Arch Therapeutics, Inc.
Form 424B3
August 25, 2014

Filed Pursuant to Rule 424(b)(3)

Registration No. 333-194745

PROSPECTUS SUPPLEMENT NO. 3 DATED AUGUST 25, 2014

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. 3 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 August 25, 2014:

A. Our Current Report on Form 8-K filed with the Securities and Exchange Commission on August 25, 2014

This Prospectus Supplement No. 3 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. 3 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. 3 is August 25, 2014

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): **August 25, 2014**

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 August 25, 2014, Arch Therapeutics, Inc. (the "**Company**") issued a press release announcing the results of its initial preclinical study of its AC5 Surgical Hemostatic Device™ in anticoagulated patients. 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 August 25, 2014

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: August 25, 2014 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 August 25, 2014

Exhibit 99.1

Arch Therapeutics Announces Positive Preclinical Data from its Study of AC5 Surgical Hemostatic Device™ in Animals on Blood Thinner

AC5™ Quickly Stopped Brisk Bleeding in Livers of Nine Rats;
Potential Treatment Option for Patients at Increased Risk of Bleeding Due to Anticoagulant and Potentially Antiplatelet Drugs

WELLESLEY, MA – August 25, 2014 -- Arch Therapeutics, Inc. (OTCQB: ARTH) ("Arch" or the "Company"), developer of the AC5 Surgical Hemostatic Device™ for potential use in bleeding during surgery, today announced positive data in an initial preclinical study assessing the use of its AC5 Surgical Hemostatic Device™ in animals receiving an anticoagulant medication (i.e. blood thinner).

In the first preclinical assessment of AC5 in the presence of an anticoagulant, AC5 quickly stopped brisk bleeding from a 4mm diameter biopsy surgical site created in the livers of nine rats that had been treated with a clinically relevant dose of the drug heparin. Heparin is an anticoagulant commonly given to patients to prevent blood clots during and after surgical procedures and in other circumstances. The study demonstrated that application of AC5 in this commonly used animal model of brisk bleeding was able to stop blood loss from the liver in less than 30 seconds and to achieve hemostasis. Time to hemostasis (TTH) after creation of the liver wounds in heparin-treated animals was comparable to TTH after creation of liver wounds in normal, non-anticoagulated animals.

"There is a great need to continue to develop novel hemostatic agents and sealants that are efficacious in surgical and trauma patients," said Cambridge, MA-based surgeon Steven Schwaitzberg, MD, Professor of Surgery at Harvard Medical School and advisor to Arch Therapeutics. "In particular, the need is greatest in those patients whose underlying coagulation cascade or platelet status is abnormal, whether due to concurrent antithrombotic therapy or an underlying disease. Increasing numbers of patients are on anticoagulant or antiplatelet medications. This can present a challenge to surgeons and other interventionalists when procedures are needed on these patients. These initial findings on the activity of AC5 in this setting are very encouraging and may lead to significant benefit in the future."

Terrence W. Norchi, MD, President and CEO of Arch Therapeutics, said, "We are excited by the data from this early study. This is the first of several planned preclinical studies intended to assess the utility of AC5 in animals on antiplatelet or anticoagulant therapy, commonly referred to as blood thinners. A significant portion of the population takes blood thinners to prevent a range of life-threatening conditions. Patients on these medications are at increased risk of bleeding and their management during surgical and other procedures requires extra care. We hope to demonstrate that AC5 is effective regardless of a patient's underlying platelet or bleeding status, whether due to prescribed medications or an underlying condition such as hemophilia, in order to offer surgeons and patients an even

better tool to control bleeding.”

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 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:

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