

Mail Stop 6010

June 27, 2008

Mr. Stanley Erck  
Chief Executive Officer  
Iomai Corporation  
20 Firstfield Road  
Gaithersburg, Maryland 20878

**Re: Iomai Corporation  
Revised Preliminary Proxy Statement on Schedule 14A  
Filed June 17, 2008  
File No. 000-51709**

Dear Mr. Erck:

We have reviewed your filing 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 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.

The Merger, page 14

Background of the Merger, page 14

1. We note your response to our prior comment 14 and reissue that comment. Please disclose who you engaged as an advisory firm to run the auction process and describe the engagement. We are not persuaded by your response that the auction process is not related to the merger. Even though you engaged the advisory firm to find a potential collaborator, the auction process resulted in the offer from Intercell. Each presentation, discussion or report held with or presented by an outside party that is materially related to the transaction, whether oral or written, is a separate report that requires a reasonably detailed description

meeting the requirements of Item 1015(b) of Regulation M-A. This requirement applies to both preliminary and final reports. Please consider the need to provide additional disclosure about any report, opinion or appraisal provided by the advisory firm and provide us a copy of such documents for our review.

2. We note your response to our prior comment 16 and reissue that comment in part. Your revised disclosure states why management was disappointed with the terms of Company B's proposal. Please briefly describe the proposal and the potential risks and benefits of pursuing the proposal that were discussed at the April 20, 2008 board meeting.

Reasons for the Recommendation of our Board of Directors, page 17

3. We note your response to our prior comment 25 and reissue that comment. We note your revised disclosure and reference to the full discussion of conflicts on page 25. Please also provide a brief discussion in the fourth full bullet point on page 20 regarding the key conflicts of interest the board considered, such as for example, potential severance payments.

Opinion of Cowen and Company, LLC, page 20

4. We note your response to our prior comment 35 and reissue that comment. Our prior comment 23 applies to the board's determination. This comment applies to a summary of Cowen's analysis. In the Analysis of Premiums Paid in Selected Transactions, please disclose the 22 selected transactions. Disclose the one day premium and 20 day premium for each selected transaction.

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As appropriate, please revise your proxy statement in response to these comments. You may wish to provide us with marked copies of the revised document to expedite our review. Please furnish a response letter that keys your responses to our comments. 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.

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Please contact Sonia Barros at (202) 551-3655 or Michael Reedich at (202) 551-3612 with any questions.

Sincerely,

Jeffrey Riedler  
Assistant Director

cc: Paul M. Kinsella, Esq.  
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