COMPLETE GENOMICS INC Form SC 13D/A July 19, 2012

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D (Amendment No. 2)

Under the Securities Exchange Act of 1934

Complete Genomics, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value per share

(Title of Class of Securities)

20454K 104

(CUSIP Number)

OrbiMed Advisors LLC OrbiMed Capital GP III LLC Samuel D. Isaly 601 Lexington Avenue, 54th Floor New York, NY 10022 Telephone: (212) 739-6400

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

July 11, 2012

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g) check the following box ".

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §§ 240.13d-7(b) for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(Continued on following pages)

SCHEDULE 13D

CUSIP No. 20454K 10 4

Page 2 of 10 Pages

1	NAME OF REPO	ORTING PERSON	IS	
1	OrbiMed Adviso	rs LLC		
2	CHECK THE AI Instructions) (a) o (b) o	PPROPRIATE BO	X IF A MEMBER OF A GROUP (See	
3	SEC USE ONLY	7		
4	SOURCE OF FU N/A	JNDS (See Instruct	ions)	
5		DISCLOSURE O ITEMS 2(d) or 2(d)	F LEGAL PROCEEDINGS IS REQUIRED e)	0
6	CITIZENSHIP C	OR PLACE OF OR	GANIZATION	
0	Delaware			
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING DEBSON	7 8 9	SOLE VOTING POWER 0 SHARED VOTING POWER 3,019,379 SOLE DISPOSITIVE POWER	
WI	PERSON TH	7	0	
			SHARED DISPOSITIVE POWER	

10

3,019,379

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

3,019,379

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES o CERTAIN SHARES (See Instructions)

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

8.83% (1)

IA

TYPE OF REPORTING PERSON (See Instructions)

14

(1) This percentage is calculated based upon 33,885,734 shares of the Issuer's Common Stock outstanding, as reported in Issuer's quarterly report on Form 10-Q filed on May 9, 2012.

SCHEDULE 13D

CUSIP No. 20454K 10 4

Page 3 of 10 Pages

1	NAME OF REPO	RTING PERSONS				
1	OrbiMed Capital GP III LLC					
2	CHECK THE AP Instructions) (a) o (b) o	PROPRIATE BOX I	F A MEMBER OF A GROUP (See			
3	SEC USE ONLY					
4		NDS (See Instruction	s)			
	N/A					
5		DISCLOSURE OF L ITEMS 2(d) or 2(e)	EGAL PROCEEDINGS IS REQUIRED 0			
6	CITIZENSHIP O	R PLACE OF ORGA	NIZATION			
-	Delaware					
		7	SOLE VOTING POWER			
]	NUMBER OF	7	0			
SHARES BENEFICIALLY		8	SHARED VOTING POWER			
	OWNED BY EACH	8	2,990,921			
	REPORTING	9	SOLE DISPOSITIVE POWER			
WITH	PERSON	2	0			
		10	SHARED DISPOSITIVE POWER			
		10	2,990,921			

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

2,990,921

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES o CERTAIN SHARES (See Instructions)

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

8.75% (1)

00

TYPE OF REPORTING PERSON (See Instructions)

14

(1) This percentage is calculated based upon 33,885,734 shares of the Issuer's Common Stock outstanding, as reported in Issuer's quarterly report on Form 10-Q filed on May 9, 2012.

SCHEDULE 13D

CUSIP No. 20454K 10 4

Page 4 of 10 Pages

1	NAME OF REPORTING PERSONS					
1	Samuel D. Isaly					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) o (b) o					
3	SEC USE ONLY	7				
4	SOURCE OF FU	NDS (See Instruction	ns)			
5		DISCLOSURE OF I TEMS 2(d) or 2(e)	LEGAL PROCEEDINGS IS REQUIRED 0			
6	CITIZENSHIP C United States	OR PLACE OF ORGA	ANIZATION			
		_	SOLE VOTING POWER			
BI	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON	7 8	0 SHARED VOTING POWER 3,019,379			
WITH		9	SOLE DISPOSITIVE POWER			
		10	SHARED DISPOSITIVE POWER			
			3,019,379			
11	AGGREGATE A	MOUNT BENEFIC	IALLY OWNED BY EACH REPORTING PERSON			
	3,019,379					

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions)

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

8.83% (1)

IN

TYPE OF REPORTING PERSON (See Instructions)

14

(1) This percentage is calculated based upon 33,885,734 shares of the Issuer's Common Stock outstanding, as reported in Issuer's quarterly report on Form 10-Q filed on May 9, 2012.

Item 1.

Security and Issuer.

The class of equity securities to which this statement relates is the Common Stock, \$0.001 par value per share ("Shares"), of Complete Genomics, Inc. (the "Issuer"). The Shares are listed on Nasdaq. The Issuer's principal offices are located at 2071 Stierlin Court, Mountain View, California.

Item 2.

Identity and Background.

(a) This Statement is being filed by OrbiMed Advisors LLC, a limited liability company organized under the laws of Delaware ("Advisors"), OrbiMed Capital GP III LLC, a limited liability company organized under the laws of Delaware ("Capital"), and Samuel D. Isaly ("Isaly"), an individual (collectively, the "Reporting Persons").

(b) – (c) Advisors, a registered investment adviser under the Investment Advisers Act of 1940, as amended, is the managing member of Capital and general partner of OrbiMed Associates III, LP ("Associates"), a limited partnership that holds Shares, as more particularly described in Item 6 below. Advisors has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

Capital is the general partner of OrbiMed Private Investments III, LP ("OPI III"), a limited partnership that holds Shares, as more particularly described in Item 6 below. Capital has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

Isaly, a natural person, owns a controlling interest in Advisors.

The directors and executive officers of Advisors and Capital are set forth on Schedules I and II, attached hereto. Schedules I and II set forth the following information with respect to each such person:

(ii)

business address (or residence address where indicated);

- (iii) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted;
 - (iv)

(i)

citizenship.

name;

(d) – (e) During the last five years, neither the Reporting Persons nor any Person named in Schedules I or II have been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Considerations.

Not applicable.

Item 4.

Purpose of Transaction.

As described more fully in Item 5 below, this statement relates to the disposition of Shares by the Reporting Persons. The Shares initially had been acquired (and those that continue to be held, are held) by the Reporting

Persons for the purpose of making an investment in the Issuer and not with the intention of acquiring control of the Issuer's business on behalf of OPI III and Associates.

The Reporting Persons from time to time intend to review their investment in the Issuer on the basis of various factors, including the Issuer's business, financial condition, results of operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's Shares in particular, as well as other developments and other investment opportunities. Based upon such review, the Reporting Persons will take such actions in the future as the Reporting Persons may deem appropriate in light of the circumstances existing from time to time. If the Reporting Persons believe that further investment in the Issuer is attractive, whether because of the market price of the Issuer's Shares or otherwise, they may acquire Shares or other securities of the Issuer either in the open market or in privately negotiated transactions. Similarly, depending on market and other factors, the Reporting Persons may determine to dispose of some or all of the Shares currently owned by the Reporting Persons or otherwise acquired by the Reporting Persons either in the open market or in privately negotiated transactions.

Except as set forth herein, the Reporting Persons have not formulated any plans or proposals which relate to or would result in: (a) the acquisition by any person of additional securities of the Issuer or the disposition of securities of the Issuer, (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries, (c) a sale or transfer of a material amount of the assets of the Issuer or any of its subsidiaries, (d) any change in the present Board of Directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board, (e) any material change in the Issuer's capitalization or dividend policy, (f) any other material change in the Issuer's business or corporate structure, (g) any change in the Issuer's charter or bylaws or other or instrument corresponding thereto or other action which may impede the acquisition of control of the Issuer by any person, (h) causing a class of the Issuer's securities to be deregistered or delisted from a national securities association, (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act or (j) any action similar to any of those enumerated above.

Item 5.

Interest in Securities of the Issuer.

(a) – (b) As of this date of this filing, based upon information contained in the most recent available filing by the Issuer with the SEC, the Reporting Persons may be deemed directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of approximately 8.83% of the outstanding Shares. As a result of the agreements and relationships described in Item 2 above and Item 6 below, Capital may be deemed to be the beneficial owner of approximately 8.75% of the Shares, and Advisors and Isaly may each be deemed to be the beneficial owner of approximately 8.83% of the Shares.

Entity	Date of Transaction	Number of Shares Sold	Price Per Share
OPI III	July 11, 2012	503,144	\$2.8988 (1)
Associates	July 11, 2012	4,792	\$2.8988 (1)
OPI III	July 12, 2012	218,624	\$2.8496 (2)
Associates	July 12, 2012	2,076	\$2.8496 (2)
OPI III	July 13, 2012	474,800	\$2.5106 (3)
Associates	July 13, 2012	4,500	\$2.5106 (3)
OPI III	July 17, 2012	99,000	\$2.9900 (4)
Associates	July 17, 2012	1,000	\$2.9900 (4)
OPI III	July 18, 2012	123,822	\$3.0433 (5)
Associates	July 18, 2012	1,178	\$3.0433 (5)

(1) Represents the weighted average sales price for the price increments ranging from \$2.62 to \$3.02.

(2) Represents the weighted average sales price for the price increments ranging from \$2.56 to \$3.32.

(3) Represents the weighted average sales price for the price increments ranging from \$2.32 to \$2.74.

(4) Represents the weighted average sales price for the price increments ranging from \$2.77 to \$3.00.

(5) Represents the weighted average sales price for the price increments ranging from 3.00 to 3.12.

(d) Not applicable.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

(c)

In addition to the relationships between the Reporting Persons described in Items 2, and 5, Capital is the sole general partner of OPI III, pursuant to the terms of the limited partnership agreement of OPI III, and Advisors is the sole managing member of Capital, pursuant to the terms of the limited liability company agreement of Capital. Advisors is also the sole general partner of Associates, pursuant to the terms of the limited partnership agreement of Associates. Pursuant to these agreements and relationships, Advisors and Capital have discretionary investment management authority with respect to the assets of OPI III and Associates. Such authority includes the power to vote and otherwise dispose of securities purchased by OPI III and Associates. The number of outstanding Shares of the Issuer attributable to OPI III is 2,699,319 Shares and Warrants to purchase 291,602 Shares and to Associates is 25,681 shares and Warrants to purchase 2,777 Shares. Advisors, pursuant to its authority as the managing member of Capital and the general partner of Associates, may be considered to hold indirectly 2,725,000 Shares and Warrants to purchase 294,379 Shares and Warrants to purchase 291,602 Shares.

On June 6, 2012, Carl L. Gordon, who is a member of OrbiMed Advisors LLC, resigned as a member of the board of directors of the Issuer and since June 6, 2012, the Reporting Persons have had no representation on the Issuer's board of directors.

Other than the agreements and the relationships mentioned above, to the best knowledge of the Reporting Persons, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any persons with respect to any securities of the Issuer, including, but not limited to, transfer or voting of any of the Shares, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

Item 7.

Materials to be Filed as Exhibits.