Cellectis S.A.

8, rue de la Croix Jarry 75013 Paris, France

April 14, 2017

VIA EDGAR

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Attention: Ms. Suzanne Hayes

Ms. Mary Beth Breslin Ms. Ada D. Sarmento

RE: Cellectis S.A.

Registration Statement on Form F-3 (File No. 333-217086)

Ladies and Gentlemen:

In accordance with Rules 460 and 461 under the Securities Act of 1933, as amended, Cellectis S.A. (the "Registrant") hereby requests that the Securities and Exchange Commission (the "Commission") take appropriate action to cause the above-referenced Registration Statement on Form F-3 to become effective on April 19, 2017 at 4:00 p.m., Eastern Time, or as soon thereafter as is practicable. The Registrant also hereby requests a copy of the written order verifying the effective date.

Please contact Boris Dolgonos of Jones Day at (212) 326-3430 if you have any questions concerning the foregoing. Thank you for your attention to this matter.

Very truly yours,

CELLECTIS S.A.

By: /s/ André Choulika
André Choulika
Chief Executive Officer

cc: Boris Dolgonos, Jones Day