ACR-2316, a novel, selective dual WEE1 and PKMYT1 inhibitor development candidate, designed using AP3 to achieve superior single agent activity, demonstrates potent preclinical activity across studies

AP3 identified mechanism of resistance to ACR-368, a clinical-stage CHK1/2 inhibitor, as well as a rational combination treatment to overcome resistance through sensitization to ACR-368 via ultra-low dose gemcitabine

WATERTOWN, Mass., March 05, 2024 (GLOBE NEWSWIRE) -- Acrivon Therapeutics, Inc. (“Acrivon” or “Acrivon Therapeutics”) (Nasdaq: ACRV), 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 its proprietary proteomics-based patient responder identification platform, Acrivon Predictive Precision Proteomics (AP3), today announced the company will be presenting data at the American Association for Cancer Research (AACR) Annual Meeting taking place April 5 – 10, 2024 in San Diego, CA.

“The data we will be presenting reinforce the broad applicability of our highly differentiated, actionable AP3 platform technology,” said Peter Blume-Jensen, M.D., Ph.D., chief executive officer, president, and founder of Acrivon Therapeutics. “ACR-2316 is our first fully internally-discovered development candidate which was rapidly generated through co-crystallography-based drug design and uniquely leverages AP3. Our platform enables us to generate selective, potent single-agent active molecules, such as ACR-2316, that we believe can address some of the key limitations of current WEE1 and PKMYT1 inhibitors. Additionally, with AP3, we believe we can prevent or reduce drug resistance by uncovering and overcoming underlying resistance mechanisms, as demonstrated with our work on our lead clinical asset ACR-368. We look forward to presenting these two datasets at AACR next month.”

Poster Details:

Title: ACR-2316: A potentially first-in-class, potent, selective WEE1/PKMYT1 inhibitor rationally designed for superior single agent activity through synergistic disruption of cell cycle checkpoints
Session Category: Experimental and Molecular Therapeutics
Session Title: Kinase and Phosphatase Inhibitors 2
Session Date and Time: Monday, April 8, 2024; 9:00 a.m. - 12:30 p.m. PT
Location: Poster Section 25
Poster Board Number: 26
Abstract Number: 1977

Title: Acrivon predictive precision proteomics (AP3) uncovers mechanism of resistance to ACR-368, a clinical-stage CHK1/2 inhibitor, and identifies rational combination treatment
Session Category: Experimental and Molecular Therapeutics
Session Title: Reversal of Drug Resistance 1
Session Date and Time: Tuesday, April 9, 2024; 9:00 a.m. - 12:30 p.m. PT
Location: Poster Section 30
Poster Board Number: 15
Abstract Number: 4749

The full abstracts are available in the AACR Online Itinerary Planner, which can be accessed at: https://www.abstractsonline.com/pp8/#!/20272.

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, 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. In addition to ACR-368, Acrivon is also leveraging its proprietary AP3 precision medicine platform for developing its co-crystallography-driven, internally-discovered preclinical stage pipeline programs. These include ACR-2316, a potent, selective WEE1/PKMYT1 inhibitor with single-agent activity, and a cell cycle program with an undisclosed target.

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, 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.

Investor and Media Contacts:
Adam D. Levy, Ph.D., M.B.A.
aley@acrivon.com
Alexandra Santos
asantos@wheelhouselsa.com