

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

DIVISION OF CORPORATION FINANCE

June 4, 2015

Meenu Chhabra President and Chief Executive Officer Proteostasis Therapeutics, Inc. 200 Technology Square, 4th Floor Cambridge, Massachusetts 02139

> Re: Proteostasis Therapeutics, Inc. Draft Registration Statement on Form S-1 Submitted May 8, 2015 CIK No. 0001445283

Dear Mr. Chhabra:

We have reviewed your 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.

General

1. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

Prospectus Summary

2. Please clarify the meaning of any significant scientific or technical terms the first time they are used in your prospectus in order to ensure that lay readers will understand the disclosure. See, e.g., CFTR modulators, correctors and potentiators.

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Our Partnered Programs, page 2

3. Please briefly describe the status of these programs, including the anticipated developmental timelines.

Risks Associated With Our Business, page 3

4. Please address here that your auditor has issued a going concern opinion.

Use of Proceeds, page 49

5. Please tell us whether you intend to use any of the proceeds to satisfy the payment of the \$30.3 million of accruing dividends due to the holders of the convertible preferred stock upon the conversion of such securities that will triggered by your initial public offering and revise your disclosure as necessary throughout the prospectus. In this regard, we note that you had \$8.8 million is cash and cash equivalents at December 31, 2014.

Management's Discussion and Analysis of Financial Condition

Contractual Obligations and Commitments, page 71

6. Please tell us what consideration you have given to filing the Harvard license agreement as an exhibit to the registration statement.

Our Partnered Programs, page 86

7. Please describe the competitive conditions and any competing products, both commercial and in development, that relate to these programs.

Executive Compensation

Narrative Disclosure to Summary Compensation Table, page 110

8. Please describe the bonus arrangements for Dr. Smart. We note a bonus was paid in 2014.

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You may contact Marc Thomas at 202-551-3452 or Gus Rodriguez at 202-551-3752 if you have questions regarding the financial statements and related matters. You may contact Jessica Livingston at 202-551-3448 or me at 202-551-3338 with any other questions.

Sincerely,

/s/ Dietrich A. King

Dietrich A. King Assistant Director

cc: Mitchell S. Bloom, Esq.