UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Amendment No. 13

to

SCHEDULE TO

(Rule 14d-100)

Tender Offer Statement under Section 14(d)(1) or 13(e)(1) of the Securities Exchange Act of 1934

VENTANA MEDICAL SYSTEMS, INC.

(Name of Subject Company)

ROCKET ACQUISITION CORPORATION ROCHE HOLDING LTD

(Names of Filing Persons — Offeror)

Common Stock, Par Value \$0.001 Per Share (including the associated preferred stock purchase rights)

(Title of Class of Securities)

92276H106

(Cusip Number of Class of Securities)

Beat Kraehenmann Roche Holding Ltd Grenzacherstrasse 124 CH-4070 Basel Switzerland

Telephone: +41-61-688-1111

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications on Behalf of Filing Persons)

Copies to:

Christopher Mayer Davis Polk & Wardwell 450 Lexington Avenue New York, New York 10017 Telephone: (212) 450-4000

CALCULATION OF FILING FEE

Transaction Valuation*

Amount of Filing Fee**

\$2,978,902,500 \$91,452.31

RCheck box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

Amount Previously Paid: \$91,452.31 Filing Party: Roche Holding Ltd Form or Registration No.: SC TO-T Date Filed: June 27, 2007

£ Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

Check the appropriate boxes below to designate any transactions to which the statement relates:

R third-party tender offer subject to Rule 14d-1. £ issuer tender offer subject to Rule 13e-4. £ going-private transaction subject to Rule 13e-3. £ amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer. £

^{*}Estimated for purposes of calculating the filing fee only. This amount assumes the purchase of all 33,668,000 shares of common stock of Ventana Medical Systems, Inc. outstanding as of March 31, 2007, all options outstanding as of March 31, 2007 with respect to 6,022,000 shares of common stock of Ventana, and all restricted stock and restricted stock units outstanding as of March 31, 2007 with respect to 28,700 shares of common stock of Ventana. The number of outstanding shares, options, and restricted stock and restricted stock units is contained in Ventana's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.

^{**}The amount of the filing fee is calculated in accordance with Rule 0-11 of the Securities Exchange Act of 1934, as amended, by multiplying the transaction valuation by 0.0000307.

Items 1 through 3 and Items 5 through 9.

This Amendment No. 13 to Tender Offer Statement on Schedule TO (the "Schedule TO") amends and supplements the statement originally filed on June 27, 2007 by Roche Holding Ltd, a joint stock company organized under the laws of Switzerland ("Parent"), and Rocket Acquisition Corporation (the "Purchaser"), a Delaware corporation and an indirect wholly owned subsidiary of Parent. This Schedule TO relates to the offer by the Purchaser to purchase all outstanding shares of common stock, par value \$0.001 per share (together with the associated preferred stock purchase rights, the "Shares"), of Ventana Medical Systems, Inc., a Delaware corporation (the "Company"), at \$75.00 per Share, net to the seller in cash, without interest and less applicable withholding taxes, upon the terms and subject to the conditions set forth in the Offer to Purchase, dated June 27, 2007 (the "Offer to Purchase"), and in the related Letter of Transmittal (which, together with any amendments or supplements thereto, collectively constitute the "Offer").

The information set forth in the Offer to Purchase, including all schedules thereto, and the related Letter of Transmittal is expressly incorporated herein by reference with respect to all of the items of this Schedule TO, except as otherwise set forth below.

All capitalized terms used in this Amendment No. 13 without definition have the meanings ascribed to them in the Schedule TO.

Item 4. Terms of the Transaction.

On October 29, 2007, Parent extended the Offer until 5:00 p.m., New York City time on Thursday, January 17, 2008, unless further extended. The full text of a press release issued by Parent announcing the extension to the Offer is filed as Exhibit (a)(5)(xii) hereto and is incorporated herein by reference.

Item 10. Financial Statements.

Not applicable.

Item 11. Additional Information

On June 29, 2007, Roche Holdings, Inc. and the Purchaser filed a Verified Complaint for Declaratory and Injunctive Relief in the Court of Chancery of the State of Delaware (the "Complaint") against the Company and the members of the board of directors of the Company. A copy of the Complaint was previously filed as Exhibit (a)(5)(ii). On October 26, 2007, Roche Holdings, Inc. and the Purchaser filed a First Amended Verified Complaint for Declaratory and Injunctive Relief (the "Amended Complaint") alleging that the defendant directors have breached their fiduciary duties to the shareholders of the Company in connection with the Offer and that certain delayed redemption provisions of the Rights Agreement are invalid as a matter of Delaware law. The Amended Complaint seeks declaratory relief that the defendant directors have breached their fiduciary duties and injunctive relief compelling the defendants to redeem the Rights or to render the Rights Agreement inapplicable to the Offer and the Merger and to approve the Offer and Merger for purposes of Section 203 of the Delaware General Corporation Law and enjoining defendants from adopting any measure that has the effect of impeding, thwarting, frustrating, or interfering with the Offer or the Merger. The Amended Complaint is filed herewith as Exhibit (a)(5)(xiii).

Section 15 of the Offer to Purchase is hereby amended by deleting the third paragraph under the heading "Foreign Antitrust Approvals" in its entirety and replacing it with the following paragraph:

"Furthermore, under the provisions of the Chinese Regulations on Merger with and Acquisitions of Domestic Companies by Foreign Investors (the "M&A Regulations"), the acquisition of the Shares pursuant to the Offer may be consummated only if the acquisition is approved by the relevant Chinese governmental authority, either by written

approval or the expiration of a 30 working day waiting period commenced by the filing by Parent of a merger notification ("Chinese Notification") with respect to the Offer, unless the relevant Chinese governmental authority issues a notice of extended review. Pursuant to the requirements of the M&A Regulations, the Chinese Notification with respect to the Offer was filed with the Ministry of Commerce and State Administration of Industry and Commerce on September 4, 2007. At 11:59 p.m., Beijing time, on Friday, October 19, 2007, the applicable waiting period under the M&A Regulations relating to the Offer expired. Accordingly the condition to the Offer relating to Chinese antitrust approval has been satisfied."

Item 12. Exhibits.

Item 12 is hereby amended and supplemented with the following information:

Exhibit (a)(5)(xii) Press Release issued by Roche Holding Ltd, dated October 29, 2007.

Exhibit (a)(5)(xiii) First Amended Complaint filed in the Court of Chancery of the State of Delaware in and for New Castle County on October 26, 2007.

SIGNATURES

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

Date: October 29, 2007

ROCKET ACQUISITION CORPORATION

By: /s/ Beat Kraehenmann

Name: Beat Kraehenmann

Title: Secretary

ROCHE HOLDING LTD

By: /s/ Bruno Maier

Name: Bruno Maier

Title: Authorized Signatory

By: /s/ Beat Kraehenmann

Name: Beat Kraehenmann Title: Authorized Signatory

EXHIBIT INDEX

Exhibit No.	Description
(a)(1)(i)	Offer to Purchase dated June 27, 2007*
(a)(1)(ii)	Letter of Transmittal*
(a)(1)(iii)	Notice of Guaranteed Delivery*
(a)(1)(iv)	Letter to Brokers, Dealers, Commercial Banks, Trust Companies and Other Nominees*
(a)(1)(v)	Letter to Clients for use by Brokers, Dealers, Commercial Banks, Trust Companies and Other Nominees*
(a)(1)(vi)	Guidelines for Certification of Taxpayer Identification Number on Substitute Form W-9*
(a)(1)(vii)	Summary Advertisement dated June 27, 2007*
(a)(5)(i)	Press Release issued by Roche Holding Ltd, dated June 25, 2007*
(a)(5)(ii)	Complaint filed in the Court of Chancery of the State of Delaware in and for New Castle County on June 29, 2007*
(a)(5)(iii)	Complaint filed in the United States District Court for the District of Arizona on June 29, 2007*
(a)(5)(iv)	Press Release issued by Roche Holding Ltd, dated July 11, 2007*
(a)(5)(v)	Excerpt from an Investor Presentation by Roche Holding Ltd, dated July 19, 2007*
(a)(5)(vi)	Transcript of an Investor Presentation by Roche Holding Ltd, dated July 19, 2007*
(a)(5)(vii)	Press Release issued by Roche Holding Ltd, dated July 25, 2007*
(a)(5)(viii)	Press Release issued by Roche Holding Ltd, dated July 26, 2007*
(a)(5)(ix)	Press Release issued by Roche Holding Ltd, dated August 21, 2007*
(a)(5)(x)	Press Release issued by Roche Holding Ltd, dated August 22, 2007*
(a)(5)(xi)	Press Release issued by Roche Holding Ltd, dated September 19, 2007*
(a)(5)(xii)	Press Release issued by Roche Holding Ltd, dated October 29, 2007
(a)(5)(xiii)	First Amended Complaint filed in the Court of Chancery of the State of Delaware in and for New Castle County on October 26, 2007
(b)	Not applicable
(c)	Not applicable
(d)	Not applicable
(f)	Not applicable
(g)	Not applicable
(h)	Not applicable

^{*} Previously filed