

Mail Stop 6010

December 8, 2005

Ms. Corrine H. Lyle  
Vice President, Chief Financial Officer and Treasurer  
Edwards LifeSciences Corporation  
One Edwards Way  
Irvine, CA 92614

RE: Edwards LifeSciences Corporation  
Form 10-K for the fiscal year ended December 31, 2004  
Filed March 7, 2005  
File No. 1-15525  
Form 8-K filed 10/25/05

Dear Ms. Lyle:

We have reviewed your filing and have the following comments.  
We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in 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 filing. 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 period ending December 31, 2004

Notes to Financial Statements, page 53

Note 2 Summary of Significant Accounting Policies, page 53

Investments in Unconsolidated Affiliates, page 57

1. We see that as of December 31, 2004, Edwards LifeSciences had a \$7.5 million unrealized loss related to a \$12.6 million investment in a publicly traded company. You indicate the trading value of the investment has been less than the original cost for greater than one year. We also see disclosures in your 2003 Form 10-K that indicate the investment had an unrealized loss of \$7.3 million as of December 31, 2003. Please tell us why you believe this impairment is temporary. Tell us when you made the investment and the name of

the company. Please describe your investment impairment analysis and conclusions for each quarterly period this investment has been trading at values below your historical cost. Provide us with market information regarding the high and low trading range and closing value of this stock for each quarterly period during 2003 to the present. Consider the guidance at Staff Accounting Bulletin Topic 5M and EITF 03-1 when preparing your response to our comment. We may have further comments after reviewing your response.

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2. We see that you present certain non-GAAP information in the form of an income statement. That adjusted income statement presents numerous non-GAAP amounts and sub-totals. Disclosures about non-GAAP measures should fully conform to the requirements of Item 10(e)(1)(i) to Regulation S-K and Question 8 to the FAQ Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003. Either delete the non-GAAP income statement from all future press releases or expand future releases to present detailed and specific disclosure of the following for each non-GAAP measure:

- \* The substantive reasons why management believes the non-GAAP measure provides useful information to investors;
- \* The specific manner in which management uses the non-GAAP measure to conduct or evaluate its business;
- \* The economic substance behind management's decision to use the measure; and
- \* The material limitations associated with the use of the non-GAAP measure as compared to the use of the most directly comparable GAAP measure, including the manner in which management compensates for these limitations when using the non-GAAP measure.

Expanded disclosure should not be generic or cookie-cutter. The existing disclosures do not provide sufficient information. Show us how you plan to comply with this comment. We may have further comment upon review of that response.

3. We also note that you refer to certain non-GAAP information as "pro forma". Pro forma has a distinct meaning under Article 11 of Regulation S-X and use of that term in conjunction with adjusted non-GAAP financial information may be confusing to investors. In future filings please refrain from using the pro forma terminology when referring to your non-GAAP financial information.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that they have provided all information investors require. 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 filings;
- \* staff comments or changes to disclosure in response to staff comments in the filings reviewed by the staff 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.

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.

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 cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Dennis Hult, Staff Accountant, at (202) 551-3618 or me at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Angela J. Crane, Accounting Branch Chief, at (202) 551-3554.

Sincerely,

Jay Webb  
Reviewing Accountant

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