

**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 April 2008

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 April 1, 2008 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/ Ronit Lerner

Title: Chief Financial Officer

Date: April 1, 2008



Compugen Discloses Novel Troponin Variant for Identification of Cardiac Muscle Injury, Receipt of Patent for the Molecule and Collaboration with Biosite

Biosite Agreement includes research collaboration with worldwide license option

Tel Aviv, Israel – April 1, 2008 – Compugen Ltd. (NASDAQ: CGEN) disclosed today 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. Compugen also announced that a patent for this biomarker has been granted by the US Patent and Trademark Office.

The novel Troponin I variant was 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 serum protein - in myocardial infarction patients compared to healthy individuals. Under the recently signed agreement with Biosite, Compugen will provide Biosite with all existing proprietary data related to the molecule and 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. The agreement also provides Biosite with an option to obtain worldwide royalty bearing commercialization rights for possible immunoassay diagnostic products based on this biomarker.

"We are very pleased to announce this additional excellent example of the capability of our unique predictive discovery platforms to discover potentially valuable molecules which were not previously known despite the maturity and high level of interest in the specific areas of research," stated Alex Kotzer, President and Chief Executive Officer of Compugen. "Also, Biosite - which has previously entered into other agreements with us and is a leading provider of rapid diagnostic products and antibody development technologies- is a premier partner to further evaluate, and if successful, commercialize this Troponin diagnostic marker given their leading position in cardiovascular diagnostics", Mr. Kotzer added.

About Troponin

The troponin complex, found in both skeletal and cardiac muscles, consists of three protein sub-units: troponin I, troponin T and troponin C. Certain subtypes of troponin, cardiac troponin I and T, are very sensitive and specific indicators of damage to the heart muscle. Cardiac-specific troponin I is used as an aid in the diagnosis of myocardial infarction since it becomes elevated in the blood approximately four to eight hours following myocardial injury or necrosis, and remains elevated for several days. According to the ACC/AHA guidelines, a cardiac-specific troponin, such as troponin I, is the preferred marker for diagnosing acute myocardial infarction. Acute myocardial infarction is one of the most common diagnoses in hospitalized patients in industrialized countries, with over one million new or recurrent occurrences annually in the US alone.

About Compugen

Compugen's 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. The Company's 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 the Company's decade-long focus on the predictive understanding of important biological phenomena at the molecular level. Compugen's current collaborations include Biosite, Medarex, Inc., Merck & Co., Inc., Ortho-Clinical Diagnostics (a Johnson & Johnson company), Roche, Siemens Healthcare Diagnostics, Inc., and Teva Pharmaceutical Industries. In 2002, Compugen established an affiliate – Evogene Ltd. (TASE: EVGN.TA) – to utilize the Company's in-silico predictive discovery capabilities in the agricultural biotechnology field. For additional information, please visit Compugen's corporate Website at www.cgen.com and Evogene's corporate Website at www.evogene.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", "could", "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:

Dikla Czaczkes Axselbard
Acting CFO
Compugen Ltd.
Email: dikla@cgen.com
Tel: +972-54-530-4469