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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 11, 2024

Acrivon Therapeutics, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware	**001-41551**	**82-5125532**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**
480 Arsenal Way Suite 100 Watertown, Massachusetts		**02472**
(Address of Principal Executive Offices)		**(Zip Code)**

Registrant's Telephone Number, Including Area Code: (617) 207-8979

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	ACRV	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure

On October 11, 2024, Acrivon Therapeutics, Inc. (the "Company") issued a press release titled "Acrivon Therapeutics Announces Initial Patient Dosing in Phase 1 Trial of ACR-2316, a Novel WEE1/PKMYT1 Inhibitor Designed Using AP3 for Superior Single Agent Activity." A copy of the press release is attached hereto as Exhibit 99.1 and incorporated by reference into this Item 7.01 of this Current Report on Form 8-K.

The information set forth under Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.1, is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section and shall not be incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 8.01 Other Events

On October 11, 2024, the Company announced that the first patient has been dosed in its Phase 1 clinical trial evaluating ACR-2316, the Company's internally discovered, selective WEE1/PKMYT1 inhibitor, for the treatment of patients with selected solid tumors identified by AP3. The Company expects to report initial clinical data from the monotherapy Phase 1 dose optimization trial for ACR-2316 in the second half of 2025.

Item 9.01 Financial Statements and Exhibits.

Exhibit Number	Description
99.1	Press Release dated October 11, 2024
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Acrivon Therapeutics, Inc.

Date: October 11, 2024

By: /s/ Peter Blume-Jensen

Name: Peter Blume-Jensen, M.D., Ph.D.
Title: Chief Executive Officer and President

Exhibit 99.1

Acrivon Therapeutics Announces Initial Patient Dosing in Phase 1 Trial of ACR-2316, a Novel WEE1/PKMYT1 Inhibitor Designed Using AP3 for Superior Single-Agent Activity

- *First patient dosed two quarters ahead of original timelines in Acrivon Phase 1 study to assess safety and tolerability of ACR-2316*

- *ACR-2316 was internally discovered and advanced in 15 months from initial lead to Phase 1 trial initiation uniquely enabled by AP3*

- *ACR-2316 was rationally designed by AP3 to deliver complete tumor regression and pro-apoptotic tumor cell death through potent activation of CDK1, CDK2, and PLK1*

- *Initial clinical data from the monotherapy Phase 1 dose optimization trial expected in 2H 2025*

WATERTOWN, Massachusetts, October 11, 2024 – Acrivon Therapeutics, Inc. (“Acrivon” or “Acrivon Therapeutics”) (Nasdaq: ACRV), a clinical stage precision medicine company utilizing its Acrivon Predictive Precision Proteomics (AP3) platform for the discovery, design, and development of drug candidates through a mechanistic match to patients whose disease is predicted sensitive to the specific treatment, today announced that the first patient has been dosed in its Phase 1 clinical trial evaluating ACR-2316, the company’s internally discovered, potent, selective WEE1/PKMYT1 inhibitor, designed by AP3 to overcome the limitations of single-target WEE1 and PKMYT1 inhibitors. ACR-2316 is initially being developed in selected solid tumors identified by AP3.

"The rapid advancement of ACR-2316 into the clinic was enabled by the powerful capabilities of our AP3 Interactome which leverages machine learning to integrate all in-house AP3 phosphoproteomic drug profiling data yielding actionable insights with direct application for streamlined drug discovery,” said Peter Blume-Jensen, M.D., Ph.D., chief executive officer, president, and founder of Acrivon. “Dosing of the first patient is an exciting first milestone for this novel, potent agent which we believe has the potential for broad impact across prevalent cancer types with high unmet need. This progress serves as a testament to the unwavering commitment of the outstanding Acrivon team. We look forward to progressing this trial and expect to report initial clinical data in the second half of 2025."

The Phase 1 monotherapy clinical trial for ACR-2316 is designed to assess the safety and tolerability of ACR-2316. Additional objectives include the determination of the maximal

tolerated dose and recommended Phase 2 monotherapy dose, characterization of the pharmacokinetic profile, and preliminary evaluation of anti-tumor activity. Dose optimization will be guided by drug target engagement in alignment with the Food and Drug Administration's Project Optimus. AP3-based indication finding and OncoSignature development is ongoing.

About Acrivon Therapeutics
Acrivon is a clinical stage biopharmaceutical company developing precision oncology medicines that it matches to patients whose tumors are predicted to be sensitive to each specific medicine by utilizing Acrivon's proprietary proteomics-based patient responder identification platform, Acrivon Predictive Precision Proteomics, or AP3. The AP3 platform is engineered to measure compound-specific effects on the entire tumor cell protein signaling network and drug-induced resistance mechanisms in an unbiased manner. These distinctive capabilities enable AP3's direct application for drug design optimization for monotherapy activity, the identification of rational drug combinations, and the creation of drug-specific proprietary OncoSignature companion diagnostics that are used to identify the patients most likely to benefit from Acrivon's drug candidates. Acrivon is currently advancing its lead candidate, ACR-368 (also known as prexasertib), a selective small molecule inhibitor targeting CHK1 and CHK2 in a potentially registrational Phase 2 trial across multiple tumor types. The company has received Fast Track designation from the Food and Drug Administration, or FDA, for the investigation of ACR-368 as monotherapy based on OncoSignature-predicted sensitivity in patients with platinum-resistant ovarian or endometrial cancer. Acrivon's ACR-368 OncoSignature test, which has not yet obtained regulatory approval, has been extensively evaluated in preclinical studies, including in two separate, blinded, prospectively-designed studies on pretreatment tumor biopsies collected from past third-party Phase 2 trials in patients with ovarian cancer treated with ACR-368. The FDA has granted Breakthrough Device designation for the ACR-368 OncoSignature assay for the identification of ovarian cancer patients who may benefit from ACR-368 treatment. The company reported positive clinical data for ovarian and endometrial cancers in April 2024, and in September 2024 it reported additional positive clinical data for endometrial cancer, including a confirmed overall response rate of 62.5% (95% C.I. 30.4% - 86.5%) and further validation of its prospective OncoSignature selection of patients predicted sensitive to ACR-368 by showing segregation of responders in OncoSignature-positive versus OncoSignature-negative patients ($p = 0.009$). The median duration of treatment was not yet reached, but the duration on study was 6 months at the time of the data cut.

In addition to ACR-368, Acrivon is also leveraging its proprietary AP3 precision medicine platform for developing its co-crystallography-driven, internally-discovered pipeline programs. These include ACR-2316, the company's second clinical stage asset, a potent, selective WEE1/PKMYT1 inhibitor designed for superior single-agent activity as demonstrated in preclinical studies against benchmark inhibitors. The company is also progressing internally- developed preclinical programs, including a cell cycle program with an undisclosed target.

Acrivon leverages its AP3 Interactome, a proprietary, computational analytics platform leveraging machine learning for integrated comprehensive analyses across all large, in-house AP3 phosphoproteomic drug profiling data sets to advance its in-house research programs.

Forward-Looking Statements
This press release includes certain disclosures that contain "forward-looking statements" within

the meaning of the Private Securities Litigation Reform Act of 1995 about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this press release, including statements regarding our future results of operations or financial condition, preclinical and clinical results, business strategy and plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” or “would” or the negative of these words or other similar terms or expressions. Forward-looking statements are based on Acrivon’s current expectations and are subject to inherent uncertainties, risks and assumptions that are difficult to predict. Factors that could cause actual results to differ include, but are not limited to, risks and uncertainties that are described more fully in the section titled “Risk Factors” in our reports filed with the Securities and Exchange Commission. Forward-looking statements contained in this press release are made as of this date, and Acrivon undertakes no duty to update such information except as required under applicable law.

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