June 2, 2021

Eli Casdin Chief Executive Officer CM Life Sciences, Inc. c/o Corvex Management LP 667 Madison Avenue New York, New York 10065

Inc.

Re: CM Life Sciences,

Preliminary Proxy

Statement on Schedule PREM14A

Filed May 6, 2021 File No. 001-39482

Dear Mr. Casdin:

We have reviewed your filing 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in

your response.

After reviewing your response to these comments, we may have additional comments.

Preliminary Proxy Statement on Schedule PREM14A

Sema4, page 29

1. Please balance your disclosure in this section by indicating, if true, that Sema4 serves patients primarily in New York, California, Florida, Connecticut and New Jersey and briefly indicate the material regulatory requirements Sema4 would face in order to expand into other states and the additional need to establish test reimbursement rates from third party payors in those areas. Summary of the Proxy Statement, page 29 2. You state herein that Sema4 was formed in October 2015. Elsewhere in the document, i.e., pages 212, 237 and F-31, the date is June 2017. Please reconcile or revise accordingly. Eli Casdin FirstName LastNameEli CM Life Sciences, Inc. Casdin Comapany June 2, 2021NameCM Life Sciences, Inc.

June 2,

Page 2 2021 Page 2

FirstName LastName Stable Free Cash Flow, Prudent Debt and Financial Visibility, page 38

3. Please balance your disclosure in this section by indicating the negative free cash flows experienced by Sema4 in each of the last three fiscal years and by indicating the amount of Sema4 s Long-term debt, net of current portion as of the date of the most recent balance sheet for Sema4 included in your proxy statement.
Our Sponsor, certain members of our Board and our officers have interests in

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the Business
Combination, page 93
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4. Please expand your discussion to disclose your sponsor's, officers' and directors' aggregate average investment per share. In addition, clarify that in addition to being at risk of losing their entire investment if the transaction is not approved, that as a result of your sponsor's, officers' and directors' significantly lower investment per share in their CM Life shares as compared to your public investors, the insiders could make a substantial profit after the initial business combination even if public investors experience substantial losses The proposed Amended and Restated Certificate of Incorporation designates the Court of Chancery of the State of Delaware, page 110 Please revise this risk factor to disclose that there is also a risk 5 that your exclusive forum provision may result in increased costs for investors to bring a claim. Unaudited Pro Forma Condensed Combined Financial Information, page 114 Please expand your description on page 121 of adjustment 5(c) to the 6. pro forma balance sheet to provide an explanation of your expected accounting for the Earn-Out Shares in the reverse recapitalization. For example, clarify whether the shares to be issued to stockholders are tied to future employment with the combined entity and if the awards will be accounted for as the issuance of share-based payments under ASC 718. Please expand your description on page 121 of adjustment 5(d) to the 7. pro forma balance sheet to explain the details of the reassessment of the terms of the Public Warrants and how it results in a reclassification to equity following the business combination. Background of the Business Combination, page 151 With reference to the first full paragraph on page 152, please revise 8. this section to describe all contacts with various parties during the evaluation by the company of potential business combinations. Please disclose the number of companies that were contacted, how the potential acquisition opportunities were identified, and the analysis and evaluation that was conducted with respect to each potential acquisition opportunity. To the extent that any preliminary proposals were submitted/received from eliminated targets, please disclose all material proposal terms, including transaction structure, valuation, and equity split distribution. Please also revise to disclose why this transaction is being Eli Casdin CM Life Sciences, Inc. June 2, 2021 Page 3 recommended as opposed to any alternatives. To the extent material, please identify the individuals who 9. participated in the meetings and discussions described in this section. For example, please identify who participated in the virtual meeting to discuss the business combination held on January 14, 2021. CMLS Board of Directors' Reasons for the Approval of the Business Combination, page 154 10. Please describe in greater detail all material analyses the board relied upon in evaluating the financial aspects of the business combination. If there were any analyses that did not support the fairness of the transaction, please include appropriate disclosure. Certain Sema4 Projected Financial Information, page 156 Please revise to describe the extent to which the financial 11. projections provided by Sema4

factored into or supported your valuation. Please also explain how these projections were used by management. In this regard, clarify whether the projections were accepted or whether management or the Board made any adjustments to these projections and if so, describe such adjustments. Sema4's Business Regulatory Strategy and Managed Care, page 219 We note your disclosure here that you are preparing to submit your 12. WES/WTS for approval by the FDA by engaging in the studies needed to demonstrate clinical utility. Under the heading "Pre-Market Approval" on page 228, please disclose the studies that will be necessary to achieve FDA approval and the current status of such studies. Intellectual Property Patents, page 225 13. We note your disclosure that you have patent applications related to various aspects of your laboratory, analytic and business practices. Please revise to disclose the specific technologies to which such patent applications relate, the type of patent protection you are seeking, the expected expiration dates and the applicable jurisdictions. Sema4's Management's Discussion and Analysis, page 237 Comparison of the Years Ended December 31, 2020, 2019 and 2018, page 243 14. We note the disclosure on page 223 referring to the collaborations or other agreements with Sanofi, Janssen and Merus. Please disclose the significant terms of these agreements, quantify the impact thereof on your financial statements to date or clarify, if true, that no FirstName LastNameEli Casdin material impact has been recognized based on the relevant terms and conditions. It Comapany NameCM appears Life Sciences, other revenue Tnc. has been impacted to some extent therefrom as mentioned on page June 2,244. 2021 Page 3 FirstName LastName Eli Casdin FirstName LastNameEli CM Life Sciences, Inc. Casdin Comapany June 2, 2021NameCM Life Sciences, Inc. June 2, Page 4 2021 Page 4 FirstName LastName Critical Accounting Policies and Estimates, page 253 We note the disclosure on page 222 that you offer "a suite of 15. products, services, and solutions to our Biopharma customers. While each of these solutions can represent a standalone offering, we believe that our Biopharma partners can realize significant value when collaborating with our team to utilize a more integrated, end-to-end solution." Regarding the revenue recognition critical accounting policy on pages 254-255, in any instances when there is one contract with multiple elements and/or products, services and solutions purchased at the same time, revise to disclose how you identify the relevant performance obligations and whether you allocate the contract s transaction price to each performance obligation on a relative standalone selling price basis. Beneficial Ownership of Securities, page 286 Please identify the natural persons that will be the beneficial owners 16.

of the shares held by

Icahn School of Medicine at Mount Sinai. General 17. Please include a form of proxy card marked as preliminary in your next amendment. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff. You may contact Jenn Do at (202) 551-3743 or Terence 0 Brien at (202)

551-3355 if you have questions regarding comments on the financial statements and related matters. Please contact Ada Sarmento at (202) 551-3798 or Tim Buchmiller at (202) 551-3635 with any other questions.

> Sincerely, Division of Office of Life

Corporation Finance

Sciences cc: Colin J. Diamond, Esq.