

Mail Stop 6010

June 12, 2008

Dr. Roger D. Cone  
President and Chief Scientific Officer  
Znomics, Inc.  
2611 SW 3rd Avenue, Suite 200  
Portland, OR 97201

**Re: Znomics, Inc.  
Amendment No. 2 to Registration Statement on Form S-1/A  
Filed May 30, 2008  
File No. 333-148220**

Dear Dr. Cone:

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.

Amendment No. 2 to Form S-1/A

General

1. Please update the financial statements based on interim data through March 31, 2008 in accordance with Rule 3-12 of Regulation S-X.
2. Please file an updated consent. Refer to Section 436(b) of Regulation C.

3. Please include in the Form S-1 the pro forma information for your merger in November 2007, incorporating our comments 90-94 issued in our letter dated January 16, 2008.

#### Description of Business

##### Status of New Products and Services, page 43

4. We note your revisions in response to Comment 4. Do you have any rights to the results of the gene discovery research conducted for Merck? If you do, please identify the disease or disorder that was the target of your research and describe the rights you have retained.

Additionally, we note your revised disclosure states that Merck has retained the right to license some of the technology produced for a limited time. Please describe the technology and disclose when their right to license the technology expires.

5. We note your response to Comment 5 and reissue the comment in part. We note your statement that you expect to develop the compound screening aspect of drug discovery by the first half of 2008. As this amendment is dated toward the end of the first half of 2008, please revise your disclosure to describe your progress in developing the compound screening aspect of drug discovery, or update your expectation if necessary.

##### Dependence on Limited Customers, page 46

6. We note your response to Comment 6. However, it appears from your response that this expectation is based on the fact that you are in the process of setting up drug discovery programs and is contingent on success identifying lead compounds before you enter into contracts with biotechnology or pharmaceutical companies. Please revise your disclosure to clarify what you need to accomplish before you will be in a position to enter into these types of agreements.

#### Financial Statements of Znomics

##### Note F- Stock Options and Warrants, page F-16

7. We refer to your response to comment 15. Stock compensation was material to your net loss in 2006. Please revise to record stock compensation in accordance with GAAP.

8. We have reviewed your response to prior comment 16. Please disclose the method used to estimate the assumed volatility of 49%. Please refer to paragraph A240 (b) of SFAS 123 (R).
9. We have reviewed your response to prior comment 17. Please disclose the method used to estimate the assumed volatility of 49%. Please refer to paragraph A240 (b) of SFAS 123 (R).

Financial Statements of Pacific Syndicated Resources, Inc.

10. We have read your response to prior comment 13. Please provide the following information:
  - Disclose how you determined that the merger with the public shell company was a reverse merger.
  - Clarify if you are accounting for the acquisition as a purchase.
  - Disclose the number of common shares issued and the purchase price of the acquisition.
  - Clarify who is considered the accounting acquirer and why.
  - Please disclose that there are no related party relationships between the two entities.

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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 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;

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- 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 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 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 Gus Rodriguez at (202) 551-3752 or Mary Mast at (202) 551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Rose Zukin at (202) 551-3239 or Suzanne Hayes at (202) 551-3675 with any other questions.

Sincerely,

Jeffrey P. Riedler  
Assistant Director

cc: Bryan R. Clark, Esq.  
Cane Clark LLP  
3273 East Warm Springs Rd.  
Las Vegas, NV 89120