

**PROSPECTUS SUPPLEMENT NO. 8 DATED AUGUST 11, 2020
TO
PROSPECTUS DATED DECEMBER 6, 2019
(AS SUPPLEMENTED)**

ARCH THERAPEUTICS, INC.

PROSPECTUS

Up to 17,587,461 Shares of Common Stock

This Prospectus Supplement No. 8 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 August 11, 2020:

A. Our Current Report on Form 8-K filed with the Securities and Exchange Commission on August 11, 2020.

This Prospectus Supplement No. 8 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. 8 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. 8 is August 11, 2020

INDEX TO FILINGS

The Company’s Current Report on Form 8-K filed with the Securities and Exchange Commission on August 11, 2020

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): **August 11, 2020**

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 August 11, 2020, Arch Therapeutics, Inc. (the “**Company**”) issued a press release announcing the the release of research from the AC5-GTM and AC5[®] self-assembling peptide technology platform that was presented at the Society of American Gastrointestinal and Endoscopic Surgeons (“**SAGES**”) 2020 Annual Meeting.

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> |
|----------------|---|
| <u>99.1</u> | <u>Press Release issued by Arch Therapeutics, Inc. on August 11, 2020</u> |

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 11, 2020

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

Name: Terrence W. Norchi, M.D.

Title: President, Chief Executive Officer

Arch Therapeutics Novel Self-Assembling Agent, AC5-G™, for Use in Endoscopic Procedures was Presented at the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) 2020 Annual Meeting

Emerging technology presentation demonstrates use of AC5-G™ in submucosal lifting and management of gastrointestinal bleeding during porcine endoscopic procedures.

FRAMINGHAM, Mass., August 11, 2020 (GLOBE NEWSWIRE) -- Arch Therapeutics, Inc. (OTCQB: ARTH) ("Arch" or the "Company"), developer of novel liquid, gel and solid hemostatic and wound care devices, announces the release of research from the AC5® self-assembling peptide technology platform that was presented at the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) 2020 Annual Meeting.

SAGES selected the research, originally submitted as an abstract, to be featured in a podium presentation with a demonstration video as part of the Emerging Technology Session.¹ The presentation, "Novel Self-assembling Agent, AC5-G™, for Use in Submucosal Lifting in Endoscopic Resection and Management of Gastrointestinal Bleeding" by Eleanor C. Fung, MD, Jay Redan, MD, Chirag Shah, PhD and Terrence Norchi, MD, is available online starting August 11, 2020.

The self-assembling peptide technology, AC5-G, was studied in live swine gastrointestinal models by Dr. Fung, Clinical Assistant Professor of Surgery at the University of Buffalo Jacobs School of Medicine, and by Dr. Redan, Chief of Surgery at AdventHealth Celebration and Professor of Surgery at the University of Florida College of Medicine. Dr. Fung specializes in general and minimally invasive surgery and advanced therapeutic endoscopy. Dr. Redan specializes in minimally invasive general surgery and has been widely considered a pioneer in the field of laparoscopic surgery since its infancy. The additional authors are Dr. Shah, Vice President Research and Development Engineering and Quality Systems at Arch Therapeutics, and Dr. Norchi, President and CEO of Arch Therapeutics.

Surgeons, clinicians and other attendees of SAGES may see the video [here](#). It is also available on the Company website www.archtherapeutics.com.

AC5-G, formulated in prefilled syringes, was studied at two different medical centers in two swine in approximately 16 procedures, including endoscopic mucosal resections (EMR), endoscopic submucosal dissections (ESD) and hemostasis of post polypectomy beds.

In these procedures, AC5-G demonstrated unique features and attributes compared to available alternatives in the growing field of EMR and ESD. AC5-G created a long lasting lift, or cushion, that provided good visibility and delineation of tissue planes to the surgeon, thereby enabling safer resection of target tissues. Furthermore, when applied to sites of bleeding, AC5-G provided hemostasis. AC5-G was also easily injected into the tissue through standard size injection needles (e.g., 230 cm long catheters with 25 gauge needle tips) deployed through the endoscopes, and it could be used in conjunction with clips when desired. From this initial experience, doctors Eleanor Fung and Jay Redan believe AC5-G has attributes that are applicable to a wide range of procedural needs in endoscopic surgery. Examples of applications in which we believe that AC5-G, could be used include resection of adenomas, early-stage cancers or other gastrointestinal mucosal lesions, as well as treatment of achalasia and gastrointestinal bleeding.

Terrence W. Norchi, MD, President and CEO of Arch said “We are pleased that this important research is being presented and that our promising development stage self-assembling peptide, AC5-G, is resonating with surgeons and gastroenterologists who strive to make surgical procedures less invasive and make existing minimally invasive procedures even safer. We look forward to sharing more information as this product advances through our pipeline.”

Please visit <http://www.sages2020.org> for more information or to register for the conference.

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 products authorized for commercial marketing are AC5[®] Advanced Wound System and AC5[®] Topical Hemostat.² Arch's development stage product candidates include AC-G[™] and AC5[®] Surgical Hemostat, among others.³ AC5 and associated logos are trademarks and/or registered trademarks of Arch Therapeutics, Inc. and/or its subsidiaries.

About SAGES

The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) is a leading surgical society representing a global community of more than 6,500 surgeons bringing minimal access surgery and emerging techniques to patients worldwide. The mission of SAGES is to improve quality patient care through education, research, innovation and leadership, principally in gastrointestinal and endoscopic surgery. SAGES also sets the clinical and educational guidelines on standards of practice in various procedures that are critical to enhancing patient safety and health. For more information, go to <https://www.sages.org>.

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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1. The conference has recently been moved to an online format.
2. AC5 Advanced Wound System and AC5 Topical Hemostat have received regulatory authorization for commercial marketing as medical devices in the USA and EU, respectively.
3. AC5-G and AC5 Surgical Hemostat are currently investigational devices limited by law to investigational use.

AC5 and associated logos are trademarks and/or registered trademarks of Arch Therapeutics, Inc. and/or its subsidiaries.
