SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-8/A

POST-EFFECTIVE AMENDMENT NO. 1 REGISTRATION STATEMENT Under THE SECURITIES ACT OF 1933

Abbott Laboratories

(Exact name of registrant as specified in its charter)

Illinois (State or other jurisdiction of incorporation or organization) **36-0698440** (I.R.S. Employer Identification No.)

100 Abbott Park Road Abbott Park, Illinois 60064-6400

(Address of Principal Executive Offices) (Zip Code)

Abbott Laboratories Ashland Union 401(k) Plan

(Full Title of the Plan)

Jose M. de Lasa Abbott Laboratories 100 Abbott Park Road Abbott Park, Illinois 60064-6400 (Name and address of agent for service)

(847) 937-5200

(Telephone number, including area code, of agent for service)

De-Registration of Common Shares and Plan Interests

This post-effective amendment relates to 61,444 common shares, without par value, of Abbott Laboratories ("Abbott") and an indeterminate amount of plan interests, registered by Abbott for the Abbott Laboratories Ashland Union 401(k) Plan (the "Plan") on a Registration Statement on Form S-8 (registration number 333-74222) (the "Registration Statement") filed with the Securities and Exchange Commission on November 30, 2001. On April 29, 2004, in connection with Abbott's spin-off of Hospira, Inc. ("Hospira"), Hospira adopted and assumed all rights, powers, duties, obligations and liabilities of Abbott under the Plan and was substituted for Abbott under the Plan (including as the employer and Plan sponsor). As a result, all offerings by Abbott of Abbott common shares and related Plan interests pursuant to the Registration Statement have terminated.

In accordance with Abbott's undertaking in the Registration Statement to remove from registration, by means of a post-effective amendment, any of the securities that remain unsold at the termination of the offering, Abbott hereby withdraws the 61,444 common shares and related Plan interests remained that remain unsold under the Plan as of the date of this post-effective Amendment.

SIGNATURES

THE REGISTRANT AND PLAN. Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and the Registrant and the Plan have duly caused this post-effective amendment to the Registration Statement to be signed on their behalf by the undersigned, thereunto duly authorized, in unincorporated Lake County, State of Illinois on this 17th day of June, 2004.

ABBOTT LABORATORIES

and

ABBOTT LABORATORIES ASHLAND UNION 401(k) PLAN

By: /s/ JOSE M. DE LASA

Jose M. de Lasa Executive Vice President and General Counsel of Abbott Laboratories and Agent for Service

3

QuickLinks

SIGNATURES