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 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 September 23, 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: September 23, 2009

COMPUGEN LTD. AND ITS SUBSIDIARIES

INTERIM CONSOLIDATED FINANCIAL STATEMENTS

AS OF JUNE 30, 2009

U.S. DOLLARS IN THOUSANDS

UNAUDITED

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CONSOLIDATED BALANCE SHEETS

	U.S.	. dollars i	n thousands	(except share and	l per share data)
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	June 30, 2009		December 31, 2008	
	Ţ	Jnaudited		
ASSETS				
CURRENT ASSETS:	Ф	c 402	Ф	4.650
Cash and cash equivalents	\$	6,483	\$	4,650
Cash held in favor of other consortium partners Short-term deposits		48		233 540
Marketable securities held to maturity		-		2,058
Investment in Evogene		4,281		3,858
Trade receivables		125		3,636
Other accounts receivable and prepaid expenses		616		768
Other accounts receivable and prepard expenses		010		700
<u>Total</u> current assets		11,553		12,107
LONG-TERM INVESTMENTS:				
Long-term lease deposits		29		41
Severance pay fund		1,072		1,038
		,	_	,
<u>Total</u> long-term investments		1,101		1,079
PROPERTY AND EQUIPMENT, NET		855		1,058
<u>Total</u> assets	\$	13,509	\$	14,244
LIADH ITIEC AND CHADEHOLDEDC FOLHTY				
LIABILITIES AND SHAREHOLDERS' EQUITY CURRENT LIABILITIES:				
Trade payables	\$	335	\$	472
Other accounts payable and accrued expenses	Ф	935	Ф	2,409
Deferred revenue		62		100
Liabilities related to discontinued operations		12		12
Liabilities related to discontinued operations		12		12
<u>Total</u> current liabilities		1,344		2,993
ACCRUED SEVERANCE PAY		1,211		1,248
SHAREHOLDERS' EQUITY:				
Share capital:				
Ordinary shares of NIS 0.01 par value; 50,000,000 shares authorized at June 30, 2009				
(unaudited) and December 31, 2008; 28,512,440 shares issued and outstanding at June				
30, 2009 (unaudited) and December 31, 2008.		77		77
Additional paid-in capital		163,810		163,181
Accumulated other comprehensive income		4,457		4,198
Accumulated deficit		(157,390)		(157,453)
Total shareholders' equity		10,954		10,003
	\$	· ·	<u> </u>	ĺ
Total liabilities and shareholders' equity	•	13,509	<u> </u>	14,244

September 23, 2009		
Date of approval of the	Martin Gerstel	Dikla Czaczkes-Axselbrad
financial statements	Co-Chief Executive Officer	Chief Financial Officer

CONSOLIDATED STATEMENTS OF OPERATIONS

U.S. dollars in thousands (except share and per share data)

	Six months ended June 30,			
	2008 2009			2009
	Unaudited			
Revenues	\$	225	\$	321
Cost of revenues Research and development expenses, net of Government and other grants amounted to \$517, \$335, \$368 and \$169 for the sixmonth periods and three-month periods ended June 30, 2009 and		-		7
2008, respectively		2,406		3,974
Marketing and Business Development expenses		485		663
General and administrative expenses		988		1,514
<u>Total</u> operating expenses		3,879		6,151
Operating loss		(3,654)		(5,837)
Financial income, net		36		361
Other income, net		3,681		27
Income (loss) from continuing operations Income (loss) from discontinued operations		63		(5,449) (13)
Net income (loss)	\$	63	\$	(5,462)
Basic and diluted net earnings (loss) per share from continuing operations	\$	0.01	\$	(0.19)
Basic and diluted net earnings (loss) per share from discontinued operations			\$	
Basic and diluted net earnings (loss) per share	<u>\$</u> \$	0.01	\$	(0.19)
8. ()			<u> </u>	(2, 2)
Weighted average number of ordinary shares used in computing basic net earnings (loss) per share	28	3,512,440	2	8,372,204
Weighted average number of ordinary shares used in computing diluted net earnings (loss) per share	28	3,746,311	2	8,372,204

STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

U.S. dollars in thousands (except share data)

	Ordinary	shares	Additiona paid-in	Accumulated other comprehensive	Accumulated	Total shareholders'	Total other comprehensive
	Number	Amount	capital	income	deficit	equity	loss
Balance as of January 1, 2008	28,323,811	\$ 77	\$ 161,158	\$ 976	\$ (144,926)	\$ 17,285	
Employee options exercised	173,629	*) -	295	-	-	295	
Issuance of shares to the CEO	15,000	*) -	25	-	-	25	
Stock-based compensation relating to options and warrants issued to scientific advisory board members and consultants	_	_	(100) -	_	(100)	
Stock-based compensation relating to options issued to employees	-	-	1,803	<i>'</i>	_	1,803	
Unrealized gain on the investment in Evogene	-	-	· -	3,222	-	3,222	\$ 3,222
Net loss					(12,527)	(12,527)	(12,527)
Total comprehensive loss							\$ (9,305)
Balance as of December 31, 2008	28,512,440	77	163,181	4,198	(157,453)	10,003	
Stock-based compensation relating to options and warrants issued to scientific							
advisory board members and consultants	-	_	54	-	-	54	
Stock-based compensation relating to options issued to employees	-	-	575	-	-	575	
Realized gain on the investment in Evogene	-	-	-	(3,557)	-	(3,557)	\$ (3,557)
Unrealized gain on the investment in Evogene	-	-	-	3,816	-	3,816	3,816
Net loss			_ 	- 	63	63	63
Total comprehensive income							\$ 322
Balance as of June 30, 2009 (unaudited)	28,512,440	\$ 77	\$ 163,810	\$ 4,457	\$ (157,390)	\$ 10,954	

*) Represents an amount lower than \$1.

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

	Six months ended June 30,		
	2009	2008	
		Unaudited	
Cash flows from operating activities:			
Net income (loss)	\$ 63	\$ (5,462)	
Adjustments required to reconcile net loss to net cash used in operating activities:			
Stock-based compensation relating to options and warrants issued to		(2.2)	
scientific advisory board members and consultants	54	(29)	
Stock-based compensation relating to options issued to employees	575	772	
Depreciation	204	246	
Accrued severance pay, net	(72)	89	
Interest and amortization of premium on deposits and marketable securities		5	
	(106)	5 (12)	
Capital gain from property and equipment	(106)	` ,	
Gain from the sale of Evogene shares Increase in trade receivables	(3,719) (125)		
Decrease in other accounts receivable and prepaid expenses	170	316	
Decrease in trade payables and other accounts payable and accrued	170	310	
expenses	(1,426)	(561)	
Decrease in deferred revenue	(38)		
Net cash used in discontinued operations operating activities		63	
Net cash used in operating activities	(4,420)	(4,743)	
Cash flows from investing activities:			
Proceeds from redemption of deposits and marketable securities Investment in bank deposits	2,598	9,000 (2,956)	
Purchase of property and equipment	(12)		
Decrease (increase) in long-term lease deposits	12	(17)	
Proceeds from sale of investment in Evogene	3,557	(17)	
Proceeds from sale of property and equipment	98	12	
Net cash provided by investing activities	6,253	5,993	
Cash flows from financing activities:			
Exercise of options		216	
Net cash provided by financing activities		216	
Increase in cash and cash equivalents	1,833	1,466	
Cash and cash equivalents at the beginning of the period	4,650	1,298	
Cash and cash equivalents at the end of the period	\$ 6,483	\$ 2,764	

U.S. dollars in thousands

NOTE 1:- GENERAL

a. Compugen Ltd. ("the Company" or "Compugen") is an early stage drug and diagnostic discovery company. The Company's business is focused on developing and using predictive computer-based discovery platforms to discover potential therapeutic drug candidates and diagnostic biomarker candidates. The Company's current focus is drug and biomarker discovery. The Company uses experimental biological processes to validate product candidates discovered by our predictive platforms. The Company seeks to enter into early stage commercial collaborations with third parties, to develop candidates that the Company has validated. The Company's initial discovery efforts have focused mainly on cancer, cardiovascular and immune-related diseases.

The Company's headquarters and research facilities are located in Israel.

b. In 1999, the Company established a division focusing on agricultural biotechnology and plant genomics called Evogene Ltd ("Evogene"). Evogene is an Israeli corporation primarily engaged in delivering improved plant traits to the agbio industry through the use of a platform combining computational genomics, molecular biology and breeding methods. Following an equity investment round with certain investors in February 2006, in which the Company's holdings were diluted to less than 20% of Evogene's ordinary shares and through June 2007, the investment in Evogene was accounted for under the cost method of accounting, in accordance with Accounting Principles Board Opinion No. 18, "The Equity Method of Accounting for Investments in Common Stock". During June 2007, Evogene completed an initial public offering on the Tel Aviv Stock Exchange. Prior to the IPO, the excess of losses over investment in Evogene amounted to \$466 and was presented as a liability included in the Company's balance sheet that represents excess of losses sustained by Compugen over its investment through the deconsolidation date. In August 2008, Evogene signed a collaboration agreement involving shares equity investment with third party. In June 2009 the Company sold 1,000,000 Evogene's ordinary shares to a third party in an "out of the stock exchange" transaction in return for \$ 3,557. The basis on which the cost of a security sold or the amount reclassified out of accumulated other comprehensive income into earnings was determined is a specific identification. As a consequence of the IPO, the additional equity investment and the sale transaction the Company currently holds 1,150,000 shares representing 3.9% of Evogene outstanding Ordinary shares.

As of June 30, 2009, the investment in Evogene was accounted for as available-for-sale marketable security in accordance with Statement of Financial Accounting Standard No. 115, "Accounting for Certain Investments in Debt and Equity Securities" ("SFAS 115").

Available-for-sale securities are carried at fair value, with the recognized gains and losses reported as a separate component of stockholders' equity under accumulated other comprehensive income in the consolidated balance sheet

c. In August 2004, the Company spun off its computational chemistry activity into a wholly-owned subsidiary, Keddem BioScience Ltd. ("Keddem"). From founding through the first quarter of 2007, Keddem experienced recurring losses from operations and had a net capital deficiency.

U.S. dollars in thousands

NOTE 1:- GENERAL (Cont.)

During the second quarter of 2007, in view of the fact that there were no assurances that additional financing would be achieved, the Company decided to suspend Keddem's operations and as such, it was classified as discontinued operation in accordance with Statement of Financial Accounting Standards No. 144, "Accounting for Impairment or Disposal of Long-Lived Assets" and EITF No. 03-13, "Applying the Conditions in Paragraph 42 of FASB Statement No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, in Determining Whether to Report Discontinued Operations". Accordingly, the results of operations have been reclassified in the accompanying statements of operations as discontinued operations.

The Company's balance sheets at June 30, 2009 and December 31, 2008 reflect the net current liabilities of Keddem as current liabilities related to discontinued operations.

In 2008, following the discontinuance of Keddem activities, Compugen entered into a term sheet agreement with Mada Ltd. ("Mada"), a newly formed company owned and managed by the former two Co-CEOs of Keddem, whereby, subject to a third party financing, the Company licenses the Keddem intellectual property to Mada, in exchange for royalties on any future revenues and certain access rights to any developed technology. Mada intends to seek third party funding for the development of this intellectual property but we can give no assurances that it will be successful in doing so.

d. We evaluated subsequent events through September 23, 2009, the date this Quarterly Report on Form 6-K was filed with the Securities and Exchange Commission (SEC).

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies applied in the annual financial statements of the Company as of December 31, 2008 are applied consistently in these financial statements. For further information, refer to the consolidated financial statements as of December 31, 2008.

NOTE 3:- UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS

The accompanying unaudited interim consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States for interim financial information. Accordingly, they do not include all the information and footnotes required by accounting principles generally accepted in the United States for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the six-month period ended June 30, 2009 are not necessarily indicative of the results that may be expected for the year ended December 31, 2009.

U.S. dollars in thousands

NOTE 4:- FAIR VALUE MEASURMENTS

The Company adopted SFAS No. 157, "Fair Value Measurements," (as impacted by FSP Nos. 157-1 and 157-2) effective January 1, 2008, with respect to fair value measurements of (a) nonfinancial assets and liabilities that are recognized or disclosed at fair value in the Company's financial statements on a recurring basis (at least annually) and (b) all financial assets and liabilities. The Company measures marketable securities available-for-sale at fair value. Marketable securities are classified only within Level 1 for these assets are valued using quoted market prices. Foreign currency derivative contracts are classified within Level 2 as the valuation inputs are based on quoted prices and market observable data of similar instruments. As of June 30, 2009 there are no foreign currency derivative contracts recorded in the Company's balance sheet. As of December 31, 2008 foreign currency derivative contracts amount \$ 41.

In April 2009, the FASB issued Staff Position No. SFAS 107-1 and APB 28-1, "Interim Disclosures about Fair Value of Financial Instruments" ("FSP SFAS 107-1 and APB 28-1") which requires quarterly disclosure of qualitative and quantitative information about the fair value of all financial instruments including methods and significant assumptions used to estimate fair value during the period. These disclosures were previously only required annually. The FSP is effective for interim reporting periods ending after June 15, 2009, unless early adopted together with FSP FAS 157-4, which the Company did not do.

The Company adopted FSP SFAS 107-1 and APB 28-1 as of April 1, 2009. As the FSP does not affect determination of fair value and only extends fair value disclosures to interim financial statements, it did not have a material impact on these consolidated financial statements.

NOTE 5:- DERIVATIVE INSTRUMENTS

None of the Company's derivatives qualify for hedge accounting under Financial Accounting Standard Board Statement No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133"). They are recognized on the balance sheet at their fair value, with changes in the fair value carried to the statements of operations and included in financial income/expenses. In the period ended June 30, 2009 the Company recorded net losses from hedging transactions in the amount of \$ 41. In the year ended December 31, 2008, the Company recorded net losses from hedging transactions in the amount of \$ 69.

U.S. dollars in thousands

NOTE 6:- COMMITMENTS AND CONTINGENCIES

a. The Company's headquarters and research facilities are located in Israel. Annual minimum future rental commitments under such non-cancelable operating leases are approximately as follows:

June 30, 2009	<u> </u>	
2009*	\$	196
2010		322
2011		322
2012		322
	\$	1,162

*) for the period July 1, 2009 – December 31, 2009

Rent expenses for the Company and subsidiary facilities were approximately \$ 230 and \$ 500 for the periods ended June 30, 2009 and December 31, 2008 respectively.

- b. The Company provided a bank guarantee in the amount of \$ 134 in favor of its offices' lessor in Israel.
- c. Commitments in favor of governmental and other grants:
 - 1. As of June 30, 2009, the Company's aggregate contingent obligations for payments to Office of the Chief Scientist and BIRD, based on royalty-bearing participation received or accrued, net of royalties paid or accrued, totaled approximately to \$5,992 and \$500, respectively.
 - 2. Under the BIRD royalty-bearing program, the Company is not obligated to repay any amounts received from BIRD if no income is generated from the results of the funded research program. If such income is generated, the Company is required to repay BIRD 100% of the grant that the Company received provided that the repayment to BIRD is made within the first year following expiry of the term of the project. For every year that the Company does not make these repayments, the amounts to be repaid incrementally increase up to an amount of 150% in the fifth year following expiry of the term of the project. All amounts to be repaid to BIRD are linked to the U.S. Consumer Price Index.
 - 3. Under the OCS royalty-bearing programs, the Company is not obligated to repay any amounts received from the OCS if it does not generate any income from the results of the funded research program. If income is generated and the research program is successful, the Company is committed to pay royalties at a rate of 3% to 5% of sales of the products arising from such research program, up to a maximum of 100% of the amount received, linked to the U.S. dollar (for grants received under programs approved subsequent to January 1, 1999, the maximum to be repaid is 100% plus interest at LIBOR). For the period ended June 30, 2009 the Company has an aggregate of paid and accrued royalties to the OCS in the amount of \$ 1. For the period ended December 31, 2008 the Company had an aggregate of paid and accrued royalties to the OCS in the amount of \$ 2.
