



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

DIVISION OF  
CORPORATION FINANCE

July 12, 2024

Thomas A. Keuer  
President and Chief Operating Officer  
ARCA biopharma, Inc.  
10170 Church Ranch Way, Suite 100  
Westminster, CO 80021

**Re: ARCA biopharma, Inc.  
Amendment No. 2 to Registration Statement on Form S-4  
Exhibit Nos. 10.50 and 10.51  
Filed July 9, 2024  
File No. 333-279387**

Dear Thomas A. Keuer:

You have redacted information from the exhibits identified above asserting that the redacted information is not material and is the type of information that you treat as private or confidential. For us to assess your compliance with the form requirements, please supplementally provide us, within five business days, with an unredacted copy (marked to show where you have redacted information in your public filing) of the exhibits identified above.

Please contact the staff member associated with the review of this filing to discuss how to submit the unredacted copy of your exhibits. Given your conclusion that this information is private or confidential, do not respond by submitting correspondence on EDGAR or sending a response by email. Unless you tell us otherwise, we will assume that you want us to treat the requested supplemental materials, including unredacted documents and any related correspondence, as confidential while in our possession. We will destroy the supplemental materials at the end of our assessment unless doing so would be inconsistent with Rules 418 or 12b-4.

We will notify you of any comments we may have or that we have concluded our assessment of your compliance with the form.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences