UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No.)*

NaPro BioTherapeutics, Inc.

(Name of Issuer)

Common Stock, par value \$0.0075 per share

(Title of Class of Securities)

630795102

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)

April 23, 2001

(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 which 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 files 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).

(Continued on following page(s))

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CUSIP No. 630795102

1.	Names of Reporting Persons I.R.S. Identification Nos. of Above Persons (entities only) Abbott Laboratories IRS Identification No. 36-0698440	
2.	Check the Appropriate Box if a Member of a Group (See Instructions)	(a) // (b) //
3.	SEC Use Only	
4.	Source of Funds (See Instructions) OO (see Item 3 below)	

5. Check If Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) //

Citizenship or Place of Organization Illinois

Number of Shares Beneficially Owned by Each Reporting Person With		7.	Sole Voting Power 2,000,000
		8.	Shared Voting Power 0
		9.	Sole Dispositive Power 2,000,000
		10.	Shared Dispositive Power 0
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 2,000,000		
12.	. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) / /		

Percent of Class Represented by Amount in Row (11)
7.2% (see Item 5 below)

14. Type of Reporting Person (See Instructions) CO

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Item 1. Security and Issuer

This statement relates to shares of the common stock, par value \$0.0075 per share (the "Common Stock"), of NaPro BioTherapeutics, Inc., a Delaware corporation (the "Issuer"), whose principal executive offices are located at 6304 Spine Road, Unit A, Boulder, Colorado 80301.

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 2,000,000 shares of Common Stock (the "Shares") is \$11,000,000 (the "Purchase Price"). The Purchase Price comprises \$2,000,000 for 400,000 shares of Common Stock acquired on or about July 23, 1999; \$4,000,000 for 711,111 shares of Common Stock acquired on or about June 27, 2000; and \$5,000,000 for 888,889 shares of Common Stock acquired on April 23, 2001. The source of the funds is the general assets of Abbott.

Item 4. Purpose of the Acquisition

The purpose of the transaction is for investment and to establish a product development and marketing alliance between Abbott and the Issuer.

(a)—(j) 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.

Item 5. Interest in Securities of the Issuer

(a) Abbott may be deemed the beneficial owner of the Shares. This represents approximately 7.2% of the outstanding shares of the 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-K Annual

Report filed by the Issuer with the Securities and Exchange Commission for the year ended December 31, 2000.

(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 on October 5, 1999 by the Issuer as exhibits 99.1, 99.2, and 99.3 to the Securities and Exchange Commission Form 8-K and amendments to said exhibits 99.1 and 99.2 which were filed on August 14, 2000 by the Issuer as exhibits 10.2 and 10.3 to the Securities and Exchange Commission Form 10-Q and all of which are incorporated herein by reference.

Development, License and Supply Agreement

Under the terms of the Development, Licence and Supply Agreement, between Abbott and the Issuer, dated July 23, 1999, (the "Development Agreement"), Abbott and the Issuer collaborate in the development and commercialization of one or more formulations for the treatment of a variety of cancer indications. The Issuer is responsible for the supply of bulk drug and jointly conducts clinical trials with Abbott. Abbott is responsible for the finishing, regulatory filings, marketing and sale of the finished drug product. The Issuer licenses to Abbott certain patents. The Issuer receives funding from Abbott in the form of development and marketing milestone payments, equity investments based on certain events and a loan.

Stock Purchase Agreement

Abbott purchased the Shares under the terms of the Stock Purchase Agreement, between Abbott and the Issuer, dated July 23, 1999. The Stock Purchase Agreement obligates Abbott to purchase shares of the Common Stock upon the occurrence of certain events. The Stock Purchase Agreement places restrictions on the sale of the Shares by Abbott. Abbott acquired certain demand registration rights, which are exercisable within a stated period. In addition, Abbott acquired piggyback registration rights that are subject to certain limitations.

Loan and Security Agreement

Pursuant to the terms of the Loan and Security Agreement, between Abbott and the Issuer, dated July 23, 1999 (the "Loan Agreement"), Abbott advanced \$2,000,000 to the Issuer on the date of the Loan Agreement. Subject to certain restrictions and time limitations, Abbott is obligated to make additional advances to the Issuer from time to time until certain events occur. The loan is not convertible. It is evidenced by a promissory note.

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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

DATED: April 26, 2001

By: /s/ THOMAS C. FREYMAN

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

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EXHIBIT INDEX

1

Description

Information Concerning Executive Officers and Directors of Abbott Laboratories.

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EXHIBIT INDEX

Exhibit 1

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.

POSITION/PRESENT PRINCIPAL OCCUPATION OR EMPLOYMENT NAME AND BUSINESS ADDRESS CITIZENSHIP CORPORATE OFFICERS Miles D. White¹ Chairman of the Board and Chief Executive Officer U.S.A. Executive President, Pharmaceuticals and Director U.S.A. Jeffrey M. Leiden¹ U.S.A. Executive President, Medical Products Richard A. Gonzales¹ Joy A. Amundson¹ Senior Vice President, Ross Products U.S.A. Senior Vice President, Hospital Products Christopher B. Begley¹ U.S.A. U.S.A. Senior Vice President, Diagnostic Operations Thomas D. Brown¹ Jose M. de Lasa¹ Senior Vice President, Secretary and General Counsel U.S.A. Senior Vice President, International Operations U.S.A. William G. Dempsey¹ Senior Vice President, Finance and Chief Financial Officer U.S.A. Thomas C. Freyman¹ Senior Vice President, Pharmaceutical Operations United Kingdom Arthur J. Higgins¹ CORPORATE OFFICERS Continued Senior Vice President, Human Resources U.S.A. Thomas M. Wascoe¹ Senior Vice President, Specialty Products U.S.A. Lance B. Wyatt¹ Catherine V. Babington Vice President, Investor Relations and Public Affairs U.S.A. Patrick J. Balthrop Vice President, Diagnostic Commercial Operations U.S.A. Mark E. Barmak Vice President, Government Affairs U.S.A.

Michael G. Beatrice	Vice President, Corporate Regulatory	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.
Edward J. Fiorentino	Vice President, Pharmaceutical Products, Marketing, and Sales	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.

David B. Goffredo	Vice President, European Operations	U.S.A.	
Robert B. Hance	Vice President, Diagnostic Operations, Europe, Africa and	U.S.A.	
Guillermo A. Herrera	Vice President, Latin America and Canada 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, Abbott HealthSystems	U.S.A.	
John M. Leonard	Vice President, Pharmaceutical Development	U.S.A.	
CORPORATE OFFICERS Continued			
Greg W. Linder	Vice President and Treasurer	U.S.A.	
John F. Lussen	Vice President, Taxes	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, Pharmaceutical Discovery	U.S.A.	
Edward A. Ogunro	Vice President, Hospital Products Research and Development, Medical and Regulatory Affairs	U.S.A.	
Marcia A. Thomas	Vice President, Diagnostic Quality Assurance, Regulatory Affairs and Compliance	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 Dursuant to Itam 401 (b) of Degulation S. K. Abbatt has identified these persons as "avagutive officers" within the magning of Itam 401 (b)			

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).

NAME	POSITION/PRESENT PRINCIPAL 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 Baylor Health Care System 3500 Gaston Avenue Dallas, Texas 75246	U.S.A.
DIRECTORS Continued		
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 20 th 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 Information Concerning Executive Officers and Directors of Abbott Laboratories