FORM 6-K SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Report of Foreign Private Issuer

Pursuant to rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934 for the month of December 2010

<u>Compugen Ltd.</u> (Translation of registrant's name in 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 Form 20-F or Form 40-F.

Form 20-F X Form 40-F ____

On December 30, 2010, Compugen Ltd. (the "Registrant") issued a Press Release, filed as Exhibit 1 to this Report on Form 6-K, which is hereby incorporated by reference herein.

SIGNATURE

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. (Registrant)

By: Ms. Dikla Czaczkes Axselbrad Title: Chief Financial Officer Date: December 30, 2010



Compugen Signs \$5 Million R&D Funding Agreement in Support of its Pipeline Program

Baize Investments to obtain a financial interest in five program molecules and a 30-month warrant to purchase 500,000 Compugen shares at \$6.00 per share

Tel Aviv, Israel, December 30, 2010 --- Compugen Ltd. (NASDAQ: CGEN) announced today that it has entered into an agreement with Baize Investments (Israel) Ltd., a private corporation investing, inter alia, in innovative medical technologies, under which it will receive \$5,000,000 in R&D funding. Under the terms of the funding agreement, which is in support of Compugen's recently announced Pipeline Program, Baize Investments has obtained a financial interest in five designated Compugen-discovered molecules and has been issued a warrant to purchase 500,000 Compugen shares at an exercise price of \$6.00 per share, expiring June 30, 2013.

Baize Investments' financial interest in the five designated molecules consists of the right to receive from Compugen up to 10% of certain future payments received by Compugen from third parties in the event of the successful licensing out for development and/or commercialization of such designated Compugen molecules. Currently, all five molecules are in active research in the Company's Pipeline Program, with their current status ranging from *in silico* selection to post animal model validation. In addition, the investor has the right, until June 30, 2013, to waive his right to receive all such future payments in exchange for 833,334 Compugen ordinary shares. The financial terms for the investor were established based on the assumption that any out-licensing of the designated molecules would be undertaken no later than IND filing.

Martin Gerstel, Compugen's Chairman, stated, "This arrangement is an excellent example of how we can financially leverage our unique predictive product candidate discovery infrastructure to provide an increasing number of novel and attractive product candidates for potential licensing. Given the continuous expansion and improvement of this infrastructure, the *in silico* prediction and selection of candidates is from a practical standpoint, essentially without limit as to the number of attractive candidates that can feed our Pipeline Program, and on an extremely cost-effective and systematic basis. Recently we announced the addition of twenty such novel molecules to the Program, and more have been added since that announcement. The funds received by Compugen pursuant to the agreement being announced today will allow us to pursue more aggressively our ambitious objectives for the Pipeline Program during the next few years."

Mr. Gerstel continued, "In view of their long-term interest in the activities of the Company, we are very pleased to have Baize Investments and Mr. Murray Goldman join the Compugen team in this very meaningful endeavor."

Murray Goldman, Baize Investments' Chairman, stated, "During the past few years, we have followed Compugen's scientific progress and growing predictive discovery capabilities. We are extremely pleased to become a financial partner in advancing these exciting product candidates, all of which have the potential to address significant unmet medical needs."

About Compugen's Pipeline Program

Compugen utilizes its systematic and broadly applicable predictive discovery capabilities to provide product candidates to the drug and diagnostic industries under licensing and other commercialization arrangements.

During 2010, the company's Pipeline Program was initiated to both expand the number of *in silico* predicted and selected therapeutic candidates undergoing *in vitro* and *in vivo* validation, and to significantly enhance the commercial value of Compugen's product candidate pipeline by advancing certain candidates 12-18 months beyond the successful animal disease model proof of concept stage. In October 2010, Compugen announced that approximately 20 novel molecules had entered the Pipeline Program, in addition to eight molecules that had at that time already successfully completed animal disease model or similar therapeutic proof of concept validation studies, and additional molecules have been added since then to the Pipeline Program. The current areas of focus for the Pipeline Program are oncology and immunology therapeutics, primarily in the form of protein, peptide and monoclonal antibody drug candidates.

About Compugen

Compugen is a leading drug and diagnostic product candidate discovery company. Unlike traditional high throughput trial and error experimental based discovery, Compugen's discovery efforts are based on in silico (by computer) product candidate prediction and selection utilizing a broad and continuously growing infrastructure of proprietary scientific understandings and predictive platforms, algorithms, machine learning systems and other computational biology tools to address important unmet therapeutic and diagnostic needs – both for Compugen and its partners. Compugen's growing number of collaborations covering the further development and commercialization of Compugen-discovered product candidates provides Compugen with potential milestone payments and royalties on product sales or other forms of revenue sharing. These collaborations may be entered into before product candidate discovery is undertaken pursuant to "discovery on demand" type arrangements, or with respect to existing product candidates. Collaborations can be initiated prior to or at the proof of concept stage, or after additional preclinical activities have been undertaken by Compugen. In 2002, Compugen established an affiliate, Evogene Ltd. (www.evogene.com) (TASE: EVGN.TA), to utilize certain of the Company's in silico predictive discovery capabilities in agricultural biotechnology. For additional information, please visit Compugen's corporate website at www.cgen.com.

This press release may contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include words such as "may", "expects", "anticipates", "believes", and "intends", and describe opinions about future events. These forward-looking statements involve known and unknown risks and uncertainties that may cause the actual results, performance or achievements of Compugen to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Some of these risks are: changes in relationships with collaborators; the impact of competitive products and technological changes; risks relating to the development of new products; and the ability to implement technological improvements. These and other factors are identified and more fully explained under the heading "Risk Factors" in Compugen's annual reports filed with the Securities and Exchange Commission.

Company contact:

Marjie Hadad Global Media Liaison Compugen Ltd. Email: marjie@cgen.com

Tel: +972-54-536-5220