SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 4 to

SCHEDULE TO

Tender Offer Statement Under Section 14(d)(1) or 13(e)(1)

of the Securities Exchange Act of 1934

CTI MOLECULAR IMAGING, INC.

(Name of Subject Company)

MI MERGER CO.

SIEMENS MEDICAL SOLUTIONS USA, INC.

SIEMENS AKTIENGESELLSCHAFT

(Names of Filing Persons (offeror))

Common Stock, Par Value \$0.01 Per Share

(Title of Class of Securities)

22943D105

(CUSIP Number of Class of Securities)	
Kenneth R. M	Meyers, Esq.
Siemens Co	rporation
153 East 53	3rd Street
New York, New	v York 10022
(Name, address and telephone number	of person authorized to receive notices
and communications on	behalf of filing persons)
Сору	to:
Stephen M.	Besen, Esq.
Shearman & S	Sterling LLP
599 Lexingt	on Avenue
New York, New	w York 10022
(212) 84	8-4000
Calculation of	f Filing Fee
Transaction Valuation*	Amount of Filing Fee**
\$1,027,149,733.50	\$120,895.53

- Estimated for purposes of calculating the amount of the filing fee only. Calculated by multiplying \$20.50, the per share tender offer price, by 50,104,867, the sum of the 47,956,322 issued and outstanding shares of common stock as of March 17, 2005 and the 2,148,545 shares of common stock subject to vested options, warrants and deferred stock units.
- Calculated as 0.011770% of the transaction value.
- Check the 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: \$120,895.53 Filing Party: Siemens Aktiengesellschaft Form or Registration No.: Schedule TO Date Filed: April 1, 2005

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

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

- x 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: "

This Amendment No. 4 to the Tender Offer Statement on Schedule TO (this Amendment No. 4) amends and supplements the Tender Offer Statement on Schedule TO filed on April 1, 2005, as amended and supplemented by Amendment No. 1, Amendment No. 2 and Amendment No. 3 to the Tender Offer Statement on Schedule TO filed on April 8, 2005, April 13, 2005 and April 27, 2005, respectively (as so amended, the Schedule TO), by Siemens Aktiengesellschaft, a corporation organized under the laws of the Federal Republic of Germany (Siemens AG), Siemens Medical Solutions USA, Inc., a Delaware corporation (Parent) and an indirect wholly owned subsidiary of Siemens AG, and MI Merger Co., a Delaware corporation (Purchaser) and a wholly owned subsidiary of Parent. The Schedule TO relates to the offer by Purchaser to purchase all the shares of common stock, par value \$0.01 per share, including the associated Series C Junior Participating Preferred Stock Purchase Rights issued pursuant to the Shareholder Protection Rights Agreement, dated as of May 21, 2002, between the Company (defined below) and SunTrust Bank, as rights agent (together, the Shares), of CTI Molecular Imaging, Inc., a Delaware corporation (the Company), that are issued and outstanding for \$20.50 per Share, net to the seller in cash, without interest, upon the terms and subject to the conditions set forth in the Offer to Purchase dated April 1, 2005 (the Offer to Purchase) and in the related Letter of Transmittal. Except as specifically provided herein, this Amendment No. 4 does not modify any of the information previously reported on the Schedule TO.

Capitalized terms not otherwise defined herein shall have the meanings assigned to them in the Offer to Purchase.

Item 8. Interest in the Securities of the Subject Company

Item 11. Other Information

Item 8 and Item 11 of the Schedule TO are hereby amended and supplemented by including the following:

At 12:00 midnight, New York City time, on Thursday, April 28, 2005, the Offer expired. Based on information provided by the Depositary, as of such time, 39,088,810 Shares were tendered pursuant to the Offer, representing approximately 80% of the outstanding Shares based upon 48,557,021 outstanding Shares as reported to Purchaser by the Company on April 28, 2005. In addition, 5,770,176 shares, representing approximately 12% of the outstanding Shares, were tendered subject to guaranteed delivery. All Shares validly tendered and not withdrawn prior to the expiration of the Offer were accepted for payment in accordance with the terms of the Offer.

Upon the terms and subject to the conditions of the Merger Agreement, Parent and Purchaser commenced a subsequent offering period in connection with the Offer, at 9:00 a.m. New York City time on April 29, 2005. The subsequent offering period will expire at 5:00 p.m. New York City time on Wednesday, May 4, 2005, unless extended. Any such extension will be followed as promptly as practicable by public announcement, which will be issued no later than 9:00 a.m. New York City time on the next business day after the subsequent offering period was scheduled to expire. Shares properly tendered during this subsequent offering period will be accepted as they are tendered and paid for promptly as they are accepted. Stockholders who properly tender during the subsequent offering period will receive the same \$20.50 per share cash consideration that is payable to stockholders who tendered during the original offering period. Procedures for tendering shares during the

subsequent offering period are the same as during the initial offering period with two exceptions: (1) shares cannot be delivered by the guaranteed delivery procedure and (2) pursuant to Rule 14d-7(a)(2) under the Securities Exchange Act of 1934, as amended, shares tendered during the subsequent offering period may not be withdrawn.

On April 29, 2005, Parent and the Company issued a joint press release announcing the final results of the Offer and the commencement of the subsequent offering period. The full text of the press release is filed as Exhibit (a)(12) hereto and is incorporated by reference herein.

Item 12. Exhibits

Item 12 of the Schedule TO is hereby amended and supplemented by including the following:

(a)(12) Joint Press Release issued by Parent and the Company on April 29, 2005.

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

Dated: April 29, 2005

MI MERGER CO.

By: /s/ James Ruger

Name: James Ruger

Title: Vice President and Treasurer

By: /s/ Kenneth R. Meyers

Name: Kenneth R. Meyers

Title: Secretary

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

Dated: April 29, 2005

SIEMENS MEDICAL SOLUTIONS USA, INC.

By: /s/ Hermann Requardt

Name: Hermann Requardt Title: Vice Chairman

By: /s/ James Ruger

Name: James Ruger Title: Secretary

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

Dated: April 29, 2005

SIEMENS AKTIENGESELLSCHAFT

By: /s/ Hermann Requardt

Name: Hermann Requardt

Title: Group Executive Vice President

By: /s/ Goetz Steinhardt

Name: Goetz Steinhardt

Title: Group Executive Vice President

EXHIBIT INDEX

Exhibit No.

(a)(12) Joint Press Release issued by Parent and the Company on April 29, 2005.