

**CALCIMEDICA, INC.**  
**505 Coast Boulevard South, Suite 307**  
**La Jolla, CA 92037**

August 16, 2023

VIA EDGAR

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

Attn: Mr. Jimmy McNamara

RE: **CalciMedica, Inc.**  
**Registration Statement on Form S-3**  
**File No. 333-273949**

Ladies and Gentlemen:

CalciMedica, Inc. (the “**Registrant**”) hereby requests that the U.S. Securities and Exchange Commission (the “**Commission**”) take appropriate action to cause the above-referenced Registration Statement on Form S-3 to become effective on August 18, 2023, at 4:00 p.m., Eastern Time, or as soon thereafter as is practicable or at such later time as the Registrant may orally request via telephone call to the staff of the Commission. The Registrant hereby authorizes Carlos Ramirez of Cooley LLP and Rachel Lydon of Cooley LLP, counsel to the Registrant, to make such request on its behalf.

Once the Registration Statement has been declared effective, please orally confirm that event with Carlos Ramirez at (858) 550-6157, or in his absence, Rachel Lydon of Cooley LLP at (858) 550-6107.

Very truly yours,

**CALCIMEDICA, INC.**

By: /s/ A. Rachel Leheny, Ph.D.

Name: A. Rachel Leheny, Ph.D.

Title: Chief Executive Officer

cc: John Dunn, CalciMedica, Inc.  
Carlos Ramirez, Cooley LLP  
Rachel Lydon, Cooley LLP