

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE TO
(Rule 14d-100)

Tender Offer Statement Under Section 14(d)(1)
or Section 13(e)(1) of the Securities Exchange Act of 1934
(Amendment No. 1)

VYSIS, INC.
(Name of Subject Company (Issuer))

RAINBOW ACQUISITION CORP.
a wholly owned subsidiary of
ABBOTT LABORATORIES
(Names of Filing Persons (Offerors))

COMMON STOCK, PAR VALUE \$.001 PER SHARE
(Title of Class of Securities)

928961-10-1
(CUSIP Number of Class of Securities)

Jose M. de Lasa
Senior Vice President, Secretary and General Counsel
Abbott Laboratories
100 Abbott Park Road
Abbott Park, Illinois 60064-6400
(847) 937-6100
(Name, address and telephone number of
person authorized to receive notices
and communications on behalf of filing persons)

With a copy to:
Charles W. Mulaney, Jr., Esq.
Skadden, Arps, Slate, Meagher & Flom (Illinois)
333 West Wacker Drive
Chicago, Illinois 60606
Telephone: (312) 407-0700
CALCULATION OF FILING FEE

Transaction Valuation*	Amount of Filing Fee
\$375,598,258.50	\$75,119.66

* Estimated for purposes of calculating the filing fee only. The filing fee calculation assumes the purchase of 10,291,789 outstanding shares of common stock of Vysis, Inc. at a purchase price of \$30.50 per share. The transaction value also includes the offer price of \$30.50 per share, multiplied by 2,002,908, the estimated number of options outstanding under Vysis Inc's employee stock option plans which are or will be, as a result of the transaction, exercisable for shares of common stock of Vysis, Inc. The amount of the filing fee calculated in accordance with Rule 0-11 of the Securities Exchange Act of 1934, as amended, equals 1/50 of 1% of the transaction value.

[X] 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:	\$75,119.66	Filing party:	Abbott Laboratories and Rainbow Acquisition Corp.
Form or Registration No.:	Schedule TO	Date Filed:	October 31, 2001

[_] 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:

- [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. 1 (the "Amendment") amends and supplements the Tender Offer Statement on Schedule TO filed with the Securities and Exchange Commission (the "Commission") on October 31, 2001 (the "Schedule TO") by Rainbow Acquisition Corp., a Delaware corporation (the "Purchaser") and a wholly owned subsidiary of Abbott Laboratories, an Illinois corporation ("Abbott"). The Schedule TO relates to the offer by the Purchaser to purchase all outstanding shares of common stock, par value \$.001 per share (the "Shares"), of Vysis, Inc., a Delaware corporation (the "Company"), at \$30.50 per Share net to the seller in cash, upon the terms and conditions set forth in its Offer to Purchase dated October 31, 2001 (the "Offer to Purchase") and in the related Letter of Transmittal (which, together with the Offer to Purchase and any amendments or supplements thereto, collectively constitute the "Offer"). Capitalized terms used and not otherwise defined herein shall have the meanings assigned to such terms in

the Offer to Purchase or in the Schedule TO.

ITEMS 4 and 11

Items 4 and 11 of the Schedule TO are hereby amended and supplemented to include the following information:

Section 1. Terms of the Offer

The first full paragraph of this section on page 5 of the Offer to Purchase is amended and restated as follows:

"Subject to the applicable rules and regulations of the SEC and the provisions of the Merger Agreement, the Purchaser expressly reserves the right, at any time on or after the date of the Merger Agreement and before the Expiration Date (i) to terminate or amend the Offer, with the consent of the Company, if any of the conditions set forth in Section 15-- "Certain Conditions of the Offer" have not been satisfied or (ii) to waive any condition to the Offer (other than the Minimum Condition), in each case by giving oral or written notice of such extension, termination, waiver or amendment to the Depository and by making a public announcement thereof."

ITEM 4

Item 4 of the Schedule TO is hereby amended and supplemented to include the following information:

Section 2. Acceptance for Payment and Payment for Shares

The first paragraph of this section on page 6 of the Offer to Purchase is amended and restated as follows:

"Upon the terms and subject to the conditions of the Offer (including, if the Offer is extended or amended, the terms and conditions of any such extension or amendment) and the satisfaction or waiver of all the conditions to the Offer set forth in Section 15--"Certain Conditions of the Offer," the Purchaser will accept for payment and will pay for all Shares validly tendered prior to the Expiration Date and not properly withdrawn promptly after the Expiration Date. Subject to the terms of the Merger Agreement and compliance with Rule 14e-1(c) under the Exchange Act, the Purchaser expressly reserves the right to delay payment for Shares pending receipt of regulatory or governmental approvals, including, without limitation, the HSR Act and any applicable pre-merger notification laws or regulations of foreign jurisdictions. See Section 16--"Certain Legal Matters; Regulatory Approvals." If Purchaser decides to include a Subsequent Offering Period, Purchaser will accept for payment, and promptly pay for all validly tendered Shares as they are received during the Subsequent Offering Period. See Section 1--"Terms of the Offer."

The fifth paragraph of this section on page 6 of the Offer to Purchase is amended and restated as follows:

"If any tendered Shares are not accepted for payment for any reason pursuant to the terms and conditions of the Offer, or if Share Certificates are submitted evidencing more Shares than are tendered, Share Certificates evidencing unpurchased Shares will be returned, without expense to the tendering stockholder (or, in the case of Shares tendered by book-entry transfer into the Depository's account at the Book-Entry Transfer Facility pursuant to the procedure set forth in Section 3--"Procedures for Accepting the Offer and Tendering Shares," such Shares will be credited to an account maintained at the Book-Entry Transfer Facility), promptly following the expiration or termination of the Offer."

Section 5. Certain United States Federal Income Tax Consequences

The first paragraph of this section on page 10 of the Offer to Purchase is amended and restated as follows:

"The following is a summary of certain United States federal income tax consequences of the Offer and the Merger to stockholders of the Company whose Shares are tendered and accepted for payment pursuant to the Offer or whose Shares are converted into the right to receive cash in the Merger. The discussion does not purport to consider all aspects of United States federal income taxation that might be relevant to stockholders of the Company. The discussion is based on current provisions of the Internal Revenue Code of 1986, as amended (the "Code"), existing, proposed and temporary regulations thereunder and administrative and judicial interpretations thereof, all of which are subject to change, possibly with a retroactive effect. The discussion applies only to stockholders of the Company in whose hands Shares are capital assets within the meaning of Section 1221 of the Code. This discussion does not apply to Shares received pursuant to the exercise of employee stock options or otherwise as compensation, or to certain types of stockholders (such as insurance companies, tax-exempt organizations, financial institutions and broker-dealers) who may be subject to special rules. This discussion does not discuss the United States federal income tax consequences to any stockholder of the Company who, for United States federal income tax purposes, is a nonresident alien individual, a foreign corporation, a foreign partnership or a foreign estate or trust, nor does it consider the effect of any foreign, state or local tax laws."

ITEMS 4, 5, 6 and 8

Items 4, 5, 6 and 8 of the Schedule TO are hereby amended and supplemented to include the following information:

The ninth full paragraph of this section on page 16 of the Offer to Purchase is amended and restated as follows:

"On October 15, the Company Board met to evaluate Abbott's proposal to acquire the Company. At this meeting, the Company Board rejected the Abbott proposal, and, on October 16, the Company's financial advisor communicated that decision to Abbott's financial advisor. The Company's financial advisor did not make a counter-proposal to Abbott, but indicated that the Company would be willing to review additional proposals from Abbott if they involved a higher offering price."

The tenth full paragraph of this section on page 16 of the Offer to Purchase is amended and restated as follows:

"On October 17, Abbott submitted a revised proposal to acquire all of the Company's shares for \$30.00 per share in cash or, if BP would indemnify Abbott from any liability due by the Company to any to any investment bank or financial advisor (other than the Company's financial advisor and Abbott's financial advisor) as a result of the transaction, \$30.50 per share in cash, in each case conditioned upon the same items included in Abbott's October 12 letter."

The first paragraph of this section on page 17 of the Offer to Purchase is amended and restated as follows:

"From October 20 through October 23, representatives of the Company and Abbott and their respective legal counsel negotiated specific terms and provisions of the proposed transaction agreements, including the conditions to closing of the offer, the interim covenants, the non-solicitation provisions, the provisions regarding regulatory approvals and the circumstances under which the parties could terminate the merger agreement. Concurrently with such negotiations, representatives of BP and Abbott and their respective legal counsel negotiated the terms of the stockholder agreement to be entered into among Abbott, the Purchaser, ATC and BP. During these negotiations between BP and Abbott, BP representatives stated that BP would be willing to indemnify Abbott from any liability due by the Company to any investment bank or financial advisor (other than the Company's financial advisor and Abbott's financial advisor) as a result of the transaction and, as a result, Abbott agreed that it would be willing to acquire all of the Company's shares for \$30.50 per share in cash."

ITEM 11

Item 11 of the Schedule TO is hereby amended and supplemented to include the following information:

Section 16. Certain Legal Matters; Regulatory Approvals

The fourth full paragraph of this section on page 33 of the Offer to Purchase is amended and restated as follows:

"Pursuant to the requirements of the HSR Act, on October 31, 2001, Abbott, on behalf of itself and the Purchaser, filed a Premerger Notification and Report Form with respect to the Offer and Merger with the FTC. Abbott was unable to make any filing on that date with the Antitrust Division because, due to concerns raised by the spread of anthrax through the U.S. mail, the Department of Justice halted the receipt of any mail, packages or HSR filings. Following discussions with the Department of Justice, Abbott was allowed to make an electronic filing with the Antitrust Division on November 6, 2001. Accordingly, the waiting period applicable to the purchase of Shares pursuant to the Offer did not begin until November 6. The waiting period is scheduled to expire at 11:59 p.m., New York City time, on November 21, 2001, unless such waiting period is earlier terminated by the FTC and the Antitrust Division or extended by a request from the FTC or the Antitrust Division for additional information or documentary material. If either the FTC or the Antitrust Division were to request additional information or documentary material prior to the expiration of the waiting period, the waiting period would be extended until 11:59 p.m., New York City time, on the tenth day after substantial compliance by the Purchaser with such request. Thereafter, such waiting period can be extended only by court order."

SIGNATURE

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.

ABBOTT LABORATORIES

By: /s/ RICHARD A. GONZALEZ

Name: Richard A. Gonzalez
Title: Executive Vice President,
Medical Products

RAINBOW ACQUISITION CORP.

By: /s/ THOMAS D. BROWN

Name: Thomas D. Brown
Title: President

Dated: November 13, 2001