Arch Therapeutics, Inc.
Form 424B3
March 23, 2015

Filed Pursuant to Rule 424(b)(3)

Registration No. 333-194745

PROSPECTUS SUPPLEMENT NO. 15 DATED MARCH 23, 2015

TO

PROSPECTUS DATED JULY 2, 2014

(AS SUPPLEMENTED)

ARCH THERAPEUTICS, INC.

PROSPECTUS

Up to 45,600,000 Shares of Common Stock

This Prospectus Supplement No. 15 supplements the prospectus of Arch Therapeutics, Inc. (“the “Company”, “we”, “us”, or “our”) dated July 2, 2014 (as supplemented to date, the “Prospectus”) with the following attached document which we filed with the Securities and Exchange Commission on March 23, 2015:

A. Our Current Report on Form 8-K filed with the Securities and Exchange Commission on March 23, 2015

This Prospectus Supplement No. 15 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. 15 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. 15 is March 23, 2015

INDEX TO FILINGS

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 23, 2015**

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.)

20 William Street, Suite 270
Wellesley, Massachusetts **02481**
(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 23, 2015, Arch Therapeutics, Inc. (the "Company") issued a press release announcing positive safety results for its AC5 Surgical Hemostatic Device™ in preclinical toxicity studies. 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 23, 2015

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 23, 2015 By:/s/ Terrence W. Norchi, M.D.
Name: Terrence W. Norchi, M.D.
Title: President, Chief Executive Officer

EXHIBIT INDEX

Exhibit	**Description**
99.1	Press Release issued by Arch Therapeutics, Inc. on March 23, 2015

Exhibit 99.1

Arch Therapeutics Announces Positive Safety Results for AC5 Surgical Hemostatic Device™ in Preclinical Toxicity Studies

Data Further Supports Non-Toxic Profile of AC5™

WELLESLEY, MA – March 23, 2015 -- Arch Therapeutics, Inc. (OTCQB: ARTH) ("Arch" or the "Company"), developer of the AC5 Surgical Hemostatic Device™ (AC5™) for use in controlling bleeding and fluid loss in order to provide faster and safer surgical and interventional care, obtained additional favorable preclinical data from two (2) planned standardized medical device safety studies in which AC5 was assessed for toxicity to cells and for contamination from pyrogens (toxins that cause fever) produced by bacterial cells. The tests are major components of the panel of biocompatibility testing that medical devices must typically complete successfully prior to use in humans.

In the cytotoxicity test, which is an *in vitro* study that assesses AC5 for toxicity to cells using cell cultures, AC5 tested in clinically relevant amounts was found to be non-toxic to cells (non-cytotoxic).

In the pyrogenicity test, which is an *in vitro* study that assesses AC5 for the presence of pyrogens, AC5 tested in clinically relevant amounts was found to be non-pyrogenic, which is a desirable characteristic. Pyrogens, also known as bacterial endotoxins, are certain toxins made by bacteria. A product that were to contain sufficient amounts of pyrogen or other cell-toxins could trigger immune responses with the potential for tissue damage and significant harm to patients.

The tests were conducted under guidelines provided by the International Organization for Standardization (ISO), the United States Pharmacopeia (USP), the American National Standards Institute (ANSI) and the Association for the Advancement of Medical Instrumentation (AAMI).

Arch Therapeutics President and CEO Terrence Norchi, MD, stated, "The favorable results demonstrated in these safety tests represent additional important milestones in the development of AC5 for planned use in humans. We continue to be pleased with the data generated, which continues to support a desirable safety profile for AC5."

About Arch Therapeutics, Inc.
Arch Therapeutics, Inc. is a medical device 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 minimally invasive and open 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.

Contact:

ARTH Investor Relations
Toll Free: +1-855-340-ARTH (2784) (US and Canada)
Email: investors@archtherapeutics.com
Website: www.archtherapeutics.com

Or

Richard Davis

Chief Financial Officer

Arch Therapeutics, Inc.

Phone: 617-431-2308

Email: rdavis@archtherapeutics.com

Website: www.archtherapeutics.com