



ANDERS HOVE, MD JOINS ARCA BIOPHARMA BOARD OF DIRECTORS

Westminster, CO, February 21, 2017 – ARCA biopharma, Inc. (Nasdaq: ABIO), a biopharmaceutical company applying a precision medicine approach to developing genetically-targeted therapies for cardiovascular diseases, today announced that Anders Hove, M.D., has joined its Board of Directors.

“Anders brings decades of experience building and advising biopharmaceutical companies,” said Dr. Michael R. Bristow, President and Chief Executive Officer of ARCA. “With his expertise on both the corporate and investment sides of the industry, Anders’ input and guidance will be valuable to our Board of Directors as we continue the development of Gencaro and seek to deliver value to our stockholders.”

Dr. Hove has more than 20 years of experience investing in and helping build biopharmaceutical companies. He has served on the Boards of Directors of numerous private and public companies, currently serving on the Boards of two private biopharmaceutical companies. In 2011, Dr. Hove was named to Forbes’ Midas List, which ranked the top venture capitalists in life sciences and technology. Dr. Hove received a M.Sc. in Biotechnology Engineering from the Technical University of Denmark, an M.D. from the University of Copenhagen and an M.B.A. from the Institut Européen d'Administration des Affaires, or INSEAD.

“I am honored to join the ARCA Board of Directors,” said Dr. Hove. “This is an exciting time for the organization with the GENETIC-AF clinical trial interim efficacy analysis expected later this year. I believe there is a significant opportunity for developing genetically-targeted cardiovascular therapeutics, for which ARCA is well-positioned.”

About ARCA biopharma

ARCA biopharma is dedicated to developing genetically-targeted therapies for cardiovascular diseases through a precision medicine approach to drug development. The Company's lead product candidate, Gencaro™ (bucindolol hydrochloride), is an investigational, pharmacologically unique beta-blocker and mild vasodilator being developed for atrial fibrillation. ARCA has identified common genetic variations that it believes predict individual patient response to Gencaro, giving it the potential to be the first genetically-targeted atrial fibrillation prevention treatment. ARCA has a collaboration with Medtronic, Inc. for support of the GENETIC-AF trial. For more information, please visit www.arcabio.com.

Safe Harbor Statement

This press release contains "forward-looking statements" for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. These statements include, but are not

limited to, statements regarding, the potential timeline for GENETIC-AF trial activities, the potential for genetic variations to predict individual patient response to Gencaro, Gencaro's potential to treat atrial fibrillation, future treatment options for patients with atrial fibrillation, the potential for ARCA to expand its cardiovascular pipeline, the opportunity related to developing genetically-targeted cardiovascular therapeutics and the potential for Gencaro to be the first genetically-targeted atrial fibrillation prevention treatment. Such statements are based on management's current expectations and involve risks and uncertainties. Actual results and performance could differ materially from those projected in the forward-looking statements as a result of many factors, including, without limitation, the risks and uncertainties associated with: the Company's financial resources and whether they will be sufficient to meet the Company's business objectives and operational requirements; results of earlier clinical trials may not be confirmed in future trials, the protection and market exclusivity provided by the Company's intellectual property; risks related to the drug discovery and the regulatory approval process; and, the impact of competitive products and technological changes. These and other factors are identified and described in more detail in ARCA's filings with the Securities and Exchange Commission, including without limitation the Company's annual report on Form 10-K for the year ended December 31, 2015, and subsequent filings. The Company disclaims any intent or obligation to update these forward-looking statements.

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