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

DIVISION OF
CORPORATION FINANCE

January 14, 2021

R. Michael Dudley
Chief Executive Officer
TransCode Therapeutics, Inc.
6 Liberty Square, #2382
Boston, MA 02109

Re: TransCode Therapeutics, Inc.
Draft Registration Statement on Form S-1
Submitted December 18, 2020
CIK No. 0001829635

Dear Mr. Dudley:

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 December 18, 2020

Prospectus Summary
Overview, page 1

1. We note your statement here and similar statements elsewhere throughout your draft registration statement that "[i]n preclinical studies, [y]our drug candidate was successfully delivered to existing metastatic lesions, and eliminated metastasis and elicited complete regression without recurrence in 100% of subjects treated in a Stage II/III cancer model." Given the stage of development of your product candidate, please balance this statement by also disclosing material description of the study, including: (i) identifying the drug candidate, (ii) disclosing the number and type of subjects, (iii) whether the study results were statistically significant, including the p-value if applicable

and (iv) other material details of your trial design and results. In addition, we note your statement on page 102 that your lead product candidate was used in combination with low dose doxorubicin in preclinical trials. Please advise us on whether or not doxorubicin was also administered in the preclinical study you reference in the summary section. To the extent it was used, please include relevant disclosure here.

2. Given the current state of development of your product candidates from your TTX platform, please substantiate or provide the basis for your beliefs regarding the potential effectiveness of the TTX platform or otherwise add balancing disclosure. By way of example, we note statements on page 1 that your platform enables you to design product candidates that "are highly efficient at reaching and engaging their targets" and " [yo]ur nanocarrier is poised for immediate clinical translation" and on page 3 where you state your science is "revolutionary."

3. Please amend your disclosure to clarify what makes your platform different from other research platforms, and whether any other research currently employs a similar approach. In particular, explain what you mean when you say your "discovery platform consists of a modular 'toolbox'," and whether that is unique to your company. If it is not unique, contrast your approach to those of other companies.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company, page 3

4. Please supplementally 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.

Risk Factors, page 9

5. Please update your risk factor disclosure by relocating risks that could apply generally to any company or offering of securities to the end of the risk factor section under the caption "General Risk Factors." Refer to Item 105 of Regulation S-K and SEC Release No. 33-10825.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical accounting policies and significant judgments and estimates
Stock-based compensation, page 86

6. Once you have an estimated offering price range, please explain to us the reasons for any differences between recent valuations of your common shares leading up to the planned offering and the midpoint of your estimated offering price range. This information will facilitate our review of your accounting for stock compensation. Please discuss with the staff how to submit your response.

Our Pipeline, page 93

7. Please revise your pipeline tables here and in the graphic immediately proceeding the table of contents to include columns depicting each of Phase 1, Phase 2, and Phase 3 to ensure that all stages in the clinical trial process prior to seeking FDA approval are shown. In addition, we note your references to a certain undisclosed programs in your pipeline table. The pipeline table should be limited to current material product candidates. Please remove from your pipeline tables items that have not yet been identified and are not currently material. To the extent they are material, you should revise the prospectus to identify and describe them.

8. We note your disclosure that you are currently planning to initiate a Phase 0 trial in 2021 for TTX-MC138. However, your pipeline table suggests that you have already initiated the clinical trial. Please shorten the arrow for TTX-MC138 as appropriate to illustrate the product candidate's current status. In addition, please revise your disclosure in the "Key Anticipated Milestone" column to clarify the milestones and anticipated timing to the extent available. For example, we note that "Tox study; First in Human Study" is unclear.

9. We note references describing your product candidates as well as potential candidates that you have the right to license as "a promising therapeutic," "miRNAs represent promising candidates," "promising target" and other similar statements. Please revise to remove any statements that suggest the safety and efficacy of your candidates, as these determinations are the exclusive authority of the FDA or other regulators. In addition, we note your disclosure in figure 5 that you believe that "TTX-MC138 is a first-in-class therapeutic to address metastatic disease." Please remove the term "first-in-class" and any other disclosure that states or implies that your product candidates will be the first approved treatments for an indication.

Our approach — Mechanism of action of TTX-MC138, page 102

10. We note your statement that "[i]n a different study, a group from Tel Aviv University the study concluded that it likely had a robust effect on c-JUN, as illustrated in Fig. 9." Please revise your disclosure to include all material information related to the study, including for example only, the study design, the number of participants, and primary and secondary endpoints. In addition, please include additional narrative disclosure that clearly explains the context for the illustration shown in Fig. 9.

11. We note your statement that "[n]o recurrence of metastatic disease was observed by the end of the study." Please revise your disclosure to clarify how the subjects were observed and the length of time the subjects were observed.

Detailed Objectives of the Phase 0 Trial:, page 106

12. We note your disclosure that you plan to validate your proprietary companion diagnostic CDx-miR10b against the gold-standard PCR method during the Phase 0 trial. Please expand your disclosure to discuss the specific process you plan to use to compare your

CDx diagnostic with the PCR method.

TTX-siPDL1, page 107

13. We note your statements at the bottom of page 107 where you compare checkpoint inhibitors to your product candidate. Please revise your disclosure to include a discussion of the objective data observed to support your statement that your product candidate "prevent[s] the synthesis of PD-L1 all together rather than blocking its function." Alternatively, please remove the statement. In addition, given the stage of your product candidate please remove your analogy that equates checkpoint inhibitors to "mopping the floor" during a flood whereas your product candidate to "turning off the faucet." We will not object to objective descriptions of the mechanism of action for your product candidates, including objective descriptions of how you believe the potential mechanism of action for your product candidate is different from checkpoint inhibitors.

Results, page 108

14. Please disclose the overall size of the study as well as the number of mice that received TTX-siPDL1 versus the control group.

Competition, page 112

15. Please expand your disclosure here to describe the competition you face in the diagnostic space.

Regulation of companion diagnostics, page 123

16. We note your statement on page 133 that the "success of certain of our product candidates may depend, in part, on the development and commercialization of a companion diagnostic." In your business section, please revise your disclosure to explain how the potential approval of your CDx-miR10b diagnostic tool impacts the timing of potential approval and/or commercialization of TTX-MC138. Please also disclose the impact to potential approval and or/marketing of TTX-MC138 if the diagnostic tool is not approved.

Employees, page 133

17. Please revise to provide a description of your human capital resources as required by Item 101(c)(2)(ii) of Regulation S-K. Refer to SEC Release No. 33-10825.

General

18. Please revise your graphics throughout as applicable so that the text is legible. For example only, Figure 3 on page 98, Figure 8 on page 102 and Figure 11 on page 103, contain text that is unclear and difficult to read.

19. We note that you have not yet disclosed the exchange on which you will list your common stock. In your next amendment please identify the exchange you plan to list your common

stock.

You may contact Frank Wyman at 202-551-3660 or Angela Connell at 202-551-3426 if you have questions regarding comments on the financial statements and related matters. Please contact Jason L. Drory at 202-551-8342 or Mary Beth Breslin at 202-551-3625 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Michael Rosenberg