



DIVISION OF  
CORPORATION FINANCE

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

August 27, 2010

Michael A. Mussallem  
Chairman and Chief Executive Officer  
Edwards Lifesciences Corporation  
One Edwards Way  
Irvine, CA 92614

**Re: Edwards Lifesciences Corporation  
Form 10-K for the Fiscal Year Ended December 31, 2009  
Filed February 26, 2010  
File No. 001-15525**

Dear Mr. Mussallem:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

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1. We note that you have not included disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.
2. We note from your discussion under the headings "Annual Cash Incentive Payment," "Financial Measure Achievement" and "Key Operating Driver Achievement" on pages 36 to 38 of the proxy statement that you have incorporated by reference into your Form 10-K that you have not disclosed the specific company-wide and individual performance targets to be achieved in order for your named executive officers to earn

their respective annual cash incentive payments. Please provide us with your analysis as to why you did not disclose these performance targets. To the extent you believe that disclosure of such information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations available on our website at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that would result in competitive harm.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules 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 responding to our comments, please provide a written 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.

Please contact Joseph McCann at (202) 551-6262, or Jay Mumford, Senior Attorney, at (202) 551-3637 if you have questions on the comments.

Sincerely,

Russell Mancuso  
Branch Chief

cc: Bruce P. Garren, Esq. – Vice President and General Counsel