has also shown positive therapeutic effects in an animal model of inflammatory bowel disease in which it protected mice from the effects of lethal colitis. The above results suggest that CGEN-25007 may thus be a useful therapeutic agent for autoimmune and inflammatory conditions.
- CGEN-25009 is a novel peptide of the LGR7 receptor that was discovered by the GPCR Peptide Ligand Discovery Platform. The LGR7 receptor is known to be activated by Relaxin and therefore could potentially have therapeutic activity in various clinical indications including fibrosis, labor complications, infertility and heart failure. CGEN-25009 has shown positive therapeutic effects in an animal model of pulmonary fibrosis. Therefore, CGEN-25009 could have a potential therapeutic utility to treat pulmonary fibrosis and other fibrosis related conditions such as chronic renal failure.

Targets for Monoclonal Antibody Therapy: Platforms and Product Candidates

During the past two decades, monoclonal antibodies (mAb) have emerged as an important new drug class. Currently, 18 mAbs have been approved for therapeutic use in the United States for various clinical indications, including oncology, chronic inflammatory diseases, transplantation, infectious diseases and cardiovascular diseases. One of the advantages of mAb therapeutics is that, in addition to now being well-established, they have a high success rate from first use in humans to receipt of regulatory approval: 29% for chimeric mAbs and 25% for humanized mAbs. In comparison, the success rate for small molecule drugs is only 11%. Across the branded prescription pharmaceutical market, mAb therapeutics are forecast to be the fastest growing molecule type.

Although significant progress has been made in recent years in mAb therapeutics, numerous challenges still remain. One of these is the identification of novel targets for mAb therapy. To this end, Compugen has developed proprietary a mAb-target discovery platform incorporating a number of our proprietary capabilities to identify novel drug targets and support external partnerships.

Monoclonal Antibody Related Platform

- **Monoclonal Antibody Targets:** Compugen's Monoclonal Antibody (mAb) Targets Discovery Platform predicts the existence of proteins that can serve as targets for antibody therapeutics. It relies heavily on Compugen's LEADS and MED capabilities, two computational biology infrastructure platforms that serve as core components for the development of Compugen's discovery platforms. The LEADS platform 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. It includes extensive gene information and annotation, such as: splice variants, antisense genes, SNPs, novel genes, RNA editing, etc. At the protein level, LEADS provides full protein annotation, including homologies, domain information, sub-cellular localization, peptide prediction, and novelty status. The MED Platform is an integrated database composed of the results from more than 70,000 public and proprietary microarray experiments, normalized and organized into approximately 1,400 therapeutically relevant conditions (i.e., normal tissues, malignant tissues, tissues from drug treated patients). Utilizing a sophisticated query interface, the proprietary MED platform allows the simultaneous examination of the expression of genes and pathways across all 1,400 conditions and tissues as well as all 70,000 microarray experiments. In addition to incorporating MED and LEADS, the mAb Targets Discovery Platform utilizes multiple data sources and algorithms to predict a large number of novel membrane proteins that can serve as targets for antibody therapeutics, such as for various cancer and autoimmune diseases. The selection of appropriate candidates from this large body of predicted membrane proteins is accomplished using sub-modules of algorithms and other computational tools developed specifically for each disease state or protein family. Recently, 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. We have recently begun to experimentally validate drug target candidates which are novel membrane proteins which we believe may serve as targets for antibody therapeutics and may play a role in the treatment of various cancer and autoimmune diseases.

Monoclonal Antibody Target Product Candidates

- 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. The potential application of CGEN-671 as a drug target was initially predicted *in silico* through the use of Compugen's Monoclonal Antibody Targets Discovery Platform. Immunohistochemistry (IHC) results from cancerous and healthy tissue sections strongly suggest significant potential for CGEN-671 as a drug target for clinical development of various types of mAb drug therapy for colorectal, breast and lung carcinomas, and possibly for additional epithelial derived tumors.
- 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. Further studies demonstrated that a polyclonal antibody which specifically recognizes CGEN-928, decreases MM tumor cell proliferation and induces apoptosis. Furthermore, an enhanced decrease in *in vitro* MM tumor cell growth was demonstrated when combining the CGEN-928 antibody with each of three existing MM standard of care drugs (bortezomib, melphalan, and dexamethasone), compared with the drugs alone. These studies suggest a potential synergistic effect of combining the targeting of CGEN-928 with standard of care drugs, thus providing a potentially enhanced clinical response with the combination therapy. The overall results of the studies done to date for CGEN-928, both of expression and functionality, strongly support its continued development as a potential target for monoclonal antibody based therapy for MM.
- CGEN-15001T is a Compugen-discovered novel B7/CD28 family member. CGEN-15001T was shown to be overexpressed at the mRNA level in cancer tissues, specifically in small cell lung cancer and the protein was demonstrated to be localized to the cell membrane. The B7-like properties of the extracellular domain of CGEN-15001T were demonstrated via CGEN-15001 and were shown to have an inhibitory effect on T cells. Therefore, CGEN-15001T has the potential to serve as a drug target for antibody based therapeutics.

Other Therapeutic and Diagnostic Platforms and Product Candidates

During the past several years, we have developed additional discovery platforms used for the identification of novel molecules that could be potential drug or diagnostic product candidates. As with all of our individual product candidate discovery platforms, these additional platforms rely on Compugen's broad predictive infrastructure and incorporate algorithms and other computational tools modified or designed for the identification of the specific type of molecule or purpose of such platforms. Since at present our research, discovery and validation efforts are focused on our Pipeline Program in the areas of therapeutic peptides, proteins, and targets for monoclonal antibodies, it is anticipated that for the next few years further development and use of these other discovery platforms, as listed below, will be limited to (i) on-going and any new collaborations with partners in the pharmaceutical and diagnostic industry, or (ii) situations where it is believed any such platforms would be useful, or could be modified to be useful, in support of our activities in our current areas of focus.

Other Therapeutic and Diagnostic Platforms

- **Nucleic-Acid Disease Markers:** Using the combination of LEADS and MED infrastructure platforms, we can identify RNA sequences found in different levels in pathological as opposed to healthy conditions. These RNA sequences can be used as biomarkers for the diagnosis of specific pathological conditions, such as cancer.
- **Protein Disease Markers:** Using the combination of LEADS and MED infrastructure platforms, we can identify RNA sequences that are translated to proteins secreted to the blood stream under various pathological conditions. Such protein sequences, identified in the bloodstream, can therefore serve as biomarkers for blood based diagnostic testing for such conditions and related diseases.
- **Nucleic-Acid Preclinical Toxicity Markers:** Using the LEADS infrastructure platform in combination with gene expression experiments designed to identify drug-induced toxicity biomarkers, we can identify high levels of RNA sequences in tissues that were exposed to toxic drug agents. Such RNA sequences can be used as biomarkers for the early detection of toxicity in preclinical trials.
- **Non-SNP Drug Response Markers:** This platform (our “GeneVa platform”) predicts non-SNP genetic variations in the human genome that could serve as potential drug response and disease predisposition markers. This platform consists of three components: a component constituting an atlas with over 350,000 predicted non-SNP variations, a component that associates variations from this atlas with certain conditions of interest (e.g. response to a drug), and an experimental genotyping component that allows testing of variations on human DNA samples.
- **New Indications:** This platform predicts new indications for existing drugs through the analysis of vast amounts of information and raw data from many different experimental and drug and disease specific sources, including gene expression, known or predicted protein networks, gene regulation data, known or predicted associations between genes and pathologies and other experimental results. A key component of the platform is the MED infrastructure platform, which provides integrated analysis of the results of over 70,000 microarray experiments. The MED infrastructure platform is also being utilized in other discovery platforms such as the mAb Targets Discovery Platform.

Initial Agreements

Beginning in 2005, we entered into a number of initial agreements under which we gave options to out-license novel therapeutic and diagnostic product candidates, most of which were discovered during the development and validation stages of our discovery platforms as well as “discovery on demand” collaborations where we undertook the utilization of our computational biology based on “prediction and selection” methodologies to systematically discover multiple product candidates in specified fields of interest for our collaboration partners. Among the companies we signed agreements with in the past two years based on these types of collaborations were Bayer, Flamel, Pfizer, and Seattle Genetics. To date, none of the discovery on demand collaborations or individual product candidate collaborations we have entered into have advanced beyond the validation state to the stage of development and commercialization of a specific product candidate, and we believe that many may not advance to such development and commercialization stage.

Prior to 2010, Compugen's *in vitro* and *in vivo* validation studies concluded with disease animal model or similar testing. 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, and in addition certain molecules are now being advanced further in 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 focus. This decision to advance further with certain molecules may result in fewer molecules being available for early stage licensing.

Under all of the agreements that we have entered to date, and as is customary in the industry, successful outcomes with respect to any validation, development or commercial milestones are not guaranteed nor contractually required of us or of our partner company. In addition, successful validation outcomes do not necessarily ensure that our collaborators will choose to license our product candidates, thus potentially requiring us to seek alternative collaborators or other avenues for the development of these product candidates. Also, mergers or acquisitions involving our collaborators, personnel changes at our collaborators, changes in our collaborators' strategic focus and other changes unknown to us and beyond our control can occur, which potentially could negatively affect the determination by such collaborators whether ultimately to license or continue the development of our product candidates, thus potentially requiring us to seek alternative collaborators or other avenues for the further development and commercialization of these product candidates.

These initial agreements were all entered into and will continue to be entered into in the ordinary course of business. Since Compugen has the ability to discover many product candidates and all of its discoveries to date are at an early stage, no single candidate or agreement is material to the Company. Compugen expects that a majority of these initial agreements will not yield commercially viable drugs and that cancellations will occur, and have occurred. Nevertheless, Compugen believes that the relationships established with major pharmaceutical companies through these initial agreements represents an important asset of the Company.

Future Agreements

We anticipate that the majority of our future agreements will be in connection with product candidates from our market-need driven Pipeline Program and from discovery on demand type collaborations. During 2010 we began planning and initiating the Pipeline Program to both substantially increase the number of product candidates in our validation pipeline, and to advance selected molecules 12-18 months beyond their proof of concept stage. Our Pipeline Program currently consists of over 30 molecules at various stages of evaluation. These molecules are candidates for protein and peptide therapeutics and drug target candidates for monoclonal antibody therapy, with a focus primarily in the fields of oncology and immunology, including, autoimmune and inflammatory conditions. It is our intent, in general, to license out - or enter into other collaborations with these candidates - towards the end of their 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, as we have done in the past. In addition, in late 2009, we shifted the focus of our discovery efforts from the previous "technology driven" basis required for us to validate our various individual discovery platforms to a "market-need driven" basis. In this new focus, we first select an important unmet therapeutic need where we believe our predictive capabilities would be relevant, or could be modified to be relevant, and then harness all of our relevant capabilities towards such need, rather than relying on a single discovery platform as was the case previously.

Our Strategy

Our strategy is to continue to build and utilize a competitive advantage in predictive life science discovery to provide an increasing number of attractive drug and diagnostic product candidates to leading pharmaceutical, biotechnology, and diagnostic companies under various forms of collaborations providing Compugen with milestone payments and royalties or other forms of revenue sharing. The competitive advantage in predictive life science discovery provides the basis for *in silico* (i.e. in computers) prediction and selection of product candidates for each selected medical need of interest, which are then *in vitro* and *in vivo* experimentally validated.

In 2010 we initiated our Pipeline Program pursuant to which we intend to both (i) substantially increase the number of predicted and selected product candidates being evaluated by us, and (ii) take selected product candidates further beyond their proof of concept into preclinical activities. In addition to taking forward candidates under our Pipeline Program, we intend to continue to enter into collaborations with major pharmaceutical and diagnostic companies that cover both (i) early-stage licensing of product candidates discovered by our discovery capabilities, primarily in the areas of oncology and immunology, and (ii) "discovery on demand" agreements where existing or new discovery platforms are utilized to predict and select product candidates as required by a partner.

To date, we have commenced implementing this strategy through (i) the successful development and validation of our predictive life science infrastructure which now includes more than ten area specific discovery platforms, (ii) the prediction, selection and validation of numerous product candidates in various therapeutic and diagnostic areas, and (iii) the signing of early stage agreements with major pharmaceutical and diagnostic companies for the development and commercialization of novel therapeutic and diagnostic products.

Subsidiary

Keddem Bioscience Ltd.

In 1999, we established a chemistry division that focused on substantially increasing the predictability and success rates of small molecule drug discovery. On August 1, 2004, we transferred all of the assets and liabilities of this division to Keddem Bioscience ("Keddem"), a wholly-owned subsidiary.

In August 2007, we suspended Keddem's operations and as such, it is reflected as a discontinued operation in our consolidated financial statements. In 2008, in order to continue to seek to maximize the value of Keddem's intellectual property, we entered into a term sheet agreement with Mada Ltd., a newly formed company owned and managed by the former two co-CEOs of Keddem, under which Compugen will license the Keddem intellectual property to Mada in exchange for royalties on any future revenues and certain access rights to any developed technology. Mada intends to seek third party funding for the development of this intellectual property, but we can give no assurances that it will be successful in doing so.

For more information on Keddem, see Item 7. "Major Shareholders and Related Party Transactions; Related Party Transactions; Keddem Bioscience Ltd.".

Significant Investment

Evogene Ltd.

In 1999, we established a division to utilize our *in silico* predictive discovery capabilities in the agricultural biotechnology field in order to deliver improved plant traits through the combination of computational genomics, molecular biology and breeding methods. On January 1, 2002, we transferred this business to Evogene Ltd., 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 completed several financing transactions in which we did not participate and therefore our shareholdings were diluted. Also, during this time period we extended the term of certain licenses to Evogene for which we were compensated in Evogene ordinary shares.

Since June 2009, we sold a total of 1,066,603 of our Evogene ordinary shares for approximately \$3.9 million. As of December 31, 2010, we held 1,083,397 Evogene ordinary shares representing approximately 3.6% of Evogene's then outstanding ordinary shares and voting power.

For more information on our holdings in Evogene, see also Note 1b to our 2010 consolidated financial statements.

Sales, Marketing and Business Development

Our principal sales, marketing and business development efforts involve licensing or other forms of collaborations with biotech, pharmaceutical and diagnostic companies for the development and commercialization of our product candidates. In earlier years we provided certain of our capabilities in the form of services and software tools to third parties, but these activities were largely discontinued by 2004.

Principal Markets

Our business model is primarily based on receiving revenues in the form of fees, milestones, research revenues and royalties and other revenue sharing payments from licensees and development partners. Therefore, current revenues remain insignificant. Revenues for the year ended December 31, 2010 were \$1.1 million, most of which were in North America. The approximate geographical breakdown of our revenues for the year ended December 31, 2010 was 67% in North America and 33% in Europe. For the year ended December 31, 2009 the approximate geographical breakdown of our revenues was 10% in North America and 90% in Europe. For the year ended December 31, 2008, the approximate geographical breakdown of our revenues was 12% in North America and 88% in Israel.

Raw Materials

We use a large range of raw materials in our research and discovery activities, including databases, biological reagents and biological samples.

We use biological information databases such as databases of ESTs, which are short nucleotide sequences that code for the expression of partial mRNA, databases of mRNA and DNA sequences, gene expression databases, including datasets from microarray experiments, databases which link proteins to diseases, protein-protein interaction and pathway databases and databases that match drugs with their respective targets. These databases include both public free of charge databases as well as proprietary databases. The public databases are maintained by various, often publically funded organizations, and are regularly updated. The proprietary databases are licensed or accessed on standard commercial terms.

We also use a large range of biological reagents such as cell growth media, enzymes, peptides, proteins and antibodies as well as cell lines and human tissue samples for our therapeutic and diagnostic validation activities.

We use a variety of commercially available growth media and enzymes as well as antibodies directed towards publicly known molecules from various companies (such as Sigma Aldrich, Abcam). We also obtain from companies such as Sigma Aldrich and Rockland Immunochemicals Inc antibodies and hybridomas which they develop specifically for our candidates and from companies such as Pepscan Therapeutics and Sigma Aldrich synthesized peptides. With respect to cell lines, we use commercially available human cell lines which we purchase from companies, such as the American Type Culture Collection, a nonprofit biological resource center and research organization. Some of these cell lines are modified by us for Compugen's target expression. We also use a wide variety of commercially available cell lines for various functional and molecular biology assays. We use RNA samples derived from various human cancer tissues (i.e. colon carcinoma, breast cancer) and normal tissues (i.e. brain, kidney, heart) which are commercially available from various companies such as Analytical Biological Services Inc., Biochain, and Asterand.

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 as well as certain components of our technology platforms. Subject to the following paragraph, we currently have a total of 25 issued patents of which 23 are U.S. patents. Subject to the following paragraph, we also have 78 pending patent applications, which include 32 patent applications that have been filed in the United States (two of which have to date been allowed for issuance) and three 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 inventions, including for related inventions such as antibodies and peptides, 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; at the current time, 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.

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.

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 companies. Our competitors include pharmaceutical, biotechnology and diagnostic 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 and diagnostic product candidates. In respect of our therapeutic product candidates, our potential competitors comprise companies that discover, develop or commercialize therapeutic protein or peptides such as Amgen, Inc., Pfizer, Inc., Genentech, Inc., and Zymogenetics, Inc. In respect of our diagnostic product candidates, we potentially face competition from any company to the extent that it discovers or develops diagnostic products. These companies include companies such as Abbott, Beckman, LabCorp, Quest and Roche.

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, proteins and peptides. 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, and occasionally gain some information on their biological importance. We believe that this advantage is made possible by the incorporation of ideas and methods from mathematics and computer science into biology, and by the modeling of significant biological phenomena and the resultant better research capabilities that we have developed. Nevertheless, we may lose this advantage if our existing or future competitors make scientific and technological progress. In addition, we may discover and pursue the development of therapeutic or diagnostic product candidates that could conflict with our collaborators' discovery and development plans, including licensees or collaborators to whom we granted in the past a license to use certain of our earlier computational platforms.

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.

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 U.S., 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 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 U.S. 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, current Good Manufacturing Practice 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;
- 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.

Once a product candidate is identified for development it enters the preclinical testing stage. An IND sponsor submits 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.

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

- *Phase 1:* The drug is 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.

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 requesting approval to market the product for one or more indications. The FDA initially reviews all NDAs 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 for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA may refer the NDA 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 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 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 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.

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 US subsidiary had no significant activities and our UK subsidiary was dissolved.

Property, Plants and Equipment

As of January 1, 2011, we lease an aggregate of approximately 15,380 square feet of office and biology laboratory facilities in Tel Aviv, Israel, which lease expires in December 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

Not Applicable

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, 2010, and with any other selected financial data included elsewhere in this annual report.

Background

We are a company that engages in drug and diagnostic product candidate discovery and commercialization of such candidates largely through early stage licensing and development agreements providing Compugen with milestone payments and royalties, or other revenue sharing amounts. Our business is focused on using our extensive and continuously growing discovery infrastructure, currently including more than 10 specific discovery platforms, algorithms, machine learning systems and other computational biology tools to predict, select and validate therapeutic drug candidates and diagnostic biomarker candidates in areas of significant unmet medical need and high industry interest. We are now focusing our efforts specifically in the fields of oncology and immunology, and on molecules for protein and peptide therapeutics, and monoclonal antibodies. Prediction and selection of product candidates is largely computer based, taking advantage of our broadly applicable and extensive discovery infrastructure, while validation of the resulting candidates is accomplished through the use of various *in vitro* and *in vivo* experimental techniques. Product candidate discovery programs are pursued either (i) by us independently as part of our market-need driven Pipeline Program and/or (ii) under "discovery on demand" collaborations with partner companies whereby our discovery capabilities are targeted to areas of interest of such partner companies.

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, 2010, we had an accumulated deficit of \$168 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 \$13 million in 2008, approximately \$4 million in 2009, and approximately \$7 million in 2010. 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. 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 their areas of their interest. To date, such third party arrangements with respect to existing product candidates have only been entered into at the early, proof of concept stage. During 2010, our Pipeline Program was initiated to take certain product candidates forward in the preclinical stage prior to licensing or other collaborations for such product candidates.

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 2011, accounting for more than 60% of our expected total 2011 operating expenses. Our research and development expenses have always comprised a significant portion of our expenses.

In 2008, 2009 and 2010, 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 \$1.7 million in 2008, approximately \$1.5 million in 2009, and approximately \$2.1 million in 2010 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, 2010, the total unamortized estimated compensation expenses related to options granted prior to that date was approximately \$3.5 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 2010 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 revenues, share based payments, fair value measurements and disclosures, commitments and contingencies, and income tax.

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.

Revenue Recognition

We generate revenues from collaboration research agreements under which we deliver novel product candidates and professional services and may receive future milestones and royalties on successful products. In previous years we also generated revenues from the licensing of software products.

We view our collaboration research agreements as service arrangements and follow the revenue recognition criteria in SAB 104. Under these arrangements revenue is being recognized when we complete our performance obligations. We believe 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. As of the balance sheet date, no milestones payments and royalties have been received. During 2010, we recognized revenues from product candidate collaboration agreements, under which we perform research services. We view our product candidate collaboration agreements under which we perform research services as arrangements subject to the revenue recognition criteria in SAB 104. Revenue is being recognized when we completes our performance obligation.

Deferred revenues include amounts received from customers for which revenue has not been recognized.

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 96% of our employee options will actually vest, and therefore as of December 31, 2010, we have applied an annual forfeiture rate between 4% 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.

Share-based compensation expense recognized under ASC 718 was \$1.7 million, \$1.5 million and \$2.1 million for the years ended December 31, 2008, 2009 and 2010 respectively.

Fair Value Measurements and Disclosures

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 Agreement with Baize and in accordance with ASC 730-20, "Research and Development Arrangements" and ASC 815, "Derivative and Hedging" We considered the Participation Rights as well as the Conversion Alternative of the instrument issued 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 this arrangement we issued detachable warrants to the investor. (See Item 4. "Information on the Company; Recent Funding Agreement").

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 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 this arrangement. 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 were years of projected net cash flows, a discount rate and the market growth rate. We considered historical rates and current market 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 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.

Accounting for Uncertainty in Income Taxes

We and our 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. We and our 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.

We must assess the likelihood that we will be able to recover our deferred tax assets. If recovery is not likely, we must increase our provision for taxes by recording a valuation allowance against the deferred tax assets that we estimate will not ultimately be recoverable. We believe that full valuation allowance should be provided against our deferred tax assets recorded on our consolidated balance sheets. Although we believe we have adequately reserved for our uncertain tax positions, no assurance can be given that the final tax outcome of these matters will not be different. We will adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will impact the provision for income taxes in the period in which such determination is made.

Recently Issued Accounting Standards

In September 2009, the FASB amended the ASC as summarized in Accounting Standard Update (“ASU”) 2009-14, Software (Topic 985): Certain Revenue Arrangements That Include Software Elements, and ASU 2009-13, Revenue Recognition (Topic 605): Multiple-Deliverable Revenue Arrangements. As summarized in ASU 2009-14, ASC Topic 985 has been amended to remove from the scope of industry specific revenue accounting guidance for software and software related transactions, tangible products containing software components and non-software components that function together to deliver the product’s essential functionality. As summarized in ASU 2009-13, ASC Topic 605 has been amended (1) to provide updated guidance on whether multiple deliverables exist, how the deliverables in an arrangement should be separated, and the consideration allocated; (2) to require an entity to allocate revenue in an arrangement using estimated selling prices of deliverables if a vendor does not have vendor-specific objective evidence (“VSOE”) or third-party evidence of selling price; and (3) to eliminate the use of the residual method and require an entity to allocate revenue using the relative selling price method. The accounting changes summarized in ASU 2009-14 and ASU 2009-13 are both effective for fiscal years beginning on or after June 15, 2010, with early adoption permitted. Adoption may either be on a prospective basis or by retrospective application. We believe the adoption of this guidance will not have a material impact on our financial condition, results of operations or cash flows.

In February 2010, the FASB issued Accounting Standards Update (ASU) No. 2010-09, which amends the Subsequent Events Topic of the Accounting Standards Codification (ASC) to eliminate the requirement for public companies to disclose the date through which subsequent events have been evaluated. We will continue to evaluate subsequent events through the date of the issuance of the financial statements, however, consistent with the guidance, this date will no longer be disclosed. We do not believe that the adoption of this guidance will have a material impact on our financial position, results of operations or cash flows of the Company.

In January 2010, the FASB issued ASU 2010-06, "Fair Value Measurements and Disclosures (ASC 820): Improving Disclosures about Fair Value Measurements." This update will require (1) an entity to disclose separately the amounts of significant transfers in and out of Levels 1 and 2 fair value measurements and to describe the reasons for the transfers; and (2) information about purchases, sales, issuances and settlements to be presented separately (i.e. present the activity on a gross basis rather than net) in the reconciliation for fair value measurements using significant unobservable inputs (Level 3 inputs). This guidance clarifies existing disclosure requirements for the level of disaggregation used for classes of assets and liabilities measured at fair value and require disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements using Level 2 and Level 3 inputs. The new disclosures and clarifications of existing disclosure are effective for fiscal years beginning after December 15, 2009, except for the disclosure requirements related to the purchases, sales, issuances and settlements in the roll forward activity of Level 3 fair value measurements. Those disclosure requirements are effective for fiscal years ending after December 31, 2010. We do not believe that the adoption of this guidance have or will have a material impact on our financial position, results of operations or our cash flows.

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,		
	2008	2009	2010
	(US\$ in thousands, except share and per share data)		
Consolidated Statements of Operations Data			
Revenues	\$ 338	\$ 250	\$ 1,115
Cost of revenues	7	-	224
Research and development expenses	9,289	5,995	6,237
Less - governmental and other grants	(544)	(944)	(1,010)
Research and development expenses, net	8,745	5,051	5,227
Marketing and business development expenses	996	681	633
General and administrative expenses	3,502	2,147	2,909
Total operating expenses *	13,243	7,879	8,769
Operating loss	(12,912)	(7,629)	(7,878)
Financial income, net	348	65	241
Other income, net	53	3,721	434
Loss from continuing operations	(12,511)	(3,843)	(7,203)
Gain (loss) from discontinued operations	(16)	12	-
Net loss	\$ (12,527)	\$ (3,831)	\$ (7,203)
Basic and diluted net loss per share from continuing operations	(0.44)	(0.13)	(0.22)
Basic and diluted net loss per share from discontinued operations	-	-	-
Basic and diluted net loss per share	(0.44)	(0.13)	(0.22)
Weighted average number of shares used in computing basic and diluted net loss per share	28,434,946	28,608,317	33,284,017

(*) Includes stock based compensation – see Note 12 of our 2010 consolidated financial statements.

	As of December 31,		
	2008	2009	2010
	(US\$ in thousands)		
Consolidated Balance Sheet Data:			
Cash and cash equivalents, short-term bank deposits, marketable securities and restricted cash	\$ 7,481	\$ 15,800	\$ 22,508
Receivables on account of shares and from funding arrangement	-	7,790	5,000
Investment in Evogene	3,858	3,898	6,227
Trade receivables, other accounts receivable and pre-paid expenses	768	720	569
Total assets	14,244	30,185	36,458
Research and development funding arrangement	-	-	4,037
Accumulated deficit	(157,453)	(161,284)	(168,487)
Total shareholders' equity	10,003	27,398	28,285

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.

Research and development expenses, increased by 4%, to approximately \$6.2 million for 2010 from approximately \$6.0 million for 2009. This increase 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, from approximately \$790,000 for 2009 to approximately \$883,000 for 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 compare 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.

Years Ended December 31, 2009 and 2008

Revenues. Revenues decreased by 26% from approximately \$338,000 in 2008 to approximately \$250,000 in 2009. The decrease in revenues was primarily due to license fees related to the extension of the LEADS license agreement with Evogene which was recognized in full in 2008. Only in 2007, did we begin to recognize revenues based on the business model implemented in 2004, which revenues remain insignificant. Revenues based on such business model were \$40,000 and \$250,000 for the years 2008 and 2009, respectively. This increase is due to the fact that during these two years, we met all of the conditions required to recognize certain revenue from our existing collaborations, mainly in 2009.

Research and Development Expenses, Net. Research and development expenses, net decreased by 42%, to approximately \$5.1 million for 2009 from approximately \$8.7 million for 2008. The decrease in our research and development expenses, net, was primarily due to a restructuring which took place in November 2008 and which was intended to reduce our operating costs and cash burn. 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 2009 compared with 2008. Research and development expenses, net, as a percentage of total operating expenses, decreased from 66% in 2008 to 64% in 2009.

Research and development expenses, decreased by 35%, to approximately \$6.0 million for 2009 from approximately \$9.3 million in 2008. The decrease was due to the November 2008 restructuring, the major portion of which was reflected in decreased payroll expenses and totaled approximately \$2.2 million of reduced expenses (including stock based compensation).

Marketing and Business Development Expenses. Marketing and business development expenses decreased by 32% to approximately \$681,000 in 2009 from approximately \$996,000 for 2008. This decrease was due to a reduction in the number of our personnel and related expenses following the November 2008 restructuring and the suspension of Compugen USA Inc. operations at the beginning of 2009. Marketing and business development expenses, as a percentage of total operating expenses, increased from 8% in 2008 to 9% in 2009.

General and Administrative Expenses. General and administrative expenses decreased by 39% to approximately \$2.1 million for 2009 from approximately \$3.5 million for 2008. This decrease was due to a reduction in the number of our personnel and related expenses following the November 2008 restructuring. The major decrease was under payroll expenses and totaled approximately \$873,000 (including stock based compensation). General and administrative expenses, as a percentage of total operating expenses, increased from 26% in 2008 to 27% in 2009.

Financial Income, Net. Financial income, net, decreased by 81% to approximately \$65,000 for 2009, from approximately \$348,000 for 2008. This decrease was primarily due to lower cash balances, lower interest rates on deposits and marketable securities and the effect of changes in currency rates.

Other Income. Other income, net, increased to \$3.7 million in 2009 compared to \$53,000 in 2008. This increase was due to realized gain derived from the sale of a portion of our holdings of Evogene ordinary shares.

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%. However, several investment programs at our facility in Tel Aviv 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” (Israeli Parliament) 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 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 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, 2010, we had not generated any taxable income. As of December 31, 2010, 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, 2010, 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 2030.

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 2010, 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
- Proceeds from sale of a portion of our holdings in Evogene’s ordinary shares
- Proceeds generated from collaborative research agreements
- Governmental and other grants
- Exercise of stock options
- Financial income

We used these funds primarily to finance our business operations.

Net Cash Used in Operating Activities

Net cash used in operating activities was approximately \$10.0 million in 2008, approximately \$7.5 million in 2009 and approximately \$4.3 million in 2010. These amounts were used to fund our operations for these periods, adjusted for non-cash expenses and changes in operating assets and liabilities including non-cash compensation relating to stock options issued. The sources of cash that we used to fund our activities through 2010 were primarily the cash held in our bank account, proceeds generated from collaborative research agreements, governmental and other grants that we received, cash received from the sale and issuance of ordinary shares in an “at the market” offering on Nasdaq during the fourth quarter of 2009 and the exercise of stock options and proceeds from sale of a portion of our holdings in Evogene’s ordinary shares. We expect that our sources of cash for 2011 will be cash held in our bank account, proceeds generated from collaborative research agreements, governmental and other grants that we will receive, proceeds from research and development Funding Arrangement signed in December 2010, and in the event of any exercise of stock options or a financing under our currently outstanding shelf registration.

Net Cash Provided By Investing Activities

Net cash used in investing activities consisted of investment in bank deposits offset by proceeds from redemption of deposits. Net cash generated by investing activities was approximately \$13.1 million in 2008 and approximately \$5.7 million in 2009 compared with net cash used in investing activities of approximately \$13.7 in 2010.

Net Cash Provided by Financing Activities

Our net cash provided by financing activities was approximately \$295,000 in 2008, approximately \$12.2 million in 2009 and approximately \$10.1 in 2010. The principal sources of cash provided by financing activities in 2010 were proceeds received from the issuance of shares in an “at the market” offering on Nasdaq during the end of 2009 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 we have available to fund our business operations and pay for near term future obligations. These liquid financial assets mostly consist of cash and cash equivalents as well as short-term bank deposits and marketable securities. As of December 31, 2010, we had total cash and cash equivalents and short-term bank deposits of approximately \$21.8 million, not including the market value of the 1,083,397 shares of Evogene ordinary shares owned by the Company and proceeds of research and development Funding Agreement signed in December 2010. 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 twelve 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 \$40,000,000. We are not certain when or if any securities will be offered or sold under the shelf registration. If we issue share in order under this shelf registration, any such issuance will dilute the holdings of our existing shareholders. In any event, the terms of any offering are yet to be determined and may not be favorable to us.

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 2008, 2009 and 2010. Our research and development expenses, net, were approximately \$5.2 million in 2010, compared to approximately \$5.1 million in 2009, and compared with \$8.7 million in 2008. As of December 31, 2010, 27 of our employees were engaged in research and development on a full-time basis. This represents approximately 70% of our entire work force.

We focus our research efforts on the development of our discovery platforms and related technologies, and the discovery and validation of our therapeutic peptides, proteins, drug targets for monoclonal antibody therapy and diagnostic biomarker product candidates. We expect that in 2011 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 successfully advance the research and development of certain of our product candidates under our internal Pipeline Program to IND application 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 and diagnostic product candidates for inclusion in our Pipeline Program and pursuant to “discovery on demand” collaborations.

Research and Development Grants

We participate or have participated in programs offered by the Office of the Chief Scientist under the Industry and Trade Ministry of Israel (“OCS”) that supports research and development activities, and by the European Community, under the European Union’s 6th Framework Program (“European Union”). We received or may receive grants and other forms of consideration from the OCS and European Union of approximately \$544,000 in 2008, approximately \$944,000 in 2009 and approximately \$1.1 million in 2010. We have applied for additional grants from the OCS for research and technological development for 2011.

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 net sales of products developed from the OCS-funded projects, 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, 2010, our contingent obligation for royalties, based on royalty-bearing government grants, net of royalties already paid, totaled approximately \$7.2 million payable out of future net sales of products that were developed under OCS-funded projects.

Israeli 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. Alternatively, the restriction on manufacturing outside of Israel shall not apply to the extent that plans to manufacture were disclosed when filing the application for funding (and provided the application was approved based on the information disclosed in the application). We believe that this restriction may not apply to the commercialization through licensing of product candidates that we develop by using or based on our OCS-funded technologies. In such circumstances, the OCS takes into account, among other considerations, the proposal that OCS-funded projects will have an overseas manufacturing component. Transfer of OCS-funded technologies outside of Israel is prohibited, unless conducted in accordance with the restrictions set forth under Israeli law. Israeli law further specifies that both the transfer of know-how as well as the transfer of intellectual property rights in such know-how are subject to the same restrictions. Therefore, our flexibility in commercializing some of our technologies or discoveries may be reduced.

The European Union’s 6th Framework Program

In 2005 we joined two research consortia under the European Union’s 6th Framework Program, which is a program based on the treaty establishing the European Union, with the aim of promoting research and technology among the European Community members.

We were the appointed coordinator of one of these research consortia, which means that we were the consortium’s primary contact with the European Community for the purpose of managing the consortium’s progress. This included a responsibility to distribute the research grant monies to the consortium members and to provide to the European Community reports describing the consortium’s progress of the funded research.

The terms of the grant from the European Community do not require us to repay the grant monies that we received, unless we or any of our consortium members default in our obligations such as carrying out the research that we undertook to perform, or in reporting the progress of the research. As of December 31, 2009, the research terms under both of these agreements were completed.

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, 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 "discovery on demand" 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, 2010, 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
Operating Lease Obligations	\$ 1,003	\$ 511	\$ 492	\$ -
Accrued Severance Pay Reflected on our Balance Sheet	1,695	-	-	1,695
Unrecognized Tax Benefit	58	58	-	-
Total	\$ 2,756	\$ 569	\$ 492	\$ 1,695

The above table does not include royalties that we may be required to pay to the OCS or under the Funding Agreement. 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 contractual undertakings to pay royalties subject to certain conditions occurring.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

Directors and Senior Management

The following table sets forth information with respect to our directors and executive officers as of January 31, 2011:

Name	Age	Positions
Prof. Yair Aharonowitz	70	Director ⁽¹⁾
Prof. Ruth Arnon	76	Director
Martin S. Gerstel	69	Chairman of the Board
Dov Hershberg	71	Director
Alex Kotzer	64	Director
Arie Ovadia, Ph.D	70	Director ⁽¹⁾
Prof. Joshua Shemer	62	Director ⁽¹⁾
Anat Cohen-Dayag, Ph.D	44	President and Chief Executive Officer
Dikla Czaczkes Axselbrad	37	Chief Financial Officer
Zurit Levine	43	Vice President, Research and Development

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

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 Jimenez 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. In addition, Prof. Arnon is the incumbent of the Paul Ehrlich Chair in Immunochimistry 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. 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 and serves on the advisory board of the Merage Foundation. 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 joined Compugen in September 2005 and served until December 2008 as President and Chief Executive Officer and a director. Since retiring as President and CEO, Mr. Kotzer has remained a member of the board of directors. 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, most recently as Vice President of Biotechnology Manufacturing. Previously, Mr. Kotzer was President and Chief Executive Officer of InterPharm, Serono's Israeli affiliate. 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 and head of the public school of 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 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 February 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 Organics. 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.

Dikla Czaczkes Axselbrad joined Compugen in March 2002 as director of finance, a position she held until February 2007. In February 2008, she became Acting Chief Financial Officer and in August 2008, she assumed her current position as Chief Financial Officer. Prior to joining Compugen, Ms. Czaczkes Axselbrad was the chief financial officer at Packet Technologies Ltd, 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 Tel Aviv University; she is also 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. As of January 2010, she holds the position of Vice President, Research and Development. 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.

Compensation

The aggregate compensation paid by us to all persons listed above who served as directors or senior management for the year 2010 (10 persons) was approximately \$941,000. This amount includes approximately \$99,000 set aside or accrued to provide pension, severance, retirement or similar benefits.

During 2010, we granted a total of 652,000 options to purchase ordinary shares to the listed above directors and senior management, as a group. These options are exercisable at a range of between \$3.43 and \$5.00 per share, and generally expire ten years after their respective dates of grant. As of December 31, 2010, there were a total of 2,933,804 outstanding options to purchase ordinary shares that were granted to those 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, 2010 was approximately \$88,000.

Approvals Required for Compensation to our Directors

Israeli Companies Law requires, among other requirements, that all payments of any type to directors be approved by the shareholders, subject to certain exceptions. Therefore, in accordance with these requirements, we determine our directors' compensation in the following manner:

- first, a proposal for compensation is submitted to our audit committee, which then reviews the proposal;
- second, provided that the audit committee approves the proposed compensation, the proposal is then submitted to our board of directors for review, except that a director who is the beneficiary of the proposed compensation does not participate in any discussion or voting with respect to such proposal;
- finally, if our board of directors approves the proposal, it must then submit its recommendation to our shareholders, which is usually done during our shareholders' annual general meeting; and
- the approval of a majority of our shareholders is required to implement any such compensation proposal.
- In addition, the compensation payable to external directors under the Israeli Companies Law is subject to certain further limitations.

Board Practices

Election of Directors and Terms of Office

Our board of directors consisted of seven members as at December 31, 2010. Other than our three external directors, who are elected for a fixed term of three years, our directors are elected by an ordinary resolution at the annual general meeting of our shareholders.

Professor Yair Aharonowitz, Dr. Arie Ovadia and Professor Joshua Shemer serve as external directors pursuant to the provisions of the Companies Law for a three-year term ending at the annual meeting to be held in 2013.

None of our directors or officers have any family relationship with any other director or officer.

None of our directors are entitled to receive any severance or similar benefits upon termination of his or her service.

Our Articles of Association permit us to maintain directors' and officers' liability insurance and to indemnify our directors and officers for actions performed on behalf of the Company, subject to specified limitations.

External and Independent Directors

The Companies Law requires Israeli companies with shares that have been offered to the public either in or outside of Israel to appoint at least two external directors. No person may be appointed as an external director if that person is a relative of the controlling shareholder or if that person or his or her relative, partner, employer, any person to whom that person reports, directly or indirectly, 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 or similar type prohibited relationships with the company or any person or entity controlling (or relative of such controlling person), controlled by or under common control with the company (or, in the case of a company with no controlling shareholder, any affiliation or similar type prohibited relationships with a person serving as chairman of the board, chief executive officer, a substantial shareholder or the most senior office holder in the company's finance department). The term affiliation and the similar types of prohibited relationships include:

- an employment relationship;
- a business or professional relationship, even if not maintained on a regular basis (but excluding a de minimus level relationship)
- control; and
- service as an office holder (as defined in the Companies Law and described below in "Item 10. Additional Information—Memorandum and Articles of Association—Approval of Certain Transactions").

No person may serve as an external director if that person's position or business activities create, or may create, a conflict of interest with that person's responsibilities as an external director or may otherwise interfere with his/her ability to serve as an external director. A person may furthermore not continue to serve as an external director if he or she accepts, during his or her tenure as an external director, direct or indirect compensation from the company for his or her role as a director, other than amounts prescribed under the Companies Law regulations (as described below) or indemnification and insurance coverage. If, at the time external directors are to be appointed, all current members of the board of directors are of the same gender, then at least one external director must be of the other gender.

The Companies Law requires that at least one external director must have financial and accounting expertise and the other external directors must possess certain professional qualifications that are promulgated by regulations to the Companies Law. These regulations provide that external directors with financial and accounting expertise must possess a high level of understanding in accounting and business matters, to the extent that they are able to read and understand financial statements in depth and to facilitate a discussion regarding the manner in which financial data is presented. An external director with professional qualifications must have an academic degree in either economics, business administration, accounting, law, public administration, or he or she must have another academic degree, or must have completed other higher education studies related to the main business of the company, or he or she must have at least five years of experience in at least two of the following: (a) a senior position in the business administration of a corporation with a significant scope of business; (b) a senior position in the public service; or (c) a senior position relating to the company's main business. Each company's board of directors must determine each external director's qualifications based on his or her education, experience and skills regarding financial matters and knowledge of financial statements in accordance with the Companies Law and Israeli securities laws.

External directors are to be elected by a majority vote at a shareholders' meeting, provided that either:

- a majority of shares voted at the meeting, including at least a majority of the shares held by non-controlling shareholders or shareholders with a personal interest in the election of the external director (other than a personal interest not deriving from a relationship with a controlling shareholder) voted at the meeting, vote in favor of election of the director; abstaining votes shall not be counted in this vote, or
- the total number of shares held by non-controlling non-interested shareholders voted against the election of the director does not exceed two percent (2%) of the aggregate voting rights in the company.

The initial term of an external director is three years and such term may be extended for up to two additional three year terms, provided that his or her service for each such additional term is recommended by one or more shareholders holding at least one percent (1%) of the company's voting rights and is approved by a majority at a shareholders meeting, which majority must include the same special majority described above required for his or her initial election. Furthermore, under regulations promulgated under the Companies Law, external directors of public companies whose shares are also registered for trading on certain stock exchanges outside of Israel, like ours, may be elected for additional three year terms (in excess of the initial three three-year terms permitted under the Companies Law itself) provided that in light of such external director's expertise and special contribution to the work of the company's board of directors and audit committee, the re-election of such external director is for the benefit of the company. The same special majority is required for election of the external director for each such additional term.

External directors may be removed only by a court, upon determination that the external directors to be so removed ceased to meet the statutory qualifications for their appointment or if they violate their duty of loyalty to the company; or by the same percentage of shareholders, acting through a shareholders meeting, as is required for their election, or if the board of directors has determined that the external directors to be so removed ceased to meet the statutory qualifications for their appointment or if they violate their duty of loyalty to the company. Such determination by the board of directors is to be made in the first meeting of the board of directors to be convened following learning of the said cessation or violation. Each committee of a company's board of directors must include at least one external director.

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 or any other services to the company.

Following the termination of an external director's membership on a board of directors, such former external director and his or her spouse and children may not be provided a direct or indirect benefit by the company, its controlling shareholder or any entity under its controlling shareholder's control, including engagement to serve as an executive officer or director of the company or a company controlled by its controlling shareholder or employment by, or providing services to, any such company for pay, either directly or indirectly, including through a corporation controlled by the former external director, for a period of two years (which prohibition also applies to other relatives of the former external director for a period of one year).

Professor Yair Aharonowitz, Dr. Arie Ovadia and Professor Joshua Shemer currently serve as our external directors under Israeli law and are among our independent directors under Nasdaq Stock Market Listing Rules. They all serve on our audit committee.

In addition to the requirements of the Companies Law as described above, since our shares are listed on the Nasdaq Capital Market, a majority of our directors must be independent (as defined by the Nasdaq Stock Market Listing Rules), and our audit committee must be comprised of at least three members, all of whom must be independent (subject to limited exceptions). We comply with such Nasdaq independence requirements, 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 to meet the Nasdaq independence requirements, while, as described above, three of such directors (all of such four directors, except Professor Arnon) comprise our fully independent audit committee.

Audit Committee

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 Stock Market Listing Rules and as external directors under the Companies Law. The audit committee has adopted a charter.

Under the Companies Law, the responsibilities of our audit committee include identifying irregularities in the management of the company's business and approving related party transactions (including compensation of office holders) as required by law. 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. Our audit committee must consist of at least three directors, including all of our external directors (one of whom must serve as chairman of the audit committee), and must be composed of a majority of independent directors. Under the Companies Law, an independent director is defined as an external director or a director who meets all of the following:

- the audit committee confirms that he or she meets the qualifications for being appointed as an external director, except for the requirement for financial and accounting expertise or professional qualifications; and
- he or she has not served as a director of the company for a period exceeding nine consecutive years. For this purpose, a break of less than two years in the service shall not be deemed to interrupt the continuation of the service.

The chairman of the board of directors, any director employed by or otherwise providing regular services to the company, or to a controlling shareholder or any entity controlled by a controlling shareholder, may not be a member of our audit committee. An audit committee may not approve an action or a transaction with a controlling shareholder, or with an office holder, or take any other action required under the Companies Law, unless at the time of approval a majority of the committee's members are present, of whom a majority consist of independent directors (as defined in the Companies Law) and at least one of whom is an external director.

Other Committees

We do not have a nominating committee nor a compensation committee. Such functions are performed by the full board of directors. This practice is compliant with Israeli law.

Approval of Officer's Compensation

The Companies Law prescribes that compensation and indemnification and insurance of or for our office holders who are not directors must be approved by our audit committee (or, should we wish to establish such a committee in the future, a compensation committee of our board of directors that meets all of the requirements applicable to an audit committee) and by our board of directors. 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. Generally, under the Companies Law, compensation of ordinary officers who are not office holders is set by the board of directors as a whole. However, as permitted under our Articles of Association, our board of directors has authorized and empowered our chief executive officer to appoint ordinary officers (who are not office holders) and determine their terms of employment, without our board of directors' further approval. Under the Companies Law, compensation for our office holders who serve as members of our board of directors (except for external directors) requires the approval of our audit committee, the board of directors and our shareholders.

Internal Auditor

Under the Companies Law, the board of directors must appoint an internal auditor, nominated 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 office holder, or an affiliate, or a relative of an office holder or affiliate, and he or she may not be the company's independent accountant or its representative. We comply with the requirement of the Companies Law relating to internal auditors. Our internal auditors examine whether our various activities comply with the law and orderly business procedure.

Our internal auditor, for the first two months of 2010, Ezra Yehudah, of Ezra Yehuda Management Services Ltd., is not an employee, affiliate, office holder of the company, or affiliated with the company's auditors. He was appointed in 1999 and his appointment was confirmed and ratified by the board of directors on October 26, 2009. On February 8, 2010, our board of directors terminated the services of Ezra Yehudah and 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.

Employees

The following table sets out the number of our employees engaged in specified activities, by geographic location at the end of the fiscal years 2008, 2009 and 2010:

	December 31, 2010	December 31, 2009	December 31, 2008
Research & Development			
Israel	27	26	40
United Kingdom	-	-	1
Administration, Accounting and Operations			
Israel	11	9	12
Sales, Marketing, Business Development and Support			
Israel	1	2	3
USA	-	-	1
Total	39	37	57

We and our Israeli employees are subject, by an extension order of the Israeli Ministry of Welfare, to a few provisions of collective bargaining agreements between the Histadrut, the General Federation of Labor Unions in Israel and the Coordination Bureau of Economic Organizations, including the Industrialists Associations. These provisions principally concern cost of living increases, recreation pay, travel expenses, vacation pay and other conditions of employment. We provide our employees with benefits and working conditions equal to or above the required minimum. Our employees are not represented by a labor union. We have written employment contracts with each of our employees, and we believe that our relations with our employees are good.

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 shares and/or options amounting to 1% or more of the outstanding ordinary shares. The following table sets forth certain information as of January 31, 2011, regarding the beneficial ownership by our directors and executive officers. All numbers quoted in the table are inclusive of options to purchase shares that are exercisable within 60 days after January 31, 2011.

Beneficial Owner	Amount Owned	Percent of Class
Martin S. Gerstel ⁽¹⁾	2,135,011	6.26%
Anat Cohen-Dayag ⁽²⁾	493,331	1.45%
All directors and senior management as a group ⁽³⁾ (10 persons)	3,338,249	9.80%

⁽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 281,243 options (of the 500,000 options granted to Martin Gerstel during 2009) that are exercisable within 60 days after January 31, 2011.

⁽²⁾ Consists of 493,331 options that are exercisable within 60 days after January 31, 2011.

⁽³⁾ Includes (i) a total of 2,628,342 shares and options that are beneficially owned by Martin S. Gerstel and Anat Cohen-Dayag, as noted in the first two rows of the above table, (ii) 674,613 options that are beneficially owned by other officers and directors, and (iii) 35,294 ordinary shares held by other officers and directors.

Share Option Plans

We maintain one active share option plan for our employees, directors and consultants. In addition to the discussion below, see Note 12 of our 2010 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) 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 the Board which resolved to cancel the then remaining “available for grant” options remaining under the 2000 Option Plan. As of December 31, 2010, options to purchase 5,745,957 ordinary shares at a weighted average exercise price of approximately \$2.70 per share were outstanding (i.e., were granted but not canceled, expired or exercised). Options to purchase 2,147,159 ordinary shares under the plan have previously been exercised at a weighted average exercise price of approximately \$2.81.

Compugen 2010 Share Incentive Plan

On July 25, 2010, the Board of Directors adopted the Compugen 2010 Share Incentive Plan (the “2010 Plan”) and terminated the 2000 Option Plan. In addition, the Board resolved that any available pool of options available for grants under the old plan, including any 1 options that may return to the pool in connection with terminated options, will be made available for future grants under the 2010 Plan. 1,953,851 shares were initially reserved for the grant under the 2010 Plan. Any options granted prior to the adoption of the 2010 Plan which terminate unexercised, will also be made available for future grants under the 2010 Plan.

If a grantee leaves his or her employment or other relationship with us, or if his or her relationship with us is terminated without cause, the term of his or her unexercised options will expire 90 days later, unless determined otherwise by the board of directors. As of December 31, 2010, options to purchase 117,500 ordinary shares at a weighted average exercise price of approximately \$5.64 per share were outstanding (i.e., were granted but not canceled, expired or exercised). Options to purchase 1,836,351 ordinary shares remain available for future grant as of December 31, 2010.

Our board of directors has elected the "Capital Gains Track" (as defined in Section 102(b)(2) of the Israeli Income Tax Ordinance (the "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 Ordinance. Entitlement to the benefits under the Capital Gains Track is contingent upon the trustee holding them and/or the shares issued upon their exercise on behalf of grantee of options for a period of at least 24 months from the time of grant. Under the Capital Gains Track, a fixed 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 gains at a rate which is his or her marginal income tax rate (up to 46% in 2009 and up to 45% in 2010), 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 each of our respective liability 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.

Directors' Options

Grants to Non-Management Directors

On July 31, 2007, our shareholders approved the following grants to the non-management members of our board of directors, in addition to the cash consideration paid to such non-management directors: Each non-management director was granted options to purchase ordinary shares as follows:

- (i) an initial grant to purchase 40,000 ordinary shares was granted to each non-management director on the following terms:
 - (a) the options were to be granted as of the date of the shareholders' approval;
 - (b) each option is exercisable for one ordinary share at an exercise price equal to the closing share price on the date of such grant;
 - (c) the options shall vest as follows: (1) 10,000 options fully vested at time of grant; (2) 10,000 options will vest annually for a period of three years, starting from the first anniversary of the initial grant date; and
 - (d) any and all other terms and conditions pertaining to the grant of the options shall be in accordance with, and subject to, the "Compugen Share Option Plan (2000)" or "Compugen 2010 Share Incentive Plan" and the Company's standard option agreement that were executed by each director and by the Company promptly after the date of the annual meeting of shareholders;

(ii) On each annual anniversary of the initial grant, an additional annual grant of options to purchase 10,000 ordinary shares to each non-management director then serving on the board of directors, with the following terms:

(a) each option is exercisable for one ordinary share at an exercise price equal to the closing share price on the date of such additional grant;

(b) the options shall vest as follows: 3,333 of the options shall vest on each of the first two anniversary dates of such grant and 3,334 on the third anniversary date; and

(c) any and all other terms and conditions pertaining to the grant of the options shall be in accordance with, and subject to, the "Compugen Share Option Plan (2000)" or "Compugen 2010 Share Incentive Plan".

Notwithstanding (i) and (ii) above, all options granted to non-management directors shall be fully vested immediately upon the completion of one or more of the following events, whether by way of a consolidation, merger or reorganization of the Company or otherwise: (a) a sale of all or substantially all of Company's issued share capital or assets to any other company, entity, person or a group of persons, or (b) the acquisition of more than 50% of Company's equity or voting power by any shareholder or group of shareholders.

Notwithstanding the terms of the "Compugen Share Option Plan (2000)" or "Compugen 2010 Share Incentive Plan" all options granted above which shall be vested as of the date of termination of services by a non-management director to the Company, may be exercised within one year after the cessation of his or her term as a director of the Company.

Grants to our Chairman of the Board

On April 15, 2010, the shareholders of the Company approved (further to previous approvals of our audit committee and board of directors) the grant to Mr. Gerstel of 125,000 options under the general terms of the "Compugen Share Option Plan (2000)". Such options were granted at an exercise price of \$5.00 per share, and shall not vest prior to December 31, 2012 and thereafter shall 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.

At the Company's shareholder meeting held on October 29, 2009, Mr. Gerstel recommended to the Board that he not receive any cash compensation for his services as Co-CEO and a member of the Board of Directors during 2009, but that a cash bonus be considered for him in March 2010 as compensation for such services, based solely on the Company's performance during 2009 and subject to shareholders' approval of any such bonus prior to payment. Notwithstanding the foregoing, since the shareholders have approved the proposed compensation set forth in the prior paragraph, Mr. Gerstel has irrevocably waived (i) receipt of any such cash bonus for 2009, and (ii) any other director fees or options to which he would otherwise be entitled to as Chairman or as a member of the Board of Directors of the Company.

Proposed Extension of Exercisability of Vested Options

On October 29, 2009, the shareholders approved an extension through December 31, 2010 of Mr. Kotzer's (the Company's former CEO) right to exercise 380,000 vested options, all of which had previously vested during the time he was CEO of the Company. On October 21, 2010, the Audit Committee and Board of Directors resolved, subject to shareholder approval, to further extend the term of exercisability of such vested options 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 the Board of Directors, or (ii) April 19, 2015. In consideration of this further extension, Mr. Kotzer has waived his right to receive options he would otherwise be entitled to receive with respect to his service as a director during any such extension period.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

Major Shareholders

The following table sets forth certain information regarding beneficial ownership of our ordinary shares as of December 31, 2010 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⁾	2,055,359	6.06%
Martin Gerstel ⁽²⁾	1,853,768	5.47%
Morgan Stanley ⁽³⁾	1,755,355	5.18%

⁽¹⁾ This disclosure is based on information disclosed by ClearBridge Advisors, LLC on Schedule 13G/A, filed with the SEC on February 11, 2011 reflecting holdings as of December 31, 2010.

⁽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 on Form 13-D.

⁽³⁾ This disclosure is based on information disclosed by Morgan Stanley on Schedule 13G/A, filed with the SEC on February 14, 2011 reflecting shareholdings as of December 31, 2010.

As of December 31, 2010, there were a total of 77 holders of record of our ordinary shares, of which 51 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.

ITEM 8. FINANCIAL INFORMATION

Consolidated Statements and Other Financial Information

Our consolidated financial statements are included on pages F-1 through F-38 of this annual report.

Legal Proceedings

Currently, we are not a party to any material pending legal proceedings. There are no legal proceedings pending or, to our knowledge, threatened against us or our subsidiaries and we are not involved in any legal proceedings that our management believes, individually or in the aggregate, would have a material adverse effect on our business, financial conditions or operating results.

Dividend Distributions

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 status, 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 15 of our 2010 consolidated financial statements and "Item 10. Taxation." Cash dividends may be paid by an Israeli company only out of retained earnings as calculated under Israeli law and provided that there is no reasonable concern that payment of a dividend will prevent the company from satisfying its existing and foreseeable 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

No significant changes have occurred since the date of the consolidated financial statements included in this annual report.

ITEM 9. THE OFFER AND LISTING

Markets and Share Price History

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 since 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 shares to the Nasdaq Capital Market where they are listed and continue to be traded under the symbol "CGEN". Our 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 of the ordinary shares on Nasdaq and on the Tel Aviv Stock Exchange:

	Nasdaq		*TASE	
	High	Low	High	Low
Last Six Calendar Months				
March 2011 (through March 15)	\$ 5.270	\$ 4.840	\$ 5.309	\$ 4.638
February 2011	\$ 5.610	\$ 4.670	\$ 5.502	\$ 4.650
January 2011	\$ 5.800	\$ 4.680	\$ 5.917	\$ 4.723
December 2010	\$ 5.030	\$ 3.820	\$ 5.011	\$ 3.752
November 2010	\$ 4.640	\$ 3.720	\$ 4.737	\$ 3.693
October 2010	\$ 5.180	\$ 4.370	\$ 5.199	\$ 4.478
Financial Quarters During the Past Two Full Fiscal Years				
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
Fourth Quarter 2009	\$ 5.860	\$ 2.300	\$ 6.064	\$ 2.387
Third Quarter 2009	\$ 3.370	\$ 1.730	\$ 3.193	\$ 1.670
Second Quarter 2009	\$ 2.250	\$ 0.630	\$ 2.174	\$ 0.640
First Quarter 2009	\$ 1.000	\$ 0.390	\$ 0.793	\$ 0.424
Last Five Full Financial Years				
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
2006	\$ 5.220	\$ 2.100	\$ 5.304	\$ 2.383

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

ITEM 10. ADDITIONAL INFORMATION

Memorandum and Articles of Association

Objects and Purposes of the Company

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 of Association is to engage in any lawful activity.

Powers of the Directors

Pursuant to the Companies Law and our Articles of Association, a director is not permitted to vote on a proposal, arrangement or contract in which he or she has a personal interest, subject to certain exceptions. Also, compensation payable to the directors requires the approval of our audit committee, board of directors, and our shareholders at a general meeting. The requirements for approval of certain transactions are set forth below in “Item 10. Additional Information; Memorandum and Articles of Association; Approval of Certain Transactions”. The powers of our directors to enter into borrowing arrangements on our behalf are limited to the same extent as any other transaction by us.

Approval of Certain Transactions

The Companies Law codifies the fiduciary duties that office holders, including directors and executive officers, owe to a company. An office holder, as defined in the Companies Law, is a director, general manager (ie. chief executive officer), chief business manager, deputy general manager, vice general manager, other manager directly subordinate to the general manager or any other person assuming the responsibilities of any of the foregoing positions without regard to such person's title. An office holder's fiduciary duties consist of a duty of care and a duty of loyalty. The duty of loyalty includes avoiding any conflict of interest between the office holder's position in the company and discharging his or her duties in another position he or she holds or his or her personal affairs, avoiding any competition with the business of the company, avoiding exploitation of any business opportunity of the company in order to reap personal gain for himself or herself or for others, and revealing to the company any information and hand over any documents relating to the company's affairs which the office holder has received due to his or her position as an office holder. Each person listed in the table under “Directors and Senior Management”, which is displayed under “Item 6. Directors, Senior Management and Employees; Directors and Senior Management”, is one of our office holders. Under the Companies Law, all arrangements as to compensation of office holders who are not directors, require approval of the audit committee (or, should we wish to establish such a committee in the future, a compensation committee of our board of directors that meets all of the requirements applicable to an audit committee) and 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. Arrangements regarding the compensation of directors also require shareholder approval, with the exception of compensation to external directors. Arrangements regarding the compensation of non-external directors may also be exempted from the requirement of shareholders approval, provided that only certain amounts are payable thereto as specified in the regulations promulgated under the Companies Law, and that other provisions of such regulations are complied with. Please see “Item 6. Directors and Senior Management—Compensation—Approvals Required for Compensation to our Directors” for a discussion of the procedures that we employ in approving the compensation of our directors.

The Companies Law requires that an office holder promptly disclose any personal interest that he or she may have and all related material information known to him or her, in connection with any existing or proposed transaction by the company. The disclosure must be made to our board of directors and shareholders a reasonable period of time prior to the meeting at which the transaction is to be discussed. A personal interest, as defined under the Companies Law, includes any personal interest held by the office holder's: spouse, siblings, parents, grandparents or descendants; spouse's descendants, siblings or parents; and the spouses of any of the foregoing, or by any corporation in which the office holder is a five percent (5%) or greater shareholder, or holder of five percent (5%) or more of the voting power, or a director or general manager or in which he or she has the right to appoint at least one director or the general manager. A personal interest further includes the personal interest of a person for whom the office holder holds a voting proxy or the interest of the office holder with respect to his or her vote on behalf of the shareholder for whom he or she holds a proxy even if such shareholder itself has no personal interest in the approval of the matter.

In the case of a transaction which is not an extraordinary transaction (as defined below) and does not involve the compensation of the office holder, after the office holder complies with the above disclosure requirement, only approval by the board of directors is required unless the articles of association of the company provide otherwise (ours do not provide otherwise). If the transaction is an extraordinary transaction, then, in addition to any approval required by the articles of association, the transaction must also be approved by the audit committee and/or by a meeting of the shareholders and by the board of directors. An office holder who has a personal interest in a matter that is considered at a meeting of the board of directors or the audit committee may not be present at this meeting or vote on this matter, subject to certain exceptions, including an allowance for him or her to be present in order to present the transaction, if the chairman of the audit committee or board of directors (as appropriate) determines that such presentation by him or her is necessary. If the majority of the board members or members of the audit committee, as applicable, have a personal interest in a transaction, they may all be present for the presentation of, and voting upon, the transaction, but it must also then be approved by the shareholders of the company. Notwithstanding having been approved in compliance with the foregoing processes, any transaction in which an office holder has a personal interest must, in addition, not be adverse to the company's interest in order for it to be properly approved.

An extraordinary transaction is defined as a transaction not in the ordinary course of business, not on market terms, or that is likely to have a material impact on the company's profitability, assets or liabilities.

The Companies Law applies the same disclosure requirements to a controlling shareholder of a public company, which is defined as a shareholder who has the ability to direct the activities of a company, other than in circumstances where this power derives solely from the shareholder's position on the board of directors or any other position with the company, and includes a shareholder that holds 25% or more of the voting rights if no other shareholder owns more than 50% of the voting rights in the company. Extraordinary transactions with a controlling shareholder or in which a controlling shareholder has a personal interest, or a transaction with a controlling shareholder or his or her relative, directly or indirectly, including for receipt of services from an entity controlled by him or her (or his or her relative), and the terms of engagement and compensation of a controlling shareholder who is an office holder or an employee of the company, require the approval of the audit committee, the board of directors and the shareholders of the company.

The shareholders majority approving an extraordinary transactions with a controlling shareholder must either include at least a majority of the disinterested shareholders who are present, in person or by proxy, at the meeting (excluding abstaining votes), or, alternatively, the total shareholdings of the disinterested shareholders who vote against the transaction must not represent more than two percent (2%) of the voting rights in the company. To the extent that any such transaction with a controlling shareholder is for a period extending beyond three years, it requires such approval once every three years, unless the audit committee determines that the duration of the transaction is reasonable given the circumstances related thereto.

In addition, a private placement of securities that comprise twenty percent (20%) or more of the voting rights in a company prior to the consummation of the private placement (assuming the exercise and conversion of all of the convertible securities into shares being sold in such private placement) and that will increase the relative holdings of a shareholder that holds five percent (5%) or more of the company's outstanding share capital (assuming the exercise and conversion by such person of all of the convertible securities into shares held by that person) or that will cause any person to become a holder of more than five percent (5%) of the company's outstanding share capital, requires approval by the board of directors and the shareholders of the company if the consideration for the issuance of the securities is not solely cash or publicly tradable securities or the terms of which are not otherwise market terms.

Under the Companies Law, a shareholder has a duty to act in good faith towards the company and other shareholders and refrain from abusing his power in the company, among other matters, through his voting in the general meetings of shareholders on the following matters:

- any amendment to the articles of association;
- an increase of the company's authorized share capital;
- a merger; and
- approval of actions of office holders in breach of their duty of loyalty and of interested party transactions.

In addition, any controlling shareholder, any shareholder who knows he, she or it can determine the outcome of a shareholders vote or of a class vote, and any shareholder who, under our Articles of Association, has the power to appoint, or to prevent the appointment of, an office holder, is under a duty to act with fairness towards the company. The Companies Law does not describe the substance of such duty of fairness. The Companies Law requires that specified types of transactions, actions and arrangements be approved as provided for in a company's articles of association and in some circumstances by the audit committee, the board of directors and the shareholders. In general, the vote required by the audit committee and the board of directors for approval of these matters, in each case, is a majority of the disinterested directors participating in a duly convened meeting.

For information concerning the direct and indirect personal interests of some of our office holders and principal shareholders in transactions with us, see "Item 7. Major Shareholders and Related Party Transactions; Related Party Transactions" above.

Rights Attached to Ordinary Shares

Our authorized share capital consists of 100,000,000 ordinary shares, par value NIS 0.01 per share. Holders of ordinary shares have one vote per share, and are entitled to participate equally in the payment of dividends and share distributions and, in the event of our liquidation, in the distribution of assets after satisfaction of liabilities to creditors. No preferred shares are currently authorized. All outstanding ordinary shares are validly issued and fully paid.

Transfer of Shares

Fully paid ordinary shares are issued in registered form and may be freely transferred under our Articles of Association unless the transfer is restricted or prohibited by another instrument.

Dividend and Liquidation Rights

We may declare a dividend to be paid to the shareholders of our ordinary shares according to their rights and interests in our profits. In the event of our liquidation, after satisfaction of liabilities to creditors, our assets will be distributed to the shareholders of our ordinary shares in proportion to the nominal value of their shareholdings. This right may be affected by the grant of preferential dividend or distribution rights to the shareholders of a class of shares with preferential rights that may be authorized in the future. 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 preference shares. 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 of Association 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.

Annual and Special General Meetings

We must hold our annual general meeting of shareholders each year no later than 15 months from the last annual meeting, at a time and place determined by the board of directors, upon at least 21 days' prior notice to our shareholders. The board of directors may, whenever it thinks fit, convene a special meeting as may be determined by the board of directors. The board of directors shall be obligated to convene a special meeting, as may be determined by the board of directors, upon requisition in writing in accordance with the Companies Law. Not less than twenty-one (21) days' prior notice, or thirty-five (35) days' prior notice to the extent required under regulations promulgated under the Companies Law, shall be given of every 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.

The quorum required for a meeting of shareholders consists of at least two shareholders present in person or by proxy who hold or represent between them at least 33.3% of the issued share capital. A meeting adjourned for lack of a quorum generally is adjourned to the same day in the following week at the same time and place or any time and place as the directors designate in a notice to the shareholders. At the reconvened meeting, the required quorum consists of any two members present in person or by proxy.

Voting Rights

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 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."

Holders of ordinary shares have one vote for each ordinary share held 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.

Under the Companies Law, unless otherwise provided in the articles of association or by applicable law, all resolutions of the shareholders require a simple majority and all shareholders' meetings require prior notice of at least 21 days. Our Articles of Association provide that, except with respect to matters which require the approval of a special majority under the Companies Law, all decisions may be made by a simple majority of the voting power represented at the meeting, in person, by proxy or by proxy card, and voting thereon. See "Item 10. Additional Information; Memorandum and Articles of Association; Approval of Certain Transactions" above for certain duties of shareholders towards the company.

Limitations on the Rights to Own Securities

The ownership or voting of ordinary shares by non-residents of Israel is not restricted in any way by our articles of association or the laws of the State of Israel, except that nationals of countries which are, or have been, in a state of war with Israel may not be recognized as owners of our shares.

Acquisitions Under Israeli Law

Tender Offers

The Companies Law provides that an acquisition of shares in a public company must be made by means of a special tender offer if, as a result of such acquisition, the purchaser would become a shareholder with 25% or more of the voting rights in the company. This rule does not apply if there is already another shareholder of the company with 25% or more of the voting rights. Similarly, the Companies Law provides that an acquisition of shares in a public company must be made by means of a tender offer if, as a result of the acquisition, the purchaser's shareholdings would entitle the purchaser to over 45% of the voting rights in the company, unless there is already another shareholder with over 45% of the voting rights in the company. These rules do not apply if the acquisition is made by way of a merger, as well as in certain other events of private placements and acquisitions from holders of blocks of 25% or more or over 45% of the voting rights in the company.

A special tender offer must be extended to all shareholders of a company but the offeror is not required to purchase shares representing more than 5% of the voting power attached to the company's outstanding shares, regardless of how many shares are tendered by shareholders. A special tender offer may be consummated only if (i) at least 5% of the voting power attached to the company's outstanding shares will be acquired by the offeror and (ii) the number of shares tendered in the offer exceeds the number of shares whose holders objected to the offer. For purposes of the foregoing clause (ii), shares held by a controlling shareholder of the purchaser or any person with a personal interest (as defined above in "Item 10. Additional Information; Memorandum and Articles of Association; Approval of Certain Transactions") are not included in determining whether the required number of tendered shares has been achieved.

Regulations adopted under the Companies Law provide that these tender offer requirements do not apply to companies whose shares are listed for trading outside of Israel if, according to the law in the country in which the shares are traded, including the rules and regulations of the stock exchange on which the shares are traded, there is either a limitation on acquisition of any level of control of the company, or the acquisition of any level of control requires the purchaser to do so by means of a tender offer to the public.

The Companies Law also provides that if following any acquisition of shares, the acquirer holds 90% or more of the company's shares or of a class of shares, the acquisition must be made by means of a tender offer for all of the target company's shares or all of the shares of the class, as applicable, not held by the acquirer. An acquirer who wishes to eliminate all minority shareholders must do so by way of a tender offer and hold, following consummation of the tender offer, more than 95% of all of the company's outstanding shares (and provided that a majority of the offerees that do not have a personal interest in such tender offer shall have approved it, which condition shall not apply if, following consummation of the tender offer, the acquirer holds at least 98% of all of the company's outstanding shares). If, however, following consummation of the tender offer the acquirer would hold 95% or less of the company's outstanding shares, the acquirer may not acquire shares tendered if by doing so the acquirer would own more than 90% of the shares of the target company. Appraisal rights are available with respect to a successfully completed full tender offer for a period of six months after such completion and the acquirer may provide in the tender offer documents that a shareholder that accepts the offer may not seek appraisal rights.

Merger

The Companies Law permits merger transactions if approved by each party's board of directors and, unless certain requirements described under the Companies Law are met, a majority of each party's shares voted on the proposed merger at a shareholders' meeting called with at least 35-days' prior notice.

For purposes of the shareholder vote, unless a court rules otherwise, the merger will not be deemed approved if a majority of the shares represented at the shareholders meeting that are held by parties other than the other party to the merger, or by any person (or group of persons acting in concert) who holds (or hold, as the case may be) 25% or more of the outstanding shares or the right to appoint 25% or more of the directors of the other party, vote against the merger. If, however, the merger involves a merger with a company's own controlling shareholder or if the controlling shareholder has a personal interest in the merger, then the merger is instead subject to the same special majority approval that governs all extraordinary transactions with controlling shareholders (as described above in "Item 10. Additional Information; Memorandum and Articles of Association; Approval of Certain Transactions"). In the event that the merger transaction has not been approved by either of the above-described special majorities (as applicable), a court may still approve the merger upon the request of holders of at least 25% of the voting rights of a company, if the court holds that the merger is fair and reasonable, taking into account the value of the parties to the merger and the consideration offered to the shareholders.

The Companies Law further provides that the foregoing approval requirements will not apply to shareholders of a wholly-owned subsidiary in a rollup merger transaction, or to the shareholders of the acquirer in a merger or acquisition transaction if:

- the transaction does not involve an amendment to the acquirer's memorandum or articles of association;
- the transaction does not contemplate the issuance of more than 20% of the voting rights of the acquirer which would result in any shareholder becoming a controlling shareholder; and
- there is no "cross ownership" of shares of the merging companies.

Upon the request of a creditor of either party to the proposed merger, the court may delay or prevent the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations of 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 date on which a proposal for approval of the merger was filed by each party with the Israeli Registrar of Companies and 30 days have passed from the date on which the merger was approved by the shareholders of each party.

Other Anti-Takeover Provisions under Israeli Law

In general, Israeli tax law treats specified acquisitions less favorably than does U.S. tax law. However, Israeli tax law provides for tax deferral in specified acquisitions, including transactions where the consideration for the sale of shares is the receipt of shares of the acquiring company.

Changes in Capital

Our Articles of Association 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 or special meeting by voting on such change in the capital. In addition, transactions that have the effect of reducing capital, such as the declaration and payment of dividends in the absence of sufficient retained earnings and profits and an issuance of shares for less than their nominal value, require the approval of both our Board of Directors and an Israeli court.

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. The conversion into the non-Israeli currency must be made at the rate of exchange prevailing at the time of conversion. Under Israeli law, both residents and non-residents of Israel may freely hold, vote and trade ordinary shares, except nationals of countries which are, or have been, in a state of war with Israel.

Taxation

The following discussion of Israeli and United States tax consequences material to our shareholders is not intended and should not be construed as legal or professional tax advice and does not discuss all possible tax considerations. To the extent that the discussion is based on new tax legislation, which has not been subject to judicial or administrative interpretation, the views expressed in the discussion might not be accepted by the tax authorities in question.

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 principal tax laws applicable to companies in Israel, including special reference to their effect on us, and Israeli government programs benefiting us. This section also contains a discussion of the material Israeli tax consequences to you if you acquire Ordinary Shares of our company. This summary does not discuss all the acts of Israeli tax law that may be relevant to you in light of your personal investment circumstances or if you are subject to special treatment under Israeli law. To the extent that the discussion is based on new tax legislation which has not been subject to judicial or administrative interpretation, we cannot assure you that the views expressed in this discussion will be accepted by the tax authorities. The discussion should not be understood as legal or professional tax advice and is not exhaustive of all possible tax considerations.

General Corporate Tax Structure

Generally, Israeli companies are subject to “Corporate Tax” on their taxable income. The applicable rates are as follows: in 2010 - 25%, in 2011 - 24%, in 2012 - 23%, in 2013 – 22%, in 2014 – 21%, in 2015 – 20% and in 2016 and thereafter - 18%. However, the effective tax rate payable by a company which derives income from an Approved Enterprise, a Privileged Enterprise or a Preferred Enterprise (as further discussed below) may be considerably less.

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

The Law for the Encouragement of Industry (Taxes), 1969, (the “Industry Encouragement Law”), provides several tax benefits for “Industrial Companies”. An Industrial Company is defined as a company resident in Israel, which at least 90% of its income in any given tax year (other than income from certain governmental security debts) 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.

Under the Industry Encouragement Law, Industrial Companies are entitled to certain tax benefits, including:

- a deduction of the cost of purchases of patents or the right to use a patent or know how used for the development or promotion of the Industrial Enterprise, over an eight-year period, commencing on the year in which such rights were first exercised;
- the right to elect, under specified conditions, to file a consolidated tax return with additional Israeli Industrial Companies controlled by it, and;
- a straight-line deduction of expenses related to a public offering over a three year period commencing on the year of offering.

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.

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

The Law for the Encouragement of Capital Investments, 1959 (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 introduces 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 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 Investments Law provides that a company is eligible for tax benefits on taxable income derived from its Approved Enterprise programs. The tax benefits under the Investments 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 Investments 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 Investments 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 Investments 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 ("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 (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 Investments 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 for these programs 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 (the “Year of Election”). 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.

Dividends paid out of income attributed to a Preferred Enterprise are generally subject to withholding tax at source at the rate of 15% or such lower rate as may be provided in an applicable tax treaty. However, if such dividends are paid to an Israeli company, no tax will be withheld.

The 2011 Amendment also provided transitional provisions to address companies already enjoying current benefits. These transitional provisions provide, among other things, that (i) terms and benefits included in any certificate of approval that was granted to an Approved Enterprise, which chose to receive grants, before the 2011 Amendment came into effect, will remain subject to the provisions of the Investment Law as in effect on the date of such approval, while the 25% tax rate applied to income derived by an Approved Enterprise during the benefit period will be replaced with the regular corporate income tax rate (24% in 2011), unless a request is made to apply the provisions of the Investment Law as amended in 2011 with respect to income to be derived as of January 1, 2011 (such request should be made by way of an application to the Israeli Tax Authority by June 30, 2011). Such request may not be withdrawn; (ii) terms and benefits included in any certificate of approval that was granted to an Approved Enterprise, which had participated in an alternative benefits program, before the 2011 Amendment came into effect will remain subject to the provisions of the Investment Law as in effect on the date of such approval, provided that certain conditions are met. However, a company that has such enterprise can file a request with the Israeli Tax Authority, according to which its income derived as of January 1, 2011 will be subject to the provisions of the Investment Law as amended in 2011; and (iii) a Privileged Enterprise can elect to continue to benefit from the benefits provided to it before the 2011 Amendment came into effect, provided that certain conditions are met, or file a request with the Israeli Tax Authority according to which its income derived as of January 1, 2011 will be subject to the provisions of the Investment Law as amended in 2011. We have evaluated the likely effect of these provisions of the 2011 Amendment and, at this time, do not intend to file a request to apply the new benefits under the 2011 Amendment.

Special Provisions Relating to Measurement of Taxable Income

According to the law, until 2007 the results for tax purposes were measured 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. For additional information, see Note 13 to our consolidated financial statements.

Tax Benefits of Research and Development

Israeli tax law permits, under some conditions, a tax deduction in the year incurred for expenditures, including capital expenditures, in scientific research and development projects, if the expenditures are approved by the relevant government ministry and if the research and development is for the promotion of the enterprise and is carried out by, or on behalf of, a company seeking the deduction.

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.

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.

As of January 1, 2006, the tax rate applicable to Real Capital Gains derived from the sale of shares, which had been purchased after January 1, 2003, whether listed on a stock exchange or not, is 20% for Israeli individuals, retroactive from January 1, 2003, unless such shareholder claims a deduction for financing expenses in connection with the purchase and holding of such shares, in which case the gain will generally be taxed at a rate of 25%. Additionally, if such shareholder is considered a "Significant Shareholder" (*i.e.*, a person who 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) at any time during the preceding 12-month period such gain will be taxed at the rate of 25%. Individual shareholders dealing with securities in Israel are taxed at the tax rates applicable to business income (up to 45% in 2010).

Dividend Income

Israeli residents who are individuals are generally subject to Israeli income tax for dividends paid on our ordinary shares (other than bonus shares or share dividends) at the rate of 20%, or 25% if the recipient of such dividend 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 are 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 will have reduced and will continue to reduce the corporate tax rate from 25% in 2010 to 24% in 2011, 23% in 2012, 22% in 2013, 21% in 2014, 20% in 2015 and 18% in 2016 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, a Privileged Enterprise or a Preferred Enterprise are 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 is generally subject to tax at the corporate tax rate (25% in 2010), if generated by a company, or at the rate of 20% or 25%, if generated by an individual from the sale of assets purchased on or after January 1, 2003. Individual and corporate shareholders dealing in securities in Israel are taxed at the tax rates applicable to business income (a tax rate of 25% for a corporation in 2010 and a marginal tax rate of up to 45% for an individual in 2010).

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 the Tel Aviv Stock Exchange or 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 (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 our 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 of 20% (25% 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 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 20% (whether the recipient is a Significant Shareholder or not) or 15% if the dividend is distributed from income attributed to our Benefited 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 are 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 ("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 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 or financial services entities;
- 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;
- are liable to alternative minimum tax;
- 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, on the date the distribution is received 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 requires that we be eligible for the benefits of a comprehensive income tax treaty with the United States that includes an information exchange program that the IRS determines is satisfactory. Furthermore, 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 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 will be income from sources outside the United States for foreign tax credit limitation purposes but 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 (the “Income Test”) 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 income, assets, activities and market capitalization, we do not believe we were a PFIC for the taxable year ended December 31, 2010; however, there can be no assurances that the United States Internal Revenue Service (“IRS”) will not challenge this conclusion. If we were not a PFIC for 2010, U.S. holders who acquired our ordinary shares in 2010 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 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, 2010.

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 Nasdaq) 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 Nasdaq. 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.

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.

Material Contracts

On December 29, 2010, we entered into a Funding Agreement with Baize. Under the Funding Agreement, Baize has provided us with \$5,000,000 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 Participation Rights; and (ii) warrants for 500,000 Compugen ordinary shares, exercisable at \$6.00 per share through June 30, 2013. Currently, all five designated product candidates are in active research in the Pipeline Program, with their current status ranging from *in silico* selection to post animal model validation. In addition, Baize has the right, until June 30, 2013, to waive its right to receive Participation Rights, in exchange for 833,334 Compugen ordinary shares.

If, prior to June 30, 2011, we receive commitments from third parties for a Subsequent Financing, the Funding Agreement provides that Baize will be required to elect to either (i) exchange in total its rights to receive Participation Rights as described above for such consideration on the same terms and conditions as would be received by third parties for a \$5,000,000 investment in such Subsequent Financing, or (ii) waive in total its rights to receive Participation Rights as described above and have the \$5,000,000 investment amount refunded to it, or (iii) exercise its right, as described above, to waive its right to receive Participation Rights in exchange for 833,333 Compugen ordinary shares. The June 30, 2011 deadline for Compugen to receive the future commitments for a new investment may be extended by us on a month to month basis, but not past December 31, 2011, by issuing to Baize a warrant for 83,333 additional Compugen ordinary shares, on the same terms as the original warrant, for each such month of extension.

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, 2010, we had \$26.8 million in cash, cash equivalents, short-term bank deposits and receivables from a Funding Agreement. We mostly invest our cash surplus in bank deposits and marketable securities. Since these investments typically carry fixed interest rate, and since our policy and practice is to hold these investments to maturity, financial income over the holding period is not sensitive to changes in interest rates. For more information, see Note 4 of our 2010 consolidated financial statements.

Foreign Currency Exchange Risk and Inflation

We hold most of our cash, cash equivalents in U.S. dollars deposits but incur a significant portion of our expenses, principally payroll and related personnel expenses and administrative expenses, in New Israeli Shekels ("NIS"). As a result, we are exposed to the risk that the U.S. dollar will be devalued against the New Israeli Shekel. Depreciation of the US dollar could have a material adverse effect on our results of operation and financial condition. We have entered into derivative instrument arrangements to hedge a portion of our anticipated New Israeli Shekel payroll and certain operation expenses. For more information, see Note 2s of our 2010 consolidated financial statements.

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**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.

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, 2010 that are included in this annual report, has issued an attestation report on our management's assessment of our internal control over financial reporting as of December 31, 2010.

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 our management's assessment of our internal control over financial reporting as of December 31, 2010 is provided on page [F-2], as included under Item 18 of this annual report.

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 Stock Market Listing Rules, qualifies as an “audit committee financial expert” as defined under the rules and regulations of the SEC.

ITEM 16B. CODE OF ETHICS

Our board of directors has adopted a code of ethics that applies to our chief executive officer, chief financial officer, controller, and other persons performing similar functions.

The code of ethics is posted on our website, addressed www.cgen.com.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents the fees paid or to be paid to our external auditors for professional services rendered in the years ended December 31, 2010 and 2009:

	2010	2009
Audit Fees	\$ 75,000	\$ 74,000
Tax Fees	\$ 10,500	\$ 11,000
All Other Fees	\$ 30,500	\$ 35,000
Total	\$ 116,000	\$ 120,000

“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;

“Tax Fees” are fees for services rendered by our principal accountant in connection with tax compliance and tax advice; and

“All Other Fees” are fees for other consulting services rendered by our principal accountant to us.

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

The audit committee of our board of directors is responsible for the oversight of our independent accountants’ work. The audit committee’s policy is to pre-approve all audit and non-audit services provided by our independent accountants, 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 accountants 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 2009 and 2010 were pre-approved by the audit committee in accordance with these procedures.

In April 2010, 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, 2010 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

None.

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

None.

ITEM 16 F. CHANGES IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

There are no significant differences between our corporate governance practices and those required of a U.S. domestic issuer under the Nasdaq Stock Market Listing Rules.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements and related information pursuant to Item 18.

ITEM 18. FINANCIAL STATEMENTS

See pages F-1 through F-38.

ITEM 19. EXHIBITS

Index to Exhibits

Exhibit Number	Description
*1.1	Form of Articles of Association of Issuer
10.1	Funding Agreement entered into on December 29, 2010 between Compugen and Baize Investments (Israel) Ltd.
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 21, 2011.

* Filed as an exhibit to our registration statement on Form F-1, registration number 333-12316, as amended, filed with the Securities and Exchange Commission, and is hereby incorporated by reference.

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.

By: /s/ Dr. Anat Cohen-Dayag

Name: Dr. Anat Cohen-Dayag

Title: President and Chief Executive Officer

Date: March 21, 2011

COMPUGEN LTD. AND ITS SUBSIDIARIES
CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2010
U.S. DOLLARS IN THOUSANDS
INDEX

	<u>Page</u>
<u>Report of Independent Registered Public Accounting Firm</u>	F - 2
<u>Report of Independent Registered Public Accounting Firm on Internal Controlover Financial Reporting</u>	F - 3 - F - 4
<u>Consolidated Balance Sheets</u>	F - 5 - 6
<u>Consolidated Statements of Operations</u>	F - 7
<u>Statements of Changes in Shareholders' Equity</u>	F - 8 - F - 9
<u>Consolidated Statements of Cash Flows</u>	F - 10 - F - 11
<u>Notes to Consolidated Financial Statements</u>	F - 12 - F - 38



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

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

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of

COMPUGEN LTD.

We have audited the accompanying consolidated balance sheets of Compugen Ltd. (the "Company") and subsidiaries as of December 31, 2010 and 2009, 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, 2010. 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, 2010 and 2009, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2010, 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, 2010, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 21, 2010 expressed an unqualified opinion thereon.

Tel-Aviv, Israel
March 21, 2011

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/il

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

To the Shareholders and Board of Directors of

COMPUGEN LTD.

We have audited Compugen Ltd.'s (the "Company") internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying management's report on internal control over financial reporting. 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
www.ey.com/il

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 maintained in all material respects, effective internal control over financial reporting as of December 31, 2010, 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, 2010 and 2009, 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, 2010 and our report dated March 21, 2010 expressed an unqualified opinion thereon.

Tel-Aviv, Israel
March 21, 2011

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

CONSOLIDATED BALANCE SHEETS

U.S. dollars in thousands

	Note	December 31,	
		2010	2009
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents	4	\$ 7,300	\$ 15,139
Short-term bank deposits		14,524	500
Restricted cash	10c	684	161
Trade receivables		21	-
Other accounts receivable and prepaid expenses	6	548	720
Receivables on account of shares and from funding arrangement	7,11	5,000	7,790
Total current assets		28,077	24,310
LONG-TERM INVESTMENTS:			
Investment in Evogene	1b, 5	6,227	3,898
Long-term prepaid expenses		64	18
Severance pay fund		1,510	1,224
Total long-term investments		7,801	5,140
PROPERTY AND EQUIPMENT, NET	8	580	735
Total assets		\$ 36,458	\$ 30,185

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

CONSOLIDATED BALANCE SHEETS

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

	Note	December 31, 2010	2009
LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES:			
Trade payables		\$ 507	\$ 199
Other accounts payable and accrued expenses	9	1,934	1,158
Deferred revenue		-	113
Total current liabilities		2,441	1,470
LONG-TERM LIABILITIES:			
Research and development funding arrangement	11	4,037	-
Accrued severance pay		1,695	1,317
Total long-term liabilities		5,732	1,317
COMMITMENTS AND CONTINGENT LIABILITIES	3, 10		
SHAREHOLDERS' EQUITY:	12		
Share capital:			
Ordinary shares of NIS 0.01 par value: 100,000,000 and 50,000,000 shares authorized at December 31, 2010 and 2009, respectively; and 33,915,545 and 32,867,912 shares issued and outstanding at December 31, 2010 and 2009, respectively		92	88
Additional paid-in capital		190,275	184,523
Accumulated other comprehensive income		6,405	4,071
Accumulated deficit		(168,487)	(161,284)
Total shareholders' equity		28,285	27,398
Total liabilities and shareholders' equity		\$ 36,458	\$ 30,185

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

CONSOLIDATED STATEMENTS OF OPERATIONS

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

	Note	Year ended December 31,		
		2010	2009	2008
Revenues	13	\$ 1,115	\$ 250	\$ 338
Cost of revenues		224	-	7
Gross profit		891	250	331
Research and development expenses, net of Government and other grants amounting to \$ 1,010, \$ 944 and \$ 544 for the years ended December 31, 2010, 2009 and 2008, respectively	3	5,227	5,051	8,745
Marketing and business development expenses		633	681	996
General and administrative expenses		2,909	2,147	3,502
Total operating expenses		8,769	7,879	13,243
Operating loss		(7,878)	(7,629)	(12,912)
Financial income, net	14	241	65	348
Other income, net	1b	434	3,721	53
Loss from continuing operations		(7,203)	(3,843)	(12,511)
Gain (loss) from discontinued operations		-	12	(16)
Net loss		\$ (7,203)	\$ (3,831)	\$ (12,527)
Basic and diluted net loss per share from continuing operations		\$ (0.22)	\$ (0.13)	\$ (0.44)
Basic and diluted net loss per share from discontinued operations		\$ -	\$ -	\$ -
Basic and diluted net loss per share		\$ (0.22)	\$ (0.13)	\$ (0.44)
Weighted average number of ordinary shares used in computing basic and diluted net loss per share		33,284,017	28,608,317	28,434,946

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

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, 2008	28,323,811	\$ 77	\$ 161,158	\$ 976	\$ (144,926)	\$ 17,285	
Employee options exercised	173,629	*) -	295	-	-	295	
Issuance of shares to the CEO	15,000	*) -	25	-	-	25	
Stock-based compensation relating to options and warrants issued to scientific advisory board members and consultants	-	-	(100)	-	-	(100)	
Stock-based compensation relating to options issued to employees	-	-	1,803	-	-	1,803	
Unrealized gain on the investment in Evogene	-	-	-	3,222	-	3,222	\$ 3,222
Net loss	-	-	-	-	(12,527)	(12,527)	(12,527)
Total comprehensive loss							<u>\$ (9,305)</u>
Balance as of December 31, 2008	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							<u>\$ (3,958)</u>
Balance as of December 31, 2009	32,867,912	88	184,523	4,071	(161,284)	27,398	

*) Represents an amount lower than \$ 1.

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

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, 2009	32,867,912	88	184,523	4,071	(161,284)	27,398	
Employee options exercised	1,047,633	4	2,416	-	-	2,420	
Issuance of warrants in connection with research and development funding arrangement, net	-	-	999	-	-	999	
Stock-based compensation relating to options and warrants issued to 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							<u>\$ (4,869)</u>
Balance as of December 31, 2010	<u>33,915,545</u>	<u>\$ 92</u>	<u>\$ 190,275</u>	<u>\$ 6,405</u>	<u>\$ (168,487)</u>	<u>\$ 28,285</u>	

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

	Year ended December 31,		
	2010	2009	2008
Cash flows from operating activities:			
Net loss	\$ (7,203)	\$ (3,831)	\$ (12,527)
Adjustments required to reconcile net loss to net cash used in operating activities:			
Loss (gain) from discontinued operations	-	(12)	16
Non-cash stock-based compensation	2,337	1,529	1,728
Depreciation	201	264	477
Severance pay, net	92	(117)	106
Gain from sale of investment in Evogene, net	(419)	(3,721)	-
Changes in fair value of the embedded derivatives in the research and development funding arrangement	97	-	-
Decrease (increase) in trade receivables	(21)	-	40
Decrease in other accounts receivable and prepaid expenses	213	58	182
Increase (decrease) in trade payables and other accounts payable and accrued expenses	562	(1,534)	(101)
Increase (decrease) in deferred revenue	(113)	13	(50)
Other loss (gain)	(25)	(102)	19
Net cash used in operating activities from continuing operations	(4,279)	(7,453)	(10,110)
Net cash provided by operating activities from discontinued operations	-	-	98
Net cash used in operating activities	(4,279)	(7,453)	(10,012)
Cash flows from investing activities:			
Proceeds from redemption of deposits and maturities of marketable securities, net	500	2,612	13,235
Investment in bank deposits	(14,524)	(500)	-
Changes in restricted cash	(1)	(96)	-
Purchase of property and equipment	(46)	(48)	(120)
Decrease (increase) in long-term prepaid expenses	(46)	23	(8)
Proceeds from sale of investment in Evogene	424	3,557	-
Proceeds from sale of property and equipment	25	185	14
Net cash provided by (used in) investing activities	(13,668)	5,733	13,121

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

	Year ended December 31,		
	2010	2009	2008
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 exercise of options	2,379	196	295
Net cash provided by financing activities	10,108	12,209	295
Increase (decrease) in cash and cash equivalents	(7,839)	10,489	3,404
Decrease in cash and cash equivalents from discontinued operations	-	-	(52)
Cash and cash equivalents at the beginning of the year	15,139	4,650	1,298
Cash and cash equivalents at the end of the year	<u>\$ 7,300</u>	<u>\$ 15,139</u>	<u>\$ 4,650</u>
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	<u>41</u>	<u>-</u>	<u>-</u>

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 1:- GENERAL

- a. Compugen is a drug and diagnostic discovery company that relies on unique computer-based discovery platforms to systematically predict and select novel product candidates in areas of high industry interest and unmet medical need. Following this computer based prediction and selection, the resulting *in silico* novel molecules are synthesized and then validated utilizing traditional *in vitro* and *in vivo* experimental procedures. Compugen's business model is to provide an increasing number of these validated product candidates to pharmaceutical, biotech and diagnostic companies under licensing and other commercialization arrangements whereby the Company is entitled to receive advance fees or research revenues, milestone payments and revenue-sharing amounts from the development and commercialization by such companies of products based on its candidate molecules.

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

- b. Investment in Evogene:

In 1999, the Company established a division focusing on agricultural biotechnology and plant genomics called Evogene Ltd. ("Evogene"). Evogene is an Israeli corporation primarily engaged in delivering improved plant traits to the agro-bio industry through the use of a platform combining computational genomics, molecular biology and breeding methods. Following an equity investment round with certain investors in February 2006, in which the Company's holdings were diluted to less than 20% of Evogene's Ordinary shares and through June 2007, the investment in Evogene was accounted for under the cost method of accounting, in accordance with Accounting Codification Statement ("ASC") 323-10. During June 2007, Evogene completed an initial public offering ("IPO") on the Tel-Aviv Stock Exchange. As of December 31, 2010, the Company holds 1,083,397 shares representing 3.6% of Evogene outstanding Ordinary shares.

As of December 31, 2010, the investment in Evogene was accounted for as available-for-sale marketable security in accordance with ASC 320-10, available-for-sale securities are carried at fair value, with the realized and unrealized gains and losses reported as a separate component of shareholders' equity under accumulated other comprehensive income.

- c. 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. The US subsidiary had no significant operations.
- d. 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 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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 1:- GENERAL (Cont.)

- e. On December 29, 2010, the Company entered into a research and development funding arrangement with an investor. Under the funding arrangement the Company received \$ 5,000 in support of its Pipeline Program (see Notes 7 and 11).

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 primary currency of the 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 2010 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

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 consortium funds under European grant plan (see Note 10c).

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, 2010 and 2009 bear an annual average interest rate of 0.97% and 0.3%, respectively.

Bank deposits in NIS for the years ended December 31, 2010 and 2009 bear an annual average interest rate of 1.35% and none, respectively.

g. Marketable securities:

The Company accounts for its investments in marketable securities using ASC 320, "Investments - Debt and Equity Securities."

The Investment in Evogene was classified as available-for-sale and it is carried at fair value, with unrealized gains reported as a separate component of shareholders' equity under accumulated other comprehensive income (see also Note 5.)

According to ASC 320-10-35, "Investments - Debt and Equity Securities", management is required to evaluate each period whether a security's decline in value is other than temporary. Realized gains and declines in value judged to be other than temporary are determined based on the specific identification method and are reported to the statement of operations.

h. Long-term prepaid expenses:

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

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 2010, 2009 and 2008, no impairment losses have been identified.

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. In previous years the Company also generated revenues from license of software products.

The Company views its collaboration research agreements as service arrangements and follows the revenue recognition criteria in SAB 104. 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. As of the balance sheet date, no milestones payments and royalties have been received. During 2010, the Company recognized revenues from product candidate collaboration agreements, under which the Company performs research services. The Company views its product candidate collaboration agreements under which it performs research services as arrangements subject to the revenue recognition criteria in SAB 104. Revenue is being recognized when the Company completes its performance obligation.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Revenues from software licenses to Evogene during the year ended December 31, 2008 were recognized in accordance with ASC 985-605, "Software Revenue Recognition" ("ASC 985-605"), as amended, when persuasive evidence of an agreement exists, delivery of the product or service has occurred, no significant obligations with regard to implementation remain, the fee is fixed or determinable, and collectability is probable. ASC 985-605 generally requires revenues earned on software arrangements involving multiple elements to be allocated to each element based on the relative fair value of the elements. ASC 985-605 requires that revenues be recognized under the "Residual Method" when vendor specific objective evidence (VSOE) of fair value exists for all undelivered elements and no VSOE exists for the delivered elements and all revenue recognition criteria of ASC 985-605, as amended, are satisfied.

Deferred revenues include amounts received from customers for which revenue has not been recognized.

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 & Labor ("OCS"), 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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, 1963, pursuant to which the severance pay liability is fully covered by the deposits with the severance pay funds. Regarding employees that have signed section 14, related obligation and amounts deposited on behalf of such obligation are not stated on the balance sheet as the Company is legally released from obligation to such employees once the deposited amounts have been paid.

Severance expenses for the years ended December 31, 2010, 2009 and 2008 amounted to approximately \$ 231, \$ 250 and \$ 397, 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.

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

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 5,863,457, 5,670,997 and 7,159,114 for the years ended December 31, 2010, 2009 and 2008, respectively. The total number of shares related to warrants excluded from the calculations of diluted net loss per share was 500,000 for the year ended December 31, 2010 and none for the years ended December 31, 2009 and 2008.

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 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.

The fair value of marketable securities and the investment in Evogene are classified under Level 1 (as follows), based on quoted market prices (see Note 5).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

The Company adopted the provision of ASC 820, "Fair Value Measurements and Disclosures" ("ASC 820") on January 1, 2008. 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, the Company considers 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 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 changes in Level 3 liabilities measured at fair value on a recurring basis:

	Fair value of embedded derivatives
Balance at December 31, 2009	\$ -
Fair value of embedded derivatives within research and development arrangement (see Note 11)	3,940
Change in fair value of embedded derivatives within research and development arrangement	97
Balance at December 31, 2010	\$ 4,037

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

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 years ended December 31, 2010, 2009 and 2008, the Company recorded net losses from derivatives transactions in the amount of \$ 15, \$ 41 and \$ 69, respectively (not including change in fair value of embedded derivatives in 2010 mentioned in Note 2r).

t. Recently issued accounting pronouncements:

In September 2009, the FASB amended the ASC as summarized in Accounting Standard Update ("ASU") 2009-14, Software (Topic 985): Certain Revenue Arrangements That Include Software Elements, and ASU 2009-13, Revenue Recognition (Topic 605): Multiple-Deliverable Revenue Arrangements. As summarized in ASU 2009-14, ASC Topic 985 has been amended to remove from the scope of industry specific revenue accounting guidance for software and software related transactions, tangible products containing software components and non-software components that function together to deliver the product's essential functionality. As summarized in ASU 2009-13, ASC Topic 605 has been amended (1) to provide updated guidance on whether multiple deliverables exist, how the deliverables in an arrangement should be separated, and the consideration allocated; (2) to require an entity to allocate revenue in an arrangement using estimated selling prices of deliverables if a vendor does not have vendor-specific objective evidence ("VSOE") or third-party evidence of selling price; and (3) to eliminate the use of the residual method and require an entity to allocate revenue using the relative selling price method. The accounting changes summarized in ASU 2009-14 and ASU 2009-13 are both effective for fiscal years beginning on or after June 15, 2010, with early adoption permitted. Adoption may either be on a prospective basis or by retrospective application. The Company believes the adoption of this guidance will not have a material impact on its financial condition, results of operations or cash flows.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

In February 2010, the FASB issued Accounting Standards Update (ASU) No. 2010-09, which amends the Subsequent Events Topic of the Accounting Standards Codification (ASC) to eliminate the requirement for public companies to disclose the date through which subsequent events have been evaluated. The Company will continue to evaluate subsequent events through the date of the issuance of the financial statements, however, consistent with the guidance, this date will no longer be disclosed. The Company does not believe that the adoption of this guidance will have a material impact on the financial position, results of operations or cash flows of the Company.

In January 2010, the FASB issued ASU 2010-06, "Fair Value Measurements and Disclosures (ASC 820): Improving Disclosures about Fair Value Measurements." This update will require (1) an entity to disclose separately the amounts of significant transfers in and out of Levels 1 and 2 fair value measurements and to describe the reasons for the transfers; and (2) information about purchases, sales, issuances and settlements to be presented separately (i.e. present the activity on a gross basis rather than net) in the reconciliation for fair value measurements using significant unobservable inputs (Level 3 inputs). This guidance clarifies existing disclosure requirements for the level of disaggregation used for classes of assets and liabilities measured at fair value and require disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements using Level 2 and Level 3 inputs. The new disclosures and clarifications of existing disclosure are effective for fiscal years beginning after December 15, 2009, except for the disclosure requirements related to the purchases, sales, issuances and settlements in the roll forward activity of Level 3 fair value measurements. Those disclosure requirements are effective for fiscal years ending after December 31, 2010. The Company does not believe that the adoption of this guidance have or will have a material impact on the financial position, results of operations or cash flows of the Company.

NOTES TO 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 and the research program is successful, 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, 2010, 2009 and 2008, the Company has an aggregate of paid and accrued royalties to the OCS recorded in the consolidated statement of operations in the amount of \$ 39, \$ 10 and \$ 2, respectively. As of December 31, 2010, 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 \$ 7,166.

NOTE 4:- CASH AND CASH EQUIVALENTS

	December 31,	
	2010	2009
Bank deposits in U.S. dollars (bearing an annual average interest rate of 0.75% and 0.4% for 2010 and 2009, respectively)	\$ 2,300	\$ 10,900
Bank deposits in NIS (bearing an annual average interest rate of 1.7% and 0.45% for 2010 and 2009, respectively)	3,832	2,683
Cash in banks	1,168	1,556
	<u>\$ 7,300</u>	<u>\$ 15,139</u>

NOTE 5:- INVESTMENT IN EVOGENE

As discussed in Notes 1b and 2g, the Company presents its investment in Evogene's shares as of December 31, 2010 and 2009, as available-for-sale.

The total amount of unrealized gain of \$ 6,405, \$ 4,071 and \$ 4,198 was included as a separate component of shareholders' equity under accumulated other comprehensive income for the years ended December 31, 2010, 2009 and 2008, respectively (see Note 1b).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 6:- OTHER ACCOUNTS RECEIVABLE AND PREPAID EXPENSES

	December 31,	
	2010	2009
Grants receivable from the Office of the Chief Scientist and others	\$ 178	\$ 407
Government authorities	20	54
Prepaid expenses	185	212
Accrued interest	85	-
Other	80	47
	<u>\$ 548</u>	<u>\$ 720</u>

NOTE 7:- RECEIVABLES ON ACCOUNT OF SHARES AND FROM FUNDING ARRANGEMENT

- a. As of December 31, 2009 approximately \$ 7,236 and \$ 554 from the total proceeds of the Company's issuance of Ordinary shares (as described in Note 1d) and exercised options, respectively, has not yet been received by the Company. The proceeds were received on January 4, 2010 and, meanwhile, the Company recorded these amounts as receivables on account of shares in current assets according to ASC 505-10-45 "Equity".
- b. As of December 31, 2010, the total proceeds of \$ 5,000 from the Company's research and development funding arrangement (see also Notes 1e and 11) has not yet been received by the Company. These proceeds were received on January 17, 2011.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 8:- PROPERTY AND EQUIPMENT, NET

	December 31,	
	2010	2009
Cost:		
Computers, software and related equipment	\$ 4,874	\$ 4,694
Laboratory equipment and office furniture	3,167	3,412
Leasehold improvements	509	506
	<u>8,550</u>	<u>8,612</u>
Accumulated depreciation:		
Computers, software and related equipment	4,818	4,635
Laboratory equipment and office furniture	2,709	2,824
Leasehold improvements	443	418
	<u>7,970</u>	<u>7,877</u>
Depreciated cost	<u>\$ 580</u>	<u>\$ 735</u>

For the years ended December 31, 2010, 2009 and 2008, depreciation expenses were approximately \$ 201, \$ 264 and \$ 477, respectively.

NOTE 9:- OTHER ACCOUNTS PAYABLE AND ACCRUED EXPENSES

	December 31,	
	2010	2009
Employees and related accruals	\$ 793	\$ 515
Pre-payment from the European Commission (1)	587	65
Consultants and Board members	262	42
Accrued expenses	184	426
Other	108	110
	<u>\$ 1,934</u>	<u>\$ 1,158</u>

(1) See Note 10c.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 10:- 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:

<u>December 31,</u>	
2011	\$ 511
2012	466
2013	26
	<u>\$ 1,003</u>

Operating lease expenses for the Company were approximately \$ 397, \$ 552 and \$ 906 in the years ended December 31, 2010, 2009 and 2008, respectively.

- b. The Company provided bank guarantees in the amount of \$ 92 in favor of its offices' lessor in Israel.
- c. The Company was coordinating a consortium, SIMAP, in a three-year collaborative project, which commenced on January 1, 2006, funded by the European 6th framework. The grants the Company received from this project did not bear any repayment royalties. The Company will have nonexclusive rights to the generic knowledge accumulated in the collaborative project. As a coordinator of this project, the Company received the consortium funds from the European Commission and distributes those funds to the consortium members based on an agreement between the consortium members. As of December 31, 2010, the Company held a pre-payment from the European Commission amounting to \$ 587 that has been distributed during early 2011, according to the payment schedule detailed in the consortium agreement. The Company presented this amount as part of the restricted cash.

NOTE 11:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENT

On December 29, 2010 (the "Issuance date") the Company signed a funding arrangement with an investor in partial support of its research and development activities with respect to novel therapeutic product candidates. According to the arrangement the Company received \$ 5,000 in consideration of:

- (1) warrants to purchase 500,000 Ordinary shares at a fixed exercise price of \$ 6 per share until June 30, 2013 ("Detachable Warrants") and,
- (2) an entitlement to receive a portion of future cash received by Compugen related to possible commercialization and post-marketing fees that are related to certain designated product candidates ("Participation Rights"). In addition, the investor has an option to exchange its Participation Rights for a fixed amount of 833,334 Ordinary shares at any time through June 30, 2013 (the "Conversion Alternative").

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 11:- RESEARCH AND DEVELOPMENT FUNDING ARRANGEMENT (Cont.)

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 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 will enter into new similar arrangement whereby it obtains \$ 15,000 or more, the Company will have the right to exchange the investor's Participation Rights for investment in the new arrangement on a pro-rata basis, provided that at such time, the investor may elect instead to receive its original investment amount of \$ 5,000 in lieu of such investment in the new arrangement ("New Arrangement Rights"). The Company may extend the New Arrangement Rights period until December 31, 2011 by issuing to the investor a fixed amount of additional warrants to purchase 83,333 Ordinary shares for each month of extension.

In accordance with ASC 730-20, "Research and Development Arrangements" and ASC 815, "Derivative and Hedging" the Company considered the Participation Rights as well as the New Arrangement Rights of the instrument issued to be a research and development arrangement ("Research and Development Component") coupled with embedded derivatives (that are the Conversion Alternative and the New Arrangement Rights) as those instruments do not have fixed settlement provisions. Consequently, the Company determined that the embedded derivatives in the Research and Development Component should be accounted for as a liability to be measured at fair value at inception. The embedded derivatives will be re-measured to fair value at each reporting period until their exercise or expiration with the change in such calculated value reported in the statement of operations (as part of financial income or expenses). As a result, the fair value of those embedded derivatives would be bifurcated out of the amount to be allocated to the Research and Development Component.

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

As per the above, 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, 2010, the Company re-measured the embedded derivatives in the Research and Development Component and recorded \$ 97 as financial expenses mainly as a result of a change in the Company's share price.

The Company selected the Monte Carlo option-pricing 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:

	Issuance date	December 31, 2010
Risk-free interest rate (1)	0.85%	0.82%
Expected volatility (2)	92.95%	92.87%
Expected life (in years) (3)	2.5	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 derivative.
- (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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 12:- 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 and to receive dividends, if declared.

b. Share option plans:

In March 2000, the Company adopted the Compugen Ltd. Share Option Plan (2000) (the "2000 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 Plan automatically increases 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 terminate the 2000 Plan.

In July 2010, the Company adopted the Compugen Ltd. 2010 Share Incentive Plan (the "Plan"), which replaced the Compugen Share Option Plan (2000) adopted in March 2000. The Plan provided for the grant of options to purchase 1,953,851 Ordinary shares to employees and consultants of the Company and its subsidiaries. Any available pool under the old plans, including any additional options that may return to the pool in connection with the termination of options granted under old option plans but not exercised prior to their termination, will be made available for future grants under the Plan.

In general, options granted under these plans vest over a four-year period and expire 10 years from the date of issuance and are granted at an exercise price of approximately fair market value. 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 issuance. Any options that are cancelled or forfeited before expiration become available for future grants. Subject to the plan, there were 1,836,351 options to purchase shares available for future grants as of December 31, 2010.

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 12:- 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, 2010, were as follows:

	Number of options	Weighted average exercise price \$	Weighted average remaining contractual life Years	Intrinsic value \$
Options outstanding at beginning of year	5,670,997	2.21		-
Options granted	1,631,500	4.36		1,029,745
Options exercised	(1,047,633)	2.31		2,315,578
Options expired	(175,676)	1.66		619,017
Options forfeited	(215,731)	3.63		286,380
Options outstanding at end of year	5,863,457	2.75	6.38	12,798,395
Options vested and expected to vest at end of year (*)	5,716,233	2.75	6.32	12,522,025
Exercisable at end of year	3,428,461	2.70	4.88	7,706,666

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

Weighted average fair value of options granted during the years 2010, 2009 and 2008 was \$ 2.51, \$ 1.97 and \$ 0.44, respectively.

As of December 31, 2010, the total unrecognized estimated compensation cost related to non-vested stock options granted prior to that date was \$ 3,511, which is expected to be recognized over a weighted average period of approximately 2.76 years.

The Company estimates the fair value of stock options granted using the Black-Scholes option-pricing model except for options granted to the present Chairman of the Board (refer to d and e below).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 12:- SHAREHOLDERS' EQUITY (Cont.)

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

	Year ended December 31,		
	2010	2009	2008
Volatility	79%	88%	66%
Risk-free interest rate	2.31%	2.15%	2.11%
Dividend yield	0%	0%	0%
Expected life (years)	5.0	5.3	5.1

The stock-based compensation expenses are based on the straight-line method and included in the following expense categories:

	Year ended December 31,		
	2010	2009	2008
Research and development expenses	\$ 883	\$ 790	\$ 819
Selling and marketing expenses	91	83	178
General and administrative expenses	1,124	656	706
	<u>\$ 2,098</u>	<u>\$ 1,529</u>	<u>\$ 1,703</u>

c. Options to consultants:

	Year ended December 31, 2010		
	Number of options	Weighted average exercise price	Weighted average remaining contractual life
		\$	Years
Options outstanding at beginning of year	349,965	3.77	
Options granted	106,000	5.63	
Options exercised	(122,000)	4.04	
Options expired	(23,965)	6.84	
Options outstanding at end of year	<u>310,000</u>	<u>4.06</u>	<u>4.49</u>
Options vested and expected to vest at end of year	<u>310,000</u>	<u>4.06</u>	<u>4.49</u>
Exercisable at end of year	<u>258,560</u>	<u>4.31</u>	<u>4.41</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 12:- 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 2010, 2009 and 2008: risk-free interest rates of 2.25%, 2.54% and 2.77%, respectively, dividend yields of 0%, volatility factors of the expected market price of the Company's Ordinary shares of 81%, 93% and 65%, respectively and a weighted-average contractual life of the options of six years. As for compensation expenses, see also b above.

- d. On July 30, 2003, the Company granted its then and current Chairman of the Board options to purchase 250,000 Ordinary shares at an exercise price of \$ 2.38 which was also the Company's market share price at the date of grant and on July 31, 2007, the Company issued 500,000 Compugen Ordinary shares at an exercise price \$ 2.91, which was also the Company's market share price at the date of grant. During 2009, the Company cancelled the 750,000 options described above, and instead granted a replacement award of 500,000 options, exercisable into Ordinary shares at \$ 0.50 per share. The options shall vest on a monthly basis over a period of 4 years commencing January 1, 2009.

This was considered as modification to previous grants described above and as such the fair value of this modification was estimated using a Monte Carlo model with the following assumptions: risk-free interest rates range between 2.33%-2.65%, dividend yields of 0%, expected volatility in range between 77%-79% and an expected term of the options of 5.34 years.

The total incremental compensation cost related to this modification is \$ 355. As of December 31, 2010, out of the above incremental cost the Company recognized an aggregate amount of \$ 175 for compensation related to the above options, using the straight-line amortization method.

- e. On October 29, 2009, the Company granted to its then Chairman of the Board (and currently a director) options to purchase 200,000 Compugen Ordinary shares at an exercise price of \$ 0.50 per share. The options shall vest on a monthly basis over a period of 4 years commencing January 1, 2009.

The pricing model for the award was estimated using a Monte Carlo model with the following assumptions: risk-free interest rates range between 2.33%-2.65%, dividend yields of 0%, expected volatility in range between 77%-79% and an expected term of the options of 5.34 years.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 12:- SHAREHOLDERS' EQUITY (Cont.)

On February 28, 2010 the former Chairman of the Board provided the Board with a letter under which he voluntarily 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, 2010, the Company fully recognized those compensation costs.

- f. On July 31, 2007, the Company granted to its then CEO (and currently a director) 9,262 Ordinary shares and, accordingly, recorded the amount of \$ 28, which represents the shares' fair value as a compensation cost in the financial statements.

On September 24, 2008, the Company granted to its then CEO (and currently a director) 15,000 Ordinary shares and, accordingly, recorded the amount of \$ 25, which represents the shares' fair value as a compensation cost in the financial statements.

On September 24, 2008, the Company granted to its then CEO (and currently a director) 150,000 options exercisable for Ordinary shares at \$ 1.82 per share. The options shall vest on a monthly basis over a period of 4 years commencing October 22, 2007.

On October 29, 2009, pursuant to the former CEO (and currently a director) termination agreement terms, the shareholders approved the extension of the exercise period of the vested options as of June 30, 2009, till December 31, 2010. 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 \$ 55. As of December 31, 2010, the Company fully recognized those compensation costs.

On October 21, 2010, the Board resolved to recommend before the shareholders to extend the above options for additional period, the earlier of (i) 180 days after the former CEO terminates his service as Board member for any reason (ii) the date when the options expire had he remained CEO (i.e. after April 19, 2015). Since the above extension is subject to shareholder approval, the change in terms was not accounted for during 2010.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 13:- GEOGRAPHIC INFORMATION AND MAJOR CUSTOMERS

The Company's business is currently comprised of one operating segment, the research, development and commercialization of therapeutic and diagnostic biomarker product candidates. The nature of the products and services provided by the Company and the type of customers for these products and services are similar. Operations in Israel and the United States include research and development, sales and business development. The Company follows ASC 280, "Segment Reporting." Total revenues are attributed to geographic areas based on the location of the end customer. The following represents the total revenues for the years ended December 31, 2010, 2009 and 2008 and long-lived assets as of December 31, 2010 and 2009:

	Year ended December 31,		
	2010	2009	2008
Revenues from sales to unaffiliated customers:			
United States	\$ 750	\$ 25	\$ 40
Europe	365	225	-
Israel	-	-	298
Total revenues	\$ 1,115	\$ 250	\$ 338

	December 31,	
	2010	2009
Long-lived assets:		
Israel	\$ 580	\$ 735

	Year ended December 31,		
	2010	2009	2008
Sales to a single customer exceeding 10%:		%	
Customer A	67	-	-
Customer B	13	-	-
Customer C	11	-	12
Customer D	-	90	-
Customer E	-	-	79

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 14:- FINANCIAL INCOME, NET

	Year ended December 31,		
	2010	2009	2008
Income (expense):			
Interest income	\$ 266	\$ 34	\$ 502
Bank fees	(15)	(42)	(26)
Change in fair value of funding arrangement	(97)	-	-
Issuance expenses	(228)	-	-
Derivatives transactions loss	(15)	(41)	(69)
Exchange rate differences	330	114	(59)
	<u>\$ 241</u>	<u>\$ 65</u>	<u>\$ 348</u>

NOTE 15:- 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 15:- 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 their enterprises, as implied by this Law. The principal benefits by virtue of the Law are:

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

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

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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 15:- INCOME TAXES (Cont.)

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

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.

d. Net operating losses carryforward:

As of December 31, 2010, 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 15:- INCOME TAXES (Cont.)

Compugen USA Inc. ("Inc.") is subject to U.S. income taxes. As of December 31, 2010, Inc. has net operating loss carryforwards for federal income tax purposes of approximately \$ 15 million which expires in the years 2018 to 2030. Inc. also has net operating loss carryforwards for state income tax purposes of approximately \$ 0.7 million which expires in the years 2013 to 2030. 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,		
	2010	2009	2008
Domestic (Israel)	\$ 7,203	\$ 3,760	\$ 12,567
Foreign	-	71	(40)
	<u>\$ 7,203</u>	<u>\$ 3,831</u>	<u>\$ 12,527</u>

- 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,	
	2010	2009
Accrued social benefits	\$ 80	\$ 55
Research and development credit	1,370	1,931
Capital funding raise credit	89	152
Operating loss carryforward	30,909	28,102
Net deferred tax asset before valuation allowance	32,448	30,240
Valuation allowance	(32,448)	(30,240)
Net deferred tax asset	<u>\$ -</u>	<u>\$ -</u>

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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 15:- INCOME TAXES (Cont.)

- 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.

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

Taxable income of Israeli companies is subject to tax at the rate of 27% in 2008, 26% in 2009, 25% in 2010, 24% in 2011, 23% in 2012, 22% in 2013, 21% in 2014, 20% in 2015 and 18% in 2016 and thereafter.

- i. The Company adopted the provisions of ASC 740 for uncertain tax positions on January 1, 2007.

The beginning and ending amount of unrecognized tax benefits at January 1, 2010 and December 31, 2010 is \$ 58.

FUNDING AGREEMENT

This Funding Agreement and its Exhibits (this “**Agreement**”) is entered into effective as of December 29, 2010 (the “**Effective Date**”), by and among COMPUGEN LTD., an Israeli company with offices at 72 Pinchas Rosen Street, Tel Aviv, 69512, ISRAEL (“**Compugen**” or the “**Company**”), and BAIZE INVESTMENTS (ISRAEL) LTD., a private company organized under the laws of Israel No. 51-430159-1, c/o Arad & Co., 1 Kermenizki St., Tel-Aviv Israel 67899 (“**Investor**”). Compugen and Investor are each a “Party” to this Agreement and, collectively, are the “Parties” to this Agreement.

RECITALS

WHEREAS, Investor has accepted Compugen's offer to participate in the financing of Compugen's Pipeline Program which has the goal of providing novel therapeutic product candidates for unmet medical needs and in that regard has agreed to provide Compugen with an amount of five million U.S. dollars (\$5,000,000) (the “**Funding Amount**”) for the consideration, and under the terms, set forth in this Agreement; and

WHEREAS, included in the Compugen discovered molecules selected for inclusion in the Pipeline Program are the molecules set forth in Exhibit A hereof (the “**Designated Product Candidates**”);

NOW, THEREFORE, for valuable consideration, the adequacy and receipt of which are hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS.

For all purposes of this Agreement, the following terms shall have the following respective meaning:

- 1.1. “**Annual Report**” shall mean an annual report containing a summary report for each Designated Product Candidate, providing general information with respect to what research was conducted by Compugen since the Effective Date or the prior Annual Report (as applicable), and what is planned to be undertaken during the remainder of the current calendar year. The Annual Report shall also contain general information as to any commercialization efforts taken (and planned to be taken) and agreements reached (and planned to be reached) in respect of the Designated Product Candidate during the period covered by such report. The Annual Report shall be duly signed by either the CEO, CFO or COO of Compugen and shall be subject to the confidentiality provisions hereof.
 - 1.2. “**Business Day**” shall mean any day on which banks in Israel and Canada are open and execute foreign exchange transactions.
-

- 1.3. **"Cash Consideration"** shall mean the Development Fees and the Post-Marketing Fees.
- 1.4. **"Compugen Warrant"** shall mean a warrant setting forth the right of the Investor to purchase Ordinary Shares for an exercise price of six U.S. dollars (\$6) per Ordinary Share, to be exercised no later than June 30, 2013, in the form attached hereto as Exhibit B.
- 1.5. **"Development Cash"** shall mean (i) all cash (and cash equivalent) consideration received by Compugen from third parties on or prior to December 31, 2020 with respect to fees, research revenues, milestone payments and any similar payments related to a Designated Product Candidate prior to the commencement of marketing of such Designated Product Candidate on a country by country basis worldwide, minus (ii) Pass-Through Amounts.
- 1.6. **"Development Fees"** shall mean fees payable by Compugen to the Investor in respect of Development Cash, which shall equal ten percent (10%) of Development Cash, until Investor has received a total cumulative amount of fifteen million U.S. dollars (\$15,000,000) from such Development Fees, and five percent (5%) thereafter until and including December 31, 2020.
- 1.7. **"FDA"** shall mean the U.S. Food and Drug Administration, or a similar regulatory agency in either Israel, the UK, Spain, France, Italy, Germany or Japan.
- 1.8. **"New Financing"** shall mean a new financing arrangement of any type whereby (i) Compugen obtains commitments of cash equal to, or greater than, fifteen million U.S. dollars (\$15,000,000) and (ii) such arrangement includes participation rights to the participants in such arrangement in any form, in more than ten (10) Compugen discovered molecules, including at least three (3) of the Designated Product Candidates. For the avoidance of doubt, if requirements (i) and (ii) of this Section 1.8 are not met at the time of closing of such arrangement, then such arrangement shall no longer be considered a New Financing for the purposes of this Agreement.
- 1.9. **"New Financing Term Sheet"** shall mean a term sheet setting forth the principle terms of a New Financing.
- 1.10. **"New Financing Preliminary Notice"** shall mean a written notice from Compugen to Investor with respect to a possible New Financing.
- 1.11. **"New Financing Final Notice"** shall mean a written notice from Compugen to Investor that Compugen anticipates the closing of a New Financing within the following 45 day period.
- 1.12. **"Ordinary Shares"** shall mean Ordinary Shares of the Company, par value New Israeli Shekels 0.01 per share.

- 1.13. **"Pass-Through Amounts"** shall mean out-of-pocket cash payments by Compugen to subcontractors directly related to a Designated Product Candidate, provided that such cash payments are incurred by Compugen **following** the closing of the third party agreement giving rise to the cash consideration received by Compugen on which the related Development Fees or Post-Marketing Fees are based. For the avoidance of doubt, each such Pass-Through Amount shall be subject to only one recovery by Compugen. By way of example only, the same Pass-Through Amount shall not be deductible from both Development Fees and Post-Marketing Fees. Reimbursement of out-of-pocket cash payments by Compugen to subcontractors incurred by Compugen **prior to** the closing of the third party agreement giving rise to the cash consideration on which the related Development Fees or Post-Marketing Fees are based, shall **not** be considered as Pass-Through Amounts for the purposes of this Agreement.
- 1.14. **"Pipeline Program"** shall mean Compugen's program for the prediction, selection, validation and initial development of Compugen discovered molecules for use as therapy to meet unmet medical needs.
- 1.15. **"Post-Marketing Fees"** shall mean, fees payable by Compugen to the Investor, constituting ten percent (10%) of all cash consideration received by Compugen from third parties with respect to the marketing of a Designated Product Candidate on a country by country basis until December 31, 2030, minus Pass-Through Amounts.

2. PAYMENT OF THE FUNDING AMOUNT, CLOSING.

- 2.1. Subject to the terms and conditions of this Agreement, Investor agrees to pay, at the Closing (as defined below), by wire transfer to the Company, or in a manner as shall otherwise be agreed upon by Investor and the Company, the Funding Amount, and in consideration for the receipt of such Funding Amount the Company agrees to provide to Investor the consideration set forth in Section 3 hereof.
- 2.2. The closing of the transactions contemplated hereby (the **"Closing"**) shall take place within no later than five (5) Business Days after the Effective Date, or at such other time agreed to by Compugen and Investor.

3. CONSIDERATION.

- 3.1. Without prejudice to any other obligation of Compugen and any other right of Investor hereunder, in consideration for, and against, the payment of the Funding Amount and subject to the provisions of this Agreement, Investor shall receive from Compugen:
- 3.1.1. The Compugen Warrant to purchase five hundred thousand (500,000) Ordinary Shares and any additional Compugen Warrants which may be provided in accordance with the provisions of Section 3.7 below.

- 3.1.2. An entitlement to receive the Development Fees.
- 3.1.3. An entitlement to receive the Post Marketing Fees.
- 3.1.4. An entitlement to receive the Annual Reports and the payment reports mentioned in Section 3.3 below.
- 3.2. Compugen shall issue to Investor the Annual Reports not later than January 31st of each year. However, the first Annual Report shall be issued by July 31, 2011 and the second Annual Report shall be issued no later than January 31, 2012. Each Annual Report shall set forth the status of the then existing Designated Product Candidates as of prior to December 31st.
- 3.3. All payments of Cash Consideration pursuant to 3.1.2 and 3.1.3 above shall be made quarterly within 120 days following the end of each calendar quarter, provided however that the first payment (if applicable) shall be made on March 31, 2012 with respect to the entire year of 2011. At the time of payment, such payments shall be in total only and not identified by Designated Product Candidate (but shall be paid together with a validity report signed by the CFO of the Company). At Investor's request no later than two years following each such payment, Investor will have an audit right at Compugen's premises, to be performed by a recognized accounting firm (chosen by Investor) during normal business hours and subject to the signature of a customary confidentiality undertaking. The cost of such auditing shall be borne by Investor, unless a deficiency of more than 2% is found, in which event Compugen shall bear all reasonable auditing costs. Within thirty (30) days of such auditing, the Party which either received an excessive amount, or paid an amount lower than required, according to the auditing, shall pay the appropriate amount, provided that if such payment is made by Compugen it shall be paid together with interest at an annual rate of five percent (5%) from the due date and until actual payment hereunder.
- 3.4. At any time prior to June 30, 2011 (the "Exchange Window" subject to extension pursuant to 3.7), in the event Compugen obtains indications of interest of a possible New Financing, Compugen shall issue to Investor a New Financing Preliminary Notice which shall include the New Financing Term Sheet. Within 20 days of receipt of such New Financing Preliminary Notice, Investor shall inform Compugen in writing and in good faith whether, based on such New Financing Term Sheet, Investor intends to Opt-Out as that term is defined in Section 3.6, provided that such intention shall be non-binding.
- 3.5. At any time during the Exchange Window, Compugen shall have the right to issue a New Financing Final Notice, which shall include a draft of the investment agreement for such New Financing. In the event that subsequent to issuing such New Financing Final Notice, the terms and conditions for such New Financing as set forth in such investment agreement are materially changed, unless the Investor agrees otherwise, such New Financing Final Notice shall no longer be applicable and a new New Financing Final Notice will be required. For avoidance of doubt, Compugen shall be bound to send Investor a New Financing Final Notice in accordance with the above provisions prior to the closing of any New Financing.

- 3.6. In the event that Compugen issues a New Financing Final Notice then unless Compugen receives the Opt-Out Notice as defined below (or Investor exercises the Exchange Option as set forth in Section 3.8), the Investor shall be obligated at the time of closing of such New Financing to exchange the Cash Consideration for such rights and other consideration received by investors under the terms and conditions of the New Financing, which shall apply to Investor on a pro-rata basis (as if Investor had invested \$5,000,000 in such New Financing on the same terms as the other investors in such New Financing), *provided, however*, that, at any time during the twelve (12) Business Day period following such New Financing Final Notice (the “**Opt-Out Notice Period**”), Investor may give written notice to Compugen (the “**Opt-Out Notice**”) that it wishes to exchange the Cash Consideration for a cash amount equal to the Funding Amount (rather than to the terms of the New Financing), and in such event Investor shall receive such Funding Amount from the Company no later than five (5) Business Days after the closing of the New Financing. Unless the Investor agrees otherwise, in the event that such closing of the New Financing does not occur within 45 days of such New Financing Final Notice, such New Financing Final Notice and any Opt-Out Notice shall become null and void as if such notices were never given.
- 3.7. Compugen may, at its sole discretion, extend the period during which it shall be entitled to issue the New Financing Final Notice past June 30, 2011 on a month to month basis until December 31, 2011, by: (i) serving written notice to extend for one month before June 30, 2011 and before the end of each following month for which right to issue is extended; and (ii) together with each such notice providing Investor with an additional Compugen Warrant, with each such additional Compugen Warrant covering the right to purchase 83,333 Ordinary Shares. For avoidance of doubt Investor shall maintain the right to issue an Opt-Out Notice also in the event Compugen exercises its rights under this Section 3.7.
- 3.8. Notwithstanding the above, Investor may, at any time before June 30, 2013 (including during the twelve (12) Business Day period following the issuance of the New Financing Final Notice) provide a written notice (the “**Exchange Option Notice**”) of its intention to exchange all of its rights to receive the full Cash Consideration for 833,334 Ordinary Shares without any further consideration required to be paid by the Investor to Compugen in connection therewith (the right to provide the Exchange Option Notice and instead receive such 833,334 Ordinary Shares, the “**Exchange Option**”). In the event that the Investor exercises the Exchange Option and provides the Exchange Option Notice, the Company shall, within twenty (20) Business Days, issue to the Investor the 833,334 Ordinary Shares. It is the intention of the parties hereto that the issuance to the Investor of the Exchange Option pursuant to the provisions hereof shall commence the Investor’s holding period with respect to the 833,334 Ordinary Shares issuable upon the exercise thereof under Rule 144 (“**Rule 144**”), paragraph (d)(3)(ii), under the U.S. Securities Act of 1933, as amended (the “**Securities Act**”), and that upon the lapse of six months following the date of Closing, the Investor shall be permitted to publicly resell such 833,334 Ordinary Shares upon exercise of the Exchange Option in accordance with Rule 144 (assuming that the Investor is not then, nor in the 3 months preceding such time, an “affiliate” of the Company (as defined in Rule 144(a)(1)) and that the Company is then current in its reports under the U.S. Securities Exchange Act of 1934, as amended (the “**Exchange Act**”). To the extent that the Investor is unable to rely upon Rule 144 for the public resale of such 833,334 Ordinary Shares, the Company shall exercise commercially reasonable efforts to promptly file a resale registration statement pursuant to the Securities Act within the following 90 day period to enable the public disposition by the Investor of such 833,334 Ordinary Shares.

- 3.9. Compugen hereby discloses to Investor, and Investor hereby acknowledges such disclosure, that Compugen is currently contemplating a New Financing arrangement to provide financing for, among other purposes, the costs of supporting the Pipeline Program post 2012 and Compugen intends to begin to approach potential investors in early 2011.
- 3.10. For the avoidance of doubt, in the event of either (i) the closing of a New Financing following the issuance by Compugen of a New Financing Notice pursuant to Section 3.6 above, or (ii) receipt by Investor of the Funding Amount as set forth in Section 3.6 above, or (iii) receipt by Investor of the 833,334 Ordinary Shares pursuant to Section 3.8 above,
- 3.10.1. Investor shall not be entitled to receive any additional Cash Consideration based on cash received by Compugen subsequent to the date of such event.
- 3.10.2. Investor shall not be entitled to receive any Further Annual Reports.
- 3.10.3. All Compugen Warrants issued or to be issued to Investor shall remain outstanding in full with no change to their terms or conditions.

- 3.10.4. Other than with respect to the Compugen Warrants and any Compugen obligation related to the period until the occurrence of any of the above events, Compugen shall have no further financial or other obligations to Investor.
- 3.11. The Parties acknowledge that their primary assumption in establishing the amount of 10% as the appropriate percentage for calculating the Cash Consideration for each Designated Product Candidate was that each such Designated Product Candidate would be licensed out to a third party and further developed and commercialized at such third party's sole expense, prior to, at, or shortly after filing an investigational new drug application with the FDA. Therefore, any other provision contained herein notwithstanding, in the event that Compugen actively and significantly participates in the development of a Designated Product Candidate past the date of filing an IND (which includes any manufacturing and/or marketing, none of which are anticipated by Compugen at the date hereof), upon Compugen's request, the Parties shall negotiate, promptly and in good faith, appropriate adjustments or an alternative to the Cash Consideration for such Designated Product Candidate, which shall be adequate and appropriate in the circumstances but in no event shall be reasonably anticipated to have a lesser economic value to the Investor than the Cash Consideration for such Designated Product Candidate ("**Alternative Consideration**") which would have been received by the Investor under the original terms given the primary assumption as stated above. If the Parties should fail, within a negotiating period of sixty (60) days (with either Party having the right, on a thirty (30) day notice, to initiate such negotiating period) to reach an agreement as to such Alternative Consideration, the Parties shall (i) first, immediately and no later than one (1) Business Day following such sixty day period embody in writing to the other Party, their respective last proposals to the other Party ("**Final Proposals**"), and (ii) immediately thereafter submit the issue to a mutually agreed upon industry expert, who shall determine, within sixty (60) days from submission, the Alternative Consideration, and the decision of such independent industry expert shall be final and binding upon the Parties. The independent industry expert may choose only between the two Final Proposals made by the Parties ("baseball arbitration") and may not impose a third, independent decision. In the event that the Parties should approach an industry expert in accordance with the provisions of this Section 3.11, each Party shall incur its own expenses in connection with such proceedings, *provided, however*, that the Parties shall pay in equal shares the fees of such industry expert.
- 3.12. If at any time the Company shall issue to the Investor Ordinary Shares pursuant to this Agreement (whether in connection with an exercise of a Compugen Warrant or otherwise), then and without derogating of any liability imposed on it by prevailing securities laws and regulations, the Company shall promptly and at its cost and expense register such Ordinary Shares for trading on the Tel-Aviv Stock Exchange ("**TASE**"), as long as the Company's Ordinary Shares are traded on the TASE.

4. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company hereby represents and warrants to Investor, as follows:

4.1. Organization of the Company.

The Company is duly organized, validly existing and has the requisite power and authority to own its properties and to carry on its business as currently conducted.

4.2. Authority.

The Company has taken any and all action necessary under all applicable legal requirements and the Company's Articles of Association ("**Articles**") and has all requisite corporate power and authority to enter into and deliver this Agreement and to consummate the transactions contemplated by this Agreement. The execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement have been duly authorized by all necessary corporate action on the part of the Company and no further action is required on the part of the Company to authorize this Agreement and the transactions contemplated hereby and, assuming the due authorization, execution and delivery by Investor, this Agreement constitutes the Company's valid and binding obligations, enforceable against the Company it in accordance with its terms.

4.3. Consents.

Except as otherwise required by applicable securities laws, the execution and delivery by Company of this Agreement and the consummation of the transactions contemplated hereby, will not require Company to obtain or deliver any consent, waiver, approval, order or authorization or permit of, or registration, declaration or filing with, or notification to any governmental entity.

4.4. The Ordinary Shares Issued upon Exercise of Warrants.

The Ordinary Shares, when issued, delivered and paid for with respect to any warrant granted to Investor pursuant to this Agreement, in the manner set forth in the Warrant Form, or when issued under Section 3.6 hereof, will be validly issued, fully paid, nonassessable, free and clear of all liens and duly registered in the name of Investor in the Company's share register. On the Closing, the Company shall have reserved from its duly authorized share capital the maximum number of Ordinary Shares which may be issued under this Agreement. The Ordinary Shares that may be issued hereunder will have the rights, preferences, privileges and restrictions set forth in the Articles. The execution and delivery by the Company of this Agreement and the consummation of the transactions contemplated hereby will not obligate the Company to issue any Ordinary Shares or other securities to any other person or entity and will not result in the adjustment of, or give rise to a right to adjust, the exercise, conversion, exchange or reset price or any other term of any outstanding security. It is the intention of the parties that the issuance to the Investor of the Compugen Warrants shall commence the Investor's holding period with respect to the Ordinary Shares issuable upon the exercise thereof under Rule 144, paragraph (d)(3)(ii), assuming that the Investor elects to exercise such Compugen Warrants pursuant to the "net (or cashless) exercise" procedure, and that upon the lapse of six months following the issuance of each Compugen Warrant, the Investor shall be permitted to publicly resell the Ordinary Shares underlying such Compugen Warrant upon exercise thereof, without volume limitation, in accordance with Rule 144 (assuming that the Investor is not then, nor in the 3 months preceding such time, an "affiliate" of the Company (as defined in Rule 144(a)(1)) and that the Company is then current in its reports under the Exchange Act). To the extent that the Investor is unable to rely upon Rule 144 for the public resale of such underlying Ordinary Shares, the Company shall exercise commercially reasonable efforts to promptly file a resale registration statement pursuant to the Securities Act within a 90 day period to enable the public disposition by the Investor of all such underlying Ordinary Shares.

4.5. No Conflict.

The execution, delivery and performance by the Company of this Agreement and the consummation of the transactions contemplated hereby, will not conflict with or result in any violation of or default under (with or without notice or lapse of time, or both) or give rise to a right of termination, cancellation, modification or acceleration of any obligation or loss of any benefit under (i) any provision of the Company's Articles, (ii) any material law, rule, regulation, order, judgment or decree applicable to the Company or by which any of its material properties is bound or affected, (iii) any material contract, or (iv) any material judgment, order, decree, statute, law, ordinance, rule or regulation applicable to the Company.

4.6. Litigation.

There are no actions, suits, claims, injunctions, decrees, orders, judgments or legal proceedings of any nature pending, or, to the knowledge of the Company, threatened, against the Company, its properties (tangible or intangible) or any of its current or former employees, members of management, officers and directors, in their capacities as such, which may affect the Company's power to enter into this Agreement or to perform its obligations hereunder and to consummate the transactions contemplated hereby.

5. REPRESENTATIONS AND WARRANTIES OF INVESTOR.

Investor hereby represents and warrants to the Company as follows:

5.1. Power and Authority.

Investor has legal and corporate power and authority to enter into this Agreement and to consummate the transactions contemplated hereby. This Agreement has been duly executed and delivered by Investor and, assuming the due authorization, execution and delivery by the Company, constitute its valid and binding obligations, enforceable against Investor in accordance with its terms.

5.2. Consents.

The execution and delivery by Investor of this Agreement and the consummation of the transactions contemplated hereby, will not require Investor to obtain or deliver any consent, waiver, approval, order or authorization or permit of, or registration, declaration or filing with, or notification to any governmental entity.

5.3. Experience; Accredited Investor.

- 5.3.1. Investor is knowledgeable, sophisticated and experienced in making, and is qualified to make, decisions with respect to an investment decision like that involved in the investment in the Company contemplated by this Agreement, without limitation of the Company's representations and warranties included herein, has requested, received, reviewed and considered all information Investor deems relevant in making an informed decision to enter into this Agreement and perform the transactions contemplated hereby, and has had the opportunity to ask questions of and receive answers from the Company concerning such information;
- 5.3.2. Investor is and/or will be acquiring the Ordinary Shares and/or warrants issued hereunder for its own account with no present intention of distributing any of such Ordinary Shares and/or warrants, and it does not have any current arrangement or understanding with any other persons regarding the distribution of such securities (this representation and warranty not limiting Investor's right to sell or distribute in compliance with the Securities Act, and the rules and regulations thereunder); and
- 5.3.3. Investor is an accredited investor within the meaning of Rule 501(a) promulgated under the Securities Act.

5.4. Available Funds.

Investor has sufficient funds in its possession to permit it to provide the Funding Amount to the Company and to perform its obligations under this Agreement.

6. INVENTIONS

Investor agrees that all information, improvements, inventions, formulae, processes, techniques, know-how and data, and all related intellectual property, whether or not patentable or registerable under copyright or any similar laws, made or conceived or reduced to practice or learned in connection with any of the Designated Candidate Products (all such information, *improvements*, inventions, formulae, processes, techniques, know-how, and data, and all related intellectual property, are hereinafter referred to as the “**Invention(s)**”) immediately upon discovery, receipt, creation or invention as applicable, shall be considered Inventions of the Company, shall be the sole property of the Company and its assignees, and the Company and its assignees shall be the sole owner of all patents, copyrights, trade secret and all other rights of any kind or nature, including moral rights, in connection with such Inventions.

7. GENERAL PROVISIONS.

7.1. **Term and Termination.** Unless earlier terminated by the Parties, or expiration in accordance with the terms hereof, the term of this Agreement will commence on the Effective Date and continue until the first to occur of:

7.1.1. Closing of the exchange of Investor rights hereunder with the New Financing terms pursuant to Section 3.6 above;

7.1.2. Receipt by Investor of the Funding Amount pursuant to the sending of an Opt-Out Notice as set forth in Section 3.6 above;

7.1.3. Receipt by Investor of the 833,334 Ordinary Shares pursuant to Section 3.8 above; or

7.1.4. December 31, 2030,

provided that any provision hereof that, according to the terms hereof, is to expire on an earlier date, shall expire on such earlier date and *provided further* that the terms of Company Warrants granted to Investor hereunder and any rights prevailing during the period until such termination shall not be affected by such termination.

7.2. Assignment.

7.2.1. Except as provided in this Agreement, neither Party may delegate, assign, transfer or attempt to delegate, assign or transfer this Agreement or its rights or obligations under this Agreement without the prior written consent of the other Party, and any assignment without such consent shall constitute a material breach of this Agreement and have no force or effect, *provided, however*, that for purposes of this Agreement, a change of control, merger, reverse merger or similar transaction of a Party shall not be deemed to be an assignment of this Agreement.

7.2.2. Notwithstanding the above prohibition of assignment or transfer, (i) Compugen may assign any rights related to the Designated Product Candidates in connection with any participation, joint venture, partnership or any other cooperation with third parties in connection with the development, marketing, selling, commercialization or any other activity it deems necessary or advisable in connection with any of the Designated Product Candidates, it being clarified for avoidance of doubt that such assignment or transfer shall be subject and without impairment to the Investor's rights against Compugen hereunder, including without limitation, the right for Cash Consideration and (ii) Investor may freely transfer and assign any Company Warrants obtained by it pursuant to this Agreement, provided such transfer or assignment is in compliance with and consistent with applicable securities law. A Party shall promptly notify the other Party in writing of any assignment made hereunder.

7.3. Confidentiality.

Investor and any successor or assignee thereof, who received or receives from the Company or its agents, directly or indirectly, any information concerning the Company, including, without limitation, the Designated Product Candidates, which the Company has not made generally available to the public, acknowledges and agrees that such information is confidential, and further agrees that, for so long as such information is not public, it will neither use such information for any purpose other than in connection with the consummation of its rights pursuant to this Agreement and the transactions contemplated hereby, nor will it disseminate such information to any person other than the representatives and advisors of Investor who have a need to know such information for purposes of effecting the transaction contemplated by this Agreement, provided that such persons to whom Investor has given access to the Company's confidential information are bound by similar confidentiality obligations to those set forth herein. If this Agreement is terminated by any of the Parties, for any reason whatsoever, (a) at the Company's request, Investor shall immediately return to the Company any and all non-public information received from the Company or their respective advisors in connection with the transactions contemplated hereby (but shall be entitled to retain for archival purposes and protection of his interests one copy of any report received from Compugen hereunder) and shall so confirm to the Company by a written certificate executed by Investor; and (b) the Confidentiality provisions of this Section 7.3 shall remain in full force and effect and binding on Investor.

7.4. Notices.

All notices required to be given under this Agreement shall be in writing, by mail, courier or hand delivery to the addresses which may be designated by each Party from time to time in a writing complying with this Notice provision, and shall be deemed received on the date confirmed on: (1) the return receipt for certified mail sent return receipt requested; or (2) the receipt for notices sent by Airborne, Federal Express or other reliable overnight courier; or (3) two (2) Business Days following delivery by Facsimile (with receipt of proper transmission).

If to Compugen:

Compugen Ltd.
Pinchas Rosen Street #72
Tel Aviv 69512, Israel
Fax: 03-765-8555
Attention: General Counsel

If to Investor:

c/o Arad & Co.,
1 Kermenizki St.,
Tel-Aviv Israel 67899 Fax. 03-6246999
Attention: Adv. Ehud Arad

Together with a copy (which shall not constitute a notice) to:

Arad & Co., Law- Office
1 Kermenizki St.
Tel-Aviv 67899, Israel
Fax. 03-6246999
Attention: Adv. Ehud Arad

7.5. Governing Law, Forum.

This Agreement shall be exclusively governed by and construed and interpreted according to the laws of the State of Israel, excluding its conflict of law provisions, and be subject to the exclusive jurisdiction of the competent courts of Tel Aviv – Jaffa or Petah-Tikva.

7.6. No Waiver.

The failure of either Party to enforce any right resulting from breach of any provision of this Agreement by the other Party shall not be deemed to be a waiver of any right relating to a subsequent breach of such provision or any other right. A waiver by A Party shall not be effective unless made in writing and duly signed by its authorized representatives.

7.7. Severability.

If any provision of this Agreement is rendered invalid under any applicable statute or rule of law, such provision is, to that extent, deemed omitted, and the other provisions of this Agreement shall be enforceable in accordance with their terms.

7.8. Limitation of Liability.

BOTH PARTIES' LIABILITY UNDER THIS AGREEMENT SHALL BE LIMITED TO DIRECT DAMAGES ONLY AND IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER FOR ANY OTHER DAMAGES OF ANY KIND WHATSOEVER BASED ON OR ARISING OUT OF EITHER PARTY'S PERFORMANCE OF OR FAILURE TO PERFORM THE ACTIVITIES DESCRIBED HEREIN (INCLUDING INCIDENTAL, CONSEQUENTIAL AND SPECIAL DAMAGES), EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, PROVIDED THAT SUCH PARTY ACTS IN GOOD FAITH.

7.9. Force Majeure.

A Party hereunder shall not be liable for any delay in the performance of its duties or responsibilities contained herein that result from acts of God, acts of civil or military authorities, fires, strikes, floods, epidemics, governmental rules or regulations, war, riot, acts of terrorism, or delays in transportation, which are not under its control and which were not foreseen by it, provided that (i) such Party shall promptly notify the other Party in writing on the occurrence of such Force Majeure conditions and their expected duration and (ii) that such Party shall immediately fulfill its delayed duties or responsibilities towards the other Party as soon as such Force Majeure conditions end.

7.10. Entire Agreement.

This Agreement (together with all its Annexes, Exhibits and Schedules) constitutes the entire understanding and agreement between Investor and Compugen with regard to the subject matter hereof and supersedes all prior agreements, communications, representations and discussions between the Parties, whether written or oral. Any contrary or conflicting term is hereby rejected. Any modification or amendment to this Agreement shall be in written form and agreed and duly signed by authorized representatives of Investor and Compugen. Pricing and benefits offered in this Agreement are not conditioned on any exclusivity or market share commitment. Furthermore, nothing in this Agreement shall prevent either Party from entering into similar arrangements with third parties.

7.11. Rules of Construction.

The Parties agree that they have been represented by counsel during the negotiation and execution of this Agreement and, therefore, waive the application of any law, regulation, holding or rule of construction providing that ambiguities in an agreement or other document will be construed against the party drafting such agreement or document.

7.12. Expenses.

Each Party shall be responsible for the payment of its own expenses incurred in connection with this Agreement and the transactions contemplated hereby.

7.13. Counterparts.

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and enforceable against the Parties actually executing such counterpart, and all of which together shall be considered one and the same agreement, it being understood that all Parties need not sign the same counterpart. The exchange of an executed Agreement (in counterparts or otherwise) by facsimile transmission or by electronic delivery in PDF format or the like shall be sufficient to bind the Parties to the terms and conditions of this Agreement, as an original.

7.14. Press Release.

Compugen shall make its best efforts to coordinate in advance with Investor, any press release made in connection with this Agreement, subject however, to any legal obligations Compugen may have.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives.

BAIZE INVESTMENTS (ISRAEL) LTD.

By: /s/ Murray Goldman
Title:

Date: December 29, 2010

COMPUGEN LTD.

By: /s/ Anat Cohen-Dayag
Title: President and Chief Executive Officer

Date: December 29, 2010

EXHIBIT A

Designated Product Candidates

EXHIBIT B

Warrant Form

**CERTIFICATION PURSUANT TO
RULE 13a-14(a)/RULE 15d-14(a) UNDER
THE EXCHANGE ACT AND SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Dr. Anat Cohen-Dayag, certify that:

1. I have reviewed this annual report on Form 20-F of Compugen Ltd.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation ; and
 - d. disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

/s/ Dr. Anat Cohen-Dayag

Title: President and Chief Executive Officer

Date: March 21, 2011

CERTIFICATION PURSUANT TO
RULE 13a-14(a)/RULE 15d-14(a) UNDER THE EXCHANGE ACT
AND SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Dikla Czaczkes Axselbrad, certify that:

1. I have reviewed this annual report on Form 20-F of Compugen Ltd.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

/s/ Dikla Czaczkes Axselbrad

Title: Chief Financial Officer
Date: March 21, 2011

**CERTIFICATION PURSUANT TO
RULE 13a-14(b)/RULE 15d-14(b) UNDER THE EXCHANGE ACT
AND 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of Compugen Ltd. (the "Company") on Form 20-F for the fiscal year ended December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I the undersigned, being the President and Chief Executive Officer of the Company, certify, pursuant to Rule 13a-14(b)/Rule 15d-14(b) under the Securities Exchange Act of 1934, as amended and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Sections 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Dr. Anat Cohen-Dayag

Title: President and Chief Executive Officer
Date: March 21, 2011

**CERTIFICATION PURSUANT TO
RULE 13a-14(b)/RULE 15d-14(b) UNDER THE EXCHANGE ACT
AND 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of Compugen Ltd. (the "Company") on Form 20-F for the fiscal year ended December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I the undersigned, being the Chief Financial Officer of the Company, certify, pursuant to Rule 13a-14(b)/Rule 15d-14(b) under the Securities Exchange Act of 1934, as amended and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Dikla Czaczkes Axselbrad

Title: Chief Financial Officer
Date: March 21, 2011

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-169239) pertaining to the Employee's stock option plan of Compugen Ltd. of our report dated March 10, 2011, with respect to the consolidated financial statements of Compugen Ltd. and the effectiveness of internal control over financial reporting of Compugen Ltd. included in the Annual Report on Form 20-F of Compugen Ltd. for the year ended December 31, 2010.

March 21, 2011
Tel-Aviv, Israel

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