

WEST PHARMACEUTICAL SERVICES INC

Form 424B3

March 08, 2007

[QuickLinks](#) -- Click here to rapidly navigate through this document

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and they are not soliciting an offer to buy these securities in any state or other jurisdiction where the offer or sale is not permitted

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-141130

SUBJECT TO COMPLETION

**PRELIMINARY PROSPECTUS SUPPLEMENT
(TO PROSPECTUS DATED MARCH 8, 2007)**

MARCH 8, 2007

\$150,000,000

% Convertible Junior Subordinated Debentures due 2047

CONVERTIBLE DEBENTURES

- > We are offering \$150,000,000 aggregate principal amount of our % convertible junior subordinated debentures due 2047.
- > The convertible debentures will mature on March 15, 2047.

INTEREST

- > We will pay % interest per annum on the principal amount of the convertible debentures, payable semi-annually in arrears on March 15 and September 15 of each year, beginning on September 15, 2007. Interest will accrue on the convertible debentures from and including March , 2007 or from and including the last date in respect of which interest has been paid or provided for, to, but excluding, the next interest payment date or the final maturity date, as the case may be.
- > We may elect to defer interest payments on the convertible debentures as described herein.
- > After five years of deferral, we generally must use commercially reasonable efforts to sell qualifying securities with specified characteristics and use the funds from that sale to pay deferred interest, although this obligation is subject to certain limitations and any failure to comply with this obligation would constitute a covenant breach but not an event of default.
- > In no event may we defer payments of interest on the convertible debentures for more than 10 years, and an event of default will result if all accrued and unpaid interest in respect of the convertible debentures is not paid in full within 30 days after the tenth anniversary of the commencement of any deferral. In the event of our bankruptcy, insolvency or receivership, any claim in respect of interest that accrued during an interest deferral period in excess of two years of accrued and unpaid interest (including any compounded interest thereon) on the convertible debentures will be extinguished.

CONVERSION AT OPTION OF HOLDER

- >

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

Holders may convert their convertible debentures into shares of our common stock at any time prior to 5:00 P.M., New York City time, on the business day immediately preceding the final maturity date of the convertible debentures.

- > The initial conversion rate, which is subject to adjustment, is _____ shares of common stock per \$1,000 principal amount of convertible debentures. This represents an initial conversion price of approximately \$ _____ per share.
- > A holder that surrenders convertible debentures for conversion in connection with a "make-whole fundamental change" that occurs prior to March 15, 2047 may in certain circumstances be entitled to an increased conversion rate.
- > Upon the occurrence of a "fundamental change," if the market value per share of our common stock multiplied by the conversion rate then in effect is less than \$1,000, holders will have the option to convert all or a portion of their convertible debentures into common stock at an adjusted conversion rate equal to the lesser of (1) \$1,000 divided by the market value per share of our common stock as of the effective date of the fundamental change and (2) _____ shares. In lieu of issuing common stock pursuant to this alternative conversion right in the event of a fundamental change, we may, at our option, make a cash payment to converting holders equal to the market value of the shares of our common stock, determined as provided in the indenture, otherwise issuable upon conversion.

AUTOMATIC CONVERSION AT OUR OPTION

- > At any time on or after March 20, 2012, we may cause the convertible debentures to be automatically converted into shares of our common stock at the then prevailing conversion rate if the closing price of our common stock exceeds 150% of the then prevailing conversion price of the convertible debentures for at least 20 of the 30 trading days preceding our publicly announcing the automatic conversion. We will not be able to call the convertible debentures for automatic conversion during an optional deferral period.

SUBORDINATION

- > The convertible debentures will be our unsecured obligations and will rank junior to all of our existing and future senior indebtedness. The convertible debentures will be structurally subordinated to all existing and future liabilities of our subsidiaries, including trade payables. As of December 31, 2006, we had approximately \$236.3 million of outstanding indebtedness that would rank senior to the convertible debentures, which includes approximately \$16.5 million of additional indebtedness of our subsidiaries.

LISTING

- > The convertible debentures are a new issue of securities with no established trading market. An active or liquid market may not develop for the convertible debentures and, if developed, may not be maintained. We have not applied, and do not intend to apply, for the listing of the convertible debentures on any securities exchange.
- > Our common stock is listed on the New York Stock Exchange under the symbol "WST." On March 7, 2007, the last reported sale price of our common stock was \$46.10 per share.

Investing in the convertible debentures involves risks. See "Risk factors" beginning on page S-13.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

	Per convertible debenture	Total
Public offering price	%	\$
Underwriting discounts and commissions	%	\$
Proceeds, before expenses, to us	%	\$

We have granted to the underwriters the option, exercisable on or before the 30th day after the date of this prospectus supplement, to purchase up to an additional \$22,500,000 aggregate principal amount of convertible debentures to cover over-allotments, if any.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

We expect that the convertible debentures will be ready for delivery in book-entry-only form through The Depository Trust Company on or about March , 2007.

Sole Book-Running Manager
UBS Investment Bank

Banc of America Securities LLC

Wachovia Securities

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and any "free writing prospectus" we authorize to be delivered to you. We have not, and the underwriter has not, authorized anyone to provide you with additional information or information different from that contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and any such "free writing prospectus." We are offering to sell, and seeking offers to buy the convertible junior subordinated debentures offered hereby only in jurisdictions where those offers and sales are permitted. You should not assume that the information contained in this prospectus supplement, the accompanying prospectus, any such "free writing prospectus" or any documents incorporated by reference into any of the foregoing is accurate as of any date other than their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

TABLE OF CONTENTS

Prospectus Supplement	Page
Forward-looking statements	S-ii
Incorporation of certain information by reference	S-ii
Summary	S-1
Risk factors	S-13
Use of proceeds	S-26
Price range of common stock and dividend policy	S-26
Capitalization	S-27
Management	S-28
Description of convertible debentures	S-31
Description of capital stock	S-63
Description of certain indebtedness	S-64
Material United States federal income and estate tax considerations	S-66
Underwriting	S-75
Legal matters	S-78
Experts	S-78
Where you can find more information	S-78

Prospectus	Page
Risk factors	i
About this prospectus	i
Where you can find more information	1
Incorporation by reference	1
Ratio of earnings to fixed charges	2
Use of proceeds	2
Description of securities	2
Legal matters	2
Experts	2

S-i

Forward-looking statements

We make statements in this prospectus supplement and the accompanying prospectus and the documents we incorporate herein and therein by reference that are considered "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

the Securities Exchange Act of 1934, which are often identifiable by the use of words such as "will," "anticipates," "believes," "estimates," "expects," "projects," "plans," "intends," "should" or similar expressions. In particular, these include statements concerning future actions, future performance or results of current and anticipated products, sales efforts, expenses, the outcome of contingencies such as legal proceedings and financial results. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Reform Act of 1995 and are including this statement for purposes of complying with those safe harbor provisions. These forward-looking statements reflect our current views about our plans, strategies and prospects, which are based on the information currently available to us and on assumptions we have made. Although we believe that our plans, intentions and expectations as reflected in or suggested by those forward-looking statements are reasonable, we can give no assurance that the plans, intentions or expectations will be achieved. We have discussed in this document some important risks, uncertainties and contingencies which could cause our actual results, performance or achievements to be materially different from the forward-looking statements we make in these documents.

We assume no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise. In evaluating forward-looking statements, you should carefully consider the risks and uncertainties in, as well as all of the other information contained in, this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, and you should not place undue reliance on forward-looking statements.

Incorporation of certain information by reference

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to another document that we filed separately with the SEC. The information incorporated by reference is deemed part of this prospectus, except for any information superseded by information in this prospectus. You should read the information incorporated by reference because it is an important part of this prospectus. We have incorporated by reference into this prospectus the following documents or information filed with the SEC (Commission File No. 1-8036):

- > Annual Report on Form 10-K for the fiscal year ended December 31, 2006, filed with the SEC on March 1, 2007;
- > Current Reports on Form 8-K filed on January 11, 2007, January 30, 2007, February 20, 2007 and March 7, 2007 (in each case, excluding the portions deemed "furnished" and not "filed" with the SEC);
- > Description of our common stock set forth in our Registration Statement on Form 8-A filed with the SEC on October 17, 1980; and
- > All documents filed by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement of which this prospectus is a part until the offering of shares of common stock pursuant to this prospectus is complete (other than those portions of such documents described in paragraphs (i), (k), and (l) of Item 402 of Regulation S-K promulgated by the SEC or otherwise deemed "furnished" and not "filed" with the SEC).

S-ii

Any statement contained in a document that is incorporated by reference shall be deemed to be modified or superseded for all purposes to the extent that a statement contained in this prospectus (or in any other document that is subsequently filed with the Securities and Exchange Commission and incorporated by reference) modifies or replaces such statement. Any statement so modified or superseded shall not be deemed a part of this prospectus except as so modified or superseded.

If you request, either orally or in writing, we will provide you with a copy of any or all documents which are incorporated by reference. We will provide such documents to you free of charge, but will not include any exhibits, unless those exhibits are incorporated by reference into the document. You should address written requests for documents to John R. Gailey III, Esq., Vice President, General Counsel and Secretary, West Pharmaceutical Services, Inc., 101 Gordon Drive, Lionville, Pennsylvania 19341, (610) 594-2900.

S-iii

Summary

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

This summary highlights selected information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. The following summary is qualified in its entirety by the more detailed information included elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. Because this is a summary, it may not contain all the information that may be important to you. You should read this entire prospectus supplement and the accompanying prospectus, including "Risk factors" beginning on page S-13 and the financial statements and the notes to those statements and the other information incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision.

References in this prospectus supplement to "West Pharmaceutical Services," "West," "we," "us" and "our" refer to West Pharmaceutical Services, Inc. and its subsidiaries, except where otherwise expressly provided or where the context otherwise requires.

OUR BUSINESS

We are a leading manufacturer of components and systems for injectable drug delivery and plastic packaging and delivery system components for the healthcare, personal care and consumer products markets. Our products include stoppers and seals for vials, and components used in prefillable and disposable syringes, intravenous delivery systems and blood collection and diagnostic systems. We have a history of innovation in our industry and our products are integral to many of the world's most successful pharmaceutical and medical device products.

Our customers include the world's leading pharmaceutical, biotechnology, generic drug and medical-device producers. We are one of the world's largest independent manufacturers of pharmaceutical packaging components, including stoppers, and seals for pharmaceutical vials, and plungers for both prefillable and disposable syringes. Our packaging is incorporated in many of the biotechnology products marketed and sold worldwide.

We have 32 manufacturing locations in North and South America, Europe and Asia Pacific, and affiliates in Mexico and Japan. We operate through two reportable segments: "Pharmaceutical Systems," which designs, tests and manufactures components for drug delivery, and the "Tech Group," a custom contract manufacturer for clients across the healthcare spectrum and personal care and consumer products markets.

Pharmaceutical Systems segment

Our Pharmaceutical Systems segment designs, manufactures and sells a variety of elastomer and metal components used in parenteral drug delivery by branded pharmaceutical, generic and biopharmaceutical companies.

Our Pharmaceutical Systems business is composed of the following product lines:

- > Elastomeric stoppers and discs, which serve as primary closures for pharmaceutical vials;
- > Secondary closures for pharmaceutical vials, called Flip-Off® aluminum seals, consisting of an aluminum seal and removable plastic button, and in some applications, just an aluminum seal;
- > Elastomeric syringe plungers, stoppers for blood collection systems and flashback bulbs and sleeve stoppers for intravenous dispensing systems;
- > Elastomer and co-molded elastomer/plastic components for IV sets;
- > Dropper bulbs including tamper-evident droppers for applications such as eye, ear and nasal drops, diagnostic products and dispensing systems;
- > Needle shields and tip caps to fit most standard prefilled syringes and combination seals for dental cartridges and pens; and
- >

S-1

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

Baby bottle nipple and pacifier bulbs from a variety of elastomeric formulations.

In recent years, our Pharmaceutical Systems business has experienced increased demand for its product offerings. We believe this demand is due to a combination of factors including an aging population that is expected to consume more healthcare products and services, the increased occurrence and treatment of chronic disorders, including diabetes, and increased spending on healthcare in the world's developing economies. Additional demand for our products has been generated by the approval of new biotechnology drug products delivered by injection or IV infusion, especially those for biologics, estimated to be the fastest growing segment of the pharmaceutical market.

For many of our products, we benefit from regulatory barriers to entry. The FDA approval process for new and generic drugs, under either the New Drug Application (NDA) or Abbreviated New Drug Application (ANDA) methodologies requires the submission of data supporting the stability of the subject drug and the packaging material. We support the NDA and ANDA filings initiated by our customers by authorizing the FDA to review relevant data contained in our confidential Drug Master File (DMF). Our DMF contains extensive stability, functionality and material data relating to the use of our components with our customers' products. Although this data is reviewed by the FDA in connection with our customers' NDA and ANDA filings, it is not made available to our customers or suppliers without our explicit permission. A pharmaceutical customer who wishes to initiate primary packaging changes, including switching its packaging supplier, must conduct new stability studies and amend its regulatory filings, as well as validate the functionality of the substitute component or material in its production processes. These processes are typically lengthy and expensive.

Tech Group segment

Our Tech Group segment serves the medical, pharmaceutical, diagnostic and healthcare markets with custom contract-manufacturing services. Products and projects include design and manufacturing of unique components for surgical, ophthalmic, diagnostic and drug delivery systems, such as contact lens storage kits, pill dispensers, safety needle syringes, disposable blood collection systems and components and systems associated with drug inhalation devices. Our Tech Group segment has manufacturing operations in the U.S., Mexico, Puerto Rico and Ireland. This segment's global customer base includes many of the world's leading manufacturers of pharmaceuticals, biologics and medical devices.

Our Tech Group segment benefits from some of the same industry factors that impact our Pharmaceutical Systems segment, particularly for products manufactured by us for diabetes care. Significantly, our Tech Group is one of two contract manufacturers for an inhalation delivery device used in connection with Exubera® Inhalation Powder, a pulmonary insulin product developed by our customer Nektar Therapeutics and marketed by Pfizer, Inc. We also produce insulin pen and auto-injector components and assemblies. It is our intention to increase the proportion of Tech Group sales of products that benefit from proprietary intellectual property protection or from the regulatory barriers associated with primary drug packaging and combination products, like the Exubera® inhalation powder device, in which the delivery device is a functioning part of the drug delivery process. Exubera® is a registered trademark of Pfizer Inc.

In the consumer products and personal care markets, Tech Group products include the following:

- > Child-resistant and tamper-evident closures and dispensers for personal care products;
- > Closures used to seal beverage containers; and
- > Multi-piece components for consumer technology products.

S-2

OUR STRATEGY

The key elements of our strategy include:

- > Continuing to maintain our market leadership position in biotechnology packaging;
- > Aggressively expanding our IP position via innovation and selective acquisitions;

- > Geographic expansion and building-out of our manufacturing capabilities to meet market growth; and
- > Creating financial flexibility through conservative balance sheet management.

CORPORATE INFORMATION

We were incorporated in Pennsylvania in 1923. Our principal executive offices are located at 101 Gordon Drive, P.O. Box 645, Lionville, PA 19341. Our telephone number is (610) 594-2900. Our website address is <http://www.westpharma.com>. The information contained on our website is not a part of this prospectus supplement or the accompanying prospectus.

S-3

The offering

Issuer	West Pharmaceutical Services, Inc.
Offered securities	% convertible junior subordinated debentures due 2047.
Principal amount	\$1,000 per convertible debenture.
Aggregate principal amount	\$150,000,000 (plus up to an additional \$22,500,000 principal amount of convertible debentures pursuant to the option we have granted to the underwriters to purchase additional convertible debentures to cover overallotments).
Final maturity date	Any unpaid principal amount of the convertible debentures, together with accrued and unpaid interest, including any compounded interest thereon, will be due and payable on March 15, 2047.
Interest	<p>We will pay % interest per annum on the principal amount of the convertible debentures, payable semi-annually in arrears on March 15 and September 15 of each year, starting on September 15, 2007. Interest will accrue on the convertible debentures from and including March , 2007 or from and including the last date in respect of which interest has been paid or provided for, to, but excluding, the next interest payment date or the final maturity date, as the case may be.</p> <p>We may elect to defer interest payments on the convertible debentures as described in this prospectus supplement. This deferral right, as well as limitations on the sources we may use to fund deferred interest payments, is described under "Description of the convertible debentures Deferral of Interest Payments." Additional restrictions on our ability to make payments (including payments of interest) on the convertible debentures and on any related claim in the event of our bankruptcy, insolvency or receivership are described under "Description of the convertible debentures Subordination" and "Description of the convertible debentures Deferral of Interest Payments Limitation on claims in the event of our bankruptcy, insolvency or receivership."</p>
Use of proceeds	We estimate that our net proceeds from the sale of the convertible debentures in this offering, after deducting underwriting discounts and estimated expenses of the offering, will be approximately \$145.2 million. We intend to use the net proceeds for general corporate purposes, which may include capital expenditures, working capital, possible acquisitions of other businesses, technologies or products, repaying debt and/or potentially repurchasing shares of our capital stock.
Indenture	We will issue the convertible debentures under an indenture and a supplemental indenture thereto, each to be dated as of March , 2007, between West Pharmaceutical Services, Inc., as issuer, and U.S. Bank National Association, as trustee. In this prospectus supplement, we

refer to that indenture, as supplemented by the supplemental indenture, and as may be further supplemented or amended from time to time in respect of the convertible debentures, as the "indenture."

S-4

Trustee and paying agent

U.S. Bank National Association

Subordination

The convertible debentures will be our unsecured subordinated obligations, ranking junior to all existing and future senior indebtedness as described under "Description of the convertible debentures Subordination." The convertible debentures will rank equal in right of payment with obligations we owe, from time to time, to our trade creditors.

The convertible debentures will be structurally subordinated to all indebtedness and other obligations of our subsidiaries. The indenture places no limitation on the amount of additional indebtedness that we or any of our subsidiaries may incur. We expect that we and our subsidiaries will incur additional indebtedness in the future.

Conversion rights

Holders may convert their notes, in whole or in part, into shares of our common stock at any time prior to 5:00 P.M., New York City time, on the business day immediately preceding the final maturity date of the convertible debentures. The initial conversion rate, which is subject to adjustment, is _____ shares of common stock per \$1,000 principal amount of notes. This represents an initial conversion price of approximately \$ _____ per share.

A holder that surrenders notes for conversion in connection with a "make-whole fundamental change" may in some circumstances be entitled to an increased conversion rate.

Upon the occurrence of a "fundamental change," if the market value per share of our common stock multiplied by the conversion rate then in effect is less than \$1,000, holders will have the option to convert all or a portion of their convertible debentures into common stock at an adjusted conversion rate as described below under " Alternative conversion right upon a fundamental change."

See "Description of the convertible debentures Conversion Rights."

Automatic conversion

At any time on or after March 20, 2012, we may cause the convertible debentures to be automatically converted into shares of our common stock at the then prevailing conversion rate if the closing price of our common stock exceeds 150% of the then prevailing conversion price of the convertible debentures for at least 20 of the 30 trading days preceding our publicly announcing the automatic conversion.

We will not be able to call the convertible debentures for automatic conversion during an optional deferral period and will be required to repay all accrued and unpaid deferred interest, if any, and compound interest thereon, in accordance with the alternative payment mechanism provisions of the indenture prior to calling convertible debentures for automatic conversion.

S-5

Alternative conversion right upon a fundamental change

Upon the occurrence of a fundamental change, if the market value per share of our common stock, determined as provided in the indenture, multiplied by the conversion rate then in effect with respect to the convertible debentures is less than \$1,000, each holder of convertible debentures will have the option to convert all or a portion of its convertible debentures into shares of common stock at an adjusted conversion rate equal to the lesser of (1) \$1,000 divided by the market value per share of our common stock as of the effective date of the fundamental change, and (2) _____ shares. In lieu of issuing shares of

common stock pursuant to this alternative conversion right, we may, at our option, make a cash payment to converting holders equal to the aggregate market value of the shares of our common stock, as determined as provided in the indenture, otherwise issuable upon conversion pursuant to this right. If the fundamental change is also a make-whole fundamental change, converting holders will be required to specify whether they are converting their convertible debentures pursuant to this alternative conversion option.

Make-whole amount

Upon the occurrence of a make-whole fundamental change, under certain circumstances, we will increase the conversion rate, for the time period described herein, by a specified number of additional shares, as described under "Description of the convertible debentures Conversion rights Make-whole adjustment in connection with conversion upon a make-whole fundamental change." The number of additional shares will be determined based on the price paid per share of our common stock in the transaction constituting a make-whole fundamental change and the effective date of such transaction. Notwithstanding the foregoing, in no event will the total number of shares of our common stock issuable upon conversion in connection with a make-whole fundamental change exceed _____ shares per \$1,000 principal amount of convertible debentures, subject to adjustment.

No increase to the conversion rate will be made upon a make-whole fundamental change if the stock price in connection with such make-whole fundamental change is less than \$ _____ or more than \$ _____ (in each case, subject to adjustment).

Optional deferral

As long as no event of default with respect to the convertible debentures has occurred and is continuing, subject to the conditions described in this prospectus supplement, we may defer payments of interest on the convertible debentures. We refer to this as "optional deferral." Upon optional deferral, any optionally deferred interest will continue to accrue and compound semi-annually, to the extent permitted by applicable law, at the applicable rate of interest on the convertible debentures.

S-6

Alternative payment mechanism

After five years of optional deferral (calculated from the first payment date as of which we defer payments on the convertible debentures due to optional deferral), we must use commercially reasonable efforts to sell qualifying securities (generally, qualifying warrants or qualifying preferred stock, including depositary shares representing interests in such preferred stock) and use eligible proceeds (as defined) from those sales to pay deferred interest as described under "Description of the convertible debentures Alternative payment mechanism." This obligation, however, is subject to certain limitations: we will not be required to sell qualifying securities during the continuation of a "market disruption event" (as defined), and the maximum amount of qualifying securities that we are required to sell will be limited by specified caps. Any breach of our obligation to fund payments through the sale of qualifying securities would constitute a covenant breach, but not an event of default permitting acceleration of the principal amount of the convertible debentures. The remedy of holders of the convertible debentures for any covenant breach may be limited to direct monetary damages (if any). See "Description of the convertible debentures Events of Default."

Notwithstanding the limitations described above, in no event may we defer payments of interest on the convertible debentures beyond the date that is 10 consecutive years after the date on which we began the deferral of interest or past the final maturity date of the convertible debentures. An event of default will result if all accrued and unpaid interest, including any compounded interest thereon, in respect of the convertible debentures has not been paid in full within 30 days after the tenth anniversary of the commencement of any interest deferral.

At the times described under "Description of the convertible debentures Deferral of Interest Payments," we will be required, subject to the occurrence of a market disruption event and the limits imposed by the specified caps, to use commercially reasonable efforts to sell qualifying securities and apply the eligible proceeds of such sale to pay deferred interest,

including any compounded interest thereon.

"Qualifying securities" generally means:

- > "qualifying warrants," which are net-share settled warrants to purchase our common stock that have an exercise price greater than the current stock market price of our common stock as of their date of issuance, that we are not entitled to redeem for cash and that the holders of such warrants are not entitled to require us to repurchase for cash in any circumstance; and
- > "qualifying preferred stock," which is preferred stock (or depositary shares representing interests in such preferred stock) issued by us on such terms as we may establish.

S-7

We may provide, at a later date at our option, that qualifying preferred stock be subject to a legally binding replacement covenant or a replacement capital intention and/or meet certain other criteria as described under "Description of the convertible debentures Deferral of Interest Payments." The indenture will permit us to amend the indenture without the consent of holders of the convertible debentures to make such provisions. In addition, the indenture may be amended without the consent of holders of the convertible debentures to add, at our election, our common stock to the definition of "qualifying securities."

Limitations on deferrals

No deferral may extend beyond the final maturity date of the convertible debentures or an acceleration of the convertible debentures upon an event of default. In addition, no interest deferral period may continue for more than 10 years. An interest deferral period will commence on the first interest payment date on which interest is deferred and will end on the first date thereafter on which all deferred interest, including any compounded interest thereon, is paid in full.

We will not be able to call the convertible debentures for automatic conversion during an optional deferral period and will be required to repay all accrued and unpaid deferred interest, if any, and compounded interest thereon, in accordance with the alternative payment mechanism provisions of the indenture prior to calling convertible debentures for automatic conversion.

Payment restrictions

On any date on which accrued interest through the most recent interest payment date has not been paid in full and until such time as all accrued and unpaid interest through the most recent interest payment date, together with any compounded interest, is paid in full, we will not, and will not permit any of our subsidiaries to, declare or pay any dividends or any distributions on, or make any payments of interest, principal or premium, or any guarantee payments on, or redeem, purchase, acquire or make a liquidation payment on, any of our capital stock or any of our debt securities or guarantees ranking equal with or junior to the convertible debentures, with exceptions that are detailed under "Description of the convertible debentures Certain restrictions during optional deferral periods."

Limitation on claims in the event of our bankruptcy, insolvency or receivership

In the event of our bankruptcy, insolvency or receivership, whether voluntary or not, prior to the final maturity date or repayment of the convertible debentures, any claim in respect of interest that accrued during an interest deferral period in excess of two years of accrued and unpaid interest (including any compounded interest thereon) on the convertible debentures will be extinguished.

S-8

Events of default

The indenture will provide for the following events of default with respect to the convertible debentures:

- > default for 30 calendar days in the payment of any interest on the convertible debentures, including any compounded interest, when it becomes due and payable (however, a default under this bullet will not occur if we have deferred interest, as permitted under the indenture);
- > deferral of interest on the convertible debentures that continues for 10 consecutive years after the date on which we began the deferral of interest, without all accrued and unpaid interest, including any compounded interest thereon, having been paid in full within 30 days after the tenth anniversary of the commencement of such deferral;
- > default in the payment of the principal of the convertible debentures when due; and
- > certain events of bankruptcy, insolvency and reorganization, whether voluntary or not.

The events of default contained in the indenture under which the convertible debentures will be issued (and the circumstances under which payment of the convertible debentures may be accelerated) will not include failure to comply with or breach of our other covenants in the indenture applicable to the convertible debentures, including those described under "Description of the convertible debentures Deferral of Interest Payments Alternative Payment Mechanism." In the case of any breach of covenant that will not give rise to an event of default, there will be no right to declare the principal amount of the convertible debentures, or accrued and unpaid interest, including any compounded interest thereon, immediately payable, and the remedy of holders of the convertible debentures for any covenant breach may be limited to direct monetary damages (if any). Notwithstanding the foregoing, the indenture will acknowledge that in the case of any failure to deliver consideration deliverable in respect of any conversion, monetary damages would not be adequate and will provide for specific performance as the remedy for any such failure.

Capital replacement

The convertible debentures are not subject to a legally binding replacement covenant or a replacement capital intention. However, we will be permitted to provide for a replacement capital obligation or replacement capital intention in respect of the convertible debentures in the future, without the consent of the convertible bondholders.

Form

The convertible debentures will be represented by one or more global securities registered in the name of Cede & Co., as nominee for The Depository Trust Company, or DTC. Beneficial interests in the convertible debentures will generally be evidenced by, and transfers thereof will be effected only through, records maintained by the participants in DTC.

Governing law

New York.

S-9

U.S. federal income tax treatment

We intend to take the position that the convertible debentures will be classified as our indebtedness for all U.S. federal tax purposes. The convertible debentures are novel financial instruments and there is no statutory, judicial or administrative authority that directly addresses the U.S. federal income tax treatment of securities similar to the convertible debentures. Thus, no assurance can be given that the Internal Revenue Service (the "IRS") or a court will agree with our position. We agree, and by purchasing convertible debentures, you will agree (except with respect to withholding as provided under "Material United States federal income and estate tax consequences Non-U.S. Holders Payments of Interest") to treat the convertible debentures as indebtedness for all U.S. federal tax purposes. If the IRS were to successfully

challenge the characterization of the convertible debentures as indebtedness, interest payments on the convertible debentures would be treated for such purposes as dividends to the extent of our current or accumulated earnings and profits and non-U.S. holders would be subject to withholding tax on such payments. See "Material United States federal income and estate tax consequences." Accordingly, an investment in the convertible debentures may not be suitable for non-U.S. holders. Non-U.S. holders should consult their tax advisors regarding the U.S. federal income tax consequences of an investment in the convertible debentures.

For a discussion of certain risks that should be considered in connection with an investment in the convertible debentures, see "Risk factors."

S-10

Summary historical condensed financial data

The following table presents our summary historical condensed consolidated financial data for the years ended December 31, 2004, 2005, and 2006. Our condensed consolidated statements of operations data for the years ended December 31, 2004, 2005 and 2006 have been derived from our audited consolidated financial statements which are incorporated by reference in this prospectus supplement and the accompanying prospectus. These historical results are not necessarily indicative of results to be expected for any future period. The as adjusted summary balance sheet data gives effect to the receipt of the net proceeds from the issuance and sale of the debentures.

You should read this summary data together with our audited consolidated financial statements and related notes and the related "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report on Form 10-K for the year ended December 31, 2006, incorporated by reference in this prospectus supplement and the accompanying prospectus.

Consolidated statements of income:	Years ended December 31,		
	2004	2005	2006
	(in millions)		
Net sales	\$ 541.6	\$ 699.7	\$ 913.3
Cost of goods and services sold	384.5	505.9	651.5
Gross profit	157.1	193.8	261.8
Selling, general and administrative expenses	105.2	120.3	155.9
Restructuring charge (benefit)	1.0	(1.3)	
Other expense (income), net	1.5	1.4	4.9
Operating profit	49.4	73.4	101.0
Loss on debt extinguishment			5.9
Interest expense	8.5	14.1	12.7
Interest income	(1.5)	(2.1)	(2.1)
Income before income taxes and minority interests	42.4	61.4	84.5
Provision for income taxes	11.5	17.7	24.6
Minority interests		0.1	0.3
Income from consolidated operations	30.9	43.6	59.6

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

	Years ended December 31,		
Equity in net income of affiliated companies	3.4	2.4	1.9
Income from continuing operations	34.3	46.0	61.5
Pretax income (loss) from discontinued operations	(13.5)	(0.3)	0.6
Pretax gain (loss) on disposal of business segment	(4.7)	0.7	
Income tax benefit from discontinued operations	4.1		5.0
Income (loss) from discontinued operations	(14.1)	0.4	5.6
Net income	\$ 20.2	\$ 46.4	\$ 67.1

S-11

Consolidated statements of income:	Years ended December 31,		
	2004	2005	2006
(in millions, except per share data)			
Net income (loss) per share:			
Basic			
Continuing operations	\$ 1.14	\$ 1.48	\$ 1.91
Discontinued operations	(0.47)	0.01	0.18
	\$.67	\$ 1.49	\$ 2.09
Assuming dilution ⁽¹⁾			
Continuing operations	\$ 1.11	\$ 1.41	\$ 1.83
Discontinued operations	(0.46)	0.01	0.17
	\$ 0.65	\$ 1.42	\$ 2.00
Average common shares outstanding	30.0	31.1	32.2
Average shares assuming dilution ⁽¹⁾	30.8	32.5	33.6

(1)

The number of shares outstanding includes the following: (i) approximately 3.0 million shares of common stock issuable upon exercise of outstanding share-based equity awards and (ii) approximately 3.5 million shares of common stock reserved for future issuance under our equity plans.

Consolidated balance sheet data:	As of December 31, 2006	
	Actual	As adjusted ⁽¹⁾

As of December 31, 2006

	(in millions)	
	(unaudited)	
Cash, including cash equivalents	\$ 47.1	\$ 192.3
Working capital	124.8	270.0
Total assets	918.2	1,068.2
Long term debt	235.8	385.8
Retained earnings	375.7	375.7
Total shareholders' equity	414.5	414.5

(1) *Adjusted to give effect to the offering of the convertible debentures (assuming no exercise of the underwriters' over-allotment option), after deducting underwriting discounts and commissions and our estimated offering expenses.*

S-12

Risk factors

This section describes some, but not all, of the risks related to our business and of purchasing convertible debentures in the offering. Before purchasing convertible debentures, you should carefully consider these risks, in addition to the other information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. In connection with the forward-looking statements that appear in this document, you should carefully review the factors discussed below and the cautionary statements referred to in "Forward-Looking Statements."

RISKS RELATED TO OUR BUSINESS

Our sales and profitability depend to a large extent on the sale of drug products delivered by injection. If the products developed by our customers in the future use another delivery system, our sales and profitability could suffer.

Our business depends to a substantial extent on customers' continued sales and development of products that are delivered by injection. We also rely on our customers who develop products that use other delivery means, including oral and trans-mucosal, specifically, the Exubera® Inhalation-Powder insulin device. However, if our customers fail to continue to sell, develop and deploy new injectable products or we are unable to develop new products that assist in the delivery of drugs by alternative methods, our sales and profitability may suffer.

If we are unable to provide comparative value advantages, timely fulfillment of customer orders, or resist pricing pressure, we will have to reduce our prices, which may negatively impact our profit margins.

We compete with several companies across our major product lines. Because of the special nature of these products, competition is based primarily on product design and performance, although total cost is becoming increasingly important as pharmaceutical companies continue with aggressive cost control programs across their entire operations. Competitors often compete on the basis of price. We differentiate ourselves from our competition as a "full-service value-added" supplier that is able to provide pre-sale compatibility studies and other services and sophisticated post-sale technical support on a global basis. However, we face continued pricing pressure from our customers and competitors. If we are unable to resist or to offset the effects of continued pricing pressure through our value-added services, improved operating efficiencies and reduced expenditures, or if we have to reduce our prices, our sales and profitability may suffer.

If we are unable to expand our production capacity at our European and Asian facilities *or otherwise experience any disruption in our production activities*, there may be a delay in fulfilling or we may be unable to fulfill customer orders and this could potentially reduce our sales and our profitability may suffer.

We have significant indebtedness and debt service payments which could negatively impact our liquidity.

We owe substantial debts and have to commit significant cash flow to debt service requirements. The level of our indebtedness, among other things, could:

- > make it difficult for us to obtain any necessary future financing for working capital, capital expenditures, debt service requirements or other purposes;
- > limit our flexibility in planning for, or reacting to changes in, our business; and
- > make our financial results and share value more vulnerable in the event of a downturn in our business.

S-13

Our ability to meet our debt service obligations and to reduce our total indebtedness depends on the results of our product development efforts, our future operating performance, our ability to generate cash flow from the sale of our products and on general economic, financial, competitive, legislative, regulatory and other factors affecting our operations. Many of these factors are beyond our control and our future operating performance could be adversely affected by some or all of these factors.

If we incur new indebtedness in the future, the related risks that we now face could intensify. Whether we are able to make required payments on our outstanding indebtedness and to satisfy any other future debt obligations will depend on our future operating performance and our ability to obtain additional debt or equity financing.

We are subject to regulation by governments around the world, and if these regulations are not complied with, existing and future operations may be curtailed, and we could be subject to liability.

The design, development, manufacturing, marketing and labeling of certain of our products and our customers' products that incorporate our products are subject to regulation by governmental authorities in the United States, Europe and other countries, including the FDA and the European Medicines Agency. The regulatory process can result in required modification or withdrawal of existing products and a substantial delay in the introduction of new products. Also, it is possible that regulatory approval may not be obtained for a new product. In addition, our analytical laboratories perform certain contract services for drug manufacturers and are subject to the FDA's current good manufacturing practices regulations. We must also register as a contract laboratory with the FDA and are subject to periodic inspections by the FDA. The Drug Enforcement Administration has licensed our contract analytical laboratories to handle and store controlled substances.

Failure to comply with applicable regulatory requirements can result in actions that could adversely affect our business and financial performance.

Our business may be adversely affected by changes in the regulation of drug products and devices.

An effect of the governmental regulation of our customers' drug products, devices, and manufacturing processes is that compliance with regulations makes it costly and time consuming for customers to substitute or replace components and devices produced by one supplier with those from another. In general terms, regulation of our customers' products that incorporate our components and devices has increased over time. However, if the applicable regulations were to be modified in a way that reduced the cost and time involved for customers to substitute one supplier's components or devices for those made by another, it is likely that the competitive pressure on us would increase and adversely affect our sales and profitability.

Our business may be adversely affected by risks typically encountered in international operations and fluctuations in currency exchange rates.

We conduct business in most of the major pharmaceutical markets in the world. Sales outside the U.S. account for approximately 49% of our consolidated net sales. Although the general business process is similar to the domestic business, international operations are exposed to additional risks, including the following: fluctuations in currency exchange rates; transportation delays and interruptions; political and economic instability and disruptions, especially in Latin and South America, Asia, and Israel; the

S-14

imposition of duties and tariffs; import and export controls; the risks of divergent business expectations or cultural incompatibility inherent in establishing and maintaining operations in foreign countries; difficulties in staffing and managing multi-national operations; labor strikes and/or disputes; limitations on our ability to enforce legal rights and remedies; and potentially adverse tax consequences.

Any of these events could have an adverse effect on our international operations in the future by reducing the demand for our products, decreasing the prices at which we can sell our products or otherwise have an adverse effect on our business, financial condition or results of operations. In addition, we may not be able to operate in compliance with foreign laws and regulations, or comply with applicable customs, currency exchange control regulations, transfer pricing regulations or any other laws or regulations to which we may be subject, in the event that these laws or regulations change.

Raw material and energy prices have a significant impact on our profitability. If raw material and/or energy prices increase, and we cannot pass those price increases on to our customers, our profitability and financial condition may suffer.

We use three basic categories of raw materials in the manufacture of our products: elastomers (which include synthetic and natural material), aluminum and plastic. In addition, our manufacturing facilities consume a wide variety of energy products to fuel, heat and cool our operations. Supply and demand factors, which are beyond our control, generally affect the price of our raw materials and utility costs. If we are unable to pass along increased raw material prices and energy costs to our customers, our profitability, and thus our financial condition, may be adversely affected. The prices of many of these raw materials and utilities are cyclical and volatile. For example, the prices of certain commodities, particularly petroleum-based raw materials, have rapidly increased in the recent past, increasing the cost of synthetic elastomers and plastic. While we generally attempt to pass along increased costs to our customers in the form of sales price increases, historically there has been a time delay between raw material and/or energy price increases and our ability to increase the prices of our products. In some circumstances, we may not be able to increase the prices of our products due to competitive pressure and other factors.

Disruptions in the supply of key raw materials and difficulties in the supplier qualification process could adversely impact our operations.

We utilize a supply chain management strategy in our reporting segments, which involves purchasing from integrated suppliers that control their own sources of supply. This strategy has reduced the number of raw material suppliers used by us. In most cases, we purchase raw materials from a single source to assure quality and reduce costs. Due to regulatory control over our production processes, and the cost and time involved in qualifying suppliers, we rely on single source suppliers for many critical raw materials. This strategy increases the risks that our supply lines may be interrupted in the event of a supplier production problem. These risks are managed, where possible, by selecting suppliers with multiple manufacturing sites, rigid quality control systems, surplus inventory levels and other methods of maintaining supply in the case of interruption in production.

However, should one of our suppliers be unable to supply materials needed for our products or should our strategies for managing these risks be unsuccessful, we may be unable to complete the process of qualifying new replacement materials for some programs in time to meet future production needs.

S-15

Prolonged disruptions in the supply of any of our key raw materials, difficulty completing qualification of new sources of supply, or in implementing the use of replacement materials or new sources of supply could have a material adverse effect on our operating results, financial condition or cash flows.

Our operations must comply with environmental statutes and regulations, and any failure to comply could result in extensive costs which would harm our business.

The manufacture of some of our products involves the use, transportation, storage and disposal of hazardous or toxic materials and is subject to various environmental protection and occupational health and safety laws and regulations in the countries in which we operate. This has exposed us in the past, and could expose us in the future, to risks of accidental contamination and events of non-compliance with environmental laws. Any such occurrences could result in regulatory enforcement or personal injury and property damage claims or could lead to a shutdown of some of our operations, which could have an adverse effect on our business and results of operations. We currently incur costs to comply with environmental laws and regulations and these costs may become more significant.

A loss of key personnel or highly skilled employees could disrupt our operations.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

Our executive officers are critical to the management and direction of our businesses. Our future success depends, in large part, on our ability to retain these officers and other capable management personnel. With the exception of our Chief Executive Officer, in general, we do not enter into employment agreements with our executive officers. We have entered into severance agreements with several of our officers that allow those officers to terminate their employment under particular circumstances, such as a change of control affecting our company. Although we believe that we will be able to attract and retain talented personnel and replace key personnel should the need arise, our inability to do so could disrupt the operations of the unit affected or our overall operations. In addition, because of the complex nature of many of our products and programs, we are generally dependent on an educated and highly skilled engineering staff and workforce. Our operations could be disrupted by a shortage of available skilled employees.

The nature of our business exposes us to litigation risk.

The nature of our business exposes us to litigation risk, and we are a party to lawsuits in the ordinary course of our business. While we do not believe that the resolution of any currently pending lawsuits against us will, individually or in the aggregate, have a material adverse effect on our business, financial condition or results of operations, it is possible that one or more lawsuits to which we are currently a party to or to which we subsequently become a party to, could adversely affect us in the future.

RISKS RELATED TO THE DEBENTURES

Increased leverage as a result of this offering may harm our financial condition and results of operations.

As adjusted to include the sale of the convertible debentures we are offering by this prospectus supplement, assuming the underwriters do not exercise their option to purchase additional convertible debentures, our total consolidated long-term debt as of December 31, 2006 would have been approximately \$385.8 million and would have represented approximately 47.9% of our total capitalization as of that date. The indenture for the convertible debentures will not restrict our ability

S-16

to incur additional indebtedness, including indebtedness that ranks senior to the convertible debentures.

Our level of indebtedness could have important consequences to you, because:

- > it could affect our ability to satisfy our obligations under the convertible debentures;
- > the portion of our cash flows from operations required to make interest and principal payments will not be available for operations, working capital, capital expenditures, expansion, acquisitions or general corporate or other purposes;
- > it may impair our ability to obtain additional financing in the future;
- > it may limit our flexibility in planning for, or reacting to, changes in our business and industry; and
- > it may make us more vulnerable to downturns in our business, our industry or the economy in general.

The convertible debentures will be subordinated to substantially all of our other debt.

The convertible debentures will be our unsecured obligations, ranking junior to all existing and future senior indebtedness (including all of our existing indebtedness that is subordinated to other debt, but excluding trade accounts payable or accrued liabilities arising in the ordinary course of business) of West Pharmaceutical Services, Inc., as described under "Description of the convertible debentures Subordination." This means that no direct or indirect payment, in cash, property or securities, by set-off or otherwise, may be made or agreed to be made on account of the convertible debentures or interest thereon, or in respect of any payment, redemption, retirement, purchase or other acquisition of the convertible debentures, if we default in the payment of any principal, or premium, if any, or interest on any senior indebtedness, or if an event of default occurs with respect to any senior indebtedness permitting the holders to accelerate the maturity thereof and written notice of such event of

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

default, requesting that payments on the convertible debentures cease, is given to us by the holders of such senior indebtedness, unless and until such default in payment or event of default has been cured or waived or ceases to exist, provided that the subordination provisions will not limit the rights of the holders of the convertible debentures to convert their convertible debentures into common stock. In addition, in connection with any insolvency, bankruptcy, receivership, liquidation, reorganization, readjustment, composition or other similar proceeding relating to us, our creditors or our property and in certain other circumstances, payments that would otherwise be made on the convertible debentures will generally be paid to the holders of senior indebtedness, or their representatives, in accordance with the priorities existing among these creditors at that time until the senior indebtedness is paid in full.

As of December 31, 2006, after giving effect to the convertible debentures offered hereby, we had total indebtedness of approximately \$236.3 million that will rank senior to the convertible debentures. The indenture places no limitation on the amount of additional indebtedness, including senior indebtedness, that we or any of our subsidiaries may incur. We expect to incur additional indebtedness in the future.

Due to the subordination provisions contained in the indenture governing the convertible debentures, in the event of our bankruptcy, insolvency or receivership, funds which we might otherwise use to pay the holders of the convertible debentures would instead be used to pay the holders of our senior indebtedness until such indebtedness is paid in full. As a result of such payments, the holders of such other indebtedness would likely recover more, ratably, than the holders of the convertible debentures in the event of our bankruptcy, insolvency or receivership, and holders of the convertible debentures might not receive anything at all.

S-17

We will be dependent on dividends and other discretionary distributions from our subsidiaries to make payments in respect of the convertible debentures. The convertible debentures will be structurally subordinated to all indebtedness of our subsidiaries.

We will be dependent on dividends and other discretionary distributions from our subsidiaries to make payments in respect of the convertible debentures. We derive substantially all of our revenues from our subsidiaries. All obligations of our subsidiaries would have to be satisfied before any of the assets of such subsidiaries would be available for distribution, upon a liquidation or otherwise, to us. As of December 31, 2006, after giving effect to the issuance of the convertible debentures offered hereby, our subsidiaries would have had total third party indebtedness and other liabilities (including trade payables and accrued expenses) of approximately \$648.9 million, all of which would be structurally senior to the convertible debentures.

We also have joint ventures and subsidiaries in which we own less than 100% of the equity so that, in addition to the structurally senior claims of creditors of those entities, the equity interests of our joint venture partners or other shareholders in any dividend or other distribution made by these entities would need to be satisfied on a basis proportionate to our interest. These joint ventures and less-than-wholly-owned subsidiaries may also be subject to contractual or regulatory restrictions that limit their ability to distribute cash to us and, as a result, we may not be able to access their cash flows to help service the convertible debentures. In addition, the payment of dividends and the making of loans and advances or other payments to us by our subsidiaries may be subject to statutory, contractual or other restrictions, may depend on the earnings or financial condition of those subsidiaries and are subject to the cash flow and assets of our subsidiaries. Among other things, our ability to repatriate funds from our international subsidiaries, which represent a significant portion of our business, may be limited by legal, tax and other considerations.

You will not have any claim as a creditor against our subsidiaries, and indebtedness and other liabilities, including trade payables, whether secured or unsecured, of our subsidiaries will be structurally senior to the convertible debentures.

The indenture relating to the convertible debentures will not limit the ability of us or our subsidiaries to incur substantially more debt. This could further exacerbate the risks associated with our substantial indebtedness.

The indenture relating to the convertible debentures will not limit the ability of us or our subsidiaries to incur substantial additional indebtedness in the future, including senior indebtedness. Our senior unsecured revolving credit facility provides borrowing capacity of \$200.0 million, and an "accordion" feature for an additional \$50.0 million. At December 31, 2006, we had an unused commitment level under this facility of \$141.5 million. On July 28, 2005, we concluded a private placement of \$75.0 million in senior floating rate notes. The total amount of the private placement was divided into two tranches with \$50.0 million maturing on July 28, 2012 ("Series A Notes") and \$25.0 million maturing on July 28, 2015 ("Series B Notes"). On February 27, 2006, we issued Euro-denominated notes totaling €81.5 million. Euro note A of €20.4 million (or \$26.8 million at December 31, 2006) has a term of 7 years due February 27, 2013 with a fixed annual interest rate of 4.215% while Euro note B of €61.1 million (\$80.3 million at December 31, 2006) has a term of 10 years due February 27, 2016 at a fixed annual interest rate of 4.38%. All of this indebtedness is senior to the convertible debentures and we and our subsidiaries will be able to incur additional debt in the future that is contractually or structurally senior to the convertible debentures. In addition, if we incur any additional indebtedness that ranks *pari passu* to the convertible debentures, the holders of such indebtedness will be entitled to share ratably with the holders of the convertible debentures in any

proceeds distributed in connection with any insolvency, liquidation, reorganization, dissolution or other winding-up of us. This may have the effect of reducing the amount of proceeds paid to you. If new debt is added to our current debt levels, the related risks that we and our subsidiaries now face could intensify.

We may elect to defer interest payments on the convertible debentures.

We may defer interest payments on the convertible debentures in our sole discretion (subject to the limitations described under "Description of the convertible debentures Deferral of Interest Payments"). During any deferral period, interest will accrue and compound on the convertible debentures at the applicable interest rate, though there is no guarantee that such compounded interest will sufficiently compensate you for your loss as a result of us not making scheduled interest payments, or that we will be able to pay deferred interest and such compounded interest at the time we are no longer permitted to defer payment.

In addition, if we defer interest for five years, we must use commercially reasonable efforts to sell certain qualifying securities (generally qualifying warrants to acquire our common stock or qualifying preferred stock) and use the funds to pay deferred interest in accordance with and subject to the alternative payment mechanism described under "Description of the convertible debentures Deferral of Interest Payments Alternative payment mechanism." We are not required to sell qualifying securities, and we will not do so, during any market disruption event (as defined). In addition, we will not be required to sell qualifying securities to the extent that doing so would exceed specified caps.

Our ability to raise proceeds to pay interest on the convertible debentures by selling qualifying securities will depend on, among other things, market conditions at the time, market demand for the types of securities we are obligated to sell, our financial performance and a variety of other factors beyond our control, including our ability to obtain any required consents or approvals, such as any corporate, governmental or regulatory authorization that may be required. Accordingly, there could be circumstances where we would wish to pay interest on the convertible debentures and sufficient cash is available for that purpose, but we may not because we have been unable to obtain proceeds from sales of qualifying securities sufficient for that purpose.

Your rights with respect to deferred interest will be limited in the event of our bankruptcy, insolvency or receivership.

In the event of our bankruptcy, insolvency or receivership, whether voluntary or not, any claim in respect of interest that accrued during an interest deferral period in excess of two years of accrued and unpaid interest (including any compounded interest thereon) on the convertible debentures will be extinguished.

The price of our common stock, and therefore of the convertible debentures, may fluctuate significantly.

Stock markets are subject to significant price and trading volume fluctuations, and the market prices of our common stock and that of other companies in our industry have been volatile. It is impossible to predict whether the price of our common stock will rise or fall. Trading prices of our common stock will be influenced by our operating results and prospects and by economic, financial and other factors. In addition, general market conditions, including the level of, and fluctuations in, the trading prices of stocks generally, and sales of substantial amounts of common stock by us, or the perception that such sales could occur, could affect the price of our common stock and make it more difficult for us to raise funds through future offerings of equity securities. In addition, because the convertible debentures are

convertible and the conversion value in relation to any conversion will depend upon the price of our common stock, volatility or depressed prices for our common stock could have a similar effect on the trading price of the convertible debentures.

Future issuances of common stock and hedging activities may depress the trading price of our common stock and the convertible debentures.

Any issuance of equity securities by us after this offering, including the issuance of shares upon conversion of the convertible debentures, could dilute the interests of our existing shareholders, including holders who have received shares upon conversion of their convertible debentures, and could substantially decrease the trading price of our common stock and the convertible debentures. We may issue equity securities in the future for a number of reasons, including to finance our operations and business strategy, to adjust our ratio of debt to equity, to satisfy our obligations upon the exercise of outstanding warrants or options, in connection with acquisitions, or for other reasons. In addition, the price of our common

stock could also be affected by possible sales of our common stock by investors who view the convertible debentures as a more attractive means of equity participation in us and by hedging or arbitrage trading activity that we expect to develop involving our common stock. This hedging or arbitrage could, in turn, affect the trading price of the convertible debentures and any common stock that holders receive upon conversion of the convertible debentures.

You may recognize taxable income in certain circumstances if we adjust the conversion rate, even if you do not receive cash.

We will adjust the conversion rate of the convertible debentures for stock splits and combinations, stock dividends, cash dividends and certain other events that affect our capital structure. See "Description of the convertible debentures Conversion Rights Conversion rate adjustments." If we adjust the conversion rate, you may be treated as having received a constructive distribution from us, resulting in taxable income to you for U.S. federal income tax purposes, even though you would not receive any cash in connection with the conversion rate adjustment and even though you might not exercise your conversion right. See "Material United States federal income and estate tax considerations U.S. Holders Constructive Distributions."

Brokers and financial institutions acting as withholding agents might withhold tax at a 30% rate (or lower treaty rate) on interest payments to non-U.S. holders of the convertible debentures.

Although we intend to take the position that the convertible debentures are indebtedness for U.S. federal income tax purposes, brokers and financial institutions acting as withholding agents might withhold tax at a 30% rate (or lower treaty rate) on interest payments on the convertible debentures paid to non-U.S. holders. Assuming the IRS does not challenge the treatment of the convertible debentures as indebtedness, non-U.S. holders should be able to claim a refund for any such withholding, provided such interest would be eligible for the portfolio interest exemption (as described under "Material United States federal income and estate tax consequences"). If however, contrary to our position, the convertible debentures were recharacterized as equity, holders would not be able to claim any such refund and payments on the convertible debentures would generally be subject to the 30% U.S. federal withholding tax (or lower treaty rate) discussed above. See "Material United States federal income and estate tax consequences." Accordingly, an investment in the convertible debentures may not be suitable for non-U.S. holders. Non-U.S. holders should consult their tax advisors regarding the U.S. federal income tax consequences of an investment in the convertible debentures.

S-20

If interest payments are deferred, holders will be required to recognize income for U.S. federal income tax purposes in advance of the receipt of cash attributable to such income, and deferral could adversely affect the trading price of the convertible debentures.

While we will not treat the convertible debentures as being initially issued with original issue discount, if we elect to defer cash payments of interest, you will be required to recognize interest income for U.S. federal income tax purposes in the form of original issue discount, determined on a constant yield method. If interest on the convertible debentures is deferred, you may recognize taxable income before you receive the cash attributable to such income. In addition, you may not receive this cash if you sell the convertible debentures before any payments are made in satisfaction of deferred interest. See "Material United States federal income and estate tax consequences U.S. Holders Consequences of owning convertible debentures."

We have no current intention of exercising our right to defer payments of interest on the convertible debentures. However, should interest on the convertible debentures be deferred because we exercise our right to defer interest, the market price of the convertible debentures is likely to be affected adversely. In addition, the existence of our right to defer payments of interest on the convertible debentures may cause the market price of the convertible debentures to be more volatile than that of other securities that do not provide for this right or possibility of deferral.

The conversion rate of the convertible debentures may not be adjusted for all diluting events that may adversely affect the trading price of the convertible debentures.

The conversion rate of the convertible debentures is subject to adjustment upon the occurrence of certain events, including the issuance of stock dividends on our common stock, the issuance of certain rights or warrants, the payment of cash dividends on our common stock in excess of specified thresholds and our purchase of our common stock in certain tender or exchange offers, as described under "Description of the convertible debentures Conversion Rights Conversion rate adjustments." The conversion rate will not be adjusted for certain other events, such as third party tender or exchange offers or the issuance by us of common stock for cash or in connection with an acquisition, that may adversely affect the trading price of the convertible debentures.

The increase in the conversion rate applicable to convertible debentures converted in connection with a make-whole fundamental change may not adequately compensate you for the lost option time value of your convertible debentures as a result of that fundamental

change.

If a make-whole fundamental change occurs before March 15, 2047, we will under certain circumstances increase the conversion rate applicable to holders who convert their convertible debentures within a specified time frame. The amount of the increase in the conversion rate depends on the date when the fundamental change becomes effective and the applicable price described in this prospectus supplement. See "Description of the convertible debentures Conversion Rights Make-whole adjustment in connection with conversion upon a make-whole fundamental change."

Although the increase in the conversion rate is designed to compensate you for the lost option time value of your convertible debentures as a result of the make-whole fundamental change, the increase in the conversion rate is only an approximation of the lost value and may not adequately compensate you for the loss. In addition, you will not be entitled to an increased conversion rate if the applicable price is greater than \$ _____ per share or less than \$ _____ per share (in each case, subject to adjustment).

S-21

Furthermore, a holder may not receive the additional shares payable as a result of the increase in the conversion rate until after the third business day after the later of the date the holder surrenders the note for conversion and the effective date of the make-whole fundamental change, which could be a significant period of time after the date the holder has tendered its convertible debentures for conversion. In addition, we will not increase the conversion rate to an amount, subject to adjustment, that exceeds _____ shares per \$1,000 principal amount of convertible debentures. Our obligation to increase the conversion rate as described above also could be considered a penalty, in which case its enforceability would be subject to general principles of reasonableness of economic remedies.

The terms of the convertible debentures will not contain restrictive covenants and provide only limited protection in the event of a change of control.

The indenture under which the convertible debentures will be issued will not contain restrictive covenants that would protect you from several kinds of transactions that may adversely affect you. In particular, the indenture will not contain covenants that will limit our ability to pay dividends or make distributions on or redeem our capital stock (except during a deferral period) or limit our ability to incur additional indebtedness (including senior indebtedness) and, therefore, may not protect you in the event of a highly leveraged transaction or other similar transaction or from other events that could adversely affect our creditworthiness or the value of your investment in the convertible debentures.

Holders of the convertible debentures will have no rights as common stockholders until they acquire common stock upon conversion.

Until a holder acquires shares of common stock upon conversion, such holder will have no rights with respect to our common stock, including voting rights, rights to respond to tender offers, and rights to receive dividends or other distributions on our common stock. Upon conversion, a holder will be entitled to exercise the rights of a holder of common stock only as to matters for which the record date occurs after the holder receives shares following the conversion. For example, in the event that an amendment is proposed to our bylaws or certificate of incorporation requiring shareholder approval, and the record date for determining the common stockholders of record entitled to vote on the amendment occurs prior to the holder receiving shares of common stock, the holder will not be entitled to vote on the amendment, although it will nevertheless be subject to any changes in the powers, preferences or special rights of our common stock following conversion.

Holders of the convertible debentures have limited rights to accelerate payment of the convertible debentures under the indenture.

Holders of the convertible debentures or the trustee may accelerate payment of principal and accrued and unpaid interest on the convertible debentures only upon the occurrence of an event of default under the indenture. These events of default are limited to:

- > default for 30 calendar days in the payment of any interest on the convertible debentures, including any compounded interest, when it becomes due and payable (however, a default under this bullet will not occur if we have deferred interest, as permitted under the indenture, in connection with an optional deferral);
- > deferral of interest on the convertible debentures that continues for 10 consecutive years after the date on which we began the deferral of interest, without all accrued and unpaid interest, including any compounded interest, having been paid in full within 30 days after the tenth anniversary of the commencement of such deferral;

S-22

- > default in the payment of the principal of the convertible debentures when due; and
- > certain events of bankruptcy, insolvency and reorganization, whether voluntary or not.

A default by us or by any of our subsidiaries on any of our or their indebtedness, respectively, or acceleration of any such indebtedness, will not result in a cross-default or cross-acceleration of the convertible debentures.

Events of default do not include failure to comply with or breach of our other covenants in the indenture applicable to the convertible debentures, including the covenant to sell qualifying securities through the alternative payment mechanism to pay deferred interest. For example, if we are required to sell qualifying securities, but we decide not to sell shares even though no market disruption event has occurred and the relevant caps would not be breached, it will not be an event of default under the indenture and holders will have limited remedies against us. Accordingly, a covenant breach, other than the events of default described above, will not result in the acceleration of payment of the convertible debentures. Although failure to comply with such other covenants could give rise to a claim against us relating to the specific breach, the remedy of holders of the convertible debentures may be limited to direct monetary damages, if any. In addition, only the trustee or the holders of a majority of the convertible debentures, if the trustee fails to institute such a proceeding, may institute a proceeding against us on account of any such breach. Furthermore, the indenture will not require the trustee to take any action in case of such a breach (other than to give notice of default under specified circumstances) unless so directed by holders. See "Description of the convertible debentures Events of Default."

Trading prices of the convertible debentures may not reflect the value of accrued and unpaid interest on the convertible debentures. Our right to defer interest payments on the convertible debentures may cause the market prices of the convertible debentures to decline.

If we defer interest payments on the convertible debentures in the future, the market prices of those securities may not fully reflect the value of accrued but unpaid interest thereon. If you sell convertible debentures during a deferral period, you may not receive the same return on investment as someone who continues to hold those securities. We have no current intention of deferring interest payments on the convertible debentures. However, the existence of our right to defer interest payments on the convertible debentures may mean that their market price will be more volatile than the market prices of other securities that are not subject to interest deferral rights.

An adverse rating of the convertible debentures may cause their trading price to fall.

We have not sought a rating from ratings agencies on the convertible debentures prior to the issuance of the convertible debentures.

If a rating agency rates the convertible debentures, it may assign a rating that is lower than investors' expectations. Ratings agencies also may lower ratings on the convertible debentures in the future. If rating agencies assign a lower-than-expected rating or reduce, or indicate that they may reduce, their ratings in the future, the trading price of the convertible debentures could significantly decline.

The rating methodologies for securities with features similar to the convertible debentures are still developing and the rating agencies may change their methodologies in the future. These changes may include (but are not limited to) the level of equity content, if any, ascribed to the convertible debentures and the relationship between ratings assigned to an issuer's senior securities and ratings assigned to securities with features similar to the convertible debentures, sometimes called "notching."

S-23

If any of the rating agencies were to change their practices for rating such securities in the future and one or more of the ratings of the convertible debentures were subsequently downgraded as a result of such changes, the trading price of the convertible debentures may be negatively affected.

Your ability to transfer the convertible debentures may be limited by the absence of an active trading market.

We do not intend to apply for listing or quotation of the convertible debentures on any securities exchange or stock market, although we expect that the convertible debentures will be eligible for trading in DTC's same-day funds settlement system. The liquidity of any market for the convertible debentures will depend on a number of factors, including:

- > the number of holders of convertible debentures;

- > our operating performance and financial condition;
- > the market for similar securities;
- > the interest of securities dealers in making a market in the convertible debentures; and
- > prevailing interest rates.

Historically, the market for convertible debt securities has been subject to disruptions that have caused volatility in price. We cannot assure you that the market for the convertible debentures will be free from disruptions. Any disruptions could have an adverse effect on holders of the convertible debentures.

Provisions of the convertible debentures, our charter documents and our material agreements could discourage an acquisition of us by a third party.

Certain provisions of the convertible debentures could make it more difficult or more expensive for a third party to acquire us. For example, the occurrence of certain change of control transactions may result in the convertible debentures becoming convertible for additional shares, which may have the effect of making an acquisition of us less attractive. In addition, certain provisions in our charter and bylaws, our revolving credit facility and other debt instruments may increase the difficulty of acquiring control of us by means of a tender offer, open market purchases, a proxy fight or otherwise.

For all of these reasons, a third party could be prevented or deterred from acquiring us even where the acquisition could be beneficial to you.

We could at a future date make provisions that restrict our right to repurchase or otherwise acquire the convertible debentures or our ability to make certain cash payments in respect of the convertible debentures, or that further limit the types of securities we can issue under the alternative payment mechanism.

Recently, a number of issuers have entered into covenants generally called "declarations of covenant" or "replacement capital covenants" in connection with their issuance of junior subordinated debt securities, preferred stock or other junior securities similar to the convertible debentures. In the covenants, the issuers have agreed in favor of specified classes of "covered debt" not to redeem, or in some cases repurchase, the securities except out of the proceeds from the issuance of preferred stock or other securities that have equity-like characteristics. We could at a future date choose to make a binding capital replacement covenant or express a replacement capital intention. In addition, we could modify the terms of the convertible debentures, without the consent of the holders of convertible debentures, so as to restrict our ability to make certain cash payments in respect of the convertible

S-24

debentures or to further limit the types of securities we can issue under the alternative payment mechanism. If we were to make such provisions, it could adversely affect trading prices for the convertible debentures.

In certain circumstances, the indenture allows us to automatically convert the convertible debentures into shares of our common stock without the consent of holders.

At any time on or after March 20, 2012, we may cause the convertible debentures to be automatically converted, without the consent of holders, into shares of our common stock at the then prevailing conversion rate if the closing price of our common stock exceeds 150% of the then prevailing conversion price of the convertible debentures and certain other conditions are satisfied.

We may invest or spend the proceeds of this offering in ways with which you may not agree and in ways that may not earn a profit.

We intend to use the proceeds from this offering primarily for general corporate purposes, which may include, among other things, capital expenditures, working capital, possible acquisitions of other businesses, technologies or products, repaying debt and/or potentially repurchasing shares of our common stock. As a result, we will retain broad discretion over the use of the proceeds from this offering. You may not agree with the ways we decide to use these proceeds, and our use of the proceeds may not yield any profits.

Use of proceeds

We estimate that the net proceeds from the issuance of the convertible debentures will be approximately \$145.2 million, after deducting underwriting discounts and commissions and estimated expenses of the offering (\$167.1 million if the underwriters' over-allotment option to purchase additional notes is exercised in full). We intend to use the net proceeds for general corporate purposes, which may include, among other things, capital expenditures, working capital, possible acquisitions of other businesses, technologies or products, repaying debt and/or potentially repurchasing shares of our common stock. Although we regularly evaluate possible acquisitions, we have no present understandings, commitments or agreements relating to any material potential acquisitions.

Price range of common stock and dividend policy

Our common stock is listed on the New York Stock Exchange. The high and low prices for the stock for each calendar quarter in 2005 and 2006, as well as in 2007 to date, were as follows:

	High	Low
Year Ended December 31, 2005		
First Quarter	\$ 27.08	\$ 23.25
Second Quarter	\$ 28.89	\$ 22.90
Third Quarter	\$ 29.99	\$ 25.72
Fourth Quarter	\$ 29.69	\$ 18.58
Year Ended December 31, 2006		
First Quarter	\$ 34.72	\$ 24.83
Second Quarter	\$ 37.97	\$ 32.75
Third Quarter	\$ 42.66	\$ 31.43
Fourth Quarter	\$ 52.77	\$ 38.00
Year Ending December 31, 2007		
First Quarter (through March 7, 2007)	\$ 52.25	\$ 43.00

On March 7, 2007, the last reported sale price of our common stock on the New York Stock Exchange was \$46.10 per share.

As of January 31, 2007, we had 1,377 shareholders of record. There were also 2,189 holders of shares registered in nominee names. Our common stock paid a quarterly dividend of \$0.11 per share in each of the first three quarters of 2005; \$0.12 per share in the fourth quarter of 2005 and each of the first three quarters of 2006; and \$0.13 per share in the fourth quarter of 2006. We expect to pay comparable dividends in the future. However, any future cash dividends will depend upon our results of operations, financial condition, cash requirements, availability of surplus and such other factors as our board of directors may deem relevant.

S-26

Capitalization

The following table sets forth our consolidated capitalization at December 31, 2006 on an actual basis and as adjusted to give effect to the \$150.0 million aggregate principal amount of convertible debentures offered hereby. You should read this table in conjunction with our financial statements and the notes to those statements included in our Annual Report on Form 10-K for the year ended December 31, 2006, which is incorporated by reference into this prospectus supplement and the accompanying prospectus.

As of December 31, 2006

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

As of December 31, 2006

	Actual	As adjusted ⁽¹⁾
(in millions)		
(unaudited)		
Cash, including cash equivalents	\$ 47.1	\$ 192.3
Capital leases, due 2008 (5.0%)	0.1	0.1
Capital leases, due 2010 (5.5%)	0.7	0.7
Revolving credit facility, due 2011 (3.4%)	52.9	52.9
Series A floating rate notes, due 2012 (6.2%)	50.0	50.0
Series B floating rate notes, due 2015 (6.3%)	25.0	25.0
Euro note A, due 2013 (4.2%) ⁽²⁾	26.8	26.8
Euro note B, due 2016 (4.4%) ⁽²⁾	80.3	80.3
% Convertible Junior Subordinated Debentures due 2047		150.0
Total long-term debt	\$ 235.8	\$ 385.8
Shareholders' equity:		
Preferred stock, par value \$0.25 per share; shares authorized: 3.0 million; shares issued and outstanding: 0		
Common stock, par value \$0.25 per share; shares authorized: 50.0 million; shares issued: 34.3 million; shares outstanding: 32.9 million ⁽³⁾	8.6	8.6
Capital in excess of par value	52.8	52.8
Retained earnings	375.7	375.7
Accumulated other comprehensive income	10.6	10.6
Treasury stock, at cost (1.4 million shares)	(33.2)	(33.2)
Total shareholders' equity	414.5	414.5
Total capitalization	\$ 650.3	\$ 800.3

(1) Adjusted to give effect to the offering of the debentures (assuming no exercise of the underwriters' over-allotment option and not giving effect to the conversion of the debentures), after deducting underwriting discounts and commissions and our estimated offering expenses.

(2) Amounts outstanding are due and payable in Euros. Dollars figures refer to amounts due and payable based on the Euro-dollar exchange rate as of December 31, 2006.

(3) The number of shares outstanding excludes the following: (i) approximately 3.0 million shares of common stock issuable upon exercise of outstanding share-based equity awards, (ii) approximately 3.5 million shares of common stock reserved for future issuance under our equity plans and (iii) shares of common stock issuable upon conversion of the convertible debentures being offered hereby.

S-27

Management

The executive officers and directors of the company are set forth in this table.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

Name	Age	Position
Donald E. Morel, Jr., Ph.D.	49	Chairman of the Board and Chief Executive Officer
Jenne K. Britell, Ph.D. ⁽¹⁾	64	Director
L. Robert Johnson ⁽²⁾	65	Director
Paula A. Johnson, M.D., MPH ⁽³⁾	47	Director
William H. Longfield ⁽²⁾⁽³⁾	68	Director
John P. Neafsey ⁽¹⁾	67	Director
Anthony Welters ⁽²⁾⁽³⁾	52	Director
Geoffrey F. Worden ⁽¹⁾	67	Director
Robert C. Young, M.D. ⁽³⁾	67	Director
Patrick J. Zenner ⁽¹⁾	60	Director
Joseph E. Abbott	54	Vice President and Corporate Controller
Michael A. Anderson	51	Vice President and Treasurer
Steven A. Ellers	56	President and Chief Operating Officer
William J. Federici	47	Vice President and Chief Financial Officer
John R. Gailey III	52	Vice President, General Counsel and Secretary
Robert S. Hargesheimer	49	President of the Tech Group
Robert J. Keating	58	President, Europe and Asia Pacific, Pharmaceutical Systems Division
Richard D. Luzzi	55	Vice President, Human Resources
Donald A. McMillan	48	President, North America, Pharmaceutical Systems Division

(1)
Member of Audit Committee

(2)
Member of Compensation Committee

(3)
Member of Nominating Committee

Donald E. Morel, Jr., Ph.D. has been Chairman of the Board of the Company since March 2003 and our Chief Executive Officer since April 2002. He was our President from April 2002 to June 2006, Chief Operating Officer from May 2001 to April 2002, Division President, Drug Delivery Systems from October 1999 to May 2001, and prior thereto, Group President.

Jenne K. Britell, Ph.D., one of our Directors, is Chairman and CEO of Structured Ventures, Inc. (advisors to private equity and venture-capital firms). She was formerly the Senior Advisor to eBay and its PayPal subsidiary for financial services. Previously, Dr. Britell was a senior executive with GE Capital, most recently as President of Global Commercial and Mortgage Banking and Executive Vice President of Global Consumer Finance. Dr. Britell is a trustee of Fox Chase Cancer Center and a director of Crown Holdings, Inc., U.S.-Russia Investment Fund, Quest Diagnostics Incorporated and United Rentals, Inc.

L. Robert Johnson, one of our Directors, is Managing Partner of Founders Capital Partners, a venture capital angel group. He is Chairman of the Board of HealthBanks Inc. Mr. Johnson is a member of the Corporation of the Massachusetts Institute of Technology and a trustee of the Scholarship Foundation of Santa Barbara.

S-28

Paula A. Johnson, M.D., MPH, one of our Directors, is a cardiologist and is the Executive Director of the Connors Center for Women's Health and Gender Biology and Chief of the Division of Women's Health at Brigham and Women's Hospital. She is also an Associate Professor at Harvard Medical School.

William H. Longfield, one of our Directors, is the retired Chief Executive Officer and Chairman of the Board of C. R. Bard, Inc., a medical device manufacturer. He is also a director of Horizon Health Corporation and Applera Corporation and Manor Care, Inc. He is a trustee of Atlantic Health System. On March 7, 2007, Mr. Longfield informed us that he intends to retire from his position on our Board at our next annual meeting, on May 1, 2007.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

John P. Neafsey, one of our Directors, is President of JN Associates, an investment consulting firm. He is Chairman of the Board of Alliance Resources, LP and Constar, Inc. He is trustee emeritus and presidential counselor of Cornell University and an overseer of Weill/Cornell Medical College.

Anthony Welters, one of our Directors, is Executive Vice President of UnitedHealth Group, Inc. Previously, he served as President and Chief Executive Officer of AmeriChoice Corporation, a United Health Group Company. Mr. Welters is Vice Chair of New York University, Chairman of Morehouse School of Medicine and a director of C. R. Bard, Inc. Mr. Welters is a Trustee of the New York University School of Medicine and School of Law and the Library of Congress. He is also a member of the Council of the National Museum of African American History and Culture.

Geoffrey F. Worden, one of our Directors, is President of South Street Capital, Inc., a consulting and investment company. Mr. Worden is a director of Princess House, Inc. and New York City Outward Bound.

Robert C. Young, M.D., one of our Directors, is President of Fox Chase Cancer Center. He is the Chairman of the Board of Scientific Advisors of the National Cancer Institute and serves on the Board of Directors of Human Genome Sciences. Dr. Young also is a Past President of the American Cancer Society and former member of the National Cancer Policy Board of the Institute of Medicine.

Patrick J. Zenner, one of our Directors, is the retired President and Chief Executive Officer of Hoffmann-La Roche Inc. Mr. Zenner is a member of the Board of Directors of ArQule, Inc., Dendrite International, Inc., Praecis Pharmaceuticals Inc., Geron Corporation, Exact Sciences Corporation, Sciele Pharma, Inc., Xoma Ltd. and CuraGen Corporation. He is also a trustee at Creighton University and is Board Chairman at Fairleigh Dickinson University.

Joseph E. Abbott joined us in 1997 as Director of Internal Audit. He was promoted to Corporate Controller in 2000 and elected a Vice President in 2002.

Michael A. Anderson joined us in 1992 as Director of Taxes. He held several positions in finance and business development before being elected Vice President and Treasurer in June 2001.

Steven A. Ellers joined us in 1983. He has held numerous positions in operations before being elected Senior Vice President and Chief Financial Officer in March 1998. In June 2000, he was elected Executive Vice President and in June 2002 was elected President, Pharmaceutical Systems Division. He was elected President and Chief Operating Officer in June 2005.

William J. Federici joined us in August 2003. He was previously National Industry Director for Pharmaceuticals of KPMG LLP (accounting firm) from June 2002 until August 2003, and prior thereto, an audit partner with Arthur Andersen, LLP.

John R. Gailey III joined us in 1991 as Corporate Counsel and Secretary. He was elected General Counsel in 1994 and Vice President in 1995.

S-29

Robert S. Hargesheimer joined us in 1992. He served in numerous operational and general managerial roles before being elected President of the Device Group in April 2003. He was elected President of the Tech Group in October 2005.

Robert J. Keating joined us in 1997. He served in country general management and regional sales and marketing-management positions before being elected President, Europe and Asia Pacific, Pharmaceutical Systems Division in April 2002.

Richard D. Luzzi joined us in June 2002. Prior to his service with us, he served as Vice President Human Resources of GS Industries, a steel manufacturer.

Donald A. McMillan joined us in May 1984. He served in numerous operations, sales and sales-management and marketing positions prior to being elected President, North America, Pharmaceutical Systems Division in October 2005.

S-30

Description of the convertible debentures

We will issue the _____ % convertible junior subordinated debentures under an indenture, and a supplemental indenture thereto, each to be dated as of March _____, 2007, between West Pharmaceutical Services, Inc., as issuer, and U.S. Bank National Association, as trustee. In this prospectus supplement, we refer to the indenture, as supplemented by the supplemental indenture, and as may be further supplemented or amended from time to time in respect of the convertible debentures, as the "indenture."

The terms of the convertible debentures include those stated in the indenture and those made part of the indenture by reference to the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act"). The following description of the terms of the convertible debentures is a summary. It does not restate the indenture in its entirety. We urge you to read the indenture because it, and not this description, will define your rights as a holder of the convertible debentures. You may request copies of the indenture at our address set forth under "Incorporation of certain information by reference." Unless otherwise specified, references herein to holders are to registered holders. The registered holder of a convertible debenture will be treated as the owner of it for all purposes. Only registered holders will have rights under the indenture.

Unless otherwise specified, the words "we" "us" and "our," and words of similar import, as used in this section refer only to West Pharmaceutical Services, Inc. and not to any of its subsidiaries.

GENERAL

We will initially issue \$150,000,000 aggregate principal amount of the convertible debentures (and may issue up to an additional \$22,500,000 principal amount of convertible debentures pursuant to the option we have granted to underwriters to purchase additional convertible debentures solely to cover overallocments). We may, without the consent of the holders, reopen the series of convertible debentures offered by this prospectus supplement and issue additional convertible debentures under the indenture with the same terms and with the same CUSIP numbers as the convertible debentures offered hereby in an unlimited aggregate principal amount, provided that no such additional convertible debentures may be issued unless fungible with the convertible debentures offered hereby for U.S. federal income tax purposes. Additional convertible debentures issued in this manner will constitute a single series with the previously outstanding convertible debentures.

The final maturity date of the convertible debentures will be March 15, 2047. The entire principal amount of the convertible debentures will mature and become due and payable, together with accrued and unpaid interest thereon, including any compounded interest thereon, on such date.

The convertible debentures will not be subject to any sinking fund provision.

INTEREST

Interest on the convertible debentures will accrue at an annual rate equal to _____ % from (and including) the date of initial issuance or from (and including) the last date in respect of which interest has been paid or duly provided for to, but excluding, the next interest payment date, until the date on which the convertible debenture is converted or paid at final maturity, as the case may be. Subject to certain requirements during any optional deferral period described below, interest will be payable semi-annually in arrears on March 15 and September 15 of each year, commencing on September 15, 2007. The term "interest period" as used in this prospectus supplement refers to each period from and including an interest payment date to, but excluding, the next interest payment date or the date on which the convertible debenture is converted or paid at final maturity, as the case may be, except that

S-31

the initial interest period will commence on, and include, the date of initial issuance of the convertible debentures and will end on, and exclude, the first interest payment date.

We may elect to defer interest payments on the convertible debentures. Those deferral mechanisms, as well as limitations on the sources we may use to fund deferred interest payments under specified circumstances, are described under " Deferral of Interest Payments." Additional restrictions on our ability to make payments (including payments of interest) on the convertible debentures and on any related claim in the event of our bankruptcy, insolvency or receivership are described under " Subordination," and "Deferral of Interest Payments Limitations on claims in the event of our bankruptcy, insolvency or receivership."

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

The amount of interest payable for any full interest period will be computed on the basis of a 360-day year consisting of twelve 30-day months. The amount of interest payable for any period shorter than a full interest period will be computed on the basis of 30-day months and, for periods of less than a 30-day month, the actual number of days elapsed in that period. In the event that any date on which interest is payable is not a business day, payment of the interest payable on such date will be made on the next succeeding day that is a business day (without any payment of interest or other amounts in respect of any such delay). Interest not paid on any payment date, including interest that is deferred pursuant to an optional deferral period, as described under "Deferral of Interest Payments Option to defer interest payments," will accrue and compound semi-annually at the applicable rate of interest on the convertible debentures until paid.

"Business day" means any day which is not a Saturday, a Sunday or a legal holiday or a day on which banking institutions or trust companies located in New York City are authorized or obligated by law to close.

For so long as the convertible debentures are held in book-entry only form, interest is payable on each payment date to the person in whose name a given convertible debenture is registered at the close of business on the business day before the interest payment date. In the event that the convertible debentures do not continue to remain in book-entry only form or are not in the form of a global certificate, we will have the right to select record dates, which will be at least one business day before an interest payment date.

SUBORDINATION

The payment of principal of and interest on the convertible debentures will be, to the extent provided in the indenture, subordinated to the prior payment in full of all existing and future senior indebtedness, as defined below.

Subject to the qualifications described below, the term "senior indebtedness" includes principal of, and interest and premium (if any) on, the following:

- > all of our indebtedness, whether outstanding on the date of the issuance of the convertible debentures or thereafter created, incurred or assumed, which is for money borrowed, or which is evidenced by a note, bond, indenture or similar instrument;
- > all of our obligations under leases required or permitted to be capitalized under generally accepted accounting principles;
- > all of our reimbursement obligations with respect to any letter of credit, banker's acceptance, security purchase facility or similar credit transactions;
- > all conditional sales agreements or agreements or obligations to pay deferred purchase prices other than in the ordinary course of business;

S-32

- > all of our obligations under interest rate swap agreements, interest rate cap agreements, interest rate collar agreements and other agreements or arrangements designed to protect against fluctuations in interest rates or foreign exchange rates;
- > all obligations of the types referred to in the preceding bullet points of another person, the payment of which we are responsible or liable for as obligor, guarantor or otherwise; and
- > amendments, modifications, renewals, extensions, deferrals and refundings of any of the above types of indebtedness.

Notwithstanding anything to the contrary in the foregoing, however, senior indebtedness will not include:

- >

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

trade accounts payable or indebtedness incurred for the purchase of goods, materials or property, or for services obtained in the ordinary course of business or for other liabilities arising in the ordinary course of business;

- > any indebtedness which by its terms is expressly made equal or junior in rank to the convertible debentures; or
- > obligations we owe to our subsidiaries.

The convertible debentures will rank senior to all of our equity securities, including any preferred stock we may issue in the future.

The senior indebtedness will continue to be senior indebtedness and entitled to the benefits of the subordination provisions irrespective of any amendment, modification or waiver of any term of the senior indebtedness or extension or renewal of the senior indebtedness.

No direct or indirect payment, in cash, property or securities, by set-off or otherwise, may be made or agreed to be made on account of the convertible debentures or interest thereon, or in respect of any payment, retirement, purchase or other acquisition of the convertible debentures, if:

- > we default in the payment of any principal, or premium, if any, or interest on any senior indebtedness, whether at maturity or at a date fixed for prepayment or upon acceleration or otherwise, or
- > an event of default occurs with respect to any senior indebtedness permitting the holders to accelerate the maturity thereof and written notice of such event of default, requesting that payments on the convertible debentures cease, is given to us by the holders of such senior indebtedness,

unless and until such default in payment or event of default has been cured or waived or ceases to exist, provided that this section will not limit the rights of the holders of the convertible debentures to convert their convertible debentures into common stock (but not cash, other than in respect of fractional shares), as described under " Conversion Rights."

All existing and future senior indebtedness, which will include, without limitation, interest accruing after the commencement of any proceeding, assignment or marshalling of assets described below, will first be paid in full before any payment, whether in cash, securities or other property, will be made by us on account of the convertible debentures in the event of:

- > any insolvency, bankruptcy, receivership, liquidation, reorganization, readjustment, composition or other similar proceeding relating to us, our creditors or our property;
- > any proceeding for the liquidation, dissolution or other winding-up of us, voluntary or involuntary, whether or not involving insolvency or bankruptcy proceedings;
- > any assignment by us for the benefit of creditors; or
- > any other marshalling of our assets,

provided that this section will not limit the rights of the holders of the convertible debentures to convert their convertible debentures into common stock (but not cash, other than in respect of fractional shares), as described under " Conversion Rights."

In any such event, payments that would otherwise be made on the convertible debentures will generally be paid to the holders of senior indebtedness, or their representatives, in accordance with the priorities existing among these creditors at that time until the senior indebtedness is paid in full.

S-33

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

No present or future holder of any senior indebtedness will be prejudiced in the right to enforce the subordination of the convertible debentures by any act or failure to act on our part.

In the event that, notwithstanding any of the foregoing prohibitions, the trustee or the holders of the convertible debentures receive any payment on account of or in respect of the convertible debentures at a time when a responsible officer of the trustee or such holder has actual knowledge that such payment should not have been made to it, the trustee or such holder will hold such payment in trust for the benefit of, and, upon written request, will pay it over to, the holders of the senior indebtedness or their agents or representatives, for application to the payment of all principal, premium, if any, and interest then payable with respect to any senior indebtedness.

Senior indebtedness will only be deemed to have been paid in full if the holders of such indebtedness have received cash, securities or other property equal to the amount of the outstanding senior indebtedness.

After payment in full of all existing and future senior indebtedness, holders of the convertible debentures will be subrogated to the rights of any holders of senior indebtedness to receive any further payments that are applicable to the senior indebtedness until all the convertible debentures are paid in full. In matters between holders of the convertible debentures and any other type of our creditors, any payments that would otherwise be paid to holders of senior indebtedness and that are made to holders of the convertible debentures because of this subrogation will be deemed a payment by us on account of senior indebtedness and not on account of the convertible debentures.

Due to the subordination provisions described above, funds we would otherwise use to pay the holders of the convertible debentures will be used to pay the holders of senior indebtedness to the extent necessary to pay the senior indebtedness in full. See "Risk factors The convertible debentures will be subordinated to substantially all of our other debt."

The indenture places no limitation on the amount of additional indebtedness that may be incurred by us or our subsidiaries. We expect to incur additional indebtedness constituting senior indebtedness in the future, and expect that our subsidiaries will incur additional indebtedness in the future to which the convertible debentures will be structurally subordinated.

CONVERSION RIGHTS

Holders may convert their convertible debentures, in whole or in part, at any time prior to 5:00 P.M., New York City time, on the business day immediately preceding the final maturity date of the convertible debentures.

S-34

The initial conversion rate for the convertible debentures is _____ shares of common stock per \$1,000 principal amount of convertible debentures, subject to adjustment as described below, which represents an initial conversion price of approximately \$ _____ per share.

A holder may convert convertible debentures only in denominations of \$1,000 principal amount and whole multiples thereof. The "conversion price" on any day will equal \$1,000 divided by the conversion rate in effect on that day.

Conversion procedures

Procedures to be followed by a holder

To convert convertible debentures, the holder of a beneficial interest in a global convertible debenture must complete, or cause to be completed, the appropriate instruction form for conversion pursuant to DTC's conversion program and, if required, pay funds equal to interest payable in respect of the current interest period on the next interest payment date to which the holder is not entitled and, if required, pay all taxes or duties, if any. In order to exercise the conversion right with respect to any convertible debenture in certificated form, we must receive at the office or agency maintained by us for that purpose in The City of New York or, at the option of the holder of such convertible debenture, the corporate trust office, such convertible debenture with the original or facsimile of the form entitled "Conversion Notice" on the reverse thereof, duly completed and manually signed, together with such convertible debenture duly endorsed for transfer, accompanied by any required funds. Such notice shall also state the name or names (with address or addresses) in which the certificate or certificates for any shares of our common stock which shall be issuable on such conversion shall be issued, and shall be accompanied by transfer or similar taxes, if required. In addition, if the conversion is being made pursuant to the alternative conversion right described below under "Alternative conversion right upon a fundamental change," the conversion notice shall so specify.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

The conversion date will be the date on which a holder has satisfied all of the foregoing requirements. The person in whose name any shares of common stock issued upon conversion of convertible debentures is registered shall be treated as a shareholder of record on and after the conversion date, all anti-dilution adjustments to the conversion rate and determinations as to entitlement to interest shall be carried out through that date in respect of the convertible debentures converted and upon that date the converting holder will no longer be a holder of such convertible debentures.

Holders will be required to pay any tax or duty that may be payable relating to any transfer involved in the issuance or delivery of common stock in names other than their own. Certificates representing common stock will be issued and delivered only after all applicable taxes and duties, if any, payable by a holder have been paid in full.

Settlement upon conversion

Upon conversion, holders will be entitled to receive _____ shares of our common stock per \$1,000 principal amount of convertible debentures, subject to adjustment as described below under " Conversion rate adjustments" and " Make-whole adjustment in connection with conversion upon a make-whole fundamental change." This rate results in an initial conversion price of approximately \$ _____ per share. We will not issue fractional shares of common stock upon conversion of the convertible debentures and instead will pay a cash adjustment for fractional shares based on the closing sale price per share of our common stock on the trading day immediately before the conversion date. Except as described below under " Additional information regarding settlement," we will not make any payment or other adjustment on conversion with respect to any accrued interest on the

S-35

convertible debentures, and we will not adjust the conversion rate to account for accrued and unpaid interest.

On conversion, in addition to receiving shares of our common stock, the holders of convertible debentures will also receive rights under any future rights plan (i.e., a poison pill) adopted by us, unless the rights have separated from our common stock at the time of conversion, in which case the conversion rate will be adjusted at the time of separation as if we had distributed to all holders of our common stock shares of our capital stock, evidences of indebtedness, other assets or certain rights or warrants as described in clause (4) under " Conversion rate adjustments" below, subject to readjustment in the event of the expiration, termination or redemption of such rights.

In certain circumstances, a holder must pay interest in respect of the current interest period if the conversion occurs between a record date and an interest payment date. See " Additional information regarding settlement" below.

Additional information regarding settlement

We will deliver the common stock and cash in lieu of fractional shares, if any, as promptly as practicable after the conversion date, but in no event later than three business days thereafter.

Upon conversion, holders will not receive any cash payment representing accrued and unpaid interest for the current interest period, except as provided in the next paragraph below. Holders will, however, receive additional shares of common stock (and cash in lieu of any fractional shares) having a value (determined in accordance with the indenture) equal to the amount of optionally deferred interest on the convertible debentures accrued in respect of prior interest periods, if any, plus compounded interest thereon, to, but not including, the conversion date (regardless of when such conversion occurs); provided, however, that if such shares are required to be registered under the Securities Act of 1933, as amended (the "Securities Act"), in order for the shares to be freely tradeable in the hands of holders, then we will use commercially reasonable efforts to register such shares under the Securities Act so as to permit such shares to be freely sold by holders. If we are unable to deliver freely tradeable shares to holders, we will instead pay the amount of deferred interest in cash through funds raised using the alternative payment mechanism described below under " Deferral of Interest Payments Alternative payment mechanism." Any shares of our common stock delivered in satisfaction of our obligations with respect to optionally deferred interest shall be valued for such purposes at 97% of the average of the daily volume-weighted average prices per share of our common stock for each of the five consecutive trading days ending on the second trading day immediately prior to the conversion date. The term "volume-weighted average price" per share of our common stock on a trading day is the volume-weighted average price per share of our common stock on the New York Stock Exchange (or such other national securities exchange or automated quotation system on which the common stock is then listed or authorized for quotation or, if not so listed or authorized for quotation, an amount determined in good faith by our board of directors to be the fair value of the common stock, which determination shall be conclusive) from 9:30 A.M. to 4:00 P.M., New York City time, on that trading day, as displayed by Bloomberg or such other comparable service determined in good faith by us that has replaced Bloomberg.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

If a convertible debenture is converted after the record date for an interest payment but prior to the corresponding interest payment date, a holder will receive on the corresponding interest payment date the interest accrued and unpaid on such convertible debenture in respect of the current interest period notwithstanding the conversion of those convertible debentures prior to the interest payment date (regardless of whether the convertible debenture is converted at the option of the holder or pursuant to automatic conversion), assuming the holder was the holder of record on the corresponding record date.

S-36

Notwithstanding the foregoing, except as provided in the next sentence, at the time a holder surrenders such convertible debentures for conversion after the record date for an interest payment but prior to the corresponding interest payment date, the holder must pay us an amount equal to the interest that has accrued in respect of the current interest period and will be paid on the convertible debentures being converted on the corresponding interest payment date. A holder is not required to make such payment:

- > if we have called the convertible debenture for automatic conversion;
- > if the holder converts convertible debentures in connection with a make-whole fundamental change and the final date upon which convertible debentures may be converted to qualify for receipt of the related make-whole amount falls after a record date and on or prior to the corresponding interest payment date;
- > to the extent of any overdue or deferred interest, including any compounded interest, if overdue or deferred interest exists at the time of conversion with respect to such convertible debentures; or
- > if the holder converts convertible debentures following the last record date for interest prior to March 15, 2047.

Except as described under " Conversion rate adjustments," we will not make any payment or other adjustment for dividends on any common stock issued upon conversion of the convertible debentures. Accrued interest, if any, to the date of conversion not paid in cash is deemed to be paid in full with the shares of our common stock and cash in lieu of fractional shares, if any, delivered upon conversion, rather than cancelled, extinguished or forfeited.

Conversion rate adjustments

We will adjust the conversion rate (as well as the stock prices and additional share amounts set forth in the table of make-whole amounts described under " Make-whole adjustment in connection with conversion upon a make-whole fundamental change") if any of the following events occurs:

- (1) we issue to all or substantially all holders of our common stock shares of our common stock as a dividend or distribution on our common stock;
- (2) we issue to all or substantially all holders of our common stock rights or warrants entitling them for a period expiring within 60 days after the record date for such distribution to purchase shares of our common stock at less than the average of the closing sale prices of our common stock for the five consecutive trading days immediately preceding the first public announcement of such issuance of rights or warrants, provided that with respect to any rights provided for in any future rights plan (i.e., poison pill) we adopt, that have separated from the shares of our common stock in accordance with the provisions of the applicable stockholder rights agreement so that the holders of the convertible debentures would not be entitled to receive any rights in respect of common stock issuable upon conversion of the convertible debentures, the adjustment will be made pursuant to clause (4) below;
- (3) we subdivide or combine our outstanding shares of common stock;
- (4) we distribute to all or substantially all holders of common stock shares of our capital stock, assets (including shares of any subsidiary or business unit of ours) or debt securities or certain rights to purchase our securities (excluding any rights described in clause (2)

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

above and any cash dividends or other cash distributions), in which event the conversion rate will be adjusted by multiplying such conversion rate by a fraction, the numerator of which will be the current market price (as defined below) of our common stock, and the denominator of which will be the current market

S-37

price of our common stock minus the fair market value, as determined in good faith by our board of directors, of the portion of those assets, debt securities, shares of capital stock or rights so distributed applicable to one share of our common stock. If we distribute capital stock of, or similar equity interests in, a subsidiary or other business unit of ours, then the conversion rate will be adjusted, based on the market value of the securities so distributed relative to the market value of our common stock, in each case based on the average closing sale price of those securities (where such closing sale prices are available) and our common stock for the 10 trading days commencing on and including the fifth trading day after the "ex-dividend date" (as defined below) for such distribution on the New York Stock Exchange or the principal U.S. stock exchange or interdealer quotation system on which the securities are then listed or quoted by multiplying the conversion rate by a fraction of which the numerator shall be such market value per share of our common stock plus such market value of securities so distributed per share of our common stock and the denominator shall be such market value per share of our common stock;

- (5) we distribute cash dividends or other cash distributions to all or substantially all holders of our common stock (other than (i) regular quarterly cash dividends, to the extent the aggregate amount of such dividends in any quarterly period does not exceed the Reference Dividend Amount (as defined below), (ii) distributions described in clause (6) below or (iii) any dividend or distribution in connection with our liquidation, dissolution or winding up), in which event the conversion rate will be increased based on the following formula:

$$CR1 = CR0 \times MP0 / (MP0 - C)$$

where

CR0 = the conversion rate in effect immediately prior to the ex-dividend date for such distribution;

CR1 = the new conversion rate immediately on and after the ex-dividend date for such distribution;

MP0 = the current market price of our common stock on the ex-dividend date for the distribution; and

C = the amount in cash per share that we distribute to holders of our common stock that exceeds the Reference Dividend Amount; or

- (6) we or any of our subsidiaries distribute cash or other consideration in respect of a tender offer or exchange offer for our common stock, where such cash and the value of any such other consideration per share of our common stock validly tendered or exchanged exceeds the closing sale price of our common stock on the trading day immediately following the expiration date for such tender or exchange offer, in which event the conversion rate will be increased by multiplying such conversion rate by a fraction, the numerator of which will be the sum of (i) the fair market value, as determined by our board of directors, of the aggregate consideration payable for all shares of our common stock we purchase in such tender or exchange offer and (ii) the product of the number of shares of our common stock outstanding as of such expiration date, less such purchased shares, and the closing sale price of our common stock on the trading day immediately following the expiration date of the tender or exchange offer, and the denominator of which will be the product of the number of shares of our common stock outstanding as of such expiration date, including any such purchased shares, and the closing sale price of our common stock on the trading day immediately following the expiration date of the tender or exchange offer.

S-38

"Reference Dividend Amount" means \$0.13 per quarter, appropriately adjusted from time to time to take into account the occurrence, on or before the date of determination, of any event that would require an anti-dilution adjustment and to account for any change in the frequency of payment of our regular dividend. Notwithstanding the foregoing, if an adjustment is required to be made under clause (5) above as a result of a distribution that is not a regular quarterly dividend, the Reference Dividend Amount will be deemed to be zero. Whenever the conversion rate is adjusted (other than in connection with a regular quarterly dividend pursuant to clause (5) above), the Reference Dividend Amount shall be

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

adjusted by multiplying such Reference Dividend Amount by a fraction, the numerator of which is the conversion rate prior to adjustment and the denominator of which is the conversion rate following such adjustment.

"Current market price" of our common stock on any day means the average of the closing sale prices per share of our common stock for each of the five consecutive trading days ending on the earlier of the day in question and the day before the "ex-dividend date" with respect to the issuance or distribution requiring such computation.

"Ex-dividend date" means the first date on which the shares of our common stock trade on the applicable exchange or in the applicable market, "regular way," without the right to receive the relevant issuance or distribution.

In the event of:

- > any reclassification of our common stock;
- > a consolidation, merger, binding share exchange or combination involving us; or
- > a sale or conveyance to another person or entity of all or substantially all of our property and assets (or all or substantially all of the assets of us and our subsidiaries on a consolidated basis);

in which holders of our common stock would be entitled to receive capital stock, other securities, other property, assets or cash for their common stock, upon conversion of convertible debentures,

- > the consideration received in settlement of any conversion will be based on the kind and amount of cash, securities and other assets or property that a holder of a number of shares of common stock equal to the conversion rate would have owned or been entitled to receive in such transaction; and
- > holders will generally be entitled to receive the same type (and the same proportions) of consideration that holders would have been entitled to receive if they had owned a number of shares of our common stock equal to the conversion rate immediately prior to any of these events.

In the event holders of our common stock have the opportunity to elect the form of consideration to be received in such transaction, the type and amount of consideration that holders of convertible debentures would have been entitled to receive will be deemed to be the weighted average of the types and amounts of consideration received by the holders of our common stock that affirmatively make an election (or, if a majority of electing holders chose a single option, the types and amounts of consideration received by those majority electing holders).

Holders may, in certain circumstances, be deemed to have received a distribution or dividend subject to U.S. federal income tax as a result of an adjustment or the non-occurrence of an adjustment to the conversion rate. Holders will generally be deemed to have received such a distribution or dividend as a result of adjustments made in respect of taxable dividends to holders of our common stock and in respect of a fundamental change. See "Material United States federal income and estate tax

S-39

consequences U.S. Holders Constructive Distributions" and "Material United States federal income and estate tax consequences Non-U.S. Holders Dividends and Constructive Dividends."

We may, to the extent permitted by applicable law and in accordance with the indenture, from time to time, increase the conversion rate if our board of directors determines that this increase would be in our best interests. Any such determination by our board will be conclusive. In addition, we may increase the conversion rate if our board of directors deems it advisable to avoid or diminish any income tax to holders of common stock resulting from any dividend or distribution of our common stock or rights distribution or similar event.

An adjustment in the conversion rate that would require a change of less than 1% in the conversion rate will be carried forward, and not immediately made, unless the event triggering the adjustment occurs subsequent to September 15, 2046. Any such adjustment carried forward

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

will be taken into account by us in any subsequent adjustment. In addition, we will make any such carried forward adjustments not previously made, regardless of whether the aggregate adjustment is less than 1%, at the end of each fiscal year, beginning with the fiscal year ending on December 31, 2007. Further, any adjustments previously carried forward and not previously made will be made, as applicable, upon any call for automatic conversion, upon a fundamental change, upon a make-whole fundamental change or on September 15, 2046. Except as described above in this section and in " Make-whole adjustment in connection with conversion upon a make-whole fundamental change," we will not adjust the conversion rate (provided, however, that holders of convertible debentures will be entitled to receive additional shares of common stock upon conversion in respect of optionally deferred interest, if any, to the extent provided above under " Conversion Procedures Additional information regarding settlement").

Make-whole adjustment in connection with conversion upon a make-whole fundamental change

If a make-whole fundamental change occurs prior to March 15, 2047, and a holder elects to convert convertible debentures in connection with such make-whole fundamental change, we will increase the applicable conversion rate for the convertible debentures surrendered for conversion in connection therewith by a number of additional shares of our common stock (the "additional shares"), as described below. A conversion of convertible debentures will be deemed for these purposes to be "in connection with" such a make-whole fundamental change if the notice of conversion of the convertible debentures is received by the conversion agent from and including the effective date of the make-whole fundamental change up to and including the date that is 35 days after such date, unless such transaction is also a fundamental change (as defined below), the holder specifies in the conversion notice that such conversion is being made pursuant to the provisions described below under " Alternative conversion right upon a fundamental change" and the conversion takes place within the specified period for conversion pursuant to such alternative conversion procedures.

A "make-whole fundamental change" shall be deemed to have occurred if, prior to March 15, 2047:

- > there occurs a sale, transfer, lease, conveyance or other disposition (other than by way of a merger or consolidation covered by the next bullet point below, which shall be addressed under such bullet point) of all or substantially all of the property or assets of us, or of us and our subsidiaries on a consolidated basis, to any "person" or "group" (as those terms are used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934), including any group acting for the purpose of acquiring, holding, voting or disposing of securities within the meaning of Rule 13d-5(b)(1) under the Securities Exchange Act of 1934; or

S-40

- > there occurs any transaction or series of related transactions (other than a "listed stock business combination," as defined below), in connection with which (whether by means of an exchange offer, liquidation, tender offer, consolidation, merger, combination, reclassification, recapitalization, asset sale, lease of assets or otherwise) our common stock is exchanged for, converted into, acquired for or constitutes solely the right to receive other securities, other property, assets or cash.

A "listed stock business combination" is a transaction in which we consolidate with, or merge with or into, another person, or any person consolidates with, or merges with or into us, where both of the following conditions are satisfied:

- > at least 90% of the consideration (other than cash payments for fractional shares or pursuant to statutory appraisal rights) in such consolidation or merger consists of common stock and, if applicable, any associated rights traded on a US national securities exchange (or which will be so traded when issued or exchanged in connection with such consolidation or merger); and
- > as a result of such consolidation or merger, the convertible debentures become convertible into such common stock and, if applicable, associated rights.

We will mail to holders of the convertible debentures, at their addresses appearing in the security register, notice of, and we will publicly announce, through a reputable national newswire service, and publish on our website, the anticipated effective date of any proposed fundamental change. We must make this mailing, announcement and publication at least 30 days before the anticipated effective date of the fundamental change. In addition, no later than the third business day after the completion of the fundamental change, we must make an additional notice, announcement and publication announcing such completion.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

The number of additional shares will be determined by reference to the table below, based on the effective date of, and the price paid per share of our common stock (the "stock price") in, the transaction constituting the make-whole fundamental change. If the make-whole fundamental change is of a type described in the first bullet point of the make-whole fundamental change definition above and the consideration paid for our property and assets consists solely of cash, then the stock price will be the cash amount paid for our property and assets, expressed as an amount per share of our common stock outstanding on the effective date of the make-whole fundamental change. If the make-whole fundamental change is of a type described in the second bullet point of the make-whole fundamental change definition above and holders of our common stock receive only cash in the transaction constituting the make-whole fundamental change, the stock price will equal the cash amount paid per share. In all other cases, the stock price will equal the average closing sale price of our common stock (as defined in the indenture) over the five-trading-day period ending on the trading day immediately preceding the effective date.

S-41

The following table sets forth the stock price and number of additional shares of common stock per \$1,000 principal amount of convertible debentures used to compute the conversion rate in connection with a make-whole fundamental change.

Effective Date	Stock Price									
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
March , 2007										
March 15, 2008										
March 15, 2009										
March 15, 2010										
March 15, 2011										
March 15, 2012										
March 15, 2013										
March 15, 2014										
March 15, 2015										
March 15, 2016										
March 15, 2017										
March 15, 2022										
March 15, 2027										
March 15, 2032										
March 15, 2037										
March 15, 2042										
March 15, 2047										

Notwithstanding the foregoing, in no event will the total number of common shares issuable upon conversion in connection with a make-whole fundamental change exceed _____ shares per \$1,000 principal amount of convertible debentures, subject to adjustment in the same manner as the conversion rate as set forth under " Conversion rate adjustments."

The exact stock price and effective date of the make-whole fundamental change may not be set forth on the table. In such event:

- > If the stock price is between two stock price amounts on the table or the effective date is between two dates on the table, the number of additional shares will be determined by straight-line interpolation between the number of additional shares set forth for the higher and lower stock price amounts and the two dates, as applicable, based on a 365 day year.
- > If the stock price is more than \$ _____ per share (subject to adjustment as described below), the number of additional shares will be zero.
- > If the stock price is less than \$ _____ (subject to adjustment as described below), the number of additional shares will be zero.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

The stock prices set forth in the first row of the table will be adjusted as of any date on which the conversion rate of the convertible debentures is adjusted as set forth under " Conversion rate adjustments" (other than any increase to the conversion rate for a make-whole fundamental change as described in this section). The adjusted stock prices will equal the stock prices applicable immediately prior to such adjustment multiplied by a fraction, the numerator of which is the conversion rate immediately prior to the adjustment giving rise to the stock price adjustment and the denominator of which is the conversion rate as so adjusted. The number of additional shares will be adjusted in the same manner as the conversion rate as set forth under " Conversion rate adjustments."

S-42

Because the consideration due upon conversion in connection with a make-whole fundamental change will not be delivered until after the effective date of the make-whole fundamental change, the consideration received upon conversion of convertible debentures may consist of consideration other than shares of our common stock, as contemplated above under " Conversion rate adjustments" with respect to transactions in which holders of our common stock become entitled to receive other capital stock, other securities, other property, other assets or cash for their common stock.

If the conversion in connection with the make-whole fundamental change occurs at a time when there is outstanding any accrued and unpaid optionally deferred interest in respect of prior interest periods, a converting holder shall also be entitled to receive upon conversion additional shares of common stock (or, if applicable, a cash payment) in respect of such deferred interest and compounded interest thereon as contemplated by the second paragraph under " Conversion Procedures Additional information regarding settlement" above.

Alternative conversion right upon a fundamental change

Upon the occurrence of a fundamental change (as defined below), if the current market price per share of our common stock (as defined above under " Conversion rate adjustments") as of the effective date of the fundamental change multiplied by the conversion rate then in effect with respect to the convertible debentures is less than \$1,000, each holder of convertible debentures shall have the option to convert all or a portion of its convertible debentures into shares of common stock at an adjusted conversion rate equal to the lesser of (1) \$1,000 divided by such current market price per share of our common stock, and (2) _____ shares. This option shall be exercisable at any time during the 35 days following the effective date of the fundamental change. In lieu of issuing shares of common stock issuable upon this alternative conversion right in the event of a fundamental change, we may, at our option, make a cash payment to converting holders equal to the aggregate market value of the shares of our common stock, determined as provided in the indenture, otherwise issuable upon conversion. If the conversion pursuant to this alternative conversion right occurs at a time when there is outstanding any accrued and unpaid optionally deferred interest in respect of prior interest periods, a converting holder shall also be entitled to receive upon conversion additional shares of common stock (or, if applicable, a cash payment) in respect of such deferred interest and compounded interest thereon as contemplated by the second paragraph under " Conversion Procedures Additional information regarding settlement" above.

A "fundamental change" will be deemed to occur upon the occurrence of a "change in control" or a "termination of trading."

A "change in control" generally will be deemed to occur at such time as:

- > any "person" or "group" (as those terms are used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934) is or becomes the "beneficial owner" (as that term is used in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of 50% or more of the total outstanding voting power of all classes of our capital stock entitled to vote generally in the election of directors ("voting stock");
- > there occurs a sale, transfer, lease, conveyance or other disposition (other than by way of a merger or consolidation covered by the next bullet point below, which shall be addressed under such bullet point) of all or substantially all of the property or assets of us, or of us and our subsidiaries on a consolidated basis, to any "person" or "group" (as those terms are used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934), including any group acting for the purpose of acquiring, holding, voting or disposing of securities within the meaning of Rule 13d-5(b)(1) under the Securities Exchange Act of 1934;

S-43

- > we consolidate with, or merge with or into, another person or any person consolidates with, or merges with or into, us, unless either:

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

the persons that "beneficially owned," directly or indirectly, the shares of our voting stock immediately prior to such consolidation or merger "beneficially own," directly or indirectly, immediately after such consolidation or merger, shares of the surviving or continuing corporation's voting stock representing at least a majority of the total outstanding voting power of all outstanding classes of voting stock of the surviving or continuing corporation in substantially the same proportion as such ownership immediately prior to such consolidation or merger; or

the transaction constitutes a listed stock business combination (as defined above under " Make-whole adjustment in connection with conversion upon a make-whole fundamental change");

>

the following persons cease for any reason to constitute a majority of our board of directors:

individuals who on the first issue date of the convertible debentures constituted our board of directors; and

any new directors whose election to our board of directors or whose nomination for election by our stockholders was approved by at least a majority of our directors then still in office either who were directors on such first issue date of the convertible debentures or whose election or nomination for election was previously so approved; or

>

we are liquidated or dissolved or holders of our capital stock approve any plan or proposal for our liquidation or dissolution.

A "termination of trading" is deemed to occur if our common stock (or other common stock into which the convertible debentures are then convertible) is no longer listed for trading on a US national securities exchange.

There is no precise, established definition of the phrase "all or substantially all" under applicable law. Accordingly, there may be uncertainty as to whether a sale, transfer, lease, conveyance or other disposition of less than all of the property or assets of us, or of us and our subsidiaries on a consolidated basis, would constitute a fundamental change under the provisions described above.

We will mail to holders of the convertible debentures, at their addresses appearing in the security register, notice of, and we will publicly announce, through a reputable national newswire service, and publish on our website, the anticipated effective date of any proposed fundamental change. We must make this mailing, announcement and publication at least 30 days before the anticipated effective date of the fundamental change. In addition, no later than the third business day after the completion of the fundamental change, we must make an additional notice, announcement and publication announcing such completion.

If a transaction constituting a fundamental change also constitutes a make-whole fundamental change and a holder of convertible debentures elects to convert their convertible debentures pursuant to this alternative conversion right, such holder shall not be entitled to receive any additional shares pursuant to the provisions described above under " Make-whole adjustment in connection with conversion upon a make-whole fundamental change." Investors electing to convert convertible debentures pursuant to this alternative conversion right will be required to specify in their conversion notice that they are converting in reliance on this alternative conversion provision.

S-44

Because the consideration due upon conversion in connection with this alternative conversion right upon a fundamental change will not be delivered until after the effective date of the fundamental change, the consideration received upon conversion of convertible debentures pursuant to this provision may consist of consideration other than shares of our common stock, as contemplated above under " Conversion Rate Adjustments" with respect to transactions in which holders of our common stock become entitled to receive other capital stock, other securities, other property, other assets or cash for their common stock.

The indenture will permit us to, without the consent of holders of the convertible debentures, amend the provisions of the indenture relating to our ability to make cash payments to holders of convertible debentures pursuant to this alternative conversion right upon a fundamental change so as to eliminate our ability to elect to pay cash, or to make such an election subject to either a legally binding capital replacement covenant or a replacement capital intention (each as defined below under " Deferral of Interest Payments Capital replacement").

AUTOMATIC CONVERSION

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

At any time on or after March 20, 2012, we may at our option cause the convertible debentures to be automatically converted into shares of our common stock at the conversion rate then in effect. We may exercise this right only if the closing sale price (as defined below) of our common stock has exceeded 150% of the then prevailing conversion price in respect of the convertible debentures for at least 20 trading days in a period of 30 consecutive trading days, including the last trading day of such 30-day period, ending on the trading day prior to our issuance of a press release announcing the automatic conversion as described below.

The term "trading day" for this purpose means a day during which trading in securities generally occurs on the New York Stock Exchange or, if our common stock is not then listed on the New York Stock Exchange, on the principal other national or regional securities exchange on which our common stock is then listed or, if our common stock is not listed on a national or regional securities exchange, on the principal other market on which our common stock is then traded.

The "closing sale price" of our common stock on any date means the closing sale price per share (or if no closing sale price is reported, the average of the closing bid and ask prices or, if more than one in either case, the average of the average closing bid and the average closing ask prices) on such date as reported on the principal United States securities exchange on which such common stock is traded or, if such common stock is not listed on a United States national or regional securities exchange, as reported by the National Quotation Bureau Incorporated. In the absence of such quotation, but only with respect to our common stock, the closing sale price will be an amount determined in good faith by our board of directors to be the fair value of such common stock, and such determination shall be conclusive.

To exercise the automatic conversion right described above, we must issue a press release prior to the close of business on the first trading day following any date on which the conditions described in the first paragraph of this "Automatic Conversion" section are met, announcing such election to call an automatic conversion. We will also give notice by mail or by publication (with subsequent prompt notice by mail) to the holders of the convertible debentures (not more than four business days after the date of the press release) of the election to call an automatic conversion. The conversion date will be a date selected by us (which we will refer to as the "automatic conversion date") and will be no more than 15 days after the date on which we issue such press release.

S-45

In addition to any information required by applicable law or regulation, the press release and notice of an automatic conversion shall state, as appropriate:

- > the automatic conversion date;
- > the number of shares of common stock to be issued upon conversion of each \$1,000 principal amount of convertible debentures;
- > the principal amount of convertible debentures to be converted; and
- > that interest on the convertible debentures to be converted will cease to accrue on the automatic conversion date.

On or after the automatic conversion date, interest will cease to accrue on the convertible debentures called for a automatic conversion, all rights of holders of such convertible debentures will terminate and all such convertible debentures will automatically convert into the common stock issuable upon conversion thereof at the conversion rate then in effect. Accrued interest relating to the current interest period with respect to the convertible debentures for which the automatic conversion date occurs during the period between the close of business on any record date for the payment of interest to the close of business on the corresponding interest payment date will be payable on such interest payment date to the record holder of such convertible debentures on such record date. Except as provided in the immediately preceding sentence, with respect to an automatic conversion, no payment or adjustment will be made upon conversion of convertible debentures for accumulated and unpaid interest relating to the current interest period.

We will not be able to call the convertible debentures for automatic conversion during an optional deferral period and will have been required to have repaid all accrued and unpaid deferred interest, if any, and compounded interest thereon, in accordance with the alternative payment mechanism provisions of the indenture prior to calling debentures for automatic conversion. All accumulated and unpaid deferred interest, if any, including compounded interest thereon, for interest periods ending prior to the date we issue a press release or give notice of automatic conversion must have been paid prior to issuing such a press release or giving such notice.

DEFERRAL OF INTEREST PAYMENTS

As long as no event of default with respect to the convertible debentures has occurred and is continuing, we may elect to defer interest payments on the convertible debentures. During the deferral period resulting from any such deferral, interest on the convertible debentures will not be currently payable, but will continue to accrue and compound semi-annually to the extent permitted by applicable law, at the applicable rate of interest on the convertible debentures. Upon the termination of a deferral period, we will be required to pay all deferred interest then accrued and unpaid, together with interest thereon, to the extent permitted by applicable law, compounded semi-annually at the applicable rate of interest on the convertible debentures, which we refer to as "compounded interest."

Notwithstanding any other term of the convertible debentures, in no event may we defer payments of interest on the convertible debentures beyond the date that is 10 consecutive years (20 consecutive semi-annual interest periods) after the date on which we began the deferral of interest, or past the final maturity date of the convertible debentures or earlier acceleration of the convertible debentures pursuant to an event of default. An event of default will result if all accrued and unpaid interest, including any compounded interest thereon, in respect of the convertible debentures has not been paid in full within 30 days after the tenth anniversary of the commencement of interest deferral.

S-46

Option to defer interest payments

As long as no event of default with respect to the convertible debentures has occurred and is continuing, subject to the conditions below, we may defer payments of interest on the convertible debentures at any time and from time to time. We refer to this as "optional deferral." Upon optional deferral, deferred interest will continue to accrue and compound semi-annually, to the extent permitted by applicable law, at the applicable rate of interest on the convertible debentures. During an optional deferral period, holders of convertible debentures will be required to accrue interest income as original issue discount for United States federal income tax purposes. See "Material United States federal income and estate tax consequences."

After five years of optional deferral (calculated from the first payment date as of which we defer payments on the convertible debentures due to optional deferral), we must use commercially reasonable efforts to sell qualifying securities (as defined below) pursuant to the alternative payment mechanism (the "alternative payment mechanism") described under " Alternative payment mechanism" and use "eligible proceeds" (as defined below) to pay deferred interest. This obligation is, however, subject to limitations: we will not be required to sell qualifying securities during the continuation of a market disruption event (as defined below under " Market disruption events"), and the maximum amount of qualifying securities that we are required to sell will be limited by certain caps. Notwithstanding these limitations, in no event may we defer payments of interest on the convertible debentures beyond the date that is 10 consecutive years after the date on which we began the deferral of interest, or past the final maturity date of the convertible debentures or earlier acceleration of the convertible debentures pursuant to an event of default. An event of default will result if all accrued and unpaid interest, including any compounded interest thereon, in respect of the convertible debentures has not been paid in full within 30 days after the tenth anniversary of the commencement of an interest deferral.

We have no present intention of exercising our right to defer payments of interest.

The period commencing on the payment date on which payment is optionally deferred and ending on the date on which optionally deferred interest, plus compounded interest thereon, is paid in full is referred to herein as the "optional deferral period." We refer to interest deferred pursuant to optional deferral as "optionally deferred interest." Upon the termination of any optional deferral period and the payment of all amounts then due, we may commence a new optional deferral period, subject to the above requirements, there being no limit to the number of such new optional deferral periods that we may elect.

We will give notice of an optional deferral not more than 60 days and not less than 15 days prior to the related interest payment date, and such notice, once given, will be irrevocable and the deferral of payments on the related interest payment date shall be an optional deferral.

A covenant breach will occur if we fail to comply with our obligations under " Alternative payment mechanism." Although a covenant breach would not constitute an event of default permitting the holders to accelerate the principal amount of the convertible debentures, it would give rise to a claim against us relating to the specific breach. The remedy of holders of the convertible debentures for any covenant breach could, however, be limited to direct monetary damages (if any). Failure to pay interest will constitute an event of default, giving rise to a right of acceleration, only if deferred interest and any compounded interest thereon is not paid in full within 30 days after the tenth anniversary of the first interest payment date on which an interest payment is deferred or at the final maturity date. See " Events of Default."

S-47

Satisfaction of interest

From the earlier of (i) the business day immediately following the first interest payment date during an optional deferral period on which we elect to pay current interest and (ii) the business day following the fifth anniversary of the start of the relevant optional deferral period, we will be required to comply with the alternative payment mechanism described below under "Alternative payment mechanism." Optionally deferred interest accrued may be paid only from eligible proceeds received from the sale of qualifying securities in accordance with the alternative payment mechanism. Upon the sale of qualifying securities in accordance with the alternative payment mechanism, the eligible proceeds thereof will be applied in chronological order to the payment of any optionally deferred interest beginning with deferred interest relating to the earliest interest payment date with respect to which interest has been deferred.

Certain restrictions during optional deferral periods

On any date on which accrued interest through the most recent interest payment date has not been paid in full (including during any optional deferral period) and until such time as all accrued but unpaid interest, together with any compounded interest thereon, is paid in full, we will not, and will not permit any subsidiary (as defined below) of ours to:

- > declare or pay any dividends on, make distributions regarding, or redeem, purchase, acquire or make a liquidation payment with respect to, any shares of our capital stock, other than:
 - (1) purchases of our capital stock in connection with employee or agent benefit plans or under any dividend reinvestment plan;
 - (2) purchases or repurchases of shares of our capital stock pursuant to a contractually binding requirement to buy stock existing prior to the commencement of the deferral period, including under a contractually binding stock repurchase plan;
 - (3) in connection with the reclassification of any class or series of our capital stock, or the exchange or conversion of one class or series of our capital stock for or into another class or series of our capital stock, in each case if the resulting capital stock ranks, upon liquidation, equal to or junior to the capital stock so reclassified, exchanged or converted;
 - (4) the purchase of fractional interests in shares of our capital stock in connection with the conversion or exchange provisions of that capital stock or the security being converted or exchanged;
 - (5) dividends or distributions in the form of our capital stock or rights to acquire our capital stock, where the dividend stock or stock underlying the dividend rights is the same class as the stock on which the dividend is being paid or ranks, upon liquidation, equal to or junior to such stock;
 - (6) any declaration of a dividend in connection with the implementation of a shareholders' rights plan (i.e., a poison pill), or issuances of capital stock under any such plan in the future, or redemptions or repurchases of any rights outstanding under a shareholders' rights plan; or
 - (7) the payment of any dividend during an optional deferral period within 60 days after the date of declaration thereof, if at the date of declaration no optional deferral was in effect;
- > make any payment of interest, principal or premium, if any, on or pay, repurchase or redeem any debt securities issued by us that rank, upon liquidation, equal to the convertible debentures ("parity debt securities") or junior to the convertible debentures ("junior debt securities"), other

than (1) any payment, repurchase or redemption in respect of parity debt securities made ratably and in proportion to the respective amount of (a) accrued and unpaid amounts on such parity debt securities, on the one hand, and (b) accrued and unpaid amounts on the convertible debentures, on the other hand; (2) any payments of deferred interest on parity debt securities that, if not made, would cause us to breach the terms of the instrument governing such parity debt securities (provided that such payments are made in accordance with the third to last paragraph under "Alternative payment mechanism" to the extent it applies); or (3) the exchange or conversion of one class or series of parity debt securities or junior debt securities for or into another class or series of our securities, in each case if the resulting securities rank, upon liquidation, equal to or junior to the securities so exchanged or converted; or

>

make any guarantee payments with respect to any guarantee by us of the debt securities of any subsidiary, if such guarantee ranks, upon liquidation, equal to or junior to the convertible debentures, other than any payment in respect of guarantees that rank, upon liquidation, equal to the convertible debentures ("parity guarantees") made ratably and in proportion to the respective amounts of (1) accrued and unpaid amounts on such parity guarantees, on the one hand, and (2) accrued and unpaid amounts on the convertible debentures, on the other hand.

A "subsidiary," for purposes of the restrictions above, is any corporation or other entity in which we own, directly or indirectly, more than 50% of the voting stock or other voting interests.

Alternative payment mechanism

Under the circumstances described under "Option to defer interest payments" above, we will be required to satisfy our obligation to pay optionally deferred interest by selling qualifying warrants or qualifying preferred stock (including depository shares representing such preferred stock as described below), or any combination thereof (collectively "qualifying securities"), the sale of which will provide sufficient "eligible proceeds" (as defined below) to pay accrued but unpaid interest, together with any compounded interest, in respect of the convertible debentures. The indenture provides that the indenture may be amended without the consent of holders of the convertible debentures to add, at our election, our common stock to the definition of "qualifying securities"; in such an event, our ability to issue common stock to satisfy our obligation to pay optionally deferred interest will be subject to the same limitations as those on our ability to sell qualifying warrants, including the absence of a market disruption event, the 2% issuance cap and the maximum share cap (each as defined below).

We will not be obligated to sell qualifying securities, and may satisfy deferred interest payments with cash from any source, at the final maturity date, at the tenth anniversary of the commencement of any optional deferral period or upon the occurrence of an event of default under the convertible debentures. No optional deferral period may continue after an event of default has occurred.

Subject to certain conditions described below, if we defer interest on the convertible debentures, we will be required, not later than (i) the business day immediately following the first interest payment date during an optional deferral period on which we elect to pay current interest (which we may do from any source of funds), or (ii) if earlier, not later than the business day following the fifth anniversary of an optional deferral period, to use our commercially reasonable efforts to begin selling qualifying securities to persons that are not our affiliates. We will be required, with respect to any subsequent interest payment date during an optional deferral period until the optionally deferred interest has been paid in full, to use our commercially reasonable efforts to sell qualifying securities until we have raised an amount of eligible proceeds that, together with the eligible proceeds of any sales of qualifying securities within the 180 days preceding such interest payment date, is sufficient to pay the optionally deferred interest (including compounded interest on the deferred payments) on such

S-49

interest payment date, *provided* that, if, due to a market disruption event or otherwise, we are able to raise some, but not all, of the eligible proceeds from the sale of qualifying securities necessary to pay all deferred interest (including compounded interest on the deferred payments) on any interest payment date, we will apply any such available eligible proceeds on such interest payment date to pay accrued and unpaid installments of optionally deferred interest in chronological order beginning with deferred interest relating to the earliest interest payment date with respect to which interest has been deferred. We will not pay optionally deferred interest (including compounded interest on the deferred payments) on the convertible debentures from any source other than eligible proceeds from the sale of qualifying securities, except at the final maturity date, at the tenth anniversary of the commencement of any optional deferral period or upon the occurrence of an event of default. We refer to this method of funding the payment of optionally deferred accrued and unpaid interest, and compounded interest thereon, as the "alternative payment mechanism."

"Eligible proceeds" means, for each relevant interest payment date, the net proceeds (after underwriters' or placement agents' fees, commissions or discounts and other expenses relating to the issuance or sale) we have received during the 180-day period prior to that interest payment date from the issuance or sale of qualifying securities (in the case of qualifying preferred stock, up to the preferred stock issuance cap), in each case to persons that are not our affiliates.

"Qualifying securities" means

- > "qualifying warrants," which are net share settled warrants to purchase our common stock that have an exercise price greater than the current stock market price of our common stock as of their date of issuance, that we are not entitled to redeem for cash and that the holders of such warrants are not entitled to require us to repurchase for cash in any circumstance; and
- > "qualifying preferred stock," which means preferred stock issued by us, up to the preferred stock issuance cap, on such terms as we may establish, or depositary shares representing interests in such preferred stock.

We may, at a later date at our option and without the consent of holders of the convertible debentures, amend the definition of "qualifying preferred stock" to impose additional criteria in order for preferred stock to qualify as "qualifying preferred stock." These criteria may include, but need not be limited to, one or more of the following:

- > a requirement that the preferred stock be non-cumulative perpetual preferred stock;
- > a requirement that the preferred stock be subject to a legally binding replacement covenant;
- > a requirement that the preferred stock be subject to a replacement capital intention;
- > a requirement that the preferred stock be subject to a mandatory trigger provision; and
- > a requirement that the preferred stock be subject to no remedies other than permitted remedies.

If we were to so amend the definition of qualifying preferred stock, that might adversely affect our ability to sell qualifying preferred stock pursuant to the alternative payment mechanism (which could, in turn, adversely affect the trading price of the convertible debentures). For the definition of certain terms used in this paragraph, see " Capital replacement" below.

The indenture further provides that the definition of "qualifying securities" may be amended by us without the consent of holders of the convertible debentures to add, at our election, our common stock as qualifying securities. In such an event, our ability to issue common stock to satisfy our obligation to pay deferred interest will be subject to the same limitations as those limiting our ability to sell qualifying warrants, including the limitations on selling qualifying securities at a time when a market disruption event exists or when the 2% issuance cap or the maximum share cap is exceeded.

S-50

Although our failure to comply with our obligations with respect to the alternative payment mechanism would be a breach of our obligations under the indenture, it would not constitute an event of default thereunder or give rise to a right to accelerate the maturity of the convertible debentures or a similar remedy under the terms thereof. The remedies of holders of the convertible debentures may be limited in such circumstances to direct monetary damages (if any).

We intend to issue qualifying warrants with exercise prices at least 10% above the current stock market price of our common stock on the date of issuance and with other commercially reasonable terms. The "current stock market price" of our common stock on any date for this purpose will be the closing sale price per share (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on that date as reported in composite transactions by the New York Stock Exchange or, if our common stock is not then listed on the New York Stock Exchange, as reported by the principal U.S. securities exchange on which our common stock is traded or quoted. If our common stock is not either listed or quoted on any U.S. securities exchange on the relevant date, the "current stock market price" will be the last quoted bid price for our common stock in the over-the-counter market on the relevant date as reported by the National Quotation Bureau or similar organization. If our common stock is not so quoted, the "current stock market price" will be the average of the mid-point of the last bid and ask prices for our common stock on the relevant date from each of at least three nationally recognized independent investment banking firms selected by us for this purpose.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

Under the alternative payment mechanism, we are not required to issue qualifying warrants prior to the fifth anniversary of the commencement of any optional deferral period pursuant to the alternative payment mechanism to the extent that the net proceeds of any issuance of qualifying warrants applied to pay such interest, together with the net proceeds of all prior issuances of qualifying warrants during such optional deferral period so applied, would exceed 2% of the product of the average of the current stock market prices of our common stock on 10 consecutive trading days ending on the second trading day immediately preceding the date of issuance of such securities multiplied by the total number of issued and outstanding shares of our common stock as of the date of our then most recent publicly available consolidated financial statements (the "2% issuance cap"). In addition, we are not required to issue qualifying warrants pursuant to the alternative payment mechanism to the extent that the total number of shares of our common stock underlying such qualifying warrants, together with all prior issuances of qualifying warrants, exceeds 10 million shares (subject to customary anti-dilution adjustments) (the "maximum share cap"). We may not issue qualifying preferred stock if the net proceeds of any issuance of qualifying preferred stock applied to pay interest, together with the net proceeds of all prior issuances of qualifying preferred stock so applied, would exceed 25% of the aggregate principal amount of the convertible debentures offered hereby (the "preferred stock issuance cap").

Once we reach the 2% issuance cap for any optional deferral period, we will not be required to issue more qualifying warrants prior to the fifth anniversary of the commencement of such optional deferral period even if the 2% issuance cap would have increased due to a subsequent increase in the current stock market price of our common stock or in the number of shares of our outstanding common stock. The 2% issuance cap will cease to apply following the fifth anniversary of the commencement of any optional deferral period, at which point we must pay any deferred interest, regardless of the time at which it was deferred, using the alternative payment mechanism, subject to the maximum share cap, the preferred stock issuance cap and any market disruption event. For the avoidance of doubt, if the 2% issuance cap has been reached during an optional deferral period and we subsequently pay all optionally deferred interest (including compounded interest thereon), the 2% issuance cap will cease to apply, and will only apply again once we start a new optional deferral period. The maximum share

S-51

cap and the preferred stock issuance cap will apply so long as the convertible debentures remain outstanding.

If, due to a market disruption event, the 2% issuance cap, the maximum share cap, preferred stock issuance cap or otherwise, we are able to raise some, but not all, eligible proceeds necessary to pay all optionally deferred interest (including compounded interest thereon) on any interest payment date, we will apply any available eligible proceeds to pay accrued and unpaid installments of interest on the applicable interest payment date in chronological order beginning with deferred interest relating to the earliest payment date with respect to which interest has been deferred and each holder of convertible debentures will be entitled to receive its pro rata share of any amounts received on the convertible debentures. If we have outstanding securities in addition to, and that rank, upon liquidation, *pari passu* with, the convertible debentures under which we are obligated to sell qualifying securities and apply the net proceeds to the payment of deferred interest or distributions, then on any date and for any period the amount of net proceeds received by us from those sales and available for payment of the deferred interest and distributions will be applied to the convertible debentures and those other securities on a pro rata basis in proportion to the total amounts that are due on the convertible debentures and such securities.

"Commercially reasonable efforts" to sell securities in accordance with the alternative payment mechanism means commercially reasonable efforts by us to complete the offer and sale of qualifying securities to third parties that are not affiliates of us in public offerings or private placements. We will not be excused from our obligations under the alternative payment mechanism if we determine not to pursue or complete the sale of qualifying warrants or qualifying preferred stock due to pricing, dividend rate or dilution considerations.

If we are involved in a business combination where immediately after its consummation more than 50% of the surviving entity's voting stock is owned by the shareholders of the other party to the business combination, then the alternative payment mechanism will not apply to any deferral period that is terminated on the next interest payment date following the date of consummation of the business combination (or, if later, at any time within 90 days following the date of consummation of the business combination).

Market disruption events

We will not be required to sell qualifying securities in accordance with the alternative payment mechanism during any semi-annual period preceding any interest payment date to the extent we provide written certification to the trustee (which the trustee will promptly forward upon receipt to each holder of record of the convertible debentures) no more than 30 and no less than 15 days in advance of such interest payment date certifying that:

> a market disruption event was existing after the immediately preceding interest payment date; and

>

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

either (a) the market disruption event continued for the entire period from the business day immediately following the preceding interest payment date to the business day immediately preceding the date on which that certification is provided or (b) the market disruption event continued for only part of this period, but we were unable after commercially reasonable efforts to raise sufficient eligible proceeds during the rest of that period to pay all accrued and unpaid interest.

S-52

"Market disruption event" means the occurrence or existence of any of the following events or sets of circumstances:

- > we may not issue qualifying securities without obtaining the consent or approval of a regulatory body (including, without limitation, any securities exchange) or governmental authority, and we have used commercially reasonable efforts to obtain such consent or approval but such consent or approval has not yet been obtained;
- > we do not have sufficient common stock available for issuance to raise sufficient eligible proceeds to pay the interest payments on the convertible debentures and we have used commercially reasonable efforts to obtain the consent or approval of our shareholders to increase the amount of our authorized common stock but such consent or approval has not been obtained; provided that this market disruption event will not relieve us of our obligation to issue qualifying preferred stock and to issue the number of qualifying warrants for which we have common stock available for issuance, and to apply the proceeds thereof in partial payment of deferred interest;
- > trading in securities generally (or our common stock or preferred stock specifically) on the principal exchange on which our common stock or preferred stock is then listed and traded shall have been suspended or the settlement of such trading generally shall have been materially disrupted;
- > (a)(1) the United States shall have become engaged in hostilities, (2) there shall have been an escalation in hostilities involving the United States or (3) there shall have been a declaration of a national emergency or war by the United States or (b) there shall have occurred any material adverse change in (1) domestic or international economic, political or financial conditions (including from terrorist activities) or (2) the effect of international conditions on the financial markets in the United States that, in any of the circumstances described in clauses (a) or (b) of this bullet, materially disrupts or otherwise has a material adverse effect on trading in, or the issuance and sale of, qualifying securities;
- > a material disruption has occurred or banking moratorium has been declared in commercial banking or securities settlement or clearance services, and such disruption or moratorium materially disrupts or otherwise has a material adverse effect on trading in, or the issuance and sale of, qualifying securities;
- > minimum or maximum prices have been fixed, or maximum ranges for prices of securities are required on the New York Stock Exchange or by the Securities and Exchange Commission (the "SEC") or other governmental authority which, in either case, materially disrupts or otherwise has a material adverse effect on trading in, or the issuance and sale of, qualifying securities;
- > an event occurs and is continuing as a result of which the offering document for such offer and sale of qualifying securities would, in our reasonable judgment, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading and either (1) the disclosure of that event at such time, in our reasonable judgment, would have a material adverse effect on our business or (2) the disclosure relates to a previously undisclosed proposed or pending material development or business transaction, the disclosure of which would impede our ability to consummate such transaction, provided that no single suspension period contemplated by this bullet may exceed 90 consecutive days and multiple suspension periods contemplated by this bullet may not exceed an aggregate of 90 days in any 180-day period; or
- > we reasonably believe that the offering document for the offer and the sale of our qualifying securities would not be in compliance with a rule or regulation of the SEC (for reasons other than

S-53

those described in the immediately preceding bullet) and we are unable to comply with such rule or regulation or such compliance is unduly burdensome, provided that no single suspension period described in this bullet shall exceed 90 consecutive days and multiple suspension periods described in this bullet shall not exceed an aggregate of 90 days in any 180-day period.

Our common stock available for issuance will be calculated by determining the number of our authorized and unissued shares of common stock, and then subtracting from that number the number of those shares of common stock that we are unable to issue due to their reservation for other purposes. We must use commercially reasonable efforts to increase our authorized preferred stock or common stock, as the case may be, so that we have sufficient authorized preferred stock and common stock to fulfill our obligations in respect of the alternative payment mechanism. A covenant breach will occur if we do not use our commercially reasonable efforts to seek the consent of our shareholders to increase the number of our authorized preferred shares or common stock, when required. Although a covenant breach would not constitute an event of default permitting the convertible debentures to be accelerated, it would give rise to a claim against us relating to the specific breach. The remedy of holders of the convertible debentures for any covenant breach could, however, be limited to direct monetary damages (if any). See " Events of Default."

Covenant against repurchases

If any deferral period lasts longer than one year, we will not repurchase any qualifying securities sold pursuant to the alternative payment mechanism described above or any securities that are, in respect of liquidation, *pari passu* with or junior to such securities (including, without limitation, our common stock), until the first anniversary of the date on which all deferred interest on the convertible debentures, and compounded interest thereon, has been paid, subject to the same exceptions as provided for in the first paragraph under " Certain restrictions during optional deferral periods" above. Failure by us to adhere to this requirement will constitute a covenant breach but not an event of default. If we are involved in a business combination where immediately after its consummation more than 50% of the surviving entity's voting stock is owned by the shareholders of the other party to the business combination, then the one-year restriction on such repurchases will not apply to any deferral period that is terminated on the next interest payment date following the date of consummation of the business combination (or if later, at any time within 90 days following the date of consummation of the business combination).

Limitations on claims in the event of our bankruptcy, insolvency or receivership

The indenture provides that the holders of convertible debentures, by their acceptance of the convertible debentures, agree that in the event of our bankruptcy, insolvency or receivership, whether voluntary or not, prior to the final maturity date or repayment of the convertible debentures, any claim in respect of interest that accrued during an optional interest deferral period in excess of two years of accrued and unpaid interest (including any compounded interest thereon) on the convertible debentures will be extinguished; provided that such limitation shall not reduce the amounts holders of senior indebtedness would have been entitled to receive in the absence thereof.

Capital replacement

The convertible debentures are not subject to a legally binding replacement covenant, and in connection with the issuance of the convertible debentures we have not expressed a replacement capital intention. However, we will be permitted, without the consent of holders, to provide for a replacement capital obligation, or a replacement capital intention, in respect of the convertible debentures in the future. If we were to make provisions to have a legally binding replacement covenant or a replacement

S-54

capital intention apply with respect to the convertible debentures, the trading prices for the convertible debentures could be adversely affected.

Certain definitions:

"Legally binding replacement covenant" generally means a covenant made by us to the effect that we will only fund repurchases or other acquisitions of convertible debentures for cash, or make certain other cash payments in respect of the convertible debentures, out of the proceeds received by us or one of our subsidiaries from the sale of replacement securities that are as or more equity-like than the convertible debentures, within six (6) months of the purchase, acquisition or other payment.

"Replacement capital intention" generally means that we have publicly stated our intention, in filings made by us with the SEC, to the effect that we will only fund repurchases or other acquisitions of convertible debentures for cash, or make certain other cash payments in respect of the convertible debentures, out of the proceeds received by us or one of our subsidiaries from the sale of replacement securities that are as or more equity-like than the convertible debentures, within six (6) months of the purchase, acquisition or other payment.

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

"Mandatory trigger provision" generally means provisions in the terms of the applicable security or the transaction agreements relating thereto that (A) due to a failure to satisfy one or more financial tests set forth in the terms of such securities or related transaction agreements, require or permit us to make payments in respect of interest or distributions on such securities only pursuant to the issuance and sale of permitted types of securities (such as common stock, warrants, preferred stock or other equity like securities); (B) prohibit us from repurchasing our common stock or other equity or equity-like securities prior to a specified date after we apply the net proceeds of the sales described in clause (A) to pay such unpaid interest or distributions; and (C) upon any liquidation, dissolution, winding up, reorganization or in connection with any insolvency, receivership or proceeding under any bankruptcy law with respect to us, limit claims of holders of such securities in respect of distributions that accumulate during a period in which we fail to satisfy one or more financial tests set forth in the terms of such securities or related transaction agreements.

"Non-cumulative perpetual preferred stock" generally means perpetual preferred stock (which may or may not be redeemable by us) with respect to which we may elect to defer or skip any number of periodic distributions without any remedy arising under the terms of the securities or related agreements in favor of the holders, other than one or more "permitted remedies."

"Permitted remedies" generally means, with respect to any preferred stock, one or more of the following remedies: (a) rights in favor of the holders of such securities permitting such holders to elect one or more directors of the issuer (including any such rights required by the listing requirements of any stock or securities exchange on which such securities may be listed or traded), (b) complete or partial prohibitions on the issuer paying distributions on or repurchasing common stock or other securities that rank, upon liquidation, *pari passu* with or junior to such securities for so long as distributions on such securities, including unpaid distributions, remain unpaid and (c) an alternative payment mechanism similar to that provided for with respect to the convertible debentures.

MERGER AND CONSOLIDATION

Subject to the provisions described under " Conversion Rights Make-whole adjustment in connection with conversion upon a make-whole fundamental change" and " Conversion Rights Alternative conversion right upon a fundamental change," we may, without the consent of the holders of the convertible debentures, consolidate with, merge with or into or transfer all or substantially all of our assets (or all or substantially all of the assets of us and our subsidiaries on a consolidated basis) to

S-55

any other corporation organized under the laws of the United States or any of its political subdivisions provided that:

- > the surviving corporation assumes all of our obligations under the indenture;
- > at the time of such transaction, no event of default, and no event that, after notice or lapse of time, would become an event of default, shall have happened and be continuing; and
- > certain other conditions are met.

If, as a result of any merger or similar transaction, the convertible debentures become convertible into common stock or other securities issued by a third party, such third party must fully and unconditionally guarantee all obligations of ours or our successor under the convertible debentures and the indenture.

EVENTS OF DEFAULT

An event of default with respect to the convertible debentures means:

- > default for 30 calendar days in the payment of any interest on the convertible debentures, including any compounded interest, when it becomes due and payable (however, a default under this bullet will not occur if we have deferred interest, as permitted under the indenture, in connection with an optional deferral);

- > deferral of interest on the convertible debentures, due to an optional deferral, that continues for 10 consecutive years after the date on which we began the deferral of interest, without all accrued and unpaid interest, including any compounded interest, having been paid in full within 30 days after the tenth anniversary of the commencement of such deferral;
- > default in the payment of the principal of the convertible debentures when due; and
- > certain events of bankruptcy, insolvency and reorganization, whether voluntary or not.

If an event of default occurs and is continuing, we will not be required to sell qualifying securities to make deferred interest payments and may make such payments using cash from any source.

Events of default with respect to the convertible debentures do not include failure to comply with or breach of our other covenants in the indenture with respect to the convertible debentures, including the covenant to sell qualifying securities through the alternative payment mechanism to meet certain interest payment obligations. Although a covenant breach would not constitute an event of default permitting the convertible debentures to be accelerated, it would give rise to a claim against us relating to the specific breach. The remedy of holders of the convertible debentures for any covenant breach could, however, be limited to direct monetary damages (if any). See "Risk Factors Risks Related to the Convertible Debentures Holders of the convertible debentures have limited rights to accelerate payment of the convertible debentures under the indenture." Notwithstanding the foregoing, the indenture will acknowledge that in the case of any failure to deliver consideration deliverable in respect of any conversion, monetary damages would not be adequate and will provide for specific performance as the remedy for any such failure.

A covenant breach will only give rise to possible remedies if it continues for 90 days after delivery of the notices specified below. Our failure (if any) to sell qualifying securities through the alternative payment mechanism in accordance with the provisions of the indenture in the event that no market disruption event has occurred and we are not restricted by the 2% issuance cap, the maximum share cap or the preferred stock cap will result in the limited remedies against us described above, and will not include the right of holders to accelerate payment of principal on the convertible debentures. See

S-56

"Risk Factors Risks Related to the Convertible Debentures Holders of the convertible debentures have limited rights to accelerate payment of the convertible debentures under the indenture."

Within 90 days after a default, the trustee must give to the holders of the convertible debentures notice of all uncured and unwaived defaults by us known to it. However, except in the case of default in payment, the trustee may withhold such notice if it determines that doing so is in the interest of the holders of the convertible debentures.

Holders of the convertible debentures may not themselves institute a proceeding against us on account of a covenant breach unless, among other things, the trustee fails to institute such a proceeding, subject to the terms of the indenture. However, the holders of a majority in principal amount of the convertible debentures may direct the trustee to bring such a proceeding if a covenant breach continues for a period of 90 days after delivery of the specified notice to us from the trustee or to us and the trustee from the holders of a majority in principal amount of the convertible debentures, subject to the terms of the indenture. The indenture will not require the trustee to take any action in case of a covenant breach (other than to give notice of such default to the holders of the convertible debentures under certain circumstances, as described above) unless so directed by the holders and unless, if so requested by the trustee, an indemnity reasonably satisfactory to it is granted by the holders.

If an event of default occurs in respect of any outstanding convertible debentures, the trustee or the holders of at least 25% in principal amount of the outstanding convertible debentures may declare the principal amount, and all unpaid and accrued interest and any compounded interest to be due and payable immediately by written notice thereof to us, and to the trustee if given by the holders of the convertible debentures, subject to the terms of the indenture. However, the payment of principal and interest on the convertible debentures will remain subordinated to the extent provided in the indenture. In addition, at any time after such a declaration of acceleration but before a judgment or decree for payment of the money due has been obtained, the holders of a majority in principal amount of the convertible debentures may, subject to specified conditions, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal, or interest on the convertible debentures have been cured or waived as provided in the indenture. See " Modification and Waiver." Notwithstanding the foregoing, any holder may bring an action against us for specific performance if we fail to deliver to that holder consideration due upon a conversion of convertible debentures.

SATISFACTION AND DISCHARGE

We may generally satisfy and discharge our obligations under the indenture by:

- > delivering all outstanding convertible debentures to the trustee for cancellation; or
- > depositing with the trustee or the paying agent after the convertible debentures have become due and payable at maturity, cash sufficient to pay all amounts due on all outstanding convertible debentures and paying all other sums payable under the indenture.

In addition, in the case of a deposit, there must not exist a default or event of default on the date we make the deposit, and the deposit must not result in a breach or violation of, or constitute a default under, the indenture or any other agreement or instrument to which we are a party or by which we are bound.

MODIFICATION AND WAIVER

Generally, our rights and obligations and the holders' rights may be modified with the consent of holders of a majority of the outstanding convertible debentures. No modification or amendment may

S-57

occur without the consent of each affected holder of a convertible debenture, however, if that modification or amendment would do any of the following:

- > change the maturity date of the principal of, or the date of any interest payment due upon, the convertible debentures;
- > reduce the principal amount of, or the interest on, the convertible debentures;
- > adversely affect the rights of the holders to convert the convertible debentures;
- > reduce the amount of or change the form of consideration due to holders of the convertible debentures upon their conversion thereof;
- > change the currency of payment of the convertible debentures;
- > impair the right to institute suit for the enforcement of any payment on, or conversion of, the convertible debentures or adversely affect the right of payment, if any, at the option of the holder; or
- > reduce the percentage of holders necessary to modify or amend the indenture or to waive any past default.

The indenture shall provide that we and the trustee, may make modifications without the consent of the holders of convertible debentures in order to do the following:

- > evidence the assumption by a successor entity of the obligations of the obligor under the indenture;
- >

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

convey security for the convertible debentures to the trustee;

- > add covenants, restrictions or conditions for the protection of the holders of convertible debentures;
- > provide for the issuance of convertible debentures in coupon or fully registered form;
- > cure any ambiguity or correct or supplement any defect or inconsistency in the indenture;
- > make such other provisions in regard to matters or questions arising under the indenture that shall not adversely affect the interests of any holder of convertible debentures in any material respect; provided that any amendment to conform the terms of the convertible debentures to the description contained in this prospectus supplement will not be deemed to adversely affect the interests of any holder of convertible debentures in any material respect;
- > evidence the appointment of a successor trustee or more than one trustee;
- > surrender any right or power conferred upon us;
- > comply with the requirements of the SEC in order to maintain the qualification of the indenture under the Trust Indenture Act of 1939, as amended;
- > add or modify any other provisions with respect to matters or questions arising under an indenture that we and the trustee may deem necessary or desirable and that will not in the good faith opinion of our board of directors and the trustee adversely affect the interests of convertible debentures;
- > to the extent necessary to make provision for a binding capital replacement covenant or provide for a replacement capital intention;
- > provide for the addition of our common stock as "qualifying securities" for purposes of the alternative payment mechanism and make any necessary modifications to the indenture in

S-58

connection therewith, including any related modifications to the 2% issuance cap, the maximum share cap and the definition of "market disruption event";

- > modify the definition of "qualifying preferred stock" as contemplated above under "Deferral of Interest Payments Alternative payment mechanism";
- > eliminate our right to elect to pay cash pursuant to the alternative conversion right upon a fundamental change; or
- > provide for guarantees of the convertible debentures and to specify the ranking of the obligations of the guarantors under their respective guarantees.

The holders of not less than a majority in aggregate principal amount of the convertible debentures then outstanding may, on behalf of the holders of all convertible debentures, waive any past default under the indenture except (1) a default in the payment of principal, or any interest on the convertible debentures, (2) a default arising from our failure to convert any note at the option of a holder in accordance with the indenture or (3) a default in respect of a covenant or provision of the indenture which cannot be modified or amended without the consent of each affected holder of the convertible debentures then outstanding.

REPORTS

The indenture provides for us to file with the trustee, within 15 days after we are required to file the same with the SEC, after giving effect, to the extent applicable, any extension permitted by Rule 12b-25 under the Securities Exchange Act of 1934 (the "Exchange Act"), copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may from time to time by rules and regulations prescribe) which we may be required to file with the SEC, pursuant to Section 13 or Section 15(d) of the Exchange Act; provided, however, that we will not be required to deliver to the trustee any materials for which we have sought and obtained confidential treatment from the SEC. Documents filed by us with the SEC via the EDGAR system will be deemed filed with the trustee as of the time such documents are filed via EDGAR. If we are not required to file information, documents or reports pursuant to Section 13 or Section 15(d) of the Exchange Act, we will file with the trustee and, unless the SEC will not accept such a filing, the SEC, in accordance with rules and regulations prescribed from time to time by the SEC, such periodic reports and other documents which may be required pursuant to Section 13 of the Exchange Act in respect of a security listed and registered on a national securities exchange as may be prescribed from time to time in such rules and regulations. We will also comply with Section 314(a) of the Trust Indenture Act of 1939, as amended.

GOVERNING LAW

The indenture and the convertible debentures will be governed by, and construed in accordance with, the laws of the State of New York.

BOOK-ENTRY, DELIVERY AND FORM

We will initially issue the convertible debentures in the form of one or more global notes. Except as set forth below, convertible debentures will be issued in registered, global form in minimum denominations of \$1,000 and integral multiples of \$1,000. Convertible debentures will be issued at the closing of this offering only against payment in immediately available funds. The global notes will be deposited upon issuance with the trustee as custodian for The Depository Trust Company ("DTC"), in New York, New York, and registered in the name of Cede & Co., as nominee of DTC (such nominee

S-59

being referred to herein as the "global note holder"), in each case for credit to an account of a direct or indirect participant in DTC as described below. Except as set forth below, the global notes may be transferred, in whole and not in part, only to another nominee of DTC or to a successor of DTC or its nominee. Beneficial interests in the global notes may not be exchanged for convertible debentures in certificated form except in the limited circumstances described in the accompanying prospectus. Except in the limited circumstances described below, owners of beneficial interests in the global notes will not be entitled to receive physical delivery of convertible debentures in certificated form.

The following description of the operations and procedures of DTC are provided solely as a matter of convenience. These operations and procedures are solely within the control of DTC and are subject to changes by it. We take no responsibility for these operations and procedures and urge investors to contact DTC or its participants directly to discuss these matters. DTC has advised us that DTC is a limited-purpose trust company created to hold securities for its participating organizations (collectively, the "participants") and to facilitate the clearance and settlement of transactions in those securities between participants through electronic book-entry changes in accounts of its participants. The participants include securities brokers and dealers (including the underwriters), banks, trust companies, clearing corporations and certain other organizations. Access to DTC's system is also available to other entities such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a participant, either directly or indirectly (collectively, the "indirect participants"). Persons who are not participants may beneficially own securities held by or on behalf of DTC only through the participants or the indirect participants. The ownership interests in, and transfers of ownership interests in, each security held by or on behalf of DTC are recorded on the records of the participants and indirect participants. DTC has also advised us that, pursuant to procedures established by it:

- (1) upon deposit of the global notes, DTC will credit the accounts of Participants designated by the underwriters with portions of the principal amount of the global notes; and
- (2) ownership of these interests in the global notes will be shown on, and the transfer of ownership of these interests will be effected only through, records maintained by DTC (with respect to the participants) or by the participants and the indirect participants (with respect to other owners of beneficial interest in the global notes).

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

The laws of some states require that certain persons take physical delivery in definitive form of securities that they own. Consequently, the ability to transfer beneficial interests in a global note to such persons will be limited to that extent. Because DTC can act only on behalf of participants, which in turn act on behalf of indirect participants, the ability of a person having beneficial interests in a global note to pledge such interests to persons that do not participate in the DTC system, or otherwise take actions in respect of such interests, may be affected by the lack of a physical certificate evidencing such interests.

Except as described below, owners of interests in the global notes will not have convertible debentures registered in their names, will not receive physical delivery of convertible debentures in certificated form and will not be considered the registered owners or "holders" thereof under the indenture for any purpose.

Payments in respect of the principal of, and interest on a global note registered in the name of DTC or its nominee will be payable to DTC in its capacity as the registered holder under the indenture. Under the terms of the indenture, we and the trustee will treat the persons in whose names the convertible debentures, including the global notes, are registered as the owners of the convertible debentures for

S-60

the purpose of receiving payments and for all other purposes. Consequently, neither we, the trustee nor any agent of us or the trustee has or will have any responsibility or liability for:

- (1) any aspect of DTC's records or any participant's or indirect participant's records relating to or payments made on account of beneficial ownership interests in the global notes or for maintaining, supervising or reviewing any of DTC's records or any participant's or indirect participant's records relating to the beneficial ownership interests in the global notes; or
- (2) any other matter relating to the actions and practices of DTC or any of its participants or indirect participants. DTC has advised us that its current practice, upon receipt of any payment in respect of securities such as the convertible debentures (including principal and interest), is to credit the accounts of the relevant participants with the payment on the interest payment date unless DTC has reason to believe it will not receive payment on such interest payment date. Each relevant participant is credited with an amount proportionate to its beneficial ownership of an interest in the principal amount of the relevant security as shown on the records of DTC. Payments by the participants and the indirect participants to the beneficial owners of convertible debentures will be governed by standing instructions and customary practices and will be the responsibility of the participants or the indirect participants and will not be the responsibility of DTC, the trustee or us. Neither we nor the trustee will be liable for any delay by DTC or any of its participants in identifying the beneficial owners of the convertible debentures, and we and the trustee may conclusively rely on and will be protected in relying on instructions from DTC or its nominee for all purposes.

Transfers between participants in DTC will be effected in accordance with DTC's procedures, and will be settled in same-day funds in accordance with its rules and operating procedures.

DTC has advised us that it will take any action permitted to be taken by a holder of convertible debentures only at the direction of one or more participants to whose account DTC has credited the interests in the global notes and only in respect of such portion of the aggregate principal amount of the convertible debentures as to which such participant or participants has or have given such direction. However, if there is an event of default under the convertible debentures, DTC reserves the right to exchange the global notes for legended convertible debentures in certificated form, and to distribute such convertible debentures to its participants.

Although DTC has agreed to the foregoing to facilitate transfers of interests in the global notes among participants in DTC, it is under no obligation to perform or to continue to perform such procedures, and may discontinue such procedures at any time. Neither we nor the trustee nor any of their respective agents will have any responsibility for the performance by DTC or its participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

The trustee will exchange each beneficial interest in a global note for one or more certificated securities registered in the name of the owner of the beneficial interest, as identified by DTC or any successor depositary, only if: (i) DTC or such successor depositary notifies us that it is unwilling or unable to continue as depositary for that global note or ceases to be a clearing agency registered under the Securities Exchange Act of 1934 and, in either case, we do not appoint a successor depositary within 90 days of such notice or cessation; or (ii) an event of default has occurred and is continuing and the trustee has received a request from DTC or any successor depositary to issue certificated securities.

About the trustee

U.S. Bank National Association will act as trustee with respect to the convertible debentures and will be the paying agent and registrar for the convertible debentures. We and our affiliates have entered, and from time to time may continue to enter, into banking or other relationships with or its affiliates. The trustee may resign or be removed by the holders of a majority of the convertible debentures in certain circumstances, and a successor trustee may be appointed by us to act with respect to the convertible debentures.

S-62

Description of capital stock

We have authority to issue 50,000,000 shares of common stock, par value \$0.25 per share. As of January 31, 2007, there were 33,042,322 shares of our common stock issued and outstanding.

Each holder of common stock is entitled to one vote for each share on all matters to be voted upon by the stockholders. Generally, there are cumulative voting rights where there is a public announcement that a third party holds 40% or more of our voting stock, and such third party participates in a solicitation of proxies with respect to us, becomes a participant in any election with respect to us, seeks to advise or influence any person with respect to the voting of any of our securities, or takes a shareholder action in lieu of a meeting of holders of our voting stock. Subject to preferences to which holders of any outstanding preferred stock may be entitled, holders of common stock are entitled to receive ratably those dividends, if any, that may be declared from time to time by our board of directors, as long as we are not in default with respect to any dividend due and payable on, or any sinking or purchase fund requirement relating to, any shares of preferred stock. In the event of liquidation, dissolution or winding up of us, holders of our common stock would be entitled to ratably share in our assets remaining after the payment of liabilities and the satisfaction of all amounts to which holders of any outstanding shares of preferred stock are then entitled. Holders of our common shares have no preemptive or conversion rights or other subscription rights and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, any may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

We have authority to issue 3,000,000 shares of preferred stock, par value \$0.25 per share. As of January 31, 2007, there were no shares of our preferred stock issued and outstanding. The authorized shares of preferred stock are issuable from time to time in one or more series on the terms set by the resolution or resolutions of our board of directors providing for the issuance thereof. Each series of preferred stock would have such number, dividend rate (which might or might not be cumulative), voting rights, liquidation preferences, redemption and sinking fund provisions, conversion or exchange rights or other rights and preferences, if any, as our board of directors may determine, subject to the Pennsylvania Business Corporation Law of 1988, as amended.

S-63

Description of certain indebtedness

The following are summaries of the material terms and conditions of our principal indebtedness.

Credit facilities

Our principal source of short-term liquidity is a \$200.0 million committed revolving credit facility expiring in 2011. Borrowings under the revolving credit agreement were \$52.9 million, and outstanding letters of credit were \$5.6 million, at December 31, 2006, leaving \$141.5 million undrawn and available for future use under the facility. Upon repayment of borrowings under this facility, we may again reborrow under the facility. Our revolving credit agreement also contains an uncommitted \$50.0 million "accordion" feature which allows the revolving credit facility to be temporarily expanded to \$250.0 million.

Other than our capital leases, our indebtedness is unsecured. We and all of our domestic subsidiaries, plus our United Kingdom and German holding company subsidiaries and our Danish operating subsidiary comprise the borrowers under our credit facility. Except for foreign borrowers, all borrowers are jointly and severally liable for all amounts outstanding under our revolving credit agreement. Foreign borrowers are

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

liable only for amounts borrowed by such borrowers and their respective subsidiaries, plus accrued interest.

Our revolving credit agreement contains various customary affirmative and negative covenants, including covenants related to:

- > the delivery of financial statements and other certificates;
- > the payment of our obligations;
- > the maintenance of us and our subsidiaries in existence;
- > the maintenance of insurance and our property;
- > the inspection of our property, books and records;
- > notice to the lenders;
- > environmental laws;
- > notice and joinder of new subsidiaries;
- > the use of proceeds;
- > subsequent credit terms;
- > tax-shelter regulations;
- > compliance with anti-terrorism laws;
- > maintenance of financial ratios;
- > limitations on liens;
- > limitations on fundamental changes;
- > limitations on sale of assets;
- > limitations on distributions;
- > limitations on transactions with affiliates;

- > limitations on acquisitions;
- > our and our subsidiaries' fiscal year; and
- > limitations on conduct of business.

Series A and Series B floating rate notes

On July 28, 2005, we concluded a private placement of \$75.0 million in senior floating rate notes. The total amount of the private placement was divided into two tranches, with \$50.0 million maturing on July 28, 2012 and \$25.0 million maturing on July 28, 2015. The two tranches have interest payable based on LIBOR rates, with the Series A Notes at LIBOR plus 0.8 percentage points and the Series B Notes at LIBOR plus 0.9 percentage points. The Series A and B floating rate notes are subject to an interest rate swap agreement which effectively fixes the interest rates payable on these notes at 5.32% and 5.51%, respectively.

Covenants included in the note purchase agreement for the Series A and Series B floating rate notes are similar to those in our revolving credit agreement.

Euro notes Series A and B

On February 27, 2006 we issued Euro denominated notes totaling €81.5 million. Euro note A of €20.4 million (or \$26.8 million at December 31, 2006) has a term of 7 years due February 27, 2013 with a fixed annual interest rate of 4.215% while Euro note B of €61.1 million (\$80.3 million at December 31, 2006) has a term of 10 years due February 27, 2016 at a fixed annual interest rate of 4.38%.

Covenants included in the note purchase and private shelf agreement for the Euro notes Series A and Series B are similar to those in our revolving credit agreement.

Capital leases

At December 31, 2006 we had obligations under capital leases of \$1.3 million. These obligations were primarily denominated in Euros and carried a weighted average interest rate of 5.3%. In connection with the financing of equipment purchases, as of December 31, 2006 we have capital lease obligations of \$0.1 million due in 2008 and \$0.7 million due in 2010. These lease obligations are primarily denominated in Euros.

S-65

Material United States federal income and estate tax consequences

The following is a summary of certain United States federal income and estate tax considerations of the ownership of convertible debentures and the shares of common stock into which the convertible debentures may be converted, as of the date hereof. Except where noted, this summary deals only with a convertible debenture or share of common stock held as a capital asset by a holder who purchases the convertible debentures on original issuance at their initial offering price, and does not constitute a detailed description of the U.S. federal income and estate tax considerations applicable to you if you are subject to special treatment under the U.S. federal income or estate tax laws, including if you are a dealer in securities or currencies, a financial institution, a regulated investment company, a real estate investment trust, a tax-exempt organization, an insurance company, a person holding the convertible debentures or shares of common stock as part of a hedging, integrated, conversion or constructive sale transaction or a straddle, a trader in securities that has elected the mark-to-market method of accounting for your securities, a person liable for alternative minimum tax, a person who is an investor in a pass-through entity, or a United States person whose "functional currency" is not the U.S. dollar.

This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), U.S. Treasury regulations, rulings and judicial decisions as of the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in U.S. federal income and estate tax considerations different from those summarized below. This summary does not address all aspects of U.S. federal income and estate taxes and does not deal with all tax considerations that may be relevant to holders in light of their personal circumstances.

For purposes of this discussion, a "U.S. holder" is a beneficial owner of a convertible debenture or share of common stock that is:

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

- > an individual citizen or resident of the United States;
- > a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- > an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- > a trust if it (1) is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

The term "non-U.S. holder" means a beneficial owner of a convertible debenture or share of or common stock (other than a partnership) that is not a U.S. holder.

If a partnership (including any entity treated as a partnership for U.S. federal income tax purposes) holds the convertible debentures or shares of common stock, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding the convertible debentures or shares of common stock, you should consult your own tax advisors.

If you are considering the purchase of convertible debentures, you should consult your own tax advisors concerning the particular U.S. federal income and estate tax considerations to you of the

S-66

ownership of the convertible debentures, as well as the consequences to you arising under the laws of any other taxing jurisdiction.

CLASSIFICATION OF THE CONVERTIBLE DEBENTURES

We intend to take the position that the convertible debentures will be classified as our indebtedness for all U.S. federal income tax purposes. These convertible debentures are novel financial instruments and there is no statutory, judicial or administrative authority that directly addresses the U.S. federal income tax treatment of securities similar to the convertible debentures. Thus, no assurance can be given that the IRS or a court will agree with our position. If the IRS were to successfully challenge the characterization of the convertible debentures as indebtedness, interest payments on the convertible debentures would be treated for such purposes as dividends to the extent of our current or accumulated earnings and profits. In the case of non-U.S. holders (as defined above), distributions treated as dividends would be subject to withholding of U.S. federal income tax at a 30% rate, except to the extent reduced by applicable income tax treaty. Except with respect to withholding as provided under "Non-U.S. Holders Interest payments and OID accruals" below, we agree, and by purchasing a convertible debenture you will agree to treat the convertible debentures as indebtedness for all U.S. federal income tax purposes, and the remainder of this discussion assumes such treatment.

U.S. HOLDERS

The following discussion is a summary of certain U.S. federal income tax consequences that will apply to you if you are a U.S. holder of convertible debentures.

Consequences of owning convertible debentures

Interest payments and original issue discount

Under applicable Treasury regulations, a "remote" contingency that stated interest will not be timely paid will be ignored in determining whether a debt instrument is issued with original issue discount ("OID"). The Company believes that the likelihood of its exercising its option to defer payments is remote within the meaning of the Treasury regulations. Based on the foregoing, while the issue is not free from doubt, the Company will not treat the convertible debentures as issued with OID at the time of their original issuance. Accordingly, the Company intends to treat interest on the convertible debentures as "qualified stated interest" that is taxable to a U.S. Holder as ordinary interest income at the time it

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

accrues or is received, in accordance with such U.S. Holder's method of tax accounting.

Under the applicable Treasury regulations, if the option to defer any payment of interest was determined not to be "remote," or if we exercised such option, the convertible debentures would be treated as issued with OID at the time of issuance or at the time of such exercise, as the case may be. Then, all stated interest on the convertible debentures would thereafter be treated as OID as long as the convertible debentures remained outstanding. In such event, all of a U.S. Holder's taxable interest income relating to the convertible debentures would constitute OID that would have to be included in income on an economic accrual basis before the receipt of the cash attributable to the interest, regardless of such U.S. Holder's method of tax accounting, and actual distributions of stated interest would not be reported as taxable income. Consequently, a U.S. Holder of convertible debentures would be required to include in gross income OID even though we would not make any actual cash payments during a deferral period. The following discussion generally assumes that the Company's treatment of the convertible debentures as not initially bearing OID is correct.

S-67

Under the OID rules, if the convertible debentures are to be treated as issued with OID for federal income tax purposes, we believe the following would occur:

- > regardless of your method of accounting, you would accrue an amount of interest income each year that approximates the stated interest payments called for under the terms of the convertible debentures (including any interest that accrues with respect to deferred interest payments) using the constant-yield-to-maturity method of accrual described in section 1272 of the Code and applicable U.S. Treasury regulations;
- > the actual cash payments of interest you receive on the convertible debentures would not be reported separately as taxable income;
- > any accrual of OID included in your gross income (whether or not during a deferral period) with respect to the convertible debentures will increase your tax basis in the convertible debentures; and
- > the amount of cash payments that you receive in respect of such accrued OID will reduce your tax basis in such convertible debentures.

If we elect to defer interest payments on the convertible debentures, you will recognize taxable income with respect to the accrual of OID on the convertible debentures in advance of the receipt of the cash related to such deferred interest (and you may never receive such deferred interest). As noted above, any OID included in your gross income will increase your basis in your convertible debentures. You are urged to consult with your own tax advisors with respect to the potential timing of OID income with respect to the convertible debentures.

Sale, exchange, redemption, or other disposition of convertible debentures

Except as provided below under "Conversion of convertible debentures" you will generally recognize gain or loss upon the sale, exchange, redemption or other disposition of a convertible debenture equal to the difference between the amount realized (less accrued interest treated as qualified stated interest which will be taxable as interest income) upon the sale, exchange, redemption or other disposition and your adjusted tax basis in the convertible debenture. Your tax basis in a convertible debenture will generally be equal to the amount you paid for the convertible debenture, increased by the amount of any OID accrued with respect to the convertible debenture and reduced by any cash payments, other than payments of qualified stated interest, received with respect to the convertible debentures. Any gain or loss recognized on a taxable disposition of the convertible debenture will be capital gain or loss. If you are an individual and have held the convertible debenture for more than one year, such capital gain will be subject to reduced rates of taxation. Your ability to deduct capital losses may be limited.

Conversion of convertible debentures

If you convert your convertible debentures into common stock, you generally will not recognize any gain or loss (except with respect to any cash paid in lieu of fractional common shares and with respect to amounts attributable to accrued interest treated as qualified stated interest which would be taxable as interest income). Generally, your basis in the common stock received upon such conversion of convertible debentures will equal the basis of the converted convertible debentures (plus any income attributable to accrued interest) and the holding period of such common stock will include the holding period of the convertible debentures, except that the holding period of any common stock received with respect to accrued interest treated as qualified stated interest will commence on the day after the date of receipt.

Cash received in lieu of a fractional share of common stock will be treated as received in redemption of such fractional share and gain or loss will be recognized by a holder in an amount equal to the difference between the cash received and the portion of the basis of the convertible debentures allocable to such fractional interest. Such gain or loss will generally be capital gain or loss and will be long-term capital gain or loss if the holding period for such convertible debentures was greater than one year as of the date of the conversion.

Constructive distributions

The conversion rate of the convertible debentures will be adjusted in certain circumstances. Under Section 305(c) of the Code, adjustments (or failures to make adjustments) that have the effect of increasing your proportionate interest in our assets or earnings may in some circumstances result in a deemed distribution to you. Adjustments to the conversion rate made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing the dilution of the interest of the holders of the convertible debentures, however, will generally not be considered to result in a deemed distribution to you. Certain of the possible conversion rate adjustments provided in the convertible debentures (including, without limitation, in respect of Fundamental Changes as discussed in "Description of the convertible debentures") may not qualify as being pursuant to a bona fide reasonable adjustment formula. In addition, adjustments in respect of taxable dividends to holders of our common stock will generally result in a deemed distribution to you. If such adjustments are made, the U.S. holders of convertible debentures will be deemed to have received a distribution even though they have not received any cash or property as a result of such adjustments.

Any deemed distributions will be taxable as a dividend, to the extent deemed paid out of our earnings and profits, and any excess will be treated as a return of capital, or capital gain as described under "Consequences of owning common stock Dividends." It is not clear whether a constructive dividend deemed paid to you would be eligible for the preferential rates of U.S. federal income tax. It is also unclear whether corporate holders would be entitled to claim the dividends received deduction with respect to any such constructive dividends.

Consequences of owning common stock

Dividends

Dividends on the common stock will be dividends for U.S. federal income tax purposes to the extent paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes, and to such extent will be taxable as ordinary income. It is unclear whether our current and accumulated earnings and profits will be such that all dividends paid with respect to the common stock will qualify as dividends for U.S. federal income tax purposes. Our accumulated earnings and profits and our current earnings and profits in future years will depend in significant part on our future profits or losses, which we cannot accurately predict. To the extent that the amount of any dividend paid on common stock exceeds our current and accumulated earnings and profits attributable to that share of stock, the dividend will be treated first as a return of capital and will be applied against and reduce your adjusted tax basis (but not below zero) in that share of stock. This reduction in basis would increase any gain, or reduce any loss realized by you on the subsequent sale, redemption or other disposition of your common stock. The amount of any such dividend in excess of your adjusted tax basis will then be taxed as capital gain. For purposes of the remainder of this discussion, it is assumed that dividends paid on the common stock will constitute dividends for U.S. federal income tax purposes. If you are a corporation, dividends that are received by you may be eligible for a 70% dividends-received deduction under the Code. However, the Code disallows this dividends-received deduction in its entirety if the stock with respect to which the dividend is paid is

S-69

held by you for less than 46 days during the 91-day period beginning on the date which is 45 days before the date on which the stock becomes ex-dividend with respect to such dividend. (A 91-day minimum holding period applies to certain dividend arrearages.)

Under current law, if you are an individual, dividends received by you generally will be subject to a reduced maximum tax rate of 15% through December 31, 2010, after which the rate applicable to dividends is scheduled to return to the tax rate generally applicable to ordinary income. The rate reduction will not apply to dividends received to the extent that you elect to treat the dividends as "investment income," which may be offset by investment expense. Furthermore, the rate reduction will also not apply to dividends that are paid to you with respect to common stock that is held by you for less than 61 days during the 121-day period beginning on the date which is 60 days before the date on which the common stock becomes ex-dividend with respect to such dividend. (A 91-day minimum holding period applies to certain dividend arrearages.)

In general, for purposes of meeting the holding period requirements for both the dividends-received deduction and the reduced maximum tax rate on dividends described above, you may not count towards your holding period any period in which you (a) have the option to sell, are under

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

a contractual obligation to sell, or have made (and not closed) a short sale of the common stock, as the case may be, or substantially identical stock or securities, (b) are the grantor of an option to buy the common stock or substantially identical stock or securities or (c) otherwise have diminished your risk of loss by holding one or more other positions with respect to substantially similar or related property. The U.S. Treasury regulations provide that a taxpayer has diminished its risk of loss on stock by holding a position in substantially similar or related property if the taxpayer is the beneficiary of a guarantee, surety agreement, or similar arrangement that provides for payments that will substantially offset decreases in the fair market value of the stock. In addition, the Code disallows the dividends-received deduction as well as the reduced maximum tax rate on dividends if the recipient of a dividend is obligated to make related payments with respect to positions in substantially similar or related property. This disallowance applies even if the minimum holding period has been met. You are advised to consult your own tax advisor regarding the implications of these rules in light of your particular circumstances.

You should consider the effect of section 246A of the Code, which reduces the dividends-received deduction allowed with respect to "debt-financed portfolio stock." The Code also imposes a 20% alternative minimum tax on corporations. In some circumstances, the portion of dividends subject to the dividends-received deduction will serve to increase a corporation's minimum tax base for purposes of the determination of the alternative minimum tax. In addition, under section 1059 of the Code, a corporate shareholder may be required to reduce its basis in stock with respect to certain "extraordinary dividends."

You should consult your own tax adviser in determining the application of the rules described in the previous paragraphs in light of your particular circumstances.

Sale, exchange, redemption or other disposition of common stock

A sale, exchange, redemption or other disposition (including upon a remarketing) of the common stock will generally result in gain or loss equal to the difference between the amount realized upon the disposition and your adjusted tax basis in such shares. Such gain or loss will be capital gain or loss and will be long-term capital gain or loss if your holding period for such shares exceeds one year. If you are an individual, such capital gain will be subject to reduced rates of taxation. The deduction of capital losses is subject to limitations.

S-70

Information reporting and backup withholding

Information reporting requirements generally will apply to interest (including any OID) on the convertible debentures and dividends on shares of common stock and to the proceeds of a sale of a convertible debenture or share of common stock paid to you unless you are an exempt recipient such as a corporation. Backup withholding will apply to those payments if you fail to provide your taxpayer identification number, or certification of exempt status, or if you fail to report in full interest and dividend income.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against your U.S. federal income tax liability, if any, provided the required information is furnished to the IRS in a timely manner.

NON-U.S. HOLDERS

The following is a summary of the U.S. federal tax consequences that will apply to you if you are a non-U.S. holder of convertible debentures or shares of common stock. Special rules may apply to certain non-U.S. holders such as "controlled foreign corporations," "passive foreign investment companies" and U.S. expatriates. Such entities should consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them.

Interest payments and OID accruals

We intend to take the position that the convertible debentures are indebtedness for U.S. federal income tax purposes, and, therefore, that interest income (including OID accruals) on the convertible debentures may qualify for the "portfolio interest exemption" discussed below. Brokers and financial institutions acting as withholding agents might, however, decide to withhold a 30% tax (or lower applicable income tax treaty rate) on interest payments on the convertible debentures as if the interest payments were distributions with respect to our stock. If, contrary to our position, the convertible debentures were recharacterized as equity, payments on the convertible debentures would generally be subject to this 30% withholding tax (or lower applicable income tax treaty rate). Assuming the IRS does not challenge the treatment of the convertible debentures as indebtedness, non-U.S. holders should be able to claim a refund for any such withholding provided the payments to you of interest on a convertible debenture fall within the "portfolio interest exemption." To meet the portfolio interest exemption, the following must apply:

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

- > interest paid on the convertible debenture is not effectively connected with your conduct of a trade or business in the United States,
- > you do not own (actually or constructively) 10% or more of the total combined voting power of all classes of our voting stock within the meaning of the Code and applicable U.S. Treasury regulations;
- > you are not a controlled foreign corporation that is related to us through stock ownership;
- > you are not a bank whose receipt of interest on a convertible debenture is described in section 881(c)(3)(A) of the Code; and
- > either (a) you provide your name and address on an IRS Form W-8BEN (or other applicable form), and certify, under penalties of perjury, that you are not a United States person or (b) you hold your convertible debentures through certain foreign intermediaries and satisfy the certification requirements of applicable U.S. Treasury regulations.

S-71

Non-U.S. holders should consult their tax advisors regarding the U.S. federal income tax consequences of an investment in the convertible debentures.

Special rules apply to non-U.S. holders that are pass-through entities rather than corporations or individuals.

If you are engaged in a trade or business in the United States and interest on the convertible debentures is effectively connected with the conduct of that trade or business (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment), then you will be subject to U.S. federal income tax on that interest on a net income basis (although you will be exempt from the 30% U.S. federal withholding tax, provided you provide a completed IRS Form W-8ECI stating that interest is effectively connected with your conduct of a trade or business in the United States) in the same manner as if you were a United States person as defined under the Code. In addition, if you are a foreign corporation, you may be subject to a branch profits tax equal to 30% (or lower applicable income tax treaty rate) of earnings and profits for the taxable year, subject to adjustments, that are effectively connected with your conduct of a trade or business in the United States.

Dividends and constructive dividends

Any dividends paid to you with respect to the shares of common stock (and any deemed dividends, see "U.S. Holders Constructive Distributions" above) will be subject to U.S. federal withholding tax at a 30% rate (or lower applicable income tax treaty rate). In the case of any constructive dividend, it is possible that this tax would be withheld from any amount owed to you, including, but not limited to, interest payments on the convertible debentures, dividend payments on shares of your common stock or sales proceeds subsequently paid or credited to you. Dividends that are effectively connected with the conduct of a trade or business within the United States and, where a tax treaty applies, are attributable to a U.S. permanent establishment, generally are not subject to the U.S. federal withholding tax, but instead are subject to U.S. federal income tax on a net income basis at applicable graduated individual or corporate rates. Certain certification requirements and disclosure requirements must be complied with in order for effectively connected income to be exempt from withholding. Any such effectively connected income received by a foreign corporation may, under certain circumstances, be subject to an additional branch profits tax at a 30% rate (or lower applicable income tax treaty rate).

To the extent that shares received upon the conversion of the convertible debentures by you are subject to U.S. federal withholding tax and are not sufficient to comply with the withholding agent's U.S. federal withholding obligations, the withholding agent may recoup or set-off such liability against any amounts owed to you, including, but not limited to, any actual cash dividends or distributions subsequently made with respect to such common stock, with respect to the applicable U.S. federal withholding tax that the withholding agent is required to pay on your behalf.

A non-U.S. holder of shares of common stock who wishes to claim the benefit of an applicable treaty rate is required to satisfy applicable certification and other requirements. If you are eligible for a reduced rate of U.S. federal withholding tax pursuant to an applicable income tax treaty, you may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS.

S-72

Sale, exchange, redemption, conversion or other disposition of convertible debentures or shares of stock

You will recognize gain, if any, on the sale, exchange, redemption or other taxable disposition of a convertible debenture or share of common stock, as well as upon the conversion of a convertible debentures into a combination of cash and common stock or a combination of common stock to the extent generally provided under "U.S. Holders." Nevertheless, any such gain generally will not be subject to U.S. federal income tax unless:

- > that gain is effectively connected with your conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment);
- > you are an individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met; or
- > you are a more than 5% holder with respect to "United States real property holding corporations."

If you are an individual described in the first bullet point above, you will be subject to tax on the net gain derived from the sale, exchange, redemption, conversion or other taxable disposition under regular graduated U.S. federal income tax rates. If you are an individual described in the second bullet point above, you will be subject to a flat 30% tax on the gain derived from the sale, exchange, redemption, conversion or other taxable disposition, which may be offset by U.S. source capital losses, even though you are not considered a resident of the U.S. If you are a foreign corporation that falls under the first bullet point above, you will be subject to tax on your net gain in the same manner as if you were a United States person as defined under the Code and, in addition, you may be subject to the branch profits tax equal to 30% of your effectively connected earnings and profits or at such lower rate as may be specified by an applicable income tax treaty. With respect to the last bullet point above, we believe that we are not currently, and that it is unlikely that we will become, a "United States real property holding corporation."

Any stock which you receive on the sale, exchange, redemption, conversion or other disposition of a convertible debenture which is attributable to accrued interest will be subject to U.S. federal income tax in accordance with the rules for taxation of interest described above under "Payments of Interest."

United States federal estate tax

Your estate generally will not be subject to U.S. federal estate tax on convertible debentures beneficially owned by you at the time of your death, provided that any payment to you on the convertible debentures would be eligible for exemption from the 30% U.S. federal withholding tax under the "portfolio interest rule" described above under "Payments of Interest" without regard to the statement requirement described in the last bullet point. However, if the convertible debentures are recharacterized as equity for U.S. federal tax purposes, the convertible debentures will be included in your gross estate for U.S. federal estate tax purposes unless an applicable estate tax treaty provides otherwise. In addition, shares of common stock held by you at the time of your death will be included in your gross estate for U.S. federal estate tax purposes unless an applicable estate tax treaty provides otherwise.

Information reporting and backup withholding

Generally, the payor must report to the IRS and to you the amount of interest (including any OID) and dividends paid (or deemed to be paid) to you and the amount of tax, if any, withheld with respect to those payments. Copies of the information returns reporting such interest payments and any

S-73

withholding may also be made available to the tax authorities in the country in which you reside under the provisions of an applicable income tax treaty.

In general, you will not be subject to backup withholding with respect to payments of interest (including any OID) or dividends that the payor makes to you provided that the payor does not have actual knowledge or reason to know that you are a United States person, as defined under the Code, and the payor has received from you the statement described above in the last bullet point under "Payments of Interest."

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

In addition, no information reporting or backup withholding will be required regarding the proceeds of the sale of a convertible debenture or share of common stock made within the United States or conducted through certain U.S.-related financial intermediaries, if the payor receives the statement described above and does not have actual knowledge or reason to know that you are a United States person, as defined under the Code, or you otherwise establish an exemption.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against your U.S. federal income tax liability, if any, provided the required information is furnished to the IRS in a timely manner.

S-74

Underwriting

We are offering the convertible debentures described in this prospectus supplement through the underwriters, UBS Securities LLC, Banc of America Securities LLC and Wachovia Capital Markets, LLC. We have entered into an underwriting agreement with the underwriters. UBS Securities LLC is the sole book-running manager of this offering. Subject to the terms and conditions of the underwriting agreement, each of the underwriters has severally agreed to purchase the principal amount of convertible debentures listed next to its name in the following table:

Underwriters	Principal amount of convertible debentures
UBS Securities LLC	
Banc of America Securities LLC	
Wachovia Capital Markets, LLC	
Total	\$ 150,000,000

The underwriting agreement provides that the underwriters must buy all of the convertible debentures if they buy any of them. However, the underwriters are not required to take or pay for the convertible debentures covered by the underwriter's over-allotment option described below.

The convertible debentures are offered subject to a number of conditions, including:

- > receipt and acceptance of the convertible debentures by the underwriters; and
- > the underwriters' right to reject orders in whole or in part.

In connection with this offering, the underwriters or certain securities dealers may distribute prospectuses electronically.

OVER-ALLOTMENT OPTION

We have granted the underwriters an option to buy up to \$22,500,000 principal amount of additional convertible debentures. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with this offering. The underwriters have 30 days from the date of this prospectus supplement to exercise this option.

COMMISSIONS AND DISCOUNTS

Convertible debentures sold by the underwriters to the public will initially be offered at the offering price set forth on the cover of this prospectus supplement. Any convertible debentures sold by the underwriters to securities dealers may be sold at a discount of up to % of the principal amount of the debentures. Any of these securities dealers may resell any convertible debentures purchased from the underwriters to

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

other brokers or dealers at a discount of up to _____ % of the principal amount of the debentures. If all the convertible debentures are not sold at the public offering price, the underwriters may change the offering price and the other selling terms. Sales of convertible debentures made outside of the United States may be made by affiliates of the underwriters.

The following table shows the per convertible debenture (expressed as a percentage of the principal amount of convertible debentures) and total underwriting discounts and commissions we will pay to

S-75

the underwriters, assuming both no exercise and full exercise of the underwriters' option to purchase up to \$22,500,000 principal amount of additional convertible debentures:

	No exercise	Full exercise
Per convertible debenture	%	%
Total	\$	\$

We estimate that the total expenses of this offering payable by us, not including the underwriting discounts and commissions, will be approximately \$700,000.

NO SALES OF SIMILAR SECURITIES

We and our executive officers and directors have entered into lock-up agreements with the underwriters. Under these agreements, we and each of these persons may not, without the prior written approval of UBS Securities LLC, subject to limited exceptions, offer, sell, contract or agree to sell or otherwise dispose of or agree to dispose of, directly or indirectly, or file a registration statement with the SEC in respect of, or hedge our common stock, any of our debt securities or any of our other securities that are substantially similar to our common stock or the convertible debentures, or any securities that are convertible into or exchangeable or exercisable for, or any warrants or other rights to purchase, these securities. These restrictions will be in effect for a period of 90 days after the date of this prospectus supplement. At any time and without public notice, UBS Securities LLC may in its sole discretion release all or some of the securities from these lock-up agreements.

If:

- > during the period that begins on the date that is 15 calendar days plus 3 business days before the last day of the 90-day lock-up period and ends on the last day of the 90-day lock-up period,
 - we issue an earnings release; or
 - material news or a material event relating to us occurs; or
- > prior to the expiration of the 90-day lock-up period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 90-day lock-up period,

then the restrictions imposed by the lock-up agreement shall continue to apply until the expiration of the date that is 15 calendar days plus 3 business days after the date on which the issuance of the earnings release or the material news or material event occurs.

INDEMNIFICATION AND CONTRIBUTION

We have agreed to indemnify the underwriters and their controlling persons and certain affiliates against certain liabilities, including liabilities under the Securities Act. If we are unable to provide this indemnification, we will contribute to payments the underwriters and these controlling

persons and affiliates may be required to make in respect of those liabilities.

LISTING AND TRADING

The convertible debentures offered by this prospectus supplement are a new issue of securities with no established trading market. We do not intend to apply for listing of the convertible debentures on a national securities exchange. We have been advised by the underwriters that they intend to make a market in the convertible debentures, but the underwriters are not obligated to do so and may discontinue market-making at any time without notice. We can provide no assurances as to the

S-76

development or liquidity of any trading market for the convertible debentures. If an active public trading market for the convertible debentures does not develop, the market price and liquidity of the convertible debentures may be adversely affected. Our common stock is listed on the New York Stock Exchange under the ticker symbol "WST."

PRICE STABILIZATION AND SHORT POSITIONS

In connection with this offering, the underwriters may engage in activities that stabilize, maintain or otherwise affect the price of the convertible debentures or our common stock, including:

- > stabilizing transactions;
- > short sales;
- > purchases to cover positions created by short sales;
- > imposition of penalty bids; and
- > covering transactions.

Stabilizing transactions consist of bids or purchases made for the purpose of preventing or retarding a decline in the market price of the convertible debentures or our common stock while this offering is in progress. These transactions may also include making short sales of the convertible debentures, which involve the sale by the underwriters of a greater amount of convertible debentures than it is required to purchase in this offering. Short sales may be "covered short sales," which are short positions in an amount not greater than the underwriters' over-allotment option referred to above, or may be "naked short sales," which are short positions in excess of that amount.

The underwriters may close out any covered short position either by exercising their over-allotment option, in whole or in part, or by purchasing convertible debentures in the open market. In making this determination, the underwriters will consider, among other things, the price of convertible debentures available for purchase in the open market compared to the price at which it may purchase convertible debentures through the over-allotment option. The underwriters must close out any naked short position by purchasing convertible debentures in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of convertible debentures in the open market that could adversely affect investors who purchased in this offering.

As a result of these activities, the price of the convertible debentures or our common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. The underwriters may carry out these transactions in the over-the-counter market or otherwise.

AFFILIATIONS

The underwriters and their affiliates have provided and may provide certain commercial banking, financial advisory and investment banking services for us for which they receive fees. Certain of the underwriters or their affiliates are lenders under our revolving credit facility.

The underwriters and their affiliates may from time to time in the future engage in transactions with us and perform services for us in the ordinary course of their business.

S-77

Legal matters

The validity of the securities offered by this prospectus supplement will be passed upon for us by Dechert LLP, Philadelphia, Pennsylvania. Dewey Ballantine LLP, New York, New York is counsel for the underwriters in connection with this offering.

Experts

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to our Annual Report on Form 10-K for the year ended December 31, 2006, have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Where you can find more information

We file annual, quarterly and current reports and other information with the Securities and Exchange Commission, or SEC. You may access and read our SEC filings, through the SEC's Internet site at www.sec.gov. This site contains reports and other information that we file electronically with the SEC. You may also read and copy any document we file at the SEC's public reference room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. In addition, reports, proxy statements and other information concerning us may be inspected at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005.

We have filed with the SEC a registration statement under the Securities Act with respect to the securities offered by this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus, which constitutes part of the registration statement, do not contain all of the information presented in the registration statement and its exhibits and schedules. Our descriptions in this prospectus supplement and the accompanying prospectus of the provisions of documents filed as exhibits to the registration statement or otherwise filed with the SEC are only summaries of the terms of those documents that we consider material. If you want a complete description of the content of the documents, you should obtain the documents yourself by following the procedures described above.

S-78

PROSPECTUS

WEST PHARMACEUTICAL SERVICES, INC.

Debt Securities
Preferred Stock
Common Stock
Warrants
Units

The following are types of securities that we may offer, issue and sell from time to time, together or separately:

debt securities, which may be senior debt securities or subordinated debt securities;

shares of our preferred stock;

shares of our common stock;

warrants to purchase debt or equity securities; and

units.

The specific terms of any securities to be offered will be described in supplements to this prospectus. The prospectus supplements may also add, update, or change information contained in this prospectus. This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement. You should read this prospectus and the applicable prospectus supplement carefully before you make your investment decision.

We may offer and sell these securities through one or more underwriters, dealers and agents, through underwriting syndicates managed or co-managed by one or more underwriters, or directly to purchasers, on a continuous or delayed basis.

To the extent that any selling securityholder resells any securities, the selling securityholder may be required to provide you with this prospectus and a prospectus supplement identifying and containing specific information about the selling securityholder and the terms of the securities being offered.

The prospectus supplement for each offering of securities will describe in detail the plan of distribution for that offering. Our common stock is quoted on the New York Stock Exchange under the trading symbol "WST." Each prospectus supplement will indicate if the securities offered thereby will be listed on any securities exchange.

See "**Risk factors**" beginning on page i in this prospectus as well as in all supplements to this prospectus, as well as any risk factors contained in documents incorporated by reference in this prospectus, for a discussion of certain risks that you should consider before buying any securities hereunder.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is March 8, 2007.

TABLE OF CONTENTS

	<u>Page</u>
RISK FACTORS	i
ABOUT THIS PROSPECTUS	i
WHERE YOU CAN FIND MORE INFORMATION	1
INCORPORATION BY REFERENCE	1
RATIO OF EARNINGS TO FIXED CHARGES	2
USE OF PROCEEDS	2
DESCRIPTION OF SECURITIES	2
LEGAL MATTERS	2
EXPERTS	2

Risk factors

Prior to making any investment decision with respect to the securities that we may offer, prospective investors should carefully consider the specific factors set forth under the caption "Risk Factors" in the applicable prospectus supplement and in our periodic and other reports filed with the Securities and Exchange Commission (the "SEC") that are incorporated by reference herein, together with all of the other information appearing in this prospectus, in the applicable prospectus supplement or incorporated by reference into this prospectus in light of their particular investment objectives and financial circumstances.

About this prospectus

This prospectus is part of a registration statement that we filed with the SEC utilizing the "shelf" registration process. Each time we offer securities, we will provide a prospectus supplement that will contain specific information about the terms of the securities we may offer. The prospectus supplement may also add, update or change information contained in this prospectus. The securities may be sold for U.S. dollars, foreign-denominated currency or currency units. Amounts payable with respect to any securities may be payable in U.S. dollars or foreign-denominated currency or currency units as specified in the prospectus supplement. The prospectus supplement will also contain, with respect to the securities being sold, the names of any underwriters, dealers or agents, together with the terms of the offering, the compensation of any underwriters and the net proceeds to us. Any underwriters, dealers or agents participating in such offering may be deemed "underwriters" within the meaning of the Securities Act of 1933, as amended, which we refer to in this prospectus as the "Securities Act." You should carefully read both this prospectus and any prospectus supplement together with additional information described under the heading "Where You Can Find More Information."

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. You should not assume that the information contained or incorporated by reference in this prospectus is accurate as of any date other than the date of this prospectus. We are not making an offer of these securities in any state or jurisdiction where the offer is not permitted.

In this prospectus we use the terms "we," "us," and "our" and similar words to refer to West Pharmaceutical Services, Inc., a Pennsylvania corporation, and its consolidated subsidiaries, unless the context otherwise requires. References to "securities" include any security that we might offer under this prospectus or any prospectus supplement. References to "\$" and "dollars" are to United States dollars.

i

Where you can find more information

We are required to file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any documents filed by us at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our filings with the SEC are also available to the public through the SEC's Internet site at <http://www.sec.gov> and through the New York Stock Exchange, 20 Broad Street, New York, New York 10005, on which our common stock is listed.

We have filed with the SEC a registration statement on Form S-3 relating to the securities covered by this prospectus. This prospectus is a part of the registration statement and does not contain all the information in the registration statement. Whenever a reference is made in this prospectus to a contract or other document of ours, the reference is only a summary and you should refer to the exhibits that are a part of the registration statement for a copy of the contract or other document. You may review a copy of the registration statement at the SEC's public reference room in Washington, D.C., as well as through the SEC's Internet site.

Incorporation by reference

The SEC's rules allow us to incorporate by reference information into this prospectus. This means that we can disclose important information to you by referring you to another document. Any information referred to in this way is considered part of this prospectus from the date we file that document. Any reports filed by us with the SEC after the date of this prospectus and before the date that the offering of the securities by means of this prospectus is terminated will automatically update and, where applicable, supersede any information contained in this prospectus or incorporated by reference in this prospectus.

We incorporate by reference into this prospectus the following documents or information filed with the SEC (other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules):

Edgar Filing: WEST PHARMACEUTICAL SERVICES INC - Form 424B3

- (1) Annual Report on Form 10-K for the fiscal year ended December 31, 2006, filed with the SEC on March 1, 2007;
- (2) Current Reports on Form 8-K filed on January 11, 2007, January 30, 2007, February 20, 2007 and March 7, 2007 (in each case, excluding the portions deemed "furnished" and not "filed" with the SEC);
- (3) Description of our common stock set forth in our Registration Statement on Form 8-A filed with the SEC on October 17, 1980; and
- (4) All documents filed by us under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 on or after the date of this prospectus and before the termination of this offering.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon his or her written or oral request, a copy of any or all documents referred to above which have been or may be incorporated by reference into this prospectus excluding exhibits to those documents unless they are specifically incorporated by reference into those documents. You can request those documents from the Corporate Secretary, West Pharmaceutical Services, Inc., 101 Gordon Drive, Lionville, Pennsylvania 19341, (610) 594-2900.

1

Ratio of earnings to fixed charges

Our consolidated ratios of earnings to fixed charges for each of the five fiscal years ended December 31, 2002, 2003, 2004, 2005 and 2006 are as follows:

	Year Ended December 31,				
	2002	2003	2004	2005	2006
Ratio of Earnings to Fixed Charges ⁽¹⁾	3.4x	6.1x	4.5x	4.4x	5.9x

- (1) For purposes of the ratio of earnings to fixed charges, "earnings" represent pre-tax earnings plus fixed charges, and "fixed charges" represent interest expense plus that portion of rent expense that, in our opinion, approximates the interest factor included in rent expense. The 2003 ratio includes a \$17.3 million insurance gain. If that gain were excluded, the 2003 ratio would be 4.8.

As of the date of this prospectus, we have no preferred stock outstanding.

Use of proceeds

We intend to use the net proceeds from the sales of the securities as set forth in the applicable prospectus supplement.

Unless otherwise set forth in a prospectus supplement, we will not receive any proceeds in the event that the securities are sold by a selling securityholder.

Description of securities

We will set forth in the applicable prospectus supplement a description of the debt securities, preferred stock, common stock, warrants or units that may be offered under this prospectus.

Legal matters

In connection with particular offerings of the securities in the future, and unless otherwise stated in the applicable prospectus supplements, the validity of those securities may be passed upon for us by Dechert LLP, Philadelphia, Pennsylvania and for any underwriters or agents by counsel named in the applicable prospectus supplement.

Experts

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to our Annual Report on Form 10-K for the year ended December 31, 2006, have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

2

QuickLinks

TABLE OF CONTENTS

Forward-looking statements

Incorporation of certain information by reference

Summary

OUR BUSINESS

OUR STRATEGY

CORPORATE INFORMATION

The offering

Summary historical condensed financial data

Risk factors

RISKS RELATED TO OUR BUSINESS

RISKS RELATED TO THE DEBENTURES

Use of proceeds

Price range of common stock and dividend policy

Capitalization

Management

Description of the convertible debentures

GENERAL

INTEREST

SUBORDINATION

CONVERSION RIGHTS

AUTOMATIC CONVERSION

DEFERRAL OF INTEREST PAYMENTS

MERGER AND CONSOLIDATION

EVENTS OF DEFAULT

SATISFACTION AND DISCHARGE

MODIFICATION AND WAIVER

REPORTS

GOVERNING LAW

BOOK-ENTRY, DELIVERY AND FORM

Description of capital stock

Description of certain indebtedness

Material United States federal income and estate tax consequences

CLASSIFICATION OF THE CONVERTIBLE DEBENTURES

U.S. HOLDERS

NON-U.S. HOLDERS

Underwriting

OVER-ALLOTMENT OPTION

COMMISSIONS AND DISCOUNTS

NO SALES OF SIMILAR SECURITIES

INDEMNIFICATION AND CONTRIBUTION

LISTING AND TRADING

PRICE STABILIZATION AND SHORT POSITIONS

AFFILIATIONS

Legal matters

Experts

Where you can find more information

TABLE OF CONTENTS

Risk factors

About this prospectus

Where you can find more information

Incorporation by reference

Ratio of earnings to fixed charges

Use of proceeds

Description of securities

Legal matters

Experts