



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

March 19, 2014

Via E-Mail

Todd C. Brady, M.D., Ph.D.
President and Chief Executive Officer
Aldeyra Therapeutics, Inc.
15 New England Executive Park
Burlington, MA 01803

**Re: Aldeyra Therapeutics, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed March 17, 2014
File No. 333-193204**

Dear Dr. Brady:

We have reviewed your registration statement and have the following comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

General

1. We note your response to our prior comment 1. We also note your disclosure in the prospectus indicating that NS2 has only been tested in healthy subjects, that you have no active INDs for any of the indications in the pipeline table and that you will have to either do additional pre-clinical work or amend your existing IND to commence further anticipated testing. In light of this disclosure, the inclusion of a pipeline table showing products in clinical phases is inappropriate. Please either eliminate the pipeline table in the prospectus or substantially revise it to show each of the current indications as being in the pre-clinical stage. If you decide to retain a modified product pipeline table, the table should appear after a discussion of your products, in the prospectus summary at the earliest in the prospectus.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in

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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 you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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 staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Christine Allen at (202) 551-3652 or Mark Brunhofer at (202) 551-3638 if you have questions regarding comments on the financial statements and related matters. Please contact Christina De Rosa at (202) 551-3577 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler
Assistant Director

cc: Via E-Mail
Keith J. Scherer
Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP
850 Winter Street
Waltham, MA 02451