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

DIVISION OF
CORPORATION FINANCE

May 15, 2015

Via E-mail
Mark Leuchtenberger
Chief Executive Officer
Chiasma, Inc.
831 Beacon Street, Suite 313
Newton Centre, Massachusetts 02459

Re: Chiasma, Inc.
Draft Registration Statement on Form S-1
Submitted April 17, 2015
CIK No. 0001339469

Dear Mr. Leuchtenberger:

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.

Company Overview, page 1

1. We refer to your disclosure in the first paragraph regarding "oral octreotide." Please revise your disclosure to include a general description of oral octreotide including whether it is a solution, powder or a pill. If oral octreotide is being developed in a pill form, please disclose whether it is a solid or gel cap formulation. In addition, please discuss any special handling requirements including refrigeration, if applicable.

Our Proprietary TPE Technology Platform, page 2

2. Please describe the meaning and significance of "peptides" at its first reference.

3. Please revise your disclosure to include a brief discussion of whether your technology was developed in-house or was acquired pursuant to a purchase, assignment or license. If so, please identify the licensor or assignor and whether any such license or assignment is exclusive or non-exclusive.

4. Please expand your disclosure regarding octreotide to include:
    - a brief description about the proprietary or non-proprietary nature of octreotide;
    - whether octreotide is currently proprietary or was recently proprietary and if so, please identify the owner of the compound and briefly describe the nature of the proprietary rights such owner holds or held; and
    - whether the company is required to obtain any licenses or rights to commercialize its product including a discussion of any plans or proposals to license or otherwise obtain the requisite rights to commercialize the product.

5. We refer to your disclosure in the first full paragraph on page 3. Please revise your disclosure to briefly describe the FDA's 505(b)(2) regulatory pathway.

Risks Affecting Us, page 4

6. Please supplement your list of bullet point risk factors to address the risk associated with your ability or inability to enter into strategic collaboration or licensing agreements.

Risk Factors, page 11

7. We refer to your disclosure in the last paragraph under Anti-Takeover Effects of Our Certificate of Incorporation and Our Bylaws on page 144. Please add a risk factor describing the disadvantages to stockholders attendant to the exclusive forum provision contained in your amended and restated certificate of incorporation.

8. We note that some pharmaceutical companies and others have objected to the FDA's interpretation of Section 505(b)(2). Please expand your disclosure in the risk factor beginning at the bottom of page 14 to explain the nature of such challenges and how, if such challenges were successful, they would impede your planned operations.

9. We refer to your first full risk paragraph on page 35 and the subsequent risk factor on page 36. We also note, that these risk factors appear to be substantially similar and repetitive. Please revise these risk factors to provide one concise risk factor to discuss the risk described therein.

Industry And Market Data, page 57

10. We refer to the second and last sentences in the first paragraph of this section. The inclusion of these statements might cause a potential investor to believe the registrant is not liable for some of the information included in your prospectus. In order to eliminate any inference that you are not liable for all of the information in your registration statement, please delete these sentences from your registration statement. Alternatively, please clearly state that the registrant is liable for all of the information contained in the registration statement.

Use of Proceeds, page 58

11. Please revise your disclosure to provide your best reasonable estimate of whether the amount of proceeds allocated will be sufficient to accomplish your plans to build your corporate infrastructure, including your U.S. sales and marketing operations, to support the commercial launch of oral octreotide in the United States for the treatment of acromegaly. Additionally, please clarify whether the allocated proceeds will be sufficient to complete your Phase III and Phase II studies discussed in the second and third bullets, respectively.

Stock-Based Compensation, page 75

12. We may have additional comments on your accounting for equity issuances including stock compensation and beneficial conversion features. Once you have an estimated offering price, please provide us an analysis explaining the reasons for the differences between recent valuations of your common stock leading up to the IPO and the estimated offering price.

Our Product Candidate Pipeline, page 86

13. We refer to your product pipeline table on page 86. Please revise your table to identify the new orphan indication for oral octreotide that is described as Phase 2 ready as well as the compounds and indication for Product Candidate 2 and Product Candidate 3. The product pipeline table is intended to provide information about actual products. Unless an indication and a compound have been identified, the product is too preliminary for inclusion in the table. Accordingly, please identify the indication and compound for the last three products in the table or alternately, eliminate them from the table.

Trial Results, page 90

14. We refer to your disclosure following your tables on page 92 that the safety profile of oral octreotide was consistent with the known safety profile of octreotide and the disease burden of acromegaly, but without adverse injection-site reactions. Please expand your disclosure to provide a discussion of the safety profile of oral octreotide.

15. We refer to your disclosures on page 91. Please clarify whether any statistical analysis was performed relating to the lower GH and IGF-1 levels. If so, state whether such analysis demonstrated any statistically significant results. Also, disclose the corresponding p-values.

Planned Phase 3 Clinical Trial, page 92

16. We refer to your disclosures concerning the EMA and the advisement of the necessity of an actively controlled study prior to filing for EMA approval. Please clarify whether the FDA has advised the company that they will not need such study, as the company will be filing an NDA without a second Phase III actively controlled study as mandated by the EMA. If the company has not been so advised, please disclose why the company believes it will not need to complete such a study prior to filing an NDA.

Other Indications for Oral Octreotide, page 95

17. We refer to your last sentence in the first paragraph on page 95. Please revise your disclosure to include the identity of the orphan indications the company has identified for clinical study.

Manufacturing, page 97

18. We refer to your disclosure regarding your third-party suppliers and manufacturers. We also note your bulleted risk factor disclosure and your risk factor on page 25, citing your dependence on a limited number of third parties to manufacture oral octreotide and disclosure of a limited number of manufacturers who are both capable of manufacturing oral octreotide and willing to do so. In that regard, please expand your disclosure to provide the material terms of each of your agreements with Novetide Ltd., Bachem Americas Inc., Lyophilization Services of New England Inc. and Encap Drug Delivery, including each party's material rights and obligations, termination provisions and any payment provisions. Also, please file each of the agreements as exhibits in accordance with Item 601 of Regulation S-K. Alternatively, please provide an analysis as to why the company is not substantially dependent upon these agreements.

Patents, page 99

19. We note you identify the following patent families or patent groups:

- compositions of octreotide formulated with TPE;
- capsules containing octreotide compositions;
- methods of treating various conditions with octreotide compositions;
- further uses of octreotide;
- dosage regimens and methods of treating acromegaly; and

- proprietary packaging.

For each of these groups please provide the following information:

- the number of issued material patents,
- the number of pending material applications,
- the jurisdictions of each material patent or material patent application, and
- the year of expiration or expected year of expiration of each material patent or material patent application.

20. Please disclose whether any of your intellectual property (including oral octreotide, TPE or your other product candidates) is subject to the rights of others, including any impairments, licenses or assignments. In that regard, we refer to your biographical disclosure relating to Dr. Mamluk. We note that Dr. Mamluk and the company have entered into an Intellectual Property Assignment Agreement. We also note your disclosure on page 3, that Dr. Mamluk, led the development of oral octreotide and is one of the primary inventors of your TPE platform. Please disclose the material terms of this agreement and file it as an exhibit, in accordance with Item 601 of Regulation S-K.

Services Agreement, page 137

21. We note your reference to Dr. Patou as a "key person" in your prospectus and the tasks allocated to Dr. Patou, including the filing of drug applications, clinical development and product development, pursuant to the Services Agreement. In that regard, please file as an exhibit to your Form S-1 the Services Agreement with MPM Asset Management LLC and Gary Patou, M.D., your Senior Medical Advisor.

22. We refer to your disclosure regarding the consulting agreement with Waterloo Holdings Limited, an affiliate of a 10% holder of your outstanding stock. Please file the consulting agreement as an exhibit to your Form S-1.

Financial Statements
Note 9. Redeemable Convertible Preferred Stock

23. Please tell us and disclose how you determined the initial carrying value of the Series D' Preferred stock of $20.1 million and the accretion of deemed liquidation of Series D redeemable convertible preferred stock of $38.5 million and reference the supporting authoritative literature.

Item 15. Recent Sales of Unregistered Securities, page II-3

24. We refer to Footnote 17 of your Financial Statements and the grant of options to purchase an aggregate of 14,884,096 shares of common stock to certain officers, directors, employees and a consultant in 2015. Please update your recent sales of unregistered

securities to include all sales of unregistered securities in accordance with Item 15 of Form S-1.

Other Comments

25. Please submit all exhibits as soon as practicable. We may have further comments upon examination of these exhibits.

26. Please confirm that the graphics included in your registration statement are the only graphics you will use in your prospectus. If those are not the only graphics, please provide any additional graphics prior to their use for our review.

27. 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.

You may contact Lisa Vanjoske at 202-551-3614 or Joel Parker at 202-551-3651 if you have questions regarding comments on the financial statements and related matters. Please contact Tara Keating Brooks at (202) 551-8336 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Michael H. Bison
Goodwin Procter LLP