

Mail Stop 6010

February 9, 2006

Michael Burshtine
Senior Vice President and Chief Financial Officer
Omrix Biopharmaceuticals, Inc.
708 Third Avenue
New York, NY 10017

Re: Omrix Biopharmaceuticals, Inc.
File No. 333-131107
Filed January 19, 2006

Dear Mr. Burshtine:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. Please note that where we provide examples to illustrate what we mean by our comments, they are examples and not exhaustive lists. If our comments are applicable to portions of the filing that we have not cited as examples, make the appropriate changes in accordance with our comments.
2. In your response letter, please state our comment and then explain each change that has been made in response to a comment. In addition, you should also reference each page number in which disclosure has been revised in response to a comment so that we can easily place your revised disclosure in its proper context.

3. Please file as promptly as possible all exhibits required by the Exhibit Table provided in Item 601(a) of Regulation S-K. We note, for example, that you have not filed the opinion or consent of your legal counsel, along with several other exhibits. Please note that we may have comments on these materials once they are filed.
4. Please note that we will send you our comments on your pending request for confidential treatment by separate letter. All confidential treatment issues must be resolved before we will consider a request for acceleration of the registration statement.
5. Please complete all of the blank sections of your filing prior to filing the next amendment. In particular, we note that you have left the Use of Proceeds sections with blanks, which makes it difficult for us to comment on your disclosure.
6. Please provide us proofs of all graphic, visual or photographic information you will provide in the printed prospectus prior to its use, for example in a preliminary prospectus. Please note we may have comments regarding this material.
7. Please note that when you file a pre-effective amendment containing pricing-related information, we may have additional comments. As you are likely aware, you must file this amendment prior to circulating the prospectus.
8. Please note that when you file a pre-effective amendment that includes your price range, it must be bone fide. We interpret this to mean that your range may not exceed \$2 if you price below \$20 and 10% if you price above \$20.
9. Throughout the registration statement, you cite various estimates, statistics and facts and figures. Where you cite your own estimates, please explain how you arrived at those estimates and disclose any third-party sources you relied upon. Where you cite third party sources, please provide us with copies of the sources with the disclosed information highlighted. For all other figures, please identify your sources and provide copies of these sources to us. Set forth below is a list of statements that should be supported:
 - “We believe that the advanced biosurgical hemostats is the fastest growing segment of the surgical sealant market,” p.1
 - “...currently represents \$275M of the worldwide \$1billion...we expect these markets to grow substantially,” p.1, p.55
 - “we estimate the conventional hemostats market...\$4.6 billion,” p.55
10. In the registration statement, you have included disclosure that describes your company and its products in flattering or otherwise positive terms. As a few examples only, on page 1 you state that the company “develops and markets innovative biological products” and refer to your products as “novel and easy to use.” Unless you can provide third party substantiation for these descriptive words and phrases, they are not appropriate for the registration statement and you should

limit your description of the company to facts that can be observed and/or measured. Please review the registration statement and revise or delete any such descriptions that cannot be substantiated.

Prospectus Summary, p. 1

11. The summary section should be a balanced discussion of the most significant factors that relate to your offering. Currently, your summary is a detailed discussion of mainly the positive aspects of your company's business, products and strategy. While you do reference the risk factors section, your presentation does not address any of the other categories of risk set forth in that section and we believe that discussion of the most material risks warrants disclosure in the summary. Please revise the section to provide more disclosure regarding other the major risk factors facing the company along with any negative aspects of your company's experiences, strategy and prospects. This discussion should be at least as prominent as the subsection titled "Our Competitive Strengths."
12. Much of the language you have included in the summary is quite technical and will be difficult for some investors to follow. As a few examples only, your references to "protein purification therapy," "passive immunotherapy," "surgical sealant," "fibrin sealant," "biodefense applications," "stabilizing agent," and other such terms should be explained or replaced with simple, plain language that investors will understand. Please revise the section accordingly.
13. In your description of VIG on page 3, please explain what kind of product VIG is. Is it a pill, a topical solution or some other type of product? Please provide this information for each product you describe in the summary.
14. In your discussion of WNIG and the hemostatic biodevice in the registration statement, including your discussion on pages 2 and 3, you have indicated that these product candidates are in combination Phase I/II clinical trials. Unless the FDA has agreed that these trials are combination trials, you should refer to the trials as Phase I trials.

Risk Factors, p. 9

We have an exclusive relationship with Ethicon..., p. 9

15. Please provide more disclosure relating to the divergent interests between you and Ethicon. In particular, please explain what you mean when you say that Ethicon's agenda "may not be consistent with our best interests. For example, Ethicon may change its strategic focus or pursue alternative technologies in a manner that results in reduced revenues to us." If you are trying to disclose the possibility that Ethicon may enter into an arrangement with a competing product and make the competing product a higher priority at the expense of your product, state this fact explicitly. If you have something else in mind, please revise the disclosure to clarify these statements.

If our products do not achieve market acceptance..., p. 11

16. Please disclose any facts or circumstances that might lead to problems of the type described in this risk factor.

If the third parties with which we contract..., p. 12

17. Please expand the disclosure to explain the alternatives the company will face if any of the third parties referenced in this section terminates its agreement with the company. In addition, it appears that this risk factor is focused on delays that may be caused by third party failure to meet contractual requirements or to act competently. Please consider whether there are any other risks associated with these potential problems.

If the limited number of suppliers..., p. 12

18. We note your statement that you have long-term agreements with your suppliers other than Daiichi. However, you should consider whether these agreements are easily terminable, which might leave you vulnerable to the risks you have described in this risk factor. If you believe this is the case, you should include a discussion of this possibility in the risk factor.

A shutdown at our sole manufacturing site..., p. 13

19. Please consider whether production problems of the type you describe in this section could lead to the inability to meet your contractual requirements with Ethicon, with the consequences if you breach that agreement. If you believe that disruptions could cause a breach, you should disclose this risk. However, since you already have included a risk factor relating to the Ethicon agreement, you need not repeat the possible consequences of the breach in this risk factor. You may simply reference the possibility, as you have in the risk factor titled, "If we are unable to expand our manufacturing capacity..." on page 13.

Our products are derived from human plasma..., p. 13

20. Please disclose any problems you have faced of the type described in this risk factor.

If we lose the services of our key management..., p. 16

21. Please identify the individuals that you believe are key personnel by name.

Political and military instability..., p. 25

22. This risk factor appears to repeat the information already disclosed in “A shutdown in our sole manufacturing site...” on page 13. Please consider whether this risk factor is necessary.

Use of proceeds, p. 28

23. For each allocation you have disclosed, please also disclose the anticipated type and extent of activity in each of these areas. Also, please clarify the products that will see increased production as a result of your increased manufacturing capability and the products that will be the focus of the marketing expenses in Japan.

Management’s Discussion and Analysis of Financial Condition and Results of Operations
Factors Affecting Results of Operations
Research and development, clinical and regulatory expenses, net, page 38

24. Please expand your disclosure by referring to the Division of Corporation Finance “Current Issues and Rulemaking Projects Quarterly Update” under section VIII – Industry Specific Issues – Accounting and Disclosure by Companies Engaged in Research and Development Activities. You can find it at the following website address: <http://www.sec.gov/divisions/corpfin/cfcrq032001.htm#secviii>.

Please disclose the following information for each of your major research and development projects:

- a. The current status of the project;
- b. The costs incurred during each period presented and to date on the project;
- c. The nature, timing and estimated costs of the efforts necessary to complete the project;
- d. The anticipated completion dates;
- e. The risks and uncertainties associated with completing development on schedule, and the consequences to operations, financial position and liquidity if the project is not completed timely; and finally
- f. The period in which material net cash inflows from significant projects are expected to commence.

Regarding b., if you do not maintain any research and development costs by project, disclose that fact and explain why management does not maintain and evaluate research and development costs by project. Provide other quantitative or qualitative disclosure that indicates the amount of the company's resources being used on the project.

Regarding c. and d., disclose the amount or range of estimated costs and timing to complete the phase in process and each future phase. To the extent that information is not estimable, disclose those facts and circumstances indicating the uncertainties that preclude you from making a reasonable estimate.

Financial expenses, net, page 38

25. We note that the recapitalization expense is included in financial expenses in the consolidated statements of operations. Please include the recapitalization expense as a factor that affects your results of operations.

Critical Accounting Policies and Estimates
Revenue Recognition, page 39

26. Please tell us and disclose your accounting policy for the recognition of your milestone payments. In your disclosure please clarify whether the milestones are substantive or non-substantive.
27. It appears that the price of your product sales are subject to adjustment based on estimated prices to the end users. As such please disclose what could result from using other reasonably likely assumptions than what you used to arrive at your estimate of product sales such as a range of reasonably likely amounts or other type of sensitivity analysis.

Results of Operations

Nine months ended September 30, 2004 and 2005, page 41

28. Please revise your results of operations discussion to explain the reasons for the increases and/or decreased in the financial captions discussed. For example on page 41 you disclose that milestone payments recognized increased but provide no explanation as to the why the milestone payments recognized increased.

Years ended December 31, 2002, 2003 and 2004

Financial expenses, net, page 45

29. We note from your disclosure that interest expense is offset partially by inter-company balances between you and your Belgian subsidiary. Please explain to us how an inter-company balance, which is eliminated in consolidation, has an impact on the consolidated results of operations.

Liquidity and Capital Resources
Obligations and commitments
Israel Discount Bank credit facility, page 48

30. We note from your disclosure that borrowings for long-term loans will have maturities of one to three years, but it appears you have a long-term loan with a maturity of four years. Please clarify this contradiction in your filing.

Business, p. 54

31. We note your reference to competitive advantages both here and in the prospectus summary. As noted in our prior comment, descriptive statements of this type require substantiation or should be deleted from the registration statement. In this case, please provide substantiation that the features you are describing provide a competitive advantage.
32. We note your references to the agreements with Aeris and Symphony. As it appears that these are material agreements, you should file them as exhibits to the registration statement and include a description of their material terms in the Business section.
33. We note your reference to the Frankel Group report on page 56. However, it is not clear to us whether VIG is approved in the US. If it is not approved in the US, the \$435 million figure may be confusing to investors and you should delete it.
34. For each material agreement you have listed, please disclose the aggregate amount of milestone payments that may be made pursuant to the agreement. If you are seeking confidential treatment for this information, please be advised that we do not grant confidential treatment for aggregate milestone payments.
35. In the section titled "Facilities," please disclose your lease payments for each agreement you list.

Signature Page

36. Your signature page must include the signature of your Chief Accounting Officer/Controller.

Consolidated Financial Statements
Consolidated statements of operations, page F-6

37. Pursuant to Rule 5-03(b)(1) of Regulation S-X, please separately show milestone payments recognized and upfront license fees recognized from product sales.

Note 12: Commitments and Contingent Liabilities

Guarantee

38. Please tell us in greater detail what is meant by the disclosure in 'f' regarding the fixed charges on property and equipment of Omrix Ltd. and floating charges on various assets of Omrix Ltd.

Note 13: Stockholders' Deficiency

b. Recapitalization agreement, page F-25

39. We note that fair value of the common stock delivered to the convertible note holders and convertible promissory note holders was in excess of the fair value of the securities issuable pursuant to the original conversion terms. We also note that carrying amount of the preferred stock and warrants were in excess of the fair value of the common stock received as apart of the recapitalization. Please explain to us why the fair value of the common stock appears to be in excess of the original issuable securities but lower than the carrying amount of the preferred stock and warrants.

g. Stock option plans and stock options, page F-26

40. Please provide an analysis of how you determined the fair value of the underlying common stock and any related stock-based compensation for each equity issuance. Please include an itemized chronological schedule covering all equity instruments issued since the beginning of 2004 through the date of your response. In addition, please disclose the following in the financial statements:
- The date of each issuance;
 - The number of options granted or shares issued;
 - The exercise price or per share amount paid;
 - Management's fair market value per share and significant factors, assumptions and methodologies used in determining fair value;
 - The intrinsic value, if any, per option;
 - The identity of the recipient, indicating if the recipient was a related party;
 - The amount of any compensation expense recognized;
 - The method used in valuing the issuance;
 - Whether the valuation was contemporaneous or retrospective;
 - Significant factors contributing to the difference between the fair value as of the date of each grant and the estimated IPO price.

As appropriate, please amend your filing 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 supplemental information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR under the form type label CORRESP. 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 filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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 this action as 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 a 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 Joe Roesler at (202) 551-3628 or Lisa Von Joske, at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Zafar Hasan at (202) 551-3653 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: Phyllis Korff
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