PIPEX PHARMACEUTICALS, INC. 3985 Research Park Drive Ann Arbor, Michigan 48108 Tel. (734) 332-7800

February 9, 2007

VIA FACSIMILE (202) 772-9217 AND FIRST CLASS MAIL

United States Securities and Exchange Commission 450 Fifth Street, N.W. Mail Stop 4561 Washington, D.C. 20549 Attention: Sonia Barros, Esq.

Re: File No. 333-139354

Pipex Pharmaceuticals, Inc. Form SB-2

Dear Ms. Barros:

Pipex Pharmaceuticals, Inc. (the "Company") hereby requests acceleration of the effective date of the above-referenced Registration Statement so that it may become effective by 5:00 p.m. Eastern Daylight Time on Tuesday, February 13, 2007 or as soon thereafter as reasonably practicable.

In making this request, the Company acknowledges that (i) should the Securities and Exchange Commission or the staff declare the filing effective, it will not foreclose the Commission from taking any action with respect to the filing; (ii) the action of the Commission or the staff 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 (iii) 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.

PIPEX PHARMACEUTICALS, INC.

By: <u>/s/ Steve H. Kanzer</u>
Steve H. Kanzer, Chief Executive Officer\_