



DIVISION OF
CORPORATION FINANCE

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

May 26, 2015

Via E-Mail

Kamil Ali-Jackson
Chief Legal Officer
Aclaris Therapeutics, Inc.
101 Lindenwood Drive, Suite 400
Malvern, PA 19355

**Re: Aclaris Therapeutics, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted May 14, 2015
CIK No. 0001557746**

Dear Ms. Ali-Jackson:

We have reviewed your amended draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Notes to Financial Statements

3. Fair Value of Financial Assets and Liabilities, page F-13

1. Refer to your response to our prior comment 16. Your disclosure is confusing and does not appear to meet the objective in ASC 820-10-50-2bbb to disclose, for each "class," the valuation technique(s) and inputs used in your Level 2 fair value measurement. In this regard, your disclosure says the Company primarily relied on quoted prices for identical securities in markets that are not active while it also refers to "models used." Please clarify to indicate, by class of security, the extent to which you used quoted prices versus models. For quoted prices, indicate if prices are adjusted and if so, the nature of the adjustment. For each model, describe the model and the inputs used.

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You may contact Staff Accountant Christine Torney at (202) 551-3652 or Senior Assistant Chief Accountant Jim Rosenberg at (202) 551-3679 if you have questions regarding comments on the financial statements and related matters. Please contact Staff Attorney Preston Brewer at (202) 551-3969, Senior Staff Attorney John Krug at (202) 551-3862 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler
Assistant Director

cc: Via E-Mail
Brian F. Leaf, Esq.
Cooley LLP