

PROSPECTUS SUPPLEMENT NO. 1 DATED APRIL 19, 2021  
TO  
PROSPECTUS DATED FEBRUARY 8, 2021  
(AS SUPPLEMENTED)

ARCH THERAPEUTICS, INC.

PROSPECTUS

Up to 36,366,691 Shares of Common Stock  
Underlying Warrants Previously Issued

This Prospectus Supplement No. 1 supplements the prospectus of Arch Therapeutics, Inc. (the “Company”, “we”, “us”, or “our”) dated February 8, 2021 (as supplemented to date, the “Prospectus”) with our Current Report on Form 8-K filed with the Securities and Exchange Commission on April 19, 2021.

This Prospectus Supplement No. 1 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. 1 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. 1 is April 19, 2021

---

INDEX TO FILINGS

	<u>Annex</u>
The Company’s Current Report on Form 8-K filed with the Securities and Exchange Commission on April 19, 2021	A

---

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): April 19, 2021

**ARCH THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

Nevada  
(State or other jurisdiction  
of incorporation)

000-54986  
(Commission  
File Number)

46-0524102  
(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

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))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
N/A	N/A	N/A

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2). Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

**Item 7.01 Regulation FD Disclosure.**

On April 19, 2021, Arch Therapeutics, Inc. (the “Company”) issued a press release to provide an update on its commercialization efforts and clinical results.

The text of the press release is attached hereto as Exhibit 99.1 and is incorporated by reference herein.

**Item 8.01 Other Events.**

The disclosure under Item 7.01 (Regulation FD Disclosure) is incorporated herein by reference.

**Item 9.01 Financial Statements and Exhibits**

(d) The following exhibits are being filed herewith:

<u>Exhibit</u>	<u>Description</u>
<a href="#">99.1</a>	<a href="#">Press Release issued by Arch Therapeutics, Inc. on April 19, 2021.</a>

**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: April 19, 2021

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

**Exhibit 99.1**

**Arch Therapeutics Provides Corporate Update on Commercialization Efforts and Clinical Results**

*2021: Executing on Opportunities and Preparing for the Future*

**FRAMINGHAM, MA – April 19, 2021** -- Arch Therapeutics, Inc. (OTCQB: ARTH) (“Arch” or the “Company”), developer of novel self-assembling wound care and biosurgical devices, today provided the following corporate update, in line with its commitment to maintain continuing dialogue with investors and other stakeholders on the progress and development of the Company.

**Commercializing AC5<sup>®</sup> Advanced Wound System**

As Arch transitions to a commercialization stage, in alignment with its strategic plan to rely on the expertise of third parties, it is launching AC5<sup>®</sup> Advanced Wound System through a distribution model. Arch has engaged and trained approximately one dozen independent sales representatives covering different territories, and it expects to continue to add additional independent sales representatives to enhance Arch’s commercialization efforts. The Company plans to support distributor and sales relationships with a sales director and clinical liaison(s), and is currently engaged with a strategic marketing firm to provide sales support materials.

Arch Therapeutics President and CEO Terrence Norchi, MD, stated, “Access to hospitals and surgeons has fluctuated during the pandemic, which has created headwinds to product placement during the launch phase. While revenue generation has been modest, the product launch is only in the early stages.” The Company notes that clinicians remain enthusiastically receptive for AC5 Advanced Wound System, and the recent addition of independent sales representatives is expected to result in acceleration of revenue growth over the course of the calendar year. Aligning to its multi-phase launch plan, the Company is implementing a controlled focus on government channels, including Veteran’s Affairs (“VA”) facilities, with expansion to non-government channels as growth continues.

AC5<sup>®</sup> Advanced Wound System is indicated for the management of partial and full-thickness wounds, such as pressure sores, leg ulcers, diabetic ulcers, and surgical wounds. The product's proprietary self-assembling peptide technology provides distinctive utility across all phases of wound healing. Applied via syringe, it provides a protective barrier that seals wounds of various shapes and sizes, while also serving as a scaffolding to allow for tissue repair. It also protects tissue, donates moisture and softens wound debris. Notably, a unit of AC5 Advanced Wound System covers more surface area than other advanced wound care products with which it competes.

---

Daniel C. Wadsworth, VP of Dermal Sciences, said, "With demonstrated effectiveness in acute surgical and chronic wounds, AC5 Advanced Wound System is well-positioned to be first-line treatment for all complex partial and full thickness wounds, potentially providing the healthcare system significant cost savings while dramatically improving patient outcomes."

#### **Clinical Update**

Ongoing clinical activities support continued favorable results for the Company's AC5<sup>®</sup> self-assembling peptide technology platform. Two clinical case report abstracts were submitted and accepted for poster presentations at the upcoming Symposium on Advanced Wound Care (SAWC) in May. The SAWC is the official meeting site of the Wound Healing Society and will engage over 1,500 surgeons, wound care providers and other wound care specialists in the vital role emerging therapies play in chronic wound care and prevention.

Norchi added, "Presenting at SAWC provides an important opportunity for Arch to share valuable insights on the significant impact our self-assembling peptide technology may have on the future of wound care. We continue to be gratified with the data generated and the response from wound healing experts."

#### **Human Capital & Leadership**

During the pandemic, the Company has added internal and external team members to support commercialization efforts, and additional members are expected this year. The talent acquisition strategy has focused on people who are inspired by our team and the opportunity to support a compelling technology, have the desire to address areas of important medical need, and are excited to have the chance to participate in the success of the product pipeline.

As previously announced, and in preparation for the planned retirement of Richard Davis, the Company expects to announce a successor Chief Financial Officer in the near future. In addition, the Company plans to expand the Board of Directors to include a Board Member with expertise in medical device commercialization.

#### **About Arch Therapeutics, Inc.**

Arch Therapeutics, Inc. is a biotechnology company developing a novel approach to stop bleeding (hemostasis), control leaking (sealant) and manage wounds during surgery, trauma and interventional care. Arch is developing products based on an innovative self-assembling barrier technology platform with the goal of making care faster and safer for patients. Arch has received regulatory authorization to market AC5 Advanced Wound System and AC5 Topical Hemostat as medical devices in the United States and Europe, respectively. Arch's development stage product candidates include AC5-G, AC5-V and AC5 Surgical Hemostat, among others.<sup>1,2</sup>

---

<sup>1</sup> AC5-G, AC5-V, and AC5 Surgical Hemostat are currently investigational devices limited by law to investigational use.

<sup>2</sup> AC5, AC5-G, AC5-V and associated logos are trademarks and/or registered trademarks of Arch Therapeutics, Inc. and/or its subsidiaries.

---

#### **Notice Regarding Forward-Looking Statements**

This news release contains "forward-looking statements" as that term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E 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 ability to recruit additional field sales representatives and their effectiveness, 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 obtain required regulatory approvals, our ability to produce commercial quantities of our products within projected timeframes, our ability to develop and commercialize products based on our technology platform, and market conditions, and our ability to establish additional commercialization partnerships and build a critical mass of field sales representatives. 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](http://www.sec.gov).

#### **Contact:**

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

Richard Davis  
Chief Financial Officer  
Arch Therapeutics, Inc.  
Phone: 617-431-2308  
Email: [rdavis@archtherapeutics.com](mailto:rdavis@archtherapeutics.com)  
Website: [www.archtherapeutics.com](http://www.archtherapeutics.com)

---