

June 21, 2024

United States Securities and Exchange Commission
Division of Corporation Finance
Office of Life Sciences
100 F Street, N.E.
Washington, D.C. 20549
Attn: Vanessa Robertson
Tracie Mariner

**RE: Biomea Fusion, Inc.
Form 10-K for Fiscal Year Ended December 31, 2023
Filed March 28, 2024
File No. 001-40335**

To the addressees set forth above:

On behalf of Biomea Fusion, Inc. (the "Company"), this letter responds to the comments set forth in the letter to the Company dated June 12, 2024 from the staff (the "Staff") of the United States Securities and Exchange Commission (the "SEC"), relating to the financial statements and related disclosures in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2023, as filed on March 28, 2024. For your convenience, we have repeated the comment from the June 12, 2024 letter in italicized print, and the Company's response is provided below the comment.

Form 10-K for Fiscal Year Ended December 31, 2023

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

Research and Development Expenses, page 103

1. You disclose, on page 101, that you track direct costs by stage of program, clinical or preclinical. Please address the following:

- Revise your disclosure in future filings to break out clinical costs by program or by indication separately for each period presented.*
- If you do not track clinical costs on a more granular level, revise your disclosure to explain the reason.*
- For preclinical costs, revise your disclosure to break out the total amount spent for each period presented.*
- Provide us with your proposed disclosure.*

Company Response to Comment 1:

The Company respectfully acknowledges the Staff's comment and undertakes to provide the requested detail for external research and development expenses by stage of program or type of research and development activity as shown below, to the extent such spend is attributable to a specific stage of program. Many of these expenses are shared among various programs and product candidates and, as such, the Company does not track expenses by program or indication.

In addition, the Company will provide a breakdown of research and development expenses consistent with the following tabular and narrative disclosure in its future periodic reports filed with the SEC, where applicable, beginning with the Company's upcoming Form 10-Q for the three months and six months ending June 30, 2024.

Research and Development Expenses

We track research and development expenses to the extent such spend is attributable to a specific stage of program or type of research and development activity. Many of these expenses are shared among various programs and product candidates and, as such, we do not track expenses by program or indication. The following table summarizes our research and development expenses by stage of program and type of research and development activity incurred during the periods indicated (in thousands):

	Three Months Ended June 30,			Six Months Ended June 30,		
	2024	2023	\$ Change	2024	2023	\$ Change
External costs						
Clinical activities related expenses	\$ []	\$ []	\$ []	\$ []	\$ []	\$ []
Pre-clinical activities related expenses	[]	[]	[]	[]	[]	[]
Expenses related to manufacturing of clinical and research material	[]	[]	[]	[]	[]	[]
Other external costs	[]	[]	[]	[]	[]	[]
Internal costs:	[]	[]	[]	[]	[]	[]
Personnel-related expenses (including stock-based compensation)	[]	[]	[]	[]	[]	[]
Facilities and other allocated expenses	[]	[]	[]	[]	[]	[]
Total research and development expenses	\$ []	\$ []	\$ []	\$ []	\$ []	\$ []

Biomea Fusion, Inc. is committed to fully complying with the SEC disclosure requirements. Please do not hesitate to contact me by telephone at (650) 460-7636 with any questions or comments regarding this correspondence.

Very truly yours,

/s/ Franco Valle

Chief Financial Officer

cc: Thomas Butler, Biomea Fusion, Inc.
Rainer (Ramses) Erdtmann, Biomea Fusion, Inc.