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January 25, 2007

VIA EDGAR AND  
OVERNIGHT MAIL  
United States Securities  
and Exchange Commission  
100 F Street, NE  
Mail Stop 4561  
Washington, D.C. 20549  
Attention: Sonia Barros

*Re: Pipex Pharmaceuticals, Inc.*  
*Registration Statement on Form SB-2*  
*Filed on December 14, 2006*  
*File No. 333-139354*

Dear Ms. Barros:

Thank you for your January 24, 2007 letter regarding Pipex Pharmaceuticals, Inc. (the "Company"). We hereby submit a letter responding to the one comment. For your convenience, we have set forth below the comment in its entirety followed by our response thereto.

1. Please provide us your analysis as to whether you consider Ridgeback Capital Investments Ltd. to be an "affiliate" of the Company. We may have further comments after receiving your response.

Response: We do not consider Ridgeback Capital Investments Ltd. ("Ridgeback Capital") to be an affiliate of the Company.

Ridgeback Capital is a New York-based investment fund that makes investments in the life sciences sector. The fund is managed by a physician having substantial experience and sophistication in the realm of life science investing. Based upon public filings made by Ridgeback Capital with the Securities and Exchange Commission (the "Commission"), it is clear that Ridgeback Capital has made considerable investments in, and continues to hold positions in, numerous other

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publicly-traded life science companies.

Ridgeback was first introduced to the Company in 2006 by a registered representative of an NASD member firm that served as a selected dealer in connection with the Company's recently completed private placement. Ridgeback Capital's only relationship with the Company is therefore that of an

investor. Indeed, there are no interlocking relationships between the Company's directors and officers and those of Ridgeback Capital; Ridgeback Capital has no part in the management of the Company and no one associated with the Company has a part in the management or investment decisions of Ridgeback Capital; neither the Company nor anyone associated with the Company has any equity interest in Ridgeback Capital or any of Ridgeback Capital's affiliates; and there are no family relationships among the individuals associated with the Company and those associated with Ridgeback Capital.

Moreover, Ridgeback Capital has filed a Schedule 13G with the Commission in connection with its investment in the Company. As you are aware, Ridgeback Capital would have been obligated to file a Schedule 13D under Regulation 13D-G of the Rules and Regulations promulgated under the Securities Exchange Act of 1934 (the "Exchange Act") if it had made its investment in the Company with the purpose or with the effect of changing or influencing the control of the Company.

Finally, Ridgeback Capital's beneficial ownership of the Company's common stock has decreased to 10.5% since the original filing of the Company's Form SB-2 due to the Company's issuance of 2,295,259 shares of its common stock on January 12, 2007 in order to acquire the minority interest in its subsidiary Effective Pharmaceuticals, Inc. And after giving effect to the exercise of all of the Company's currently outstanding warrants and options, Ridgeback Capital's beneficial ownership is only 7.7%. Indeed, when one backs out the Company warrants that Ridgeback Capital owns, the 3,713,129 shares of Company common stock that Ridgeback Capital owns now represents only 7.3% of the Company's outstanding common stock.

While we recognize that beneficial ownership of 10% or more of a publicly registered equity security mandates insider filings with the Commission pursuant to Section 16 of the Exchange Act, we believe that such ownership is not dispositive as to affiliate status. As you are aware, Rule 144 of the Rules and Regulations promulgated under the Securities Act of 1933 (the "Rules and Regulations") provides that an affiliate of an issuer is "a person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such issuer." Rule 405 of the Rules and Regulations provides the same.

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While the term "control" is not defined in either the Securities Act of 1933 or the Securities Exchange Act of 1934, our above analysis demonstrates that none of the factors are present here that are consistently found to be present by the Commission when concluding that "control" exists. See generally Loss & Seligman, Fundamentals of Securities Regulation, Aspen Publishers (2004), at pages 455-469 ("Control Concepts under the SEC Statutes").

For all of the above reasons, we believe that Ridgeback Capital is not an affiliate of the Company.

Sincerely,

/s/ Hank Gracin

Hank Gracin

HG:ckg  
cc: Pipex Pharmaceuticals, Inc.

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