

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 September 2004

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 September 8th, 2004 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/ Mor Amitai
Title: President & CEO
Date: September 8th, 2004

Exhibit 1



Diagnostic Products Corporation and Compugen Announce Broad Diagnostic Collaboration

Los Angeles, CA and Tel Aviv, Israel – September 8, 2004 – Diagnostic Products Corporation (NYSE:DP) and Compugen Ltd. (NASDAQ: CGEN) announced today a broad collaboration for the development and commercialization of novel diagnostic products, with an anticipated focus in the cancer and cardiovascular fields. Terms of this agreement allow Diagnostic Products Corporation (DPC) to develop and commercialize immunoassay and nucleic-acid based diagnostic products based on Compugen discovered biomarkers, including certain biomarker candidates already discovered by Compugen, as well as additional candidates arising out of the collaboration.

The unique discovery capability underlying this collaboration is provided by Compugen's discovery engines. These engines, incorporating Compugen's LEADS technology and its deeper understandings of key biological phenomena, enable the identification of novel mRNAs and proteins with desired characteristics, including novel splice variants of known genes with documented diagnostic applications. After Compugen identifies and initially validates biomarker candidates, DPC will be able to apply its proven expertise and capabilities in the development and commercialization of novel diagnostic products.

Compugen is entitled to receive development milestone payments and royalties on the sales of the diagnostic products. In some cases, the discovered proteins may also have therapeutic applications, in which case Compugen will have the right to pursue further development in this field, and DPC will be entitled to milestone payments and royalties from any successful therapeutic applications.

"We are enthusiastic about the opportunity to assess multiple high quality diagnostic biomarkers that have been discovered by Compugen," said Michael Ziering, President and Chief Executive Officer, Diagnostic Products Corporation.

Mor Amitai, Ph.D., President and Chief Executive Officer of Compugen Ltd., stated, "Our unique discovery engines are now providing us with two types of royalty bearing product development collaborations: first, the more traditional product specific agreements, and second, what we call pipeline agreements, such as this agreement with DPC. Pipeline agreements, which we intend to pursue in both the therapeutic and diagnostic fields, are possible only because of the flexible nature of our discovery engines which allow us to focus these engines on specific fields of interest to our partners." Dr.

Amitai continued, "We are very pleased that our first pipeline collaboration in the diagnostic field is with DPC, a global provider of immunodiagnostic systems and reagents, and a company with which we have already established an excellent working relationship."

About Compugen

Compugen, a genomics-based drug and diagnostic discovery company, increases the probability of successful development of novel drug and diagnostic products by incorporating ideas and methods from mathematics, computer science, and physics into the disciplines of biology, organic chemistry, and medicine. This unique capability results in powerful predictive models and discovery engines, which are both advancing the understanding of important biological phenomena and enabling the discovery of numerous potential therapeutic products and diagnostic markers. The Company has an early stage in-house pipeline consisting of selected therapeutic protein candidates discovered by the Company; additional therapeutic and diagnostic discoveries have been out-licensed for development. Among Compugen's customers and partners are leading pharmaceutical and diagnostic companies, such as Abbott Laboratories, Diagnostic Products Corporation, Novartis, and Pfizer. Compugen has established a small-molecule drug discovery subsidiary – Keddem Bioscience, and an agricultural biotechnology subsidiary – Evogene. For additional information, please visit Compugen's updated corporate Website at www.cgen.com.

About Diagnostic Products Corporation

Founded in 1971, Diagnostic Products Corporation (DPC) is the global leader dedicated exclusively to immunodiagnostic testing. The Company's menu of automated tests includes about 100 immunoassays for medically important substances and nearly 350 specific allergens and allergy panels. DPC also designs and manufactures automated laboratory instrumentation, which provides fast, accurate results while reducing labor and reagent costs. DPC sells its products to hospitals, clinics and laboratories domestically and in over 100 other countries. Additional Company information can be found on DPC's website at www.dpcweb.com.

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include words like "may," "expects," "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 and DPC 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; the ability to implement technological improvements; the ability of Compugen to obtain and retain customers. These and other factors are identified and more fully explained: (i) in the case of Diagnostic Products Corporation, in its Annual Report on Form 10-K for the year ended December 31, 2003 and its Quarterly Reports on Form 10-Q filed with the Securities and Exchange Commission, and (ii) in the case of Compugen, under the heading "Risk Factors" in Compugen's annual reports filed on form 20F for the year ended December 31, 2003 with the Securities and Exchange Commission.

NOTES FOR EDITORS**About Compugen's biomarker discovery engine**

Compugen's discovery engines are designed to enable researchers to accurately identify proteins and mRNAs with desired properties, which are expected to render them suitable for therapeutic and diagnostic development with a high probability of success. Compugen's biomarker discovery engine identifies novel transcripts and splice variants that are differentially expressed in specific tissues and/or pathological conditions, and which may therefore serve as biomarkers for diagnosis.

Genes involved in various diseases are often over-expressed under disease conditions. Compugen's approach to identifying such genes is to look for over-expression *in-silico*,

and subsequently verify the predictions by experimental methods. The in-silico predictions are based on a sophisticated analysis of genomic and expressed data, in which novel mRNAs and proteins, as well as their differential expression in certain pathologies or tissues, are predicted. Novel splice variants of known genes are often discovered in this process.

Once a set of variants and genes is identified, it is validated by microarray analysis. Successful candidates are further tested using quantitative RT-PCR with the relevant tissues, to validate expression at the mRNA level.

Currently, Compugen is focusing its efforts on utilizing its discovery engines to discover potential therapeutic proteins and diagnostic markers. However, this approach may be equally useful for the discovery and selection of targets for small molecules, antibodies and other types of drugs.