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

DIVISION OF
CORPORATION FINANCE

July 16, 2020

Howard J. Weisman
Chief Executive Officer
PaxMedica, Inc.
50 Tice Boulevard, Suite A26
Woodcliff Lake, NJ 07677

Re: PaxMedica, Inc.
Registration Statement on Form S-1
Filed July 2, 2020
File No. 333-239676

Dear Mr. Weisman:

We have reviewed your 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Registration Statement on Form S-1

Prospectus Summary
Our Development Strategy, page 1

1. We note your revised disclosure in response to comment 1 that you believe there is a reasonable likelihood that you will receive approval of PAX-101 for the treatment of HAT. This statement conveys an expectation of regulatory approval which is speculative and inappropriate given the uncertainty with respect to securing marketing approval. Please revise your disclosure accordingly.

PAX-102, page 3

2. We note your response to comment 5; however, you continue to state conclusions regarding safety or efficacy. Please revise your statement here that your proprietary

intranasal formulations and methods of delivering suramin to mammals have been shown to dramatically reduce systemic exposure to remove your conclusion that data demonstrated safety or efficacy. You may present objective data resulting from your trials without including conclusions related to safety or efficacy in the Business section.

Risk Factors
Risks Related to Product Development, Regulatory Approval, Manufacturing and Commercialization, page 12

3. We note your response to comment 3, which we reissue in part. Please revise your disclosure to highlight the risks associated with UCSD's conduct of clinical trials of suramin and the impact UCSD's patent application discussed on page 28, if approved, may have on your development plans, your patent portfolio and your business or tell us why you believe such disclosure is not required.

Use of Proceeds, page 42

4. We note your revised disclosure in response to comment 7. Please revise your disclosure to remove the implication that you will be successful in securing marketing approval of PAX-101 for the treatment of HAT. Additionally, please revise to provide more meaningful and specific disclosure of the intended use of proceeds, as well as the approximate amounts intended to be used for each such purpose. This is required even if management will have broad discretion in allocating the proceeds. This section does not require disclosure of definitive plans and it is acceptable to provide a quantitative discussion of preliminary plans. You may also reserve the right to change the use of proceeds as indicated in Instruction 7 to Regulation S-K Item 504.

Dilution, page 45

5. The historical net tangible book value of $32,000 and historical net tangible book value per share of $0.00 as of March 31, 2020 appears to include the preferred units in the mezzanine section of the balance sheet. Please revise the calculations to exclude the mezzanine preferred units or advise as to the appropriateness of the Company's calculation.

Business
Current Clinical Development Plan, page 56

6. We note your response to comment 10, which we reissue in part. We note your disclosure that you intend to conduct preclinical and clinical safety studies of PAX-101 for the treatment of HAT yet you present PAX-101 for the treatment of this indication as completing Phase 3 clinical trials in your pipeline table on page 56. Please revise your pipeline table so that it accurately reflects the necessity to conduct preclinical studies. We will not object to explanatory disclosure indicating, if true, that you intend to rely on data exclusively licensed by you to support your application for marketing approval.

7. We note your response to comment 11, which we reissue in part. We note that you have not provided any additional disclosure regarding preclinical studies conducted for PAX-101 for the treatment of FXTAS or for PAX-102. Please provide us with your analysis as to why these programs are material to your business and appropriate for inclusion in the pipeline table. Please also remove your selective anti-purinergic therapy program from your pipeline table. We will not object to a discussion of the program below the table, but research and discovery activities that precede the identification of a product candidate are too remote to be highlighted in the pipeline table.

Mitochondrial Dysfunction and Implications for the Use of Suramin for Management of ASD and FXTAS, page 58

8. We note your revised disclosure in response to comment 13 that a single dose of suramin exhibited "promising results" on the core symptoms of ASD. Because a determination of efficacy is solely within the FDA's authority, please remove this reference. You may present objective data resulting from clinical trials without including conclusions related to efficacy. Please revise this statement as well as similar statements throughout the prospectus that present conclusions regarding efficacy such as your disclosure stating compounds demonstrated "strong early preclinical data."

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Ameen Hamady at 202-551-3891 or Sasha Parikh at 202-551-3627 if you have questions regarding comments on the financial statements and related matters. Please contact Ada D. Sarmento at 202-551-3798 or Christine Westbrook at 202-551-5019 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Steven M. Skolnick, Esq.