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 January 2007

<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 <u>X</u> Form 40-F ___

On January 30, 2007 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: /s/ Nurit Benjamini
Title: Chief Financial Officer
Date: January 30, 2007



Compugen to Collaborate with Teva for Discovery of Novel Biomarkers for Drug Toxicity

Initial efforts targeted at predicting and validating biomarkers for early detection of druginduced nephrotoxicity

Tel Aviv, Israel – January 30, 2007 – Compugen Ltd. (NASDAQ: CGEN) announced today it has signed an agreement with Teva Pharmaceutical Industries (NASDAQ: TEVA) to collaborate on a project for the discovery of biomarkers for the detection of drug toxicity in preclinical stages of the drug development process. According to the agreement, the initial focus of the collaboration will be on biomarkers for the early detection of potential nephrotoxicity. The parties may jointly choose to expand the scope of the collaboration to include biomarkers for the detection of hepatotoxicity and/or cardiotoxicity in response to drug treatment. Under the terms of the agreement, Compugen has 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, Compugen expects to utilize its proprietary computational tools, discovery engines and nucleic acid testing technologies for the purpose of predicting and validating toxicity biomarkers. Compugen's integrated analysis will incorporate data derived from biological samples collected by Teva in a preclinical study designed specifically for this project, as well as Compugen's proprietary expression and clinical data.

Nucleic acid technologies detect RNA molecules that are expressed under various pathological conditions, and Compugen's computational discovery platforms are designed to directly identify such RNA molecules. Nucleic acid based toxicity biomarkers discovered through this process may assist in the early detection of toxic drug effects and may therefore enable such drug candidates not to progress into more expensive drug development stages.

Anat Cohen-Dayag, Ph.D., Vice President of Diagnostic Biomarkers, Compugen Ltd., said, "This is another example of how the capabilities that have been developed over the past decade at Compugen now allow us to address important unmet needs in drug discovery and clinical use with unique predictive platforms. In this case, we intend to utilize our discovery engines, originally developed for immunoassay diagnostic collaborations, to predict toxicity biomarkers that could be useful during preclinical evaluation, thus enabling the identification of toxicity at an early stage, before substantial investments in drug development have been made. We are very pleased to be collaborating with Teva on this very important – and largely unmet – need in drug discovery and development."

About Compugen

Compugen's mission is to be the world leader in the discovery and licensing of product candidates to the drug and diagnostic industry. The Company's powerful discovery engines enable the predictive discovery of numerous potential therapeutics and diagnostic biomarkers. This capability results from the Company's decade-long pioneering efforts in the deeper understanding of important biological phenomena at the molecular level through the incorporation of ideas and methods from mathematics, computer science and physics into biology, chemistry and medicine. To date, Compugen's product discovery efforts and its initial discovery engines have focused mainly within the areas of cancer, immune-related and cardiovascular diseases. The Company's primary commercialization pathway for its therapeutic and diagnostic product candidates is to enter into milestone and revenue sharing out-licensing and joint development agreements with leading companies. Compugen has established an agricultural biotechnology affiliate – Evogene, and a small-molecule drug discovery affiliate – Keddem Bioscience. 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:

Naomi Rabbie Corporate Communications Manager Compugen Ltd. Email: naomir@cgen.com

Tel: +972-52-598-9894