
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

Form 6-K

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

For the month of May 2012

Commission File Number 000-30902

COMPUGEN LTD.

(Translation of registrant's name into English)

**72 Pinchas Rosen Street
Tel-Aviv 69512, Israel**

(Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-For Form 40-F:

Form 20-F ☒

Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐

Compugen Ltd.

On June 26, 2012 Compugen Ltd. will hold its annual general meeting of shareholders. A copy of the notice and proxy statement is filed as Exhibit 99.1 hereto and incorporated by reference herein.

The information contained in this Report, including the exhibit hereto, is hereby incorporated by reference into the Company's Registration Statement on Form F-3, File No. 333-171655.

Exhibits

**Exhibit
Number**

Description of Exhibit

99.1	Notice and proxy statement relating to the annual general meeting of shareholders of Compugen Ltd. to be held on June 26, 2012.
------	---------------------------------------------------------------------------------------------------------------------------------

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

COMPUGEN LTD.

Date: May 22, 2012

By: /s/ Dikla Czaczkes Axselbrad

Dikla Czaczkes Axselbrad
Chief Financial Officer



COMPUGEN LTD.
NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS
TO BE HELD ON JUNE 26, 2012

Notice is hereby given that the Annual General Meeting (the “**Meeting**”) of the shareholders of Compugen Ltd. (the “**Company**”), an Israeli company, will be held at the Company’s offices at 72 Pinchas Rosen Street, Tel Aviv, Israel, on June 26, 2012 at 10:00 AM (Israel time) for the following purposes:

1. To re-elect Prof. Ruth Arnon, Mr. Martin Gerstel, Mr. Dov Hershberg and Mr. Alex Kotzer to serve as members of the Board of Directors of the Company;
2. To re-appoint Kost Forer Gabbay & Kasierer (a member of Ernst and Young Global), as the independent registered public accounting firm of the Company for the fiscal year ending December 31, 2012, and until the next annual general meeting. In addition, a review will be given of the fees paid by the Company to the independent registered public accounting firm for the professional services rendered for the year ended December 31, 2011;
3. To approve the grant of options to purchase 62,500 ordinary shares NIS 0.01 nominal (par) value each, to Mr. Martin Gerstel, Chairman of the Board of Directors of the Company, (which were approved by the Board on July 26, 2011) as described in the accompanying proxy statement;
4. To receive and consider the report of the independent registered public accounting firm and the Consolidated Financial Statements of the Company for the fiscal year ended December 31, 2011; and
5. To transact such other business as may properly come before the Meeting or any adjournment thereof.

Shareholders of record at the close of trading on May 29, 2012, are entitled to notice of, and to vote at the Meeting. All shareholders are cordially invited to attend the Meeting in person. Two (2) or more shareholders, present in person, by proxy or by proxy card, and holding shares conferring in the aggregate thirty-three and a third percent (33.33%) or more of the voting power of the Company, shall constitute a quorum at the Meeting. Should no quorum be present within an hour from the time set for the Meeting, the Meeting shall be adjourned to July 03, 2012, at the same time and place. At such adjourned meeting, any two (2) shareholders present in person, by proxy or by proxy card, shall constitute a quorum.

Shareholders who do not expect to attend the Meeting in person are requested to complete, date and sign the enclosed form of proxy card and return it as promptly as possible in the enclosed stamped envelope. No postage is required if mailed in the United States. Joint holders of shares should take note that, pursuant to Article 36 (d) of the Company’s articles of association, the vote of the senior holder who tenders a vote, in person or by proxy or by proxy card, will be accepted to the exclusion of the vote(s) of the other joint holder(s), and for this purpose seniority will be determined by the order in which the names stand in the Company’s shareholder register.

The Company urges all of its shareholders to review its Annual Report on Form 20-F and its periodic reports on Form 6K, which are available on the Company's website at www.cgen.com. However, if you wish to be mailed a copy of the Company's Annual Report on Form 20-F or any other of the Company's public filings, please send the Company a request through the Company's website or call Investor Relations at +972-3-765-8585.

Thank you for your cooperation.

By Order of the Board of Directors,

/S/ Mr. Martin S. Gerstel

Martin S. Gerstel, Chairman of the Board
Tel Aviv, Israel
May 22, 2012

PROXY STATEMENT

COMPUGEN LTD.

72 Pinchas Rosen Street

Tel Aviv 69512, Israel

ANNUAL GENERAL MEETING OF SHAREHOLDERS

TO BE HELD ON JUNE 26, 2012

The enclosed proxy is being solicited by the Board of Directors (the “**Board**”) of Compugen Ltd. (the “**Company**” or “**Compugen**”) for use at the Company’s 2012 Annual General Meeting of Shareholders (the “**Meeting**”) to be held at the Company’s offices at 72 Pinchas Rosen Street, Tel Aviv, Israel, on June 26, 2012 at 10:00 AM (Israel time), or at any postponement or adjournment thereof.

The record date for determining shareholders entitled to notice of, and to vote at, the Meeting has been established as of the close of trading on May 29, 2012.

As of May 01, 2012 the Company had outstanding 35,940,685 ordinary shares, nominal (par) value of 0.01 New Israeli Shekels (“**NIS**”) each (the “**Ordinary Shares**”), each of which is entitled to one vote upon each of the matters to be presented at the Meeting.

Two or more shareholders, present in person, by proxy or by proxy card and holding shares conferring in the aggregate thirty-three and a third percent (33.33%) or more of the voting power of the Company, shall constitute a quorum at the Meeting. Should no quorum be present within an hour from the time set for the Meeting, the Meeting shall be adjourned to July 03, 2012, at the same time and place. At such adjourned meeting, any two (2) shareholders present in person, by proxy or by proxy card, shall constitute a quorum.

All proposals set forth in the accompanying Notice of Annual General Meeting of Shareholders (the “**Notice**”) to be presented at the Meeting, require the affirmative vote of the holders of a majority of the Ordinary Shares represented at the Meeting in person, by proxy or by proxy card, and voting thereon. The Company is not currently aware of any controlling shareholders as such term is defined for purposes of the Israel Companies Law 5759, 1999, as amended (the “**Companies Law**”).

The Company expects to solicit proxies by mail and to mail this proxy statement and the accompanying proxy card to shareholders on or about June 01, 2012. The Company will bear the cost of solicitation of proxies, including preparation, assembly, printing and mailing, and will, upon request, reimburse banks, brokerage houses, other institutions, nominees, and fiduciaries for their reasonable expenses in forwarding solicitation materials to beneficial owners of Ordinary Shares.

In order to be counted, a duly executed proxy or proxy card must be received by the Company prior to the Meeting. An instrument appointing a proxy shall be in writing in a form approved by the Company's Board and shall be delivered to the Company at its registered offices at 72 Pinchas Rosen Street, Tel Aviv 69512, Israel, Attention: General Counsel, or at the offices of the Company's transfer agent at 6201 15th Avenue, Brooklyn NY 11219, not less than two (2) hours before the time fixed for the Meeting or presented to the Chairman at the Meeting. A proxy card shall be delivered to the Company at its registered offices at 72 Pinchas Rosen Street, Tel Aviv 69512, Israel, Attention: General Counsel, or at the offices of the Company's transfer agent at 6201 15th Avenue, Brooklyn, NY 11219, at least twenty four (24) hours prior to the commencement of the Meeting or adjourned Meeting or presented to the Chairman at the Meeting. Shares represented by proxies received after the times specified above will not be counted as present at the Meeting and will not be voted.

Ordinary Shares represented by executed and unrevoked proxies will be voted in the manner instructed by the executing shareholder, or if no specific instructions are given, will be voted FOR the proposals set forth in the Notice. The Company is not currently aware of any other matters to be presented at the Meeting. If any other matters properly come before the Meeting, it is the intention of the persons designated as proxies to vote in accordance with their judgment on such matters.

Shareholders may revoke the authority granted by their execution of a proxy or a proxy card at any time before the effective exercise thereof by voting in person at the Meeting or by providing the Company with a written notice of such revocation or executing and delivering to the Company a later-dated proxy or proxy card, delivered to the Company at its registered offices at 72 Pinchas Rosen Street, Tel Aviv 69512, Israel, Attention: General Counsel, or at the offices of the Company's transfer agent at 6201 15th Avenue, Brooklyn, NY 11219, with respect to a proxy- not less than two (2) hours before the time fixed for the Meeting or presented it to the Chairman the Meeting at the Meeting; and with respect to a proxy card, at least twenty four (24) hours prior to the commencement of the Meeting or adjourned Meeting, or presented to the Chairman of the Meeting at the Meeting.

BENEFICIAL OWNERSHIP OF SECURITIES BY PRINCIPAL SHAREHOLDERS AND MANAGEMENT

The following table and notes thereto sets forth certain information, as of May 01, 2012 (except as noted below) regarding persons or entities known to the Company to beneficially own more than 5% of the Company's outstanding Ordinary Shares as well as the Company's directors and officers as a group. As of May 01, 2012, the Company had outstanding 35,940,685 Ordinary Shares. Beneficial ownership is determined in accordance with the rules of the U.S. Securities and Exchange Commission (the "SEC") and includes voting or investment power with respect to the securities. Ordinary Shares that may be acquired by an individual or group within 60 days of May 01, 2012, pursuant to the exercise of options or warrants, are deemed to be outstanding for the purpose of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table.

Beneficial Owner	Number of Ordinary Shares Beneficially Owned	Percent of Ownership
Martin Gerstel ⁽¹⁾	2,280,849	6.27%
ClearBridge Advisors, LLC ⁽²⁾	2,211,586	6.15%
Morgan Stanley ⁽³⁾	1,912,327	5.32%
Directors and officers as a group (consist of 11 persons) ⁽⁴⁾	3,821,529	10.08%

⁽¹⁾ Includes 550,000 shares held by Shomar Corporation, an affiliate of Mr. Martin S. Gerstel, 669,033 shares held by Merrill Lynch IRA for Martin Gerstel, of which Martin Gerstel is the beneficiary and 634,735 shares held in various brokerage accounts for the benefit of Martin Gerstel. Also includes 427,081 shares subject to options that are currently exercisable or that become exercisable within 60 days of May 01, 2012. Does not include options to purchase 62,500 Ordinary Shares that will be granted to Mr. Gerstel if Item No. 3 is approved at the Meeting. See "Item No. 3 — Approval of Grant of Stock Options to our Chairman of the Board of Directors."

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

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

⁽⁴⁾ See note 1 above. Includes an additional 5,000 shares and 1,535,680 shares subject to options that are currently exercisable or that become exercisable within 60 days of May 01, 2012 held by directors and officers other than Mr. Gerstel.

ITEM NO. 1

RE-ELECTION OF DIRECTORS

The articles of association of the Company (the “**Articles**”) provide that the minimum number of members of the Board is five (5) and the maximum number is fourteen (14). The Board is currently comprised of seven (7) members, four (4) of whom are hereby being proposed for re-election for a term of approximately one year expiring at the end of the annual general meeting of the shareholders of the Company to be held in 2013 and when their respective successors are duly elected.

The other three (3) of the Company's current seven (7) members of the Board serve as external directors, appointed under the Companies Law, for a fixed term of three years which will expire on April 14, 2013. Other than the Company's three external directors, the Company's directors are elected at each annual general meeting by a simple majority of the Company's shareholders present and voting thereon.

Pursuant to the Companies Law, Israeli companies whose shares have been offered to the public either in or outside of Israel are required to appoint at least two natural persons as “external directors.” No person may be appointed as an external director if such person is a relative of a controlling shareholder or if such person, a relative, partner or employer of that person or anyone to whom such person is directly or indirectly subordinate, or any entity under the person's control, has or had, on or within the two years preceding the date of that person's appointment to serve as an external director, any affiliation with the company to whose board the external director is proposed to be appointed, with any controlling shareholder of such company, a relative of such controlling shareholder, or any entity controlled by the company or by a controlling shareholder of the company, or, if the company has no controlling shareholder or shareholder holding 25% or more of the company's voting rights, any affiliation, at the time of the appointment, with the chairman of the board of directors, the chief executive officer, the most senior financial officer of the company, or with a shareholder holding 5% or more of the outstanding shares or voting rights of the company. The term affiliation includes an employment relationship, a business or professional relationship maintained on a regular basis or control, as well as service as an office holder (as such term is defined in the Companies Law).

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

The Companies Law requires that an external director have either accounting and financial expertise or professional qualifications according to criteria set forth in regulations promulgated by the Israeli Minister of Justice, provided that at least one of the external directors has accounting and financial expertise. The conditions and criteria for possessing accounting and financial expertise or professional qualifications were determined in regulations promulgated by the Israeli Minister of Justice in consultation with the Israeli Securities Authority. Under the regulations a director having “expertise in finance and accounting” is a person whose education, experience and qualifications provide him or her with expertise and understanding in business matters, accounting and financial statements, in a way that allows him or her to understand, in depth, the company's financial statements and to encourage discussion about the manner in which the financial data is presented. A company's board of directors must evaluate the proposed external director's expertise in finance and accounting, by considering, among other things, his or her education, experience and knowledge in the following: (i) accounting and auditing issues typical to the field in which the company operates and to companies of a size and complexity similar to such company; (ii) the independent registered public accounting firm's duties and obligations; (iii) preparing company financial statements and their approval in accordance with the Companies Law and the Israeli Securities Law. Under the regulations a director having “professional qualifications” is a person who meets any of the following criteria: (i) has an academic degree in any of the following professions: economics, business administration, accounting, law or public administration; (ii) has a different academic degree or has completed other higher education, in a field that is the company's main field of operations, or a field relevant to his or her position; or (iii) has at least five years of experience in any of the following, or has at least a total of five years of experience in at least two of the following: (a) a senior position in the business management of a corporation with significant operations, (b) a senior public position or a senior position in public service, or (c) a senior position in the company's main field of operations. The board of directors here too must evaluate the proposed external director's “professional qualification” in accordance with the criteria set forth above.

External directors are to be elected at the general meeting of shareholders by a majority, provided that either: (i) in calculating the majority, votes of controlling shareholders and/or shareholders having a personal interest in the approval of the appointment (other than a personal interest which is not the result of an affiliation with a controlling shareholder) and abstentions are disregarded, or (ii) the total number of shares of shareholders who are not controlling shareholders and/or shareholders who do not have a personal interest in the approval of the appointment (other than a personal interest which is not the result of an affiliation with a controlling shareholder), who voted against the election did not exceed two percent of the total voting power of the company.

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

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

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

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

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

In a 2008 amendment, the Companies Law introduced the concept of 'unaffiliated directors' in addition to external directors. This concept was reinforced in a 2011 amendment to the Companies Law. An unaffiliated director is either an external director or a director appointed or classified as such who meets the same non-affiliation criteria as an external director, as determined by the subject company's audit committee, and who has not served as a director of the company for more than nine consecutive years. For these purposes, ceasing to serve as a director for a period of two years or less would not be deemed to sever the consecutive nature of such director's service. An unaffiliated director may be removed from office in the same manner that an external director may be removed.

Pursuant to the Companies Law, a public company, such as the Company, may include in its articles of association a provision providing that a specified number of its directors be independent directors or may adopt a standard provision providing that a majority of its directors be independent directors or, if there is a controlling shareholder or a 25% or more shareholder, that at least one-third of its directors be independent directors. To date, the Company has not included such provision in its Articles.

Regulations promulgated pursuant to the Companies Law provide that a director in a company whose shares are listed for trading on specified exchanges outside of Israel, including the NASDAQ Global Market and the NASDAQ Global Select Market, but not including the NASDAQ Capital Market, who qualifies as an independent director under the relevant non-Israeli rules relating to independence standards for audit committee membership and who meets certain non-affiliation criteria, which are less stringent than those applicable to external directors, would be deemed an unaffiliated director pursuant to the Companies Law provided he or she has not served as a director for more than nine consecutive years. For these purposes, ceasing to serve as a director for a period of two years or less would not be deemed to sever the consecutive nature of such director's service. Furthermore, pursuant to these regulations, such company may re-appoint a person as an unaffiliated director for additional terms, beyond nine years, which do not exceed three years each, if the audit committee and the board of directors determine that in light of the unaffiliated director's expertise and special contribution to the board of directors and its committees, the re-appointment for an additional term is to the company's benefit.

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

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

In addition to the requirements of the Companies Law as described above, since the Company's shares are listed on the Nasdaq Capital Market, pursuant to the NASDAQ Listing Rules, a majority of the Company's directors must be independent (as defined by the Nasdaq Listing Rules). The Company complies with such NASDAQ independence requirement, as four of the seven members of the Board – Professor Yair Aharonowitz, Dr. Arie Ovadia, Professor Joshua Shemer and Professor Ruth Arnon – have been determined by the Board to meet the NASDAQ independence requirements.

Professor Yair Aharonowitz, Dr. Arie Ovadia and Professor Joshua Shemer currently serve as the Company's external directors, each of whom is also independent under the NASDAQ Listing Rules. The initial election of each of Professor Yair Aharonowitz, Dr. Arie Ovadia and Professor Joshua Shemer for a term of three years was approved by the Company's shareholders at the Company's annual general meeting of shareholders held on July 31, 2007. They were each re-elected by the Company's shareholders on April 15, 2010 for an additional three year term that expires on April 14, 2013.

At the Meeting, four of the Company's current directors, Prof. Ruth Arnon, Mr. Martin Gerstel, Mr. Dov Hershberg and Mr. Alex Kotzer, are candidates for re-election. The Board is recommending to shareholders, the election of each of these proposed nominees for a term of approximately one year expiring at the end of the annual general meeting of the shareholders of the Company to be held in 2013 and when their respective successors are duly elected.

It is intended that proxies (other than those directing the proxy holders to vote otherwise) will be voted for the re-election of Prof. Ruth Arnon, Mr. Martin Gerstel, Mr. Dov Hershberg and Mr. Alex Kotzer as members of the Board. Each of the nominees will hold office until the expiration of their respective terms of appointment and until their respective successors shall have duly taken office unless their office is earlier vacated under any relevant provisions of the Articles or the Companies Law.

If any of the nominees are unable to serve, the proxies will be voted for the election of such other person as shall be determined by the persons named in the proxy in accordance with their best judgment. The Company is not aware of any reason why any of the nominees, if elected, would be unable to serve as a director.

Set forth below are the names and certain other information concerning the nominees, as well as the other directors whose term expires on April 14, 2013, as of May 01, 2012:

Name	Age	Positions
Prof. Yair Aharonowitz	71	Director ⁽¹⁾⁽²⁾
Prof. Ruth Arnon	78	Director
Martin S. Gerstel	70	Chairman of the Board
Dov Hershberg	72	Director
Alex Kotzer	66	Director
Arie Ovadia, Ph.D	62	Director ⁽¹⁾⁽²⁾
Prof. Joshua Shemer	64	Director ⁽¹⁾⁽²⁾

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

(2) Member of the Audit Committee of the Board.

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

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

Martin S. Gerstel has served as Compugen's Chairman of the Board since 1997, other than from February 2009 to February 2010, during which time he served as either CEO or co-CEO and, in both cases, as a member of the Board. Prior to Compugen, Mr. Gerstel was co-chairman and CEO of ALZA Corporation, which he helped found in 1968. Mr. Gerstel is the Chairman of Evogene Ltd., Keddem Bioscience, Mada Ltd., the co-founder and co-chairman of Itamar Medical, and serves as a director of Yisum Ltd., Yeda Ltd. and the U.S. Foundation for the National Medals of Science and Technology. He is a member of the Board of Governors and the Executive Committee of the Weizmann Institute of Science and the Board of Governors of The Hebrew University of Jerusalem, and is an advisor to the Burrill Life Science Funds and the board of the Israel-U.S. Binational Industrial Research and Development Foundation. Mr. Gerstel holds a B.S. from Yale University and an MBA from Stanford University.

Dov Hershberg was appointed as a member of the Board in February 2009, prior to which he served as a consultant to the Board. From February 2009 through February 2010, Mr. Hershberg served as Chairman of the Board. Mr. Hershberg previously managed the Israel-U.S. Binational Industrial Research and Development ("BIRD") Foundation from 1997 through 2006. He is currently a founder and executive director of Powermat, a wireless electricity company. Prior to joining BIRD, Mr. Hershberg held various senior management positions in software development, marketing and sales. He was the founder and CEO, with colleagues from Stanford University, of Molecular Applications Group, which created software in biomedical research. He spent eleven years at Digital Equipment Corporation in various senior management positions in product development, marketing and sales and worked as a mathematician in the Israeli Aircraft Industry. Mr. Hershberg holds graduate degrees in Mathematics, from the Hebrew University in Jerusalem, Israel and in Applied Mathematics and Operations Research from Columbia University in New York City.

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

Arie Ovadia, Ph.D. joined Compugen's Board 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 as an external director in July 2007. He is Full Professor of Medicine at the Tel Aviv University. In addition, he is the Chairman of Assuta Medical Centers in Israel and Deputy Chairman of the Board of Directors of Maccabi Healthcare Services in Israel. Prof. Shemer is a director of the Israeli center for medical technology assessment in healthcare in Gertner Institute, Tel Hashomer. Prof. Shemer is an Associate Editor at IMAJ and Harefuah, and a member of the Editorial Board of the International Journal of Technology Assessment in Health Care. Prof. Shemer teaches Medical Technology Management at the Faculty of Business Administration at Tel Aviv University. He was a member and former chairman of the National Public Committee for Updating the National List of Health Services in Israel and the National Council for Trauma of the Israeli Ministry of Health. Most recently, Prof. Shemer was the Director-General of Maccabi Healthcare Services. Prof. Shemer was formerly Director-General of the Ministry of Health and Surgeon General of the Israel Defense Forces Medical Corps. Prof. Shemer has published 5 books and more than 200 peer reviewed articles. Additionally, Prof. Shemer is an external director of El-Al Airlines. He is a graduate of the Hebrew University and Hadassah School of Medicine and Board certified in Internal Medicine in Israel.

Audit Committee

The Companies Law requires public companies such as the Company to appoint an audit committee comprised of at least three directors, including all of the external directors, and the majority of the members of the audit committee must be unaffiliated directors, and further stipulates that the following may not be members of the audit committee: (a) the chairman of the board of directors; (b) any director employed by or providing services on an ongoing basis to the company, to a controlling shareholder or an entity controlled by a controlling shareholder of the company; (c) a director whose livelihood depends on a controlling shareholder; or (d) a controlling shareholder or any relative of a controlling shareholder. The Companies Law further requires that: (i) the chairman of the audit committee be an external director; (ii) generally, any person who is not entitled to be a member of the audit committee may not attend the audit committees meetings; and (iii) the quorum required for the convening of meetings of the audit committee and for adopting resolutions by the audit committee be a majority of the members of the audit committee provided that the majority of the members present are unaffiliated directors and at least one of them is an external director.

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

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

Other Committees

The Board does not maintain a nominating committee or a compensation committee. The functions of such committees are performed by the full Board (or, in the case of compensation, by the Audit Committee). This practice is compliant with Israeli law and, as a foreign private issuer under the SEC's rules, the Company has elected, pursuant to NASDAQ Listing Rule 5615(a)(3), to follow Israeli practice, in lieu of compliance with the NASDAQ Listing Rules 5602(d) or 5602(e).

Directors' Remuneration

Under arrangements approved by the Audit Committee, the Board and the shareholders of the Company, all non-management members of the Board are entitled to receive fees in connection with their participation in Board meetings as well as meetings of committees of the Board and are also eligible to receive options to purchase Ordinary Shares on an annual basis. Under the Companies Law, any arrangement as to the compensation of directors as well as exculpation, indemnification and insurance of directors, generally requires the approval of the audit committee, the board of directors and the shareholders. In addition any arrangement between a company and an office holder who is not a director as to such office holders' terms of office and employment, including the grant of exculpation, indemnification and insurance, shall require prior to the approval of the board of directors, the approval of the audit committee (or of a compensation committee provided that the compensation committee meets all of the requirements applicable to an audit committee under the Companies Law). The amendment of existing employment terms of a company's office holders who are not directors merely requires the approval of the audit committee, if such committee determines that the amendment is not substantial in relation to the existing terms.

The Company's shareholders previously approved the following compensation for each of the Company's non-management directors:

- (i) an annual amount of \$10,000, and an additional annual amount of \$5,000 to be paid to non-management Board members who serve on one or more of the Board committees;
- (ii) a \$1,000 per participation in each Board meeting, provided that if such participation is both by telephone and less than 4 hours in total, then such "per meeting day" fee shall be \$500;
- (iii) an initial grant of options to purchase 40,000 of the Company's Ordinary Shares was granted on July 31, 2007 to the Company's non-management directors that were in office at that time. Such options are fully vested, and
- (iv) an additional grant of options to purchase 10,000 of the Company's Ordinary Shares per year on each annual anniversary of the initial grant, to each non-management director then serving on the Board. Such additional options vest as follows 3,333 of the options vest on each of the first two anniversary dates of such grant and 3,334 on the third anniversary date.

Mr. Martin Gerstel, Compugen's active Chairman of the Board, does not receive the above compensation. The Company has entered into an employment agreement with Mr. Gerstel, according to which he is entitled to employment terms as required by Israeli law. The employment agreement may be terminated by either party by providing 90 days prior written notice. As part of his employment agreement, the Company's shareholders have approved the following compensation to the Chairman of the Board: (i) a gross monthly salary of NIS 42,000 (approximately \$11,200), and (ii) a grant of options to purchase 125,000 of the Company's Ordinary Shares at an exercise price of \$5.00 per share. Such options will vest as follows: beginning on January 31, 2013 and ending on December 31, 2013, 1/12 of the options shall vest on the last day of each month during 2013. These options shall expire on February 28, 2020. In addition, the Audit Committee and the Board have approved, subject to shareholder approval, an additional grant of options to purchase 62,500 of the Company's Ordinary Shares at an exercise price of \$4.01 per share. Such options will vest as follows: beginning on January 31, 2014 and ending on December 31, 2014, 1/12 of the options shall vest on the last day of each month. These options shall expire on July 26, 2021. For further information, see Item 3 below.

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

Any director who is elected at the Meeting, as well as any current directors who are re-elected, would be remunerated in the manner, and would benefit from the insurance, indemnification, release and exemption, all as discussed above.

It is proposed that the following resolution be adopted at the Meeting:

“RESOLVED that:

- (a) Prof. Ruth Arnon be, and she hereby is, re-elected to serve as a member of the Board of Directors of the Company for a term of approximately one year expiring at the end of the annual general meeting of the shareholders of the Company to be held in 2013 and when her successor has been duly elected;
- (b) Mr. Martin Gerstel be, and he hereby is, re-elected to serve as a member of the Board of Directors of the Company for a term of approximately one year expiring at the end of the annual general meeting of the shareholders of the Company to be held in 2013 and when his successor has been duly elected;
- (c) Mr. Dov Hershberg be, and he hereby is, re-elected to serve as a member of the Board of Directors of the Company for a term of approximately one year expiring at the end of the annual general meeting of the shareholders of the Company to be held in 2013 and when his successor has been duly elected;
- (d) Mr. Alex Kotzer be, and he hereby is, re-elected to serve as a member of the Board of Directors of the Company for a term of approximately one year expiring at the end of the annual general meeting of the shareholders of the Company to be held in 2013 and when his successor has been duly elected.”

An affirmative vote of a majority of the shares represented and voting at the Annual Meeting in person, by proxy or by proxy card is required for the approval of such resolutions.

The re-election of each of these nominees will be voted upon separately at the Meeting.

The Board of Directors recommends that the shareholders vote “FOR” the re-election of each of Prof. Ruth Arnon, Mr. Martin Gerstel, Mr. Dov Hershberg and Mr. Alex Kotzer as members of the Board of Directors of the Company.

ITEM NO. 2

RE-APPOINTMENT OF AUDITORS

The Company's current independent registered public accounting firm, Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global ("KFGK"), is hereby being nominated for re-election as the independent registered public accounting firm of the Company for the fiscal year ending December 31, 2012, and until the next annual general meeting.

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

The Audit Committee has reviewed, and is satisfied with, the performance of KFGK, and has approved their re-appointment as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2012, and until the next annual general meeting. Approval of that appointment is now being sought from the Company's shareholders.

The Audit Committee's policy is to pre-approve all audit and non-audit services provided by the Company's independent registered public accounting firm, KFGK. These services may include audit services, tax services and other consulting services, as described above. The Audit Committee sets forth the basis for its pre-approval in detail, listing the particular services or categories of services which are pre-approved, and setting forth a specific budget for such services. Additional services may be pre-approved by the Audit Committee on an individual basis. Once services have been pre-approved, the Company's independent registered public accounting firm and management then report to the Audit Committee on a periodic basis regarding the extent of services actually provided in accordance with the applicable pre-approval, and regarding the fees for the services performed. Such fees for 2010 and 2011 were pre-approved by the Audit Committee in accordance with these procedures.

The following table presents the fees paid by the Company to KFGK for professional services rendered in the years ended December 31, 2011 and 2010:

	2011	2010
Audit Fees ⁽¹⁾	\$ 75,000	\$ 75,000
Audit Related Fees ⁽²⁾	\$ 26,000	\$ 20,000
Tax Fees ⁽³⁾	\$ 5,000	\$ 10,500
All Other Fees ⁽⁴⁾	\$ -	\$ 10,500
Total	\$ 106,000	\$ 116,000

⁽¹⁾ Fees for professional services rendered by KFGK in connection with the audit of the Company's consolidated annual financial statements and review of the Company's unaudited interim financial statements.

⁽²⁾ Fees for professional services rendered by KFGK in connection with the audit and other assignments, relating to internal accounting functions and procedures including review of internal control over financial reporting.

⁽³⁾ Fees for services rendered by KFGK in connection with tax compliance tax advice and tax planning which in year 2011 and 2010 were related to Annual Israeli tax reports, Approved Enterprise request submission and request to discontinue Tax reports submission for Keddem following its operation suspension.

⁽⁴⁾ Fees for other consulting services rendered by KFGK to the Company including consultancy and consents with respect to Form S-8 and Form F-3 filed with the SEC.

Subject to the approval of this proposal, the Audit Committee and the Board will fix the remuneration of KFGK for their services in 2012 and until the next annual general meeting in accordance with the volume and nature of their services to the Company.

It is proposed that the following resolution be adopted at the Meeting:

“RESOLVED, that Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, be re-appointed as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2012, and until the next annual general meeting.”

An affirmative vote of a majority of the shares represented and voting at the Annual Meeting in person, by proxy or by proxy card is required for the approval of such resolution.

The Audit Committee recommends that the shareholders vote “FOR” the approval of the appointment of Kost Forer Gabbay & Kasierer as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2012 and until the next annual general meeting.

ITEM NO. 3

APPROVAL OF GRANT OF STOCK OPTIONS

TO OUR CHAIRMAN OF THE BOARD OF DIRECTORS

Under the Companies law, any arrangement as to the compensation of directors requires the approval of the Audit Committee, the Board and shareholders of the Company, in such order.

At its meeting held on July 26, 2011, the Board of Directors approved the grant to Mr. Gerstel, in his role as active Chairman, of options to purchase 62,500 Ordinary Shares of the Company at an exercise price of \$4.01 per share (which was the fair market value at the time of such approval). The grant of these options is subject to the approval of the shareholders and is therefore presented to the shareholders at the Meeting for their approval.

The Audit Committee and the Board of Directors of the Company, have ratified and approved and recommend that the shareholders approve to grant to Mr. Gerstel, in his role as active Chairman, options to purchase 62,500 Ordinary Shares of the Company at an exercise price of \$4.01 per share (which was the fair market value when approved by the Board on July 26, 2011). The options will be granted and otherwise be subject to the same terms and conditions as applicable to options granted under the Company's 2010 Share Incentive Plan except that the options shall vest as follows: beginning on January 31, 2014 and ending on December 31, 2014, 1/12 of the options shall vest on the last day of each month during 2014. These options shall expire on July 26, 2021, unless they expire earlier in accordance with the terms of the Company's 2010 Share Incentive Plan.

It is proposed that the following resolution be adopted at the Meeting:

"RESOLVED to grant to Mr. Martin Gerstel, the Company's Chairman of the Board of Directors options to purchase 62,500 Ordinary Shares of the Company at an exercise price of \$4.01 per share to vest during calendar year 2014, as set forth in Item 3 of the Proxy Statement of the Company dated May 21, 2012."

The affirmative vote of the holders of a majority of the voting power of the Company represented at the Meeting in person or by proxy and voting thereon is necessary for approval of this proposal.

The Board of Directors recommends that the shareholders vote "FOR" the approval of the grant of options to the Company's Chairman of the Board of Directors

**CONSIDERATION OF THE REPORT OF THE INDEPENDENT REGISTERED PUBLIC
ACCOUNTING FIRM AND THE CONSOLIDATED FINANCIAL STATEMENTS**

At the Meeting, the report of the independent registered public accounting firm and the Consolidated Financial Statements of the Company for the fiscal year ended December 31, 2011, will be presented for discussion. The representative of KFGK present at the Meeting will be available to respond to appropriate questions from shareholders concerning the report of the independent registered public accounting firm and the Consolidated Financial Statements of the Company.

OTHER BUSINESS

Other than as set forth above, management knows of no business to be transacted at the Meeting; but, if any other matters are properly presented to the Meeting, Ordinary Shares represented by executed and unrevoked proxies will be voted by the persons named in the enclosed form of proxy will vote upon such matters in accordance with their best judgment.

By Order of the Board of Directors,

/s/ Martin S. Gerstel

Martin S. Gerstel
Chairman of the Board
Tel Aviv, Israel
May 22, 2012