



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

MAIL STOP 7010

October 3, 2007

Carlton E. Turner
Chief Executive Officer
Carrington Laboratories, Inc.
2001 Walnut Hill Lane
Irving, Texas 75038

Re: **Carrington Laboratories, Inc.**
Registration Statement on Form S-1
Filed September 6, 2007
Annual Report on Form 10-K for fiscal year end December 31, 2006
Definitive Proxy Statements on Schedule 14A filed on April 19, 2007 and
June 6, 2007

Dear Mr. Turner:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is 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.

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 filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Registration Statement on Form S-1

General

1. Given the nature and size of the transaction being registered, advise the staff of your basis for determining that the transaction is appropriately characterized as a transaction that is eligible to be made on a shelf basis under Rule 415(a)(1)(i). We note that it appears that the number of shares issuable upon exercise of the warrants and debentures would constitute a significant portion of your outstanding common stock. Accordingly, it appears that this transaction may not comport with the requirements of an at the market secondary shelf offering but may be an indirect primary offering. See, e.g., Manual of Publicly Available Telephone Interpretations,

Securities Act Section 415, no. 29 (July 1997). Please note that in reaching this determination, we have disregarded the applicability of beneficial ownership caps, as these contractual arrangements do not affect our determination of what constitutes a valid secondary shelf offering. We also note that the number of shares being registered in this transaction is substantially more than the number of shares held by non-affiliates. Please also give consideration to your eligibility to conduct a primary offering on a delayed or continuous basis under Rule 415(a)(1)(x) of the Securities Act.

2. Regardless of whether it is appropriate to register this transaction as a resale under Rule 415(a)(1)(i), it is appropriate to register only the number of shares that you have in good faith determined that you are likely to issue upon conversion of the various securities, notwithstanding any contractual obligations you may have. Please tell us why 130% of what would have been issuable at the time of the private placements is your good faith estimate.
3. It appears that you would be defined as an issuer of penny stock pursuant to Rule 3a51-1 of the Exchange Act; therefore, please amend your registration statement to include all information required by the Form S-1 as it appears that you are not eligible to incorporate information from your periodic reports by reference. Please refer to General Instruction VII.D.1.(c) of Form S-1. Please note that we have reviewed your periodic reports for the information required by the form and have commented accordingly. Please respond to our comments on your periodic reports by amending your registration statement. Please also revise your Item 17. Undertakings as well.
4. We note that you have described the warrants, debentures, and elements of the private placement transactions with the selling shareholders which gave rise to this offering in your definitive proxy statement for your July 19, 2007 special meeting. However, when amending your registration statement to include this information, please ensure that you clearly highlight the following:
 - the amount of each payment you made to or may be required to make to any selling shareholder, any affiliate of a selling shareholder, or any person with whom any selling shareholder has a contractual relationship with regarding the transaction. This would include such things as liquidated damages, interest payments or finders fees;
 - total potential profit the selling shareholders could realize as a result of conversion adjustments;
 - comparison of the gross proceeds paid or payable to the issuer in the private transaction, all payments that have or may be required to be made by the issuer, and net proceeds to the issuer;
 - all prior securities transactions between the issuer (or any of its predecessors) and the selling shareholders, any affiliate of a selling shareholder, or any person with whom any selling shareholder has a contractual relationship with regarding the transaction;
 - the issuer's intention and ability to make all note payments and details of the presence or absence of short selling by the selling shareholders;
 - a materially complete description of the relationship and arrangements that have existed between the issuer and selling shareholders, any affiliate of a selling shareholder, or any

person with whom any selling shareholder has a contractual relationship with regarding the transaction in the past three years.

We may have additional comments upon review of your response.

5. Please describe your policies and procedures for the review, approval, or ratification of transactions required to be reported under Item 404(a) of Regulation S-K. Disclose whether the policies and procedures are in writing, and if not, how such policies and procedures are evidenced. Please refer to Item 404(b)(1)(i)-(iv) of Regulation S-K.

Recent Developments

6. Please explain why Dr. Turner would propose to spin off DelSite. In addition, we note that at the time this registration statement was filed you had no specific plans about the timing or structure of the spinoff. However, please clarify when it is anticipated that the Board will consider the spinoff, and update remaining disclosure regarding the timing of the spinoff as necessary. Explain how you have met the requirements of Article 11 of Regulation S-X with respect to the presentation of pro forma financial information.

Selling Shareholders

7. Please disclose by footnote or otherwise the identity of the natural person or persons having sole or shared voting and investment control over the securities held by Iroquois Master Fund, Ltd.
8. For selling stockholders that are affiliates of broker-dealers, the prospectus must state that: (1) the sellers purchased in the ordinary course of business; and (2) at the time of purchase of the securities you are registering for resale, the seller had no agreements or understandings, directly or indirectly, with any person, to distribute the securities. If you are unable to make these statements in the prospectus, the disclosure must state that the sellers are also underwriters.

Risk Factors

We will need to raise additional financing....

9. Please separate the third paragraph of this risk factor into its own risk factor or combine it with subsequent risk factor dealing with your senior secured convertible debentures and if you are not currently in compliance with the financial covenants discussed, or expect to have difficulty meeting them, please disclose this.

We have substantial indebtedness...

10. Please disclose your current total indebtedness and your debt service requirements.

The breadth, validity and enforceability of patents...

11. In order to make this risk factor more currently relevant, please disclose whether you have been involved in intellectual property disputes, which involved significant business interests of yours.

We are dependent on key personnel...

12. Because most companies rely on their key personnel, this risk factor appears to be generic. Please disclose in more detail the unique risks you face in this regard or delete the risk factor.

We expect that our common stock will be delisted from NASDAQ...

13. Please update this risk factor to the latest practicable date.

The market price for our common stock may be volatile...

14. This risk factor appears generic. Please delete or revise to describe how the risks described are unique to you.

Where You Can Find Additional Information

15. We note the statement in third sentence of the first paragraph. Please be advised that the disclosure in your prospectus regarding the contents of any contract or other document should be materially complete and may not be qualified by reference to information outside of your prospectus. Please revise accordingly.

Item 15. Recent Sales of Unregistered Securities

16. Please disclose the facts relied upon to make the exemptions from registration for the transactions discussed available. Please refer to Item 701(d) of Regulation S-K.

Legal Opinion

17. Please revise to remove the assumptions contained in paragraphs (ii) and (v) of the opinion.

Annual Report on Form 10-K for fiscal year ended December 31, 2006

Business

18. We note that Medline may market other products under your trademarks and pay you a royalty. Please elaborate on this aspect of your business. For instance, what products not manufactured by you are marketed under your brands and what percentage of your revenue is generated from this part of your business?

19. Please provide a greater sense of the competitive conditions that exist in your industry. For instance, what percentage of the market do you have for your services and products versus that of your major competitors? Disclose, to the extent known, the revenue and customer base of these competitors. Further, discuss the barriers to entry into your industry to the extent they exist and how they might affect your competitive position. Please refer to and provide the information required by Item 101(c)(x) of Regulation S-K.
20. For each business segment, disclose the information required by Items 101(c)(iv),(v),(vi),(vii) of Regulation S-K.

Patents and Proprietary Rights

21. Revise this section in your amended Form S-1 to clearly articulate which patents and intellectual property rights discussed in this section relate to current or proposed products as well as to those that have not yet been commercialized. Clarify the importance that each patent has to each business segment. Consider utilizing a tabular format to disclose this information. Please refer to Item 101(c)(iv) of Regulation S-K.

Item 3. Legal Proceedings

22. Please disclose a description of the factual basis alleged to underlie the proceeding involving Glamourpuss, Inc. Please refer to Item 103 of Regulation S-K.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Company Overview

23. You discuss a continual decline in sales since 2004 to Natural Alternatives and Mannatech. Please revise your discussion to quantify each factor contributing to this downward trend in sales to these customers.
24. We note from your disclosure that you entered into a three-year Supply and Trademark Licensing Agreement with Mannatech in January 2007 and based on this Agreement you anticipate the 2007 sales to be above the minimum levels as required by the agreement. Please revise your disclosure to include the anticipated minimum revenue expected for each of the three years.

Grant Awards

25. In October 2004 DelSite received notification of a \$6 million grant over a three-year period from the National Institute of Allergy and Infectious Diseases. We note that approximately \$2.7 million of funds remain to be drawn under this grant. Please revise your disclosure to provide the date by which you have to complete the approved work. If you intend to file an extension, please disclose this fact and whether you believe you will receive such extension.

Key Performance Indicators

26. You present your key performance indicators that you use to measure performance and manage your business. However, you provide no analysis of the key drivers contributing to the decrease in days sales outstanding or months inventory on hand. Please revise your filing to include an analysis of the changes in these performance measures, as you consider them key measures.

Results of Operations

27. You disclose that your Consumer Services Division recorded revenues of \$16.28 million in 2006, an increase of 5.8%, when compared to revenues of \$15.79 million in 2005. Please revise your filing to provide a discussion of and quantify the factors contributing to the increase in sales.
28. Please disclose the reasons for the decrease in sales to major customers Natural Alternatives and Mannatech in 2006 and 2005. Discuss, if applicable, any trends or long-term factors accounting for these decreases.

Critical Accounting Policies

29. To enhance an investor's understanding of your financial statements, we encourage you to better explain in MD&A the effects of your critical accounting policies applied, the judgments made in their application, and the likelihood of materially different reported results if different assumptions or conditions were to prevail. Disclosures of your critical accounting policies should supplement, not duplicate, the description of accounting policies that are already disclosed in the notes to the financial statements. While accounting policy notes in the financial statements generally describe the method used to apply an accounting principle, the discussion in MD&A should present a company's analysis of the uncertainties involved in applying a principle at a given time or the variability that is reasonably likely to result from its application over time. Please revise your disclosure to separately discuss each accounting policy that you have determined critical to your operations. Refer to FRR 33-8350 for guidance.
30. Please expand the discussion of your inventory obsolescence reserve of \$903,000 and \$791,000 as of December 31, 2006 and 2005. Discuss the specific reasons for the reserve, including the nature of the obsolescence (e.g. discontinued products, loss of potency of certain ingredients, new research regarding efficacy, etc.). Discuss the changes in the reserve, including the reasons for an increase of 14% in the reserve while inventories have decreased 22%.

For the Fiscal Year Ended December 31, 2006

Note 2 – Summary of Significant Accounting Policies

31. Please describe to us your revenue recognition policies for specialized product development and manufacturing services provided to customers in the cosmetic and nutraceutical markets. Expand your footnote disclosure to discuss these contracts, significant terms and the related accounting policies.
32. You disclose that certain laboratory and test equipment costs determined to have alternative future uses in other R&D activities are capitalized and depreciated as R&D expense over the life of the equipment. Please revise the filing to disclose the carrying value of capitalized R&D, where it is reported on the balance sheet (e.g. property, plant and equipment), the depreciable life, and the expense for each period presented.

Note 7 – Long-term debt

33. You disclose your 5 million warrants have a fair value of \$4.8 million, as determined by your independent appraisers. Please expand your disclosure to identify the independent appraiser(s) and provide their consent(s) in accordance with Rule 436(a) of Regulation C or delete these references.
34. You discuss several lawsuits related to the mouthwash product and disclose, “The Company believes that Plaintiffs’ claims are without merit and intends to vigorously defend against the claim.” Please revise your disclosure to clarify whether you believe it is probable, reasonably possible or remote that losses could be material. We caution you that a statement that a contingency is not expected to be material does not satisfy the requirements of SFAS 5, if there is at least a reasonable possibility that a loss exceeding amounts already recognized may have been incurred and the amount of that additional loss would be material to a decision to buy or sell your securities. Refer to SFAS 5 for guidance.

For the Fiscal Quarter Ended June 30, 2007

35. Please explain how you have reported the \$1.7 million repayment of the Comerica credit facilities on the statement of cash flows for the period ending June 30, 2007.
36. In the discussion of liquidity and capital resources, you discuss financing efforts. You disclose you may be forced to file for reorganization or liquidation as soon as October if the second tranche of the private placement cannot be consummated; the second tranche has subsequently been finalized. We also note generic disclosure regarding reliance on cash reserves, existing credit facilities, proceeds from debt and equity offerings, etc., as well as discussion of anticipated capital expenditures. However, we do not note a comprehensive discussion of your cash requirements for the next twelve months and how you expect to meet them. Please provide a summary of your cash requirements for the next twelve months,

discuss how long you can satisfy your cash requirements, and your specific viable plans to overcome your financial difficulties. Refer to Item 303(a)(1) of Regulation S-B and FRR 501.03 a and 607.02. In Note 7 and in the discussion of liquidity and capital resources you state you must maintain trailing twelve month revenue of at least \$23.5 million for each fiscal quarter during 2007 and \$25 million for each fiscal quarter thereafter and must have a certain secured debt coverage ratio. Please explain the rights of the noteholders in the event these covenants are not met. Based on your reported revenue for the six months ending June 30, 2007, it is not clear whether you expect to meet these covenants, what will result from non-compliance, and how you plan to satisfy any resulting requirements to repay the debentures or pay interest, penalties, etc. Please revise your disclosure accordingly.

37. Please tell us how you have applied the guidance in EITF Issue 00-19 in evaluating whether the debt conversion feature for your \$8 million private placement of convertible debentures are embedded derivatives that you should separate from the debt host and account for at fair value under SFAS 133. In this regard, we note that it appears the conversion feature would meet the paragraph 12 criteria for bifurcation under SFAS 133 and thus the conversion feature would be required to be analyzed under EITF 00-19 in order to determine whether it would meet the paragraph 11(a) scope exception in SFAS 133. If the paragraph 11(a) scope exception is not met, the conversion feature would be required to be bifurcated from the debt host and accounted for as a derivative liability with changes in fair value recorded in earnings. The first step in the EITF 00-19 analysis is to determine whether the host instrument meets the definition of conventional convertible debt in paragraph 4 of EITF Issue 00-19. If the host instrument qualifies as conventional convertible debt, the embedded conversion option would qualify for equity classification under EITF 00-19, qualify for the scope exception in paragraph 11(a) of SFAS 133 and not be bifurcated from the host instrument. If the host instrument does not qualify as conventional convertible, the embedded conversion option would be required to be analyzed further under paragraphs 12-32 of EITF 00-19. As an example, we note that if a change of control occurs, the holders can require the company to purchase the debentures for an amount based, in part, on the value of the conversion feature. Refer to paragraph 12 of EITF 00-19. Please tell us how you considered this and other relevant provisions in analyzing the conversion feature.
38. Tell us how you have considered the guidance in paragraph 12 of EITF 00-19 in accounting for the Series D and Series E warrants, given the ability of the holders to require the company to repurchase the warrants at a price based on the value of the underlying stock upon a change of control.
39. Please revise your filing to include a discussion to explain how you allocated proceeds from your debt issuances between the debentures and the warrants. This allocation should be in compliance with APB 14.

Liquidity and Capital Resources

40. Please disclose the material covenants to your credit facilities and your compliance with those covenants.

41. Please update and discuss your ability to finance operations and service your debt. Disclose any material planned financing and debt restructuring.

Definitive Proxy Statement on Schedule 14A

Compensation Discussion and Analysis

42. You state that in determining base salary, cash and equity compensation you consider, from time to time, executive compensation data at comparable companies in the biotechnology and medical manufacturing industries. Identify these peer group companies against which you appear to have benchmarked your compensation. Clarify how these companies and any survey data are used to determine total compensation or individual elements of compensation. Refer to Item 402(b)(2)(xiv) of Regulation S-K.
43. We note that equity and cash compensation are, in part, determined by company profitability and other predetermined performance measures. Please provide a quantitative discussion of the terms of the necessary performance objectives to be achieved in order for your named executive officers to earn their incentive compensation. Please disclose the specific target performance metrics, as well as the strategic objectives for each individual, used to determine incentive amounts. To the extent you believe that disclosure of the information 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 on a supplemental basis a detailed explanation for such conclusion and discuss how difficult it would be for the named executive officers or how likely it will be for you to achieve the undisclosed target levels or other factors. General statements regarding the level of difficulty, or ease associated with achieving performance goals, are not sufficient.
44. You provide only a general discussion and little analysis of the effect of individual performance, even though your disclosure suggests it is a factor considered by the compensation committee. Please disclose additional qualitative, and if applicable, quantitative detail and an analysis of how individual performance contributed to actual 2006 compensation for the named executive officers. See Item 402(b)(2)(vii) of Regulation S-K.
45. The Compensation Discussion and Analysis should be sufficiently precise to identify material differences in compensation policies with respect to individual named executive officers. Refer to Section II.B.1. of Commission Release No. 33-8732A. We note the disparity between Ms. Turner's compensation and that of the other named executive officers. Please provide a more detailed discussion of how and why Mr. Turner's compensation differs from that of the other named executive officers. If policies or decisions relating to a named executive officer are materially different than the other officers, discuss this on an individualized basis.

Summary Compensation Table

46. With respect to the amounts listed in the option awards column, disclose by footnote the assumptions made in determining the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with FAS 123R. The discussion of the assumptions may be made by reference to a discussion of those assumptions in the financial statements, footnotes to the financial statements, or discussion in the Management's Discussion and Analysis. See the Instruction to Item 402(c)(2)(v) and (vi) of Regulation S-K.

Closing Comments

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- ☐ should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- ☐ the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and

- ☐ the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Tracey McKoy at (202) 551-3772 or Terrence O'Brien at (202) 551-3355 for questions regarding comments on the financial statements and related matters. Please contact Craig Slivka at (202) 555-3729 with any other questions.

Sincerely,

Pamela A. Long
Assistant Director

CC: Peter A. Lodwick, Esq.
(214) 969-1751