

HOLOGIC INC  
Form SC 13D/A  
December 12, 2013

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934  
(Amendment No. 2)\*

Hologic, Inc.  
(Name of Issuer)

Common Shares of no par value  
(Title of Class of Securities)

436440101  
(CUSIP Number)

Keith Schaitkin, Esq.  
Icahn Capital LP  
767 Fifth Avenue, 47th Floor  
New York, New York 10153  
(212) 702-4300  
(Name, Address and Telephone Number of Person Authorized to  
Receive Notices and Communications)

December 12, 2013  
(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 of Section 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 Rule 13d-7 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).

SCHEDULE 13D

Item 1. Security and Issuer

The Schedule 13D filed with the Securities and Exchange Commission on November 21, 2013, as amended (the "Initial 13D"), by the Reporting Persons with respect to the shares of Common Stock, \$0.01 par value ("Shares"), issued by Hologic, Inc. (the "Issuer") is hereby amended to furnish the additional information set forth herein. All capitalized terms contained herein but not otherwise defined shall have the meanings ascribed to such terms in the Initial 13D.

Item 3. Source and Amount of Funds or Other Consideration

Item 3 of the Initial 13D is hereby amended and restated in its entirety as follows:

The Reporting Persons may be deemed to be the beneficial owner of, in the aggregate, 34,154,879 Shares. The aggregate purchase price of the Shares purchased by the Reporting Persons collectively was approximately \$729.2 million (including commissions and premiums and exercise price for options to purchase Shares). The source of funding for these Shares was the general working capital of the respective purchasers. The Shares are held by the Reporting Persons in margin accounts together with other securities. Such margin accounts may from time to time have debit balances. Part of the purchase price of the Shares was obtained through margin borrowing.

Item 5. Interest in Securities of the Issuer

Item 5(a) of the Initial 13D is hereby amended and restated in its entirety as follows:

(a) The Reporting Persons may be deemed to beneficially own, in the aggregate, 34,154,879 Shares, representing approximately 12.51% of the Issuer's outstanding Shares (based upon the 273,128,747 Shares stated to be outstanding as of September 28, 2013 by the Issuer in the Issuer's Form 10-K filed with the Securities and Exchange Commission on November 26, 2013).

Item 5(c) of the Initial 13D is hereby amended to add the following:

(c) On December 12, 2013, the Reporting Persons acquired 30,629,879 Shares upon exercise of all of the call options listed in the table set forth under Item 5(c) of the Initial 13D.

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

Item 6 of the Initial 13D is hereby amended to add the following:

On December 12, 2013, the Reporting Persons exercised all call options described in the Initial 13D and thereby acquired 30,629,879 Shares in the aggregate. On December 12, 2013, upon exercise of such call options, all put options described in the Initial 13D terminated in accordance with their terms.

SIGNATURE

After reasonable inquiry and to the best of each of the undersigned knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: December 12, 2013

ICAHN PARTNERS MASTER FUND LP  
ICAHN PARTNERS MASTER FUND II LP  
ICAHN PARTNERS MASTER FUND III LP  
ICAHN OFFSHORE LP  
ICAHN PARTNERS LP  
ICAHN ONSHORE LP  
BECKTON CORP.  
HOPPER INVESTMENTS LLC  
BARBERRY CORP.  
HIGH RIVER LIMITED PARTNERSHIP  
By: Hopper Investments LLC, general partner  
By: Barberry Corp.

By: /s/ Edward E. Mattner  
Name: Edward E. Mattner  
Title: Authorized Signatory

ICAHN CAPITAL LP  
By: IPH GP LLC, its general partner  
By: Icahn Enterprises Holdings L.P., its sole member  
By: Icahn Enterprises G.P. Inc., its general partner  
IPH GP LLC  
By: Icahn Enterprises Holdings L.P., its sole member  
By: Icahn Enterprises G.P. Inc., its general partner  
ICAHN ENTERPRISES HOLDINGS L.P.  
By: Icahn Enterprises G.P. Inc., its general partner  
ICAHN ENTERPRISES G.P. INC.

By: /s/ SungHwan Cho  
Name: SungHwan Cho  
Title: Chief Financial Officer

/s/ Carl C. Icahn  
CARL C. ICAHN

[Signature Page of Schedule 13D – Hologic, Inc.]