

April 15, 2021

**VIA EDGAR AND HAND DELIVERY**

United States Securities and Exchange Commission  
Division of Corporation Finance  
Office of Life Sciences  
100 F Street, N.E.  
Washington, D.C. 20549-6010

Attention: Dillon Hagius and Ada D. Sarmento

Re: **Biomea Fusion, Inc.**  
Registration Statement on Form S-1  
Publicly filed on March 26, 2021  
**File No. 333-254793**

Ladies and Gentlemen:

On behalf of Biomea Fusion, Inc. (the “**Company**” or “**Biomea**”), we are hereby filing Amendment No. 2 (“**Amendment No. 2**”) to the Registration Statement on Form S-1 (“**Registration Statement**”). The Company previously filed a Registration Statement on Form S-1 on March 26, 2021 and Amendment No. 1 to the Registration Statement on April 12, 2021, in each case, with the U.S. Securities and Exchange Commission (the “**Commission**”). Amendment No. 2 has been revised to reflect the Company’s responses to the comment letter received on April 15, 2021 from the staff of the Commission (the “**Staff**”).

For ease of review, we have set forth below each of the numbered comments of your letter in bold type followed by the Company’s responses thereto.

**LATHAM & WATKINS** LLP

**Registration Statement on Form S-1**

**Prospectus Summary**

**Overview, page 1**

1. We note that you have revised this section to include an additional table depicting your active discovery programs in response to prior comment 1. Please remove this additional table from the Prospectus Summary. We will not object to a narrative description in the Prospectus Summary that summarizes this table.

*Response:* The Company acknowledges the Staff's comment and advises the SEC that it has revised pages 2, 109 and 115 of Amendment No. 2 accordingly.

\* \* \*

**LATHAM & WATKINS** LLP

We hope the foregoing answers are responsive to your comments. Please do not hesitate to contact me by telephone at (415) 395-8198 or by fax at (650) 463-2600 with any questions or comments regarding this correspondence.

Very truly yours,

/s/ Miles P. Jennings

Miles P. Jennings  
of LATHAM & WATKINS LLP

cc: Thomas Butler, Biomea Fusion, Inc.  
Rainer (Ramses) Erdtmann, Biomea Fusion, Inc.  
Brian Cuneo, Latham & Watkins LLP  
Charles Kim, Cooley LLP  
Jonie Kondracki, Cooley LLP