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

DIVISION OF
CORPORATION FINANCE

September 11, 2022

Peter Blume-Jensen, M.D., Ph.D.
Chief Executive Officer
Acrivon Therapeutics, Inc.
480 Arsenal Way, Suite 100
Watertown, MA 02472

Re: Acrivon Therapeutics, Inc.
Draft Registration Statement on Form S-1
Submitted August 12, 2022
CIK No. 0001781174

Dear Dr. Blume-Jensen:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement on Form S-1 submitted August 12, 2022

Prospectus Summary
Overview, page 1

1. Please remove the statements concluding your ACR-368 OncoSignature test was validated here and on pages 84, 104, and 107 because it creates an improper inference that your clinical trials will be successful.

2. We note your disclosure that ACR-368 is a "potent" CHK1 and CHK2 inhibitor here and elsewhere throughout your prospectus. Please revise these and similar statements throughout your prospectus to eliminate conclusions or predictions that ACR-368 is safe and effective, as determinations of safety and efficacy are solely within the authority of

the FDA. You may provide an objective summary of the data that you used to draw such conclusions.

Our AP3 Platform, page 2

3. We note your disclosure here that you are developing OncoSignature test as a companion diagnostic. Please update your disclosure here and on page 105 in your business section to disclose that the companion diagnostic is being developed in partnership with Akoya Biosciences, Inc., consistent with your risk factor disclosure on page 22 where you state you "do not have experience or capabilities in developing or commercializing diagnostics and plan to rely in large part on our collaboration partner Akoya to perform these functions."

Our Lead Clinical Candidate ACR-368, page 3

4. We note your disclosure here and elsewhere that ACR-368 is a "potent inhibitor of CHK1/2 which are regulators of the cell cycle and of DDR and have been validated as attractive drug targets in multiple preclinical models." We further note your disclosure that "none have been approved by the FDA." Please revise your disclosure here and similar statements throughout your prospectus to eliminate conclusions or predictions that ACR-368 is "validated" or safe and effective, as determinations of safety and efficacy are solely within the authority of the FDA.

5. We note your disclosure that you believe your Phase 2 clinical trial for ACR-368, if successful, "has the potential to be registrational for ACR-368 in each of the three tumor types." Please disclose whether you have received any indication from the FDA that your Phase 2 clinical trial with be treated as registrational clinical trial such that a Phase 3 clinical trial will not be required.

Our Pipeline, page 3

6. Please make the following changes to your pipeline table here and on page 106:
   - change the “registrational” column to “Phase 3;”
   - for example only it appears that you "are initiating a Phase 2 clinical trial where [you] intend to treat patients with all three tumor types: platinum-resistant ovarian, endometrial, and bladder cancer," but your pipeline table appears to show you being half way through Phase 2. Please shorten your progress arrows for all of your applicable programs so they reflect the current stage of development;
   - given the stage of development of your AP3 Discovery programs please remove the AP3 Discovery Programs row from your pipeline table; and
   - revise the anticipated next milestone for your single-arm trials to reflect a nearer term milestone in light of the fact that you have not enrolled any patients for the trials.

7. Please revise to ensure your pipeline table graphic is legible. As presented, the text is too small to be legible.

8. We note that you include two early stage, preclinical programs in your pipeline table, WEE1 Inhibitor and DDR Kinase Inhibitor Program. In addition, the DDR Kinase Inhibitor Program appears to have an "undisclosed target," and is not discussed in detail elsewhere in your registration statement. Please remove these preclinical programs from the pipeline table as it appears it is not currently material to your business. Alternatively, please tell us why you believe these programs are sufficiently material to warrant inclusion in the pipeline table and expand your disclosure in your business section concerning these programs.

9. We note your pipeline table lists ACR-368 for platinum-resistant ovarian, endometrial, and bladder cancer each twice in your pipeline table. Once, to depict ACR-368 as a monotherapy and a second time to depict ACR-368 as a combination therapy. Please revise your pipeline table so that ACR-368 is only shown once for each indication or otherwise advise. You can add footnotes and narrative disclosure before or after the pipeline to depict your plan to study ACR-368 as both a combination and monotherapy for each indication.

Our Preclinical Programs, page 4

10. We note your disclosure here that one of your preclinical programs " is directed at WEE1, a target that has been well-validated in preclinical studies described in the literature, and a critical node in the DDR pathways." Please provide your basis for this statement and update your disclosure to clarify the specific "literature" you reference or otherwise advise.

Our Strategy, page 5

11. We note your statement on page 5 and elsewhere that you plan to “rapidly” advance clinical development of ACR-368. Please revise to remove such statements as they are speculative.

Our Team, page 5

12. Please limit the disclosure of specific investors to those identified in the Principal Shareholder table on page 184. Additionally, indicate that prospective investors should not rely on the named investors’ investment decision, that these investors may have different risk tolerances and the recent offering was conducted at a significant discount to the IPO price.

Risks Associated with Our Business, page 5

13. Please add a bullet point highlighting the risk that the FDA may require the approval of a companion diagnostic in order for you to market ACR-368, as referenced on pages 22 and 23.

Risk Factors
We have identified material weaknesses in our internal control over financial reporting..., page 67

14. Please revise to also disclose your planned or in process remediation procedures related to your material weaknesses identified in your internal control over financial reporting.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Significant Judgments and Estimates
Determination of Fair Value of Common Stock, page 99

15. For the three 2022 grants disclosed here, please revise to include specific drivers and causes of their valuation changes, including any impact from the market adjustment.

Business
ACR-368, Our Phase 2 Lead Candidate, page 117

16. Please revise here to remove the statement that you initiated a phase 2 trial as it is a premature statement in light of the fact that you have not enrolled any patients.

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

17. We note your disclosure that ACR-368 has been generally well-tolerated. However, it appears there are possibly treatment related serious adverse events (e.g., deaths) in your table on page 125. To the extent trial participants have experienced any serious adverse events, please describe the events and disclose the number of occurrences. In addition, given that you intend to conduct clinical trials with ACR-368 monotherapy at the same RP2D as the other phase 2 trials, consider including a risk factor discussion specific to such serious adverse event(s) or revise your risk factor on page 24 to discuss any specific serious adverse events from the previous phase 2 trials.

Licensing and Collaborations
License Agreement with Lilly, page 140

18. We note your disclosure here that you may be obligated to pay a tiered percentage royalty on annual net sales ranging from a low single-digit up to low double-digits. The upper bound of the range is very broad and therefore does not provide investors with a meaningful understanding of the potential royalty payments. Accordingly, please revise so that the range of the royalty rate does not exceed 10 percentage points.

Companion Diagnostic Agreement, page 141

19. With respect to your agreement with Akoya Biosciences, Inc., please disclose the aggregate potential milestone payments.

Intellectual Property, page 141

20. Regarding the patent filing relating to ACR-368 that you in-licensed, disclose the other material jurisdictions where patents have been issued or otherwise advise. Also, disclose the jurisdiction(s) for your patent filing directed to OncoSignature test for ACR-368.

21. We note your disclosure here that you "in-licensed from [y]our founder a patent family with a presumptive twenty-year term extending into 2028 that includes issued EP and pending US filings that claims aspects of [y]our AP3 platform relating to methods of identifying responder populations." Please file the in-licensing agreement with your founder as an exhibit or explain the basis for your determination that it is not required to be filed. In addition, in your "Licensing and Collaborations" section please describe all material terms of the agreement, including amounts paid to date, future potential payments, royalty provisions, term and termination provisions or otherwise advise.

Principal Stockholders, page 184

22. We note your principal stockholders table is missing footnotes that appear in the table. Please revise or otherwise advise.

Notes to Consolidated Financial Statements for the Fiscal Years Ended December 31, 2021 and 2020
7. License Agreement, page F-22

23. You disclose here that you accounted for the Lilly Agreement as an asset acquisition of IPR&D assets with no alternative future use. Please address the following comments:

- Please revise to provide more details for the components acquired under the Lilly Agreement. In that regard, we note you disclosed elsewhere that you acquired three families of patent filings related to ACR-368 under "Patents" at page 142 and acquired sufficient ACR-368 drug substance and drug product from Lilly to treat several hundred patients under "Manufacturing" at page 140.
- Please tell us in your response the accounting literature you relied upon to determine the asset acquisition accounting.

Notes to Unaudited Condensed Consolidated Financial Statements for the Six Months Ended June 30, 2022 and 2021
12. Commitments and Contingencies
Companion Diagnostic Agreement, page F-50

24. Please tell us in your response whether the Akoya Agreement is subject to ASC 808 *Collaborative Arrangements.* And if so, please revise to provide all the required disclosures under ASC 808-10-50, including any profit sharing arrangement.

General

25. Many of your tables and graphics include print that is not legible. For example only Figure 15 on page 127 and Figure 20 on page 131 contain text that is too small to be legible. Please revise your graphics throughout your prospectus as applicable to ensure that the text is legible.

You may contact Li Xiao at 202-551-4391 or Lynn Dicker at 202-551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Daniel Crawford at 202-551-7767 or Jason Drory at 202-551-8342 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Ryan Sansom