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 2009

<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 October 27, 2009 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: October 27, 2009



Compugen Reports Third Quarter 2009 Financial Results

Tel Aviv, Israel, October 27, 2009 --- Compugen Ltd. (NASDAQ: CGEN) today reported financial results for the third quarter ended September 30, 2009.

Martin Gerstel, Compugen's co-CEO stated, "The industry interest and collaboration opportunities that we are now seeing for our company exist solely due to the broadly applicable drug and biomarker discovery capability that has been created at Compugen during the past decade. As we increase our focus on these commercialization opportunities, we will also continue to widen and deepen our leadership position in predictive discovery, which we are confident, will become increasingly important in drug and diagnostic research industry-wide. A reflection of this commitment is the fact that during 2009, and in our budget for 2010, almost half of our R&D efforts are allocated to further extending our capabilities and modifying or creating additional discovery platforms."

As previously projected, current revenues continue to be insignificant with no revenues reported for the third quarter of 2009 compared with \$6,000 for the third quarter of 2008. Revenues for the nine months ended September 30, 2009, were \$225,000, compared with \$327,000 for the same period in 2008.

The net loss for the most recent quarter was \$1.9 million (including a non-cash expense of \$460,000 related to stock based compensation), or \$0.06 per share, compared with a net loss of \$3.3 million (including a non-cash expense of \$484,000 related to stock based compensation), or \$0.12 per share, for the corresponding quarter of 2008. The net loss for the first nine months of 2009 was \$1.8 million (including a non-cash expense of \$1.1 million related to stock based compensation), or \$0.06 per share, compared with a net loss of \$8.7 million (including a non-cash expense of \$1.2 million related to stock based compensation), or \$0.31 per share, for the same period in 2008.

The significant reduction in net loss for the first nine months of 2009 reflects the sale by Compugen during the second quarter of 2009 of a portion of its holdings of Evogene Ltd. shares for approximately \$3.6 million, which is included in Other Income for the first nine months of 2009. At September 30, 2009, the market value of Compugen's remaining 1.15 million Evogene shares was \$4.0 million, compared with a market value of \$3.9 million for the 2.15 million Evogene shares owned as of December 31, 2008 prior to the sale. These amounts, and the proceeds received from the Evogene shares sale in the second quarter of 2009, reflect the substantial increase in the market price of the Evogene shares during 2009.

Research and development expenses for the third quarter of 2009 were \$1.4 million compared with \$2.3 million for the third quarter of 2008 and remained the Company's largest expense. Research and development expenses for the first nine months of 2009 were \$4.4 million compared with \$6.6 million for the comparable period in 2008. These amounts are before the deduction of governmental and other grants, which totaled for the third quarter ended September 30, 2009, \$180,000 compared with \$158,000 for the corresponding quarter in 2008, and \$697,000 for the first nine months of 2009, compared with \$493,000 for the comparable period in 2008.

As of September 30, 2009, Compugen had \$5.7 million in cash and cash equivalents, not including its holding of 1.15 million Evogene shares as discussed above. With the inclusion of the current market value for these Evogene shares, the Company would have sufficient resources to meet its expected cash requirements through early 2011, assuming no significant milestones,

upfront fees, or additional funds from any other source were obtained prior to such time. The Company previously projected that its total net cash usage for calendar year 2010 would be less than \$8 million.

Conference Call and Web Cast Information

A replay of the conference call will be available approximately two hours after the completion of the live conference call. To access the replay, please dial 1-877-332-1104 from the US or +972-3-925-5901 internationally. The replay will be available until 12 noon EDT on October 30, 2009.

(Tables to follow)

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 collaborations include Bayer Schering Pharma, Biosite, Medarex, Inc., Merck & Co., Inc., Merck Serono, 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.evogen.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: acceptance of its business model by major pharmaceutical companies; possible inability to become profitable; inability to raise capital to sustain its operations; inability to enter into favorable arrangements with collaborators; inability of collaborators to successfully develop drugs based on our candidates; 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

COMPUGEN LTD. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(U.S. dollars in thousands, except for share and per-share amounts)

	Three Months Ended September 30,		Nine Months Ended <u>September 30,</u>	
	<u>2009</u>	<u>2008</u>	<u>2009</u>	<u>2008</u>
	Unaudited	Unaudited	Unaudited	Unaudited
Revenues	-	6	225	327
Cost of revenues	-	-	-	7
Research and development expenses	1,447	2,286	4,370	6,595
Less: governmental and other grants	(180)	(158)	(697)	(493)
Research and development expenses, net	1,267	2,128	3,673	6,102
Sales and marketing expenses	175	339	660	1,002
General and administrative expenses	582	915	1,570	2,429
Total operating expenses *	2,024	3,382	5,903	9,533
Operating loss	(2,024)	(3,376)	(5,678)	(9,213)
Financing income, net	181	77	217	438
Other income (loss)	(24)	12	3,657	39
Net loss from continuing operations	(1,867)	(3,287)	(1,804)	(8,736)
Income (loss) from discontinued operations	14	(1)	14	(14)
Net loss	(1,853)	(3,288)	(1,790)	(8,750)
Basic and diluted loss per ordinary share from continuing operations	(0.06)	(0.12)	(0.06)	(0.31)
Basic and diluted loss per ordinary share from discontinued operations	-	-	-	-
Basic and diluted net loss per ordinary share	(0.06)	(0.12)	(0.06)	(0.31)
Weighted average number of ordinary shares outstanding	28,552,927	28,480,592	28,526,084	28,408,597

^{*} Includes stock based compensation

COMPUGEN LTD. CONDENSED CONSOLIDATED BALANCE SHEETS DATA

(U.S. dollars, in thousands)

	September 30, 2009 Unaudited	December 31, 2008 Audited
ASSETS		
Current assets		
Cash, cash equivalents, short term deposits and marketable securities	5,656	7,248
Cash held in favor of other consortium partners	50	233
Investment in Evogene	3,991	3,858
Receivables and prepaid expenses	408	768
Total current assets	10,105	12,107
Long-term investments		
Other assets	25	41
Severance pay fund	1,174	1,038
Total long-term investments	1,199	1,079
Property and equipment, net	721	1,058
Total assets	12,025	14,244
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued expenses	1,231	2,881
Deferred revenues	62	100
Liabilities related to discontinued operations	-	12
Total current liabilities	1,293	2,993
Long-term liabilities		
Accrued severance pay	1,340	1,248
Total shareholders' equity	9,392	10,003
Total liabilities and shareholders' equity	12,025	14,244