



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 6010

November 23, 2007

VIA U.S. MAIL AND FACSIMILE (949.250.2525)

Mr. Thomas M. Abate
Corporate Vice President, Chief Financial Officer and
Treasurer
Edwards Lifesciences Corporation
One Edwards Way
Irvine, California 92614

Re: Edwards Lifesciences Corporation
Form 10-K for the fiscal year ended December 31, 2006
Filed March 1, 2007
File No. 001-15525

Dear Mr. Abate:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Fiscal Year Ended December 31, 2006

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 24

Purchased in-process Research and Development Expenses, page 31

1. You disclose that the information in this section has not been updated and that the current status of your IPR&D programs and your expectations is included in the discussion of *Research and Development Expenses*. However we were not able to locate this discussion of the status of the IPR&D projects, including the \$81.0 million spent in 2004 for percutaneously-delivered balloon-expandable stent technology that was forecasted to commence cash inflows in 2007. In future filings, including your December 31, 2007 Form 10-K, please disclose the status of your efforts for completion of the R&D projects and the impact on the company from any delays. Also include an explanation of material variations between projected results and actual results and how failure to achieve projected results impacted (or will impact) expected return on investment, future results, and financial condition.

Financial Statements, page 51

Note 2. Summary of Significant Accounting Policies, page 59

Revenue Recognition, page 60

With respect to the following, please refer to Section II.F.3 of the November 30, 2006 Current Accounting and Disclosure Issues in the Division of Corporation Finance available on our website at <http://www.sec.gov/divisions/corpfin/cfacctdisclosureissues.pdf>.

2. Please tell us and disclose in future filings the major revenue-generating products, services, or arrangements clearly. For example, you disclose on page 59 that you provide both products and technologies. Please clarify the nature of the technologies provided and whether or not the technology is a separate unit of accounting from your product sales.
3. If the technology is a separate unit of accounting, please tell us and disclose in future filings your revenue recognition methods for the sale of technology.
4. Please tell us and disclose in future filings the essential terms of your sales including payment terms and unusual provisions or conditions. For example, the disclosure should address the nature of and accounting for charge-backs, rebates, returns and other sales allowances discussed on page 60.

5. Please tell us and disclose in future filings how you apply the accounting criteria listed in your disclosure to specific sales of products and technologies. The disclosure should be specific about when you actually recognize revenue. We note your disclosure about acceptance in the first paragraph on page 60. Include a discussion of the nature of acceptance terms and how they impact your revenue recognition policies.
6. You disclose that you have multiple-element arrangements. Please tell us and disclose in future filings the contract elements permitting separate revenue recognition and describe how they are distinguished. Explain in more detail how revenue is recognized for each element and how you determine their value. Address how you determine fair value for undelivered items. Also tell us why you use the term 'generally.' Discuss other valuation methods you employ.

Controls and Procedures, page 105

7. We note your disclosure refers to "providing reasonable assurance." Please revise future filings to state clearly, if true, that your disclosure controls and procedures are *designed* to provide reasonable assurance of achieving their objectives and that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures are effective at that reasonable assurance level. In the alternative, remove the reference to the level of assurance of your disclosure controls and procedures. Please refer to Section II.F.4 of Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, SEC Release No. 33-8238, available on our website at <<http://www.sec.gov/rules/final/33-8238.htm>>.
8. We note your disclosure that your "Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures are effective in providing reasonable assurance that the information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms." The language that is currently included after the word "effective" in your disclosure appears to be superfluous, since the meaning of "disclosure controls and procedures" is established by Rule 13a-15(e) of the Exchange Act. Please remove the language in your future filings or revise the disclosure so that the language that appears after the word "effective" is substantially similar in all material respects to the language that appears in the entire two-sentence definition of "disclosure controls and procedures" set forth in Rule 13a-15(e).

Exhibits 31.1 and 31.2

9. We note the language in paragraphs 4(b) and (d) of the certifications required by Exchange Act Rule 13a-14(a) are not in the exact form as shown in Item 601(b)(31) of Regulation S-K. In future filings, please revise so that the language is consistent with Item 601(b)(31).

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Mr. Thomas M. Abate
Edwards Lifesciences Corporation
November 23, 2007
Page 5

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 or me at (202) 551-3676 if you have any questions regarding comments on the financial statements and related matters. You may also contact Martin James; Senior Assistant Chief Accountant, at (202) 551-3604 with any other questions.

Sincerely,

Brian Cascio
Branch Chief