Arch Therapeutics, Inc.
Form 424B3
March 22, 2016

Filed Pursuant to Rule 424(b)(3)

Registration No. 333-206873

PROSPECTUS SUPPLEMENT NO. 5 DATED MARCH 22, 2016

TO

PROSPECTUS DATED JANUARY 15, 2016

(AS SUPPLEMENTED)

ARCH THERAPEUTICS, INC.

PROSPECTUS

Up to 25,590,599 Shares of Common Stock

This Prospectus Supplement No. 5 supplements the prospectus of Arch Therapeutics, Inc. ("the "**Company**", "**we**", "**us**", or "**our**") dated January 15, 2016 (as supplemented to date, the "**Prospectus**") with the following attached document which we filed with the Securities and Exchange Commission on March 22, 2016:

A. Our Current Report on Form 8-K filed with the Securities and Exchange Commission on March 22, 2016

This Prospectus Supplement No. 5 should be read in conjunction with the Prospectus, which is required to be delivered with this Prospectus Supplement. This Prospectus Supplement updates, amends and supplements the information included in the Prospectus. If there is any inconsistency between the information in the Prospectus and this Prospectus Supplement, you should rely on the information in this Prospectus Supplement.

This Prospectus Supplement is not complete without, and may not be delivered or utilized except in connection with, the Prospectus, including any amendments or supplements to it.

Investing in our common stock involves a high degree of risk. Before making any investment in our common stock, you should carefully consider the risk factors for our common stock, which are described in the Prospectus, as amended or supplemented.

You should rely only on the information contained in the Prospectus, as supplemented or amended by this Prospectus Supplement No. 5 and any other Prospectus Supplement or amendment thereto. We have not authorized anyone to provide you with different information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this Prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement No. 5 is March 22, 2016

INDEX TO FILINGS

ANNEX A

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **March 22, 2016**

ARCH THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Nevada	**000-54986**	**46-0524102**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

235 Walnut Street, Suite 6
Framingham, Massachusetts **01702**
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(617) 431-2313**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

¨Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

¨Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

¨Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

¨Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events.

On March 22, 2016, Arch Therapeutics, Inc. (the "**Company**") issued a press release announcing that the Company has received favorable results for its lead product candidate, the AC5 Surgical Hemostatic Device™, in a skin irritation test. The text of the press release is attached hereto as Exhibit 99.1 and is incorporated by reference herein.

Item 9.01 Financial Statements and Exhibit

(d) Exhibits

Exhibit	**Description**
99.1	Press Release issued by Arch Therapeutics, Inc. on March 22, 2016

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ARCH THERAPEUTICS, INC.

Dated: March 22, 2016 By:/s/ Terrence W. Norchi, M.D.
Name: Terrence W. Norchi, M.D.
Title: President, Chief Executive Officer

Exhibit List

Exhibit	Description
99.1	Press Release issued by Arch Therapeutics, Inc. on March 22, 2016

Exhibit 99.1

Arch Therapeutics Obtains Favorable Safety Data for AC5 Surgical Hemostatic Device™ in Skin Irritation Testing in Humans

AC5™ Not Considered an Irritant in a Cumulative Evaluation

FRAMINGHAM, MA – March 22, 2016 -- Arch Therapeutics, Inc. (OTCQB: ARTH) ("Arch" or the "Company"), developer of the AC5 Surgical Hemostatic Device™ ("AC5™"), reports favorable data from a 21-day repeat exposure skin test to evaluate the irritation potential of AC5 to human skin. This represents the first safety data obtained for AC5 from human testing.

The study was a Cumulative Irritation Evaluation test designed to determine the skin irritation potential of AC5 and controls after each was applied daily for 21 sequential days to the skin of a total of 41 healthy male and female human subjects. Results were obtained by evaluating and comparing the subject's skin in areas where AC5 and the controls were repeatedly applied. Based upon the results, AC5 was not considered an irritant.

Arch Therapeutics President and CEO Terrence Norchi, MD, stated, "The results of this study represent an important step toward demonstrating clinical safety of AC5, and we remain pleased with the safety data generated to date. This irritation test adds to the portfolio of solid results and should enhance the profile of AC5 for hemostasis and other wound care applications."

In addition, blood tests were performed both prior to and 24 hours after the testing period to evaluate any changes from baseline levels. No change was attributed to exposure to AC5 or the controls, indicating that there were no adverse events associated with the absorption or metabolism of AC5.

The Cumulative Irritation Evaluation test is a standard test that provides safety information. AC5's peptide structure and mechanism of action, which is based on the formation of a local physical-mechanical barrier at the wound site, continues to be associated with a favorable safety profile.

About Arch Therapeutics, Inc.
Arch Therapeutics, Inc. is a biotechnology company developing a novel approach to stop bleeding (hemostasis) and

control leaking (sealant) during surgery and trauma care. Arch is developing products based on an innovative self-assembling peptide technology platform to make surgery and interventional care faster and safer for patients. Arch's flagship development stage product candidate, known as the AC5 Surgical Hemostatic Device™, is being designed to achieve hemostasis in surgical procedures.

Find out more at www.archtherapeutics.com.

Notice Regarding Forward-Looking Statements

This news release contains "forward-looking statements" as that term is defined in Section 27(a) of the Securities Act of 1933, as amended, and Section 21(e) of the Securities Exchange Act of 1934, as amended. Statements in this press release that are not purely historical are forward-looking statements and include any statements regarding beliefs, plans, expectations or intentions regarding the future. Such forward-looking statements include, among other things, references to novel technologies and methods, our business and product development plans and projections, or market information. Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, the inherent uncertainties associated with developing new products or technologies and operating as a development stage company, our ability to retain important members of our management team and attract other qualified personnel, our ability to raise the additional funding we will need to continue to pursue our business and product development plans, our ability to develop and commercialize products based on our technology platform, and market conditions. These forward-looking statements are made as of the date of this news release, and we assume no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements. Although we believe that any beliefs, plans, expectations and intentions contained in this press release are reasonable, there can be no assurance that any such beliefs, plans, expectations or intentions will prove to be accurate. Investors should consult all of the information set forth herein and should also refer to the risk factors disclosure outlined in the reports and other documents we file with the SEC, available at www.sec.gov.

On Behalf of the Board,
Terrence W. Norchi, MD
Arch Therapeutics, Inc.

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Or

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