UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934

(Amendment No. 1)*

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)

November 30, 2000

(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 //.

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

 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) // (b) //

(3) SEC USE ONLY

(4) SOURCE OF FUNDS* OO (see Item 3 below)

(6)	CITIZENSHIP OR PLACE OF ORGANIZATION
	Illinois

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTIN	ſG
PERSON WITH	

RTING	(7)	SOLE VOTING POWER 1,084,225
	(8)	SHARED VOTING POWER 0
	(9)	SOLE DISPOSITIVE POWER 1,084,225
	(10)	SHARED DISPOSITIVE POWER 0

11

(11)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
	1,084,225

(12) CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* (SEE INSTRUCTIONS) //

- (13) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 11.3% (see Item 5 below)
- (14) TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO

Page 2 of 6 pages

The following information amends and supplements the Schedule 13D filed on July 16, 1997 (the "Schedule 13D").

Item 1. Security and Issuer

This statement relates to shares of the common stock, par value \$.001 per share (the "Common Stock"), of SpectRx, Inc., a Delaware corporation (the "Issuer"), whose principal executive offices are located at 6025A Unity Drive, Norcross, Georgia, 30071.

Item 2. Identity and Background

(a)-(c), and (f) The person filing this statement is Abbott Laboratories ("Abbott"), an Illinois corporation. Abbott's principal business is the discovery, development, manufacture, and sale of a broad and diversified line of health care products and services. Abbott's principal office is located at 100 Abbott Park Road, Abbott Park, Illinois 60064-6049.

The names, citizenship, business addresses, present principal occupation or employment and the name, and the principal business and address of any corporation or other organization in which such employment is conducted of the directors and executive officers of Abbott are as set forth in Exhibit 1 hereto and incorporated herein by this reference.

(d) and (e) Neither Abbott, nor to the best of its knowledge, any person listed on Exhibit 1 has during the last five years (i) been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) been a party to a civil proceeding of a judicial or administrative body of competent

jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

The aggregate purchase price of the 525,000 shares of Redeemable Convertible Preferred Stock of the Issuer ("Convertible Preferred Stock"), convertible to Common Stock, is \$5,250,000 (the "Purchase Price"). The Purchase Price comprises \$2,750,000 for 275,000 shares (the "Initial Shares") of Convertible Preferred Stock acquired on or about November 30, 1999; and \$2,500,000 for 250,000 shares (the "Additional Shares") of Preferred Stock acquired on or about January 3, 2000. The source of funds for the Shares is Abbott's general assets.

Item 4. Purpose of the Acquisition

Abbott acquired the Shares as an investment and in connection with its research, development and license agreement with the Issuer.

Abbott intends to monitor its interests in the Issuer on an ongoing basis and to take such measures as it deems appropriate from time to time in furtherance of such interests. Abbott may from time to time acquire additional shares of Common Stock, dispose of some or all of the shares of Common Stock then beneficially owned by it, discuss the Issuer's business, operations, or other affairs with the Issuer's management, board of directors, shareholders or others or take such other actions as Abbott may deem appropriate. Notwithstanding the foregoing, except as described in this Item 4 and in Item 6, Abbott has no present plan or proposal which relate to or would result in any of the matters referred to in Items (a) through (j) of Item 4 of Schedule 13D of the Securities and Exchange Commission. Abbott does, however, reserve the right to adopt such plans or proposals subject to compliance with applicable regulatory requirements.

Page 3 of 6 pages

Item 5. Interest in Securities of the Issuer

(a) Abbott may be deemed to be the beneficial owner of 559,225 shares of Common Stock to which the Initial Shares and the Additional Shares may be converted. Because the conversion price is subject to change, as more fully described in Item 6 below, the actual amount of Common Stock obtained upon conversion may differ from this number. Subject to the foregoing, the shares received upon conversion together with the 500,143 shares of Common Stock described in the Schedule 13D, would represent approximately 11.3% 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 March 31, 2001.

(b) Abbott will have sole power to vote or to direct the vote and the sole power to dispose or to direct the disposition of the shares.

(c) Except as described herein, there have been no transactions by Abbott or the persons whose names are listed on Exhibit 1 in securities of the Issuer during the past sixty days.

(d) No one other than Abbott is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from a sale of, the shares.

(e) Not applicable.

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

The summaries of certain terms of the following agreements do not purport to be complete and are subject to, and are qualified in their entirety by reference to, all provisions of the agreements and reference is made to the full text of such agreements which were filed with the Securities and Exchange Commission ("SEC") by the Issuer, on February 27, 1997 as exhibit 10.6 to SEC Form S-1, on March 30, 2000 as exhibit 10.21(C) to SEC Form 10-K, and on May 15, 2000 as exhibit 4.3 to SEC Form 10-Q, and all of which are incorporated herein by reference.

Series C Preferred Stock Purchase Agreement and Registration Rights Agreement

Abbott acquired Series C Preferred Shares under the terms of the Series C Preferred Stock Purchase Agreement, dated October 21, 1996, by and between Abbott and the Issuer. The Series C Preferred Shares were converted to shares of Common Stock in connection with the Issuer's initial public offering. Additionally, Abbott acquired certain registration rights pursuant to the Amended and Restated Registration Rights Agreement (the "Registration Rights Agreement"), also dated October 21, 1996, by and among Abbott, the Issuer, and certain shareholders of the Issuer. Under its terms, the Issuer grants Abbott certain piggyback and demand registration rights. The rights granted thereunder terminate four years (increased by amendment to six years) from the date of the Issuer's initial public offering.

Common Stock Purchase Agreement

The Common Stock Purchase Agreement, by and between Abbott and the Issuer, is dated November 30, 1999. Under the terms of the Common Stock Purchase Agreement, Abbott may elect to pay certain milestone payments due the Issuer under a Research & Development and License Agreement, dated October 10, 1996, between Abbott and the Issuer, and receive Common Stock in exchange. Abbott may only use up to one-half of such payment obligations under this provision. If Abbott exercises this option, the number of shares it receives will equal the sum so elected by Abbott to be applied to purchase Common Stock, divided by the average closing sales price of the Common Stock as reported by NASDAQ for the thirty trading days prior to the date of Abbott's election.

Page 4 of 6 pages

Abbott agreed to purchase the Initial Shares and the Additional Shares under the terms of the Redeemable Convertible Preferred Stock Purchase Agreement, dated November 30, 1999, by and between Abbott and the Issuer. Subject to certain conditions, the shares so acquired are convertible to Common Stock on the first anniversary of their date of issue at the rate of one share of Preferred Stock into the number of shares of Common Stock that equals the quotient obtained by dividing the Purchase Price by the conversion price. The conversion price is the greater of a specified dollar amount or the average of the closing sales price of the Common Stock as reported by the NASDAQ Stock Market for each day of the thirty day trading period that begins on the trading day that is fifteen trading days before the date of the Issuer's receipt of Abbott's conversion notice. The shares will be automatically converted on and as of December 31, 2004.

Item 7. Material to be Filed as Exhibits

Exhibit 1-Information Concerning Executive Officers and Directors of Abbott Laboratories.

After reasonable 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/ THOMAS C. FREYMAN

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

Page 5 of 6 pages

EXHIBIT INDEX

Description

Exhibit Number

DATED: July 17, 2001

Information Concerning Executive Officers and Directors of Abbott Laboratories.

Page 6 of 6 pages

QuickLinks

Item 1. Security and Issuer

Item 2. Identity and Background

Item 3. Source and Amount of Funds or Other Consideration

Item 4. Purpose of the Acquisition

Item 5. Interest in Securities of the Issuer

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

Item 7. Material to be Filed as Exhibits

EXHIBIT INDEX

Information Concerning Executive Officers and Directors of Abbott Laboratories

The current corporate officers and directors of Abbott Laboratories are listed below. The address of Abbott Laboratories is: Abbott Laboratories, 100 Abbott Park Road, Abbott Park, Illinois 60064-6049. Abbott Laboratories does not consider all of its corporate officers to be executive officers as defined by the Securities Exchange Act of 1934 or Releases thereunder. Unless otherwise indicated, all positions set forth below opposite an individual's name refer to positions within Abbott Laboratories, and, where applicable, the business address listed for each individual not principally employed by Abbott Laboratories is also the address of the corporation or other organization which principally employs that individual.

NAME	POSITION/PRESENT PRINCIPAL OCCUPATION OR EMPLOYMENT AND BUSINESS ADDRESS	CITIZENSHIP
CORPORATE OFFICERS		
Miles D. White(1)	Chairman of the Board and Chief Executive Officer	U.S.A.
Jeffrey M. Leiden(1)	Executive President, Pharmaceuticals, Chief Scientific Officer and Director	U.S.A.
Richard A. Gonzales(1)	Executive President, Medical Products	U.S.A.
Joy A. Amundson(1)	Senior Vice President, Ross Products	U.S.A.
Christopher B. Begley(1)	Senior Vice President, Hospital Products	U.S.A.
Thomas D. Brown(1)	Senior Vice President, Diagnostic Operations	U.S.A.
Jose M. de Lasa(1)	Senior Vice President, Secretary and General Counsel	U.S.A.
William G. Dempsey(1)	Senior Vice President, International Operations	U.S.A.
Thomas C. Freyman(1)	Senior Vice President, Finance and Chief Financial Officer	U.S.A.
David B. Goffredo(1)	Senior Vice President, Pharmaceutical Operations	United Kingdom
Thomas M. Wascoe(1)	Senior Vice President, Human Resources	U.S.A.
Lance B. Wyatt(1)	Senior Vice President, Specialty Products	U.S.A.
Catherine V. Babington	Vice President, Investor Relations and Public Affairs	U.S.A.
Patrick J. Balthrop	Vice President, Vascular Devices	U.S.A.
Mark E. Barmak	Vice President, Government Affairs	U.S.A.
Michael G. Beatrice	Vice President, Corporate Regulatory and Quality Science	U.S.A.
Christopher A. Bleck	Vice President, Pediatrics, Ross Products	U.S.A.
Douglas C. Bryant	Vice President, Diagnostic Operations, Asia and Pacific	U.S.A.
Gary R. Byers	Vice President, Internal Audit	U.S.A.
Thomas F. Chen	Vice President, Pacific, Asia, and Africa Operations	U.S.A.
Michael Collins	Vice President, Diagnostic Operations	U.S.A.
Edward J. Fiorentino	Vice President, Pharmaceutical Products Commercial Operations	U.S.A.
Gary L. Flynn(1)	Vice President and Controller	U.S.A.
Stephen R. Fussell	Vice President, Compensation and Development	U.S.A.
Robert B. Hance	Vice President, Diagnostic Operations, Europe, Africa and Middle East	U.S.A.
Guillermo A. Herrera	Vice President, European Operations	Colombia
James J. Koziarz, Ph.D.	Vice President, Diagnostic Products Research and Development	U.S.A.

John C. Landgraf	Vice President, Corporate Engineering	U.S.A.
Elaine R. Leavenworth	Vice President, Washington Government Affairs	U.S.A.
John M. Leonard	Vice President, Global Pharmaceutical Drug Development	U.S.A.
Holger Liepman	Vice President, Japan Operations	Germany
Greg W. Linder	Vice President and Treasurer	U.S.A.
John F. Lussen	Vice President, Taxes	U.S.A.
P. Loreen Mershimer	Vice President, Hospital Products Business Sector	U.S.A.
Edward L. Michael	Vice President, Diagnostic Assays and Systems	U.S.A.
Karen L. Miller	Vice President, Information Technology	U.S.A.
Daniel W. Norbeck	Vice President, Global Pharmaceutical Discovery	U.S.A.
Edward A. Ogunro	Vice President, Hospital Products Research and Development, Medical and Regulatory Affairs	U.S.A.
Roberto Reyes	Vice President, Latin America	Colombia
Mary T. Szela	Vice President, Hospital Products Business Sector	U.S.A.
Marcia A. Thomas	Vice President, Diagnostic Quality Assurance, Regulatory Affairs and Compliance	U.S.A.
James L. Tyree	Vice President, Global Licensing/New Business Development	U.S.A
Steven J. Weger	Vice President, Corporate Planning and Development	U.S.A.
Susan M. Widner	Vice President, Diagnostic Operations, U.S. and Canada	U.S.A.

(1)

Pursuant to Item 401 (b) of Regulation S-K Abbott has identified these persons as "executive officers" within the meaning of Item 401 (b).

	POSITION/PRESENT PRINCIPAL	
NAME	OCCUPATION OR EMPLOYMENT AND BUSINESS ADDRESS	CITIZENSHIP
DIRECTORS		
Roxanne S. Austin	Corporate Senior Vice President and Chief Financial Officer Hughes Electronics Corporation P. O. Box 956 200 N. Sepulveda Blvd. El Segundo, California 90245-0956	U.S.A.
H. Laurance Fuller	Retired Co-Chairman, BP Amoco, p.l.c. c/o Primary Business Center 1111 E. Warrenville Road Suite 257 Naperville, Illinois 60563	U.S.A.
Jack M. Greenberg	Chairman and Chief Executive Officer McDonald's Corporation One Kroc Drive Oak Brook, Illinois 60521	U.S.A.
David A. Jones	Chairman of the Board Humana Inc. 500 W. Main Street Humana Building Louisville, Kentucky 40202	U.S.A.
Jeffrey M. Leiden	Officer of Abbott	U.S.A.
The Rt. Hon. the Lord Owen CH	Physician, Politician, and Businessman House of Lords Westminster, London SW1A 0PW, England	United Kingdom
Boone Powell, Jr.	Chairman	U.S.A.

	Baylor Health Care System 3500 Gaston Avenue Dallas, Texas 75246	
Addison Barry Rand	Former Chairman and Chief Executive Officer Avis Group 900 Old Country Road Garden City, New York 11530	U.S.A.
Dr. W. Ann Reynolds	President The University of Alabama at Birmingham AB 1070 701 20th Street South Birmingham, Alabama 35294-0110	U.S.A.
Roy S. Roberts	Retired Group Vice President North American Vehicle Sales, Service and Marketing General Motors 317 Pine Ridge Drive Bloomfield Hills, Michigan 48304	U.S.A.
William D. Smithburg	Retired Chairman, President and Chief Executive Officer The Quaker Oats Company 676 N. Michigan Avenue Suite 3860 Chicago, Illinois 60611	U.S.A.
John R. Walter	Chairman Manpower, Inc. 5301 N. Ironwood Road Milwaukee, Wisconsin 53217	U.S.A.
Miles D. White	Officer of Abbott	U.S.A.

QuickLinks

Exhibit 1