Cellectis S.A.

8, rue de la Croix Jarry 75013 Paris, France

March 23, 2015

VIA EDGAR

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

Attention: Mr. Jeffrey P. Riedler

Mr. Johnny Gharib Mr. Bryan Pitko

RE: Cellectis S.A.

Registration Statement on Form F-1 (File No. 333-202205)

Ladies and Gentlemen:

In accordance with Rule 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-1 to become effective on March 24, 2015 at 4:00 p.m., Eastern Time, or as soon thereafter as is practicable. The Registrant hereby authorizes Boris Dolgonos, an attorney with our legal counsel, Jones Day, to orally modify or withdraw this request for acceleration. The Registrant also hereby requests a copy of the written order verifying the effective date.

In connection with this request, the Registrant acknowledges that:

- should the Commission or the staff of the Commission (the "<u>Staff</u>"), acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Registrant from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Registrant may not assert Staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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

c: Boris Dolgonos, Jones Day

VIA EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Mail Stop 6010 Washington, D.C. 20549-3628

Re: Cellectis S.A. (the "<u>Company</u>") – Request for Acceleration <u>Registration Statement on Form F-1 (File No. 333-202205)</u>

Ladies and Gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended (the "<u>Act</u>"), and as Representatives of the several underwriters of the Company's proposed public offering of American Depositary Shares, we hereby join the Company's request for acceleration of the above-referenced Registration Statement, as amended, requesting effectiveness for 4:00 p.m. Eastern Time on March 24, 2015, or as soon thereafter as is practicable.

Pursuant to Rule 460 of the Act, we wish to advise you that we have distributed approximately 2,530 copies of the Company's Preliminary Prospectus dated March 17, 2015 through the date hereof to underwriters, dealers, institutions and others.

We have been informed by the participating underwriters that they will comply with the requirements of Rule 15c2-8 under the Securities Exchange Act of 1934, as amended.

[Signature Page Follows]

Very truly yours,

MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED

JEFFERIES LLC

As Representatives of the several Underwriters

By: MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED

By: /s/ Richard A. Diaz Name: Richard A. Diaz

Title: Authorized Signatory

By: JEFFERIES LLC

By: /s/ Dr. Gil Bar-Nahum

Name: Dr. Gil Bar-Nahum Title: Managing Director

SIGNATURE PAGE TO ACCELERATION REQUEST