June 28, 2021

US Securities and Exchange Commission 100 F St NE Washington, DC 20549

Attn: Ada Sarmento and Tim Buchmiller

CM Life Sciences, Inc. Amendment No. 1 to the Preliminary Proxy Statement on Schedule PREM14A Filed June 10, 2021 File No. 001-39482

Dear Ms. Sarmento and Mr. Buchmiller:

On behalf of our client, CM Life Sciences, Inc., a company organized under the laws of the State of Delaware (the "Company"), we are writing to submit the Company's responses to the comments of the staff of the Division of Corporation Finance of the United States Securities and Exchange Commission (the "Staff") with respect to the above-referenced proxy statement filed on June 10, 2021 (the "Amended Proxy Statement"), contained in the Staff's letter dated June 24, 2021 (the "Comment Letter").

The Company has filed via EDGAR Amendment No. 2 to the Proxy Statement (the "Second Amended Proxy Statement"), which reflects the Company's responses to the comments received by the Staff and certain updated information. For ease of reference, each comment contained in the Comment Letter is printed below in bold and is followed by the Company's response. All page references in the responses set forth below refer to page numbers in the Proxy Statement as filed.

Revised Preliminary Proxy Statement on Schedule PREM14A

Selected Historical Financial Information of the Company, page 44

1. Please revise to provide the balance sheet information as of March 31, 2021 on page 45. Please label the first column presented on page 45. Finally, it appears that the amount of Cash and marketable securities held in trust account of \$442,774 has been presented in thousands of U.S. dollars, but all other balance sheet amounts are whole U.S. dollars. Please revise accordingly.

Response: The financial tables on page 45 of the of the Second Amended Proxy Statement have been updated to provide the missing information from the Balance Sheet Data and to rectify the discrepancy in dollar amounts.

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Selected Historical Financial Information of Sema4, page 47

2. Please revise Total stockholders' (deficit) equity of \$521,044 at March 31, 2021 on page 48 to indicate a deficit, similar to the deficits at December 31, 2020 and 2019.

Response: The Total stockholders' (deficit) equity on page 48 of the Second Amended Proxy Statement has been updated to indicate a deficit.

Risk Factors, page 52

3. Please add a risk factor to disclose the material risks to unaffiliated investors presented by taking the company public through a merger rather than an underwritten offering. These risks could include the absence of due diligence conducted by an underwriter that would be subject to liability for any material misstatements or omissions in a registration statement.

Response: The Company has added a disclosure on page 97 of the Second Amended Proxy Statement to the effect that there are risks to unaffiliated investors presented by taking the target company public through a merger, rather than an underwritten offering, which include the absence of underwriter due diligence and other associated risks.

Our Sponsor, certain members of our Board and our officers have interests in the Business Combination, page 93

4. We note your revisions in response to prior comment 4. Please further revise to disclose your sponsor's, officers' and directors' aggregate average investment per share and the aggregate dollar amount of what the sponsor and its affiliates have at risk that depends on completion of a business combination. In addition to the current value of securities held, please include loans extended, fees due, and out-of-pocket expenses for which the sponsor and its affiliates are awaiting reimbursement. Provide similar disclosure for the company's officers and directors, if material.

Response: In response to the Staff's comment, the Company has revised its disclosure on pages 93 and 94 to include statements regarding the aggregate average investment per share and the aggregate dollar amount of what the Sponsor, officers and directors have at risk subject to the completion of the proposed business combination. Additionally, the Company advises that there are no loans extended, fees due, or out-of-pocket expenses for which the Sponsor, its affiliates, officers or directors are awaiting reimbursement, and the Company has added in such disclosure on page 94 of the Second Amended Proxy Statement.

Critical Accounting Policies and Estimates, page 267

5. We have read your response to comment 15 in our letter dated June 2, 2021. Please confirm our understanding that for your diagnostic test revenue contracts that typically consist of a single performance obligation to deliver diagnostic testing services to the ordering facility or patient, allocation of the transaction price is also not applicable.

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Response: The Company confirms the Staff's understanding that, for Sema4's diagnostic test revenue contracts that typically consist of a single performance obligation to deliver diagnostic testing services to the ordering facility or patient, allocation of a transaction price is not applicable. As disclosed on page 267 of the Second Amended Proxy Statement, Sema4 recognizes revenue when test results are delivered to customers for an amount that reflects what Sema4 expects to collect in exchange for its services.

In response to the Staff's comment, the disclosure on page 267 in the Second Amended Proxy Statement has been revised to clarify that, in Sema4's diagnostic test revenue contracts that include a single performance obligation to deliver diagnostic testing services to an ordering facility or patient, allocation of the transaction price is not applicable.

* * *

Please do not hesitate to contact Colin Diamond at (212) 819-8754 or Matt Kautz at (212) 819-8395 of White & Case LLP with any questions or comments regarding this letter.

Sincerely,

/s/ White & Case

White & Case LLP

cc: Keith Meister, Chairman, CM Life Sciences, Inc.