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

DIVISION OF
CORPORATION FINANCE

May 14, 2021

David Campbell, Ph.D.
Chief Executive Officer
Janux Therapeutics, Inc.
11099 N. Torrey Pines Road, Suite 290
La Jolla, CA 92037

Re: Janux Therapeutics, Inc.
Draft Registration Statement on Form S-1
Submitted April 16, 2021
CIK No. 0001817713

Dear Dr. Campbell:

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 April 16, 2021

Prospectus Summary
Overview, page 1

1. We note your disclosure that "[y]our lead TRACTr product candidates are designed to target PSMA, EGFR, and TROP2," that your TRACTrs are "designed to be selectively activated in the tumor microenvironment" and that the attachment of the albumin binding domain "is designed to extend the half-life of [y]our TRACTr product candidates." Please balance these and similar statements relating to the desired or intended purpose of your product candidates with equally prominent explanations that any conclusions regarding desired effects are premature as your product candidates remain in the preclinical or discovery stages and are based on novel technologies.

2. Please clarify here and in the Business section whether you expect to initially seek approval of your product candidates as first line or later lines of therapy.

3. At first use, please define the term "mask."

Our Lead Programs, page 3

4. Please explain what is involved in "lead-optimization" and why you believe this is a separate and distinct development phase, as opposed to part of lead discovery and/or IND-enabling studies, or revise. In addition, please include separate columns for Phase 2 and Phase 3 or tell us the basis for your belief that you will be able to conduct Phase 2/3 trials for all of your product candidates.

Pipeline of Proprietary TRACTrs, page 3

5. Please revise your graphic at the top of page 3 to disclose the "undisclosed" domains. Alternatively, please explain to us why such programs are sufficiently material to include in your pipeline of proprietary TRACTrs graphic.

Business

Our Research Collaboration with Merck Sharp & Dohme Corp., page 5

6. Please remove statements that your collaboration with Merck Sharp & Dohme Corp "provides validation for [y]our TRACTr platform technology" as these statements appear to imply that your product candidates' outlook for approval are stronger due to Merck's endorsement, which is premature and speculative.

Our Team and Investors, page 5

7. Please limit the disclosure identifying your investors to investors identified in your Principal Stockholder table.

Use of Proceeds, page 74

8. Please revise to clarify whether you will be able to complete the trials referenced with the allocated net proceeds from the offering. If any material amounts of other funds are necessary, please disclose the amount of funds needed to complete the trials referenced. Refer to Instruction 3 to Item 504 of Regulation S-K.

Research Collaboration and Exclusive License Agreement with Merck Sharp & Dohme Corp., page 131

9. We note your disclosure that Merck is required to make tiered royalty payments on a product-by-product and country-by-country basis, ranging from low single-digit to low double-digit percentage royalty rates. Please refine your disclosure to provide a more exact description of the high end of the range (e.g., low teens) to ensure that you have described the royalty rate within a ten percentage point range.

Executive and Director Compensation
Employment, Severance and Change in Control Agreements, page 166

10. We note that you have neither paid nor entered into an employment or other service agreement with Mr. Reardon with respect to his services as Acting Chief Financial Officer. With reference to your disclosure on page 175 that you are party to a Support Services Agreement with COI and that Mr. Reardon is an executive officer and director of COI, please disclose whether Mr. Reardon is providing services as Acting Chief Financial Officer via the Support Services Agreement. If so, please disclose the material terms of his service.

General

11. Please provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

You may contact Tracie Mariner at 202-551-3744 or Al Pavot at 202-551-3738 if you have questions regarding comments on the financial statements and related matters. Please contact Deanna Virginio at 202-551-4530 or Irene Paik at 202-551-6553 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Ken Rollins, Esq.