VIA EDGAR AND FEDERAL EXPRESS

Office of Life Sciences Division of Corporation Finance United States Securities and Exchange Commission 100 F Street N.E. Washington, D.C. 20549 Attn: Irene Paik, Joe McCann, Tara Harkins and Dan Gordon

Re: Centessa Pharmaceuticals plc Registration Statement on Form S-1 Filed April 21, 2021 CIK No. 0001847903 File No. 333-255393

Ladies and Gentlemen:

This letter is being submitted on behalf of Centessa Pharmaceuticals plc (which was formerly known as Centessa Pharmaceuticals Limited prior to re-registration as a public limited company on May 14, 2021) (the "Company") in response to comments contained in the letter dated May 25, 2021 (the "Letter") from the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") to Saurabh Saha, M.D., Ph.D., Chief Executive Officer of the Company, with respect to the Company's Registration Statement on Form S-1 that was filed on April 21, 2021, as amended on May 12, 2021 and May 24, 2021 (the "Registration Statement"). In addition to responding to the Staff's comments as set forth below, the Company has filed an amendment (the "Amendment") to the Registration Statement to file certain exhibits, including in response to the Staff's comments.

The responses set forth below have been organized in the same manner in which the Staff's comments were organized and all page references in the Company's responses are to the Registration Statement. Two copies of this letter will be provided to Irene Paik of the Commission.

Amendment No. 2 to Registration Statement on Form S-1 filed May 24, 2021

Exhibits

1. The Exhibit 5.1 legal opinion should not assume conclusions of law or material facts that are necessary for the ultimate opinion. Please revise your legal opinion to remove assumptions (g), (j), (k), and (l) and reservations (a), (c), (d), (e) and (f). For guidance, please refer to Section II.B.3.a of Staff Legal Bulletin No. 19.

RESPONSE:

The Company respectfully advises the Staff that it intends to revise its Exhibit 5.1 legal opinion to remove assumptions (g), (j), (k), and (l) and reservations (a), (c), (d), (e), and (f) as identified by the Staff.

2. Please file your Severance and Change in Control Policy as an exhibit to the registration statement. See Item 601(b)(10)(iii)(A) of Regulation S-K.

RESPONSE:

The Company respectfully advises the Staff that, as disclosed in the Registration Statement, its board of directors (the "Board") approved certain change of control and severance benefits for certain employees of the Company, which the Company intends to implement through a Severance and Change in Control Policy (the "Severance Policy"). The Company supplementally advises the Staff that the Board has not yet approved, nor has the Company adopted, such Severance Policy. For the benefit of the readers of the Registration Statement, the Company described the general features of the severance and change in control benefits that it intends to implement. The Company supplementally advises the Staff that if and when the Severance Policy is formally adopted, the Company intends to file such policy as an exhibit to its reports filed under the Securities Exchange Act of 1934, as amended.

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If you require additional information, please telephone the undersigned at (212) 813-8853.

Sincerely,

/s/Edwin O'Connor

Edwin O'Connor

cc.

Saurabh Saha, M.D., Ph.D., Centessa Pharmaceuticals plc Gregory Weinhoff, Centessa Pharmaceuticals plc Iqbal Hussain, Centessa Pharmaceuticals plc Mitchell Bloom, Goodwin Procter LLP Graham Defries, Goodwin Procter LLP James Xu, Goodwin Procter LLP