

EDWARDS LIFESCIENCES CORP
Form 424B3
May 25, 2005

Prospectus Supplement No. 1
(To Prospectus dated April 1, 2004)

Filed Pursuant to Rule 424(b)(3)
File No. 333-107405

\$150,000,000
Edwards Lifesciences Corporation
3.875% Convertible Senior Debentures due 2033 and the Common Stock
Issuable Upon Conversion of the Debentures

We issued \$150,000,000 principal amount of our 3.875% Convertible Senior Debentures due 2033 in a private offering in May 2003. This prospectus supplement relates to the resale by the selling securityholder listed below of the debentures and the common stock issuable upon conversion of the debentures.

You should read this prospectus supplement together with the prospectus dated April 1, 2004, which is to be delivered with this prospectus supplement and the documents incorporated and deemed to be incorporated by reference in the prospectus dated April 1, 2004.

The table below sets forth additional and updated information concerning beneficial ownership of the debentures and the common stock issuable upon conversion of the debentures and supplements and amends the table appearing under "Selling securityholders" beginning on page 58 of the prospectus. To the extent that a selling securityholder is listed both in the table below and in the table appearing in the prospectus or in any prior prospectus supplement, the information set forth below regarding that selling securityholder supersedes the information in the prospectus and such prospectus supplement. We have prepared this table based on information given to us by the selling securityholders listed below prior to the date hereof.

| Name of Selling Securityholder(1) | Principal Amount of Debentures Beneficially Owned Prior to this Offering | Principal Amount of Debentures Offered Hereby | Number of Shares of Common Stock Beneficially Owned Prior to this Offering(2) | Number of Shares of Common Stock Offered Hereby(2) |
|-----------------------------------|--|---|---|--|
| S.A.C. Arbitrage Fund, LLC(3) | \$715,000 | \$715,000 | 99,101 | 13,081 |

- (1) Information concerning this selling securityholder may change from time to time. Any such changed information will be set forth in amendments or supplements to the prospectus, if and when required.
- (2) Unless otherwise indicated, includes all shares of common stock issuable upon conversion of the debentures and assumes a conversion price of \$54.66 per share and a cash payment in lieu of any fractional share. However, this conversion price will be subject to adjustment as described in the prospectus under the caption "Description of the debentures Conversion rights." As a result, the number of shares of common stock beneficially owned prior to this offering and the number of shares of common stock offered hereby may increase or decrease in the future. Also assumes that the debentures are convertible immediately. As described in the prospectus under the caption "Description of the debentures Conversion rights," the debentures are convertible only in specified circumstances.
- (3) Pursuant to investment agreements, each of S.A.C. Capital Advisors, LLC, a Delaware limited liability company ("SAC Capital Advisors"), and S.A.C. Capital Management, LLC, a Delaware limited liability company ("SAC Capital Management") share all investment and voting power with respect to the securities listed above as beneficially owned or offered by SAC Arbitrage Fund, LLC. Mr. Steven A. Cohen controls both SAC Capital Advisors and SAC Capital Management. Each of SAC Capital Advisors, SAC Capital Management and Mr. Cohen disclaim beneficial ownership of any of the securities listed above. S.A.C. Capital Associates, LLC is no longer a holder of the debentures.
- (4) This securityholder has advised us that it is an affiliate of a broker-dealer and that it purchased the securities reflected in this table as being owned by it in the ordinary course of business and, at the time of that purchase, it had no agreements or understandings, directly

or indirectly, with any person to distribute those securities.

Investing in the debentures and the shares of common stock offered hereby involves risks. See "Risk factors" beginning on page 7 of the prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is May 25, 2005.
