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

DIVISION OF
CORPORATION FINANCE

October 25, 2018

Frank G. Haluska
Chief Executive Officer
Anchiano Therapeutics Ltd.
1/3 High-Tech Village, Givat Ram
P.O. Box 39264
Jerusalem, 9139102
Israel

Re: Anchiano Therapeutics Ltd.
Draft Registration Statement on Form F-1
Submitted September 28, 2018
CIK No. 0001534248

Dear Dr. Haluska:

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 F-1

Prospectus Summary
Overview, page 1

1. Please revise throughout the prospectus to remove any implication that your product candidates are more likely than others to receive FDA approval or explain to us why these statements are appropriate given the stage of your product candidates. We note by way of example statements on page 1 regarding your belief "that the regulatory

pathway to approval for commercialization and wide distribution of our product is a straightforward extension of the clinical trial program we have accomplished to date"; your belief "that the prospects for regulatory approval are significantly improved by the unmet need of the patient population . . . "; and your assertions here and in the Business section that your proposed clinical development plan "will support approval."

2. Please revise throughout to remove any inference regarding the safety and efficacy of your product candidates. Given that the determination of a product's safety and efficacy is solely within the FDA's authority and your product candidates have not yet completed clinical trials, these inferences are not appropriate. We note by way of example statements here regarding the potential "therapeutic efficacy" of your product candidates; your belief that "inodiftagene can demonstrate efficacy and safety against early stage bladder cancer . . . "; and your statement on page 56 that "the potential for efficacy is optimized without attendant risk of significant adverse effects for the patient. . . ."

3. Please disclose in what countries your six clinical trials were conducted.

4. We note your disclosure in the first paragraph on page 2 and in the Business section that the results of your trials "compare favorably with historical outcomes." Please tell us whether you conducted studies of inodiftagene on a head to head basis. If not, please remove this comparison from your disclosure or tell us why you believe this comparison is appropriate. Please also explain how the results of your trials compare favorably "with regulatory guidance in this field."

5. Please substantiate your statement in the second paragraph on page 2 that "[b]oth of these studies have been reviewed by the FDA and other international regulatory bodies, who have stated that either or both will support regulatory approval." Please also describe the FDA review process and how this relates to the broader FDA approval process.

Our Pipeline, page 2

6. Please add columns in your pipeline here and on page 54 to show all phases of the FDA approval process.

Our Growth Strategy, page 6

7. We note your disclosure that "[r]egulatory agencies in the European Union and Canada have also reviewed our pivotal program, and concurred that our trials will support approval." Please disclose whether any of your product candidates have already received approval in the European Union and Canada. In addition, please delete the statement that you "believe that regulatory approval will follow from the studies meeting their primary endpoints."

Implications of Being an Emerging Growth Company, page 8

8. 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.

Risk Factors
If serious adverse or undesirable side effects are identified, page 17

9. Please disclose the serious adverse events experienced by the patients in the trial.

Use of Proceeds, page 38

10. We note your disclosure that you intend to use the proceeds of this offering to further the development of your pipeline projects, general research and development and for general corporate purposes. Please specify how far in the development of your pipeline projects you expect to reach with the proceeds of the offering. If any material amounts of other funds are necessary to accomplish the specified purposes, state the amounts and sources of other funds needed for each specified purpose and the sources. Refer to Instruction 3 to Item 504 of Regulation S-K.

Business
We have positive FDA input on our pivotal development program, page 57

11. We note your disclosure regarding obtaining special protocol assessment from the FDA. Please balance your disclosure in this section by stating that the existence of an SPA agreement does not guarantee that your trial results will be adequate to support approval.

Inodiftagene Clinical Trial Experience, page 59

12. Please disclose and quantify all adverse effects and severe adverse effects referenced on page 60, in the Phase 1/2 Study on page 62, and in the Phase 2 study on page 63.

Government Regulation
Special Protocol Assessment, page 73

13. Please clarify that the SPA agreement does not imply that FDA has reviewed or concurs with protocol details that do not affect approvability or guarantee that a marketing application will be filed or approved, even if the trial is conducted in accordance with the protocol.

Notes to the Consolidated Financial Statements
NOTE 2—BASIS OF PREPARATION
A. Statement of compliance, page F-9

14. We note that you do not indicate here whether the financial statements comply with IFRS as issued by the IASB. Please tell us, and revise your disclosure here to clarify this fact.

NOTE 3—SIGNIFICANT ACCOUNTING POLICIES
I. Grants for participation in research and development expenses, page F-13

15. With regard to the grants from the Israel Innovation Authority (IIA), please tell us why these amounts are accounted for as forgivable loans according to IAS 20. Cite the relevant stipulations that indicate that such grants can be waived. In your response, specifically tell us whether the intellectual property underlying the research and development (R&D) supported by these grant must be transferred to the IIA or other government agency if you abandon the R&D or otherwise cannot generate product or licensing revenues from the R&D.

Condensed Consolidated Interim Financial Statements:
Notes to the Condensed Consolidated Interim Financial Statements
NOTE 4—SIGNIFICANT EVENTS DURING THE REPORT PERIOD, page F-39

16. With respect to C. and F., please disclose the inputs used to value the shares and options discussed in these sub-notes. Additionally, please disclose how you accounted for these transactions.

17. With respect to E., please clarify for us, and in your disclosure, the nature of the "additional rights" granted the investors and your accounting therefor.

Part II
Item 8. Exhibits and Financial Statement Schedules, page II-4

18. Please file the following agreements as exhibits to your registration statement or tell us why you believe the respective agreement is not material to you:
    - 2017 Share Option Plan disclosed on page 92;
    - employment agreements with your executive officers disclosed on page 95; and
    - clinical research agreement with Syneos Health disclosed on pages 50 and F-32.

You may contact Tabatha McCullom at (202) 551-3658 or Mark Brunhofer at (202) 551-3638 if you have questions regarding comments on the financial statements and related matters. Please contact Tonya Aldave at (202) 551-3601 or J. Nolan McWilliams, Attorney-Advisor, at (202) 551-3217 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Anna T. Pinedo