

PROSPECTUS SUPPLEMENT NO. 5 DATED OCTOBER 1, 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. 5 supplements the prospectus of Arch Therapeutics, Inc. (the “Company”, “we”, “us”, or “our”) dated February 8, 2021 (as supplemented to date, the “Prospectus”) with the following attached documents:

1. Our Current Report on Form 8-K filed with the Securities and Exchange Commission on October 1, 2021.

This Prospectus Supplement No. 5 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. 5 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. 5 is October 1, 2021

INDEX TO FILINGS

The Company’s Current Report on Form 8-K filed with the Securities and Exchange Commission on October 1, 2021

Annex
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): September 27, 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 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(d) On September 27, 2021, the Directors (the "Board") of Arch Therapeutics, Inc. (the "Company"), increased the size of the Board from three to four directors and appointed Laurence Hicks as director of the Company, effective immediately.

Mr. Hicks, age 55, has been the chief executive officer of Healthcare Components Group, a global manufacturer of OEM and replacement parts used for the manufacture and repair of medical devices, since 2021. From 2016 until 2021, when it merged into Healthcare Components Group, Mr. Hicks was chief executive officer of 2506052 Ontario Inc., a holding company for American Optics, Endoscopy Replacement Parts and Micro Optics Europe, which sell components used in the manufacturing and repair of endoscopes worldwide. He has held medical device leadership roles at ACMI, Karl Storz Endoscopy and NeuroTherm. Mr. Hicks' experience in the medical device industry was instrumental in his selection as a member of the Board.

In connection with his appointment to the Board, the Board has granted Mr. Hicks 250,000 stock options, which vest monthly on each of the first 36 month anniversaries of the grant date and are exercisable at \$0.1028 per share. Mr. Hicks will receive a retainer of \$12,500 for his Board service through December 31, 2021. Commencing January 1, 2022, Mr. Hicks will receive an annual retainer of \$25,000 for his service on the Board, an additional \$2,500 for any standing committee of the Board on which he serves as chair, and an additional \$5,000 if Mr. Hicks serves as chair of the Board, up to a maximum of \$30,000 per year, payable in cash or stock.

There are no arrangements or understandings pursuant to which Mr. Hicks was appointed as a director, and there are no related party transactions between the Company and Mr. Hicks reportable under Item 404(a) of Regulation S-K.

A copy of the press release announcing Mr. Hicks' appointment to the Board is filed as Exhibit 99.01 to, and incorporated by reference in, this report.

Item 9.01 Financial Statements and Exhibit

(d) The following exhibits are being filed herewith:

Exhibit	Description
99.1	Press Release issued by Arch Therapeutics, Inc. on September 30, 2021.

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: October 1, 2021

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

Arch Therapeutics Announces Appointment of Larry Hicks to the Board

Brings deep industry experience to support commercialization plan

FRAMINGHAM, Mass., Sept. 30, 2021 (GLOBE NEWSWIRE) -- Arch Therapeutics, Inc. (OTCQB: ARTH) (“Arch” or the “Company”), a marketer and developer of novel self-assembling wound care and biosurgical devices, today announced the appointment of Larry Hicks to its Board of Directors.

Mr. Hicks has over 30 years of medical device experience with an established track record of success in commercialization, operations and creating shareholder value. Mr. Hicks is currently the CEO of Healthcare Components Group, a global manufacturer of OEM and replacement parts used for the manufacture and repair of medical devices. He has held medical device leadership roles at ACMI, Karl Storz Endoscopy and NeuroTherm.

Terrence W. Norchi, M.D., Chief Executive Officer of Arch Therapeutics, stated, “I am delighted that Larry has joined the Board at Arch. He has an unusual breadth and depth of experience in areas of particular importance to us. I am confident that his proven capabilities to drive sales, coupled with his passion for the Company’s purpose, will prove invaluable to Arch as we continue to execute our commercialization plan.”

Mr. Hicks commented, “Arch Therapeutics’ technology has the potential to dramatically improve outcomes for millions of patients, and I am honored to have the opportunity to contribute to their growth as a member of the Board. I am confident that Arch will achieve great success.”

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.^{1,2}

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

² 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 obtain the inclusion of our AC5® Advanced Wound System on targeted federal supply schedules, 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.

Contact:

ARTH Investor Relations

Toll Free: +1-855-340-ARTH (2784) (US and Canada)

Email: investors@archtherapeutics.com

Website: www.archtherapeutics.com

or

Michael Abrams

Chief Financial Officer

Arch Therapeutics, Inc.

Phone: 617-431-2333

Email: mabrams@archtherapeutics.com
