



DIVISION OF
CORPORATION FINANCE

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

August 8, 2011

Via E-mail

Kevin D. Green
Chief Accounting Officer
Cerus Corporation
2550 Stanwell Drive
Concord, California 94520

Re: Cerus Corporation
Form 10-K for the fiscal year ended December 31, 2010
Filed March 16, 2011
Form 10-Q for the fiscal quarter ended June 30, 2011
Filed August 8, 2011
File No. 000-21937

Dear Mr. Green:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. 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 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 comment

Form 10-K for the fiscal year ended December 31, 2010

Purchased intangible assets and goodwill, page 36

1. Please revise future filings to provide a discussion of how you assess impairment of goodwill. In addition, please clarify how you determine fair value of your

reporting unit. We note from your financial statements that you have identified one reporting unit.

Warrants, page 36

2. With a view toward enhanced disclosure in future filings, please tell us the material terms of the warrants that resulted in it being recorded as a liability and marked to market in your financial statements at each balance sheet date.

Results of Operations- Year ended December 31, 2010, 2009, and 2008 - Revenues, page 38

3. We see that you attribute the increase in revenues to an increase in the number of system kits sold. In future filings please also provide an indication of the underlying reasons for the increase in demand for your products.

Liquidity and Capital Resources, page 45

4. We see that inventory decreased from December 31, 2009 to December 31, 2010 despite the corresponding increase in revenues. In future filings please include a discussion of the reasons for material fluctuations in operating assets such as inventory and accounts receivable.

Consolidated Financial Statements

Note 5. Inventories, page 71

5. We reference the disclosure that work-in-process inventory can accumulate for periods exceeding one year. Please tell us how you considered that a portion of inventory should be classified as a non-current asset at the balance sheet date(s).

Note 7. Acquisition, Goodwill and Other Intangible Assets, page 72

6. We note that you accounted for the acquisition of assets of BioOne as the acquisition of a business under the guidance of FASB ASC 805. Please provide us with your analysis of why you believe that the acquisition was one of a business rather than of assets.
7. Please revise future filings to disclose how you valued the shares of common stock issued to BioOne at December 31, 2010, including the shares issued in February 2011 that were recorded as of December 31, 2010. Please provide us with a copy of your proposed revised disclosure.

8. As a related matter, please tell us how you determined the \$0.3 million fair value of your non-controlling equity interest in BioOne that was relinquished in the acquisition.

Note 15. Income Taxes, page 83

9. In future filings, please include the disclosures required by 740-10-50-12 or tell us why you do not believe it is applicable to you.

Note 17. Segment Information and Geographic Information, page 84

10. Please tell us why you have not provided the geographic disclosures required by FASB ASC 280-10-50-41(a).
11. Please also tell us why you do not include the disclosures about individual products and services required by FASB ASC 280-10-50-40.

Form 10-Q for the fiscal quarter ended June 30, 2011

Exhibits 31.1 and 31.2

12. We note that the identification of the certifying individual at the beginning of the certification required by Exchange Act Rule 13a-14(a) also includes the title of the certifying individual. In future filings, the identification of the certifying individual at the beginning of the certification should be revised so as not to include the individual's title.

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.

Kevin D. Green
Cerus Corporation
August 8, 2011
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You may contact Jeanne Bennett at (202) 551-3606 or me at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. If you have any other questions, please do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

/s/ Brian Cascio

Brian Cascio
Accounting Branch Chief