



DIVISION OF  
CORPORATION FINANCE

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

December 16, 2010

John W. Price, Chief Executive Officer  
RBC Life Sciences, Inc.  
2301 Crown Court  
Irvin, TX 75038

**Re: RBC Life Sciences, Inc.  
Form 10-K for Fiscal Year Ended December 31, 2009  
Filed March 11, 2010  
Definitive Proxy Statement filed on Schedule 14A  
Filed April 28, 2010  
Forms 10-Q for the Quarters Ended March 31, 2010,  
June 30, 2010 and September 30, 2010  
Filed May 13, 2010, August 11, 2010 and  
November 12, 2010  
File No. 000-50417**

Dear Mr. Price:

We have reviewed your filings 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. You should comply with the comments in all future filings, as applicable. Please confirm in writing that you will do so, and also explain to us in detail sufficient for an understanding of your disclosure how you intend to comply by providing us with your proposed revisions.

Please respond to this letter within ten business days 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 please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K

Risk Factors, page 15

We may have to obtain regulatory approvals before we market and sell certain Medical Products, page 18

1. To provide context for this risk factor please disclose, if applicable, whether you have any pending applications for approval or you are preparing to file any applications. If do not have any pending applications then revise to state so.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 25

2. Please expand this section to discuss known material trends and uncertainties that will have, or are reasonably likely to have, a material impact on your revenues or income or result in your liquidity decreasing or increasing in any material way. For example, we note your disclosure in your Risk Factor that third party payers are increasingly challenging the pricing of medical products and services. Another example, you have adopted a new Associate compensation plan. The adoption of a new Associate compensation plan would appear to be an adjustment in your business strategy in response to a trend or development in your business. Your disclosure should provide your investors with a discussion of those trends that are impacting your business and, if applicable, any changes in your business strategy in response to those trends. In this regard, also discuss whether you expect these trends to continue. Please provide additional analysis concerning the quality and variability of your earnings and cash flows so that investors can ascertain the likelihood or the extent past performance is indicative of future performance. Please discuss whether you expect levels to remain at this level or to increase or decrease. Also, you should consider discussing the impact of any changes on your earnings. Further, please discuss in reasonable detail:
  - Economic or industry-wide factors relevant to your company, and
  - Material opportunities, challenges, and
  - Risk in the short and long term and the actions you are taking to address them.

See Item 303 of Regulation S-K and SEC Release No. 33-8350.

Definitive Proxy Statement filed on Schedule 14A

Board of Directors, page 3

3. Please revise to describe the business experience of Andrew V. Howard for the past five years, or clarify your disclosure by adding dates or the duration of employment. Refer to Item 401(e) of Regulation S-K.

Compensation Decision-Making Process, page 11

4. We note that you consider competitive market practices when considering salaries and total compensation paid by similarly-sized companies. Please provide greater detail regarding whether these determinations entail benchmarking or whether they entail the review or consideration of comparative data for a more general purpose than benchmarking compensation. See Question 118.05 in the Regulation S-K section of our Compliance and Disclosure Interpretations (July 3, 2008). If you engage in benchmarking in setting this amount, please identify the benchmark and its components, pursuant to Item 402(b)(2)(xiv). See Item 402(b)(1)(v) of Regulation S-K.

Summary Compensation Table, page 15

5. Please confirm that for awards of options the aggregate grant date fair value (column (f)) was calculated in accordance with FASB ASC Topic 718 or advise.

Grants of Plan-Based Awards, page 16

6. If applicable, please confirm that the grant date fair value (column (l)) was calculated in accordance with FASB ASC Topic 718 or advise.

Forms 10-Q for the Quarters Ended March 31, 2010, June 30, 2010 and September 30, 2010

Exhibits 31.1 and 31.2

7. We note that your certifications in each of your 2010 Forms 10-Q differ from the certification set forth in Item 601(b)(31) of Regulation S-K. Specifically, you omitted the reference to internal controls over financial reporting in introductory paragraph 4. Please confirm to us that your future filings will read exactly as set forth in Item 601(b)(31) of Regulation S-K.

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.

You may contact Yong Kim, Accountant, at (202) 551-3323 or Jennifer Thompson, Accounting Branch Chief, at (202) 551-3737 if you have questions regarding comments on the financial statements and related matters. Please contact Scott Anderegg, Staff Attorney, at (202) 551-3342, or me at (202) 551-3720 with any other questions.

Sincerely,

H. Christopher Owings  
Assistant Director