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 November 30, 2011

Compugen Ltd.
(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 November 30, 2011, 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: November 30, 2011

Compugen Presents Predictive Drug Target Discovery Platform at European Antibody Conference

Presentation by Dr. Anat Cohen-Dayag, Compugen's CEO, includes results for two promising novel targets for antibody-based therapy

Geneva, Switzerland, November 30, 2011 --- Speaking today at the plenary session of the 7th Annual European Antibody Congress in Geneva, Dr. Anat Cohen-Dayag, President and CEO of Compugen Ltd. (NASDAQ: CGEN), presented Compugen's Antibody Target Discovery Platform, one of the Company's predictive discovery platforms for novel therapeutic targets. As part of her presentation covering the unique discovery capabilities of this platform, Dr. Cohen-Dayag presented experimental data demonstrating the potential of two *in silico* predicted proteins, CGEN-928 and CGEN-15001T, to serve as new targets for monoclonal antibody ("mAb") based therapy.

Dr. Cohen-Dayag stated, "During the past two decades, mAbs have emerged as an important new and rapidly growing drug class, with over 20 mAbs already approved for therapeutic use in the U.S. for various clinical indications. mAb therapeutics have an exceptionally high success rate from first use in humans to regulatory approval, a rate more than double that of small molecule drugs. However, one of the main challenges in this extremely promising field is the identification of novel targets for mAb therapy. To this end, Compugen has developed several proprietary target discovery platforms through the focusing and integration of various aspects of its unique predictive discovery capabilities."

Dr. Cohen-Dayag continued, "In addition to the two drug target candidates presented today in the conference, other promising candidates have entered our Pipeline Program and are at various stages of validation and mAb generation. We are now initiating collaborations with leading scientists from distinguished academic institutions in relevant scientific and medical fields to assist us in the further validation and development of these candidates."

In her presentation, Dr. Cohen-Dayag explained that CGEN-928 is a membrane protein which previously had no known function or potential clinical utility. However, Compugen's Monoclonal Antibody Targets Discovery Platform predicted that this protein should have utility in the treatment of multiple myeloma, an important unmet medical need in oncology. Consistent with this prediction, CGEN-928 has now been shown by Compugen to be highly expressed in multiple myeloma samples compared with various normal tissue samples. Further studies have demonstrated broad expression of the protein in human multiple myeloma tumor cells, including late stage multiple myeloma and drug resistant and aggressive primary tumor cell lines. Thus CGEN-928's expression profile and supporting data indicate its potential use as a target for antibody-based therapy, as well as a diagnostic and prognostic marker for multiple myeloma.

The second predicted mAb target Dr. Cohen-Dayag discussed was CGEN-15001T, which is also a membrane protein. This previously uncharacterized protein was predicted by Compugen to belong to the B7/CD28 protein family, known to be involved in regulation of the immune system in immune related disorders and in cancer. CGEN-15001T has demonstrated potential therapeutic

utility for cancer, and in her talk, Dr. Cohen-Dayag presented, for the first time, recent experimental results demonstrating that it is expressed in both prostate cancer tissues as well as in immune cells residing within the tumor. These results support its possible additional role as a cancer immunotherapy target, an area of great interest to the pharmaceutical industry. Dr. Cohen-Dayag also presented data supporting the therapeutic potential and mechanism of action of CGEN-15001, the extracellular domain of CGEN-15001T fused to an Fc, for various immune-related conditions such as multiple sclerosis and rheumatoid arthritis. These results further support the immunomodulatory role of CGEN-15001T as a drug target in oncology.

About mAb Therapy
Monoclonal antibody (mAb) therapy is based on antibodies that bind with high specificity to target cells or proteins. The antibodies may then stimulate the patient's immune system to attack those cells, or it is possible to use such antibodies to target drugs only to the cells that have been identified by the antibodies. Due to the versatility and specificity of this approach, mAb therapies are being intensively researched and developed as treatments for numerous serious diseases, with the expectation of higher efficacy and fewer side effects. For example, mAbs could be used to target the delivery of chemotherapy only to cancer cells with the goal of sparing healthy cells and thereby avoiding certain serious side effects associated with conventional chemotherapy.

About Compugen's Antibody Targets Discovery Platform
Compugen's Antibody Therapeutic Targets Discovery Platform relies heavily on the Company's LEADS and MED capabilities, two computational biology infrastructure platforms that serve as core components for the development of Compugen's discovery platforms. The LEADS platform provides a comprehensive view of the human transcriptome, proteome, and peptidome and serves as a rich infrastructure for the discovery of novel genes, transcripts and proteins. It includes extensive gene information and annotation, such as: splice variants, antisense genes, SNPs, novel genes, RNA editing, etc. At the protein level, LEADS provides full protein annotation, including homologies, domain information, subcellular localization, peptide prediction, and novelty status. The MED Platform is an integrated database composed of the results from more than 70,000 public and proprietary microarray experiments, normalized and organized into approximately 1,400 therapeutically relevant conditions (i.e. normal tissues, malignant tissues, tissues from drug treated patients, etc.). Utilizing a sophisticated query interface, the proprietary MED platform allows the simultaneous examination of the expression of genes and pathways across all 1,400 conditions and Tissues as well as all 70,000 microarray experiments.

In addition to incorporating MED and LEADS, the mAb Targets Discovery Platform utilizes multiple data sources and algorithms to predict a large number of novel membrane proteins that can serve as targets for antibody therapeutics, such as for various cancer and autoimmune diseases. The selection of appropriate candidates from this large body of predicted membrane proteins is accomplished using sub-modules of algorithms and other computational tools developed specifically for each disease state or protein family

About Compugen
Compugen is a leading therapeutic product discovery company focused on therapeutic proteins and monoclonal antibodies to address important unmet needs in the fields of immunology and oncology, either for Compugen or its partners. Unlike traditional high throughput trial and error experimental based drug candidate discovery, Compugen's discovery efforts are based on systematic and continuously improving *in silico* (by computer) product candidate prediction and selection followed by experimental validation, with selected product candidates being advanced in its Pipeline Program to the pre-IND stage. Compugen's *in silico* predictive models utilize a broad and continuously growing infrastructure of proprietary scientific understandings and predictive platforms, algorithms, machine learning systems and other computational biology capabilities. The Company's business model primarily involves collaborations covering the further development

and commercialization of Compugen-discovered product candidates and various forms of "discovery on demand" arrangements, in both cases providing Compugen with potential milestone payments and royalties on product sales or other forms of revenue sharing. 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.

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