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October 17, 2022

Daniel Crawford
Jason Drory
Li Xiao
Lynn Dicker
Office of Life Sciences
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Acrivon Therapeutics, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted September 22, 2022
CIK No. 0001781174

Ladies and Gentlemen:

On behalf of Acrivon Therapeutics, Inc. (the "***Company***") we are providing this letter in response to comments (the "***Comments***") received from the staff of the U.S. Securities and Exchange Commission's Division of Corporate Finance (the "***Staff***") by letter dated October 5, 2022 with respect to the Company's Amendment No. 1 to the Draft Registration Statement on Form S-1 (the "***Draft Registration Statement***"), as confidentially submitted to the Staff on September 22, 2022. The Company is concurrently publicly filing a revised Registration Statement on Form S-1 (the "***Registration Statement***"), which includes changes that reflect the responses to the Comments.

Set forth below are the Company's responses to the Comments. The numbering of the paragraphs below corresponds to the numbering of the Comments, which for your convenience we have incorporated into this response letter in italics. Page references in the text of the Company's responses correspond to the page numbers of the Registration Statement. Capitalized terms used in this letter but not otherwise defined in this letter have the meanings assigned to them in the Registration Statement.

Amendment No. 1 to Draft Registration Statement on Form S-1 submitted September 22, 2022

Prospectus Summary
Overview, page 1

1. *We note your response to comment 1 and reissue. We disagree with your conclusion that it is appropriate to state that your OncoSignature test has achieved "preclinical validation" or "has been validated in preclinical studies." We note the U.S. Food and Drug Administration ("FDA"), draft guidance "Principles for Codevelopment of an In Vitro Companion Diagnostic Device with a Therapeutic Product" from July 16, 2016 you reference in your response, defines "analytical validation" as the demonstration that the in vitro companion diagnostic can accurately and reliably detect or measure the analyte it is intended to detect or measure. If accurate, you can state that your OncoSignature test has completed the clinical trial assay "analytical validation" prior to entering the phase 2 clinical trials. However, your disclosure should also clarify that OncoSignature companion diagnostic test has not been approved or otherwise advise.*

Response: In response to the Staff's comment, the Company has revised its disclosure on pages 1, 2, 44, 84, 104, 105, 107, 110, 111, 116, 119, 126, and 131 of the Registration Statement.

Our Lead Clinical Candidate ACR-368, page 3

2. *We note your response to comment 5 and revised disclosure on page 4. Please revise further to provide balancing disclosure that there can be no assurance that the FDA will permit you to utilize and expedited approval process or that your intended approach will be sufficient for regulatory approval.*

   Response: In response to the Staff's comment, the Company has revised its disclosure on pages 4 and 107 of the Registration Statement.

Our Pipeline, page 3

3. *We note your response to comment 6 and reissue in part. Please revise your pipeline tables here and on page 106 to change the "registrational" column to "Phase 3" because you may be required to conduct a Phase 3 clinical trial prior to registration for all of your product candidates currently included in your pipeline table. We do not object to you disclosing in a footnote that you believe your Phase 2 trial for ACR-368 could potentially be registrational under an accelerated approval pathway if accurate.*

   Response: In response to the Staff's comment, the Company has revised the pipeline tables on pages 3 and 106 of the Registration Statement.

4. *We note your response to comment 9 and disagree with your reasons for continuing to include ACR-368 multiple times for each indication. You may add narrative disclosure either before or after your pipeline table to discuss the different trials you plan to conduct based on whether or not a potential patient is OncoSignature-positive or negative.*

   Response: In response to the Staff's comment, the Company has revised the pipeline tables on pages 3 and 106 of the Registration Statement.

Clinical development of ACR-368 for patients with ovarian and other solid cancers of high unmet treatment need, page 118

5. *We note your disclosure elsewhere that "[yo]ur OncoSignature test is being developed with Akoya Biosciences, Inc., or Akoya, pursuant to a companion diagnostic agreement." We also note your disclosure here that you have begun enrolling patients in your Phase 2 clinical trial. Please update your disclosure to clarify if the OncoSignature tests to be used in the study will be procured and manufactured by Akoya or otherwise advise.*

   Response: In response to the Staff's comment, the Company has revised its disclosure on pages 4, 107, and 118 of the Registration Statement.

Summary of adverse events from published reports on clinical trials with ACR-368 monotherapy dosed at RP2D, page 125

6. *We note your response to comment 17 and reissue in part. Please update your narrative disclosure here and your risk factor disclosure on page 24 to clarify that adverse events greater than or equal to Grade 3 are considered "serious adverse events" or otherwise advise.*

Response: In response to the Staff's comment, the Company has revised its disclosure on pages 24 and 126 of the Registration Statement.

Patent License Agreement, page 141

7. *Please update your disclosure to clarify which product(s) or product candidates(s) are covered by the patent license agreement.*

Response: In response to the Staff's comment, the Company has revised its disclosure on pages 142 of the Registration Statement.

General

8. *We note your response to comment 25 and reissue in part. We note there is still illegible text in Figure 20 on page 131. To the extent that the illegible text is not necessary to understand the graphic, consider removing the text. Otherwise, revise as appropriate so the text is legible. In addition, please include a legend or otherwise provide additional narrative disclosure explaining what this figure represents.*

Response: In response to the Staff's comment, the Company has revised its disclosure on page 132 of the Registration Statement.

* * *

Please contact me at (617) 937-2335, Divakar Gupta at (212) 479-6474 or Mark Ballantyne at (703) 456-8084 with any questions or further comments regarding our response to the Staff's comments.

Sincerely,

/s/ Ryan Sansom

Ryan Sansom

cc: Peter Blume-Jensen, Chief Executive Officer, Acrivon Therapeutics, Inc.
Rasmus Holm-Jorgensen, Chief Financial Officer, Acrivon Therapeutics, Inc.
Eric Devroe, Chief Operating Officer, Acrivon Therapeutics, Inc.
Kristina Masson, Executive Vice President, Business Operations, Acrivon Therapeutics, Inc.
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