#### PROSPECTUS SUPPLEMENT NO. 9 DATED JANUARY 6, 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. 9 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 January 6, 2015:

A. Our Current Report on Form 8-K filed with the Securities and Exchange Commission on January 6, 2015

This Prospectus Supplement No. 9 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. 9 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. 9 is January 6, 2015

# INDEX TO FILINGS Annex The Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on January 6, 2015 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): January 6, 2015

## ARCH THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

<b>Nevada</b> (State or other jurisdiction		000-54986	46-0524102		
		(Commission	(I.R.S. Employer		
	of incorporation)	File Number)	Identification No.)		
	20 William Street, Suit	te 270			
Wellesley, Massachusetts			02481		
(Address of principal executive offices)			(Zip Code)		
	Registrant's telephor	ne number, including area code: (617) 4	31-2313		
	the appropriate box below if the Form 8-K filing is owing provisions (see General Instruction A.2. be	•	filing obligation of the registrant under any of		
	Written communications pursuant to Rule 425 ur	nder the Securities Act (17 CFR 230.42	5)		
	Soliciting material pursuant to Rule 14a-12 under	r the Exchange Act (17 CFR 240.14a-1	2)		
	Pre-commencement communications pursuant to	Rule 14d-2(b) under the Exchange Act	t (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 January 6, 2015, Arch Therapeutics, Inc. (the "Company") issued a press release announcing further positive preclinical test results of its AC5 Surgical Hemostatic Device<sup>TM</sup> in biochemical and cell function safety studies. The text of the press release is attached hereto as  $\underline{\text{Exhibit}}$   $\underline{99.1}$  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 January 6, 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: January 6, 2015 By: /s/ Terrence W. Norchi, M.D

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 January 6, 2015	

## Arch Therapeutics Announces Positive Results for AC5 Surgical Hemostatic Device<sup>TM</sup> in Biochemical and Cell Function Safety Studies

AC5<sup>TM</sup> Safety Further Supported by Non-Interaction with Tested Biological Targets

WELLESLEY, MA – January 6, 2015 -- Arch Therapeutics, Inc. (OTCQB: ARTH) ("Arch" or the "Company"), developer of the AC5 Surgical Hemostatic Device<sup>TM</sup>, obtained positive results from preclinical tests in which AC5<sup>TM</sup> was subjected to a battery of high-throughput *in vitro* safety assessments for biological interactions in standardized testing panels of receptors on the surface of cells and protein kinase enzymes inside cells. These receptors and enzymes represent important biochemical "switches," and interactions with them could indicate biological activity with the potential for toxicity. AC5 is a unique development-stage hemostasis product being evaluated to control bleeding and fluid loss in order to provide faster and safer surgical and interventional care.

In this *in vitro* study panel, AC5 tested in relevant amounts had no interactions with the examined 71 individual cell receptors or 211 separate cell kinase enzymes. These outcomes support AC5 as a non-toxic product to biochemical targets. Results from these safety interaction studies indicate that AC5's mechanism of action, which is the formation of a local physical-mechanical barrier, does not rely on AC5's interaction with known human receptors or enzymes to inhibit bleeding and leaking.

Arch Therapeutics President and CEO Terrence Norchi, MD, stated, "These differentiating results provide additional safety experience with AC5. The data highlights that there is no evidence of unintended interactions with the nearly 300 tested targets in the body, and it underscores the straightforward mechanism of action. We believe that AC5 has the potential to be a standout in terms of safety, efficacy and user friendliness."

#### 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 or 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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