UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934 (Amendment No. 4)*

SpectRx, Inc.

(Name of Issuer)
Common Stock, par value \$.001 per share

(Title of Class of Securities) 847635109

(CUSIP Number)
Jose M. de Lasa, 100 Abbott Park Road
Abbott Park, Illinois 60064-6049; Phone (847) 937-8905

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications) September 27, 2002

(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 sections 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g) check the following box o.

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 in 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).

CUSIP No. 847635109 1) NAME OF REPORTING PERSON I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Abbott Laboratories IRS Identification No. 36-0698440 2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) 0 (b) 0 3) SEC USE ONLY

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5)

Illir	nois			
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		7)	SOLE VOTING POWER 732,860	
		8)	SHARED VOTING POWER 0	
		9)	SOLE DISPOSITIVE POWER 732,860	
		10)	SHARED DISPOSITIVE POWER 0	
,	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 732,860			
	INSTRUCTIONS)			0
	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 6.5% (see Item 5 below)			
14) TY	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO			
			D . 2 (4	

Page 2 of 4 pages

The following information amends and supplements the Schedule 13D filed on July 16, 1997 (the "Schedule 13D"), the First Amendment to the Schedule 13D filed on July 17, 2001 (the "First Amendment"), the Second Amendment to the Schedule 13D filed on September 17, 2001 (the "Second Amendment"), and the Third Amendment to the Schedule 13D filed on October 3, 2001 (the "Third Amendment"). Capitalized terms used but not otherwise defined herein shall have the same meanings assigned to those terms in the Schedule 13D and its amendments.

Item 4. Purpose of the Transaction

See Item 5 below.

Item 5. Interest in Securities of the Issuer

(a) and (c) On September 27, 2002, in accordance with Section (d)(1) of the "Designations, Preferences and Rights of Redeemable Convertible Preferred Stock of SpectRx, Inc." (filed with the SEC by the Issuer on March 30, 2000 as part of Exhibit 10.21(C) to its Form 10-K for the year ended December 31, 1999), Abbott gave notice of its election to cause the redemption for cash of 425,000 shares of the Redeemable Convertible Preferred Stock, \$0.001 par value, that were eligible for redemption (the "Redemption"). On December 31, 2002, the Issuer shall pay Abbott for 162,500 shares at \$10 per share, for a total of \$1,625,000. If Issuer has achieved a specific revenue threshold, then on or before January 31, 2004, Issuer shall pay Abbott for the remaining 262,500 shares of preferred stock at \$10 per share for an additional payment of \$2,625,000. Otherwise, on or prior to January 31, 2004, Issuer shall pay Abbott for 131,250 shares of preferred stock at \$10 per share for an additional payment of \$1,312,500 and on December 31, 2004, pay Abbott for the remaining 131,250 shares of preferred stock at \$10 per share for a final payment of \$1,312,500.

As a result of the Redemption, only 100,000 of the Initial Shares (as defined in the First Amendment) and Additional Shares (as defined in the First Amendment) will be beneficially owned by Abbott after giving effect to the redemption (collectively "Remaining Shares"). Abbott may be deemed to be the beneficial owner of the 106,518 shares of Common Stock into which the Remaining Shares may be converted. Because the conversion price is subject to change, as more fully described in Item 6 of the First Amendment, the actual amount of Common Stock obtained upon conversion may differ from this number. Subject to the foregoing, the shares receivable upon conversion, together with the 126,199 shares described in the Third Amendment and the 500,143 shares of Common Stock described in the Schedule 13D, represent approximately 6.5% of the total outstanding shares of Common Stock. The calculation of the foregoing percentage is based on the number of shares of Common Stock shown as being outstanding on the Form 10-Q Quarterly Report filed by the Issuer with the Securities and Exchange Commission for the quarter ended June 30, 2002.

Page 3 of 4 pages

ABBOTT LABORATORIES

By:

DATED: September 27, 2002

/s/ THOMAS C. FREYMAN

Thomas C. Freyman Senior Vice President, Finance and Chief Financial Officer

Page 4 of 4 pages

QuickLinks

<u>Item 4. Purpose of the Transaction</u> <u>Item 5. Interest in Securities of the Issuer</u>