

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

POST-EFFECTIVE AMENDMENT NO. 1  
TO

**FORM S-1**  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

**ACURX PHARMACEUTICALS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**2834**  
(Primary Standard Industrial  
Classification Code Number)

**82-3733567**  
(I.R.S. Employer  
Identification Number)

**259 Liberty Avenue  
Staten Island, New York 10305  
(917) 533-1469**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**David P. Luci**  
**President and Chief Executive Officer**  
**Acurx Pharmaceuticals, Inc.**  
**259 Liberty Avenue**  
**Staten Island, New York 10305**  
**(917) 533-1469**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

*Copies to:*  
**Ivan K. Blumenthal**  
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**666 Third Avenue**  
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**212-935-3000**

**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

**THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933, AS AMENDED, OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.**

## EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (this “Amendment”) to the Registration Statement on Form S-1 (File No. 333-284627) (the “Registration Statement”) of Acurx Pharmaceuticals, Inc. (the “Company”) is being filed pursuant to the undertakings in the Registration Statement to update and supplement the information contained in the Registration Statement, which was previously declared effective by the Securities and Exchange Commission (the “SEC”) on February 6, 2025.

This Amendment is being filed pursuant to Section 10(a)(3) of the Securities Act of 1933, as amended (the “Securities Act”), to update the Registration Statement to incorporate by reference the Company’s Annual Report on Form 10-K for the year ended December 31, 2024, which was filed with the SEC on March 17, 2025, to include a statement providing for the incorporation by reference of any future filings that the Company will make with the SEC under Sections 13(a), 13(c), 14 or 15 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), until the termination of the offering of the securities under this Amendment (excluding any documents or information or portions of such documents that are deemed to be furnished and not filed with the SEC) and make conforming changes to the undertakings included in Item 17 of this Amendment.

No additional securities are being registered under this Amendment. We previously paid to the SEC the entire registration fee relating to the shares of common stock that are the subject of this Amendment.

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**THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING STOCKHOLDERS MAY NOT RESELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS DECLARED EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.**

SUBJECT TO COMPLETION, DATED MARCH 17, 2025

## PROSPECTUS

### Acurx Pharmaceuticals, Inc.

#### 2,610,841 Shares of Common Stock

The selling stockholders of Acurx Pharmaceuticals, Inc. (“Acurx,” “we,” “us” or the “Company”) listed beginning on page 11 of this prospectus may offer and resell under this prospectus up to 2,610,841 shares of our common stock consisting of (i) up to 2,463,058 shares of our common stock, par value \$0.001 per share (the “common stock”), issuable upon exercise of series E warrants (the “series E warrants”) acquired by certain of the selling stockholders under the Purchase Agreement (defined below) with an exercise price of \$0.90 per share and (ii) up to 147,783 shares of our common stock issuable upon exercise of placement agent warrants (the “placement agent warrants” and, together with the series E warrants, the “warrants”) acquired by certain of the selling stockholders under the Engagement Letter (defined below) with an exercise price of \$1.2688 per share. Each series E warrant was immediately exercisable upon the issuance date and will expire five years from the initial exercise date, and each placement agent warrant was immediately exercisable upon the issuance date and will expire five years from the date of the Purchase Agreement (defined below). The selling stockholders acquired the warrants from us pursuant to a securities purchase agreement (the “Purchase Agreement”), dated January 6, 2025, by and between the Company and the purchasers named therein, and the engagement letter (the “Engagement Letter”), dated October 9, 2024, by and between the Company and H.C. Wainwright & Co., LLC (“Wainwright”).

We are registering the resale of the shares of common stock covered by this prospectus as required by the Purchase Agreement. The selling stockholders will receive all of the proceeds from any sales of the shares of common stock offered hereby. We will not receive any of the proceeds, but we will incur expenses in connection with the offering. To the extent the warrants are exercised for cash, if at all, we will receive the exercise price of the warrants.

The selling stockholders may sell these shares through public or private transactions at market prices prevailing at the time of sale or at negotiated prices. The timing and amount of any sale are within the sole discretion of the selling stockholders. Our registration of the shares of common stock covered by this prospectus does not mean that the selling stockholders will offer or sell any of the shares. For further information regarding the possible methods by which the shares may be distributed, see “Plan of Distribution” beginning on page 15 of this prospectus.

Our common stock is listed on The Nasdaq Capital Market under the symbol “ACXP.” The last reported sale price of our common stock on March 14, 2025 was \$0.461 per share.

We are an “emerging growth company” under applicable Securities and Exchange Commission rules and, as such, we are subject to reduced public company reporting requirements.

**Investing in our common stock is highly speculative and involves a significant degree of risk. Please consider carefully the specific factors set forth under “Risk Factors” beginning on page 5 of this prospectus and in our filings with the Securities and Exchange Commission.**

**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 \_\_\_\_\_, 2025.

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## ABOUT THIS PROSPECTUS

The registration statement we filed with the Securities and Exchange Commission (the “SEC”) includes exhibits that provide more detail of the matters discussed in this prospectus. You should read this prospectus, the related exhibits filed with the SEC, and the documents incorporated by reference herein before making your investment decision. You should rely only on the information provided in this prospectus or any amendment thereto. In addition, this prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made 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 is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find More Information.”

The selling stockholders named in this prospectus may sell up to 2,610,841 shares of our common stock previously issued and issuable upon exercise of warrants to purchase shares of our common stock from time to time. This prospectus also covers any shares of common stock that may become issuable as a result of share splits, share dividends, or similar transactions. We have agreed to pay the expenses incurred in registering these shares, including legal and accounting fees.

We have not, and the selling stockholders have not, authorized anyone to provide any information or to make any representations other than those contained in this prospectus, the documents incorporated by reference herein or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The information contained in this prospectus, the documents incorporated by reference herein or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since that date.

The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only under circumstances and in jurisdictions where it is lawful to do so. The selling stockholders are not making an offer to sell these securities in any state or jurisdiction where the offer or sale is not permitted.

Unless the context otherwise requires, “Acurx,” “ACXP,” “the Company,” “we,” “us,” “our” and similar terms refer to Acurx Pharmaceuticals, Inc.

### Industry and Market Data

This prospectus or the documents incorporated by reference herein includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information.

## 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 audited and unaudited financial statements, notes to the 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 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.

### **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 \$1.235 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.

### **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.

### **Risks Associated with Our Business**

Our business and our ability to implement our business strategy are subject to numerous risks, as more fully described in the section entitled “Risk Factors” in this prospectus and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2024 incorporated herein by reference. You should read these risks before you invest in our securities. We may be unable, for many reasons, including those that are beyond our control, to implement our business strategy.

### **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](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. 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.

### **Recent Developments**

#### ***2025 Registered Direct Offering***

On January 6, 2025, we entered into the Purchase Agreement with certain institutional investors named therein (the “Investors”), and with each of 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 a member of our board of directors (collectively, the “Affiliate Investors”), pursuant to which we agreed to issue and sell, in a registered direct offering by us directly to the Investors and to the Affiliate Investors (the “Registered Offering”), an aggregate of 2,463,058 shares of common stock, par value \$0.001 per share, of the Company (consisting of an aggregate of 2,295,570 shares purchased by the Investors and an aggregate of 167,488 Shares purchased by the Affiliate Investors), at an offering price of \$1.015 per share, for aggregate gross proceeds from the Registered Offering of approximately \$2.5 million, before deducting the placement agent fees and related offering expenses.

The Purchase Agreement contains customary representations and warranties and agreements of the Company and the Investors (and of the Affiliate Investors) and customary indemnification rights and obligations of the parties. Pursuant to the terms of the Purchase Agreement, we agreed to certain restrictions on the issuance and sale of its Common Stock or Common Stock Equivalents (as defined in the Purchase Agreement) during the 30-day period following the closing of the Registered Offering. Additionally, we agreed not to enter into a variable rate transaction for a period of one year following the closing of the Registered Offering.

The Shares were offered by us pursuant to a registration statement on Form S-3 (File No. 333-265956), which was filed with the SEC on July 1, 2022 and was declared effective by the SEC on July 11, 2022.

In a concurrent private placement (the “Private Placement” and together with the Registered Offering, the “Offering”), we agreed to issue to the Investors and to the Affiliate Investors Series E warrants to purchase up to an aggregate of 2,463,058 shares of Common Stock (consisting of Series E warrants to purchase up to 2,295,570 shares of Common Stock issued to the Investors (the “Investor Warrants”) and Series E warrants to purchase up to 167,488 shares of Common Stock issued to the Affiliate Investors (the “Affiliate Warrants”)) at an exercise price of \$0.90 per share. Each Series E warrant will be immediately exercisable upon the issuance date and will expire five years from the initial exercise date. The Series E warrants and the shares of our Common Stock issuable upon the exercise of the Series E warrants are not being registered under the Securities Act of 1933, as amended (the “Securities Act”), were not offered pursuant to the Registration Statement and were offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act, and Rule 506(b) promulgated thereunder.

The Offering closed on January 7, 2025.

On October 9, 2024, we entered into the Engagement Letter (“Engagement Letter”) with Wainwright, pursuant to which Wainwright agreed to serve as the exclusive placement agent for the issuance and sale of securities pursuant to the Purchase Agreement. As compensation for such placement agent services, we agreed to pay Wainwright an aggregate cash fee equal to 7.0% of the gross proceeds received by us from sales to the institutional investors pursuant to the Purchase Agreement, plus a management fee equal to 1.0% of the gross proceeds received by us in the offering, non-accountable expenses of up to \$35,000 and up to \$50,000 for its fees and expenses of legal counsel. We also agreed to issue to Wainwright or its designees the placement agent warrants exercisable for an aggregate of 147,783 shares of Common Stock. The placement agent

### THE OFFERING

<b>Shares of Common Stock that May be Offered by the Selling Stockholders</b>	Up to 2,610,841 shares of common stock.
<b>Use of Proceeds</b>	We will not receive any proceeds from the sale of the common stock by the selling stockholders. However, if all of the warrants were exercised for cash, we would receive gross proceeds of approximately \$2.4 million. See the section entitled “Use of Proceeds” in this prospectus.
<b>Offering Price</b>	The selling stockholders may sell all or a portion of their shares through public or private transactions at prevailing market prices or at privately negotiated prices.
<b>Nasdaq Capital Market Symbol</b>	ACXP
<b>Risk Factors</b>	Investing in our common stock involves a high degree of risk. See “Risk Factors” beginning on page 5 of this prospectus, and any other risk factors described in the documents incorporated by reference herein, for a discussion of certain factors to consider carefully before deciding to invest in our common stock.

Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the selling stockholders for offer and sale, we are referring to the shares of common stock issuable upon exercise of the warrants, each as described under “The Private Placement” and “Selling Stockholders.” When we refer to the selling stockholders in this prospectus, we are referring to the selling stockholders identified in this prospectus and, as applicable, its donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from the selling stockholders as a gift, pledge, partnership distribution or other transfer.

### RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider and evaluate all of the information contained in this prospectus and in the documents we incorporate by reference into this prospectus before you decide to purchase our securities. In particular, you should carefully consider and evaluate the risks and uncertainties described under the heading “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2024. Any of the risks and uncertainties set forth below and in the Annual Report, as updated by annual, quarterly and other reports and documents that we file with the SEC and incorporate by reference into this prospectus, or any prospectus, could materially and adversely affect our business, results of operations and financial condition, which in turn could materially and adversely affect the value of any securities offered by this prospectus. As a result, you could lose all or part of your investment

### THE PRIVATE PLACEMENT

On January 6, 2025, we entered into the Purchase Agreement with certain institutional investors named therein (the “institutional investors”), and with each of 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”) pursuant to which we issued and sold, in a private placement, series E warrants exercisable for an aggregate of 2,463,058 shares of Common Stock (consisting of series E warrants to purchase up to 2,295,570 shares of Common Stock issued to the institutional investors (the “investor warrants”) and series E warrants to purchase up to 167,488 shares of Common Stock issued to the affiliate investors (the “affiliate warrants”)) at an exercise price of \$0.90 per share. Each series E warrant will be immediately exercisable upon the issuance date and will expire five years from the initial exercise date.

A holder (together with its affiliates) may not exercise any portion of the series E warrants to the extent that the holder would own more than 4.99% (or, at the holder’s option upon issuance, 9.99%) of our outstanding common stock immediately after exercise. However, upon at least 61 days’ prior notice from the holder to us, a holder with a 4.99% ownership blocker may increase the amount of ownership of outstanding common stock after exercising the holder’s series E warrants up to 9.99% of the number of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the series E warrants.

On October 9, 2024, we entered into the Engagement Letter with Wainwright, pursuant to which Wainwright agreed to serve as the exclusive placement agent for the issuance and sale of securities pursuant to the Purchase Agreement. As compensation for such placement agent services, we agreed to pay Wainwright an aggregate cash fee equal to 7.0% of the gross proceeds received by us from sales to the institutional investors pursuant to the Purchase Agreement, plus a management fee equal to 1.0% of the gross proceeds received by us in the offering, non-accountable expenses of up to \$35,000 and up to \$50,000 for its fees and expenses of legal counsel. We also agreed to issue to Wainwright or its designees the placement agent warrants exercisable for an aggregate of 147,783 shares of Common Stock. The placement agent warrants are exercisable immediately, will expire five years from the commencement of sales in the Offering, and have an exercise price of \$1.2688 per share. Further, pursuant to the Engagement Letter, Wainwright is entitled to compensation with respect to any financing of the Company occurring within twelve months of the termination of the Engagement Letter when such financing is provided by investors whom Wainwright has contacted or introduced to the Company during the term of the Engagement Letter. Further, pursuant to the Engagement Letter, Wainwright has a right of first refusal to act as sole book-running manager, sole underwriter or sole placement agent with respect to any public offering or private placement of equity, equity-linked or debt securities using an underwriter or placement agent occurring during the twelve-month period following the termination of the Engagement Letter. The Engagement Letter also includes indemnification obligations and other provisions customary for transactions of this nature.

Pursuant to the terms of the Purchase Agreement, we agreed to 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 by March 7, 2025 and to keep such registration statement effective at

all times.

The foregoing descriptions of the form of Purchase Agreement, the form of series E warrant and the form of placement agent warrant are not complete and are subject to and qualified in their entirety by reference to the form of Purchase Agreement, the form of series E warrant and the form of placement agent warrant, respectively, copies of which are attached as Exhibits 10.15, 4.8 and 4.9 hereto.

#### 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, 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 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;
- 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;
- 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.

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#### USE OF PROCEEDS

We are not selling any shares of our common stock in this offering and we will not receive any of the proceeds from the sale of shares of our common stock by the selling stockholder. The selling stockholders will receive all of the proceeds from any sales of the shares of our common stock offered hereby. However, we will incur expenses in connection with the registration of the shares of our common stock offered hereby.

We will receive the exercise price upon any exercise of the warrants, to the extent exercised on a cash basis. If all the warrants were exercised for cash, we would receive gross proceeds of approximately \$2.4 million. However, the holders of the warrants are not obligated to exercise the warrants, and we cannot predict whether or when, if ever, the holders of the warrants will choose to exercise the warrants, in whole or in part. Accordingly, any proceeds from such exercise will be used for general corporate purposes and working capital.

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#### MARKET FOR COMMON STOCK AND DIVIDEND POLICY

Our common stock is traded on the Nasdaq Capital Market under the symbol “ACXP.” The last reported sale price of our common stock on March 14, 2025 on the Nasdaq Capital Market was \$0.461 per share. As of March 17, 2025, there were 368 stockholders of record of our common stock.

We have never declared or paid any cash dividend on our common stock. We intend to retain any future earnings and do not expect to pay dividends in the foreseeable future.

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#### SELLING STOCKHOLDERS

The common stock being offered by the selling stockholders are those issuable to the selling stockholders upon exercise of the warrants. For additional information regarding the issuance of the warrants, see “The Private Placement” above. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time. Except as described below, to our knowledge, the selling stockholders have not been an officer or director of ours or of our affiliates within the past three years or has any material relationship with us or our affiliates within the past three years. Our knowledge is based on information provided by the selling stockholders in connection with the filing of this prospectus.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by the selling stockholders. The second column lists the number of shares of common stock beneficially owned by the selling stockholder, based on its ownership of the shares of common stock, options to purchase common stock, and warrants, as of January 15, 2025, assuming exercise of the warrants held by the selling stockholders on that date, without regard to any limitations on exercises. The third column lists the maximum number of shares of common stock that may be sold or otherwise disposed of by the selling stockholders pursuant to the registration statement of which this prospectus forms a part. The selling stockholders may sell or otherwise dispose of some, all or none of its shares. Pursuant to Rules 13d-3 and 13d-5 of the Exchange Act, beneficial ownership includes any shares of our common stock as to which a stockholder has sole or shared voting power or investment power, and also any shares of our common stock which the stockholder has the right to acquire within 60 days of January 15, 2025. The percentage of beneficial ownership for the selling stockholders is based on 19,533,744 shares of our common stock outstanding as of January 15, 2025 and the number of shares of our common stock issuable upon exercise or conversion of convertible securities that are currently exercisable or convertible or are exercisable or convertible within 60 days of January 15, 2025 beneficially owned by the selling stockholder. The fourth column assumes the sale of all of the shares of common stock offered by the selling stockholders pursuant to this prospectus.

Under the terms of the warrants, the selling stockholders may not exercise the warrants to the extent such exercise would cause such selling stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of common stock which would exceed 4.99% (or for certain holders, 9.99%) of our then outstanding common stock following such exercise, excluding for purposes of such determination shares of common stock issuable upon exercise of the warrants which have not been exercised. The number of shares in the second column does not reflect this limitation. The selling stockholders may sell all, some or none of its shares in this offering. See “Plan of Distribution.”

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Information about the selling stockholders may change over time. Any changed information will be set forth in an amendment to the registration statement or supplement to this prospectus, to the extent required by law. Unless otherwise noted below, the address of the selling stockholders listed on the table is c/o Acurx Pharmaceuticals, Inc., 259

Name of Selling Stockholder	Beneficial Ownership Prior to the Offering <sup>(1)</sup>		Maximum Number of Shares of Common Stock To Be Sold Pursuant to this Prospectus	Beneficial Ownership After the Offering	
	Number of Shares of Common Stock Beneficially Owned Prior to the Offering	Percentage of Outstanding Common Stock <sup>(2)</sup>		Number of Shares of Common Stock Beneficially Owned After the Offering <sup>(3)</sup>	Percentage of Outstanding Common Stock <sup>(3)</sup>
3i, LP <sup>(4)</sup>	758,398	3.8%	459,114	299,284	1.4%
Anson Investments Master Fund LP <sup>(5)</sup>	358,109	1.8%	358,109	—	—
Anson East Master Fund LP <sup>(6)</sup>	101,005	*	101,005	—	—
Hudson Bay Master Fund Ltd. <sup>(7)</sup>	489,228	2.4%	459,114	30,114	*
Orca Capital AG <sup>(8)</sup>	572,515	2.9%	459,114	113,401	*
Intracoastal Capital LLC <sup>(9)</sup>	459,114	2.3%	459,114	—	—
David P. Luci <sup>(10)</sup>	2,257,025	10.9%	49,261	2,207,764	9.5%
Robert J. DeLuccia <sup>(11)</sup>	2,130,611	10.3%	49,261	2,081,350	9.0%
Carl V. Sailer <sup>(12)</sup>	263,218	1.3%	24,631	238,587	1.1%
James Donohue <sup>(13)</sup>	98,454	*	9,852	88,602	*
Joseph C. Scodari <sup>(14)</sup>	112,339	*	24,631	87,708	*
Jack H. Dean <sup>(15)</sup>	102,398	*	9,852	92,546	*
Craig Schwabe <sup>(16)</sup>	4,988	*	4,988	—	—
Charles Worthman <sup>(17)</sup>	1,478	*	1,478	—	—
Aileen Gibbons <sup>(18)</sup>	14,039	*	14,039	—	—
Michael Vasinkevich <sup>(19)</sup>	94,766	*	94,766	—	—
Noam Rubinstein <sup>(20)</sup>	35,512	*	35,512	—	—

\* Represents less than one percent.

- (1) Assumes all warrants are exercised.
- (2) Based on a denominator equal to the sum of (i) 19,533,744 shares of common stock outstanding on January 15, 2025 and (ii) the number of shares of common stock issuable upon exercise or conversion of convertible securities that are currently exercisable or convertible or are exercisable or convertible within 60 days of January 15, 2025 beneficially owned by the applicable selling stockholder.
- (3) Assumes that (i) all of the shares of common stock to be registered by the registration statement of which this prospectus is a part are sold in this offering and (ii) the selling stockholders do not acquire additional shares of our common stock after the date of this prospectus and prior to completion of this offering. The percentage of beneficial ownership after the offering is based on 22,144,585 shares of common stock, consisting of (a) 19,533,744 shares of our common stock outstanding on January 15, 2025, and (b) the 2,610,841 shares of our common stock underlying the warrants offered under this prospectus. The number of shares listed do not take into account any limitations on exercise of the warrants.
- (4) Consists of (i) 299,284 share of common stock and (ii) 459,114 shares of common stock issuable upon the exercise of warrants subject to certain beneficial ownership limitations held by the selling stockholder. 3i Management LLC is the general partner of 3i, LP, and Maier Joshua Tarlow is the manager of 3i Management LLC. As such, Mr. Tarlow exercises sole voting and investment discretion over securities beneficially owned directly or indirectly by 3i, LP and 3i Management LLC. Mr. Tarlow disclaims beneficial ownership of the securities beneficially owned directly by 3i, LP and indirectly by 3i Management LLC. The business address of each of the aforementioned parties is 2 Wooster Street, 2nd Floor, New York, NY 10013. We have been advised that none of Mr. Tarlow, 3i Management LLC, or 3i, LP is a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer, or an affiliate or associated person of a FINRA member or independent broker-dealer.
- (5) Consists of 358,109 shares of common stock issuable upon the exercise of warrants subject to certain beneficial ownership limitations held by the selling stockholder. Anson Advisors Inc and Anson Funds Management LP, the Co-Investment Advisers of Anson Investments Master Fund LP (“Anson”), hold voting and dispositive power over the shares of Common Stock held by Anson. Tony Moore is the managing member of Anson Management GP LLC, which is the general partner of Anson Funds Management LP. Moez Kassam and Amin Nathoo are directors of Anson Advisors Inc. Mr. Moore, Mr. Kassam and Mr. Nathoo each disclaim beneficial ownership of these shares of common stock except to the extent of their pecuniary interest therein. The principal business address of Anson is Maple Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KYI-1104, Cayman Islands

- (6) Consists of 101,005 shares of common stock issuable upon the exercise of warrants subject to certain beneficial ownership limitations held by the selling stockholder. Anson Advisors Inc and Anson Funds Management LP, the Co-Investment Advisers of Anson East Master Fund LP (“Anson East”), hold voting and dispositive power over the shares of Common Stock held by Anson East. Tony Moore is the managing member of Anson Management GP LLC, which is the general partner of Anson Funds Management LP. Moez Kassam and Amin Nathoo are directors of Anson Advisors Inc. Mr. Moore, Mr. Kassam and Mr. Nathoo each disclaim beneficial ownership of these shares of common stock except to the extent of their pecuniary interest therein. The principal business address of Anson East is Maple Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KYI-1104, Cayman Islands.
- (7) Consists of (i) 30,114 share of common stock and (ii) 459,114 shares of common stock issuable upon the exercise of warrants subject to certain beneficial ownership limitations held by the selling stockholder. Hudson Bay Capital Management LP, the investment manager of Hudson Bay Master Fund Ltd., has voting and investment power over these securities. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management LP. Each of Hudson Bay Master Fund Ltd. and Sander Gerber disclaims beneficial ownership over these securities.
- (8) Consists of (i) 113,401 share of common stock and (ii) 459,114 shares of common stock issuable upon the exercise of warrants subject to certain beneficial ownership limitations held by the selling stockholder. The address of Orca Capital AG is Sperling, 85276 Pfaffenhofen, Germany.

- (9) Consists of 459,114 shares of common stock issuable upon the exercise of warrants subject to certain beneficial ownership limitations held by the selling stockholder. Mitchell P. Kopin (“Mr. Kopin”) and Daniel B. Asher (“Mr. Asher”), each of whom are managers of Intracoastal Capital LLC (“Intracoastal”), have shared voting control and investment discretion over the securities reported herein that are held by Intracoastal. As a result, each of Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities reported herein that are held by Intracoastal.
- (10) Consists of (i) 1,097,458 shares of common stock, (ii) 85,873 shares of common stock issuable upon the exercise of warrants, (iii) 1,023,611 shares of common stock issuable upon the exercise of stock options within 60 days of January 15, 2025, held by David P. Luci, our President and Chief Executive Officer, (iv) 15,083 shares of common stock held by Mr. Luci’s spouse and (v) 35,000 shares of common stock held by Mr. Luci’s child.
- (11) Consists of (i) 1,010,196 shares of common stock, (ii) 92,957 shares of common stock issuable upon the exercise of warrants, (iii) 1,023,611 shares of common stock issuable upon the exercise of stock options within 60 days of January 15, 2025, held by Robert J. DeLuccia, our Executive Chairman, and (iv) 3,847 shares of common stock held by Mr. DeLuccia’s spouse.
- (12) Consists of (i) 137,183 shares of common stock, (ii) 61,035 shares of common stock issuable upon the exercise of warrants, (iii) 60,000 shares of common stock issuable upon exercise of stock options within 60 days of January 15, 2025, held by Carl V. Sailer, a member of our board of directors and (iv) 5,000 shares of common stock held by Mr. Sailer’s spouse.
- (13) Consists of (i) 22,532 shares of common stock, (ii) 16,102 shares of common stock issuable upon the exercise of warrants and (iii) 60,000 shares of common stock issuable upon exercise of stock options within 60 days of January 15, 2025, held by James Donohue, a member of our board of directors.
- (14) Consists of (i) 27,708 shares of common stock, (ii) 24,631 shares of common stock issuable upon the exercise of warrants and (iii) 60,000 shares of common stock issuable upon exercise of stock options within 60 days of January 15, 2025, held by Joseph C. Scodari, a member of our board of directors.
- (15) Consists of (i) 21,776 shares of common stock, (ii) 14,852 shares of common stock issuable upon the exercise of warrants, (iii) 60,000 shares of common stock issuable upon exercise of stock options within 60 days of January 15, 2025, held by Jack H. Dean, a member of our board of directors, and (iv) 5,770 shares of common stock held by the Dean Family Trust.
- (16) Consists of 4,988 shares of common stock issuable upon the exercise of the placement agent warrants. Mr. Schwabe is affiliated with H.C. Wainwright & Co., with a registered address of 430 Park Avenue, New York, New York 10022, and has sole voting and dispositive power over the securities held. The selling stockholder acquired the placement agent warrants in the ordinary course of business and, at the time the placement agent warrants were acquired, the selling stockholder had no agreement or understanding, directly or indirectly, with any person to distribute such securities.
- (17) Consists of 1,478 shares of common stock issuable upon the exercise of the placement agent warrants. Mr. Worthman is affiliated with H.C. Wainwright & Co., with a registered address of 430 Park Avenue, New York, New York 10022, and has sole voting and dispositive power over the securities held. The selling stockholder acquired the placement agent warrants in the ordinary course of business and, at the time the placement agent warrants were acquired, the selling stockholder had no agreement or understanding, directly or indirectly, with any person to distribute such securities.
- (18) Consists of 14,039 shares of common stock issuable upon the exercise of the placement agent warrants. Ms. Gibbons is affiliated with H.C. Wainwright & Co., with a registered address of 430 Park Avenue, New York, New York 10022, and has sole voting and dispositive power over the securities held. The selling stockholder acquired the placement agent warrants in the ordinary course of business and, at the time the placement agent warrants were acquired, the selling stockholder had no agreement or understanding, directly or indirectly, with any person to distribute such securities.

- (19) Consists of 94,766 shares of common stock issuable upon the exercise of the placement agent warrants. Mr. Vasinkevich is affiliated with H.C. Wainwright & Co., with a registered address of 430 Park Avenue, New York, New York 10022, and has sole voting and dispositive power over the securities held. The selling stockholder acquired the placement agent warrants in the ordinary course of business and, at the time the placement agent warrants were acquired, the selling stockholder had no agreement or understanding, directly or indirectly, with any person to distribute such securities.
- (20) Consists of 35,512 shares of common stock issuable upon the exercise of the placement agent warrants. Mr. Rubinstein is affiliated with H.C. Wainwright & Co., with a registered address of 430 Park Avenue, New York, New York 10022, and has sole voting and dispositive power over the securities held. The selling stockholder acquired the placement agent warrants in the ordinary course of business and, at the time the placement agent warrants were acquired, the selling stockholder had no agreement or understanding, directly or indirectly, with any person to distribute such securities.

#### PLAN OF DISTRIBUTION

The selling stockholders of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on The Nasdaq Capital Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the selling stockholders to sell a specified number of such securities at a stipulated price per security;

- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

In connection with the sale of the securities or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The selling stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

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The selling stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The selling stockholders have informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to use commercially reasonable efforts to keep this registration statement effective at all times until the selling stockholders no longer own any Warrants or shares of Common Stock issuable upon the exercise of the Warrants.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the Common Stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the Common Stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

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## DESCRIPTION OF OUR SECURITIES TO BE REGISTERED

The securities to be registered on this registration statement on Form S-1 include up to an aggregate amount of 2,610,841 shares of our common stock consisting of (i) up to 2,463,058 shares of our common stock, par value \$0.001 per share, issuable upon exercise of series E warrants acquired by certain of the selling stockholders under the Purchase Agreement with an exercise price of \$0.90 per share and (ii) up to 147,783 shares of our common stock issuable upon exercise of placement agent warrants acquired by certain of the selling stockholders under the Engagement Letter with an exercise price of \$1.2688 per share

### General

The following is a summary of material characteristics of our capital stock as set forth in our certificate of incorporation and bylaws, and certain provisions of Delaware law. The following description does not purport to be complete and is subject to and qualified in its entirety by, and should be read in conjuncture with, our certificate of incorporation and bylaws, each of which are filed as exhibits to this Registration Statement and are incorporated herein by reference. The summaries and descriptions below do not purport to be complete statements of the Delaware General Corporation Law (“DGCL”).

### Authorized Capital Stock

Our certificate of incorporation authorizes us to issue 200,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share.

### Common Stock

*Voting.* The holders of our common stock are entitled to one vote for each share held of record on all matters on which the holders are entitled to vote (or consent to).

*Dividends.* 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.

*Liquidation Rights.* In the event of our liquidation, dissolution or winding-up, the holders of our common stock may be entitled to share, ratably, in all assets remaining available for distribution after payment or provision for payment of all debts and other liabilities and subject to the rights of each class or series of capital stock having preference over, or right to participate with, the common stock.

*Preemptive and Similar Rights.* The holders of our common stock have no preemptive or similar rights.

### Forum Selection

Our certificate of incorporation and our bylaws provide that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Notwithstanding the foregoing, the exclusive forum provision does not apply to suits brought to enforce any liability or duty created by the Exchange Act, the Securities Act or any other claim for which the federal courts have exclusive jurisdiction. Unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall, to the fullest extent permitted by applicable law, be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees.

#### **Anti-Takeover Provisions**

Our certificate of incorporation and bylaws contain provisions that may delay, defer or discourage another party from acquiring control of us. We expect that these provisions, which are summarized below, will discourage coercive takeover practices or inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors, which we believe may result in an improvement of the terms of any such acquisition in favor of our stockholders. However, they also give our board of directors the power to discourage acquisitions that some stockholders may favor.

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*Authorized but unissued shares.* The authorized but unissued shares of our common stock and our preferred stock are available for future issuance without stockholder approval, subject to the requirements of any national securities exchange on which our common stock is listed, should we so qualify for listing. These additional shares may be used for a variety of corporate finance transactions, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could make more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

*Elimination of Stockholder Action by Written Consent.* Our certificate of incorporation will eliminate the right of stockholders to act by written consent without a meeting.

*Special meetings of stockholders.* Our certificate of incorporation and bylaws provide that, except as otherwise required by law or provided by the resolution or resolutions adopted by our board of directors designating the rights, powers and preferences of any series of preferred stock, special meetings of our stockholders may be called only by (a) our board of directors pursuant to a resolution approved by a majority of the total number of our directors that we would have if there were no vacancies or (b) the chair of our board of directors, and any power of our stockholders to call a special meeting is specifically denied.

*Advance notice requirements for stockholder proposals and director nominations.* Our bylaws provide for an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of candidates for election to our board of directors. In order for any matter to be "properly brought" before a meeting, a stockholder must comply with advance notice and duration of ownership requirements and provide us with certain information. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a qualified stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying stockholder actions that are favored by the holders of a majority of our outstanding voting securities until the next stockholder meeting.

*Amendment of Certificate of Incorporation or Bylaws.* The DGCL provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation, unless a corporation's certificate of incorporation requires a greater percentage. Our certificate of incorporation provides that certain provisions of our certificate of incorporation (namely, those provisions relating to (i) directors; (ii) limitation of director liability, indemnification and advancement of expenses and renunciation of corporate opportunities; (iii) meetings of stockholders; and (iv) certain amendments to our certificate of incorporation and bylaws) may not be altered, amended or repealed in any respect (including by merger, consolidation or otherwise), nor may any provision inconsistent therewith be adopted, unless such alteration, amendment, repeal or adoption is approved by the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of all of our then-outstanding shares then entitled to vote generally in an election of directors, voting together as a single class. Our certificate of incorporation and bylaws also provide that approval of stockholders holding sixty-six and two-thirds percent (66 2/3%) of the voting power of all of our then-outstanding shares entitled to vote generally in an election of directors, voting together as a single class, is required for stockholders to make, alter, amend, or repeal any provision of our bylaws. Our board of directors retains the right to alter, amend or repeal our bylaws.

*Classified Board of Directors.* Our certificate of incorporation provides for a classified board of directors consisting of three classes of approximately equal size, each serving staggered three-year terms. Only the directors in one class will be subject to election by a plurality of the votes cast at each annual meeting of stockholders, with the directors in the other classes continuing for the remainder of their respective three-year terms. Stockholders do not have the ability to cumulate votes for the election of directors.

#### **Limitations on Liability and Indemnification of Officers and Directors**

Our certificate of incorporation and bylaws provide indemnification for our directors and officers to the fullest extent permitted by the DGCL. We have entered into Indemnification Agreements with each of our directors that may be, in some cases, broader than the specific indemnification provisions contained under the DGCL. In addition, as permitted by the DGCL, our certificate of incorporation and bylaws includes provisions that eliminate the personal liability of our directors for monetary damages resulting from breaches of certain fiduciary duties as a director. The effect of this provision is to restrict our rights and the rights of our stockholders in derivative suits to recover monetary damages against a director for breach of fiduciary duties as a director. These provisions may be held not to be enforceable for violations of the federal securities laws of the United States.

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#### **Section 203 of the Delaware General Corporation Law**

We are subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that such stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation's voting stock.

Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, the board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

- upon 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 voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or
- at or after the time the stockholder became interested, the business combination was approved by the board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

A Delaware corporation may “opt out” of these provisions with an express provision in its original certificate of incorporation or an express provision in its amended and restated certificate of incorporation or by-laws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

#### **Listing**

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

#### **Transfer Agent and Registrar**

The transfer agent and registrar of our common stock is VStock Transfer, LLC. They are located at 18 Lafayette Place, Woodmere, New York 11598. Their telephone number is (212) 828-8436.

### **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**

CohnReznick LLP, independent registered public accounting firm, has audited the financial statements of Acurx Pharmaceuticals, Inc. as of, and for the two years ended December 31, 2024 appearing in Acurx Pharmaceutical, Inc.’s Annual Report on Form 10-K for the year ended December 31, 2024. The report of CohnReznick LLP contains an explanatory paragraph about the ability of Acurx Pharmaceuticals, Inc. to continue as a going concern. The financial statements of Acurx Pharmaceuticals, Inc. are incorporated by reference in this prospectus and elsewhere in this registration statement in reliance on CohnReznick LLP’s report, given on their authority as experts in accounting and auditing.

#### **WHERE YOU CAN FIND MORE INFORMATION**

We have filed a registration statement on Form S-1 with respect to the shares of common stock offered by this prospectus with the SEC in accordance with the Securities Act and the rules and regulations enacted under its authority. This prospectus, which constitutes a part of the registration statement, does not contain all of the information included in the registration statement and its exhibits and schedules. Any statement made in this prospectus concerning the contents of any contract, agreement or other document is only a summary of the actual contract, agreement or other document. If we have filed or incorporated by reference any contract, agreement or other document as an exhibit to the registration statement, you should read the exhibit for a more complete understanding of the document or matter involved. Each statement regarding a contract, agreement or other document is qualified by reference to the actual document. For further information regarding us and the shares of common stock offered by this prospectus, we refer you to the full registration statement, including its exhibits and schedules, filed under the Securities Act.

The SEC maintains a website at <http://www.sec.gov> that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Our registration statement, of which this prospectus constitutes a part, can be downloaded from the SEC’s website.

We also file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings on the SEC’s website at <http://www.sec.gov>.

Our website address is <http://www.acurxpharma.com>. There we make available free of charge, on or through the investor relations section of our website, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with the SEC. The information contained on, or that can be accessed through, our website is not a part of this prospectus, and our reference to the address for our website is intended to be an inactive textual reference only.

### **INCORPORATION OF DOCUMENTS BY REFERENCE**

The rules of the SEC allow us to incorporate by reference into this prospectus the information we file with the SEC. This means that we are disclosing important information to you by referring to other documents. The information incorporated by reference is considered to be part of this prospectus, except for any information superseded by information contained directly in this prospectus. We incorporate by reference the documents listed below (other than any portions thereof, which under the Exchange Act, and applicable SEC rules, are not deemed “filed” under the Exchange Act):

- our Annual Report on [Form 10-K for the fiscal year ended December 31, 2024](#) filed with the SEC on March 17, 2025;
- our Current Reports on Form 8-K filed with the SEC on [January 7, 2025](#), [February 26, 2025](#) and [March 10, 2025](#) (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.

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

In addition, all documents subsequently filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, prior to the termination of the offering, shall be deemed to be incorporated by reference into this prospectus; provided, however, that all reports, exhibits and other information that we “furnish” to the SEC will not be considered incorporated by reference into this prospectus. If we have incorporated by reference any statement or information in this prospectus and we subsequently modify that

statement or information with information contained in this prospectus, the statement or information previously incorporated in this prospectus is also modified or superseded in the same manner.

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.

## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### ITEM 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses, payable by the Company in connection with the registration and sale of the Common Stock being registered. All amounts are estimates except the SEC registration fee.

	<b>Amount</b>
SEC registration fee	\$ 297.37
Accounting fees and expenses	7,000
Legal fees and expenses	25,000.00
Miscellaneous	2,702.63
Total expenses	<u>\$ 35,000</u>

#### ITEM 14. Indemnification of Directors and Officers.

The Delaware General Corporation Law and certain provisions of our certificate of incorporation and bylaws under certain circumstances provide for indemnification of our officers, directors and controlling persons against liabilities which they may incur in such capacities. A summary of the circumstances in which such indemnification is provided for is contained herein, but this description is qualified in its entirety by reference to our certificate of incorporation, bylaws and to the statutory provisions.

In general, any officer, director, employee or agent may be indemnified against expenses, fines, settlements or judgments arising in connection with a legal proceeding to which such person is a party, if that person's actions were in good faith, were believed to be in our best interest, and with respect to any criminal action or proceeding, such person had no reasonable cause to believe their actions were unlawful. Unless such person is successful upon the merits in such an action, indemnification may be awarded only after a determination by independent decision of the board of directors, by legal counsel, or by a vote of the stockholders, that the applicable standard of conduct was met by the person to be indemnified.

The circumstances under which indemnification is granted in connection with an action brought on our behalf is generally the same as those set forth above; however, with respect to such actions, indemnification is granted only with respect to expenses actually incurred in connection with the defense or settlement of the action. In such actions, unless the court determines otherwise, the person to be indemnified must have acted in good faith and in a manner believed to have been in our best interest, and have not been adjudged liable to the corporation.

Indemnification may also be granted pursuant to the terms of agreements which we are currently party to with each of our directors and executive officers, agreements which we may enter into in the future or pursuant to a vote of stockholders or directors. Delaware law and our certificate of incorporation also grant the power to us to purchase and maintain insurance which protects our officers and directors against any liabilities incurred in connection with their service in such a position, and such a policy may be obtained by us.

A stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. There is no pending litigation or proceeding involving any of our directors, officers or employees regarding which indemnification by us is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

#### ITEM 15. Recent Sales of Unregistered Securities.

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act:

##### Private Placement Issuances

On March 10, 2025, we issued (i) to an institutional investor in a private placement series F warrants to purchase 8,235,000 shares of common stock with an exercise price of \$0.40 per share and (ii) to designees of the placement agent placement agent warrants to purchase 164,700 shares of common stock with an exercise price of \$0.50 per share. The exercise of of the series F warrants and placement agent warrants is subject to stockholder approval of the issuance of shares of common stock issuable upon exercise of the

series F warrants and the placement agent warrants.

On January 7, 2025, we issued (i) to institutional investors and affiliate investors in a private placement series E warrants to purchase 2,463,058 shares of common stock with an exercise price of \$0.90 per share and (ii) to designees of the placement agent placement agent warrants to purchase 147,783 shares of common stock with an exercise price of \$1.2688 per share.

On May 18, 2023, we issued to an investor in a private placement series C warrants to purchase 1,333,333 shares of common stock and series D warrants to purchase 1,333,333 shares of common stock, each with an exercise price of \$3.26 per share.

On July 27, 2022, we issued to investors in a private placement series A warrants to purchase 1,289,980 shares of common stock and series B warrants to purchase 1,289,980 shares of common stock. An aggregate of 59,211 series A warrants and an aggregate of 59,211 series B warrants were issued to certain affiliates with an exercise price of \$3.80 per share and an aggregate of 1,230,769 series A warrants and an aggregate of 1,230,769 series B warrants were issued to an investor with an exercise price of \$3.25 per share.

On July 27, 2022, we issued to the Placement Agents placement agent warrants to purchase 63,018 shares of common stock with an exercise price of \$3.60.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. We believe the offers, sales and issuances of the above securities were exempt from registration under the Securities Act (or Regulation D or Regulation S promulgated thereunder) by virtue of Section 4(a)(2) of the Securities Act because the issuance of securities to the recipients did not involve a public offering. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

#### Service-Related Issuances

The Company granted shares of common stock to certain vendors in the ordinary course of business in exchange for consulting services. The Company granted 353,170 and 140,186 shares of common stock for the years ended December 31, 2024, and 2023, respectively.

No underwriters were used in the foregoing transactions, and no discounts or commissions were paid. All sales of securities described above were exempt from the registration requirements of the Securities Act in reliance on Section 4(a)(2) of the Securities Act, Rule 701 promulgated under the Securities Act or Regulation D promulgated under the Securities Act, relating to transactions by an issuer not involving a public offering. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act.

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#### Item 16. Exhibits

(a) The following exhibits are filed herewith or incorporated herein by reference:

#### EXHIBIT INDEX

EXHIBIT NUMBER	EXHIBIT DESCRIPTION	FILED HEREWITH	INCORPORATED BY REFERENCE HEREIN FROM FORM OR SCHEDULE	FILING DATE	SEC FILE/ REG. NUMBER
<a href="#">3.1</a>	<a href="#">Certificate of Incorporation of Acurx Pharmaceuticals, Inc.</a>		<a href="#">10-K (Exhibit 3.1)</a>	<a href="#">March 15, 2024</a>	<a href="#">001-40536</a>
<a href="#">3.2</a>	<a href="#">Bylaws of Acurx Pharmaceuticals, Inc.</a>		<a href="#">10-K (Exhibit 3.2)</a>	<a href="#">March 15, 2024</a>	<a href="#">001-40536</a>
<a href="#">4.1</a>	<a href="#">Form of Series A Warrant</a>		<a href="#">8-K (Exhibit 4.1)</a>	<a href="#">July 25, 2022</a>	<a href="#">001-40536</a>
<a href="#">4.2</a>	<a href="#">Form of Series B Warrant</a>		<a href="#">8-K (Exhibit 4.2)</a>	<a href="#">July 25, 2022</a>	<a href="#">001-40536</a>
<a href="#">4.3</a>	<a href="#">Form of Placement Agent Warrant</a>		<a href="#">8-K (Exhibit 4.4)</a>	<a href="#">July 25, 2022</a>	<a href="#">001-40536</a>
<a href="#">4.5</a>	<a href="#">Form of Series C Warrant</a>		<a href="#">8-K (Exhibit 4.1)</a>	<a href="#">May 17, 2023</a>	<a href="#">001-40536</a>
<a href="#">4.6</a>	<a href="#">Form of Series D Warrant</a>		<a href="#">8-K (Exhibit 4.2)</a>	<a href="#">May 17, 2023</a>	<a href="#">001-40536</a>
<a href="#">4.7</a>	<a href="#">Form of 2023 Pre-Funded Warrant</a>		<a href="#">8-K (Exhibit 4.3)</a>	<a href="#">May 17, 2023</a>	<a href="#">001-40536</a>
<a href="#">4.8</a>	<a href="#">Form of Series E Warrant</a>		<a href="#">8-K (Exhibit 4.1)</a>	<a href="#">January 7, 2025</a>	<a href="#">001-40536</a>
<a href="#">4.9</a>	<a href="#">Form of January 2025 Wainwright Warrant</a>		<a href="#">8-K (Exhibit 4.2)</a>	<a href="#">January 7, 2025</a>	<a href="#">001-40536</a>
<a href="#">4.10</a>	<a href="#">Form of Series F Warrant</a>		<a href="#">8-K (Exhibit 4.1)</a>	<a href="#">March 10, 2025</a>	<a href="#">001-40536</a>
<a href="#">4.11</a>	<a href="#">Form of Pre-Funded Warrant</a>		<a href="#">8-K (Exhibit 4.2)</a>	<a href="#">March 10, 2025</a>	<a href="#">001-40536</a>
<a href="#">4.12</a>	<a href="#">Form of March 2025 Wainwright Warrant</a>		<a href="#">8-K (Exhibit 4.3)</a>	<a href="#">March 10, 2025</a>	<a href="#">001-40536</a>
<a href="#">4.13</a>	<a href="#">Form of Common Stock Certificate</a>		<a href="#">S-1 (Exhibit 4.1)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">5.1</a>	<a href="#">Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.</a>		<a href="#">S-1 (Exhibit 5.1)</a>	<a href="#">January 31, 2025</a>	<a href="#">333-284627</a>
<a href="#">10.1</a>	<a href="#">Form of Indemnification Agreement</a>		<a href="#">S-1 (Exhibit 10.1)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.2</a>	<a href="#">Form of Securities Purchase Agreement</a>		<a href="#">S-1 (Exhibit 10.2)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.3</a>	<a href="#">Form of Warrant</a>		<a href="#">S-1 (Exhibit 10.3)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.4</a>	<a href="#">Form of Common Stock Purchase Warrant</a>		<a href="#">S-1 (Exhibit 10.4)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.5</a>	<a href="#">Form of Investor Rights Agreement, by and between the Registrant and certain purchasers</a>		<a href="#">S-1 (Exhibit 10.5)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.6.1+</a>	<a href="#">Acurx Pharmaceuticals, Inc. 2021 Equity Incentive Plan</a>		<a href="#">S-1 (Exhibit 10.9)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.6.2+</a>	<a href="#">Form of Stock Option Agreement under the 2021 Equity Incentive Plan</a>		<a href="#">S-8 (Exhibit 99.2)</a>	<a href="#">July 19, 2021</a>	<a href="#">333-258026</a>
<a href="#">10.6.3+</a>	<a href="#">Form of Restricted Stock Agreement under the 2021 Equity Incentive Plan.</a>		<a href="#">S-8 (Exhibit 99.3)</a>	<a href="#">July 19, 2021</a>	<a href="#">333-258026</a>
<a href="#">10.6.4+</a>	<a href="#">Form of Recapitalization Exchange Option Agreement</a>		<a href="#">S-8 (Exhibit 99.4)</a>	<a href="#">July 19, 2021</a>	<a href="#">333-258026</a>
<a href="#">10.7+</a>	<a href="#">Amended and Restated Employment Agreement, by and between Acurx Pharmaceuticals, Inc. and Robert J. DeLuccia, dated May 25, 2021</a>		<a href="#">S-1 (Exhibit 10.6)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>

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EXHIBIT NUMBER	EXHIBIT DESCRIPTION	FILED HEREWITH	INCORPORATED BY REFERENCE HEREIN FROM FORM OR SCHEDULE	FILING DATE	SEC FILE/ REG. NUMBER
<a href="#">10.8+</a>	<a href="#">Amended and Restated Employment Agreement, by and between Acurx Pharmaceuticals, Inc. and David P. Luci, dated May 25, 2021</a>		<a href="#">S-1 (Exhibit 10.7)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.9+</a>	<a href="#">Amended and Restated Employment Agreement, by and between Acurx Pharmaceuticals, Inc. and Robert Shawah, dated May 25, 2021</a>		<a href="#">S-1 (Exhibit 10.8)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.10</a>	<a href="#">Master Clinical Services Agreement, dated October 11, 2019, by and between Acurx Pharmaceuticals, Inc. and Syneos Health, LLC.</a>		<a href="#">S-1 (Exhibit 10.10)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.11#</a>	<a href="#">Asset Purchase Agreement, dated February 5, 2018, by and between Acurx Pharmaceuticals, Inc. and GLSynthesis Inc.</a>		<a href="#">S-1 (Exhibit 10.11)</a>	<a href="#">May 27, 2021</a>	<a href="#">333-256516</a>
<a href="#">10.12</a>	<a href="#">Form of Securities Purchase Agreement, dated as of May 16, 2023, by and among Acurx Pharmaceuticals, Inc. and the purchasers party thereto</a>		<a href="#">8-K (Exhibit 10.1)</a>	<a href="#">May 17, 2023</a>	<a href="#">001-40536</a>
<a href="#">10.13</a>	<a href="#">Form of Warrant Amendment Agreement, dated May 16, 2023, by and between Acurx Pharmaceuticals, Inc. and the Investor</a>		<a href="#">8-K (Exhibit 10.2)</a>	<a href="#">May 17, 2023</a>	<a href="#">001-40536</a>
<a href="#">10.14</a>	<a href="#">Sales Agreement, dated as of November 15, 2023, between Acurx Pharmaceuticals, Inc. and A.G.P/Alliance Global Partners.</a>		<a href="#">8-K (Exhibit 1.1)</a>	<a href="#">November 15, 2023</a>	<a href="#">001-40536</a>
<a href="#">10.15</a>	<a href="#">Form of Securities Purchase Agreement, dated as of January 6, 2025, by and among Acurx Pharmaceuticals, Inc. and the purchasers party thereto.</a>		<a href="#">8-K (Exhibit 10.1)</a>	<a href="#">January 7, 2025</a>	<a href="#">001-40536</a>
<a href="#">10.16</a>	<a href="#">Form of Securities Purchase Agreement, dated as of March 6, 2025, by and between Acurx Pharmaceuticals, Inc. and the purchaser party thereto.</a>		<a href="#">8-K (Exhibit 10.1)</a>	<a href="#">March 10, 2025</a>	<a href="#">001-40536</a>

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EXHIBIT NUMBER	EXHIBIT DESCRIPTION	FILED HEREWITH	INCORPORATED BY REFERENCE HEREIN FROM FORM OR SCHEDULE	FILING DATE	SEC FILE/ REG. NUMBER
<a href="#">21.1</a>	<a href="#">Subsidiaries</a>		<a href="#">10-K (Exhibit 21.1)</a>	<a href="#">March 17, 2025</a>	<a href="#">001-40536</a>
<a href="#">23.1</a>	<a href="#">Consent of CohnReznick LLP, independent registered public accounting firm</a>	<a href="#">X</a>			
<a href="#">23.2</a>	<a href="#">Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1)</a>		<a href="#">S-1 (Exhibit 23.2)</a>	<a href="#">January 31, 2025</a>	<a href="#">333-284627</a>
<a href="#">24.1</a>	<a href="#">Power of attorney (included on the signature page)</a>		<a href="#">S-1 (Exhibit 24.1)</a>	<a href="#">January 31, 2025</a>	<a href="#">333-284627</a>
<a href="#">107</a>	<a href="#">Filing Fee Table</a>		<a href="#">S-1 (Exhibit 107)</a>	<a href="#">January 31, 2025</a>	<a href="#">333-284627</a>

# Certain confidential portions of this Exhibit were omitted by means of marking such portions with brackets (“[\*\*\*]”) because the identified confidential portions (i) are not material and (ii) would be competitively harmful if publicly disclosed.

+ Denotes management compensation plan or contract.

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## Item 17. Undertakings

We hereby undertake:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933 (the “Securities Act”);

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the “Calculation of Registration Fee” table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

*provided, however,* that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser,

(i) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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(6) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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#### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this post-effective amendment to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on March 17, 2025.

#### ACURX PHARMACEUTICALS, INC.

By: /s/ David P. Luci  
David P. Luci  
President and Chief Executive Officer

#### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
<u>/s/ David P. Luci</u> David P. Luci	President, Chief Executive Officer and Director (Principal Executive Officer)	March 17, 2025
<u>/s/ Robert G. Shawah</u> Robert G. Shawah	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 17, 2025
<u>*</u> Robert J. DeLuccia	Executive Chairman	March 17, 2025
<u>*</u> Carl V. Sailer	Director	March 17, 2025
<u>*</u> Joseph C. Scodari	Director	March 17, 2025
<u>*</u> Thomas Harrison	Director	March 17, 2025
<u>*</u> Jack H. Dean	Director	March 17, 2025
<u>*</u> James Donohue	Director	March 17, 2025

\*By: /s/ David P. Luci  
David P. Luci  
Attorney-In-Fact

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this post-effective amendment No. 1 to the registration statement on Form S-1 (File No. 333-284627) and related Prospectus, of our report dated March 17, 2025, with respect to the financial statements of Acurx Pharmaceuticals, Inc. as of December 31, 2024 and 2023, and for the years then ended. Our audit report includes an explanatory paragraph relating to the Acurx Pharmaceuticals, Inc.'s ability to continue as a going concern.

We also consent to the reference to our firm under the caption "Experts."

/s/ CohnReznick LLP

Parsippany, New Jersey  
March 17, 2025

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