

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-3030

August 7, 2009

Via facsimile and U.S. mail

Howard G. Ervin, Esq. Vice President, Legal Affairs Cerus Corporation 2411 Stanwell Drive Concord, California 94520

Re: Cerus Corporation

Annual Report on Form 10-K

for the fiscal year ended December 31, 2008

Filed March 13, 2009 File No. 000-21937

Dear Mr. Ervin:

We have reviewed your letters dated July 31, 2009 and August 6, 2009 and have the following comments. Where indicated, we think you should revise your document in response to our comments. If you disagree, we will consider your explanation as to why our comments are 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.

1. As we noted in comment 1 of our letter dated May 21, 2009, the disclosure under "Item 1. Business" in your most recent Annual Report on Form 10-K regarding how your product works, which is key to understanding your business, is limited solely to the statement that the "INTERCEPT Blood System is based on [y]our proprietary technology for controlling biological replication." Given your responses to our prior comment letters, in which you provide greater detail regarding how your system works, the additional risk factor disclosure that you have undertaken to include in your future filings that resulted from a more thorough understanding of how your product works, and the indicated limitations of your product, such as it has not yet been shown to inactivate non-enveloped viruses, please provide us with your analysis as to whether the current disclosure regarding your business complies in all material respects with the technical

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requirements of Item 101 of Regulation S-K <u>and</u> provides such further material information as is necessary so that investors can make an informed investment decision with respect to your business, or whether "Item 1. Business" in your filing should be amended to include a more robust discussion of how your product works, including a more balanced presentation of the advantages and disadvantages of your system given the additional risk factor and other disclosures you have already undertaken to include in your future filings.

2. We note the portion of your response in your letter dated August 6, 2009 that you disagree with "the premise that higher velocity processes are at work within the human body than the processes at work in the live bacteria and cellular models used by the Company for the approval of its products." Although you have not provided us with any support that we requested for this statement, we note the acknowledgement in your letter to us dated June 5, 2009 that the company is responsible for the adequacy and accuracy of the disclosure in the filing. As such, we have no further comment on this issue at this time.

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

You may contact Joe McCann, Staff Attorney, at (202) 551-6262, or me, at (202) 551-3635, with any questions.

Sincerely,

Tim Buchmiller Senior Attorney

cc: Suzanne Sawochka Hooper, Esq.Samantha Shiraishi, Esq.Cooley Godward Kronish LLP(via facsimile)