

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
August 27, 2009**

**ORDER GRANTING CONFIDENTIAL TREATMENT
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

ARCA biopharma, Inc., formerly Nuvelo, Inc.

File No. 000-22873 - CF#23331

ARCA biopharma, Inc., formerly Nuvelo, Inc., submitted an application under Rule 24b-2 requesting an extension of a previous grant of confidential treatment for information it excluded from the Exhibits to a Form 10-K filed on March 15, 2006.

Based on representations by ARCA biopharma, Inc., formerly Nuvelo, Inc. that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibit will not be released to the public for the time period specified:

Exhibit 10.56 through June 25, 2012

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Christian Windsor
Special Counsel