

Via Facsimile and U.S. Mail
Mail Stop 6010

April 19, 2006

Timothy J. Barberich
Chairman and Chief Executive Officer
Sepracor Inc.
84 Waterford Drive
Marlborough, Massachusetts 01752

Re: Sepracor Inc.
Form 10-K for Fiscal Year Ended December 31, 2005
Filed March 16, 2006
File No. 000-19410

Dear Mr. Barberich:

We have limited our review of your filing to the issue we have addressed in our comment. In our comment, we ask you to provide us with information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. 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 filings. We look forward to working with you in these respects. We welcome any questions you may have about our comment or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Exhibit 13 – Selected Portions of the 2005 Annual Report to Shareholders

Management's Discussion And Analysis Of Financial Condition And Results Of Operations, page 3

Critical Accounting Policies, page 14

1. We believe that your disclosure related to estimates of items that reduce gross revenue, such as returns, chargebacks, rebates, and other applicable discounts and allowances, could be improved as follows. As such, please provide us the following information in disclosure-type format:

- a. The nature and amount of each accrual at the balance sheet date and the effect that could result from using reasonably likely assumptions other than what you used to arrive at each accrual, such as a range of reasonably likely amounts or other type of sensitivity analysis.
- b. Elaborate on the factors that you consider in estimating each accrual such as historical return of products, levels of inventory in the distribution channel, estimated remaining shelf life, price changes from competitors and introductions of generics and/or new products.
- c. To the extent that information you consider in b) is quantifiable, provide both quantitative and qualitative information and discuss to what extent information is from external sources (e.g., end-customer prescription demand, third-party market research data comparing wholesaler inventory levels to end-customer demand). For example, in discussing your estimate of product that may be returned, consider disclosing and discussing, preferably by product and in tabular format, the total amount of product (in sales dollars) that could potentially be returned as of the balance sheet date and disaggregated by expiration period.
- d. A roll forward of the balance for each estimate for each period presented showing the following:
 - Beginning balance,
 - Current provision related to sales made in current period,
 - Current provision related to sales made in prior periods,
 - Actual returns or credits in current period related to sales made in current period,
 - Actual returns or credits in current period related to sales made in prior periods, and
 - Ending balance.
- e. In your discussion of results of operations for the period to period revenue comparisons, discuss the amount of and reason for fluctuations for each type of reduction of gross revenue (i.e., returns, chargebacks, rebates and other applicable discounts and allowances), including the effect that changes in your estimates of these items had on your revenues and operations.

Please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comment and provide the requested information. Detailed letters greatly facilitate our review. Please file your letter on EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 comment, please provide, in your letter, 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 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.

You may contact James Peklenk, Staff Accountant, at (202) 551-3661, or Oscar M. Young, Senior Accountant, at (202) 551-3622 if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant