Gentium S.p.A. Form POS AM April 25, 2011

> As filed with the Securities and Exchange Commission on April 25, 2011 Registration No. 333-171443

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

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM F-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

GENTIUM S.p.A. (Exact name of Registrant as specified in its charter)

Republic of Italy
(State or other jurisdiction of incorporation or organization)

Not Applicable (I.R.S. Employer Identification No.)

Piazza XX Settembre 2 22079 Villa Guardia (Como), Italy +39 031 385111

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

CT Corporation System 111 Eighth Avenue, 13th Floor New York, New York 10011 (212) 894-8940

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Theodore L. Polin, Esq. Adam D. So, Esq. Epstein Becker & Green, P.C. 250 Park Avenue New York, New York 10177 (212) 351-4500

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective as determined by market conditions.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please 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(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. o

If this Form is a registration statement pursuant to General Instruction I.C. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. o

DEREGISTRATION OF SECURITIES

This Post-Effective Amendment No.1 relates to the following Registration Statement on Form F-3 (the "Registration Statement") of Gentium S.p.A. (the "Company"): File 333-171443, pertaining to the registration for resale by FinSirton S.p.A. of 1,500,000 ordinary shares, no par value, of the Company from time to time. The Registration Statement was filed with the Securities and Exchange Commission on December 28, 2010 and declared effective on January 13, 2011.

FinSirton S.p.A. sold an aggregate of 1,000,000 ordinary shares under the Registration Statement. FinSirton S.p.A. has informed the Company that it will not pursue any additional offering of ordinary shares of the Company under the Registration Statement.

In accordance with the undertakings made by the Company in the Registration Statement to remove from registration, by means of a post-effective amendment, any of the securities which remain unsold at the termination of the offering, the Company hereby removes from registration the securities of the Company registered but unsold under the Registration Statement.

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-3 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement on Form F-3 (File No. 333-171443) to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Villa Guardia (Como) Italy, on the 25th day of April, 2011.

GENTIUM S.p.A

By: /s/ Khalid Islam
Dr. Khalid Islam,
Chairman and Chief Executive Officer
(Principal Executive Officer)

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to the Registration Statement on Form F-3 (File No. 333-171443) has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title(s)		Date
/s/ Khalid Islam Dr. Khalid Islam	Chairman, Chief Executive Officer and Director (principal executive officer)	April 25, 2011	
/s/ Salvatore Calabrese Salvatore Calabrese	Chief Financial Officer and Senior Vice President, Finance (principal financial officer and principal accounting officer)	April 25, 2011	
* Gigliola Bertoglio	Director	April 25, 2011	
* Marco Codella	Director	April 25, 2011	
* Dr. Glenn Cooper	Director	April 25, 2011	
* Dr. Laura Ferro	Director	April 25, 2011	
* Dr. Bobby W. Sandage, Jr.	Director	April 25, 2011	

*By: /s/ Khalid Islam Attorney-in-Fact