Acrivon Therapeutics Provides Program Updates and Fourth Quarter and Full Year 2024 Financial Results

March 27, 2025

Generative Phosphoproteomics AP3 platform designed to enable streamlined, rational drug discovery, with proprietary, proteome-wide SAR delivering desirable pathway effects

R&D event highlighted positive ACR-368 endometrial cancer data in OncoSignature-positive (BM+) patients with heavily pretreated aggressive tumors, and who had all progressed on prior anti-PD-1 and chemotherapy, with 35% confirmed overall response rate (cORR), which is >2-fold higher than last prior line of therapy (15%)

In the BM+ patients who had relapsed after prior anti-PD-1 and chemotherapy, the cORR was 50% with the median duration of response (mDOR) not yet reached (>10 months), while in BM+ patients who were refractory to their last prior line of therapy, the cORR was 33% and mDOR was ~3.4 months

Endometrial cancer prioritized given limited treatment options and compelling commercial opportunity; represents first potential regulatory approval opportunity for ACR-368

Phase 1 trial of ACR-2316 ahead of schedule with enrollment in first three dose-escalation cohorts completed; initial clinical activity with tumor shrinkage already observed at dose level three

Cash runway extended into 2027

WATERTOWN, Mass., March 27, 2025 (GLOBE NEWSWIRE) -- 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 reported financial results for the fourth quarter and full year ended December 31, 2024 and reviewed recent business highlights.

“We continue executing our highly differentiated Generative Phosphoproteomics AP3-enabled strategy, delivering rapid progress towards key milestones across all programs, including our clinical assets, ACR-368 and ACR-2316,” said Peter Blume-Jensen, M.D., Ph.D., chief executive officer, president, and founder of Acrivon. “We previously identified endometrial cancer as a sensitive tumor type with our AP3 platform prior to clinical entry. At our recent R&D event, we shared positive data for ACR-368 in patients with stage III/IV endometrial cancer who had all progressed after prior anti-PD-1 and chemotherapy. Despite patients presenting with large, heavily pretreated tumors (including 65% treated with prior pembrolizumab and lenvatinib) with aggressive histopathologies (75% serous or carcinosarcomas), pMMR, and p53 mutations, we observed strong anti-tumor activity, both among refractory and relapsed patients. Interestingly, amongst the patients that had relapsed after their last prior line, we observed 50% cORR and mDOR (not yet reached) of greater than 10 months, and 33% cORR in refractory patients who did not respond at all to their last prior line of therapy. In our ACR-2316 Phase 1 trial, we have completed enrollment in the first three dose-escalation cohorts, and have observed approximate dose proportionality, target engagement, and initial clinical activity with significant tumor shrinkage already at dose level three. Finally, we continue to expand the actionable capabilities of our Generative Phosphoproteomics AP3 platform to enable us to optimize therapeutic compounds for desired pathway effects, which drives our streamlined drug discovery, design and development.”

Program Updates Presented at Corporate R&D Event on March 25, 2025

- Reviewed continued expansion of the differentiated capabilities of the Generative Phosphoproteomics AP3 platform, highlighting the growing suite of powerful, internally-developed tools, including the AP3 Interactome, the AP3 Kinase Substrate Relationship Predictor, the AP3 Data Portal and the AP3 Chatbot. Together, these proprietary tools have enabled the company to go beyond the limitations of traditional drug discovery to rapidly design and advance innovative agents into clinical development.
- Presented data (from February 25, 2025) from the ongoing Phase 2b registrational-intent trial of ACR-368 that included 20 BM+ endometrial cancer patients treated with ACR-368 monotherapy and 38 BM- patients treated with ACR-368 plus ultra-low dose gemcitabine (LDG) that were efficacy-evaluable by RECIST (2 BM- had treatment discontinued without scan)
    - All BM+ patients had progressed after prior platinum-based chemotherapy and prior anti-PD-1, and the median and mean prior lines of therapy for these patients were 2 and 2.6, respectively. A majority of these BM+ patients were refractory to the last prior line of therapy, with aggressive, generally heavily pre-treated tumors: 12 had refractory disease (best overall response of PD in last prior line of therapy), 6 had relapsed disease, and 2 were unknown.
    - Among the 20 BM+ patients, 15 were either serous or carcinosarcomas, 13 were pMMR (2 deficient DNA mismatch repair, 5 not tested), and 11 had p53 mutations (3 wild-type; 6 unknown)
    - The ACR-368 OncoSignature assay accurately identified patients whose tumors are sensitive to ACR-368, with 80% of BM+ patients demonstrating tumor shrinkage. Among all 20 BM+ patients, the cORR was 35%, more than double than in the prior line of therapy, and the disease control rate (DCR) was 80%.

- In patients that had relapsed after the prior line of therapy (N=6), the cORR was 50%, mDOR was not yet reached (>10 months), and DCR was 100%. In the 12 patients with tumors refractory to last prior line of therapy (ORR = 0%), significant clinical activity was observed with a cORR of 33% and DCR of 75%.
- In BM- patients treated with the ACR-368 + LDG combination, cORR was ~13%, which is comparable to the best overall response rate in the last prior line of therapy (median = 3), which was 17%. The totality of the preclinical and observed clinical data support significant LDG sensitization to ACR-368 in BM- patients. The company expects that a similar sensitization would occur in BM+ patients, which could be explored in a future all-comer study of ACR-368 + LDG.
- Several case studies were presented with imaging showing clinically significant, powerful tumor shrinkage in endometrial cancer patients treated with ACR-368
- Given encouraging, maturing data in endometrial cancer, combined with limited treatment options for second-line therapy (standard of care ORR of 10-12% and mPFS of ~3 months, based on estimates from key opinion leaders and derived from control arms of past Phase 2 trials), and potential market opportunity, the company is prioritizing endometrial cancer, reallocating all clinical resources to ACR-368 in endometrial cancer and ACR-2316
    - Due to increased competition and a smaller market opportunity, the company set a high internal clinical bar for ovarian cancer, which preliminary data suggests is unlikely to be met
    - Bladder cancer is also being deprioritized due to lower than preclinically predicted BM+ rate, leading to enrollment challenges

- Continued dosing of patients with a certain advanced solid tumors in the ongoing Phase 1 monotherapy clinical trial of ACR-2316 (initiated 2 quarters ahead of original timelines). ACR-2316 was uniquely designed by AP3 to overcome the limitations of current WEE1 and PKMYT1 inhibitors, for superior therapeutic index, and for potent single-agent activity.
    - Dose levels 1 and 2 were cleared without safety concerns or dose-limiting toxicities (DLTs) by the safety review committee; dose level 3 is fully enrolled and the safety observation period is anticipated to be completed by April 1
    - Encouraging early observations include: evidence of approximate dose proportionality, based on pharmacokinetic analyses of the first two DLs; drug target engagement, identified using the company's mass spectrometry-based AP3 profiling capabilities; and initial clinical activity in a DL3 patient, with significant decrease in size of metastatic lesions throughout the chest, abdomen and pelvis. This patient (who had received 3 prior lines of therapy including chemotherapy and anti-PD-1) remains on therapy.
    - Using AP3-based Indication Finding and AP3-based analyses of in-house and publicly available data, the company is enrolling selected, high unmet need solid tumor types predicted sensitive to ACR-2316 in the clinical trial

Anticipated Upcoming Milestones

- Provide update on registrational intent trial and confirmatory trial design for ACR-368
- Report initial clinical data from the Phase 1 clinical study of ACR-2316 in the second half of 2025
- Advance a new potential first-in-class cell cycle drug discovery program for an undisclosed target towards development candidate nomination in 2025

Fourth Quarter and Full Year 2024 Financial Results

Net loss for the quarter and full year ended December 31, 2024 was $22.8 million and $80.6 million, respectively. This compares to a net loss of $19.3 million and $60.4 million, respectively for the same periods in 2023.

Research and development expenses were $18.6 million for the quarter ended December 31, 2024, and $64.0 million for the full year 2024, compared to $15.5 million and $46.0 million, respectively, for the same periods in 2023. The difference was primarily due to the continued development of ACR-368 - which included the progression of the ongoing clinical trial and the achievement of milestones for the companion diagnostic, the initiation of the ACR-2316 clinical trial in the third quarter of 2024, and increased personnel to support development activities.

General and administrative expenses were $6.3 million for the quarter ended December 31, 2024, and $25.2 million for the full year 2024, compared to $5.6 million and $21.1 million, respectively, for the same periods in 2023. The difference was primarily due to increased personnel costs, inclusive of non-cash stock compensation expense.

As of December 31, 2024, the company had cash, cash equivalents and investments of $184.6 million, which is expected to fund operating expenses and capital expenditure requirements into 2027.

About Acrivon Therapeutics

Acrivon is a clinical stage biopharmaceutical company discovering and developing precision oncology medicines for patients whose tumors are predicted to be sensitive to each specific medicine by utilizing its proprietary Generative Phosphoproteomics 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 yielding terabytes of high resolution proprietary quantitative data for pathway-based drug design, indication finding, and response prediction. These distinctive capabilities enable AP3's direct application for streamlined rational drug discovery 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, focusing on endometrial cancer. 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 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 designations for the ACR-368 OncoSignature assay for the identification of patients with endometrial cancer who may benefit from ACR-368 treatment.

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 novel, potent, selective WEE1/PKMYT1 inhibitor designed for superior single-agent activity through strong activation of not only CDK1 and CDK2, but also of PLK1 to drive pro-apoptotic cell death, as demonstrated in preclinical studies against benchmark inhibitors. In addition, the company has a preclinical cell cycle program with an undisclosed target.

Acrivon has developed its AP3 Interactome, a proprietary, computational analytics platform driven by Generative Phosphoproteomics 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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Acrivon Therapeutics, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(in thousands, except share and per share data)

	Three Months Ended December 31,		Year Ended December 31,	
	2024	2023	2024	2023
Operating expenses:				
Research and development	$ 18,630	$ 15,478	$ 63,992	$ 46,024
General and administrative	6,324	5,575	25,207	21,079
Total operating expenses	24,954	21,053	89,199	67,103
Loss from operations	(24,954)	(21,053)	(89,199)	(67,103)
Other income (expense), net:				
Interest income	2,363	1,692	9,201	7,037
Other income (expense), net	(240)	109	(558)	(322)
Total other income, net	2,123	1,801	8,643	6,715
Net loss	$ (22,831)	$ (19,252)	$ (80,556)	$ (60,388)
Net loss per share - basic and diluted	$ (0.60)	$ (0.86)	$ (2.38)	$ (2.74)
Weighted-average common stock outstanding - basic and diluted	38,242,412	22,335,407	33,791,817	22,078,190
Comprehensive loss:				
Net loss	$ (22,831)	$ (19,252)	$ (80,556)	$ (60,388)
Other comprehensive income (loss):				
Unrealized gain (loss) on available-for-sale investments, net of tax	(335)	219	530	12
Comprehensive loss	$ (23,166)	$ (19,033)	$ (80,026)	$ (60,376)

Acrivon Therapeutics, Inc.
Condensed Consolidated Balance Sheets

(in thousands)

	December 31,	
	2024	2023
Assets		
Cash and cash equivalents	$ 39,818	$ 36,015
Investments	144,751	91,443
Other assets	12,019	10,807
Total assets	$ 196,588	$ 138,265
Liabilities and Stockholders' Equity		
Liabilities	19,802	17,070
Stockholders' Equity	176,786	121,195
Total Liabilities and Stockholders' Equity	$ 196,588	$ 138,265