PROSPECTUS SUPPLEMENT NO. 9 DATED AUGUST 20, 2015 TO PROSPECTUS DATED MAY 22, 2015 (AS SUPPLEMENTED)

ARCH THERAPEUTICS, INC.

PROSPECTUS

Up to 31,279,926 Shares of Common Stock

This Prospectus Supplement No. 9 supplements the prospectus of Arch Therapeutics, Inc. ("the "Company", "we", "us", or "our") dated May 22, 2015 (as supplemented to date, the "Prospectus") with the following attached document which we filed with the Securities and Exchange Commission on August 20, 2015:

A. Our Current Report on Form 8-K filed with the Securities and Exchange Commission on August 20, 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 August 20, 2015

INDEX TO FILINGS Annex The Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 20, 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): August 19, 2015

ARCH THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Nevada000-5498646-0524102(State or other jurisdiction of incorporation)(Commission File Number)(I.R.S. Employer Identification No.)

235 Walnut Street, Suite 6 Framingham, Massachusetts (Address of principal executive offices)

01702 (Zip Code)

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

eck the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under 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 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(d)(e)

Arch Therapeutics, Inc. (the "Company") announced on August 20, 2015 that its Board of Directors (the "Board") has appointed James R. Sulat, a director of Momenta Pharmaceuticals, Inc. ("Momenta") since June 2008 and the Chairman of Momenta's board of directors since December 2008, as a director of the Company effective August 19, 2015. Mr. Sulat's appointment increases the number of the Company's Board members from two to three.

Under the Company's current compensation policy for non-employee directors, which was adopted March 23, 2014, Mr. Sulat will receive an annual cash fee of \$50,000, which will be prorated for the current fiscal year. In addition, upon his appointment, Mr. Sulat was granted a stock option award under the Company's 2013 Stock Incentive Plan exercisable for 200,000 shares of the Company's common stock, par value \$0.001 ("Common Stock"), at an exercise price of \$0.27 per share that will vest in equal increments over the next twelve months, subject to his continued service on the Board through each applicable vesting date (the "Option Grant"). The form of stock option award agreement pursuant to which the Option Grant was made was previously filed as Exhibit 10.13 to the Quarterly Report on Form 10-Q filed by the Company with the Securities and Exchange Commission ("SEC") on August 14, 2013 (File Number 000-54986).

While there is no arrangement or understanding under which Mr. Sulat was appointed to the Board, he has been both, directly and indirectly, an investor in and a consultant to the Company and its subsidiaries. On June 19, 2013, 2013, the Keyes Sulat Revocable Trust (the "Trust"), of which Mr. Sulat and his wife are co-trustees, purchased a convertible promissory note in the aggregate principal amount of \$75,000 and warrants from the Company's wholly-owned subsidiary, Arch Biosurgery, Inc. ("ABS"). Upon the closing of the Company's reverse merger that became effective on June 26, 2013, the convertible promissory note was converted into 273,277 shares of our Common Stock and the warrants were cancelled. On June 13, 2013, the Company granted Mr. Sulat an option award to purchase 30,000 shares of Common Stock at an exercise price of \$0.37 per share in consideration for services rendered to the Company as a consultant. Finally, on June 22, 2015, the Trust executed a subscription agreement with the Company to purchase 454,546 Units from the Company in the recent private placement financing that concluded on July 2, 2015 (the "2015 Private Placement Financing"). As disclosed in the Current Report on Form 8-K that the Company filed with the SEC on July 6, 2015, each Unit consisted of a share of Common Stock and a Series D Warrant to purchase a share of Common Stock at an exercise price of \$0.25 per share at any time prior to the fifth anniversary of the issuance date of the Series D Warrant. Upon the initial closing of the 2015 Private Placement Financing on June 30, 2015, the Trust was issued 454,546 shares of Common Stock and a Series D Warrant to purchase an additional 454,546 shares of Common Stock at an exercise price of \$0.25 per share.

Except as set forth above, there are no relationships between Mr. Sulat and the Company or any of its subsidiaries that would require disclosure pursuant to Item 404(a) of Regulation S-K.

Item 8.01 Other Events

On August 20, 2015, the Company issued a press release announcing the Mr. Sulat's appointment to the Board. The text of the press release is attached hereto as <u>Exhibit 99.1</u> and is incorporated by reference herein.

Item 9.01 Financial Statements and Exhibit

(d) Exhibits

99.1 Press Release issued by Arch Therapeutics, Inc. on August 20, 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.

Dated: August 20, 2015

ARCH THERAPEUTICS, INC.

By: /s/ Terrence W. Norchi, M.D.

Name: Terrence W. Norchi, M.D.

Title: President, Chief Executive Officer

Exhibit List	$\mathbf{E}\mathbf{x}$	hib	ıt	Last
--------------	------------------------	-----	----	------

Exhibit 99.1

DescriptionPress Release issued by Arch Therapeutics, Inc. on August 20, 2015

Arch Therapeutics Appoints James Sulat to Board of Directors

Extensive Healthcare Industry Experience Enhances Company

FRAMINGHAM, MA – August 20, 2015 — Arch Therapeutics, Inc. (OTCQB: ARTH) ("**Arch**" or the "**Company**"), developer of the AC5 Surgical Hemostatic DeviceTM ("**AC5**TM"), has appointed James Sulat to its Board of Directors as an independent member, effective August 19, 2015. This brings the total number of Board members to three.

Mr. Sulat served as Chief Executive Officer and Chief Financial Officer of Maxygen Inc., a biopharmaceutical company focused on developing improved versions of protein drugs, from October 2009 to June 2013. Prior to this, he was Chief Executive Officer, Chief Financial Officer and a member of the Board of Directors at Memory Pharmaceuticals Corp., which developed innovative drug candidates for the treatment of debilitating central nervous system disorders, from 2005 to 2008. He previously served in senior executive roles for R.R. Donnelley & Sons, Co., Chiron Corporation, Stanford Health Services, Inc., and Esprit de Corp, Inc. He currently serves as Chairman of the Board of Directors of Momenta Pharmaceuticals, Inc., a biotechnology company focused on the analysis, characterization and design of complex pharmaceutical products. He has additionally served on numerous boards including Valneva SE, AMAG Pharmaceuticals, Inc., diaDexus, Inc., and General Surgical Innovations, Inc. Mr. Sulat received a BS in Administrative Sciences from Yale University and an MBA and MS in Health Services Administration from Stanford University.

Dr. Avtar Dhillon, Chairman of Arch Therapeutics, Inc., said, "Jim Sulat will be a great addition to the boardroom. His executive leadership and corporate governance positions with public companies contribute to his exceptional qualifications. We look forward to working together with management in the drive to building value."

Mr. Sulat said, "Having been involved with numerous companies in the healthcare industry, I understand the importance of technological innovation to advancing the state of care across a range of therapeutic areas. I am convinced that the technology being developed by Arch holds the potential to improve an impressive array of surgical procedures. I look forward to working with the Board as Arch continues its development path through clinical studies with the eventual goal of commercializing its products."

Dr. Terrence Norchi, President and CEO of Arch Therapeutics, Inc., added, "Jim Sulat brings a tremendous amount of industry experience to Arch, and we intend to draw heavily on his insights and professional talents. He is knowledgeable, seasoned, insightful and exceptionally qualified, and his financial expertise promises to be of great benefit."

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 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