Filed Pursuant to Rule 424(b)(3)
Registration No. 333-194745

PROSPECTUS SUPPLEMENT NO. 1 DATED MARCH 23, 2020
TO
PROSPECTUS DATED DECEMBER 6, 2019
(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 December 6, 2019 (as supplemented to date, the "**Prospectus**") with the following attached document which we filed with the Securities and Exchange Commission on March 23, 2020:

A. Our Current Report on Form 8-K filed with the Securities and Exchange Commission on March 23, 2020.

This Prospectus Supplement No. 1 should be read in conjunction with the Prospectus, which is required to be delivered with this Prospectus SupplementThis 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 March 23, 2020

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	Annex
The Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 23, 2020	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): **March 23, 2020**

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.)

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 March 23, 2020, Arch Therapeutics, Inc. (the "**Company**") issued a press release announcing that the U.S. Food and Drug Administration (FDA) provided marketing authorization related to AC5® Topical Gel Supply Chain. 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:

Exhibit	Description
99.1	Press Release issued by Arch Therapeutics, Inc. on March 23, 2020

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, 2020

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

Exhibit 99.1

Arch Therapeutics Receives Marketing Clearance from the US FDA Related to the AC5® Topical Gel Supply Chain

FRAMINGHAM, Mass., March 23, 2020 (GLOBE NEWSWIRE) -- Arch Therapeutics, Inc. (OTCQB: ARTH) ("Arch" or the "Company"), developer of novel liquid, gel and solid hemostatic and wound care devices, today announced that the U.S. Food and Drug Administration (FDA) provided clearance to market AC5® Topical Gel that is manufactured using an additional supplier and additional manufacturing processes. AC5 Topical Gel is to be used in the management of partial and full-thickness wounds, such as pressure sores, leg ulcers, diabetic ulcers, and surgical wounds.

To better harmonize US and European supply chains, Arch sought this marketing clearance from the FDA to use an additional supplier and manufacturing processes in the production of AC5® Topical Gel. Marketing clearances, such as this, require the provision of necessary documentation and data to the FDA, and they are essential milestones to the path to commercialization.

Chief Executive Officer, Terrence W. Norchi, MD, said, "This is an important step. While the review process took significantly longer than anticipated, we are pleased with the achievement, and we are awaiting comparable news from the Notified Body regarding a CE Mark."

As previously indicated, the Company was recently notified that the Notified Body review team has completed its review of Arch's technical documentation, provided the Company a draft of the CE certificate to review, and has recommended to its decision-making panel that CE Marking be granted.

Norchi added, "Despite the current pandemic that challenges us all, our staff has been enabled to work remotely, we are working with our supply chain to manage inventory, and we are assessing our roll-out strategy to consider the evolving needs of our key clinicians."

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's development stage product candidates include AC5® Topical Gel, AC5® Topical Hemostat[1] and AC5® Surgical Hemostat.[1]

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 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. 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.

Source: Arch Therapeutics, Inc.

Contact
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or

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1. AC5® Topical Hemostat and AC5® Surgical Hemostat are currently investigational devices limited by law to investigational use.