

PROSPECTUS SUPPLEMENT

(To the Prospectus dated July 11, 2022)

**2,463,058 Shares of Common Stock**

We are offering an aggregate of 2,463,058 shares of our common stock, par value \$0.001 per share (“common stock”) consisting of (i) an aggregate of 2,295,570 shares of common stock purchased by certain institutional investors (the “institutional investors”) and (ii) an aggregate of 167,488 shares of common stock purchased by David P. Luci, our President and Chief Executive Officer, Robert J. DeLuccia, our Executive Chairman, Carl V. Sailer, Jack H. Dean, James Donohue, and Joseph Scodari, each members of our Board of Directors (the “affiliate investors”). The offering price of each share of common stock is \$1.015. In a concurrent private placement, we are also selling to such investors, series E warrants to purchase up to an aggregate of 2,463,058 shares of our common stock (the “warrants”). The warrants will have an exercise price of \$0.90 per share, will be exercisable immediately upon issuance and will expire five years from the initial exercise date. The warrants and the shares of common stock issuable upon the exercise of the warrants are not being registered under the Securities Act of 1933, as amended (the “Securities Act”), are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder.

We are an “emerging growth company” as defined under U.S. federal securities laws and are subject to reduced public company reporting requirements. Our shares of common stock are listed on The Nasdaq Capital Market (“Nasdaq”) under the symbol “ACXP.” The last sale price of our shares of common stock on January 3, 2025 was \$0.8899 per share.

Investing in our securities involves risks. You should review carefully the risks and uncertainties described under the heading “Risk Factors” beginning on page S-7 of this prospectus supplement and page 6 of the accompanying prospectus and under similar headings in the other documents that are incorporated by reference in this prospectus supplement and the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

As of the date of this prospectus supplement, the aggregate market value of our outstanding shares of common stock held by non-affiliates, or public float, was determined to be \$27,350,738 based on 17,030,686 shares of common stock outstanding, of which 14,626,063 are held by non-affiliates, and the closing sale price of our shares of common stock on Nasdaq of \$1.87 on November 7, 2024, which is within 60 days of the date of this prospectus supplement. Upon any sale of shares of common stock under this prospectus supplement pursuant to General Instruction I.B.6 of Form S-3, in no event will the aggregate market value of securities sold by us or on our behalf pursuant to General Instruction I.B.6 of Form S-3 during the twelve calendar month period immediately prior to, and including, the date of any such sale exceed one-third of our public float, calculated in accordance with General Instruction I.B.6 of Form S-3. During the prior twelve calendar month period that ends on, and includes, the date of this prospectus supplement (excluding this offering), we have sold \$6,615,071 of our securities pursuant to General Instruction I.B.6 of Form S-3.

We have retained H.C. Wainwright & Co., LLC to act as our exclusive placement agent (the “placement agent”) in connection with this offering. The placement agent is not purchasing or selling any of the securities we are offering. This offering is being conducted on a “best efforts” basis and the placement agent has no obligation to arrange for the purchase or sale of any specific number or dollar amount of securities. We have agreed to pay the placement agent fees set forth in the table below. There is no required minimum number of securities that must be sold as a condition to completion of this offering, and there are no arrangements to place the funds in an escrow, trust, or similar account. See “Plan of Distribution” beginning on page S-13 of this prospectus supplement for more information.

	Per Share to institutional investors	Per Share to affiliate investors	Total
Public Offering Price	\$ 1.01500	\$ 1.01500	\$ 2,500,003.87
Placement Agent Fees(1)	\$ 0.07105	\$ 0.00000	\$ 163,100.25
Proceeds, before expenses, to us(2)	\$ 0.94395	\$ 1.01500	\$ 2,336,903.62

(1) We have agreed to pay the placement agent a cash fee equal to \$163,100.25, or (i) 0% of the aggregate purchase price of our securities sold in this offering to the affiliate investors and (ii) 7% of the aggregate purchase price of our securities sold in this offering to the institutional investors. In addition, we have agreed to pay the placement agent a management fee equal to 1.0% of the aggregate gross proceeds received for the securities sold in this offering, as well as \$35,000 for non-accountable expenses and \$50,000 for accountable expenses. In addition, we have agreed to issue to the placement agent or its designees as compensation in connection with this offering placement agent warrants (the “placement agent warrants”), to purchase up to an aggregate of 147,783 shares of common stock (representing 6.0% of the shares of common stock sold in the offering), which each have an exercise price equal to \$1.2688 per share. The placement agent warrants are immediately exercisable from the date of issuance until the five year anniversary of the commencement of sales of the offering. See “Plan of Distribution” for additional disclosure regarding placement agent’s compensation.

(2) Does not include proceeds from the exercise of the warrants to be issued to the investors or the placement agent warrants to be issued to the placement agent in cash, if any.

Delivery of the securities being offered pursuant to this prospectus supplement and the accompanying prospectus is expected to be made on or about January 7, 2025.

H.C. Wainwright & Co.

The date of this prospectus supplement is January 6, 2025.

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PROSPECTUS

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You should rely only on the information contained in this prospectus supplement, the accompanying prospectus, and the documents we incorporate by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different information. We and the placement agent do not take any responsibility for, and cannot provide any assurance as to the reliability of, any other information that others may give you. We and the placement agent are not making an offer to sell our securities in any jurisdiction where the offer or sale thereof is not permitted. The information contained in this prospectus supplement and the accompanying prospectus and incorporated by reference herein and therein is accurate only as of the respective date of such information, regardless of the time of delivery of this prospectus supplement or of any sale or offer to sell hereunder.

To the extent this prospectus supplement contains summaries of the documents referred to herein, you are directed to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed, or will be incorporated by reference as exhibits to the registration statement of which this prospectus supplement forms a part, and you may obtain copies of such documents as described below in the section titled "Where You Can Find Additional Information."

This prospectus supplement contains references to a number of trademarks which are registered or for which we have pending applications or common law rights. Solely for convenience, the trademarks, service marks and trade names referred to in this prospectus supplement and the documents we incorporate by reference are listed without the ®, (sm) and (tm) symbols, but we will assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensors to these trademarks, service marks and trade names.

ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is this prospectus supplement, including the documents incorporated by reference herein, which describes the specific terms of this offering and other matters relating to us. The second part is the accompanying prospectus, which provides more general information about us and the securities we may offer from time to time, some of which may not apply to this offering. This prospectus supplement and the accompanying prospectus are part of the registration statement on Form S-3 (Registration No. 333-265956) that we filed with the Securities and Exchange Commission (the "SEC") using a "shelf" registration process. Under this "shelf" registration process, we may, from time to time, sell or issue any of the combination of securities described in the accompanying prospectus in one or more offerings with a maximum aggregate offering price of up to \$50,000,000. Each time we sell securities, we provide a prospectus supplement that contains specific information about the terms of that offering. A prospectus supplement may also add, update, or change information contained in the accompanying prospectus. You should read both this prospectus supplement and the accompanying prospectus, together with the documents incorporated by reference and the additional information described under the heading "Where You Can Find Additional Information" in this prospectus supplement and "Where You Can Find More information" in the accompanying prospectus before making an investment decision.

To the extent there is a conflict between the information contained in this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement. This prospectus supplement, the accompanying prospectus, and the documents we incorporate by reference herein and therein include important information about us, this offering and our securities and other information you should know before investing. If any statement in this prospectus supplement conflicts with any statement in a document that has been incorporated herein by reference, then you should consider only the statement in the more recent document.

The distribution of this prospectus supplement and the accompanying prospectus and the offering of our securities in certain jurisdictions may be restricted by law. We are not, and the placement agent is not, making an offer of these securities in any jurisdiction where the offer is not permitted. Persons who come into possession of this prospectus supplement and the accompanying prospectus should inform themselves about and observe any such restrictions. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to any person to whom it is unlawful to make such offer or solicitation.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus, and any free writing prospectus prepared by or on behalf of us or to which we have referred you. We have not, and the placement agent has not, authorized any person to provide you with any information or to make any representation other than as contained in this prospectus supplement or in the accompanying prospectus and the information incorporated by reference herein and therein. We and the placement agent do not take any responsibility for, and can provide no assurance as to the reliability of, any information that others may provide you. The information appearing or incorporated by reference in this prospectus supplement and the accompanying prospectus is accurate only as of the date of this prospectus supplement or the date of the document in which incorporated information appears unless otherwise noted in such documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference herein and therein is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should carefully read this entire prospectus supplement and the accompanying prospectus, including the information included and referred to under “*Risk Factors*” below, the information incorporated by reference in this prospectus supplement and in the accompanying prospectus, and the financial statements and the other information incorporated by reference in the accompanying prospectus, before making an investment decision.

Unless otherwise stated in this prospectus supplement, “Acurx,” “ACXP,” “we,” “us,” “our,” or “the Company,” and similar terms refer to Acurx Pharmaceuticals, Inc.

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NOTE ON FORWARD-LOOKING STATEMENTS

The statements contained in this prospectus supplement and accompanying prospectus and the documents incorporated by reference in this prospectus supplement include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), that relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Words such as, but not limited to, “believe,” “expect,” “anticipate,” “estimate,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “targets,” “likely,” “will,” “would,” “could,” “should,” “continue,” and similar expressions or phrases, or the negative of those expressions or phrases, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus supplement and incorporated by reference in this prospectus supplement, we caution you that these statements are based on our projections of the future that are subject to known and unknown risks and uncertainties and other factors that may cause our actual results, level of activity, performance or achievements expressed or implied by these forward-looking statements, to differ. The sections in our periodic reports, including our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q or our Current Reports on Form 8-K, entitled “Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” as well as other sections in this prospectus supplement and the other documents or reports incorporated by reference in this prospectus supplement, discuss some of the factors that could contribute to these differences. These forward-looking statements include, among other things, statements about:

- our ability to obtain and maintain regulatory approval of ibezapolstat and/or our other product candidates;
- our ability to successfully commercialize and market ibezapolstat and/or our other product candidates, if approved;
- our ability to contract with third-party suppliers, manufacturers and other service providers and their ability to perform adequately;
- the potential market size, opportunity and growth potential for ibezapolstat and/or our other product candidates, if approved;
- our ability to build our own sales and marketing capabilities, or seek collaborative partners, to commercialize ibezapolstat and/or our other product candidates, if approved;
- our ability to obtain funding for our operations;
- the initiation, timing, progress and results of our preclinical studies and clinical trials, and our research and development programs;
- the timing of anticipated regulatory filings;
- the timing of availability of data from our clinical trials;
- the accuracy of our estimates regarding expenses, capital requirements and needs for additional financing;
- our ability to retain the continued service of our key professionals and to identify, hire and retain additional qualified professionals;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- our ability to recruit and enroll suitable patients in our clinical trials and the timing of enrollment;
- the timing or likelihood of the accomplishment of various scientific, clinical, regulatory and other product development objectives;
- the pricing and reimbursement of our product candidates, if approved;
- the rate and degree of market acceptance of our product candidates, if approved;
- the implementation of our business model and strategic plans for our business, product candidates and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- developments relating to our competitors and our industry;
- the development of major public health concerns, including the coronavirus outbreak or other pandemics arising globally, and the future impact of it and COVID-19 on our clinical trials, business operations and funding requirements;

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- the effects of the recent disruptions to and volatility in the credit and financial markets in the United States and worldwide from the conflict between Russia and Ukraine as well as the conflict in the Middle East between Israel and Hamas;
- the volatility of the price of our common stock; and
- other factors described from time to time in documents that we file with the SEC.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important cautionary statements in this prospectus supplement and in the documents incorporated by reference in this prospectus supplement, particularly in the “Risk Factors”

section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. For a summary of such factors, please refer to the section entitled “Risk Factors” in the accompanying prospectus, as updated and supplemented by the discussion of risks and uncertainties under “Risk Factors” contained in this prospectus supplement and in our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q or our Current Reports on Form 8-K, as well as any amendments thereto, as filed with the SEC and which are incorporated herein by reference. The information contained in this document is believed to be current as of the date of this document.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this prospectus supplement or in any document incorporated herein by reference might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus supplement or the date of the document incorporated by reference. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our securities. For a more complete understanding of our company and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference into this prospectus supplement and the accompanying prospectus, and the information referred to under the heading “Risk Factors” in this prospectus supplement on page S-7 and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

Overview

We are a late-stage biopharmaceutical company focused on developing a new class of small molecule antibiotics for difficult-to-treat bacterial infections. Our approach is to develop antibiotic candidates with a Gram-positive selective spectrum (“GPSS®”) that block the active site of the Gram positive specific bacterial enzyme deoxyribonucleic acid (“DNA”) polymerase III (“pol III”), inhibiting DNA replication and leading to Gram-positive bacterial cell death. Our research and development (“R&D”) pipeline includes antibiotic product candidates that target Gram-positive bacteria, including *Clostridioides difficile*, methicillin-resistant *Staphylococcus aureus* (“MRSA”), vancomycin resistant *Enterococcus* (“VRE”) and drug-resistant *Streptococcus pneumoniae* (“DRSP”).

These bacterial targets are listed as priority pathogens by the World Health Organization (“WHO”), the United States (“U.S.”) Centers for Disease Control and Prevention (“CDC”) and the U.S. Food and Drug Administration (“FDA”). Priority pathogens are those which require new antibiotics to address the worldwide crisis of antimicrobial resistance (“AMR”) as identified by the WHO, CDC and FDA.

Corporate Information

We were organized as a limited liability company in the State of Delaware in July 2017 and we commenced operations in February 2018 upon acquiring the rights to our lead antibiotic product candidate from GLSynthesis, Inc. Our principal executive offices are located at 259 Liberty Avenue, Staten Island, NY 10305 and our telephone number is (917) 533-1469. Our website address is www.acurxpharma.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus supplement. We have included our website address in this prospectus solely as an inactive textual reference. On June 23, 2021, we converted from a Delaware limited liability company into a Delaware corporation pursuant to a statutory conversion, and changed its name to Acurx Pharmaceuticals, Inc.

Emerging Growth Company

We are an “emerging growth company”, as defined in the Jumpstart Our Business Startups Act (the “JOBS Act”). As an emerging growth company, we are eligible, and have elected, to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies. These include, but are not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 and reduced disclosure obligations regarding executive compensation (to the extent applicable to a foreign private issuer).

We could remain an emerging growth company until the last day of our fiscal year following the fifth anniversary of the consummation of our initial public offering. However, if our annual gross revenue is \$1.07 billion or more, or our non-convertible debt issued within a three year period exceeds \$1 billion, or the market value of our shares of common stock that are held by non-affiliates exceeds \$700 million on the last day of the second fiscal quarter of any given fiscal year, we would cease to be an emerging growth company as of the last day of that fiscal year.

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Smaller Reporting Company

We are also currently a “smaller reporting company,” meaning that we are not an investment company, an asset-backed issuer, or a majority-owned subsidiary of a parent company that is not a smaller reporting company, and have a public float of less than \$250 million or annual revenues of less than \$100 million during the most recently completed fiscal year. In the event that we are still considered a “smaller reporting company,” at such time as we cease being an “emerging growth company,” the disclosure we will be required to provide in our SEC filings will increase, but will still be less than it would be if we were not considered either an “emerging growth company” or a “smaller reporting company.” Specifically, similar to “emerging growth companies,” “smaller reporting companies” are able to provide simplified executive compensation disclosures in their filings; are exempt from the provisions of Section 404(b) of the Sarbanes-Oxley Act requiring that independent registered public accounting firms provide an attestation report on the effectiveness of internal control over financial reporting; and have certain other decreased disclosure obligations in their SEC filings, including, among other things, only being required to provide two years of audited financial statements in annual reports. Decreased disclosures in our SEC filings due to our status as an “emerging growth company” or “smaller reporting company” may make it harder for investors to analyze our results of operations and financial prospects.

THE OFFERING

<i>Issuer</i>	Acurx Pharmaceuticals, Inc.
<i>Common Stock Offered</i>	2,463,058 shares.
<i>Common Stock to Be Outstanding Immediately Following This Offering</i>	19,493,744 shares.
<i>Use of Proceeds</i>	We expect to receive net proceeds of approximately \$2.1 million from this offering after deducting the placement agent's fees and estimated offering expenses payable by us. We intend to use the net proceeds from this offering for working capital and other general corporate purposes. See the section titled " <i>Use of Proceeds</i> " on page S-9.
<i>Risk Factors</i>	See the sections titled " <i>Risk Factors</i> " commencing on page S-7 of this prospectus supplement and on page 6 in our accompanying prospectus and the Annual Report incorporated by reference herein for a discussion of factors you should consider carefully before deciding to invest in our shares of our common stock.
<i>Concurrent Private Placement</i>	In a concurrent private placement, we are also selling to purchasers of shares of common stock, warrants to purchase to purchase up to an aggregate of 2,463,058 shares of our common stock. The warrants will be exercisable immediately upon issuance at an exercise price of \$0.90 per share and will expire five years from the initial exercise date. The warrants and the shares of common stock issuable upon the exercise of the warrants, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. See the section titled "Private Placement Transaction." Pursuant to the securities purchase agreement, dated January 6, 2025, by and among the Company, the investor signatories thereto, Mr. Luci, Mr. DeLuccia, Mr. Sailer, Mr. Scodari, Mr. Donohue and Mr. Dean, we will use commercially reasonable efforts to cause a registration statement on Form S-1 providing for the resale by holders of shares of our common stock issuable upon the exercise of the warrants, to become effective 60 days following the date of the securities purchase agreement and to keep such registration statement effective at all times.
<i>Nasdaq Capital Market Symbol</i>	"ACXP".

The number of shares of our common stock to be outstanding after this offering is based on 17,030,686 shares of our common stock outstanding as of January 6, 2025, and excludes, as of that date, the following:

- 6,136,245 shares of common stock issuable upon the exercise of outstanding warrants with a weighted average exercise price of \$3.28 per share;
- 3,880,000 shares of our common stock issuable upon the exercise of stock options, with a weighted-average exercise price of \$5.05 per share; and
- 852,948 shares of common stock reserved for future issuance pursuant to future awards under our 2021 Equity Incentive Plan.

Unless otherwise indicated, this prospectus supplement assumes no exercise of the placement agent warrants and the warrants issued in the concurrent private placement.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before investing in our securities, you should carefully consider the risk factors set forth below and those described under "Risk Factors" in the documents incorporated by reference herein, including in our most recent Annual Report on Form 10-K filed with the SEC, together with the other information included in this prospectus supplement and incorporated by reference herein from our filings with the SEC. If any of such risks or uncertainties occurs, our business, financial condition, and operating results could be materially and adversely affected. Additional risks and uncertainties not currently known to us or that we currently deem immaterial also may materially and adversely affect our business operations. As a result, the trading price of our common stock could decline and you could lose all or a part of your investment.

Risks Related to this Offering

You will experience immediate and substantial dilution in the net tangible book value per share of the common stock you purchase.

Since the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer immediate and substantial dilution in the net tangible book value of the shares of common stock you purchase in this offering. As of September 30, 2024, our net tangible book value was approximately \$2.7 million, or \$0.16 per share. Based on the offering price of \$1.015 per share, and our net tangible book value as of September 30, 2024, if you purchase securities in this offering, you will suffer immediate and substantial dilution of \$0.77 per share with respect to the net tangible book value of our shares of common stock.

If we sell additional shares of common stock in future financings, shareholders may experience immediate dilution and, as a result, our share price may decline.

We may from time to time issue additional shares of common stock at a discount from the current market price of our common stock. As a result, our shareholders would experience immediate dilution upon the purchase of any shares of common stock sold at such discount. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, including the issuance of debt securities, preferred stock or common stock. If we issue shares of common stock or securities convertible or exercisable into shares of common stock, our shareholders would experience additional dilution and, as a result, our share price may decline.

We will have broad discretion in using the proceeds of this offering, and we may not effectively spend the proceeds.

We will use the net proceeds of this offering for working capital and general corporate purposes. We have not allocated any specific portion of the net proceeds to any particular purpose, and our management will have the discretion to allocate the proceeds as it determines. We will have significant flexibility and broad discretion in applying the net proceeds of this offering, and we may not apply these proceeds effectively. Our management might not be able to yield a significant return, if any, on any investment of these net proceeds, and you will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

An active trading market for our shares may not be sustained.

Although our shares are listed on Nasdaq, the market for our shares has demonstrated varying levels of trading activity. Furthermore, the current level of trading may not be sustained in the future. The lack of an active market for our shares may impair investors' ability to sell their shares at the time they wish to sell them or at a price that they consider reasonable, may reduce the fair market value of their shares and may impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire additional intellectual property assets by using our shares as consideration.

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Our share price may be subject to substantial volatility, and shareholders may lose all or a substantial part of their investment.

Our shares currently trade on Nasdaq. There is limited public float, and trading volume historically has been low and sporadic. The trading price of our common stock is highly volatile and subject to wide fluctuations in response to various factors, some of which we cannot control. The stock market in general, and pharmaceutical and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the trading price of our common shares, regardless of our actual operating performance. As a result, the market price for our shares may not necessarily be a reliable indicator of our fair market value. The price at which our shares trade may fluctuate as a result of a number of factors, including the number of shares available for sale in the market, quarterly variations in our operating results, actual or anticipated announcements of new releases by us or competitors, the gain or loss of significant customers, changes in the estimates of our operating performance, market conditions in our industry and the economy as a whole.

If our shares become subject to the penny stock rules, it may be more difficult to sell our shares.

The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than \$5.00 (other than securities registered on certain national securities exchanges or authorized for quotation on certain automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system). The OTC Bulletin Board does not meet such requirements and if the price of our shares is less than \$5.00 and our shares are no longer listed on a national securities exchange such as Nasdaq, our shares may be deemed a penny stock. The penny stock rules require a broker-dealer, at least two business days prior to a transaction in a penny stock not otherwise exempt from those rules, to deliver to the customer a standardized risk disclosure document containing specified information and to obtain from the customer a signed and dated acknowledgment of receipt of that document. In addition, the penny stock rules require that prior to effecting any transaction in a penny stock not otherwise exempt from those rules, a broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive: (i) the purchaser's written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks; and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our shares, and therefore shareholders may have difficulty selling their shares.

Holders of the warrants being sold in the concurrent private placement will have no rights as stockholders until they acquire our common stock.

Until you acquire shares of our common stock upon exercise of the warrants being sold in the concurrent private placement, you will have no rights with respect to our common stock issuable upon exercise of such warrants, including the right to receive dividend payments, vote or respond to tender offers. Upon exercise of such warrants, you will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

There is no public market for the warrants being offered by us in the concurrent private placement.

There is no established public trading market for the warrants being sold in the concurrent private placement, and we do not expect a market to develop. In addition, we do not intend to apply to list the warrants on any securities exchange or recognized trading system. Without an active market, the liquidity of the warrants will be limited.

We do not intend to pay any dividends on our common stock at this time.

We have not paid any cash dividends on our common stock to date. The payment of cash dividends on our common stock in the future will be dependent upon our revenue and earnings, if any, capital requirements, and general financial condition, and will be within the discretion of our board of directors. It is the present intention of our board of directors to retain all earnings, if any, for use in our business operations and, accordingly, our board of directors does not anticipate declaring any dividends on our common stock in the foreseeable future. As a result, any gain you will realize on our common stock will result solely from the appreciation of such shares.

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USE OF PROCEEDS

We expect to receive net proceeds of approximately \$2.1 million from this offering, after deducting the placement agent's fees and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for working capital and other general corporate purposes. We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds, if any, we receive in connection with securities offered pursuant to this prospectus supplement for any purpose. Pending application of the net proceeds as described above, we may initially invest the net proceeds in short-term, investment-grade and interest-bearing securities.

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DILUTION

If you invest in our securities in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share of our common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after the closing of this offering.

As of September 30, 2024, our historical net tangible book value was \$2.7 million, or \$0.16 per share of common stock. Our historical net tangible book value per share is equal to our total tangible assets, less total liabilities, divided by the number of outstanding shares of common stock as of September 30, 2024.

After giving effect to the sale of 2,463,058 shares of common stock at a public offering price of \$1.015, and after deducting fees, commissions and estimated offering expenses

payable by us, our as adjusted net tangible book value as of September 30, 2024 would have been \$4.8 million, or \$0.25 per share of common stock. This amount represents an immediate increase in as adjusted net tangible book value of \$0.09 per share to our existing shareholders and an immediate dilution of \$0.77 per share to investors participating in this offering. We determine dilution per share to investors participating in this offering by subtracting as adjusted net tangible book value per share after this offering from the assumed public offering price per share paid by investors participating in this offering.

Public offering price per share		\$	1.015
Net tangible book value per share as of September 30, 2024		\$	0.16
Increase in net tangible book value per share attributable to new investors in this offering			0.09
As adjusted net tangible book value per share as of September 30, 2024, after giving effect to this offering			0.25
Dilution per share to new investors in this offering		\$	0.77

The foregoing discussion and table do not take into account further dilution to new investors that could occur upon the exercise of outstanding options or warrants having a per share exercise price less than the per share offering price to the public in this offering. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

The number of shares of our common stock to be outstanding after this offering is based on 16,770,378 shares of our common stock outstanding as of September 30, 2024, and excludes, as of that date, the following:

- 6,136,245 shares of common stock issuable upon the exercise of outstanding warrants with a weighted average exercise price of \$3.28 per share;
- 3,880,000 shares of our common stock issuable upon the exercise of stock options, with a weighted-average exercise price of \$5.05 per share;
- 171,720 shares of common stock reserved for future issuance pursuant to future awards under our 2021 Equity Incentive Plan as of September 30, 2024; and
- 260,308 shares of our common stock issued subsequent to September 30, 2024.

Unless otherwise indicated, this prospectus supplement assumes no exercise of the placement agent warrants and the warrants issued in the concurrent private placement.

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DESCRIPTION OF THE SECURITIES WE ARE OFFERING

We are offering shares of common stock. The following description of our shares of common stock summarizes the material terms and provisions thereof, including the material terms of the shares of common stock we are offering under this prospectus supplement and the accompanying prospectus.

Common Stock

For a description of the rights associated with the common stock, see “*Description of Common Stock*” in the accompanying prospectus. Our common stock is listed on the Nasdaq Capital Market under the symbol “ACXP.” Our transfer agent is VStock Transfer LLC.

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PRIVATE PLACEMENT TRANSACTION

Concurrent Private Placement

In a concurrent private placement, we are selling to purchasers in this offering of our shares of common stock warrants to purchase up to an aggregate of 2,463,058 shares of our common stock, consisting of (i) warrants to purchase up to an aggregate of 2,295,570 shares of common stock issued to the institutional investors and (ii) warrants to purchase up to an aggregate of 167,488 shares of common stock issued to the affiliate investors.

The warrants and the shares of our common stock issuable upon the exercise of the warrants are not being registered under the Securities Act, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. Accordingly, purchasers of the warrants, may only sell shares of our common stock issued upon exercise of the warrants being sold to them in the concurrent private placement, pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act.

Each warrant will be exercisable immediately upon issuance at an exercise price of \$0.90 per share, subject to adjustment and will remain exercisable for five years from the initial exercise date, but not thereafter. A holder of warrants will not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, at the holder’s option upon issuance, 9.99%) of the number of shares of common stock outstanding immediately after giving effect to such exercise; provided, however, that upon notice to the Company, the holder may increase or decrease such beneficial ownership limitation, provided that in no event shall such beneficial ownership limitation exceed 9.99% and any increase in the beneficial ownership limitation will not be effective until 61 days following notice of such increase from the holder to us. In addition, the holders of the warrants will have the right to participate in any rights offering or distribution of assets together with the holders of our shares of common stock on an as-exercised basis.

The exercise price and number of shares of common stock issuable upon the exercise of the warrants will be subject to adjustment for stock splits, reverse splits, and similar capital transactions, as described in the warrants. The warrants will be exercisable on a “cashless” basis in certain circumstances.

Additionally, if a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the warrants with the same effect as if such successor entity had been named in the warrant itself. If holders of our shares of common stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the holder shall be given the same choice as to the consideration it receives upon any exercise of the warrant following such fundamental transaction. As more fully described in the form of warrant, in the event of certain fundamental transactions, the holders of the warrants will be entitled to receive consideration in an amount equal to the Black Scholes value of the warrants on the date of consummation of the transaction.

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PLAN OF DISTRIBUTION

Pursuant to an engagement letter agreement dated as of October 9, 2024, we have engaged H.C. Wainwright & Co., LLC (“Wainwright”) to act as our exclusive placement agent in connection with this offering. Under the terms of the engagement letter agreement, Wainwright has agreed to act as our exclusive placement agent, on a reasonable best efforts basis, in connection with the issuance and sale of our securities pursuant to this prospectus supplement and the accompanying prospectus. The terms of this offering were subject to market conditions and negotiations between us, Wainwright and prospective investors. The engagement letter agreement does not give rise to any commitment by Wainwright to purchase or sell any of our securities, and Wainwright will have no authority to bind us by virtue of the engagement letter agreement. Wainwright may retain other underwriters, brokers, dealers, or agents to assist with the offering.

Wainwright proposes to arrange for the sale of the securities we are offering pursuant to this prospectus supplement and accompanying prospectus to one or more purchasers through a securities purchase agreement directly between such purchasers and us. We will only sell to such investors who have entered into the securities purchase agreement with us.

We expect to deliver the securities being offered pursuant to this prospectus supplement and accompanying prospectus on or about January 7, 2025, subject to satisfaction of customary closing conditions.

Fees and Expenses

We have agreed to pay to Wainwright a cash fee of \$163,100.25, or the aggregate of (i) 7.0% of the aggregate purchase price of our securities sold in this offering to the institutional investors and (ii) 0% of the aggregate purchase price of our securities sold in this offering to the affiliate investors. The following table shows the per share and total cash placement agent’s fees we will pay to the placement agent in connection with the sale of the securities offered pursuant to this prospectus supplement and the accompanying prospectus, assuming the purchase of all of the securities offered hereby.

	Per Share to institutional investors	Per Share to affiliate investors	Total
Public Offering Price	\$ 1.01500	\$ 1.01500	\$ 2,500,003.87
Placement Agent Fees	\$ 0.07105	\$ 0.00000	\$ 163,100.25
Proceeds, before expenses, to us	\$ 0.94395	\$ 1.01500	\$ 2,336,903.62

In addition, we have agreed to pay Wainwright a management fee equal to 1.0% of the aggregate gross proceeds received for the securities sold in this offering.

We estimate that the total expenses of the offering payable by us, excluding the placement agent fees, will be approximately \$220,000, which includes (i) up to \$50,000 of legal fees and expenses that we have agreed to reimburse Wainwright in connection with this offering and (ii) up to \$35,000 of non-accountable expenses that we have agreed to reimburse Wainwright in connection with this offering.

In addition, we will issue to Wainwright, or its designees, placement agent warrants to purchase up to 147,783 shares of common stock. The placement agent warrants will be exercisable immediately following issuance, will have an exercise price equal to \$1.2688 per share and will have a term of five years from the commencement of sales in this offering.

Regulation M Restrictions

Wainwright may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the sale of our securities offered hereby by it while acting as our exclusive placement agent might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, Wainwright would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by Wainwright acting as exclusive placement agent. Under these rules and regulations, Wainwright may not (i) engage in any stabilization activity in connection with our securities; and (ii) bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

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Discretionary Accounts

The placement agent does not intend to confirm sales of the securities offered hereby to any accounts over which it has discretionary authority.

Listing

Our common stock is listed on The Nasdaq Capital Market under the symbol “ACXP.”

Lock-Up

Pursuant to the terms of the securities purchase agreement and subject to certain exceptions, we are prohibited from entering into any agreement to issue or announcing the issuance or proposed issuance of any shares of Common Stock or securities convertible or exercisable into Common Stock for a period commencing on the date of this prospectus supplement and expiring 30 days from the closing date of this offering. Furthermore, we are also prohibited from entering into any agreement to issue Common Stock or any Common Stock Equivalent (as defined in the securities purchase agreement) involving a Variable Rate Transaction (as defined in the securities purchase agreement), subject to certain exceptions, for a period commencing on the date of the securities purchase agreement and expiring one year from the closing date of this offering.

Right of First Refusal

We have granted Wainwright a right of first refusal for a period of twelve-months following the closing of any offering undertaken by them during the term of their engagement to act as our sole book-runner, sole manager, sole underwriter, sole placement agent, or sole agent for any further capital raising transactions undertaken by us using a manager, placement agent, or underwriter.

Tail

We also have granted Wainwright a tail cash fee equal to 7% of the gross proceeds and warrants to purchase shares of Common Stock equal to 6% of the aggregate number of shares of Common Stock sold in any offering, except an at the market offering (other than block trades) within twelve months following the termination or expiration of the engagement letter agreement, to investors whom the placement agent contacted or introduced to us directly or indirectly in connection with this offering, subject to certain exceptions.

We have agreed to indemnify Wainwright and specified other persons against certain liabilities relating to or arising out of Wainwright's activities under the engagement letter agreement and to contribute to payments that Wainwright may be required to make in respect of such liabilities.

The engagement letter with Wainwright may be terminated for cause by us in compliance with FINRA rules. Otherwise, the engagement letter will terminate upon expiration of its term.

Electronic Distribution

This prospectus supplement and accompanying prospectus may be made available in electronic format on websites or through other online services maintained by the Company and/or Wainwright or by their respective affiliates. Other than this prospectus supplement and accompanying prospectus in electronic format, the information on the Company's and/or Wainwright's websites and any information contained in any other websites maintained by the Company and/or Wainwright is not part of this prospectus supplement, accompanying prospectus, or the registration statement of which this prospectus supplement and accompanying prospectus form a part, has not been approved and/or endorsed by us or Wainwright, and should not be relied upon by investors.

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The foregoing does not purport to be a complete statement of the terms and conditions of the engagement letter agreement with Wainwright nor the securities purchase agreement. See "Where You Can Find Additional Information".

Other Relationships

The placement agent and certain of its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The placement agent and certain of its affiliates may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they will receive customary fees and expenses.

In the ordinary course of their various business activities, the placement agent and certain of its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the placement agent or its affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The placement agent and its affiliates may hedge such exposure by entering into transactions that consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the securities offered hereby. Any such short positions could adversely affect future trading prices of the securities offered hereby. The placement agent and certain of its affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

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LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., New York, New York. Haynes and Boone, LLP, New York, New York, is acting as counsel for the placement agent in connection with this offering.

EXPERTS

The consolidated financial statements of Acurx Pharmaceuticals, Inc. appearing in our [Annual Report on Form 10-K for the year ended December 31, 2023](#) have been audited by CohnReznick LLP, an independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

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WHERE YOU CAN FIND ADDITIONAL INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities being offered under this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities being offered under this prospectus supplement and the accompanying prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Acurx. The SEC's website can be found at www.sec.gov.

These documents are also available, free of charge, through the Investors section of our website. We maintain a website at www.acurxpharma.com. Information contained in or accessible through our website does not constitute a part of this prospectus supplement or the accompanying prospectus.

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INCORPORATION BY REFERENCE OF CERTAIN DOCUMENTS

The SEC allows us to "incorporate by reference" information into this prospectus supplement, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The documents incorporated by reference into this prospectus supplement contain important information that you should

read about us.

The following documents are incorporated by reference into this prospectus supplement:

- [our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on March 15, 2024](#)
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2024, filed with the SEC on [May 14, 2024](#), June 30, 2024, filed with the SEC on [August 8, 2024](#), and September 30, 2024, filed with the SEC on [November 12, 2024](#);
- our Current Report on Form 8-K filed with the SEC on [May 15, 2024](#) and [June 17, 2024](#) (except for any information furnished under Items 2.02 or 7.01 and exhibits furnished thereto); and
- the description of our common stock contained in our Registration Statement on [Form 8-A](#) initially filed on June 23, 2021, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus supplement all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of this prospectus supplement, or (ii) after the date of this prospectus supplement but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus supplement but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests should be directed to:

Acurx Pharmaceuticals, Inc.
259 Liberty Avenue
Staten Island, NY 10305
Telephone: (917) 533-1469

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

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PROSPECTUS

Acurx Pharmaceuticals, Inc.

\$50,000,000

**COMMON STOCK
PREFERRED STOCK
DEBT SECURITIES
WARRANTS
RIGHTS
UNITS**

This prospectus will allow us to issue, from time to time at prices and on terms to be determined at or prior to the time of the offering, up to \$50,000,000 of any combination of the securities described in this prospectus, either individually or in units. We may also offer common stock or preferred stock upon conversion of or exchange for the debt securities; common stock upon conversion of or exchange for preferred stock; or common stock, preferred stock or debt securities upon the exercise of warrants or rights.

This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide you with the specific terms of any offering in one or more supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any prospectus supplement, as well as any documents incorporated by reference into this prospectus or any prospectus supplement, carefully before you invest.

Our securities may be sold directly by us to you, through agents designated from time to time or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus and in the applicable prospectus supplement. If any underwriters or agents are involved in the sale of our securities with respect to which this prospectus is being delivered, the names of such underwriters or agents and any applicable fees, commissions or discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on The Nasdaq Capital Market under the symbol "ACXP." On June 30, 2022, the last reported sale price of our common stock was \$3.79 per share. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on The Nasdaq Capital Market or any securities market or other securities exchange of the securities covered by the prospectus supplement. Prospective purchasers of our securities are urged to obtain current information as to the market prices of our securities, where applicable.

Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell our common stock in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75.0 million. As of June 30, 2022, the aggregate market value of our outstanding common stock held by non-affiliates, or public float, was approximately \$30.5 million, based on 7,867,001 shares of our outstanding common stock that were held by non-affiliates on such date and a price of \$3.88 per share, which was the price at which our common stock was last sold on The Nasdaq Capital Market on May 6, 2022 (a date within 60 days of the date hereof), calculated in accordance with General Instruction I.B.6 of Form S-3. During the 12 calendar months prior to and including the date of this prospectus, we have not offered and sold any of our securities pursuant to General Instruction I.B.6 of Form S-3.

Investing in our securities involves a high degree of risk. See “Risk Factors” included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

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 is July 11, 2022.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants or rights to purchase any such securities, either individually or in units, in one or more offerings, with a total value of up to \$50,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. The prospectus supplement may also add, update or change information contained or incorporated by reference in this prospectus. However, no prospectus supplement will offer a security that is not registered and described in this prospectus at the time of its effectiveness. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to the offering of securities under this prospectus. You should carefully read this prospectus, the applicable prospectus supplement, the information and documents incorporated herein by reference and the additional information under the heading “Where You Can Find More Information” before making an investment decision.

You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained or incorporated by reference in this prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated herein by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

PROSPECTUS SUMMARY

The following is a summary of what we believe to be the most important aspects of our business and the offering of our securities under this prospectus. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC or included in any applicable prospectus supplement. Investing in our securities involves risks. Therefore, carefully consider the risk factors set forth in any prospectus supplements and in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus and any prospectus supplements and the documents incorporated by reference herein or therein, before purchasing our securities. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

Overview

We are a publicly-held, clinical stage biopharmaceutical company developing a new class of antibiotics for infections caused by bacteria listed as priority pathogens by the World Health Organization (“WHO”), the U.S. Centers for Disease Control and Prevention (“CDC”) and the U.S. Food and Drug Administration (“FDA”). Priority pathogens are those which require new antibiotics to address the worldwide crisis of antimicrobial resistance (“AMR”) as identified by the WHO, CDC and FDA. The CDC estimates that, in the U.S., antibiotic-resistant pathogens infect one individual every 11 seconds and result in one death every 15 minutes. The WHO recently stated that growing antimicrobial resistance is equally as dangerous as the ongoing COVID-19 pandemic, threatens to unwind a century of medical progress and may leave us defenseless against infections that today can be treated easily. According to the WHO, the current clinical development pipeline remains insufficient to tackle the challenge of the increasing emergence and spread of antimicrobial resistance.

Our approach is to develop a new class of antibiotic candidates that block the DNA polymerase III (“Pol III”). We believe we are developing the first Pol III inhibitor to enter clinical trials and have clinically validated the efficacy of our lead antibiotic candidate in a Phase 2a clinical trial. Pol III is the primary catalyst for DNA replication of several Gram-positive bacterial cells. Our research and development pipeline includes clinical stage and early-stage antibiotic candidates that target Gram-positive bacteria for oral and/or parenteral treatment of infections caused by *Clostridium difficile* (“*C. difficile*”), Enterococcus (including vancomycin-resistant strains (“VRE”)), Staphylococcus (including methicillin resistant strains), and Streptococcus (including antibiotic resistant strains).

Pol III is required for the replication of DNA in certain Gram-positive bacterial species. By blocking this enzyme, our antibiotic candidates are believed to be bactericidal and inhibit proliferation of several common gram-positive bacterial pathogens, including *C. difficile*, methicillin-resistant *Staphylococcus aureus* (“MRSA”), vancomycin-resistant Enterococcus, penicillin-resistant Streptococcus pneumonia (“DRSP”) and other resistant bacteria.

We intend to “de-risk” this new class of antibiotics through our drug development activities and potentially partner with a fully-integrated pharmaceutical company for late-stage clinical trials and commercialization.

Our lead antibiotic candidate, ibezapolstat (formerly named ACX-362E), has a novel mechanism of action that targets the Pol III enzyme, a previously unexploited scientific target. Phase 2a clinical data validate the efficacy of our lead antibiotic candidate as well as Pol III as an appropriate bacterial target.

On December 3, 2021, we commenced enrollment in a Phase 2b 64-patient, randomized (1-to-1), non-inferiority, double-blind trial of oral ibezapolstat compared to oral vancomycin, a standard of care to treat *C. difficile* infections (“CDI”).

Prior to that, we completed our Phase 2a clinical trial of ibezapolstat to treat patients with CDI and reported the top-line data in November 2020. The Phase 2a clinical trial was terminated early based upon the recommendation of our Scientific Advisory Board (the “SAB”). The SAB reviewed the study data presented by management, including adverse events and efficacy outcomes, and discussed its clinical impressions. The SAB unanimously supported the early termination of the Phase 2a trial after 10 patients were enrolled in the trial instead of 20 patients as originally planned. The early termination was further based on the evidence of meeting the treatment goals of eliminating the infection with an acceptable adverse event profile.

The SAB noted that 10 out of 10 patients enrolled in the Phase 2a trial reached the Clinical Cure endpoint, defined in the study protocol as the resolution of diarrhea in the 24-hour period immediately before the end of treatment that is maintained for 48 hours after end of treatment. Such cure was sustained, meaning that the patients showed no sign of infection recurrence, for 30 days thereafter. This constitutes a 100% response rate for the primary and secondary endpoints of the trial. All 10 patients enrolled in the Phase 2a trial met the study’s primary and secondary efficacy endpoints, namely, Clinical Cure at end of treatment and Sustained Clinical Cure of no recurrence of CDI at the 28-day follow-up visit. No treatment-related serious adverse events (“SAEs”) were reported by the investigators who enrolled patients in the trial. We believe these results represent the first-ever clinical data showing Pol III has potential as a therapeutically relevant antibacterial target. Our Phase 2b clinical trial commenced enrollment on December 3, 2021.

The SAB is comprised of seven scientists and clinicians who have significant expertise in the scientific disciplines required for the research and development of antibiotics. The members of the SAB serve at the pleasure of management, are paid in cash on an hourly basis for their services and do not receive equity compensation. Generally, the SAB is consulted by management during the process of designing our preclinical and clinical trials as well as in the process of analyzing data generated from these trials, although the SAB’s services are not limited to such activities.

Currently available antibiotics used to treat CDI infections utilize other mechanisms of action. We believe ibezapolstat is the first antibiotic candidate to work by blocking the DNA Pol III enzyme in *C. difficile*. This enzyme is necessary for replication of the DNA of certain Gram-positive bacteria, like *C. difficile*.

We also have an early-stage pipeline of antibiotic product candidates with the same previously unexploited mechanism of action which has established proof of concept in animal studies. This pipeline includes ACX-375C, a potential oral and parenteral treatment targeting Gram-positive bacteria, including MRSA, VRE and DRSP.

Implication of Being an Emerging Growth Company

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended (the “JOBS Act”). We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year following the fifth anniversary of the completion of our initial public offering, (2) the last day of the fiscal year in which we have total annual gross revenues of at least \$1.07 billion, (3) the date on which we are deemed to be a “large accelerated filer” as defined in

Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of our most recently completed second fiscal quarter or (4) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company,

- we may reduce our executive compensation disclosure;
- we may present only two years of audited financial statements, plus unaudited condensed financial statements for any interim period, and related Management’s Discussion and Analysis of Financial Condition and Results of Operations in this Prospectus;
- we may avail ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002; and
- we may not require stockholder non-binding advisory votes on executive compensation or golden parachute arrangements.

We have availed ourselves in this Prospectus of the reduced reporting requirements described above with respect to compensation disclosure requirements and selected financial data. As a result, the information that we provide stockholders may be less comprehensive than what you might receive from other public companies. When we are no longer deemed to be an emerging growth company, we will not be entitled to the exemptions provided in the JOBS Act discussed above. We have not elected to avail ourselves of the exemption that allows emerging growth companies to extend the transition period for complying with new or revised financial accounting standards. This election is irrevocable.

As a company with less than \$1.0 billion in revenue during our last fiscal year, we qualify as an “emerging growth company.”

Smaller Reporting Company

We are also currently a “smaller reporting company,” meaning that we are not an investment company, an asset-backed issuer, or a majority-owned subsidiary of a parent company that is not a smaller reporting company, and have a public float of less than \$250 million or annual revenues of less than \$100 million during the most recently completed fiscal year. In the event that we are still considered a “smaller reporting company,” at such time as we cease being an “emerging growth company,” the disclosure we will be required to provide in our SEC filings will increase, but will still be less than it would be if we were not considered either an “emerging growth company” or a “smaller reporting company.” Specifically, similar to “emerging growth companies,” “smaller reporting companies” are able to provide simplified executive compensation disclosures in their filings; are exempt from the provisions of Section 404(b) of the Sarbanes-Oxley Act requiring that independent registered public accounting firms provide an attestation report on the effectiveness of internal control over financial reporting; and have certain other decreased disclosure obligations in their SEC filings, including, among other things, only being required to provide two years of audited financial statements in annual reports. Decreased disclosures in our SEC filings due to our status as an “emerging growth company” or “smaller reporting company” may make it harder for investors to analyze our results of operations and financial prospects.

Corporate Information and History

We were organized as a limited liability company in the State of Delaware in July 2017 and we commenced operations in February 2018 upon acquiring the rights to our lead antibiotic product candidate from GLSynthesis, Inc. Our principal executive offices are located at 259 Liberty Avenue, Staten Island, NY 10305 and our telephone number is (917) 533-1469. Our website address is www.acurxpharma.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference. On June 23, 2021, Acurx Pharmaceuticals, LLC converted from a Delaware limited liability company into a Delaware corporation pursuant to a statutory conversion, and changed its name to Acurx Pharmaceuticals, Inc.

Offerings Under This Prospectus

Under this prospectus, we may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants or rights to purchase any of such securities, either individually or in units, with a total value of up to \$50,000,000, from time to time at prices and on terms to be determined by market conditions at the time of the offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity, if applicable;
- rates and times of payment of interest or dividends, if any;
- redemption, conversion or sinking fund terms, if any;
- voting or other rights, if any; and
- conversion or exercise prices, if any.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we offer securities through agents or underwriters, we will include in the applicable prospectus supplement:

- the names of those agents or underwriters;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

This prospectus may not be used to consummate a sale of any securities unless it is accompanied by a prospectus supplement.

RISK FACTORS

Investing in our securities involves significant risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in Acurx. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading “Risk Factors” in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under the heading “Risk Factors” included in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q or our Current Reports on Form 8-K that we have filed with the SEC, all of which are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), that relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Words such as, but not limited to, “believe,” “expect,” “anticipate,” “estimate,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “targets,” “likely,” “will,” “would,” “could,” “should,” “continue,” and similar expressions or phrases, or the negative of those expressions or phrases, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus and incorporated by reference in this prospectus, we caution you that these statements are based on our projections of the future that are subject to known and unknown risks and uncertainties and other factors that may cause our actual results, level of activity, performance or achievements expressed or implied by these forward-looking statements, to differ. The sections in our periodic reports, including our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q or our Current Reports on Form 8-K, entitled “Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” as well as other sections in this prospectus and the other documents or reports incorporated by reference in this prospectus, discuss some of the factors that could contribute to these differences. These forward-looking statements include, among other things, statements about:

- our ability to obtain and maintain regulatory approval of ibezapolstat and/or our other product candidates;
- our ability to successfully commercialize and market ibezapolstat and/or our other product candidates, if approved;
- our ability to contract with third-party suppliers, manufacturers and other service providers and their ability to perform adequately;
- the potential market size, opportunity and growth potential for ibezapolstat and/or our other product candidates, if approved;
- our ability to build our own sales and marketing capabilities, or seek collaborative partners, to commercialize ibezapolstat and/or our other product candidates, if approved;
- our ability to obtain funding for our operations;
- the initiation, timing, progress and results of our preclinical studies and clinical trials, and our research and development programs;
- the timing of anticipated regulatory filings;
- the timing of availability of data from our clinical trials;
- the impact of the ongoing COVID-19 pandemic and our response to it;
- the accuracy of our estimates regarding expenses, capital requirements and needs for additional financing;
- our ability to retain the continued service of our key professionals and to identify, hire and retain additional qualified professionals;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- our ability to recruit and enroll suitable patients in our clinical trials and the timing of enrollment;
- the timing or likelihood of the accomplishment of various scientific, clinical, regulatory and other product development objectives;
- the pricing and reimbursement of our product candidates, if approved;
- the rate and degree of market acceptance of our product candidates, if approved;
- the implementation of our business model and strategic plans for our business, product candidates and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- developments relating to our competitors and our industry;

- the development of major public health concerns, including the novel coronavirus outbreak or other pandemics arising globally, and the future impact of it and COVID-19 on our clinical trials, business operations and funding requirements;
- the volatility of the price of our common stock;
- our financial performance; and
- other factors described from time to time in documents that we file with the SEC.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important cautionary statements in this prospectus and in the documents incorporated by reference in this prospectus, particularly in the “Risk Factors” section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. For a summary of such factors, please refer to the section entitled “Risk Factors” in this prospectus, as updated and supplemented by the discussion of risks and uncertainties under “Risk Factors” contained in any supplements to this prospectus and in our most recent Annual Report on Form 10-K, as revised or supplemented by our subsequent Quarterly Reports on Form 10-Q or our Current Reports on Form 8-K, as well as any amendments thereto, as filed with the SEC and which are incorporated herein by reference. The information contained in this document is believed to be current as of the date of this document. We do not intend to update any of the forward-looking statements after the date of this document to conform these statements to actual results or to changes in our expectations, except as required by law.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this prospectus or in any document incorporated herein by reference might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus or the date of the document incorporated by reference in this prospectus. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, we intend to use any net proceeds from the sale of securities under this prospectus for general corporate purposes, including, but not limited to, clinical trials, research and development activities, working capital, capital expenditures, investments, acquisitions, should we choose to pursue any, and collaborations. We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds, if any, we receive in connection with securities offered pursuant to this prospectus for any purpose. Pending application of the net proceeds as described above, we may initially invest the net proceeds in short-term, investment-grade, interest-bearing securities or apply them to the reduction of short-term indebtedness.

PLAN OF DISTRIBUTION

We may offer securities under this prospectus from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities (1) through underwriters or dealers, (2) through agents or (3) directly to one or more purchasers, or through a combination of such methods. We may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed from time to time;
- market prices prevailing at the time of sale;
- prices related to the prevailing market prices; or
- negotiated prices.

We may directly solicit offers to purchase the securities being offered by this prospectus. We may also designate agents to solicit offers to purchase the securities from time to time, and may enter into arrangements for “at-the-market,” equity line or similar transactions. We will name in a prospectus supplement any underwriter or agent involved in the offer or sale of the securities.

If we utilize a dealer in the sale of the securities being offered by this prospectus, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If we utilize an underwriter in the sale of the securities being offered by this prospectus, we will execute an underwriting agreement with the underwriter at the time of sale, and we will provide the name of any underwriter in the prospectus supplement which the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of the securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and the underwriter may compensate those dealers in the form of discounts, concessions or commissions.

With respect to underwritten public offerings, negotiated transactions and block trades, we will provide in the applicable prospectus supplement information regarding any compensation we pay to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof.

If so indicated in the applicable prospectus supplement, we will authorize underwriters, dealers or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in each applicable prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in each applicable prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

One or more firms, referred to as “remarketing firms,” may also offer or sell the securities, if a prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as our agents. These remarketing firms will offer or sell the securities in accordance with the terms of the securities. Each prospectus supplement will identify and describe any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm’s compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket. Remarketing firms may be entitled under agreements that may be entered into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

Certain underwriters may use this prospectus and any accompanying prospectus supplement for offers and sales related to market-making transactions in the securities. These

underwriters may act as principal or agent in these transactions, and the sales will be made at prices related to prevailing market prices at the time of sale. Any underwriters involved in the sale of the securities may qualify as “underwriters” within the meaning of Section 2(a)(11) of the Securities Act. In addition, the underwriters’ commissions, discounts or concessions may qualify as underwriters’ compensation under the Securities Act and the rules of the Financial Industry Regulatory Authority, Inc. (“FINRA”).

Shares of our common stock sold pursuant to the registration statement of which this prospectus is a part will be authorized for listing and trading on The Nasdaq Capital Market. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on The Nasdaq Capital Market or any securities market or other securities exchange of the securities covered by the prospectus supplement. Underwriters may make a market in our common stock, but will not be obligated to do so and may discontinue any market making at any time without notice. We can make no assurance as to the liquidity of or the existence, development or maintenance of trading markets for any of the securities.

In order to facilitate the offering of the securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than we sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing the applicable security in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if the securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

The underwriters, dealers and agents may engage in other transactions with us, or perform other services for us, in the ordinary course of their business.

DESCRIPTION OF COMMON STOCK

We are authorized to issue 200,000,000 shares of common stock, par value \$0.001 per share. As of June 30, 2022, we had 10,263,202 shares of common stock outstanding and approximately 247 stockholders of record of our common stock.

The following summary of certain provisions of our common stock does not purport to be complete. You should refer to the section of this prospectus entitled “Certain Provisions of Delaware Law and of the Company’s Certificate of Incorporation and Bylaws” and our certificate of incorporation and our bylaws, both of which are included as exhibits to the registration statement of which this prospectus is a part. The summary below is also qualified by provisions of applicable law.

General

The holders of our common stock are entitled to receive, ratably, dividends only if, when and as declared by our board of directors out of funds legally available therefor and after provision is made for each class of capital stock having preference over the common stock. To date, we have not paid dividends on our common stock. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. Our common stock is not entitled to pre-emptive or similar rights. Upon liquidation, dissolution or winding up of the Company, the assets legally available for distribution to stockholders are distributable ratably among the holders of our common stock after payment of all debts and other liabilities, if any, and subject to the rights of each class or series of capital stock having preference over, or right to participate with, the common stock. Each outstanding share of our common stock is duly and validly issued, fully paid and non-assessable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is VStock Transfer, LLC.

Stock Exchange Listing

Our common stock is listed for quotation on The Nasdaq Capital Market under the symbol “ACXP.”

DESCRIPTION OF PREFERRED STOCK

The following description of our preferred stock and the description of the terms of any particular series of preferred stock that we choose to issue hereunder are not complete. These descriptions are qualified in their entirety by reference to our certificate of incorporation and the certificate of designation relating to any series of preferred stock issued by us. The rights, preferences, privileges and restrictions of the preferred stock of each series will be fixed by the certificate of designation relating to that series.

Our board of directors is authorized, without action by the stockholders, to designate and issue up to an aggregate of 10,000,000 shares of preferred stock in one or more series. Any or all of these rights may be greater than the rights of our common stock.

The shares of preferred stock may be issued from time to time in one or more series, each of which will have such distinctive designation or title as shall be determined by our board of directors prior to the issuance of any shares thereof. Preferred stock will have such voting powers, full or limited, or no voting powers, and such preferences and relative, participating, optional or other special rights and such qualifications, limitations or restrictions thereof, as shall be stated in such resolution or resolutions providing for the issue of such class or series of preferred stock as may be adopted from time to time by our board of directors prior to the issuance of any shares thereof. The number of authorized shares of preferred stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of all the then outstanding shares of our capital stock entitled to vote generally in the election of the directors, voting together as a single class, without a separate vote of the holders of the preferred stock, or any series thereof, unless a vote of any such holders is required pursuant to any preferred stock designation.

The issuance of such preferred stock could adversely affect the rights of the holders of common stock and, therefore, reduce the value of the common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of the common stock until the board of directors determines the specific rights of the holders of the preferred stock; however, these effects may include:

- Restricting dividends on the common stock;
- Diluting the voting power of the common stock;
- Impairing the liquidation rights of the common stock; or
- Delaying or preventing a change in control of the Company without further action by the stockholders.

Transfer Agent and Registrar

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we may offer pursuant to this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any debt securities offered under such prospectus supplement may differ from the terms we describe below, and to the extent the terms set forth in a prospectus supplement differ from the terms described below, the terms set forth in the prospectus supplement shall control.

We may sell from time to time, in one or more offerings under this prospectus, debt securities, which may be senior or subordinated. We will issue any such senior debt securities under a senior indenture that we will enter into with a trustee to be named in the senior indenture. We will issue any such subordinated debt securities under a subordinated indenture that we will enter into with a trustee to be named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus is a part. We use the term “indentures” to refer to either the senior indenture or the subordinated indenture, as applicable. The indentures will be qualified under the Trust Indenture Act of 1939, as in effect on the date of the indenture. We use the term “debenture trustee” to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities.

General

Each indenture provides that debt securities may be issued from time to time in one or more series and may be denominated and payable in foreign currencies or units based on or relating to foreign currencies. Neither indenture limits the amount of debt securities that may be issued thereunder, and each indenture provides that the specific terms of any series of debt securities shall be set forth in, or determined pursuant to, an authorizing resolution and/or a supplemental indenture, if any, relating to such series.

We will describe in each prospectus supplement the following terms relating to a series of debt securities:

- the title or designation;
- the aggregate principal amount and any limit on the amount that may be issued;
- the currency or units based on or relating to currencies in which debt securities of such series are denominated and the currency or units in which principal or interest or both will or may be payable;
- whether we will issue the series of debt securities in global form, the terms of any global securities and who the depository will be;
- the maturity date and the date or dates on which principal will be payable;
- the interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the date or dates interest will be payable and the record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place or places where payments will be payable;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional redemption provisions;
- the date, if any, on which, and the price at which, we are obligated, pursuant to any mandatory sinking fund provisions or otherwise, to redeem or, at the holder’s option, to purchase the series of debt securities;

- whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;
- whether we will be restricted from incurring any additional indebtedness;
- a discussion of any material or special U.S. federal income tax considerations applicable to a series of debt securities;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities.

We may issue debt securities that provide for an amount less than their stated principal amount to be due and payable upon declaration of acceleration of their maturity pursuant to the terms of the indenture. We will provide you with information on the federal income tax considerations and other special considerations applicable to any of these debt securities in the applicable prospectus supplement.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms, if any, on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale; No Protection in Event of a Change of Control or Highly Leveraged Transaction

The indentures do not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate.

Unless we state otherwise in the applicable prospectus supplement, the debt securities will not contain any provisions that may afford holders of the debt securities protection in the event we have a change of control or in the event of a highly leveraged transaction (whether or not such transaction results in a change of control), which could adversely affect holders of debt securities.

Events of Default Under the Indenture

The following are events of default under the indentures with respect to any series of debt securities that we may issue:

- if we fail to pay interest when due and our failure continues for 90 days and the time for payment has not been extended or deferred;
- if we fail to pay the principal, or premium, if any, when due and the time for payment has not been extended or delayed;
- if we fail to observe or perform any other covenant set forth in the debt securities of such series or the applicable indentures, other than a covenant specifically relating to and for the benefit of holders of another series of debt securities, and our failure continues for 90 days after we receive written notice from the debenture trustee or holders of not less than a majority in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur as to us.

No event of default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of debt securities. The occurrence of an event of default may constitute an event of default under any bank credit agreements we may have in existence from time to time. In addition, the occurrence of certain events of default or an acceleration under the indenture may constitute an event of default under certain of our other indebtedness outstanding from time to time.

If an event of default with respect to debt securities of any series at the time outstanding occurs and is continuing, then the trustee or the holders of not less than a majority in principal amount of the outstanding debt securities of that series may, by a notice in writing to us (and to the debenture trustee if given by the holders), declare to be due and payable immediately the principal (or, if the debt securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) of and premium and accrued and unpaid interest, if any, on all debt securities of that series. Before a judgment or decree for payment of the money due has been obtained with respect to debt securities of any series, the holders of a majority in principal amount of the outstanding debt securities of that series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) may rescind and annul the acceleration if all events of default, other than the non-payment of accelerated principal, premium, if any, and interest, if any, with respect to debt securities of that series, have been cured or waived as provided in the applicable indenture (including payments or deposits in respect of principal, premium or interest that had become due other than as a result of such acceleration). We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of such discount securities upon the occurrence of an event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the debenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will only have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

- the holder previously has given written notice to the debenture trustee of a continuing event of default with respect to that series;
- the holders of at least a majority in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and
- the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series (or at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) other conflicting directions within 60 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the applicable debenture trustee regarding our compliance with specified covenants in the applicable indenture.

Modification of Indenture; Waiver

The debenture trustee and we may change the applicable indenture without the consent of any holders with respect to specific matters, including:

- to fix any ambiguity, defect or inconsistency in the indenture; and
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series issued pursuant to such indenture.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) that is affected. However, the debenture trustee and we may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon the redemption of any debt securities;
- reducing the principal amount of discount securities payable upon acceleration of maturity;
- making the principal of or premium or interest on any debt security payable in currency other than that stated in the debt security; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment or waiver.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding debt securities of any series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) may on behalf of the holders of all debt securities of that series waive our compliance with provisions of the indenture. The holders of a majority in principal amount of the outstanding debt securities of any series may on behalf of the holders of all the debt securities of such series waive any past default under the indenture with respect to that series and its consequences, except a default in the payment of the principal of, premium or any interest on any debt security of that series or in respect of a covenant or provision, which cannot be modified or amended without the consent of the holder of each outstanding debt security of the series affected; *provided, however*, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Discharge

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for obligations to:

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged with respect to a series, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, the premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depository named by us and identified in a prospectus supplement with respect to that series.

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At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange or in the applicable indenture, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Debenture Trustee

The debenture trustee, other than during the occurrence and continuance of an event of default under the applicable indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the debenture trustee under such indenture must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check which we will mail to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the debenture trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

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All money we pay to a paying agent or the debenture trustee for the payment of the principal of or any premium or interest on any debt securities which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

Subordination of Subordinated Debt Securities

Our obligations pursuant to any subordinated debt securities will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to

DESCRIPTION OF WARRANTS

General

We may issue warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series together with other securities or separately, as described in the applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the warrant agreements and the prospectus supplement relating to the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that series of our preferred stock;
- if applicable, the exercise price for our debt securities, the amount of debt securities to be received upon exercise, and a description of that series of debt securities;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositories, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions;
- whether the warrants may be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

Outstanding Warrants

As of June 30, 2022, we had the following warrants outstanding.

Purchase Warrants

We have 1,432,227 warrants (the "Purchase Warrants") to purchase common stock outstanding with a weighted average exercise price of \$2.88 per share that were issued in connection with private placement financings prior to our initial public offering ("IPO").

The following summary of certain terms and provisions of the Purchase Warrants is not complete and is subject to, and qualified in its entirety by, the provisions of the Purchase Warrants, the forms of which are filed as exhibits to our public reports filed with the SEC.

Duration

Each Purchase Warrant is exercisable and will expire on the tenth anniversary of each respective issuance. The exercise price and number of shares of common stock issuable upon exercise of the Purchase Warrants is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price.

Exercisability

The Purchase Warrants are exercisable, at the option of each holder, in whole or in part, by delivering a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below).

Cashless Exercise

If the holder provides written notice at the time they exercise their Purchase Warrants that they elect to effect a "net exercise" of their Purchase Warrants, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Purchase Warrants.

Transferability

Subject to applicable laws, a Purchase Warrant may be transferred at the option of the holder upon surrender of the Purchase Warrant together with the appropriate instruments of transfer.

Exchange Listing

The Purchase Warrants are not listed on any securities exchange or nationally recognized trading system.

Right as a Stockholder

Except as otherwise provided in the Purchase Warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the Purchase Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their Purchase Warrants.

Underwriter Warrants

In connection with our IPO, we issued 150,000 warrants (the "Underwriter Warrants") to the underwriter. Each warrant is exercisable until June 24, 2026 at an exercise price of \$7.50 per share.

The following summary of certain terms and provisions of the Underwriter Warrants is not complete and is subject to, and qualified in its entirety by, the provisions of the Underwriter Warrants, the forms of which are filed as exhibits to our public reports filed with the SEC.

Duration

Each Underwriter Warrant is exercisable from December 21, 2021. The Underwriter Warrants will expire on June 24, 2026. The exercise price and number of shares of common stock issuable upon exercise of the Underwriter Warrants is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price.

Exercisability

The Underwriter Warrants are exercisable, at the option of each holder, in whole or in part, by delivering a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below).

Cashless Exercise

If, at the time a holder exercises its Underwriter Warrants, a registration statement registering the issuance of the shares of common stock underlying the Underwriter Warrants under the Securities Act is not then effective or available, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Underwriter Warrants.

Transferability

Subject to applicable laws, an Underwriter Warrant may be transferred at the option of the holder upon surrender of the Underwriter Warrant together with the appropriate instruments of transfer.

Exchange Listing

The Underwriter Warrants are not listed on any securities exchange or nationally recognized trading system.

Right as a Stockholder

Except as otherwise provided in the Underwriter Warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the Underwriter Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their Underwriter Warrants.

DESCRIPTION OF RIGHTS

General

We may issue rights to our stockholders to purchase shares of our common stock, preferred stock or the other securities described in this prospectus. We may offer rights separately or together with one or more additional rights, debt securities, preferred stock, common stock or warrants, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. Each series of rights will be issued under a separate rights agreement to be entered into between us and a bank or trust company, as rights agent. The rights agent will act solely as our agent in connection with the certificates relating to the rights of the series of certificates and will not assume any obligation or relationship of agency or trust for or with any holders of rights certificates or beneficial owners of rights. The following description sets forth certain general terms and provisions of the rights to which any prospectus supplement may relate. The particular terms of the rights to which any prospectus supplement may relate and the extent, if any, to which the general provisions may apply to the rights so offered will be described in the applicable prospectus supplement. To the extent that any particular terms of the rights, rights agreement or rights certificates described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable rights agreement and rights certificate for additional information before you decide whether to purchase any of our rights. We will provide in a prospectus supplement the following terms of the rights being issued:

- the date of determining the stockholders entitled to the rights distribution;
- the aggregate number of shares of common stock, preferred stock or other securities purchasable upon exercise of the rights;
- the exercise price;
- the aggregate number of rights issued;
- whether the rights are transferrable and the date, if any, on and after which the rights may be separately transferred;
- the date on which the right to exercise the rights will commence, and the date on which the right to exercise the rights will expire;
- the method by which holders of rights will be entitled to exercise;
- the conditions to the completion of the offering, if any;

- the withdrawal, termination and cancellation rights, if any;
- whether there are any backstop or standby purchaser or purchasers and the terms of their commitment, if any;
- whether stockholders are entitled to oversubscription rights, if any;
- any applicable material U.S. federal income tax considerations; and
- any other terms of the rights, including terms, procedures and limitations relating to the distribution, exchange and exercise of the rights, as applicable.

Each right will entitle the holder of rights to purchase for cash the principal amount of shares of common stock, preferred stock or other securities at the exercise price provided in the applicable prospectus supplement. Rights may be exercised at any time up to the close of business on the expiration date for the rights provided in the applicable prospectus supplement.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the shares of common stock, preferred stock or other securities, as applicable, purchasable upon exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby arrangements, as described in the applicable prospectus supplement.

Rights Agent

The rights agent for any rights we offer will be set forth in the applicable prospectus supplement.

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DESCRIPTION OF UNITS

The following description, together with the additional information that we include in any applicable prospectus supplements, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will incorporate by reference from reports that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we may offer under this prospectus, as well as any related free writing prospectuses and the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units consisting of common stock, preferred stock, one or more debt securities, warrants or rights for the purchase of common stock, preferred stock and/or debt securities in one or more series, in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each security included in the unit. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those set forth in any prospectus supplement or as described under “Description of Common Stock,” “Description of Preferred Stock,” “Description of Debt Securities,” “Description of Warrants,” and “Description of Rights” will apply to each unit, as applicable, and to any common stock, preferred stock, debt security, warrant or right included in each unit, as applicable.

Unit Agent

The name and address of the unit agent, if any, for any units we offer will be set forth in the applicable prospectus supplement.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

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CERTAIN PROVISIONS OF DELAWARE LAW AND OF THE COMPANY’S CERTIFICATE OF INCORPORATION AND BYLAWS

Delaware Takeover Statute

Section 203 of the Delaware General Corporation Law, subject to certain exceptions, prohibits a Delaware corporation from engaging in any “business combination” (as defined

below) with any “interested stockholder” (as defined below) for a period of three years following the date that such stockholder became an interested stockholder, unless: (1) prior to such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; (2) on consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned (x) by persons who are directors and also officers and (y) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or (3) on or subsequent to such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 of the Delaware General Corporation Law defines “business combination” to include: (1) any merger or consolidation involving the corporation and the interested stockholder; (2) any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder; (3) subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; (4) any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or (5) the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation. In general, Section 203 defines an “interested stockholder” as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by such entity or person.

Limitation on Liability of Directors and Indemnification of Directors and Officers

Under Delaware law, a corporation may indemnify any individual made a party or threatened to be made a party to any type of proceeding, other than an action by or in the right of the corporation, because he or she is or was an officer, director, employee or agent of the corporation or was serving at the request of the corporation as an officer, director, employee or agent of another corporation or entity against expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such proceeding if (1) he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation or (2) in the case of a criminal proceeding, he or she had no reasonable cause to believe that his or her conduct was unlawful. A corporation may indemnify any individual made a party or threatened to be made a party to any threatened, pending or completed action or suit brought by or in the right of the corporation because he or she was an officer, director, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other entity, against expenses actually and reasonably incurred in connection with such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, provided that such indemnification will be denied if the individual is found liable to the corporation unless, in such a case, the court determines the person is nonetheless entitled to indemnification for such expenses. A corporation must indemnify a present or former director or officer who successfully defends himself or herself in a proceeding to which he or she was a party because he or she was a director or officer of the corporation against expenses actually and reasonably incurred by him or her. Expenses incurred by an officer or director, or any employees or agents as deemed appropriate by the board of directors, in defending civil or criminal proceedings may be paid by the corporation in advance of the final disposition of such proceedings upon receipt of an undertaking by or on behalf of such director, officer, employee or agent to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the corporation. The Delaware law regarding indemnification and expense advancement is not exclusive of any other rights which may be granted by our Certificate of Incorporation or our bylaws, a vote of stockholders or disinterested directors, agreement or otherwise.

Under Delaware law, termination of any proceeding by conviction or upon a plea of nolo contendere or its equivalent does not, of itself, create a presumption that such person is prohibited from being indemnified.

Delaware law permits a corporation to adopt a provision in its certificate of incorporation eliminating or limiting the personal liability of a director, but not an officer, in his or her capacity as such, to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except that such provision may not limit the liability of a director for (1) any breach of the director’s duty of loyalty to the corporation or its stockholders, (2) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (3) unlawful payment of dividends or stock purchases or redemptions or (4) any transaction from which the director derived an improper personal benefit. Our Certificate of Incorporation provides that, to the fullest extent permitted under Delaware law, no Company director shall be liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director.

Our bylaws require indemnification, to the fullest extent permitted under Delaware law, of any person who is or was a director or officer of the Company or any of its direct or indirect wholly-owned subsidiaries and who is or was a party or is threatened to be made a party to, or was or is otherwise directly involved in (including as a witness), any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was a director or officer of the Company or any direct or indirect wholly-owned subsidiary of the Company, or is or was serving at our request as a director, officer, employee, partner, member or agent of another corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise, whether the basis of such proceeding is alleged action in an official capacity or in any other capacity, against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding; provided that the foregoing shall not apply to a director or officer with respect to a proceeding that was commenced by such director or officer except under certain circumstances.

In addition, our bylaws provide that expenses incurred by or on behalf of a current or former director or officer in connection with defending any action, suit or proceeding will be advanced to the director or officer by us upon the request of the director or officer, which request, if required by law, will include an undertaking by or on behalf of the director or officer to repay the amounts advanced if ultimately it is determined that the director or officer was not entitled to be indemnified against the expenses.

The indemnification rights provided in our bylaws are not exclusive of any other right to which persons seeking indemnification may otherwise be entitled.

As permitted by Delaware law, our bylaws authorize us to purchase and maintain insurance to protect any director, officer, employee or agent against claims and liabilities that such persons may incur in such capacities.

Charter Documents

Our certificate of incorporation and bylaws divide our board of directors into three classes with staggered three-year terms. The provision for a classified board could prevent a party who acquires control of a majority of our outstanding voting stock from obtaining control of our board of directors until the second annual stockholders meeting following the date the acquirer obtains the controlling stock interest. Our classified board provision could discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of Acurx and could increase the likelihood that incumbent directors will retain their positions. Our certificate of incorporation provides that, subject to the special rights of holders of one or more series of preferred stock, directors may be removed at any time, but only for cause by the affirmative vote of the holders of at least 66 2/3% of the voting power of all our outstanding voting stock.

Our certificate of incorporation provides that certain amendments of our certificate of incorporation and amendments by our stockholders of our bylaws require the approval of at least 66 2/3% of the voting power of all outstanding stock. These provisions could discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

Our bylaws provide that a special meeting of our stockholders may be called only by (i) our board of directors or (ii) the chair of our board of directors. Because our stockholders do not have the right to call a special meeting, our stockholders cannot force stockholder consideration of a proposal over the opposition of our board of directors

by calling a special meeting of stockholders prior to such time as a majority of our board of directors believed the matter should be considered and such stockholder would only be able to force consideration of such proposal at the next annual meeting, provided that the requestor met the notice requirements. The restriction on the ability of our stockholders to call a special meeting means that a proposal to replace one or more directors on our board of directors also could be delayed until the next annual meeting.

LEGAL MATTERS

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., New York, New York, will pass upon the validity of the issuance of the securities to be offered by this prospectus.

EXPERTS

The financial statements of Acurx Pharmaceuticals, Inc. (formerly Acurx Pharmaceuticals, LLC) appearing in Acurx Pharmaceuticals, Inc's [Annual Report on Form 10-K for the year ended December 31, 2021](#), have been audited by CohnReznick LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated by reference herein. Such financial statements are incorporated by reference herein in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. SEC filings are available at the SEC's website at <http://www.sec.gov>. This prospectus is only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act and therefore omits certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document.

We also maintain a website at www.acurxpharma.com, through which you can access our SEC filings. The information set forth on our website is not part of this prospectus.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act with the SEC with respect to the securities we may offer pursuant to this prospectus. This prospectus omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities we may offer pursuant to this prospectus. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. The documents we are incorporating by reference are:

- [our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on March 16, 2022;](#)
- [our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2022, filed with the SEC on May 10, 2022;](#)
- [our Current Report on Form 8-K filed with the SEC on June 7, 2022;](#)
- [the description of our common stock contained in our Registration Statement on Form 8-A initially filed on June 23, 2021, including any amendment or report filed for the purpose of updating such description; and](#)
- all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination or completion of the offering of securities under this prospectus shall be deemed to be incorporated by reference in this prospectus and to be a part hereof from the date of filing such reports and other documents.

The SEC file number for each of the documents listed above is 001-40536.

In addition, all reports and other documents filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost, by contacting:

Acurx Pharmaceuticals, Inc.
259 Liberty Avenue
Staten Island, NY 10305
Telephone: (917) 533-1469

You may also access these documents on our website, <http://www.acurxpharma.com>. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.



2,463,058 Shares of Common Stock

PROSPECTUS SUPPLEMENT

H.C. Wainwright & Co.

January 6, 2025
