UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

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	FORM 20-F
o	REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
	OR
X	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	FOR THE FISCAL YEAR ENDED DECEMBER 31, 2008
	OR
o	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	OR
o	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

OR 1

(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

Global 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:

28,512,440 Ordinary Shares

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

o Yes X No

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

o Yes X No

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

x Yes O No

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

Large accelerated filer O Accelerated filer O Non-accelerated filer X

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

U.S. GAAP X

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

Other O

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 o Item 18 o

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).

o Yes X No

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CAUTIONARY STATEMENT REGARDING

FORWARD-LOOKING STATEMENTS

This annual report on Form 20-F includes forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. These statements include words such as may, expect, could, project, estimate, believe, and intend, and describe opinions about fevents. 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 are not guarantees of future performance and are subject to risks, uncertainties and assumptions that could cause our actual results to differ materially from our expectations or projections. Factors that could cause our actual results to differ materially from those projected in the forward-looking statements include, without limitation, the risk factors set forth under Item 3. Key Information. Risk Factors, the information about us set forth under Item 4. Information about the Company, and information related to our financial condition under Item 5. Operating and Financial Review and Prospects.

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

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

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PART I.

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

The following selected consolidated financial data for and as of the five years ended December 31, 2008, 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, 2008 and 2007 and for the years ended December 31, 2008, 2007 and 2006 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, 2006, 2005 and 2004 and for the years ended December 31, 2005 and 2004 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,

Selected Financial Data 4

Year ended December 31,

	20	04		2005		2006		2007		2008
		(\$ in thousands, except share and per share data)								
Consolidated Statement of										
Operations Data	_				_					
Revenues	\$	2,630	\$	646	\$	215	\$	180	\$	338
Total operating expenses (1)	1	6,585		14,229		13,213		12,640		13,243
Operating loss	(1	5,055)	((13,731)		(13,004)		(12,460)		(12,912
Financial and other income, net		1,833		900		955		1,002		401
Net loss from continuing										
perations	(1	3,222)	((12,831)		(12,049)		(11,490)		(12,511
Net loss from discontinued										
perations		(500)		(1,147)		(971)		(624)		(16
Net loss available to ordinary										
hares	(1	3,722)	((13,978)		(13,020)		(12,114)		(12,527
asic and diluted net loss per										
rdinary share from continuing										
perations	\$	(0.48)	\$	(0.46)	\$	(0.44)	\$	(0.41)	\$	(0.44
									_	
asic and diluted net loss per										
rdinary share	\$	(0.50)	\$	(0.50)	\$	(0.47)	\$	(0.43)	\$	(0.44
iditally share	Ψ	(0.50)	Ψ	(0.50)	Ψ	(0.47)	Ψ	(0.43)	Ψ	(0.44
Weighted average number of										
ordinary shares used in										
omputing basic and diluted										
et loss per share	27,47	3.341	27.7	74,535	27.9	985,957	28	,266,273	28	3,434,946
or loss per share	-7,17	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_,,,	7 1,000		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,200,270		,,,,
Consolidated Balance Sheet Data										
Cash and cash equivalents,										
hort-term deposits,										
narketable securities and										
ash held in favor of										
onsortium partners (2)	\$	19,51	9 \$	31,05	4 \$	25,102	\$	15,200	\$	7,481
nvestment in Evogene		ĺ	_	,	_	_		510		3,858
ong-term deposits and										
marketable securities		27,85	i4	4,98	3	1,000		2,080		_
Total assets		55,35		42,10		30,856		21,666		14,244
Accumulated deficit		(105,75		(119,73		(132,754		(144,926)		(157,453

⁽¹⁾ Includes stock based compensation see Note 10 of our 2008 consolidated financial statements.

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

The amounts set forth for 2004, 2005 and 2006 have been reclassified.

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 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 revenues.

Our business model is primarily based on receiving revenues in the form of fees, milestones and royalties, and other revenue sharing payments from licensees and co-development partners of drug and diagnostic products based on product candidate discoveries (i) made by us independently and/or (ii) made pursuant to various forms of collaborations with partner companies whereby our discovery platforms or other discovery capabilities are targeted to areas of interest of such partner companies (discovery on demand collaborations). To date we have received only minimal revenues from the licensing of our initial product candidates, recognizing \$10,000, \$180,000 and \$40,000 of such revenue in 2006, 2007 and 2008 respectively. 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.

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

As of December 31, 2008, we had an accumulated deficit of approximately \$157 million resulting in large part from our primary focus from 1997 to 2004 on research and infrastructure building activities. These activities were focused on obtaining deeper understandings of selected biological phenomena at the molecular level and creating algorithms and other computational biology tools that would allow the building of predictive models of such phenomena. During this period, the costs of such research and discovery activities were partially offset by limited revenues obtained by providing certain of these capabilities to third parties in the form of services and software products. In late 2004, we began to focus a 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 computational biology tools and services, as reflected by the resulting decrease in revenues. We incurred net losses of approximately \$13 million in 2006, approximately \$12 million in 2007 and approximately \$13 million in 2008. We expect to 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 as well as the nature of our business model. To date, we have received only minimal revenues from our initial licensing activities and we cannot be certain that we will ever achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability.

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We may be required to allocate substantial additional funds in the future to our discovery and validation activities, and we may never be able to achieve profitability.

Our discovery efforts primarily consist of developing and validating discovery platforms on a field by field basis, and then utilizing these platforms on our own or pursuant to collaborations with others to discover therapeutic and diagnostic product candidate molecules that appear to have potential applications. In 2008, as in previous years, we allocated a substantial portion of our cash and other resources to such research, validation and discovery activities and we intend to continue to do so. To date, these activities have generated only negligible revenues. These activities may never generate significant revenues and we may never achieve profitability.

We will need to raise additional funds. If we are unable to raise additional funds in the future, 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, 2008, we had cash and cash equivalents, short-term deposits, long-term deposits and marketable securities of approximately \$7.2 million, compared with approximately \$17.2 million as of December 31, 2007, in both cases, not including the market value of the 2,150,000 shares of Evogene ordinary shares owned by the Company. We do not anticipate that we will achieve profitability in the near future and believe that we will need additional funds to continue financing our discovery, validation, development and commercialization activities. Potential sources of additional funds include milestones and fees under current and/or new specific product based agreements, fees and other payments under discovery or demand or other broader collaborations, sale of all or a portion of our Evogene shares, a rights offering of Compugen securities to our shareholders or various other equity based arrangements.

We cannot provide any assurance that additional funding will be available from any of these potential sources 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. In particular, the recent downturn in the credit and liquidity markets may restrict our ability to borrow funds or raise capital on favorable terms or at all. If we raise additional funds by issuing equity securities or any other convertible securities, we expect that our shareholders will experience dilution of their shareholdings. If we are unable to obtain the required additional financing on commercially reasonable terms, we may have to curtail or cease our discovery and validation activities, or restrict or cease operations. Therefore, the Board of Directors of the Company has adopted a contingency plan that includes various cost reduction measures which, in the absence of obtaining the required additional funding (including but not limited to, from the sale of Evogene shares or otherwise) would enable the Company to continue to support its operations through December 31, 2009. For more information, see Note 1e of our 2008 consolidated financial statements

If we are unable to continue to successfully apply for research and development grants, our financial results may be materially harmed.

We have received research and development grants from the Office of the Chief Scientist of the Israeli Ministry of Industry, Trade and Labor, from the Israel-U.S. Bi-national Industrial Research and Development Foundation and from the European Community, under the European Union s & Framework Program. In 2008, the grants we received totaled approximately \$544,000, compared with approximately \$1.4 million in 2007, and approximately \$1.7 million in 2006. 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 total value of grants that the Office of the Chief Scientist makes available generally, and to each individual grantee, has gradually decreased in recent years and 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 \$6.0 million at December 31, 2008.

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, or if we will be able to obtain only a reduced amount of grants, we may have to restrict certain research activities.

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The current world-wide financial crisis and its impact on capital, which may continue indefinitely or intensify, could adversely affect our results of operations, cash flows and financial condition and may affect our ability to access certain sources of funding.

The global economy is currently undergoing a period of rapid decline. This has led, and could further lead, to reduced consumer spending in the foreseeable future, which may include reduced spending on healthcare and materially impact the earnings and financial health of our collaborators and potential collaborators. As a consequence, our current customers and other prospective customers may postpone, reduce or even forego research and development activities, including acquiring licenses for therapeutic and diagnostic product candidates, which could further adversely affect our potential revenues and profitability. We cannot predict when these conditions will improve. If we attempted to obtain long term credit to finance our operations, we may not be able to do so. In the past, we accessed the capital markets to support our business activities. In the future, we may not be able to obtain capital market financing on favorable terms, or at all, which could have a material adverse effect on our ability to grow or even to continue our business operations.

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

Our approach to discovering novel therapeutic and diagnostic product candidates is itself novel and has not yet been fully proven or validated in the form of marketed products and may never lead to marketed products. If this approach does not prove to be successful, our business will be significantly harmed.

Our method of discovering novel product candidates primarily involves first utilizing our computational biology capabilities and predictive models to generate *in silico* (ie. computers) a large number of potential product candidates in the field of interest. Next we utilize proprietary algorithms and tools and other methodologies to select from this large number of potential product candidates a smaller number of novel molecules that we believe have the highest probability of being product candidates for such field of interest. Some or all of these selected molecules are then synthesized and undergo *in vitro* and/or *in vivo* validation testing. By using this 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 initially validated in the laboratory. However, our approach in general has not yet been proven or validated beyond this initial validation and we cannot predict whether any of such discoveries will be suitable for development into therapeutic or diagnostic products or that our discovery method will continue to yield product candidates.

If we or our licensees and collaborators are not able to find any beneficial biological activity for the therapeutic and diagnostic product candidates that we discover, or potential licensees or collaborators do not believe that this is an effective discovery methodology, or our approach is ultimately proven to be ineffective or non-competitive for discovering candidates suitable for development into therapeutic and

diagnostic products, or we or our licensees or collaborators fail to commercialize our discoveries, our business will likely be significantly harmed.

The success of our business largely depends on our discovery platforms and related technologies. The predictive capabilities of our discovery platforms with respect to yielding marketable products remains largely unproven and may never lead to marketable products. If we fail to continue to develop and enhance our discovery platforms, or we or our partners fail to make novel discoveries, or focus on the most promising discoveries, our business will likely be materially harmed.

Our proprietary discovery platforms are designed to predict, select and validate potential product candidates in each selected field of interest. These discovery platforms essentially model biological processes, whether physiological or 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 feeding our discovery platforms with data already used by others or by developing discovery platforms already developed, wholly or partially by others, or from inherent incapacity of the prediction capabilities of our discovery platforms. 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 progress with, either due to 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 platforms and related technologies in order to compete successfully within the pharmaceutical and biotechnology industries.

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We rely on access to public and commercial databases to feed our discovery platforms and on the quality of the data available from those databases, 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 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 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 operation may be materially harmed.

We rely on access to high-quality biological samples supported by detailed clinical records to conduct parts of our discovery activities and to perform experimental analysis and initial clinical validation. 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 development 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.

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 other risks, the possibility that:

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

our diagnostic product candidates will prove to be ineffective in distinguishing between healthy and disease samples or in providing information relating to a patient s response to a drug;

our collaborators will not fully develop or commercialize to the full extent our product candidates for economic reasons, including competition with other product candidates;

our collaborators will fail to receive applicable regulatory approvals;

our collaborators will fail to manufacture these products on a large scale in a cost effective manner;

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;

the development, marketing or sale of our product candidates will fail because they 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, and limited resources for, the discovery and 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 discovery and 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 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.

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If we fail to have available at the appropriate times all of the required experience and expertise in the discovery and development 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 or our licensees or collaborators may be unable to obtain regulatory approval of any of our therapeutic or diagnostic candidates, and if we or our collaborators fail to obtain such regulatory approval, our business will be materially harmed.

The clinical development and marketing of therapeutic and diagnostic products based on our discoveries requires obtaining regulatory approvals to such effect. The process of obtaining regulatory approvals for therapeutic or diagnostic products based on our discoveries in the United States, Israel and in other countries can be lengthy and complex. Changes in legislation and in guidelines and policies made pursuant to such legislation could increase the complexity and the length of the process of obtaining such regulatory approvals. The time required to obtain Food and Drug Administration and other approvals for therapeutic and diagnostic products is unpredictable but may exceed several years following the commencement of clinical trials. Neither we, nor our licensees or collaborators, have yet applied for or received any regulatory approvals for the marketing of any therapeutic or diagnostic products based on our discoveries. It is possible that none of the product candidates we or our licensees or collaborators develop will obtain the appropriate regulatory approvals necessary to begin selling them. Even if and once we or our collaborators or licensees obtain regulatory approval for products based on our discoveries, these products may be subject to continuous regulatory review. Products based on our discoveries that are found to be unsuitable for human consumption, for example due to the causation of unwanted side effects, may result in the withdrawal of such products from the market.

Furthermore, because some of the therapeutic products we are intending to develop may represent a newly discovered class of therapeutic products or a new indication or new use for an existing drug, without clear FDA guidelines for development, the FDA may not have established definitive policies, practices or guidelines in relation to these products or uses. The lack of such policies, practices or guidelines may hinder or slow review by the FDA of any regulatory filings that we or our licensees or collaborators may submit. Moreover, the FDA may respond to these submissions by defining requirements we may not have anticipated. Such responses could lead to significant delays in the development of our product candidates. Any delay or failure in obtaining required approvals could have a material adverse effect on our ability to generate revenues from a particular product candidate. Furthermore, any regulatory approval to market a product may be subject to limitations on the indicated uses for which we may market the product. These limitations may limit the size of the market for the product. We or our licensees or collaborators are also subject to numerous regulatory requirements outside the United States governing the conduct of clinical trials,

manufacturing and marketing authorization, pricing and third-party reimbursement. The regulatory approval process outside the United States includes all of the risks associated with FDA approval described above as well as risks attributable to the satisfaction of local regulations in these jurisdictions. Therefore, approval by the FDA does not assure approval by regulatory authorities outside the United States.

If we or our collaborators or licensees fail to obtain required regulatory approvals, our collaborators or licensees may be prevented from marketing therapeutic or diagnostic products based on our discoveries. This will in turn reduce our chances of receiving payment from our collaborators and as a result, our business may be materially harmed.

We have no experience in conducting and managing human trials. If we fail in the conducting of such trials, our business will be materially harmed.

We have no experience in conducting and managing the clinical trials which will be necessary to obtain regulatory approvals for our therapeutic or diagnostic product candidates. To the extent that we or our licensees or collaborators choose to rely on third parties for clinical development, our control over these critically important activities will be reduced. 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 expected deadlines, clinical trials could be delayed and our business materially harmed.

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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.

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 and licensees 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 and licensees 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 academic institutions

To date, we have granted a small number of licenses and entered into collaborations covering development and commercialization rights with respect to certain of our product candidates. As of December 31, 2008, we had entered into eleven such agreements for a multiple number of our product candidates.

We cannot assure you that any of these agreements will result in the successful development or commercialization of any products based on our discoveries. Further, we cannot assure you that we will succeed in identifying suitable collaborators or licensees or entering into any other agreements with collaborators or licensees for the development and commercialization of our therapeutic and diagnostic product candidates. If we are unable to identify suitable collaborators or licensees or enter into new collaborations or license agreements, our business will likely be materially harmed.

We may not be able to find collaborators or licensees that will agree to license our discoveries at an early stage, and if we do not find these collaborators or licensees, 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 early stage validation and in some cases, pre-clinical development of those product candidates. We consider early stage development of diagnostic product candidates to be a stage at which their existence is validated. At this stage we may demonstrate that the product candidate is differentially expressed in different physiological conditions, but in any case with no clinical proof. We consider early stage development of therapeutic product candidate to be a stage at which we show biological activity of that candidate in animal models. We either carry out such early stage validation work ourselves or we engage third parties to provide such validation work but we ordinarily seek to rely on our collaborators and licensees to carry out further product development.

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Pharmaceutical and diagnostic companies may be reluctant or refuse to in-license our therapeutic and diagnostic product candidates at these early stages of discovery or validation. One potential barrier to our success in obtaining collaborators and licensees 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 others. Even if we are successful in commercializing our product candidates at an early stage of development, 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 products candidates increases commensurately with the number of such products commercialized and the stage of development that we attain for them.

If we are unable to out-license 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 licensing and collaboration agreements with third parties presents a number of risks, and if one or more of these risks materialize, our business may be materially harmed.

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

we may be unable to comply or fully comply with our obligations under license or 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 may have significant discretion in electing whether to pursue any of the planned activities and the manner in which this will be done:

we may not be able to control our collaborators or licensees 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 or a licensee's business strategy may negatively affect its willingness or ability to complete its obligations under its arrangement 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 nor willing to make;

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

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

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

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

Factors Related to our Operations

The licensing cycle for our commercial offerings 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 licensee s or 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. As a result, the process of preparing and negotiating our licensing and other agreements is complex, and may take 12 months or longer. These business development and related commercial activities require the input and substantial time and efforts of our key management personnel.

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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 licensees.

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. Within our geographic location, it is difficult to find suitable and highly qualified personnel in certain aspects of our industry.

Furthermore, we do not carry key person life insurance on any member of our senior management.

In December 2008, following a restructuring intended to reduce our costs and cash burn, the Company reduced its headcount to 57, from 72 as of December 31, 2007. While we believe that this headcount reduction will not impact any of the Company s discovery capabilities or its ability to develop new platforms, we cannot be certain of this and such reduction may have a material adverse effect on our employee retention ability.

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.

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 will receive from the Israel-U.S. Bi-national Industrial Research and Development Foundation and the Office of the Chief Scientist of the Israeli Ministry of Industry, Trade and Labor. According to Israeli law, certain restrictions and obligations may be imposed on us in relation to the development and commercialization of discoveries that are financed by these grants. These obligations and restrictions may be imposed if we were to seek to manufacture the technologies or the discoveries outside of Israel or transfer certain of our know-how within or outside of Israel.

We believe that these obligations and restrictions do not apply to us for a number of reasons, including our strategy to license the candidates discovered using our platform technology and not to transfer the know-how subsisting in our platform technologies and discovery platforms. We also believe that these restrictions do not apply to the sale or to the export of product candidates that we develop using or based on our Office of the Chief Scientist-funded platform technologies or discoveries.

Nevertheless, if the Office of the Chief Scientist of the Israel Ministry of Industry, Trade and Labor adopts a view contrary to our own or if restrictive statutory changes are legislated in the future, our flexibility in commercializing some of our technologies or discoveries may be reduced.

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 financial condition. These security breaches, if significant, could harm our operations and even cause our business to cease.

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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, this could result in harm to persons or property and 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 this 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. This 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 12 issued patents, of which 11 are U.S. patents and one is an Australian patent. We also have 137 pending patent applications which include 48 patent applications that have been filed in the United States (four of which have, to date, been allowed for issuance) and seven 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 patents as we deem appropriate, 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.

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 gene-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; and

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

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.

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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 expressed therefrom.

As a result of the existence of such third party intellectual property rights, we have been and may be required further 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 in it substantial resources.

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 include diversion of management s and technical personnel s time, the effect of which may be even more adverse then in the past due to the recent reduction in force. 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 these licenses 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 of these licenses 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 to the 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 of our assets for the taxable year produce or are held for the production of passive income. 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. Based on our income, assets, activities, market capitalization and other considerations, we do not believe that we were a PFIC for the taxable year ended December 31, 2008. However there are no assurances that the Unites States Internal Revenue Service (IRS) will not challenge this conclusion. Furthermore, if the current price of our ordinary shares does not increase during 2009, there is a risk that we could be classified as a PFIC for 2009.

For a discussion of the rules relating to PFICs and related tax consequences, please see Taxation, United States Federal Income Tax Considerations under Item 10. Additional Information .

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We have a very 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 business model depends on our ability to generate revenues primarily in the form of fees, milestones, and revenue sharing payments from the licensing and commercialization of current and future product candidate discoveries, and our ability to do so remains untested. To date we have received only minimal revenues from the licensing of our initial product candidates, recognizing \$180,000 of such revenue in 2007 and \$40,000 of such revenue in 2008. We cannot be certain that this business model will ever generate a stable or significant revenue stream. 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, and revenue sharing revenues 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 this 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 the Nasdaq Global Market has traded at a low of \$0.34 to a high of \$3.40 and trading volume has been very volatile. The volatile price of our stock and the changing 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

successfully reaching certain developmental milestones;

failure to raise capital on the capital markets;

achievement or rejection 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;

economic or other crises and other external factors;

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 these trials;

period to period fluctuations in our revenues and other results of operations; changes in financial estimates by securities analysts; our need and ability to raise additional funds; our inability to disclose the commercial terms of, or progress under, our collaborations; our inability 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 experienced extreme price and volume fluctuations that may have been 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.

In addition, 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 failure 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. Market and industry fluctuations may adversely affect the trading price of our ordinary shares, regardless of our actual operating performance.

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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 tender offers for acquisitions of shares above specified thresholds, requires special approvals for transactions involving directors, officers or significant shareholders and regulates other matters that may be relevant to these types of transactions. The provisions of Israeli law may delay or prevent an acquisition, or make it less desirable to a potential acquirer, even if such an acquisition would be considered beneficial by a majority of our shareholders, and therefore depress the price of our shares. For information about these limitations, see Anti-Takeover Provisions under Israeli Law Under Item 10. Additional Information. Furthermore, Israeli tax considerations may make potential transactions undesirable to us or to some of our shareholders.

Our ordinary shares may be delisted from the Nasdaq Global Market, and as a result the liquidity and price of our ordinary shares would likely decline.

Our ordinary shares are currently listed on the Nasdaq Global Market. Nasdaq s continued listing requirements include that (i) the minimum bid price of a listed security must be at least \$1 and (ii) listed companies maintain, among other things, a minimum of \$10.0 million in shareholders equity, as reported on the issuer s balance sheet. Our ordinary shares have traded below \$1 per share since November 4, 2008. Our shareholders equity was \$10.0 million as of December 31, 2008, and we expect our shareholders equity to decline for the next reporting period. The delisting of our ordinary shares would likely have an adverse impact on the liquidity of our ordinary shares and, as a result, the market price for our ordinary shares would likely become more volatile and could decline significantly. Additionally, if we were delisted from the Nasdaq Global Market, the benefits of dual-listing reporting requirements would no longer be relevant and we would be required to make all our disclosures pursuant to Israeli law and Tel Aviv stock exchange rules and regulations. Alternatively, we might choose to or be required to delist from the Tel Aviv stock exchange as well.

Risks Relating to Operations in Israel

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

Our principal 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 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 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 this 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 this 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 devaluation of the Dollar against the New Israeli Shekel.

We hold most of our cash, cash equivalents deposits and marketable securities 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 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. The Company entered into derivative instrument arrangements to hedge a portion of its anticipated New Israeli Shekel (NIS) payroll and certain operation expenses. For more information, see Note 2q of our 2008 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.

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The tax benefits are a function of the Approved Enterprise status of our existing facilities in Israel. 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 these 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.

If we cease to become entitled to these tax benefits, 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.

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, may be difficult to obtain within the United States. In addition, because substantially all of our assets and almost all of our directors and officers are located outside the United States, any judgment obtained in the United States against us or any of our directors and officers may not be collectible within the United States.

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. The mailing address of Compugen USA, Inc. (formerly known as Compugen, Inc.), our wholly-owned U.S. subsidiary and our agent in the United States, is Compugen c/o Adjuvant Global Advisors, 7101Wisconsin Avenue, Suite 1001, Bethesda MD 20814. Our primary Internet address is www.cgen.com. None of the information on our website is incorporated by reference into this annual report.

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 were then 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 more recently, how proteins are cleaved to create peptides. These efforts, over more than 10 years, have created a core infrastructure of multidisciplinary and experienced researchers, computational biology systems, tools and algorithms and proprietary understandings and predictive models of key aspects of life at the molecular level. During this period we obtained revenues by providing certain of these capabilities to third parties (including multi-million dollar collaborations with Abbott Laboratories, Human Genome Sciences Inc., Novartis Pharma AG and Warner-Lambert Company, and the United States Patent and Trademark Office in the form of services and software products).

In 2004, having achieved what we believed to be the required infrastructure in terms of experienced scientists, computational tools and models, and scientific understandings, we began to focus a portion of our research and development efforts on the creation of field specific discovery platforms intended to provide drug and diagnostic product candidates. Consistent with this new focus, we discontinued commercialization of computational biology tools and services.

From late 2004 to date, a series of discovery platforms were successfully developed and validated. In addition, a number of initial product candidate discoveries were made, and the Company began to enter into various types of agreements with pharmaceutical and diagnostic companies for the further evaluation, development and commercialization of products based on these discoveries.

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The Company sees its competitive advantage as having the ability to utilize computational biology based prediction and selection methodologies to systematically discover, through the use of its discovery platforms, multiple product candidates of interest in an increasing number of important drug and diagnostic fields. During late 2008, in order to more fully leverage this capability, the Company increased its focus on the next stage of its commercial development in the form of seeking broader, more strategic types of collaborations whereby our discovery platforms or other discovery capabilities are targeted to areas of interest of our partner. Such discovery on demand collaborations based on our existing and to be developed platforms are a high priority for our company and we expect that these types of collaborations will provide the majority of our milestone and royalty opportunities in the future. However, 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.

In 2009, we intend to focus our internal R&D activities primarily on therapeutic peptides and monoclonal antibody drug targets. In our biomarker and other programs, particularly in view of our current financial situation, we intend to give priority to those activities pursued in collaboration with other companies. The net impact of these and related decisions resulted in a staff reduction in December 2008, and an approximate 30% reduction in planned expenditures for 2009 compared to 2008.

In 1997, we incorporated our wholly-owned U.S. subsidiary, Compugen USA, Inc. and in 2008, our wholly-owned UK subsidiary, Compugen UK Ltd. However, neither of these subsidiaries is anticipated to have any significant operations during 2009. Our research and discovery, business development and commercial operations are all carried out primarily from our Tel Aviv offices.

In August 2000, we sold 5,000,000 of our ordinary shares in an initial public offering of our shares on the Nasdaq Global 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 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. On August 1, 2004, we transferred all of the assets and liabilities of this division to Keddem Bioscience, a wholly-owned subsidiary. In August 2007, we announced the suspension of Keddem s operations. In 2008, in order to continue to seek to maximize the value of Keddem s intellectual property, Compugen 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.

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 the company s initial capital. The remaining 360,000 Evogene shares were issued to the two founding scientists, who had previously directed the agbio division at Compugen. In August 2008, Evogene entered into a multi-year research and development collaboration

with Monsanto Company focused on identifying key plant genes related to yield, environmental stress and fertilizer utilization. At such time, Monsanto purchased an \$18 million equity stake in Evogene and agreed to purchase an additional \$12 million in the future, subject to certain Evogene diligence requirements. We currently hold 2,150,000 Evogene ordinary shares representing approximately 9.0% of the outstanding ordinary shares. For more information about these transactions and our holdings in Evogene, see below Significant Investment; Evogene Ltd. and Organizational Structure in this Item 4. See also Note 1b and Note 2e to our consolidated financial statements.

On November 12, 2008, we announced the appointment of Mr. Martin Gerstel as Compugen's president and chief executive officer, effective January 1, 2009. Mr. Gerstel, who served as chairman of Compugen since 1997, succeeded then president and chief executive officer Mr. Alex Kotzer, who informed the Board of his interest to retire from his full time executive responsibilities. Mr. Kotzer continues as a director of the Company. In addition, on February 9, 2009, we announced the appointment of Dov Hershberg as chairman of the board, succeeding Martin Gerstel.

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Recent Operating Developments

In February 2007, we announced the development of our G-protein coupled receptor (GPCR) Therapeutic Peptide Ligand discovery platform and eight novel peptides that activate GPCRs discovered through the use of this new platform.

In July 2007, we announced the development of a new discovery platform for the identification of existing drug molecules that are predicted to have important therapeutic indications that are currently not known (New Indications), and the selection at such time, of nine product candidates from the initial use of this platform, three of which successfully completed *in vitro* screening and advanced to *in vivo* studies.

In January 2008, we announced results from initial *in vivo* validation studies of CGEN-855A and CGEN-855B, two novel peptide agonists of the FPRL1 GPCR, which may serve as anti-inflammatory and cardio-protective drug candidates, discovered using the Company s GPCR ligand discovery platform.

In February 2008, we announced positive *in vivo* results for two novel peptide agonists of the MAS GPCR, indicating cardio-protective effects and therapeutic potential for the treatment of various cardiovascular and other pathologies. The two peptides CGEN-856 and CGEN-857 were identified using Compugen s GPCR ligand discovery platform.

In March 2008, we announced the development and validation of our Blockers of Disease-Associated Conformation (DAC Blockers) platform, a discovery platform for the identification of peptides that block proteins from adopting their disease-associated conformations. Two of the predicted therapeutic peptide candidates from the pilot validation run of the platform showed initial experimental verification, one with anti-inflammatory and the other with anti-cancer activities.

In April 2008, we announced the discovery and experimental verification of CGEN-438, a potential blood based biomarker for lung cancer, which could potentially serve as both a serum biomarker for the diagnosis of small cell lung cancer and as a component in a biomarker combination for the diagnosis of non-small cell lung cancer patients. CGEN-438 is one of a group of putative cancer and cardiovascular biomarkers which was initially predicted *in silico* using Compugen s Protein disease markers discovery platform, and then further validated experimentally.

In May 2008, we presented experimental results for three Compugen discovered Relaxin related molecules that could have therapeutic activity in various clinical indications, including labor complications, infertility, inflammation, congestive heart failure and fibrotic diseases. These three novel peptides were predicted *in silico* through the use of Compugen s GPCR Peptide Discovery Platform.

In June 2008, we announced the discovery of more than ten novel targets of antibody therapy for various types of solid and hematopoietic cancer. The newly identified targets were initially predicted and selected *in silico* using Compugen s Monoclonal Antibody Therapeutic Targets Platform. Further experimental validation of the therapeutic potential has been initiated for five of these targets.

In June 2008 we announced the discovery and experimental confirmation of a novel combination of four biomarkers for early detection of drug-induced nephrotoxicity. Data demonstrate that the biomarker signature may enable a much earlier prediction of drug-induced kidney toxicity during pre-clinical trials in rats in comparison to traditional diagnostic methods such as histopathology or clinical chemistry. The biomarkers were discovered through the use of Compugen s Nucleic Acid Testing (NAT) Discovery Platform and a key component of the discovery effort was the integration of proprietary expression and clinical data derived from biological samplers provided by Teva Pharmaceutical Industries Ltd.

In July 2008, we announced positive results from an *in vivo* study of CGEN-25007, a novel peptide antagonist of the gp96 protein. The data indicate that CGEN-25007 has immunosuppressive effects and therapeutic potential for the treatment of various inflammatory diseases and other immune related pathologies. CGEN-25007 was initially predicted using Compugen s DAC blockers platform, which was designed to predict peptides that block proteins of interest from achieving certain disease-associated conformations.

In July 2008, we announced the discovery of the potential use of CGEN-50001, a known central nervous system (CNS) drug, for breast cancer therapy. In *in vitro* and *in vivo* validations studies, co-administration of CGEN 50001 was shown to significantly increase the effect of Tamoxifen, a frequently used drug for the treatment of estrogen receptor (ER) positive breast cancer. This previously unknown action of CGEN 50001 was initially predicted *in silico* by Compugen s New Indications Discovery Platform. At such time, we also announced plans to conduct a proof of concept human trial for such use during 2009. Subsequently, and as part of the reduction in expenditures for 2009, planning for such trial was placed on hold and is expected to move forward only in the event of a third party collaboration.

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In September 2008, we announced that our proprietary DAC Blockers Discovery Platform had led to the discovery of CGEN-25008, a novel peptide antagonist of the Clusterin protein. We also announced that recently analyzed *in vitro* and initial *in vivo* results from cell-based assays and a lung cancer mouse model indicate that CGEN-25008 reduces the growth rate of several cancer cell lines and specifically enhances the anti-cancer activity of TaxolTM, a frequently used cancer chemotherapeutic drug.

In October 2008 we announced the development and validation of a new Viral Peptides Discovery Platform designed to identify peptides from viral genomes for potential human therapeutic use against inflammatory and immune related diseases. The Viral Peptides Discovery Platform has led to the discovery of two novel viral peptides demonstrating in *in vitro* studies, the ability to suppress inflammatory responses.

Principal Capital Expenditures

In the years ended December 31, 2008, 2007 and 2006, our capital expenditures were \$120,000, \$205,000 and \$157,000, respectively, and were spent primarily on laboratory equipment, computer software and hardware and leasehold improvements. We have no current commitments for capital expenditures.

Business Overview

We are a company that engages in drug and diagnostic product candidate discovery and the commercialization of such candidates largely through early stage licensing and co-development agreements. Our business is focused on developing and using our growing inventory of field-focused discovery platforms to predict, select and validate therapeutic drug candidates and diagnostic biomarker candidates. Our initial discovery platforms have focused mainly on cancer, cardiovascular and immune-related diseases. Prediction and selection of product candidates is largely computer based utilizing one or more of our discovery platforms, while validation of the resulting candidates is accomplished through the use of various *in vitro* and *in vivo* experimental techniques. Product candidate discoveries are pursued either (i) by us independently and/or (ii) under various forms of collaborations with partner companies whereby our discovery platforms or other discovery capabilities are targeted to areas of interest of such partner companies. In general, we seek to license out our discoveries at an early stage with the goal of maximizing the number of our product candidates in development by our licensing and co-development partners under various types of milestone and revenue sharing agreements.

We are focused on and are structured along the lines of our three principal activities: (i) research and discovery; (ii) therapeutics; and (iii) diagnostics.

Research and Discovery: Our research and discovery activities consist of two primary and overlapping components. The first is our continuing effort to obtain deeper predictive understandings of important biological phenomena at the molecular level through the analysis of biological data of various types such as DNA or RNA sequences, gene expression data, protein network data, data related to drugs in development and drugs already being commercialized. The second utilizes these understandings, along with field specific information, to develop field-focused discovery platforms. Both components require the use of our extensive base of proprietary algorithms and other computational biology systems and tools.

Therapeutics and Diagnostics: In each field, we seek to discover novel candidates that answer unmet medical needs and that may be suitable for further development as therapeutic or diagnostic products. Although each of our platforms is field- or disease-specific, our underlying capabilities and general approach are not, and can be utilized for numerous applications, both therapeutic and/or diagnostic. At any given time, our discovery efforts may span a number of candidates which may become diagnostic or therapeutic products. Our therapeutic candidates include either novel peptides or proteins that are themselves drug candidates, targets to potential drugs, like specific receptors of cancer cells, or known small molecules with new indications. Our diagnostic biomarkers indicate, among others, 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.

Our business model is based on entering into commercial collaborations with leading diagnostic, biotechnology and pharmaceutical companies, as well as academic and medical institutions, which have the ability to support and fund discovery activities as well as commercial development of our early-stage discoveries and candidates from early pre-clinical stages for therapeutics or from initial clinical validation for diagnostics. These collaborations can be based on either product candidates previously discovered by Compugen, or product candidate discovery on demand in areas of interest to our partner, or combinations of the two. We intend to generate revenues through milestone and royalty based license agreements and joint development agreements with these collaborators. We have entered into several such agreements, but we have not yet recognized significant revenues from these agreements.

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Research and Discovery

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 or RNA sequences, gene expression data, protein network data and data related to drugs in development and to drugs already being commercialized.

In general, each Compugen discovery platform targets a specific field and consists of three modules: Prediction, Selection and Validation. The first two modules are largely *in silico* (i.e. performed by computer) with the third, being 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 generate *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 to select from this large number of putative product candidates a smaller number of molecules (typically in the low 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 are then synthesized and undergo experimental screening and therafter *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 initially validated in the laboratory. In addition, this procedure provides additional data for the continued improvement of the predictive capabilities incorporated in the discovery platforms.

Current Validated Discovery Platforms

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.

Nucleic-Acid Disease Markers: Using the LEADS infrastructure platform in combination with a gene expression database, 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 same capabilities as above, 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 serve as biomarkers for the diagnosis of various diseases. This platform serves as the basis of our collaborations with Siemens Healthcare Diagnostics Inc., Ortho-Clinical Diagnostics (a Johnson & Johnson company) and Iverness Medical (formerly Biosite).

Monoclonal Antibody Targets: This platform predicts the existence of proteins that can serve as targets for antibody therapeutics. It combines several information sources such as the LEADS infrastructure platform, gene expression profiles and protein domains predictions. 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. This platform is the basis for the drug target discovery program that enables our collaboration with Medarex.

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. To date, in a collaborative program with Teva Pharmaceutical Industries, we have successfully identified and

validated such biomarkers for kidney toxicity.

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Non-SNP Drug Response Markers: This platform (also called our GeneVa platform) predicts non-SNP variations in the human genome that could be potential drug response and disease predisposition markers. This platform consists of three components: a component constituting an atlas with over 200,000 predicted non-SNP variations, a component that associates variations from this atlas with a certain conditions of interest (eg. response to a drug), and an experimental genotyping component that allows testing of variations on human DNA samples. This platform forms the base of our collaboration with Roche for the identification of drug response markers to anti rheumatoid arthritis drugs.

GPCR Therapeutic Peptide Ligands: G-protein coupled receptors (GPCRs) are desirable drugs targets—with at least 40% of drugs currently in the market thought to act on GPCRs. This platform aims at finding novel peptide ligand agonists to GPCRs that could become drug candidates and is based on a predicted peptidome and our capability to extract from it, GPCR related peptides. Our peptidome is a collection of thousands of novel human peptide sequences which are expected to correspond to natural peptides, and was created by predicting novel cleavage sites in precursor proteins. Using this proprietary platform, to date, we have identified many novel peptides that activate GPCRs and progressed with multiple peptides into *in vivo* studies. In addition, we signed a collaboration agreement with Merck to use this platform to target and predict peptides likely to activate selected GPCRs and to validate their agonistic activity.

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 Compugen developed MED (Mining of Expression Data) infrastructure technology, which is also being utilized in other discovery platforms. The MED technology allows the integration and subsequent querying of multiple types and sources of data, including, gene expression results from tens of thousands DNA chips from around the world, covering hundreds of biological conditions (e.g. disease states). A significant value in discovering a new indication of an existing drug is found in the shortened development time and decreased risk due to the existence of safety, toxicity and other data.

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.

Viral Peptides Discovery: This is our newest platform, targeted 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 the virus gained knowledge on how 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.

THERAPEUTIC ACTIVITIES

We use our therapeutic discovery platforms to first predict, based on various computational biology predictive models, a large number of potential candidates and then use algorithms, machine learning systems and other tools to select from among the many predictions, likely novel potential drug candidates. After this in-silico prediction and selection of potential candidates, we perform an initial screening experiment that tests for the predicted biological activity. We then identify potential candidates, and select some for preliminary biological testing (usually in-vitro tests) which initially, also serves as validation of the discovery platform itself. Using the in-vitro results, we make an assessment based on an internal set of criteria, whether to proceed to more advanced tests (usually *in vivo* tests) which may further demonstrate the potential of the discovery platform and enable us to place those molecules with successful results, in our therapeutic pipeline. We may perform these validation activities of our candidates internally or outsource these activities to a third party.

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Our initial therapeutic product candidates include the following molecules that are either being actively pursued by Compugen or are covered by an existing collaboration:

CGEN-241 is a splice variant of the MET receptor, a prominent therapeutic target for cancer, also discovered using Compugen s Splice Variant based Therapeutic Proteins discovery platform. Compugen s MET variant is a truncated soluble form of the MET receptor, which has been shown to inhibit HGF-induced Met phosphorylation as well as cell proliferation and survival, indicating anti-mitogenic activity. Furthermore, CGEN-241 displays a profound inhibitory effect on properties related to cell motility and invasiveness demonstrated by inhibition of cell scattering, cell invasion and urokinase activity induced by HGF. Compugen s results demonstrate that in addition to the inhibition of ligand-dependent activities, CGEN-241 can also affect ligand-independent functions, illustrated by the induction of apoptosis in MKN45 cells and binding of CGEN-241 to Met overexpressing cells, implying a direct interaction with the membranal Met receptor. These different mechanisms of action may confer a therapeutic advantage with the ability to inhibit the diverse modes of Met activation existing in human malignancies.

CGEN-855 is a peptide agonist of the FPRL1 GPCR receptor, predicted by Compugen s GPCR peptide ligand discovery platform. Using *in vivo* models of acute myocardial ischemia-reperfusion injury, CGEN-855 and CGEN-855B (a shorter derivative of CGEN-855) displayed significant dose-dependent inhibition of acute inflammation in mice. Furthermore, these peptides provided cardioprotection against reperfusion injury, as manifested by reduction in infarct size and troponin I plasma secretion. Taken together, our results indicate that these novel FPRL1 agonists may be a useful therapeutic agent for control of inflammatory diseases, and for the treatment of myocardial infarct and subsequent heart failure. This protein is currently under a research and option for license agreement with Merck Serono.

CGEN-856 and CGEN-857 are MAS GPCR peptide agonists, predicted by Compugen s GPCR peptide ligand discovery platform. Sub-nanomolar concentrations of both peptides exhibit vasodilation of aortic rings which is dependent on the presence of endothelium and NO synthesis, and is mediated through the Mas receptor. *In vivo* studies using models of cardiac remodeling, induced by isoproterenol or ischemia-reperfusion, indicate that these peptides provide significant cardioprotection, as manifested by reduction in cardiac fibrosis and cardiomyocytes hypertrophy.

CGEN-25007 peptide was discovered using Compugen s proprietary discovery platform, namely, the DAC Blockers platform, which is designed for the prediction and selection of peptides that block proteins from adopting their disease-associated conformations. CGEN-25007 corresponds to a segment of the gp96 protein, a heat shock protein which, triggers both the innate and adaptive arms of the immune system and is involved in inflammatory responses. gp96 is the unique and obligatory master chaperone for toll-like receptors (TLRs). CGEN-25007 exhibited anti-inflammatory activity in human PBMCs and murine splenocytes challenged with various inflammatory stimuli. Moreover, using an animal model of endotoxemia CGEN-25007 exhibited anti-inflammatory activities. The above results suggest that CGEN-25007 may be developed as an anti inflammatory drug.

CGEN-25008 peptide is a Clusterin antagonist and was discovered using Compugen s DAC Blockers platform. *In vitro*, CGEN-25008 evoked growth inhibition of various tumor cell lines such as non-small cell lung cancer (A549), colorectal adenocarcinoma (HT29), breast cancer (MCF7) and prostate cancer (PC3). In a xenograft animal model of lung cancer, CGEN-25008 was shown to induce up to 25% greater reduction in tumor size when given together with Taxol, in comparison to mice treated with Taxol only. The peptide is currently under assessment in additional cancer models.

CGEN-25009-4 is an agonist peptide of the LGR7 receptor that was predicted 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. *In vitro*CGEN 25009-4 peptide showed an apparent cAMP related effect on CHO-K1 cells transiently transfected with LGR7. The peptide is currently under assessment in an animal model of lung fibrosis.

In addition to the above, Compugen has discovered and initially validated the following therapeutic product candidates that, as of now, will be pursued only if and when a collaboration partner is identified or currently on-going negotiations with a potential partner are successfully concluded:

CGEN-54 is a splice variant of the MCP-1 chemokine- a possible drug candidate for inflammatory conditions and cancer, discovered using Compugen s Splice Variant based Therapeutic Proteins discovery platform. Inhibition of CCR2, the receptor for MCP-1, has been shown to have an anti-inflammatory effect. Compugen s variant of MCP-1 is an inhibitor of the CCR2 axis. This protein reduces thioglycollate-induced recruitment of macrophages to the peritoneum in a dose dependent manner.

CGEN-34 is a splice variant of the peptide ANP, also discovered using Compugen s Splice Variant based Therapeutic Proteins discovery platform. This variant is a possible agonist of ANP and is likely to share similar biological properties as ANP, and therefore it could potentially affect the cardiovascular system.

CGEN-50001 is a small molecule drug which has been used in the clinic for many years for CNS related indications and has a well established safety profile. Using Compugen s New Indications Discovery Platform, it was predicted that CGEN-50001 would likely strengthen the effect of anti-breast cancer drugs which target the estrogen receptor, such as Tamoxifen. *In vitro* and *in vivo* validation studies performed by Compugen, supported this computational prediction and demonstrated that administration of CGEN-50001 was shown to have certain anti-cancer effects. This suggests a new therapeutic indication for a known drug for breast cancer patients.

DIAGNOSTIC ACTIVITIES

As with our therapeutic discovery efforts, our diagnostic discovery platforms incorporate the prediction of a large number of possible candidates for the area of interest and then selection of those with apparent higher probabilities. After these steps, we make an assessment, based on the set of criteria set forth below, which candidates to seek to experimentally validate. A candidate is validated by testing it on a set of clinical samples derived from healthy and diseased individuals. Validation may be accomplished using molecular biology techniques and antibody development and immunoassay-based detection assays. Our principal selection criteria to assess whether or not to validate a candidate are:

Novelty and freedom to operate. We select molecules that we predict to be novel and have found to not be covered by third party patents or known patent applications.

Differentiation between disease/pathological and healthy conditions. We select molecules that we predict to be present in different quantities in diseased/pathological and healthy human tissues that allow the development of a test having a diagnostic value.

Biological characteristics. We select molecules that have biological features, which make them suitable for diagnostic detection. For example, in the case of immunoassay-based diagnostic biomarkers, we select molecules that are predicted to be secreted into the blood stream and therefore possibly detectable in blood.

The specific interest of our collaboration partner. The selection of a candidate for validation is often done together with our collaboration partner, based on their diagnostic areas of interest and the specific candidate.

Our initial diagnostic product candidates include:

CGEN-144 is a variant of the Troponin I biomarker for diagnosing acute myocardial infarction. The Troponin I variant is one of a group of putative cancer and cardiovascular biomarkers previously predicted by Compugen s immunoassay biomarker computational discovery platform. The molecule has subsequently been experimentally verified to be differentially expressed as a serum protein in myocardial infarction patients compared to healthy individuals. In accordance with a recently signed agreement with Compugen, Biosite will develop and select antibodies that bind to CGEN-144 to determine assay sensitivity and specificity in various disease states and as an addition to the current commercial Troponin I test.

CGEN-438 is a splice variant peptide of the delta-like protein 3 precursor (DLL3). Using a test developed by Compugen to detect CGEN-438 in serum, the blood levels of the peptide were measured in both lung cancer patients and healthy individuals. The CGEN-438 concentrations detected in serum samples of Small Cell Lung Cancer (SCLC) patients were higher than those detected in the controls, demonstrating the potential of CGEN-438 to become a diagnostic biomarker for SCLC. CGEN-438 was also found to be expressed, to a large extent, in certain Non-SCLC serum samples. As such, CGEN-438 may too be used in a biomarker combination test for the diagnosis of Non-SCLC.

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CGEN-6 is a splice variant form of the Gastrin Releasing Peptide Precursor (GRP) gene. Today, there are three known isoforms of the wild type GRP protein, all of which are secreted proteins. CGEN-6 is a novel secreted splice variant protein with a unique combination of amino acids derived from various known GRP isoforms. This protein is detectable at higher protein concentrations in serum samples of SCLC patients as compared to control healthy samples. The control samples showing positive CGEN-6 values were different than those showing positive CGEN-438 values, implying that a combination test using both markers may enhance assay specificity.

CGEN-327 is splice variant of the HE4 (Human Epididymis Protein 4) gene, which is a known biomarker for ovarian cancer. The computationally discovered transcript was found to exist in human ovarian tissues and presented an over expression profile in ovarian cancer tissues as compared to healthy and benign ovaries. These results suggest that this splice variant may serve as a novel molecular biomarker candidate for the diagnosis of ovarian cancer.

Our diagnostic discovery platforms together with our related technologies and their experimentally validated novel output have already formed the basis for discovery-based collaborations with:

Siemens Healthcare Diagnostics; Ortho-Clinical Diagnostics, a Johnson & Johnson company; Iverness Medical (formerly Biosite Inc.); Mayo Clinic; Teva Pharmaceutical Industries Ltd.; and F. Hoffmann-La Roche Ltd.

We expect that in 2009 and 2010, as was the case in 2008, we will continue to validate and develop products based on discoveries from our immunoassay based diagnostic discovery platforms. We also intend, together with our licensees and collaborators, to continue our discovery activities, which are currently targeted at cancer, cardiovascular and inflammatory diseases, as well as drug-related toxicities, and also extend these activities to other disease areas.

Selected Existing Customers and Collaborators

We have to date entered into a number of agreements under which we have out-licensed novel therapeutic and diagnostic product candidates. We intend to continue to license out our novel therapeutic and diagnostic product candidates, to pharmaceutical, biotechnology and diagnostics companies and in addition, to enter into broader discovery on demand collaborations. We seek to generate revenues from these collaborations primarily in the form of certain predetermined developmental stages and milestones, and royalties from the sales of the drugs and/or diagnostics applications. Under all of the agreements that we have entered to date, and as is customary in the industry, successful outcomes with respect to such development or commercial milestones are not guaranteed nor required of us or of our partner company.

In November, 2008, we announced signing a collaboration agreement with Merck KGaA, covering CGEN-855, a Compugen-discovered novel peptide targeting the FPRL1 G-protein coupled receptor. The agreement covers additional research to be conducted by Compugen and provides Merck Serono with an option to exclusively license the novel peptide for worldwide development and commercialization.

On April 1, 2008, we announced the discovery and experimental verification of CGEN-144, a novel variant of Troponin I biomarker, and the signing of a research and license option agreement with Biosite, Inc. We simultaneously announced that a patent for this biomarker was granted by the U.S. Patent and Trademark Office.

In January 2008, we announced our entry into a collaboration with Merck & Co., Inc., targeted at predicting peptides likely to activate selected G-protein coupled receptors (GPCRs) and validating their agonistic activity. The agreement includes an option to Merck for exclusive worldwide licenses for such peptides—on a peptide by peptide basis—covering the development and commercialization of therapeutic products.

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In December 2007, we announced our entry into a collaborative discovery and license agreement with Roche for the identification and validation of genetic variations for the prediction of response to drugs used for the treatment of rheumatoid arthritis. We plan to utilize our proprietary GeneVa platform to analyze DNA samples and clinical data provided by Roche in order to identify and validate non-SNP (single nucleotide polymorphism) genetic variations that could serve as biomarkers for the predicted response or non-response to selected drugs for treatment of rheumatoid arthritis.

In August 2007, we announced the discovery of CGEN-54, a Compugen-discovered novel splice variant of MCP-1 and our entry into a research and license option agreement with Teva Pharmaceutical Industries, Ltd. relating to it. Teva has informed Compugen that it will not be exercising its option and therefore we are seeking other collaboration partners for this molecule.

In April 2007, we announced our entry into an agreement with Mayo Clinic targeted at discovering and validating novel biomarkers for diagnosing the presence of unstable atherosclerotic plaques in coronary artery disease and cerebrovascular disease. Coronary artery disease (CAD) is the leading cause of death in the developed world. Vulnerable plaque is regarded as the most common cause of complications from CAD and can lead to increased incidence of heart attack and stroke. We expect to utilize our unique discovery platform approach to predict and validate biomarkers related to active atherosclerotic disease, incorporating data derived from biological materials provided by Mayo Clinic, as well as our own proprietary expression and clinical data.

In March 2007, we announced our entry into an agreement with Biosite Inc. for the development and commercialization of immunoassay diagnostic products. Entering into this agreement was an expansion of our immunoassay diagnostic collaboration with Biosite, which we entered into in June 2005. Under this agreement, Compugen and Biosite expanded the number of potential diagnostic biomarkers that we made available to Biosite for selection. Furthermore, our existing collaboration was expanded to cover additional diagnostic fields such as cardiovascular and oncology. As with the initial agreement, we are entitled to receive milestone payments and royalties from the sale of any products emerging from the collaboration.

In January 2007, we announced our entry into a collaborative agreement with Medarex, Inc. to develop novel monoclonal antibody-based therapeutics for oncology and autoimmune diseases. Under the terms of the agreement, we will share with Medarex discovery, development and commercialization responsibilities on antibody-based therapeutics resulting from the collaboration, and share revenues generated from the sale of such therapeutic products. Under the collaboration, we are utilizing our proprietary antibody-target discovery platform to identify novel drug targets. Medarex plans to develop fully human antibodies against these targets using its proprietary system for developing human antibodies. The collaboration also provides that we may independently pursue diagnostic applications involving certain antibodies and targets.

In January 2007, we also announced our entry into an agreement with Teva Pharmaceutical Industries to collaborate on a project for the discovery of biomarkers for the detection of drug toxicity in preclinical stages of the drug development process. The initial focus of the collaboration was on biomarkers for the early detection of potential nephrotoxicity (being toxicity to kidney cells). We granted Teva a license to use the discovered markers for research and development activities while retaining commercialization rights for licensing to other companies, as well as rights for internal use. Under the collaboration, we utilized our proprietary computational tools, discovery platforms and nucleic acid testing technologies for the purpose of predicting and validating toxicity biomarkers. Our integrated analysis incorporated data derived from biological samples collected by Teva in a preclinical study designed specifically for this project, as well as our proprietary expression and clinical data.

We currently coordinate a consortium funded by the European 6th Framework as part of a three year collaborative project, which commenced on January 1, 2006 and which was extended to June 30, 2009. In addition, we participate as a partner in an additional research consortia under the European Union s & Framework Program. The grants we receive from these projects do not bear any repayment provisions or royalties. In our role as the coordinator of one of these projects, we receive the consortium funds from the European Commission for distribution to the consortium members pursuant to the agreement.

In June 2005, we announced our entry into a collaboration with Ortho-Clinical Diagnostics, Inc, a Johnson & Johnson company, or OCD, for the development and commercialization of immunoassay based diagnostic products that are based on the output of our diagnostic discovery platforms. The terms of this agreement allow OCD to select up to nine diagnostic biomarkers which we will then collaborate on the initial clinical validation of the selected biomarkers. Under the agreement, successfully validated biomarkers will be developed into products and commercialized by OCD. In exchange, we will receive milestone payments and license fees for each commercialized biomarker, in addition to revenue-based royalties. We applied together with OCD for a grant from the Israel-U.S. Bi-national Industrial Research and Development Foundation for contribution to our research and development expenditures under our joint collaborative project. For more information about this grant, see Item 5. Operating and Financial Review and Prospects; Research and Development, Patents and Licenses .

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In June 2005, we also announced our entry into a collaboration with Biosite, for the development and commercialization of immunoassay based diagnostic products based on the output of our diagnostic discovery platforms. Under the terms of this agreement, we granted to Biosite an exclusive license in the diagnostic field to use certain of our targets for immunoassay based diagnostic applications. In return for this grant, we are entitled to receive milestone payments and royalties from the sales of each diagnostic product emerging from the collaboration.

In August 2004, we entered into a broad pipeline discovery-based collaboration with Diagnostic Product Corporation, a division of Siemens Healthcare Diagnostics (DPC) for the development and commercialization of certain diagnostic products based on the output of our diagnostic discovery platforms. The terms of this agreement allow DPC to develop and commercialize immunoassay and nucleic-acid based diagnostic

products that are based on candidate biomarkers that we already discovered, as well as additional candidates that may arise out of the collaboration. We are entitled to receive milestone payments and royalties from the sales of each diagnostic product emerging from the collaboration. In February 2006, we entered into an expansion agreement with DPC under which we agreed to collaborate in relation to up to an additional five diagnostic product candidates. The terms of the expansion agreement entitle DPC to acquire a license to candidates that Compugen validates using serum samples to be supplied by DPC, in consideration for an option and milestone payments that are in excess of the analogous payments under the original agreement.

Our Strategy

Our mission is to be the world leader in the discovery and licensing of product candidates to the drug and diagnostic industries under milestone and revenue sharing agreements. Our increasing inventory of powerful and proprietary discovery platforms is enabling the predictive discovery—field after field—of numerous therapeutic and diagnostic product candidates. These discovery platforms are based on our decade-long focus on the predictive understanding of important biological phenomena at the molecular level.

To date, we have commenced implementing this strategy through (i) the successful development and validation of the predictive capabilities of our ten discovery platforms, (ii) the discovery of numerous product candidates in several diagnostic and therapeutic areas that were first predicted and selected *in silico* and then initially validated *in vitro* and/or *in vivo* in the laboratory and (iii) the signing of collaboration and license agreements with Roche, Siemens Healthcare Diagnostics, Inc., Ortho-Clinical Diagnostics (a Johnson & Johnson company), Biosite, Teva Pharmacuetical Industries, Merck & Co. and Medarex, Inc. for the development and commercialization of novel diagnostic and therapeutic products.

Our current inventory of validated discovery platforms is as follows:

Splice Variant based Therapeutic Proteins
Protein Disease Markers
Nucleic-Acid Disease Markers
Monoclonal Antibody Targets
Nucleic-Acid Preclinical Toxicity Markers
Non-SNP Drug Response Markers
GPCR Therapeutic Peptide Ligands
New Indications
Disease-Associated Conformation Blocker
Viral Peptides Discovery

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.

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Keddem experienced recurring losses from operations and had accumulated a deficit of approximately \$2,917,000 at December 31, 2006. In August 2007, we announced the suspension of 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, Compugen 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. .

Subsidiary 27

Significant Investment

Evogene Ltd.

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, including a three year Computational Tools License to certain existing Compugen computational biology knowhow, including LEADS, to Evogene Ltd, a newly formed corporation in exchange for 1,640,000 ordinary shares of Evogene, representing 82% of the company s initial capital. Evogene Ltd. issued 360,000 ordinary shares representing 18% of the company s initial capital to the two founding scientists, who previously had directed the agbio division at Compugen.

On August 1, 2004, the Computational Tools License was extended for two additional years, until December 31, 2007, in consideration of the issuance to Compugen of 350,000 ordinary shares of Evogene. During these two years we were obligated to provide to Evogene limited support services for no additional consideration. In August 2006, we entered into a Software License Agreement with Evogene, under which we agreed to grant Evogene a license to certain software which supports the LEADS technology licensed under the Computational Tools License Agreement. In consideration for the grant of the license, Evogene issued to us 40,000 ordinary shares during 2006 and an additional 20,000 ordinary shares during 2008. In May 2007 we entered into a further extension, under which we agreed to grant Evogene a license to certain software until December 31, 2014. In consideration, Evogene paid us \$150,000 and issued to us 100,000 Evogene ordinary shares.

In February, 2006 Evogene entered into an equity investment agreement with certain investors for \$7 million of which approximately \$2 million had originally been received by Evogene as a bridge loan in January 2005 but was converted into equity pursuant to the terms of the equity investment agreement. We did not participate in this financing round.

In June, 2007, Evogene completed an initial public offering on the Tel Aviv Stock Exchange. The company sold units consisting of ordinary shares, Series 1 warrants and Series 2 warrants. In total, 3,800,000 shares, 3,900,000 Series 1 warrants and 3,400,000 Series 2 warrants were sold in the offering. In addition, existing shareholders exercised warrants for approximately 2,000,000 ordinary shares, bringing the total new capital raised to approximately \$8 million. We did not participate in this public offering. In August 2008, Evogene entered into a five year research and development collaboration with Monsanto Company focused on identifying key plant genes related to yield, environmental stress and fertilizer utilization. At such time, Monsanto purchased an \$18 million equity stake in Evogene and agreed to purchase an additional \$12 million in the future, subject to certain Evogene diligence requirements.

In August 2008, Evogene granted to us 30,000 options to purchase ordinary shares subject to the terms of the Evogene Share Option Plan (2002)". Each of Evogene s directors was entitled to such options in consideration for their service as a director. Mr. Eli Zangvil, Compugen s representative on Evogene s board of directors, instructed that these options be issued directly to Compugen and not to him personally.

As a result of the above financings and other transactions, as of December 31, 2008, we held 2,150,000 Evogene shares, with the ability to vote 9.0% of Evogene share capital and 30,000 options to purchase ordinary shares of Evogene.

The investment in Evogene was historically accounted for in accordance with APB 18, The Equity Method of Accounting for Investments in Common Stock. Through February 2006, when Evogene completed a major finance round, we accounted for the investment under the equity method. The finance round resulted in our holdings being diluted to below 20% of Evogene s outstanding stock. We cannot exercise significant influence over operating and financial policies of Evogene and the carrying amount of the investment is currently classified and accounted for as available-for-sale marketable securities in accordance with Statement of Financial Accounting Standard No. 115, Accounting for Certain Investments in Debt and Equity Securities (SFAS 115). Securities available-for-sale are carried at fair value, with the recognized gains and losses reported as a separate component of stockholders equity under accumulated other comprehensive income in the consolidated balance sheet.

For more information on our holdings in Evogene, see below Organizational Structure in this Item 4. See also Note 1b and Note 2e to our 2008 consolidated financial statements.

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Sales, Marketing and Business Development

Since our incorporation in 1993, we have devoted most of our capital and human resources to obtaining deeper and predictive understandings of important life processes at the molecular level and utilizing these understandings as well as our extensive and growing base of proprietary computational biology systems, tools and platforms, to substantially improve important aspects of drug and diagnostic product discovery. In recent years, these efforts have focused on the development of field-specific discovery platforms and the prediction, selection and initial validation of numerous drug and diagnostic candidates. Therefore, our principal sales, marketing and business development efforts currently involve licensing or other forms of collaborations with biotech, pharmaceutical and diagnostic companies for the development and commercialization of our product candidates and our discovery platforms. 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.

Our business model is primarily based on receiving revenues in the form of fees, milestones, and royalties and other revenue sharing payments from licensees and co-development partners. Therefore, current revenues remain insignificant. Revenues for the year ended December 31, 2008 were \$338,000, most of which were in Israel. The approximate geographical breakdown of our revenues for the year ended December 31, 2008 was 12% in North America and 88% in Israel. For the year ended December 31, 2007, all of our revenues were in North America.

In 2008, in the United States, we had a business development presence in Rockville, Maryland, which operations will be suspended in 2009.

Raw Materials

We use a large range of raw materials in our research. For our research and discovery activities, we use biological databases such as databases of ESTs, which are short nucleotide sequences that code for the expression of partial mRNA, databases on DNA sequences gene expression databases, including from microarrays, databases which link proteins to diseases, protein interaction pathway databases and databases that match drugs with their respective targets. We also use a large range of biological reagents such as cell growth media, enzymes, antibodies as well as human tissue samples and cell lines for our therapeutics and diagnostic validation activities.

We rely on the quality and integrity of the raw materials that we use. We have encountered circumstances in which various biological reagents that we acquired were found to be of poor quality. Such circumstances may delay and even interfere with our discovery and development efforts.

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, the copyrights subsisting in our software and related documentation and in our patents and patent applications. 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 inventions that relate to our therapeutic and diagnostic potential product candidates as well as certain components of our technology platforms. We currently have a total of 12 registered patents of which 11 are registered in the United States and one is registered in Australia. We also have 137 pending patent applications, which include 48 patent applications that have been filed in the United States (four of which have to date been allowed for issuance) and seven applications that have been filed under the Patent Cooperation Treaty for which we have not yet designated the countries of filing. We intend to continue to apply for patent protection for our therapeutic and diagnostic inventions, including for related inventions such as antibodies and peptides.

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 commercialize them. Our competitors include pharmaceutical, biotechnology and diagnostic companies, academic and research institutions and governmental and other publicly funded agencies.

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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 diagnostic product candidates, we potentially face competition from any company to the extent that it discovers or develops diagnostic products, and especially, if its products are aimed at diagnosing cancers and cardiovascular diseases as well as toxicity biomarkers. These companies include companies such as Abbott and Bayer as well as diaDexus, Inc., and Celera Diagnostics. In respect of our therapeutic product candidates, our potential competitors comprise companies that develop or commercialize therapeutic protein or peptides such as Amgen, Inc., Wyeth Pharmaceuticals, Inc., Genentech, Inc., Xencor, Inc. and Zymogenetics, Inc.

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 also have the facilities for safe use and handling of radioactive materials, although these facilities are currently not in use. 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.

Organizational Structure

We incorporated our wholly-owned U.S. subsidiary, Compugen USA, Inc., in 1997 and in January 2008, we established a wholly-owned UK Subsidiary, Compugen UK Ltd. However, neither of these subsidiaries is anticipated to have any significant operations during 2009. Our research and discovery, business development and commercial operations are all carried out primarily from our Tel Aviv offices.

As of December 31, 2008, we held 2,150,000 ordinary shares in Evogene, with the power to vote approximately 9.0% of the outstanding share capital of Evogene Ltd. For more information on Evogene, see Item 7. Major Shareholders and Related Party Transactions; Related Party Transactions; Evogene Ltd. Evogene was not consolidated into our consolidated financial statements for the years 2007 and 2008. For accounting treatment of our investment in Evogene, see Note 1b and Note 2e to our 2008 consolidated financial statements.

Property, Plant and Equipment

We lease an aggregate of approximately 28,200 square feet of office and biology laboratory facilities in Tel Aviv, Israel. The lease in Tel Aviv expires in December 2009. We have begun the process of negotiating the renewal of this lease. We sublease approximately 4,825 square feet of this space to another entity.

We believe that the facilities that we currently lease are sufficient for at least the next 12 months, subject to renewal of the lease.

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 for the years ended December 31, 2008, 2007, and 2006 respectively, 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 co-development agreements. Our business is focused on developing and using our growing inventory of field-focused discovery platforms to predict, select and validate therapeutic drug candidates and diagnostic biomarker candidates. Our initial discovery platforms have focused mainly on cancer, cardiovascular and immune-related diseases. Prediction and selection of product candidates is largely computer based utilizing one or more of our discovery platforms, while validation of the resulting candidates is accomplished through the use of various *in vitro* and *in vivo* experimental techniques. Product candidate discoveries are pursued either (i) by us independently and/or (ii) under various forms of collaborations with partner companies whereby our discovery platforms or other discovery capabilities are targeted to areas of interest of such partner companies (discovery on demand collaborations). In general, we seek to license out our discoveries at an early stage with the goal of maximizing the number of our product candidates in development by our licensing and co-development partners under various types of milestone and revenue sharing agreements.

We are focused on and are structured along the lines of our three principal activities: (i) research and discovery; (ii) therapeutics; and (iii) diagnostics.

Research and Discovery: Our research and discovery activities consist of two primary and overlapping components. The first is our continuing effort to obtain deeper predictive understandings of important biological phenomena at the molecular level through the analysis of biological data of various types such as DNA or RNA sequences, gene expression data, protein network data, data related to drugs in development and drugs already being commercialized. The second utilizes these understandings, along with field specific information, to develop field focused discovery platforms. Both components require the use of our extensive base of proprietary algorithms and other computational biology systems and tools.

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Therapeutics and Diagnostics: In each field, we seek to discover novel candidates that answer unmet medical needs and that may be suitable for further development as therapeutic or diagnostic products. Although each of our platforms is field- or disease-specific, our general approach is not, and can be utilized for numerous applications, both therapeutic and/or diagnostic. At any given time, our discovery efforts may span a number of candidates which may become diagnostic or therapeutic products. Our therapeutic candidates include either novel peptides or proteins that are themselves drug candidates, targets to potential drugs, like specific receptors of cancer cells, or known small molecules with new indications. Our diagnostic biomarkers indicate, among others, 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. Our business model is based on entering into commercial collaborations with leading diagnostic, biotechnology and pharmaceutical companies, as well as academic and medical institutions, which have the ability to support and fund discovery activities as well as commercial development of our early-stage discoveries and candidates from pre-clinical stages for therapeutics or from initial clinical validation for diagnostics. These collaborations can be based on either product candidates previously discovered by Compugen, or product candidate—discovery on demand—in areas of interest to our partner, or combinations of the two. We intend to generate revenues through milestone and royalty based license agreements and joint development agreements with these collaborators. We have entered into several such agreements, but we have not yet recognized significant revenues from these agreements.

OPERATING RESULTS

Overview

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, 2008, we had an accumulated deficit of \$157 million. We expect to continue to incur net losses in the foreseeable future.

In late 2004, we began to focus a 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 2006, approximately \$12 million in 2007 and approximately \$13 million in 2008. We expect to 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, milestones and royalties, and other revenue sharing payments from licensees and co-development partners of drug and diagnostic products based on Compugen made or enabled product candidate discoveries. To date, we have received only minimal such revenues.

Our net research and development expenses are expected to account for more than 65% of our total operating expenses.

Our net research and development expenses are expected to be our major operating expense in 2009, accounting for more than 65% of our expected total 2009 operating expenses. Our research and development expenses have always comprised a significant portion of our expenses. In 2005, we increased the resources allocated to research and development in order to advance our internal therapeutic and diagnostic biomarkers pipeline. In 2006, as a result of our December 2005 re-organization, our operating expenses and research and development expenses decreased. In 2007 and 2008, these expenses continued to be, and we expect will continue to be, our largest operating expense.

Liquidity and Capital Resources.

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 \$1.9 million in 2006, approximately \$2.3 million in 2007, and approximately \$1.7 million in 2008 in connection with the grant of share options. These expenses are attributable to options that we granted to our employees and directors and to those of our consultants to whom we granted stock options at the fair market value known on the date of grant. These amounts are amortized over the vesting periods of the individual share options. Based on options granted through December 31, 2008 and on our ordinary share price on that date, we estimate that our future amortization of compensation expenses will be approximately \$1.6 million in 2009, \$550,000 in 2010, and \$410,000 in 2011. Since January 2006, accounting standard SFAS 123R applied. Standard SFAS 123R determines the accounting treatment for share-based compensation to employees. The above future amortization of compensation expense estimates for 2009, 2010 and 2011 reflect the application of this standard. These estimates are 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 21 of our 2008 consolidated financial statements.

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Impact of Currency Fluctuations

We hold most of our cash, cash equivalents deposits and marketable securities 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

Overview 32

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. The Company entered into derivative instrument arrangements to hedge a portion of its anticipated New Israeli Shekel (NIS) payroll and certain operation expenses. None of these derivative instrument arrangements qualify for hedge accounting under Financial Accounting Standard Board Statement No. 133, Accounting for Derivative Instruments and Hedging Activities (SFAS 133). They are recognized on the balance sheet at their fair value, with changes in the fair value reflected in the statements of operations under financial income/expenses.

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, contingencies, taxation and investment in affiliates.

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

The Company generated revenues from collaboration research agreement, under which the Company delivered a number of peptides and performed related services to a customer and from license fees for software products, as follows:

The Company recognized revenues from the collaboration agreement in accordance with SAB 104 Revenue recognition and EITF No. 00-21, Revenue Arrangements with Multiple Deliverables .

Maintenance and support revenues included in these arrangements are deferred and recognized on a straight-line basis over the term of the maintenance and support agreement. The VSOE of fair value of the undelivered elements (maintenance, support and professional services) is determined based on the price charged for the undelivered element when sold separately or based on renewal rate.

Revenues from software license recognized in accordance with Statement of Position (SOP) 97-2, Software Revenue Recognition (SOP 97-2), 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. SOP 97-2 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. SOP 98-9 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 SOP 97-2, as amended, are satisfied.

Revenues from software license fees that involve customization of the Company s software to customer specific specifications, development services, integration and installation are recognized in accordance with SOP 81-1 Accounting for Performance of Construction-Type and Certain Production-Type Contracts (SOP 81-1), using contract accounting on a percentage of completion method, over the period from signing of the license through to customer acceptance in accordance with the Input Method. After delivery, if uncertainty exists about customer acceptance of the software, license revenue is not recognized until acceptance. For the years ended December 31, 2008, 2007 and 2006 the Company recognized revenues in accordance with SOP 81-1 in the amount of \$0,\$0 and \$200, respectively.

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

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FASB 123R

On January 1, 2006, we adopted Statement of Financial Accounting Standards No. 123 (revised 2004), Share-Based Payment, or SFAS 123(R), which requires the measurement and recognition of compensation expense based on estimated grant date fair values for all share-based payment awards made to employees and directors. For periods beginning in fiscal 2006, SFAS 123(R) supersedes Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, or APB 25, under which we previously accounted for our share based awards granted to employees and directors, for periods beginning in fiscal 2006. In March 2005, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 107, or SAB 107, relating to SFAS 123(R). We have applied the provisions of SAB 107 in our adoption of SFAS 123(R).

SFAS 123(R) 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. Prior to the adoption of SFAS 123(R), we accounted for equity-based awards to employees and directors using the intrinsic value method in accordance with APB 25 as allowed under Statement of Financial Accounting Standards No. 123, Accounting for Stock-Based Compensation , or SFAS 123.

We adopted SFAS 123(R) using the modified prospective transition method, which requires the application of the accounting standard starting from January 1, 2006, the first day of our fiscal year 2006. Under that transition method, compensation cost recognized in 2006 included compensation cost for all share-based payments that were ultimately expected to vest (a) based on the grant date fair value estimated in accordance with the original provisions of SFAS 123 for awards granted prior to, but not yet vested as of January 1, 2006, and (b) based on the grant-date fair value estimated in accordance with the provisions of SFAS 123(R) for awards granted subsequent to January 1, 2006. Results for prior periods have not been restated.

We selected the Black-Scholes 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. SFAS 123(R) 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 approximately 87% of our options will actually vest, and therefore we have applied an annual forfeiture rate of 13% for all options that are not vested, but exercisable as of December 31, 2008.

The computation of expected volatility is based on realized historical stock price volatility of peer data 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 simplified method, using the average of vesting and the contractual term of the option.

Share-based compensation expense recognized under SFAS 123(R) was \$1.9 million, \$2.3 million and \$1.7 million for the years ended December 31, 2006, 2007 and 2008, respectively.

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 Financial Accounting Standards No. 5, Accounting for Contingencies (SFAS No. 5). SFAS No. 5 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.

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Accounting for Uncertainty in Income Taxes

In July 2006, the FASB issued Interpretation, or FIN, No. 48, Accounting for Uncertainty in Income Taxes An Interpretation of FASB Statement No. 109, or FIN 48. FIN 48 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 SFAS 109. Income tax positions must meet a more-likely-than-not recognition threshold at the effective date to be recognized upon the adoption of FIN 48 and in subsequent periods. We adopted FIN 48 effective January 1, 2007 and the provisions of FIN 48 have been applied to all income tax positions commencing from that date.

Recently Issued Accounting Standards

In December 2007, the FASB issued SFAS No. 141R, Business Combinations, or SFAS 141R SFAS 141R establishes principles and requirements for how the acquirer of a business recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree. The statement also provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statement to evaluate the nature and financial effects of the business combination.

SFAS 141R is effective for financial statements issued for fiscal years beginning after December 15, 2008. We expect that SFAS No. 141R will have an impact on our consolidated financial statements beginning in 2009, but the nature and magnitude of the specific effects will depend upon the nature, terms and size of the acquisitions we consummate after the effective date. The Company does not expect the adoption of SFAS No. 141R will have a significant impact on its consolidated financial statements.

In December 2007, the FASB issued SFAS 160, Non-controlling Interests in Consolidated Financial Statements. SFAS 160 amends Accounting Research Bulletin 51, Consolidated Financial Statements, to establish accounting and reporting standards for the non-controlling interest in a subsidiary and for the deconsolidation of a subsidiary. It also clarifies that a non-controlling interest in a subsidiary is an ownership interest in the consolidated entity that should be reported as equity in the consolidated financial statements. SFAS 160 also changes the way the consolidated income statement is presented by requiring consolidated net income to be reported at amounts that include the amounts attributable to both the parent and the non-controlling interest. It also requires disclosure, on the face of the consolidated statement of income, of the amounts of consolidated net income attributable to the parent and to the non-controlling interest. SFAS 160 requires that a parent recognize a gain or loss in net income when a subsidiary is deconsolidated and requires expanded disclosures in the consolidated financial statements that clearly identify and distinguish between the interests of the parent owners and the interests of the non-controlling owners of a subsidiary. SFAS 160 is effective for fiscal periods, and interim periods within those fiscal years, beginning on or after December 15, 2008. The Company does not expect the adoption of SFAS 160 will have a significant impact on its consolidated financial statements.

In February 2008, the FASB issued FASB Staff Position (FSP) FAS No. 157-2, Effective Date of FASB Statement No. 157 (FSP 157-2), to delay the effective date of FASB Statement 157 for one year for certain nonfinancial assets and nonfinancial liabilities, excluding those that are recognized or disclosed in financial statements at fair value on a recurring basis (that is, at least annually). For purposes of applying the FSP 157-2, nonfinancial assets and nonfinancial liabilities include all assets and liabilities other than those meeting the definition of a financial asset or a financial liability in FASB Statement 159. FSP 157-2 defers the effective date of Statement 157 to fiscal years beginning after November 15, 2008, and interim periods within those fiscal years for items within the scope of this FSP 157-2. The Company does not expect the adoption of FSP 157-2 to have a material impact on its financial position, results of operations or cash flows.

In March 2008, the FASB issued Statement of Financial Accounting Standards (SFAS) No. 161, Disclosures about Derivative Instruments and Hedging Activities—an amendment of FASB Statement No. 133 (SFAS 161). SFAS 161 changes the disclosure requirements for derivative instruments and hedging activities. SFAS 161 requires entities to provide enhanced disclosures about how and why an entity uses derivative instruments; how derivative instruments and related hedged items are accounted for under SFAS 133 and its related interpretations; and how derivative instruments and related hedged items affect an entity—s financial position, financial performance and cash flows. This statement is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008. The Company is currently evaluating the impact, if any, that SFAS 161 may have on its financial condition and results of operations. The adoption of SFAS 161 will change its disclosures for derivative instruments and hedging activities beginning the fiscal year 2009.

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In May 2008, the FASB issued SFAS No. 162, The Hierarchy of Generally Accepted Accounting Principles . SFAS 162 identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements of nongovernmental entities that are presented in conformity with generally accepted accounting principles in the United States. It is effective 60 days following the SEC s approval of the Public Company Accounting Oversight Board amendments to AU Section 411, The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principles . The Company is currently evaluating the impact of SFAS No. 162 on its financial statements, and the adoption of this statement is not expected to have a material effect on the Company s financial statements.

Results of Operations

Selected Financial Data

The following discussion and analysis is based on and should be read in connection 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.

Vear	ended	December	31.

6 887 670) 17 719 6777 — 213 — 2004)	\$ 180 - 9,740 (1,354) 8,386 1,324 2,930	\$	338 7 9,289 (544) 8,745 996 3,502
6 787 670) 117 719 6777	9,740 (1,354) 8,386 1,324 2,930	\$	7 9,289 (544) 8,745 996
6 787 670) 117 719 6777	9,740 (1,354) 8,386 1,324 2,930	\$	7 9,289 (544) 8,745 996
787 670) 17 719 677 ——————————————————————————————————	(1,354) 8,386 1,324 2,930		9,289 (544) 8,745 996
570) 17 719 377 ——————————————————————————————————	(1,354) 8,386 1,324 2,930	_	(544) 8,745 996
213	8,386 1,324 2,930	_	8,745 996
219	1,324 2,930	_	996
213	2,930	_	
213			3,502
	12,640		
04)			13,243
	(12,460)		(12,912)
055	1,002		401
)49)	(11,458)		(12,511)
-	32		-
)49)	(11,490)		(12,511)
771)	(624)		(16)
)20) \$	\$ (12,114)	\$	(12,527)
44) \$	\$ (0.41)	\$	(0.44)
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.47) \$	\$ (0.43)	\$	(0.44)
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).	0.03)	(0.02) (0.47) \$ (0.43)	0.03) \$ (0.02) \$ 0.47) \$ (0.43) \$

^(*) Includes stock based compensation - see Note 10 of our 2008 consolidated financial statements

As	οf	Decem	her	31.
AS	OI.	Decem	ner.	ы.

	 2006	2007			2008
		(US\$ in thousands)			
Consolidated Balance Sheet Data:					
Cash and cash equivalents, short-term deposits, marketable securities and cash held in favor of					
consortium partners (1)	\$ 25,102	\$	15,200	\$	7,48
Investment in Evogene	-		510		3,85
Long-term deposits and marketable securities	1,000		2,080		
Trade receivables and Other accounts receivable	834		990		76
Assets related to discontinued operations (1)	702		54		
Total assets	30,856		21,666		14,24
Accumulated deficit	(132,754)		(144,926)		(157,45
Total shareholders' equity	25,738		17,285		10,00

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

Years Ended December 31, 2008 and 2007

Revenues. Revenues increased by 88% from approximately \$180,000 in 2007 to approximately \$338,000 in 2008. The increase in revenues was primarily due to license fees related to the extension of the LEADS license agreement with Evogene. In 2007, we began to recognize revenues based on the new business model which we began to implement in 2004. Revenues based on the new business model were \$180,000 and \$40,000 for the years 2007 and 2008, respectively. This decrease is due to the fact that we have not yet met all of the conditions required to recognize certain revenue from our existing collaborations.

Cost of Revenues. Cost of revenues attributable to certain research services we provided, were not significant in either 2007 or 2008 and totaled approximately \$7,000 for 2008.

Research and Development Expenses, Net. Research and development expenses, net increased by 4%, to approximately \$8.7 million for 2008 from approximately \$8.4 million for 2007. The increase in our research and development expenses, net, was primarily due to the decrease in governmental and other research and development grants that we received, which are subtracted from research and development expenses when calculating research and development expenses, net. Research and development expenses, net, as a percentage of total operating expenses, remained 66% in 2007 and 2008.

Research and development expenses, decreased by 4%, to approximately \$9.3 million for 2008 from approximately \$9.7 million for 2007. The decrease in our research and development expenses was primarily due to a decrease in research and development payroll expenses of approximately \$420,000.

Selling and Marketing Expenses. Selling and marketing expenses decreased by 25% to approximately \$996,000 for 2008 from approximately \$1.3 million for 2007. This decrease was due to a reduction in the number of our personnel and related expenses. Selling and marketing expenses, as a percentage of total operating expenses, decreased from 10.5% in 2007 to 7.5% in 2008.

General and Administrative Expenses. General and administrative expenses increased by 20% to approximately \$3.5 million for 2008 from approximately \$2.9 million for 2007. This was primarily due to an increase of approximately \$132,000 of stock based compensation expenses in 2008 compared to 2007 and approximately \$163,000 of accrued compensation expenses as a result of an executive termination. General and administrative expenses, as a percentage of total operating expenses, increased from 23% in 2007 to 26% in 2008.

Financial Income, Net. Financial income, net, decreased by 60% to approximately \$348,000 for 2008, from approximately \$868,000 for 2007. This decrease was primarily due to a decrease of cash and cash related account balances, and to lower interest rates on deposits and marketable securities.

Years Ended December 31, 2007 and 2006

Revenues. We have shifted our business model away from the sale of our software products in order to concentrate on identifying therapeutic and diagnostic candidates. As a result, revenues decreased by 16% from approximately \$215,000 in 2006 to approximately \$180,000 in 2007. The decrease in revenues was anticipated and primarily due to decreased sales of Genecarta and related software products and the shift away from commercializing our computational software products. In 2007, we began to recognize revenues based on the new business model which we began to implement in 2004. The \$180,000 of revenue in 2007 was based entirely on our new business model while only \$10,000 of the \$215,000 of 2006 revenue was based on our new business model.

Cost of Revenues. Cost of revenues decreased by 100% to approximately \$0 for 2007 from approximately \$6,000 for 2006. This decrease was primarily due to our cessation of commercializing our legacy products and the fact that we have not yet generated any substantial revenues from sales of product candidates.

Research and Development Expenses, Net. Research and development expenses, net decreased by 8%, to approximately \$8.4 million for 2007 from approximately \$9.1 million for 2006. The decrease in our research and development expenses, net, was primarily due to both a reduction in the number of our personnel and related expenses which followed the re-organization that we underwent in December 2005. This decrease was partially offset by the decrease in governmental and other research and development grants that we received, which are subtracted from research and development expenses when calculating research and development expenses, net. Research and development expenses, net, as a percentage of total operating expenses, decreased from 69% in 2006 to 66% in 2007.

Selling and Marketing Expenses. Selling and marketing expenses decreased by 23% to approximately \$1.3 million for 2007 from approximately \$1.7 million for 2006. This decrease was due to a reduction in the number of our personnel and related expenses. Selling and marketing expenses, as a percentage of total operating expenses, decreased from 13.0% in 2006 to 10.5% in 2007.

General and Administrative Expenses. General and administrative expenses increased by 23% to approximately \$2.9 million for 2007 from approximately \$2.3 million for 2006. This was primarily due to an increase of approximately \$294,000 of stock based compensation expenses in 2007 compared to 2006 and due to an increase of approximately \$90,000 in corporate communication expenses. General and administrative expenses, as a percentage of total operating expenses, increased from 18% in 2006 to 23% in 2007.

Financial Income, Net. Financial income, net, increased by less than one percent to approximately \$868,000 for 2007 from approximately \$866,000 for 2006.

Governmental Policies that Materially Affected or Could Materially Affect Our Operations

Until January 2007, Israeli companies were generally subject to income tax at the corporate tax rate of 31%. In January 2007, this was reduced to 29%, and was further reduced to 27% in 2008. The tax rate will be further reduced to 26% in 2009 and to 25% in 2010 and thereafter. However, several investment programs at our facility in Tel Aviv have been granted Approved 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. The period of tax benefits with respect to our approved 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 benefit

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As of December 31, 2008, we had not generated any taxable income. As of December 31, 2008, our net operating loss carry-forwards for Israeli tax purposes amounted to approximately \$116 million. Under Israeli law, these net operating losses may be carried forward indefinitely and offset against certain future taxable income.

At December 31, 2008, 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 2028.

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 2008, similar to 2007, our sources of cash came from:

Our IPO which took place in August 2000

Revenues generated from milestone payments under existing agreements

Revenues generated from sales

Governmental and other sources of grants

The exercise of employee stock options

Financing 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 \$9.5 million in 2006, approximately \$8.2 million in 2007 and approximately \$10.1 million in 2008. These amounts were used to fund our net losses for these periods, adjusted for non-cash expenses and changes in operating assets and liabilities including compensation relating to stock options issued to employees. The sources of cash that we used in our activities through 2008 were the cash held in the bank, revenues, governmental and other grants that we received, and financing income. We expect that our sources of cash for 2009 will be similar. Our subsidiaries are not restricted from transferring funds to Compugen, although we do not expect any cash flow from them.

Net Cash Provided By Investing Activities

Net cash provided by investing activities consists of proceeds from redemption of deposits and marketable securities, net of purchases of marketable securities and net of purchases of property and equipment. Net cash generated by investing activities was approximately \$7.0 million in 2006, approximately \$3.3 million in 2007 and approximately \$13.1 in 2008. The increase in net cash provided by investing activities in 2008 was mainly attributable to proceeds from redemption of deposits and marketable securities.

Net Cash Provided by Financing Activities

Our net cash provided by financing activities was approximately \$665,000 in 2006, approximately \$295,000 in 2007 and approximately \$295,000 in 2008. The principal sources of cash provided by financing activities in 2008 were proceeds that we received from the issuance of ordinary shares as result of the exercise of stock options by employees.

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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 consist of cash and cash equivalents as well as short-term and long-term deposits and marketable securities. As of December 31, 2008, we had cash and cash equivalents, and short-term deposits and marketable securities of approximately \$7.2 million, not including the market value of the 2,150,000 shares of Evogene ordinary shares owned by the Company. Therefore, the Board of Directors of the Company has adopted a contingency plan that includes various cost reduction measures which, in the absence of obtaining the required additional funding (including but not limited to, from the sale of Evogene shares or otherwise) would enable the Company to continue to support its operations through December 31, 2009. The debt and equity markets have been extremely difficult in the past year, particularly since the dramatic downturn in the global financial sector. It is unclear whether, and the extent to which, equity and debt resources can be accessed by us in the near future. Should we be able to raise necessary funds, we cannot be certain that these funds would be furnished on acceptable terms. Any equity financing would likely materially dilute the interests of any current shareholder.

RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES

We invest heavily in research and development. Research and development expenses, net, were our major operating expenses, representing more than 65% of the total operating expenses for each of 2006, 2007 and 2008. Our research and development expenses, net, were approximately \$8.7 million in 2008, compared with \$8.4 million in 2007, and approximately \$9.1 million in 2006. As of December 31, 2008, 41 of our employees were engaged in research and development on a full-time basis. This represents approximately 72% of our entire work force.

We focus our research efforts on the development of our discovery platforms and related technologies, and the discovery and validation of our therapeutic proteins and diagnostic biomarker product candidates. We expect that in 2009 our research and development expenses net will continue to be our major operating expense, representing more than 65% of our total operating expenses.

We believe that our future success will depend, in large part on our ability to continue to expand our inventory of proprietary algorithms, predictive models and discovery platforms which provide opportunities for the discovery of promising therapeutic and diagnostic product candidates by us and pursuant to discovery on demand collaborations.

Research and Development Grants

We participate 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, by the Israel-U.S. Bi-national Industrial Research and Development Foundation (BIRD) and by the European Community, under the European Union s & Framework Program. We received grants and other forms of consideration from the OCS, BIRD and European Union of approximately \$1.7 million in 2006, approximately \$1.4 million in 2007 and approximately \$544,000 in 2008. We have applied for additional grants from the OCS for research, technological development and demonstration activities for 2009.

The Office of the Chief Scientist

We received 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, 2008, our contingent accrued obligation for royalties, based on royalty-bearing government grants, net of royalties already paid, totaled approximately \$5.5 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 does not apply to the commercialization through licensing of product candidates that we develop by using or based on our OCS-funded technologies or discoveries. In such circumstances, the OCS will take into account the proposal that OCS-funded projects will have an overseas manufacturing component. Under applicable Israeli law, Israeli government consent is required to transfer to Israeli third parties technologies developed under projects, which the government funded. 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. These restrictions do not apply to exports from Israel or the sale of products developed with these technologies.

In addition to the OCS programs described above, in the past, we participated in a number of research consortia in which Israeli research institutions and high technology companies were members. These types of consortia are devoted to the development of generic technologies in the fields of biotechnology, agricultural biotechnology and pharmaceuticals. No royalties are payable to the OCS with respect to this funding.

In general, any member of a consortium that develops technology in the framework of a consortium retains the intellectual property rights to this technology and all other consortium members have the right to use and implement this technology without having to pay royalties to the developing consortium member, provided that the technology will not be transferred under any circumstances to any entity outside of the consortium.

Bi-national Industrial Research and Development Foundation (BIRD)

In 2005 we entered into a tripartite cooperation and project funding agreement with OCD and BIRD based on BIRD s standard terms and conditions. The term of the funded collaborative project is four years. BIRD s standard terms and conditions require its grantees to repay 100% of the grant monies, provided that repayment is made within the first year following expiry of the term of the project. For every year of delay in these repayments, the amounts to be repaid incrementally increase up to an amount of 150% in the fifth year following expiry of the term of the project. All amounts to be repaid to BIRD are subject to us generating revenue from commercializing the funded project and linked to the U.S. consumer price index.

The Governments of Israel and of the United States are each entitled to a non-exclusive, royalty-free license to make and use any products generated from the funded project. Otherwise, neither we nor OCD are subject to any restrictions relating to the ownership or commercialization of the intellectual property and products generated from the funded collaborative project.

As of December 31, 2008, our contingent accrued obligation for royalties, based on royalty-bearing BIRD grant, totaled approximately \$500,000 payable out of future net sales of products that were developed under the BIRD-funded project.

The European Union s 6th Framework Program

In 2005 we joined two research consortia under the European Union s 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 are the appointed coordinator of one of these research consortia, which means that we are the consortium s primary contact with the European Community for the purpose of managing the consortium s progress. This includes 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 receive, 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.

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.

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The pharmaceutical industry appears to be open to in-licensing potential therapeutic products atvery early stages of their development

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, we expect there to be more interest in entering into agreements with us for further development and commercialization of our early stage product candidates. For more information, see Item 3. Risk Factors . We may not

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TREND INFORMATION

be able to find collaborators or licensees that will agree to license our discoveries at an early stage, and if we do not find these collaborators or licensees, our business will likely be materially harmed.

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 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 of development, 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, 2008, and should be read together with the accompanying comments that follow.

Payments due by period (US\$ in thousands)

	 (C5\$ in thousands)							
	Total		Less than 1 year	1-3 years		3-5 years		
Operating Lease Obligations	\$ 364	\$	364	_		-		
Accrued Severance Pay Reflected on								
our Balance Sheet	\$ 1,723	\$	475	-	\$	1,248		
Unrecognized Tax Benefit	\$ 58		-	-	\$	58		
Total	\$ 2,145	\$	839		\$	1,306		

The above table does not include royalties that we may be required to pay to the OCS or BIRD. 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 and BIRD, if at all, since these amounts and times depend on our ability to sell products based on the OCS and BIRD-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.

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ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

Directors and Senior Management

The following sets forth information with respect to our directors and executive officers as of February 15, 2009:

Name	Age	Positions

Name Age Positions

Prof. Yair Aharonowitz	68 Director ⁽¹⁾	
Prof. Ruth Arnon	74 Director	
Martin S. Gerstel	President, Chief Executive Officer, and Director	
Dov Hershberg	69 Director and Chairman of the Board	
Alex Kotzer	63 Director	
Arie Ovadia, Ph.D	68 Director ⁽¹⁾	
Prof. Joshua Shemer	60 Director ⁽¹⁾	
Dikla Czaczkes Axselbrad	35 Chief Financial Officer	
Yossi Cohen, M.D.	37 Chief Technology Officer	
Anat Cohen-Dayag, Ph.D	42 Vice President, Research and Development	
Eli Zangvil, M.D.	45 Vice President, Business Development	
Dorit Amitay	41 Director of Human Resources	

⁽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, Chairman of the Department of Microbiology and Biotechnology and Chairman of the Institute of Biotechnology. He served as a member of the TAU Executive Council and is a member of the TAU Board of Governors. 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; he 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 Vice President. She is an elected member of the European Molecular Biology Organization, served as President of the European Federation of Immunological Societies and as Secretary-General of the International Union of Immunological Societies. Her awards include the Robert Koch Prize in Medical Sciences, Spain s Jiminez Diaz Memorial Prize, France s Legion of Honor, the Hadassah World Organization s Women of Distinction Award, the Wolf Prize for Medicine, the Rothschild Prize for Biology, the Israel Prize and she received an Honorary Doctorate from Ben-Gurion University. Prof. Arnon is the Advisor for Science to the President of Israel and the incumbent of the Paul Ehrlich Chair in Immunochemistry.

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Martin S. Gerstel has served as Compugen s President and Chief Executive Officer since January 2009. From 1997 through 2009, Mr. Gerstel was chairman of the board of directors of Compugen. Prior to 1994, Mr. Gerstel was co-chairman and CEO of ALZA Corporation, which he helped found in 1968. Mr. Gerstel is also the Chairman of Evogene Ltd. and co-founder and co-chairman of Itamar Medical, serves as a director of Yissum Ltd., Yeda Ltd. and the Foundation for the U.S. Foundation for the National Medals of Science and Technology. He is a member of the Board of Governors and the Executive Committee of the Weizmann Institute of Science and the Board of Governors of The Hebrew University of Jerusalem, and is an advisor to the Burrill Life Science Funds and the board of the Israel-U.S. BiNational Industrial

Research and Development (BIRD) Foundation. Mr. Gerstel holds a B.S. from Yale University and an MBA from Stanford University.

Dov Hershberg was appointed as a member of the board of directors and the chairman on February 9, 2009, prior to which he served as a consultant to the board of directors and Assistant Chief Executive Officer. Mr. Hershberg managed the BIRD Foundation for nine years, until mid 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. 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 is currently the CEO of Steba Biotech N.V. In addition he is a member of the Board of Directors of Maccabi Healthcare Services and Chairman of Assuta Medical Centers. 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. He is Director of the Executive Masters Program in Health Sciences at the Multi-disciplinary Program for Emergency & Disaster Management and 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. He is a graduate of the Hebrew University and Hadassah School of Medicine and Board certified in Internal Medicine in 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.

Yossi Cohen, M.D. joined Compugen in 2001, holding several senior research and development positions until 2005 at which time he was appointed as Compugen s Vice President, Research and Discovery, a position he held until January 2007. From January 2007 until December 2008, Dr. Cohen served as Compugen s Vice President, Research and Development, at which point he assumed his current position, Chief Technology Officer. Dr. Cohen s diverse prior experience includes serving as a physician in the Israel Defense Forces and holding various software development positions in the Israeli hi-tech industry. Dr. Cohen has a B.S. in Electrical and Electronics Engineering from the Tel-Aviv University, Israel, and an M.S. in Neurobiology and an M.D., both from the Hebrew University, Israel.

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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 assumed her current position, Vice President, Research and Development. 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 Orgenic. Dr. Cohen-Dayag holds a B.Sc. in Biology from the Ben-Gurion University, Israel, and an M.S. in Chemical Immunology and a Ph.D. in Cellular Biology, both from the Weizmann Institute of Science, Israel.

Eli Zangvil, M.D. joined Compugen in November 2006 as Vice President Business Development. He previously served as Chief Operating Officer of UltraShape headquartered in Tel-Aviv, Israel, and prior to that was Head of Medical Services of the Israeli Defence Force s Central Command where he held the rank of Colonel. Dr. Zangvil holds an M.D. from the Hebrew University of Jerusalem and specializes in internal medicine, and a Master s Degree in Health Administration from the Tel-Aviv University, Israel.

Dorit Amitay joined Compugen in 2000. She held several positions in Compugen s Human Resources division until 2006 at which time she was appointed as Compugen s Director of Human Resources. Prior to joining Compugen, she was a Placement Manager at an agency for recruitment and placement in the hi-tech industry. Ms. Amitay holds a BA from the Faculty of Humanities and Social Sciences and an MBA in Business Administration, both from the Ben-Gurion University, Israel. In addition, Ms. Amitay holds a Certificate in Group Facilitation from the Kibbutzim College of Education, Tel Aviv.

Compensation

The aggregate compensation paid by us and by our wholly-owned subsidiaries to all persons who served as directors or senior management for the year 2008 (12 persons) was approximately \$1.7 million. This amount includes approximately \$217,000 set aside or accrued to provide pension, severance, retirement or similar benefits. These amounts also include compensation paid or accrued to our former CFO for a portion of 2008.

During 2008, we granted a total of 890,000 options to purchase ordinary shares to our directors and senior management, as a group. These options are exercisable at a range of between \$0.50 and \$2.44 per share, and generally expire ten years after their respective dates of grant. As of December 31, 2008, there were a total of 3,476,655 outstanding options to purchase ordinary shares that were granted to our directors and senior management, and 260,000 outstanding options that were granted to the members of our scientific advisory board. As of January 15, 2009, the number of outstanding options to purchase ordinary shares decreased by 750,000 representing the number of options waived as of such date by Martin Gerstel.

All members of our board of directors who are not our employees or consultants are reimbursed for their expenses for each meeting attended and are eligible to receive options to purchase ordinary shares under our share option plans. The aggregate amount paid to all of our non-employee directors for the year ended December 31, 2008 was approximately \$93,000. Members of our scientific advisory board received cash compensation in 2008 of approximately \$20,000 and were not granted any further options.

On September 24, 2008, the shareholders of the Company approved the issuance of 15,000 ordinary shares to our then presiding Chief Executive Officer, Alex Kotzer. See Grant to the Company s Former Chief Executive Officer and Director in this Item 6 below.

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. 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.

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Compensation 45

Board Practices

Election of Directors and Terms of Office

Our board of directors consisted of six members as at December 31, 2008, including our chairman of the board (Martin Gerstel) and chief executive officer (Alex Kotzer). Other than our three external directors, our directors are elected by an ordinary resolution at the annual general meeting of our shareholders. As of January 1, 2009, Martin Gerstel assumed the position of chief executive officer and resigned as chairman of the board. On February 9, 2009 the Board of Directors nominated Dov Hershberg as a director and in addition appointed him chairman of the board pursuant to the Articles of Association of the Company, all until the next annual general meeting of the shareholders. Therefore, as of February 9, 2009, our board of directors consisted of seven members, including our chairman (Dov Hershberg) and chief executive officer (Martin Gerstel).

Unless they resign before the end of their term or are removed in accordance with our Articles of Association and the provisions of the Israeli Companies Law, all our directors, other than our external directors, will serve as directors until our next annual general meeting of 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 2010.

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 or that person is relative, partner, employer or any entity under the person is control, has or had, on or within the two years preceding the date of that person is appointment to serve as an external director, had any affiliation with the company or any entity controlling, controlled by or under common control with the company. The term affiliation includes:

an employment relationship;

a business or professional relationship maintained on a regular basis;

control; and

service as an office holder.

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. 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 must possess a high level of understanding in business matters, to the extent that they are able to read and understand financial statements in depth and to comment on the manner in which financial data is presented. 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.

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Board Practices 46

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

the majority of shares voted at the meeting, including at least one-third of the shares held by non-controlling shareholders 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 shareholders voted against the election of the director does not exceed one percent of the aggregate voting rights in the company.

The initial term of an external director is three years and may be extended for an additional three years term. After such additional three year term, their term of service can be renewed for additional periods of up to three years and provided that the audit committee and the board of directors confirms that, in light of the external director s expertise and special contribution to the work of the board of directors and its committees, the reelection for such additional period(s) is beneficial to the company.

External directors may be removed only by the same percentage of shareholders as is required for their election, or by a court, and then only if the external directors cease to meet the statutory qualifications for their appointment or if they violate their duty of loyalty to the company. 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.

Professor Yair Aharonowitz, Dr. Arie Ovadia and Professor Joshua Shemer currently serve as our external directors under Israeli law and as our independent directors under Nasdaq Global Marketplace 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 Global Market, a majority of our directors must be independent (as defined by the Nasdaq Global Marketplace Rules), and our audit committee must be comprised of at least three members, all of whom must be independent (subject to limited exceptions).

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 Global Marketplace Rules. The audit committee has adopted a charter.

The responsibilities of the audit committee include identifying irregularities in the management of the company s business and approving related party transactions as required by law. An audit committee must consist of at least three directors, including all of its external directors. The chairman of the board of directors, any director employed by or otherwise providing services to the company, and a controlling shareholder or any relative of a controlling shareholder, may not be a member of the audit committee. An audit committee may not approve an action or a transaction with a controlling shareholder, or with an office holder, unless at the time of approval two external directors are serving as members of the audit committee and at least one of the external directors was present at the meeting in which an approval was granted.

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 Compensation to Our Officers

The Companies Law prescribes that compensation to officers must be approved by a company s board of directors. In accordance with Article 52(d) of our Articles of Association, our board of directors authorized and empowered our chief executive officer to appoint office holders and determine their terms of employment, without our board of director s approval (unless such office holders also serve as a members of our board of directors). Compensation to our officers who serve as members of our board of directors require the approval of our audit committee, the board of directors and shareholders, as specified above.

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Board Practices 47

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 auditors, Ezra Yehudah Management Services Ltd., are not employees, affiliates or office holders of the company. They were appointed in 1999.

Scientific Advisory Board

Our scientific advisory board has convened when there has been a need to review or consult regarding our therapeutic results and future directions. At the advisory board meetings, we reviewed our ongoing and planned therapeutic projects, experimental results, as well as future discovery directions. We also consulted with its individual members when we needed advice within their specific expertise. Our scientific advisory board included:

Name	Affiliation
Nabil Hannah, Ph.D.	Former Executive Vice President, Research, Biogen Idec Inc. Member, National Academy of Sciences, USA
C. Ronald Kahn, M.D.	President and Director, Joslin Diabetes Center, Mary K. Iacocca Professor, Harvard Medical School
Joseph Schlessinger, Ph.D.	William H. Prusoff Professor and Chairman of the Department of Pharmacology of the Yale University School of Medicine; Member, National Academy of Sciences, USA
Arthur Weiss, M.D., Ph.D.	Ephraim P. Engleman Distinguished Professor of Rheumatology; Investigator, Howard Hughes Medical Institute, University of California, San Francisco; Member, National Academy of Sciences, USA

As of 2009, we have suspended the activities of our Scientific Advisory Board. We continue to consult with certain members of the Scientific Advisory Board under individual consulting agreements.

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 2006, 2007 and 2008:

	December 31, 2008	December 31, 2007	December 31, 2006
Research & Development			
Israel	40	52	64
United Kingdom	1		

Administration, Accounting and Operations

Employees 48

	December 31, 2008	December 31, 2007	December 31, 2006
Israel	12	17	21
Sales, Marketing, Business Development and Support			
Israel	3	2	0
USA	1	1	5
Total	57	72	90

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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, 2009, 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, 2009.

Beneficial Owner	Amount Owned	Percent of Class
Martin S. Gerstel (1)	1,802,568	6.3%
Alex Kotzer (2)	507,387	1.8%
Yossi Cohen (3)	352,225	1.2%
All directors and senior management as a group (4)	3,196,369	11.2%

⁽¹⁾ Includes 550,000 shares held by Shomar Corporation, an affiliate of Mr. Martin S. Gerstel, 718,333 shares held by Merrill Lynch IRA for Martin Gerstel, of which Martin Gerstel is the beneficiary, and 534,235 shares held in various brokerage accounts for the benefit of Martin Gerstel. Martin Gerstel provided Compugen with a letter irrevocably waiving his rights in and to options to purchase 750,000 shares that were outstanding as of January 15, 2009 and as such, these options are not included above. The Audit Committee and the Board of Directors have resolved to recommend to the shareholders to grant 500,000 new options to Mr. Gerstel at an exercise price of \$.50 per share. These 500,000 options would vest over a 4 year period beginning January 1, 2009. This new issuance of options is subject to the approval of the shareholders of the Company and as such, these options are not included above.

Share Ownership 49

⁽²⁾ Consists of 483,125 options that are exercisable within 60 days after January 31, 2009 and 24,262 ordinary shares.

⁽³⁾ Consists only of 352,225 options that are exercisable within 60 days after January 31, 2009.

⁽⁴⁾ Includes (i) a total of 2,662,180 shares and options that are beneficially owned by Martin S. Gerstel, Alex Kotzer and Yossi Cohen, as noted in the first three rows of the above table, and (ii) 534,189 options that are beneficially owned by other officers and directors. Does not include 200,000 options to Dov Hershberg which the Audit Committee and Board of Directors have recommended to the shareholders to approve, but which remains subject to shareholder approval.

Share Option Plans

We maintain one active share option plan for our and our subsidiaries employees, directors and consultants. In addition to the discussion below, see Note 11 of our 2008 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.

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Compugen Share Option Plan (1998)

The Compugen Share Option Plan (1998) enabled granting options for up to an aggregate of 2,500,000 ordinary shares to our and our subsidiaries employees, directors and consultants. No further options are being granted under this plan following an October 22, 2007 decision of the board of directors which resolved to cancel the then remaining available for grant options remaining under the 1998 Option Plan. As of December 31, 2008, vested options to purchase 53,500 ordinary shares granted at a weighted average exercise price of approximately \$1.71 per share, remained outstanding and unexercised under the plan. Options to purchase 1,660,774 ordinary shares under the plan were previously exercised at a weighted average exercise price of approximately \$1.56. If a grantee leaves his or her employment or other relationship with us, the term of his or her unexercised vested options expire 90 days later.

Compugen Share Option Plan (2000)

Under the Compugen Share Option Plan (2000), we may grant options for up to an aggregate of 10,191,511 ordinary shares to our and our subsidiaries—employees, directors and consultants. This total number automatically increases on January 1 of every year by the lesser of 1,500,000 shares or 4% of the total number of our then-outstanding shares, or such lower amount as shall be determined by the board of directors. The above balance includes the automatic increase of 1,140,498 options on January 1, 2009. 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, 2008, options to purchase 7,105,614 ordinary shares at a weighted average exercise price of approximately \$2.69 per share were granted under this plan but remain unexercised. Thus, the 750,000 options that Mr. Gerstel waived on January 15, 2009 were not deducted from the above number. Options to purchase 829,254 ordinary shares under the plan have previously been exercised at a weighted average exercise price of approximately \$3.49, and options to purchase 1,116,145 ordinary shares remain available for future grant as of December 31, 2008. As of January 15, 2009, the number of outstanding options to purchase ordinary shares remaining for future grant increased by 750,000 representing the number of options waived as of such date by Martin Gerstel.

In 2003, the terms of this plan were modified and we adopted an addendum to this plan to comply with changes in the Israeli tax law relating to the taxation of incentive options to Israeli resident employees. This addendum does not affect grantees that are not residents of Israel.

Our board of directors has elected the Capital Gains Track (as defined in Section 102(b)(2) of 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 grantee of options holding them and/or the shares issued upon their exercise 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 (currently up to 46%), 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

Share Ownership 50

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.

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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 price on the date of such grant as reported by The Nasdaq Global Market;
 - (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) 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 price on the date of such additional grant, as reported by The Nasdaq Global Market;
 - (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)".

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) 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 Former Chairman of the Board & New Chief Executive Officer and Director

On April 29, 2003, the Audit Committee, Board and Shareholders approved a grant to Mr. Gerstel of options to purchase 250,000 ordinary shares of the Company as consideration for his services as active Chairman of the Board. These options were granted under the general terms of the Company s Share Option Plan (2000)".

Share Ownership 51

On July 31, 2007, while serving as Chairman of the Board of the Company, Mr. Gerstel requested that his compensation be entirely in the form of stock options and none in cash, and furthermore, that each such option, even if vested, would not be exercisable if at the time of exercise, the Company s share price was less than \$10 per ordinary share. The Board of Directors, the Audit Committee and the Shareholders of the Company each approved the grant to Mr. Gerstel of 500,000 options under the general terms of the Compugen Share Option Plan (2000)".

On January 15, 2009, Mr. Gerstel provided Compugen with a letter irrevocably waiving his rights to all of the above options to purchase 750,000 shares that were outstanding as of January 15, 2009.

The Audit Committee and the Board of Directors have resolved to recommend to the shareholders to grant 500,000 new options to Mr. Gerstel for his services as our new Chief Executive Officer at an exercise price of \$.50 per share. These 500,000 options would vest over a 4 year period beginning January 1, 2009. This issuance of options is subject to the approval of the shareholders of the Company, which approval has not yet been granted.

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Grants to the Company s Former Chief Executive Officer and Director

For calendar year 2006, Mr. Kotzer requested that a portion of his gross salary (which was previously approved by the shareholders of the Company) be provided to him in the form of Ordinary Shares and that his salary be determined in New Israeli Shekels. Pursuant to this request and pursuant to the decision of the shareholders at the Annual General Meeting held on July 31, 2007, Mr. Kotzer s gross salary for 2006 was reduced by approximately \$28,000 and 9,262 ordinary shares were issued to Mr. Kotzer as consideration for the deduction of such amount from his 2006 salary. In addition the shareholders approved payment to Mr. Kotzer of a cash bonus, grossed up to cover the taxes payable by Mr. Kotzer as a result of issuing to him these shares.

For calendar year 2007, Mr. Kotzer requested that if any bonus was awarded to him, such bonus be provided to him in the form of ordinary shares plus cash in an amount equal to the amount required to cover the resulting taxes to be paid on such bonus. Pursuant to this request, and pursuant to the decision of the shareholders at the Annual General Meeting held on September 24, 2008, 15,000 ordinary shares were issued to Mr. Kotzer and Mr. Kotzer was paid a cash bonus, grossed up to cover the taxes payable to Mr. Kotzer as a result of issuing to him the Bonus Shares.

On October 22, 2007, the board of directors approved a grant of 150,000 options to Mr. Kotzer, which grant was approved by the shareholders at the Annual General Meeting of the shareholders held on September 24, 2008. The options to purchase 150,000 ordinary shares were granted under Compugen s 2000 Option Plan and each such Option is exercisable for one ordinary share at \$1.82 (the last closing price on NASDAQ known on the date of the Annual General Meeting). The options shall vest on a monthly basis over a period of 4 years starting from October 22, 2007.

Pursuant to the termination agreement signed with Mr. Kotzer, as of the first date after June 30, 2009 that no consulting agreement is in effect between Mr. Kotzer and Compugen, then after such date, any unvested options shall be terminated and the right to exercise any then vested options shall be extended to the later of (i) December 31, 2010, or (ii) 12 months following such date on which no consulting arrangement is in effect, subject to Shareholder approval.

Grants to our New Chairman of the Board

During 2008, 100,000 options were granted to Dov Hershberg as a senior manager and employee of the Company (prior to him being appointed as a director and as the Chairman of the Board). In recognition of his appointment as Chairman of the Board, the Audit Committee and Board of Directors have recommended to the shareholders to approve a grant of 200,000 additional options to Dov Hershberg. Such grant remains subject to shareholder approval. These 200,000 options to Mr. Hershberg, if granted, shall have an exercise price of \$.50 per share and would vest over a 4 year period beginning January 1, 2009.

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 January 31, 2009 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

Major Shareholders 52

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)	3,511,800	12.32%
Clal Industries & Investments Ltd. (2)	2,708,224	9.50%
Martin Gerstel (3)	1,802,568	6.32%
AXA Assurances I.A.R.D. Mutuelle (4)	1,517,207	5.32%

- (1) This disclosure is based on information disclosed by ClearBridge Advisors, LLC on Form 13G/A, filed with the SEC on February 10, 2009 reflecting holdings as of January 31, 2009.
- ⁽²⁾ Includes 10,526 shares held by Clal Industries & Investments Ltd. and 2,697,698 shares held by Clal Biotechnology Industries Ltd. Clal Biotechnology Industries Ltd and Clal Industries & Investments Ltd s address is 3 Azrieli Center, Tel Aviv 67023, Israel. This disclosure is based on information disclosed to us by Clal Biotechnology Industries Ltd. on February 25, 2009.

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- (3) Includes 550,000 shares held by Shomar Corporation, an affiliate of Mr. Martin S. Gerstel, 718,333 shares held by Merrill Lynch IRA for Martin Gerstel, of which Martin Gerstel is the beneficiary and 534,235 shares held in various brokerage accounts for the benefit of Martin Gerstel. This disclosure is based on information disclosed by Martin Gerstel on Form 13G filed with the SEC on December 16, 2008.
- (4) This disclosure is based on information disclosed by AXA Assurances I.A.R.D. Mutuelle on Form 13G/A, filed with the SEC on February 13, 2009 reflecting shareholdings as of December 31, 2008.

As of December 31, 2008, there were a total of 89 holders of record of our ordinary shares, of which 60 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.

Related Party Transactions

It is our policy to enter into transactions with related parties on terms that, on the whole, are no less favorable than those that would be available from unaffiliated parties. Based on our experience in the business in which we operate and the terms of our transactions with unaffiliated third parties, we believe that all of the transactions described below met our policy standards at the time they occurred.

Keddem Bioscience Ltd.

In 1999, we established a chemistry division to carry out a research program in which we integrated the disciplines of organic chemistry with physics and advanced computational technologies for the development of a method to substantially increase the predictability and success rates of small molecule drug discovery. On August 1, 2004, we transferred all of the assets and liabilities of this division to Keddem Bioscience Ltd., a wholly-owned subsidiary. In August 2007, we announced the suspension of Keddem's operations. In 2008, in order to continue to seek to maximize the value of Keddem's intellectual property, Compugen 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, see Item 4. Information on the Company; Subsidiary; Keddem Bioscience.

Evogene Ltd.

As of December 31, 2008, Martin Gerstel, at such time our chairman of the board, held approximately 2.7 % of Evogene s issued and outstanding share capital (approximately 2.14% of Evogene s share capital, on a fully-diluted basis), and the power to vote approximately 2.7% of Evogene s share capital. All such Evogene shares were acquired by Mr. Gerstel for cash in either the 2006 private placement or the 2007 public offering, in each case, at the same price and on the same terms and conditions as other investors in such financing rounds. In addition, since December 19, 2004, Martin Gerstel has served as the chairman of Evogene s board of directors, and in such capacity has been granted

options through December 31, 2008 for a total of 90,000 Evogene shares, at an average exercise price of \$1.389.

As of December 31, 2008, we held 2,150,000 Evogene shares, with the ability to vote 9.0% of Evogene share capital and 30,000 options to purchase ordinary shares of Evogene. For more information, see Item 4. Information on the Company; Significant Investment; Evogene Ltd.

For more information, see also Note 1b and Note 15 of our 2008 consolidated financial statements.

Directors Options

For a description of options granted to our directors, see "Item 6. Directors, Senior Management and Employees; Share Option Plans; Directors' Options."

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Compensation to our Former Chief Executive Officer

For a description of shares and options granted by the shareholders of the Company to Alex Kotzer, see Item 6. Directors, Senior Management and Employees; Share Option Plans; Directors Options; Grants to the Company s Former Chief Executive Officer and Director.

Mr. Kotzer s employment agreement contained a severance provision granting him a one-time payment equal to fifty percent (50%) of his annual salary in the event of termination under certain circumstances. On September 24, 2008, on recommendation of the Audit committee and the board of directors, the shareholders approved a broadening of the circumstances under which this provision would apply to include resignation or termination after December 31, 2008 or after the consummation of a financial or strategic transaction by the Company.

ITEM 8. FINANCIAL INFORMATION

Consolidated Statements and Other Financial Information

Our consolidated financial statements are included on pages F-1 through F-29 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 status, we would be liable for corporate tax on the amount distributed at the rate of up to 25%, which would be in addition to the tax payable by the dividend payee. See Note 14 of our 2008 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. 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 the Nasdaq Global Market, where our shares have been listed and traded under the symbol CGEN since our initial public offering in August, 2000. 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 the Nasdaq Global Market and on the Tel Aviv Stock Exchange:

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		Nasdaq				*TASE				
Last Six Calendar Months	<u>-</u> -	High		Low		High		Low		
January 2009	\$	1.000	\$	0.390	\$	0.793	\$	0.488		
December 2008	\$	0.600	\$	0.390	\$	0.597	\$	0.415		
November 2008	\$	1.400	\$	0.340	\$	1.362	\$	0.416		
October 2008	\$	1.820	\$	1.230	\$	1.768	\$	1.314		
September 2008	\$	2.080	\$	0.870	\$	2.134	\$	1.699		
August 2008	\$	2.340	\$	1.900	\$	2.327	\$	1.980		
Financial Quarters During the Past Two Full Fiscal Years										
Fourth Quarter 2008	\$	1.820	\$	0.340	\$	1.768	\$	0.415		
Third Quarter 2008	\$	2.700	\$	0.870	\$	2.508	\$	1.699		
Second Quarter 2008	\$	2.590	\$	1.960	\$	2.514	\$	1.898		
First Quarter 2008	\$	2.800	\$	1.600	\$	2.811	\$	1.613		
Fourth Quarter of 2007	\$	2.500	\$	1.560	\$	2.548	\$	1.641		
Third Quarter 2007	\$	3.160	\$	2.290	\$	3.012	\$	2.407		
Second Quarter 2007	\$	3.180	\$	2.580	\$	3.064	\$	2.570		
First Quarter 2007	\$	3.400	\$	2.370	\$	3.529	\$	2.424		
Last Five Full Financial Years										
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		
2005	\$	6.540	\$	2.460	\$	6.557	\$	2.578		
2004	\$	8.090	\$	3.180	\$	8.130	\$	3.042		

^{*}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, 1999 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. Also, the directors may not vote compensation to themselves or any members of their body without the approval of our audit committee 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, chief business manager, deputy general manager, vice general manager, executive vice president, vice president, other manager directly subordinate to the managing director 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 his personal affairs, avoiding any competition with the company, avoiding exploitation of any business opportunity of the company in order to reap personal gain for himself or others, and revealing to the company any information or documents relating to the company s affairs which the office holder has received due to his 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 board of directors, or a committee thereof or of persons to whom such power is delegated. Arrangements regarding the compensation of directors also require audit committee and shareholder approval, with the exception of compensation to external directors in the amounts specified in the regulations promulgated under the Companies Law, all as described in Item 6. Directors and Senior Management; Compensation.

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The Companies Law requires that an office holder promptly discloses 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 or shareholders prior to the meeting at which the transaction is to be discussed. In addition, if the transaction is an extraordinary transaction, as defined under the Companies Law, the office holder must also disclose any personal interest held by the office holder s spouse, siblings, parents, grandparents, descendants, spouse s descendants and the spouses of any of the foregoing, 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, director or general manager or in which he or she has the right to appoint at least one director or the general manager. 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.

In the case of a transaction which is not an extraordinary transaction, after the office holder complies with the above disclosure requirement, only board of directors approval is required unless the Articles of Association of the company provide otherwise. A transaction must not be adverse to the company s interest. 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 by the board of directors, and under specified circumstances, by a meeting of the shareholders. 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.

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, and the terms of compensation of a controlling shareholder who is an office holder, require the approval of the audit committee, the board of directors and the shareholders of the company.

The shareholders—approval must either include at least one-third of the disinterested shareholders who are present, in person or by proxy, at the meeting, or, alternatively, the total shareholdings of the disinterested shareholders who vote against the transaction must not represent more than one percent (1%) of the voting rights in the company.

In addition, a private placement of securities 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 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. However, subject to certain exceptions, shareholder approval will not be required if the aggregate number of shares issued pursuant to such private placement, assuming the exercise of all of the convertible securities into shares

being sold in such a private placement, comprises less than twenty percent (20%) of the voting rights in a company prior to the consummation of the private placement.

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. Shareholders voting powers includes their power to vote 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 interested party transactions.

In addition, any controlling shareholder, any shareholder who knows it can determine the outcome of a shareholders vote and any shareholder who, under our Articles of Association, can appoint or 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 this duty. 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, by the board of directors and by 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.

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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; Related Party Transactions above.

Rights Attached to Ordinary Shares

Our authorized share capital consists of 50,000,000 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.

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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 mattes 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.

Anti-Takeover Provisions under Israeli Law

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 such acquisition, the purchaser would become shareholder with over 25% 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 a shareholder with 50% or more of the voting rights in the company. These rules do not apply if the acquisition is made by way of a merger.

Finally, 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.

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.

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 exhaust 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 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.

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General Corporate Tax Structure

Generally, Israeli companies are subject to Corporate Tax on their taxable income. The applicable rates are as follows: in 2006 31%, in 2007 29%, in 2008 27%, in 2009 26% and in 2010 and thereafter 25%. However, the effective tax rate payable by a company which derives income from an approved 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, generally referred to as the Industry Encouragement Law, provides several tax benefits for industrial companies. An industrial company is defined as a company resident in Israel, at least 90% of the income of which in a given tax year exclusive of income from specified government loans, capital gains, interest and dividends, is derived from an industrial enterprise owned by it. 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 a number of corporate tax benefits, including:

deduction of purchase of know-how and patents and/or right to use a patent over an eight-year period;

the right to elect, under specified conditions, to file a consolidated tax return with additional related Israeli industrial companies and an industrial holding company;

accelerated depreciation rates on equipment and buildings; and

deductibility of expenses related to a public offering on the Tel Aviv Stock Exchange and as of January 1, 2003, on recognized stock markets outside of Israel, are deductible in equal amounts over three years.

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 may choose between these special depreciation rates and the depreciation rates available to the approved 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

Tax benefits prior the 2005 amendment

The Law for the Encouragement of Capital Investments, 1959, as amended (effective as of April 1, 2005) (the Investments Law), 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, be designated as an approved enterprise.

The Investments Law provides that an approved enterprise 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.

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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 corporate tax at the maximum rate of 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 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 subject to corporate tax in respect of the gross amount distributed, including any taxes thereon, at the rate which would have been applicable had it not elected the alternative package of benefits, generally 10%-25%, depending on the percentage of the company s ordinary shares held by foreign shareholders. 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. A foreign investors company 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 a foreign investors company 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

A 2005 amendment to the Investments Law included revisions to the criteria for investments qualified to receive tax benefits as an Approved Enterprise. The 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. However, a company that was granted benefits according to section 51 of the Investment Law would not be allowed to commence production for a period of 2 years from the company s previous year of commencement of benefits under the amended investment law.

Under the amended law, a company wishing to receive the tax benefits afforded under the law is required to select the tax year from which the period of benefits under the Investment Law are to commence by notifying the Israeli Tax Authority within 12 months of the end of that year.

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Our company will continue to enjoy its current tax benefits in accordance with the provisions of the Investment Law prior to its revision, but if our company is granted any new benefits in the future they will be subject to the provisions of the amended Investment Law. Therefore, the following discussion is a summary of the Investment Law prior to its amendment as well as the relevant changes contained in the new legislation.

The amendment simplifies the approval process: according the amendment, only Approved Enterprises receiving cash grants require the approval of the Investment Center. The Investment Center will be entitled, to approve such programs only until the end of 2007.

The Amendment does not apply to benefits included in any certificate of approval that was granted before the Amendment came into effect, which will remain subject to the provisions of the Investment Law as they were on the date of such approval.

Tax benefits are available under the Amendment to production facilities (or other eligible facilities), which are generally required to derive more than 25% of their business income from export (referred to as a Benefited Enterprise). In order to receive the tax benefits, the Amendment states that the company must make an investment in the Benefited Enterprise exceeding a certain percentage or a minimum amount specified in the Law. Such investment 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 is effective tax rate will be the result of a weighted combination of the applicable rates. In this case, the minimum investment required in order to qualify as a Benefited Enterprise is required to exceed a certain percentage or a minimum amount of the company is production assets before the expansion.

The duration of tax benefits is subject to a limitation of the earlier of 7 to 10 years from the Commencement Year, or 12 years from the first day of the Year of Election. 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:

Similar to the currently available alternative route, 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. 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; and

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.

Generally, a company that is Abundant in Foreign Investment (as defined in the Investments Law) is entitled to an extension of the benefits period by an additional five years, depending on the rate of its income that is derived in foreign currency.

The Amendment changes the definition of foreign investment in the Investments Law so that the definition now requires a minimal investment of NIS 5 million by foreign investors. Furthermore, such definition now also includes the purchase of shares of a company from another shareholder, provided that the company soutstanding and paid-up share capital exceeds NIS 5 million. Such changes to the aforementioned definition will take effect retroactively from 2003.

The Amendment will apply to approved enterprise programs in which the year of election under the Investments Law is 2004 or later, unless such programs received approval from the Investment Center on or prior to December 31, 2004, in which case the Amendment provides that terms and benefits included in any certificate of approval already granted will remain subject to the provisions of the law as they were on the date of such approval.

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Special Provisions Relating to Measurement of Taxable Income

Our company is taxed under the Income Tax Law (Inflationary Adjustments), 1985, generally referred to as the Inflationary Adjustments Law. The Inflationary Adjustments Law is highly complex and represents an attempt to overcome the problems presented to a traditional tax system by an economy undergoing rapid inflation. Its features, which are material to us, are summarized as follows:

Where a company s equity, as calculated under the Inflationary Adjustments Law, exceeds the depreciated cost of its fixed assets (as defined in the Inflationary Adjustments Law), a deduction from taxable income is permitted equal to the excess multiplied by the applicable annual rate of inflation. The maximum deduction permitted in any single tax year is 70% of taxable income, with the unused portion permitted to be carried forward, linked to the Israeli consumer price index. The unused portion that was carried forward may be deductible in full in the following year.

Where a company s depreciated cost of fixed assets exceeds its equity, then the excess multiplied by the applicable annual rate of inflation is added to taxable income. (hereinafter: Inflation supplement). Note, the inflation supplement will only be added to the corporate income but not to other incomes such as capital gains.

Subject to specified limitations, depreciation deductions on fixed assets and losses carried forward are adjusted for inflation based on the change in the consumer price index.

In the event that the Israeli consumer price index did not rise in a particular year by 3.0%, then the Israeli government may decide that some or all of the provisions of the Inflationary Adjustments Law shall not apply with respect to such fiscal year, or that the rate of increase of the Israeli consumer price index relating to such fiscal year shall be deemed to be 0%, and to make the adjustments required to be made as a result of such determination

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 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 gain is the excess of the total capital gain over the inflationary surplus.

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Generally, until the 2006 tax year, capital gains tax was imposed on Israeli resident individuals at a rate of 15% on real gains derived on or after January 1, 2003, from the sale of shares in, among others, Israeli companies publicly traded on Nasdaq or on a recognized stock exchange or regulated market in a country that has a treaty for the prevention of double taxation with Israel. This tax rate was contingent upon the shareholder not claiming a deduction for financing expenses in connection with such shares (in which case the gain was generally be taxed at a rate of 25%), and did not apply to: (i) the sale of shares to a relative (as defined in the Israeli Income Tax Ordinance); (ii) the sale of shares by dealers in securities; (iii) the sale of shares by shareholders that report in accordance with the Inflationary Adjustments Law (that were taxed at corporate tax rates for corporations and at marginal tax rates for individuals); or (iv) the sale of shares by shareholders who acquired their shares prior to an initial public offering (which shares may be subject to a different tax arrangement).

As of January 1, 2006, the tax rate applicable to capital gains derived from the sale of shares, whether listed on a stock market or not, is 20% for Israeli individuals, unless such shareholder claims a deduction for financing expenses in connection with such shares, in which case the gain will generally be taxed at a rate of 25%. Additionally, if such shareholder is considered a material shareholder at any time during the 12-month period preceding such sale, i.e., such shareholder holds directly or indirectly, including with others, at least 10% of any means of control in the company, the tax rate shall be 25%. Israeli companies are subject to the Corporate Tax rate on capital gains derived from the sale of shares, unless such companies were not subject to the Adjustments Law (or certain regulations) at the time of publication of the aforementioned amendment to the Tax Ordinance that came into effect on January 1, 2006, in which case the applicable tax rate is 25%. However, the foregoing tax rates do not apply to: (i) dealers in securities; and (ii) shareholders who acquired their shares prior to an initial public offering (which shares may be subject to a different tax arrangement).

The tax basis of shares acquired prior to January 1, 2003 will be determined in accordance with the average closing share price in the three trading days preceding January 1, 2003. However, a request may be made to the tax authorities to consider the actual adjusted cost of the shares as the tax basis if it is higher than such average price.

Non-Israeli residents are exempt from Israeli capital gains tax on any gains derived from the sale of shares of Israeli companies publicly traded on a recognized stock exchange or regulated market outside of Israel, provided however that such capital gains are not derived from a permanent establishment in Israel, such shareholders are not subject to the Adjustments Law, and such shareholders did not acquire their shares prior to an initial public offering. However, non-Israeli corporations will not be entitled to such exemption if an Israeli resident (i) has a controlling interest of 25% or more in such non-Israeli corporation, or (ii) is the beneficiary or is entitled to 25% or more of the revenues or profits of such non-Israeli corporation, whether directly or indirectly.

In some instances where our shareholders may be liable to Israeli tax on the sale of their ordinary shares, the payment of the consideration may be subject to the withholding of Israeli tax at the source.

Pursuant to 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 ordinary shares 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 Treaty U.S. Resident holds, directly or indirectly, shares representing 10% or more of our voting power

during any part of the 12-month period preceding such sale, exchange or disposition, subject to certain conditions, or (ii) the capital gains from such sale, exchange or disposition can be allocated to a permanent establishment 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, such Treaty U.S. Resident would be permitted to claim a credit for such taxes against the U.S. federal income tax imposed with respect to such 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.

Taxation of Non-Resident Holders of Shares

Non-residents of Israel are subject to income tax on income accrued or derived from sources in Israel. Such sources of income include passive income such as dividends, royalties and interest, as well as non-passive income from services rendered in Israel. On distributions of dividends other than bonus shares, or stock dividends, income tax is withheld at the source at the following rates: (i) for dividends distributed prior to January 1, 2006 25%; (ii) for dividends distributed on or after January 1, 2006 20%, or 25% for a shareholder that is considered a material shareholder at any time during the 12-month period preceding such distribution, unless a different rate is provided in a treaty between Israel and the shareholder s country of residence. Under the U.S.-Israel Tax Treaty, the maximum tax on dividends paid to a holder of ordinary shares who is a Treaty U.S. Resident is 25%. However, under the Investments Law, dividends generated by an Approved Enterprise (or Benefited Enterprise) are taxed at the rate of 15%. Furthermore, dividends not generated by an Approved Enterprise (or Benefited Enterprise) paid to a U.S. corporation holding at least 10% of our issued voting power during the part of the tax year which precedes the date of payment of the dividend and during the whole of its prior tax year, are generally taxed at a rate of 12.5%.

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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.

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 employee stock options or otherwise as compensation;

are real estate investment trusts or regulated investment companies;

own directly, indirectly or by attribution at least 10% of our voting power; or

have a functional currency that is not the U.S. dollar.

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

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

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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 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, 2010), 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. No dividend received by a U.S. holder will 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

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 exchange rate on the date of the distribution. 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 cannot exceed the pre-credit U.S. tax liability for the taxable year attributable to non-U.S. source taxable income.

A U.S. holder will be denied a foreign tax credit for non-U.S. income taxes withheld from a dividend received on the ordinary shares if (1) 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 (2) 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.

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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. A disposition of ordinary shares will be considered to occur on the trade date, regardless of the U.S. holder s method of accounting. 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, in the case of non-corporate U.S. holders, 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, 2010). Gain or loss recognized by a U.S. holder on a sale, exchange or other disposition of ordinary shares will generally be treated as U.S. source income for U.S. foreign tax credit purposes. The deductibility of a capital loss recognized on the sale, exchange or other disposition of ordinary shares may be subject to limitations.

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

Tax Consequences if We Are a Passive Foreign Investment Company

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

Based on our income, assets, activities and market capitalization, we do not believe that we were a PFIC for the taxable year ended December 31, 2008. However, there can be no assurances that the United States Internal Revenue Service (IRS) will not challenge this conclusion. There is a risk that we were a PFIC for the taxable years 2001, 2002 and 2003 as a result of our substantial cash position and the performance of our ordinary shares during those taxable years. If we were a PFIC during 2001, 2002 and 2003, U.S. holders who acquired or held our ordinary shares during those taxable years generally will be subject to the PFIC rules described below regardless of whether we were a PFIC for 2008. However, if we were not a PFIC for 2008, U.S. holders who acquired our ordinary shares in 2008 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. Furthermore, if the current price of our ordinary shares does not increase during 2009, there is a risk that we could be classified as a PFIC for 2009.

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 sholding 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 sholding 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.

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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, any gain or loss realized by such holder on the disposition of its ordinary shares held as a capital asset ordinarily would be capital gain or loss. The QEF election is made on a shareholder-by-shareholder basis, applies to all ordinary shares held or subsequently acquired by an electing U.S. holder and can be revoked only with the consent of the IRS.

As an alternative to making a QEF election, a U.S. holder of PFIC stock which is marketable stock (e.g., regularly traded on the Nasdaq Global Market) may in certain circumstances avoid certain of the tax consequences generally applicable to holders of stock in a PFIC by electing to mark the stock to market as of the beginning of such U.S. holder s holding period for the ordinary shares. As a result of such an election, in any taxable year that we are a PFIC, a U.S. holder would generally be required to report gain or loss to the extent of the difference between the fair market value of the ordinary shares at the end of the taxable year and such U.S. holder s tax basis in its ordinary shares at that time. Any gain under this computation, and any gain on an actual disposition of the ordinary shares, would be treated as ordinary income. Any loss under this computation, and any loss on an actual disposition of the ordinary shares, 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 generally would be capital loss. A U.S. holder s tax basis in its ordinary shares is adjusted annually for any gain or loss recognized under the mark-to-market election. There can be no assurances that there will be sufficient trading volume with respect to the ordinary shares for the ordinary shares to be considered regularly traded or that our ordinary shares will continue to trade on the Nasdaq Global Market. Accordingly, there are no assurances that the ordinary shares will be marketable stock for these purposes. As with a QEF election, a mark-to-market election is made on a shareholder-by-shareholder basis, applies to all ordinary shares held or subsequently acquired by an electing U.S. holder and can only he 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. 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 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 item is 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 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.

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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 withhelding 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 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 file periodic information with 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 and other provisions in 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 spublic 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.

ITEM 11. OUANTITATIVE 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, 2008, we had \$7.2 million in cash, cash equivalents, deposits and marketable securities. We 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 5 of our 2008 consolidated financial statements.

Foreign Currency Exchange Risk and Inflation

We hold most of our cash, cash equivalents deposits and marketable securities 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 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. The Company entered into derivative instrument arrangements to hedge a portion of its anticipated New Israeli Shekel (NIS) payroll and certain operation expenses. For more information, see Note 2q of our 2008 consolidated financial statements.

ITEM 12.	DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES
Not appli	cable.

PART II

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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 15T. 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 Securities Exchange Act of 1934 (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. Our Chief Executive Officer and Chief Financial Officer have also concluded that there were no significant changes in our internal controls or in other factors that could significantly affect the internal controls subsequent to that date of evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Management Annual Report on Internal Control over Financial Reporting

Our board of directors and audit committee are responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system was 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, we conducted an evaluation of the effectiveness of our internal control over financial reporting, as such term is defined under Rule 13a-15(f) and 15d-15(f) promulgated under the Exchange Act. In making this assessment, we 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.

Firm Report of the Registered Public Accounting Firm

This annual report does not include an attestation report of our registered public accounting firm assessing our internal control over financial reporting. Our management s report was not subject to attestation by our registered public accounting firm pursuant to current rules of the SEC that permit us to provide only the management s report in this annual report.

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Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the period covered by this 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 each of Prof. Yair Aharonowitz, Mr. Arie Ovadia and Prof. Joshua Shemer qualifies as an independent director and Mr. Arie Ovadia qualifies as a financial expert as defined by the Nasdaq Marketplace Rules.

ITEM 16B. CODE OF ETHICS

Our board of directors 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 to our external auditors for professional services rendered in the years ended December 31, 2008 and 2007:

	 2008		2007	
Audit Fees	\$ 87,000	\$	65,000	
Audit Related Fees	-	\$	15,000	
Tax Fees	\$ 7,000	\$	10,000	
All Other Fees	-	\$	10,000	
Total	\$ 94,000	\$	100,000	

Audit Fees are fees for professional services rendered by our principal accountant in connection with the audit of our consolidated annual financial statements and review of our unaudited interim financial statements;

Audit Related Fees are fees for professional services rendered by our principal accountant in connection with the audit and other assignments, relating to internal accounting functions and procedures including valuation of options granted to chairman of the board in 2007;

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

All Other Fees are fees for other consulting services rendered by our principal accountant to us including preparation of response letter to SEC in 2007.

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 16F. 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 Rules.

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PART III

ITEM 17. FINANCIAL STATEMENTS

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

ITEM 18. FINANCIAL STATEMENTS

See pages F-1 to F-29.

ITEM 19. EXHIBITS

Index to Exhibits

Exhibit Number	Description
1.1	Form of Articles of Association of Issuer
12.1	Certification by Chief Executive Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
12.2	Certification by Chief Financial Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
13.1	Certification by Chief Executive Officer pursuant to section 906 of the Sarbanes-Oxley Act of 2002.
13.2	Certification by Chief Financial Officer 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 16, 2009.
15.2	Consent of Kesselman & Kesselman, member of PriceWaterhouseCoopers, independent auditors of Keddem Bioscience, dated March 16, 2009.
15.3	Audit Report by Kesselman & Kesselman, member of PriceWaterhouseCoopers, independent auditors of Keddem Bioscience, dated March 13, 2008.

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SIGNATURES

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

COMPUGEN LTD

SIGNATURES 72

By: /s/ Mr. Martin Gerstel

Martin Gerstel

President, Chief Executive Officer and Director

Date: March 16, 2009

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<u>15.3.09</u>

COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2008

U.S. DOLLARS IN THOUSANDS

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Kost Forer Gabbay & Kasierer

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of

COMPUGEN LTD.

We have audited the accompanying consolidated balance sheets of Compugen Ltd. (the Company) and its subsidiaries as of December 31, 2008 and 2007, 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, 2008. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We did not audit the financial statements of Keddem BioScience Ltd., a wholly-owned subsidiary, for the years ended December 31, 2007 and 2006 which statements reflect total assets constituting 0% and 2% and no revenues, in 2007 and 2006, respectively, of the related consolidated totals. Those statements were audited by other auditors whose unqualified report, which has been furnished to us, includes an explanatory paragraph on circumstances which raise substantial doubts regarding Keddem BioScience Ltd. s ability to continue as a going concern. Our opinion, insofar as it relates to the amounts included for Keddem BioScience Ltd. is based solely on the report of the other auditors.

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. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits and the report of the other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audits and the report of the other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company and its subsidiaries as of December 31, 2008 and 2007, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2008, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 14i to the consolidated financial statements, in 2007, the Company adopted the provisions of Statement of FIN No. 48, Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No. 109".

Tel-Aviv, Israel March 16, 2009 KOST FORER GABBAY & KASIERER A Member of Ernst & Young Global

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COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

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

		 Decei	nber	31,
	Note	2008		2007
1 a a vivo				
ASSETS				
CURRENT ASSETS:				
Cash and cash equivalents	4	\$ 4,650	\$	1,298
Cash held in favor of other consortium partners	3	233		118
Short-term deposits	5	540		11,000
Marketable securities held to maturity	5	2,058		2,784
Investment in Evogene	1b	3,858		-
Trade receivables		-		40
Other accounts receivable and prepaid expenses	7	768		950
Assets related to discontinued operations		-		54

		December 31,			31,
<u>Total</u> current assets			12,107		16,244
LONG-TERM INVESTMENTS AND RECEIVABLES:					
Marketable securities held to maturity	5		-		2,080
Long-term lease deposits	41		41		33
Investment in Evogene	1b		1,038		510 1,382
Severance pay fund			1,038	_	1,382
			1,079		4,005
		_			.,,,,,
PROPERTY AND EQUIPMENT, NET	8		1,058		1,417
<u>Total</u> assets		\$	14,244	\$	21,666
LIABILITIES AND SHAREHOLDERS' EQUITY CURRENT LIABILITIES:					
Trade payables		\$	472	\$	881
Other accounts payable and accrued expenses	9		2,409		1,860
Deferred revenue			100		150
Liabilities related to discontinued operations			12		4
<u>Total</u> current liabilities			2,993		2,895
LONG-TERM LIABILITIES:					
Accrued severance pay			1,248		1,486
Accided severance pay			1,210		1,100
Total long-term liabilities			1,248		1,486
COMMITMENTS AND CONTINGENCIES	10, 3				
SHAREHOLDERS' EQUITY:	11				
Share capital:					
Ordinary shares of NIS 0.01 par value: 50,000,000 shares authorized at December 31, 2008 and 2007; and 28,512,440 and 28,323,811 shares issued and outstanding at December 31, 2008					
and 2007, respectively			77		77
Additional paid-in capital			163,181		161,158
Accumulated other comprehensive income			4,198		976
Accumulated deficit			(157,453)		(144,926)
<u>Total</u> shareholders' equity			10,003		17,285
		_		_	
Total liabilities and shareholders' equity		\$	14,244	\$	21,666

December 31,

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

March 16, 2009

Date of approval of the financial statements

Martin Gerstel President and Chief Executive Officer Dikla Czaczkes - Axselbrad Chief Financial Officer

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COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

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

		Year ended December 31,							
	Note	2008	2007	2006					
Revenues		\$ 338	\$ 180	\$ 215					
Cost of revenues		7	-	6					
Research and development expenses, net of governmental and other grants amounting to \$ 544, \$ 1,354 and \$ 1,670 for the years 2008, 2007 and 2006,									
respectively	3	8,745	8,386	9,117					
Selling and marketing expenses General and administrative expenses		996 3,502	1,324 2,930	1,719 2,377					
<u>Total</u> operating expenses *)		13,243	12,640	13,213					
Operating loss		(12,912)	(12,460)	(13,004)					
Financial income, net Other income, net	13	348	868 134	866 89					
Loss before taxes on income		(12,511)	(11,458)	(12,049)					
Taxes on income		-	32	-					
Loss from continuing operations		(12,511)	(11,490)	(12,049)					

	Year ended December 31,					31,
Loss from discontinued operations		(16)	_	(624)	_	(971)
Net loss	\$	(12,527)	\$	(12,114)	\$	(13,020)
Basic and diluted net loss per share from continuing operations	\$	(0.44)	\$	(0.41)	\$	(0.44)
Basic and diluted net loss per share from discontinued operations	\$	-	\$	(0.02)	\$	(0.03)
Basic and diluted net loss per share	\$	(0.44)	\$	(0.43)	\$	(0.47)
Weighted average number of Ordinary shares used in computing basic and diluted net loss per share	2	8,434,946	2	8,266,273		27,985,957

^{*)} Includes stock-based compensation, see Note 11.

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

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COMPUGEN LTD. AND ITS SUBSIDIARIES

STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

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

	Ordinary	share	s	A 1124		mulated			(T) . 4 . 1	TD 4 - 1 - 41
	Number	Am	ount	Additional paid-in capital	comp	other rehensive acome	Deferred e stock compensat	Accumulated	Total I shareholders equity	Total other 'comprehensive loss
Balance as of January 1, 2006	27,846,420	\$	75	\$ 155,923	\$	-	\$ (16)	\$ (119,734)	\$ 36,248	
Employee options exercised	315,782		1	560		-	-	-	561	
Reclassification due to adoption of SFAS 123(R)	_		_	(16)		-	16	-	_	
Stock-based compensation relating to options and warrants issued to scientific advisory board members and consultants	-		_	(47)		_	_	-	(47)	
Stock-based compensation relating to options issued to employees	_		_	1,996		_	_	_	1,996	
Net loss				-				(13,020)	(13,020)	\$ (13,020)

	Ordinary	shares	paid-in	other	stock		shareholders	Total other comprehensive
Total comprehensive loss			capital	comprehensive income	e ompensatio	n	equity	(13,020)
-				- income		-		
								\$
Balance as of December 31, 2006	28,162,202	76	158,416	-	-	(132,754)	25,738	
Employee options exercised	152,347	1	294	-	-	-	295	
Issuance of shares to the CEO	9,262	*) -	28	-	-	-	28	
Stock-based compensation relating to								
options and warrants issued to								
scientific advisory board members and								
consultants	-	-	28	-	-	-	28	
Stock-based compensation relating to								
options issued to employees			2,303				2,303	
Expired options granted to								
subsidiary's employees	-	-	89	-	-	-	89	
Cumulative impact of change in								
accounting for uncertainties in income								
taxes	_	_	_	_	_	(58)	(58)	
Unrealized gain on the investment in						` ′	` /	
Evogene	-	-	-	976	-	-	976	\$ 976
Net loss	-	-	-	-	-	(12,114)	(12,114)	(12,114)
Total comprehensive loss								\$ (11,138)
Total comprehensive ross								ψ (11,150)
Balance as of December 31, 2007	28,323,811	77	161,158	976	_	(144,926)	17,285	
Bulance as of Beechieur 51, 2007	20,020,011		101,100	7.0		(1,>20)	17,200	
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								\$ (9,305)
Total Completions to 1000								Ψ (2,303)
		_			_			
Balance as of December 31, 2008	28,512,440	\$ 77	\$ 163,181	\$ 4,198	\$ -	\$ (157,453)	\$ 10,003	

^{*)} Represents an amount lower than \$ 1.

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

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COMPUGEN LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

		Year ended December 31,				
	2008 2007					
Cash flows from operating activities:						
Net loss	\$	(12,527) \$	(12,114)	\$ (13,020)		
Adjustments required to reconcile net loss to net cash used in	Ţ	(,)	(==,==,)	, (,,		
operating activities:						
Loss from discontinued operations		16	624	971		
Compensation relating to options and warrants issued to						
scientific advisory board members and consultants		(100)	28	(47)		
Compensation relating to options issued to employees		1,803	2,303	1,996		
Fair value of shares issued to CEO		25	28	-		
Depreciation		477	633	911		
Accrued severance pay, net		106	(2)	(28)		
Interest and amortization of premium on deposits and marketable						
securities		31	932	261		
Capital loss (gain)		(12)	2	(76)		
Decrease (increase) in trade receivables		40	(30)	(10)		
Decrease (increase) in other accounts receivable and prepaid						
expenses		182	(126)	(301)		
Increase (decrease) in trade payables and other accounts payable						
and accrued expenses		(101)	(289)	257		
Increase (decrease) in deferred revenue		(50)	75	(125)		
Net cash used in operating activities from continuing operations		(10,110)	(7,936)	(9,211)		
Net cash provided by (used in) operating activities from discontinued operations		98	(60)	218		
Net cash used in operating activities		(10,012)	(7,996)	(8,993)		
	_					
Cash flows from investing activities:						
Purchase of marketable securities		_	(4,824)	(3,237)		
Proceeds from redemption of deposits and maturities of marketable						
securities		13,235	8,180	22,302		
Investment in bank deposits		-	-	(12,000)		
Purchase of property and equipment		(120)	(205)	(157)		
Decrease (increase) in long-term lease deposits		(8)	7	34		
Proceeds from sale of property and equipment		14	1	82		
Net cash provided by investing activities from continuing operations		13,121	3,159	7,024		
Nat each provided by (used in) invecting activities from						
Net cash provided by (used in) investing activities from						

		Year ended December 31,					
discontinued operations		-	139	(3)			
Net cash provided by investing activities	1	3,121	3,298	7,021			
Cash flows from financing activities:							
Proceeds from exercise of options		295	295	665			
Net cash provided by financing activities		295	295	665			
Increase (decrease) in cash and cash equivalents Decrease in cash and cash equivalents from discontinued operations Cash and cash equivalents at the beginning of the year		3,404 (52) 1,298	(4,403) (249) 5,950	(1,307) (467) 7,724			
Cash and cash equivalents at the end of the year	\$	4,650	\$ 1,298	\$ 5,950			

Supplemental information on financing activities not involving cash flow:

In December 2005, the Company issued shares as a result of exercise of options in the amount of \$ 104. The Company received the proceeds from the exercise of the options in January 2006.

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

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COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

NOTE 1: - GENERAL

a. Compugen Ltd. (the Company or Compugen) is an early stage drug and diagnostic discovery company. The Company s business is focused on developing and using predictive computer-based discovery platforms to discover potential therapeutic drug candidates and diagnostic biomarker candidates. The Company uses experimental biological processes to validate product candidates discovered by its predictive platforms. The Company seeks to enter into early stage commercial collaborations with third parties, to develop candidates that the Company has validated. The Company s initial discovery efforts have focused mainly on cancer, cardiovascular and immune-related diseases.

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 agbio 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 Principles Board Opinion No. 18, The Equity Method of Accounting for Investments in Common Stock. During June 2007, Evogene completed an initial public offering on the Tel Aviv Stock Exchange. Prior to the IPO, the excess of losses over investment in Evogene amounted to \$ 466 and was presented as a liability included in the Company's balance sheet that represents excess of losses sustained by Compugen over its investment through the deconsolidation date. In August 2008, Evogene signed a collaboration agreement involving an additional equity investment, with a third party. As a consequence of the IPO and the additional equity investment, the Company currently holds 2,150,000 shares representing approximately 9% of Evogene outstanding Ordinary shares.

As of June 30, 2007, the investment in Evogene was accounted for as available-for-sale marketable security in accordance with Statement of Financial Accounting Standard No. 115, Accounting for Certain Investments in Debt and Equity Securities (SFAS 115).

Available-for-sale securities are carried at fair value, with the recognized gains and losses reported as a separate component of stockholders equity under accumulated other comprehensive income in the consolidated balance sheet (see Note 5b).

c. In August 2004, the Company spun off its computational chemistry activity into a wholly-owned subsidiary, Keddem BioScience Ltd. (Keddem).

Keddem experienced recurring losses from operations and had a net capital deficiency. These matters raised substantial doubts about Keddem's ability to continue as a going concern. During the second quarter of 2007, in view of the fact that there were no assurances that additional financing would be achieved, the Company decided to suspend Keddem's operations and as such, it was classified as discontinued operation in accordance with Statement of Financial Accounting Standards No. 144, Accounting for Impairment or Disposal of Long-Lived Assets and EITF No. 03-13, Applying the Conditions in Paragraph 42 of FASB Statement No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, in Determining Whether to Report Discontinued Operations . Accordingly, the results of operations, including the results for the years ended December 31, 2008, 2007 and 2006, have been reclassified in the accompanying statements of operations as discontinued operations. The Company's balance sheets at December 31, 2008 and December 31, 2007 reflect the net assets and net liabilities of discontinued operations within current liabilities and current assets.

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COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. dollars in thousands

NOTE 1: - GENERAL (Cont.)

In 2008, following the discontinuance of Keddem s activities, the Company entered into a term sheet agreement with Mada Ltd. (Mada), a newly formed company owned and managed by the former two Co-CEOs of Keddem, whereby the Company will license the Keddem intellectual property to Mada, in exchange for royalties on any future revenues and certain access rights to any developed technology and subject to a third party financing. Mada intends to seek third party funding for the development of this intellectual property but the Company can give no assurances that it will be successful in doing so.

- d. In 1997, the Company established its wholly-owned U.S. subsidiary, Compugen USA, Inc. and in 2008, its wholly-owned UK subsidiary, Compugen UK Ltd. However, in view of the Company s current corporate needs, neither of these subsidiaries is anticipated to have any significant operations during 2009.
- e. The Company s net loss and negative cash flow from operating activities as of December 31, 2008 amounted to \$ 12,527 and \$ 10,012, respectively. The Company s business is focused on research and development activities. To date, the Company has received only minimal revenues from its initial licensing activities.

The Board of Directors of the Company has adopted a contingency plan that includes various cost reduction measures which in the absence of obtaining the required additional funding, (including but not limited to, from the sale of Evogene shares or otherwise) would enable the Company to continue to support its operations through December 31, 2009.

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.

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COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. dollars in thousands

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

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 were made and are expected to be 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 Statement of the Financial Accounting Standard Board (SFAS) No. 52, Foreign Currency Translation. 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.

e. Marketable securities:

The Company accounts for its investments in marketable securities using SFAS No. 115, Accounting for Certain Investments in Debt and Equity Securities.

Management determines the appropriate classification of its investments in marketable debt at the time of purchase and re-evaluates such determinations at each balance sheet date. To date, all debt securities have been classified as held-to-maturity as the Company has the positive intent and ability to hold the securities to maturity.

These investments are stated at amortized cost, including accrued interest. Amortization of the premium and the accretion of discounts and interest are included in financial income, net. The Company s investment holdings have been classified in the consolidated balance sheet according to the maturity date.

Securities classified as available-for-sale are stated at fair value, with unrealized gains and losses reported in accumulated other comprehensive income, a separate component of stockholders equity.

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COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. dollars in thousands

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

According to Staff Accounting Bulletin No. 59, Accounting for Noncurrent Marketable Equity Securities (SAB No. 59), management is required to evaluate each period whether a security s decline in value is other than temporary. The Company also follows the guidance provided by FSP FAS 115-1 The Meaning of Other-Then-Temporary Impairment and Its Application to Certain Investments, to assess whether its investment with unrealized loss position are other than temporarily impaired. Realized gains and declined in value judged to be other than temporary are determined based on the specific identification method and are reported to the statement of operations.

f. Long-term lease deposits:

Long-term lease deposits include long-term deposits as security for motor vehicles leases.

g. Property and equipment:

Property and equipment are stated at cost, net of related investment grants and of 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%)
	Shorter of the term of the lease or useful
Leasehold improvements	life

h. Impairment of long-lived assets:

The long-lived assets of the Company and its subsidiaries are reviewed for impairment in accordance with SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets , 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 2006, 2007 and 2008, no impairment losses have been identified.

i. Revenue recognition:

The Company generated revenues from collaboration research agreement, under which the Company delivered a number of peptides and performed related services to a customer, and from license fees for software products, as follows:

The Company recognized revenues from the collaboration agreement in accordance with SAB 104, Revenue Recognition and EITF No. 00-21, Revenue Arrangements with Multiple Deliverables .

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COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. dollars in thousands

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Maintenance and support revenues included in these arrangements are deferred and recognized on a straight-line basis over the term of the maintenance and support agreement. The VSOE of fair value of the undelivered elements (maintenance, support and professional services) is determined based on the price charged for the undelivered element when sold separately or based on renewal rate.

Revenues from software license recognized in accordance with Statement of Position (SOP) 97-2, Software Revenue Recognition (SOP 97-2), 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. SOP 97-2 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. SOP 98-9 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 SOP 97-2, as amended, are satisfied.

Revenues from software license fees that involve customization of the Company s software to customer specific specifications, development services, integration and installation are recognized in accordance with SOP 81-1, Accounting for Performance of Construction-Type and Certain Production-Type Contracts (SOP 81-1), using contract accounting on a percentage of completion method, over the period from signing of the license through to customer acceptance in accordance with the Input Method. After delivery, if uncertainty exists about customer acceptance of the software, license revenue is not recognized until acceptance. For the years ended December 31, 2008, 2007 and 2006, the Company recognized revenues in accordance with SOP 81-1 in the amount of \$0, \$0 and \$200, respectively.

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

j. 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), the Bi-national Industrial Research and Development Foundation (BIRD) and the Europhemiework 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.

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COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. dollars in thousands

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

k. Severance pay:

The Company s liability for severance pay for its Israeli employees is calculated pursuant to Israel s 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. 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 they are legally released from obligation to such employees once the deposited amounts have been paid. 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 Israel s 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.

Severance expenses for the years ended December 31, 2008, 2007 and 2006 amounted to approximately \$ 397, \$ 329 and \$ 317, respectively.

1. Accounting for stock-based compensation:

At December 31, 2008, the Company has two stock-based employee compensation plans, which are described more fully in Note 10. Effective January 1, 2006, the Company adopted SFAS No. 123 (revised 2004), Share-Based Payment , or SFAS 123R, which requires all share-based payments to employees, including grants of employee stock options, restricted stock units and employee stock purchase rights, to be recognized in the financial statements based upon their respective grant date fair values, and does not allow the previously permitted pro forma disclosure-only method as an alternative to financial statement recognition. SFAS 123R supersedes Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees , or APB 25, and related interpretations and amends SFAS No. 95, Statement of Cash Flows . SFAS 123R also requires the benefits of tax deductions in excess of recognized compensation cost be reported as a financing cash flow, rather than as an operating cash flow as required under previous literature. In March 2005, the Securities and Exchange Commission (SEC) issued SAB No. 107, Share-Based Payment , or SAB 107, which provides guidance regarding the interaction of SFAS 123R and certain SEC rules and regulations. The Company has applied the provisions of SAB 107 in its adoption of SFAS 123R.

On December 21, 2007, the SEC staff issued Staff Accounting Bulletin No. 110 (SAB 110), which, effective January 1, 2008, amends and replaces SAB 107, Share-Based Payment .

Effective January 1, 2006, the Company adopted the fair value recognition provisions of SFAS 123R, using the modified-prospective-transition method. Under that transition method, compensation cost recognized includes: (a) compensation cost for all share-based payments granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of Statement 123, and (b) compensation cost for all share-based payments granted subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS 123R. Results for prior periods have not been restated.

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COMPUGEN LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. dollars in thousands

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

m. Concentrations of credit risks:

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

The majority of the Company s cash and cash equivalents are invested in U.S. dollar deposits with major banks in Israel. Management believes that the financial institutions that hold the Company s investments are financially sound and accordingly, minimal credit risk exists with respect to these investments.

The Company s marketable securities include investments in corporate bonds. Management believes that those corporations are financially sound, the portfolio is well diversified, and accordingly, minimal credit risk exists with respect to these marketable securities.

The Company and its subsidiaries have no significant off-balance-sheet concentration of credit risk such as foreign exchange contracts, option contracts or other foreign hedging arrangements.

n. Income taxes:

The Company and its subsidiaries account for income taxes in accordance with SFAS No.109, Accounting for Income Taxes (SFAS No. 109) and FASB Interpretation, or FIN, No. 48, Accounting for Uncertainty in Income Taxes - An Interpretation of FASB Statement No. 109, or FIN 48. SFAS No. 109 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, if necessary, to reduce deferred tax assets to their estimated realizable value. FIN 48 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 SFAS No. 109.

Prior to 2007 the Company determined its tax contingencies in accordance with SFAS No. 5, Accounting for Contingencies, or SFAS 5. The Company recorded estimated tax liabilities to the extent the contingencies were probable and could be reasonably estimated.

o. 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 outstan