UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form F-1 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

CELLECTIS S.A.

(Exact name of registrant as specified in its charter)

France (State or other jurisdiction of incorporation or organization) 2836 (Primary Standard Industrial Classification Code Number) Not applicable (I.R.S. Employer Identification Number)

Cellectis S.A. 8, rue de la Croix Jarry 75013 Paris, France +33 1 81 69 16 00

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Puglisi & Associates 850 Library Avenue, Suite 204 Newark, Delaware 19711 (302) 738-6680 (Name, address, including zip code, and telephone number, including area code, of agent for service)

Boris Dolgonos, Esq. Jones Day 222 East 41st Street New York, NY 10017 (212) 326-3939 Copies to:

Renaud Bonnet, Esq. Jones Day 2, rue Saint-Florentin 75001 Paris, France +33 1 5659-3939 B. Shayne Kennedy, Esq. Thomas E. Mitchell, Esq. Latham & Watkins LLP 650 Town Center Drive, Suite 2000 Costa Mesa, CA 92626 (714) 540-1235

Approximate date of commencement of proposed sale to public: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. 🛛 333-202205

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered(1)(2)	Proposed maximum offering price per share	Proposed maximum aggregate offering price(3)	Amount of registration fee
Ordinary Shares, €0.05 nominal value per share(1)(2)(4)	862,500	\$41.50	\$35,793,750	\$4,160

(1) The 862,500 ordinary shares being registered in this Registration Statement are in addition to the 5,462,500 ordinary shares registered pursuant to Registrant's Registration Statement on Form F-1 (File No. 333-202205).

(2) Includes 112,500 ordinary shares which the underwriters have the option to purchase.

(3) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(a) under the Securities Act of 1933, as amended.

(4) American Depositary Shares, or ADSs, issuable upon deposit of the ordinary shares registered hereby are being registered pursuant to a separate Registration Statement on Form F-6. Each ADS represents one ordinary share.

This Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) promulgated under the Securities Act of 1933, as amended.

Explanatory Note

This Registration Statement is being filed by Cellectis S.A. (the "Company") pursuant to Rule 462(b) ("Rule 462(b)") under the Securities Act of 1933 and General Instruction V of Form F-1. Pursuant to Rule 462(b), the contents of the Company's registration statement on Form F-1, as amended (File No. 333-202205), including the exhibits thereto, which was declared effective by the Securities and Exchange Commission on March 24, 2015 (the "Initial Registration Statement"), are incorporated by reference into this Registration Statement.

The Registrant hereby certifies that its agent (i) has instructed its bank to transmit to the Commission the filing fee set forth on the cover page of this Registration Statement by a wire transfer of such amount to the Commission's account at U.S. Bank as soon as practicable (but no later than the close of business on March 25, 2015), (ii) will not revoke such instructions, (iii) has sufficient funds in the relevant account to cover the amount of such filing fee and (iv) will confirm receipt of such instructions by its bank during the bank's regular business hours no later than March 25, 2015.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 8. Exhibits and Financial Statement Schedules.

(a) Exhibits.

All exhibits filed with or incorporated by reference in the Initial Registration Statement (File No. 333-202205) are incorporated by reference herein, and shall be deemed to be a part of this Registration Statement, except for the following, which are filed herewith.

Exhibit Number	Description of Exhibit
5.1	Opinion of Jones Day
23.1	Consent of Ernst & Young et Autres
23.2	Consent of Jones Day (included in Exhibit 5.1)

24.1 Powers of Attorney (incorporated by reference to Exhibit 24.1 to the Initial Registration Statement on Form F-1 (File No. 333-202205))

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Paris, France, on March 24, 2015.

CELLECTIS

By: /s/ André Choulika

André Choulika Chief Executive Officer Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated on March 24, 2015.

Signature	Title
*	Chief Executive Officer, Chairman of the Board and Co-
André Choulika	Founder (Principal Executive Officer)
*	Chief Financial Officer
Thierry Moulin	(Principal Financial and Accounting Officer)
*	Director, Executive Vice President,
Mathieu Simon	Chief Operating Officer
* David Sourdive	Director, Executive Vice President, Corporate Development and Co-Founder
*	Director
Alain Godard	
*	Director
Pierre Bastid	
*	Director
Laurent Arthaud	
*	Director
Annick Schwebig	
Donald Puglisi, Authorized Representative in the United States	
By:*	
*By: /s/ Marie-Bleuenn Terrier Marie-Bleuenn Terrier	Attorney-in-Fact

EXHIBIT INDEX

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JONES DAY

PARTNERSHIP CONSTITUEE SELON LE DROIT DE L'OHIO, USA AVOCATS AU BARREAU DE PARIS 2, RUE SAINT-FLORENTIN • 75001 PARIS TELEPHONE: (0)1.56.59.39.39 • FACSIMILE: (0)1.56.59.39.38 • TOQUE J 001 WWW.JONESDAY.COM

March 24, 2015

Cellectis S.A. 8, rue de la Croix Jarry 75013 Paris, France

Re: Registration Statement on Form F-1

Ladies and Gentlemen:

We are acting as special French counsel for Cellectis S.A. (the "<u>Company</u>"), a French *société anonyme*, in connection with the initial public offering and sale by the Company of up to 5,462,500 ordinary shares, par value €0.05 per share, each represented by American Depositary Shares, pursuant to the underwriting agreement (the "<u>Underwriting Agreement</u>") proposed to be entered into by and among the Company, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Jefferies LLC, acting as the representatives of the several underwriters to be named in Schedule A to the Underwriting Agreement. This opinion relates to 862,500 additional ordinary shares (the "<u>Additional Shares</u>") to be sold by the Company in such initial public offering pursuant to the registration statement to which this opinion pertains (the "<u>462(b) Registration Statement</u>").

In connection with the opinion expressed herein, we have examined such documents, records and matters of law as we have deemed relevant or necessary for purposes of such opinion. Based on the foregoing, and subject to the further limitations, qualifications and assumptions set forth herein, we are of the opinion that, when the 462(b) Registration Statement has become effective under the Securities Act of 1933, as amended (the "<u>Act</u>"), the Additional Shares, when issued and delivered by the board of directors of the Company in accordance with the resolutions of the Company's shareholders adopted at the meeting of February 16, 2015 pursuant to the Underwriting Agreement against full payment of their subscription price as provided in the Underwriting Agreement, will be validly issued and fully paid.

As to facts material to the opinions and assumptions expressed herein, we have relied upon written statements and representations of officers and other representatives of the Company. We are members of the Paris bar and this opinion is limited to the laws of the Republic of France. This opinion is subject to the sovereign power of the French courts to interpret agreements and assess the facts and circumstances of any adjudication. This opinion is given on the basis that it is to be governed by, and construed in accordance with, the laws of the Republic of France.

Cellectis S.A. March 24, 2015 Page 2

We hereby consent to the filing of this opinion as Exhibit 5.1 to the 462(b) Registration Statement. In giving such consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Securities and Exchange Commission promulgated thereunder.

Very truly yours,

/s/ Jones Day

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form F-1 filed pursuant to Rule 462(b) of the Securities Act of 1933 of our report dated March 10, 2015, with respect to the consolidated financial statements of Cellectis S.A. included in Amendment No. 4 to the Registration Statement (Form S-1 No. 333-202205) and related Prospectus of Cellectis S.A. for the registration of its ordinary shares.

Ernst & Young et Autres /s/ Frank Sebag

Paris La Defense, France March 24, 2015