

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 October 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 October 23, 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/ Dikla Czaczkes Axselbard
Title: Chief Financial Officer
Date: October 23, 2008



Compugen Announces New Discovery Platform to Identify Viral Peptides for Use as Human Anti Inflammatory Drugs

Platform Further Strengthens Compugen's Capabilities in Peptide Therapeutics Area

Tel Aviv, Israel – October 23, 2008 - Compugen Ltd. (Nasdaq: CGEN) today announced the development and validation of its new Viral Peptides Discovery Platform designed to identify peptides from viral genomes for potential human therapeutic use against inflammatory and immune related diseases.

Compugen also announced that the Viral Peptides Discovery Platform has led to the discovery of two novel viral peptides demonstrating in *in vitro* studies the ability to suppress inflammatory responses.

Yossi Cohen, M.D., vice president of research and development at Compugen, said, "This is the third peptide therapeutics platform we've developed following our previously announced GPCR peptide ligands and DAC peptide blockers discovery platforms. Each of our three discovery platforms in the peptide therapeutics area relies on a fundamentally different methodology and demonstrates our growing strength and focus in this important field of drug discovery."

The engine of the Viral Peptides Discovery Platform is based on the concept of utilizing the virus gained knowledge on how to subvert the human immune system. This is accomplished through the use of sophisticated algorithms and *in silico* tools that predict a large number of potential natural peptides produced by viruses and then select those that appear to have features suggesting anti-inflammatory activities. Validation activities for this platform included experimentally screening a number of these predicted peptides in a functional assay utilizing activated immune cells. In this validation experiment, two of the tested peptides exhibited suppression of secretion of various cytokines and chemokines suggesting anti-inflammatory properties.

The company's previously announced GPCR Peptide Discovery Platform, the basis for its collaboration with Merck, relies on machine learning algorithms to predict and select potential human peptide ligands for GPCRs. Using an entirely different prediction and selection methodology, the DAC Blockers Discovery Platform focuses on human peptides that can block disease-related three-dimensional conformations of proteins.

Alex Kotzer, president and CEO of Compugen, said, "This is the 10th drug and diagnostic discovery platform that has now been validated and added to our growing portfolio. We are extremely pleased by our accelerating progress and confident of the significant commercial potential provided by our unique and broad discovery capabilities and the growing number of product 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) prediction and selection utilizing a growing number of field focused proprietary discovery platforms accurately modeling biological processes at the molecular level. The resulting product candidates are then validated through *in vitro* and *in vivo* experimental studies and out-licensed for further development and commercialization under various forms of revenue sharing agreements. 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. 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 Web site 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

U.S. contacts:

Investors:
John Quirk
Porter Novelli Life Sciences
Email: jquirk@pnlifesciences.com
Tel: (212) 601-8296

Media:
Arash Khurana
Porter Novelli Life Sciences
Email: arash.khurana@porternovelli.com
Tel: (212) 601-8290