Gentium S.p.A.
Form F-1/A
January 26, 2006

As filed with the Securities and Exchange Commission on January 26, 2006
Registration No. 333-130796

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

Amendment No. 1
to
FORM F-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

GENTIUM S.p.A.
(Exact Name of Registrant as Specified in its Charter)
NOT APPLICABLE
(Translation of Registrant's Name into English)

Republic of Italy	**2834**	**Not Applicable**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

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)

Copies to:
Theodore L. Polin, Esq.
Christopher M. Locke, Esq.
Epstein Becker & Green, P.C.
250 Park Avenue
New York, New York 10177
(212) 351-4500 (Phone) (212) 661-0989 (Fax)

Approximate date of commencement of proposed sale to the 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: S

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. o

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 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 earliest effective registration statement for the same offering. o

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. o

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered (1)	Proposed maximum offer price per share	Proposed maximum aggregate offering price	Amount of registration fee
Ordinary shares, par value €1.00 per share (2)	3,101,591(3)	$ 0(4)	$ 0(4)	$ 0(4)
Ordinary shares, par value €1.00 per share (2)	43,016(5)	$ 8.78(6)	$ 377,681(6)	$ 41
Total ordinary shares, par value € per share (2)	3,144,607(7)	--	--	$ 41

(1) Pursuant to Rule 416, this registration statement shall be deemed to cover an indeterminate number of additional ordinary shares if the number of outstanding ordinary shares of the Company is increased by a stock split, stock dividend and/or similar transaction.

(2) American Depositary Shares evidenced by American Depositary Receipts issuable upon deposit of the ordinary shares registered hereby are being registered under a separate registration statement. Each American Depositary Share represents one ordinary share.

(3) Includes 1,100,466 ordinary shares that may be issued pursuant to the exercise of warrants.

(4) The registration fee for these ordinary shares was paid in connection with the initial filing of this registration statement.

(5) Consists of 43,016 ordinary shares that may be issued pursuant to the exercise of warrants.

(6) Pursuant to Rule 457(c), the proposed maximum offering price per share and the proposed maximum aggregate offering price have been calculated on the basis of $8.78, the average of the high and low prices of the American Depositary Shares on the American Stock Exchange on January 23, 2006.

(7) Includes 1,143,482 ordinary shares that may be issued pursuant to the exercise of warrants.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall after that become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

THE INFORMATION IN THIS PRELIMINARY PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THESE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PRELIMINARY PROSPECTUS IS NOT AN OFFER TO SELL NOR DOES IT SEEK AN OFFER TO BUY THESE SECURITIES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION DATED JANUARY 26, 2006

PRELIMINARY PROSPECTUS

Gentium S.p.A.

3,144,607 American Depositary Shares
Representing 3,144,607 Ordinary Shares

The selling security holders identified in this prospectus are offering up to 3,144,607 American Depositary Shares ("ADSs"), each representing one ordinary share of our company, Gentium S.p.A. The ADSs will be evidenced by American Depositary Receipts ("ADRs"). Our ADSs are listed on the American Stock Exchange under the symbol "GNT."

We will not receive any proceeds from the sale of ADSs by the selling security holders. We are not offering any ADSs for sale under this prospectus. See "Selling Security Holders" beginning on page 114 for a list of the selling security holders. See "Plan of Distribution" beginning on page 121 for a description of how the ADSs can be sold.

Our business and an investment in our ADSs involve significant risks. These risks are described under the caption "Risk Factors" beginning on page 8 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

[_____], 2006

TABLE OF CONTENTS

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information that is different. The selling security holders are offering to sell and seeking offers to buy the ADSs only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the ADSs.

We have not taken any action to permit a public offering of the ADSs outside the United States or to permit the possession or distribution of this prospectus outside the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about and observe any restrictions relating to this offering of the ADSs and the distribution of the prospectus outside of the United States. See "Plan of Distribution."

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information and financial statements and notes thereto appearing elsewhere in this prospectus. Before you decide to invest in the ADSs, you should read the entire prospectus carefully, including the risk factors and financial statements and related notes included in this prospectus. Except where we state otherwise, the information we present in this prospectus assumes no exercise of our outstanding options or warrants.

THE COMPANY

Our Business Focus

We are a biopharmaceutical company focused on the research, discovery and development of drugs to treat and prevent a variety of vascular diseases and conditions related to cancer and cancer treatments. In 1986, our founding company received approval to sell in Italy a drug called "defibrotide" to treat deep vein thrombosis, and, in 1993, it received approval to manufacture and sell defibrotide to both treat and prevent all vascular disease with risk of thrombosis. For the nine months ended September 30, 2005, we derived approximately €1.348 million of revenues, or approximately 67.6% of our product sales of €1.995 million, from sales of defibrotide for these uses in Italy to Sirton, a subsidiary of our largest shareholder, FinSirton, which currently owns 39% of our stock. Our primary focus is on the development of defibrotide for other uses in the United States and Europe. We have not received approval by the U.S. Food and Drug Administration, or FDA, or any European regulators to sell defibrotide for these other uses. We do not expect revenues from any of our product candidates until at least 2007 and, as a result, we will require additional funding in order to obtain FDA and European regulatory approvals for our product candidates and for working capital. See "Risk Factors".

We are building upon our extensive experience with defibrotide, which our predecessors discovered over 18 years ago, to develop it for a variety of additional uses, including to treat and prevent hepatic Veno-Occlusive Disease, or VOD, a condition in which some of the veins in the liver are blocked as a result of toxic cancer treatments such as chemotherapy. A severe form of VOD with multiple-organ failure is a potentially devastating complication with a survival rate after 100 days of only approximately 20%, according to our review of more than 200 published medical articles. Results from a Phase II clinical trial conducted at Harvard University's Dana-Farber Cancer Institute of VOD with multiple-organ failure that concluded in December 2005 showed that the survival rate after 100 days was approximately 39% after treatment with defibrotide, although those results were based on the treatment of only 142 patients and may not show the safety or effectiveness of the product candidate. We believe that there is no drug approved by the FDA or European regulators to treat or prevent VOD.

Our Advanced Product Candidates

The stages of development and status of our most advanced product candidates are summarized below. For additional information on our most advanced and additional product candidates and the clinical trials, see "Business - Advanced Product Candidates" and "- Additional Product Candidates."

Product Candidate	Intended Use	Stage of Development/Status
Defibrotide	Treat VOD with multiple-organ failure	Phase III in the United States/Orphan drug designation in the United States and Europe; fast track designation in the United States
Defibrotide	Prevent VOD	

		Phase II/III in Europe/Orphan drug designation in Europe
Defibrotide	Treat multiple myeloma	Phase I/II in Italy

Our Development and Commercialization Strategy

Our goal is to research, discover, develop and manufacture drugs derived from DNA extracted from natural sources to treat and prevent a variety of vascular diseases and conditions related to cancer and cancer treatments. The primary elements of our strategy are:

· **Obtain regulatory approvals for our advanced product candidates.** Although clinical trials are being conducted for these uses of defibrotide, the regulatory process is difficult and expensive. We do not expect revenues from defibrotide to treat VOD with multiple-organ failure until at least 2007 and do not expect revenues from defibrotide to prevent VOD or defibrotide to treat multiple myeloma until at least 2009.

· **Discover and develop additional product candidates.** We intend to continue to discover and develop, either internally or through collaborative arrangements, additional products candidates including:

· Defibrotide for additional uses such as to increase the number of stem cells available for transplant and to prevent deep vein thrombosis in markets outside of Italy;

· Other drugs, such as oligotide, to protect against damage to blood vessel wall cells from certain cancer treatments; and

· Gen 301, which we believe may prevent and treat oral ulcers that develop during and after cancer treatments.

· **Enter into collaborative and strategic agreements to assist us in the development and marketing of our products and product candidates.** To date, we have entered into a limited number of license and sales agreements. These agreements include:

· Our license for the right to market defibrotide to treat VOD in North America, Central America and South America, upon regulatory approval, to Sigma-Tau Pharmaceuticals, Inc., which markets drug treatments for rare conditions and diseases. Sigma-Tau Pharmaceuticals, Inc. is an United States subsidiary of Sigma Tau Finanziaria S.p.A., an international family of pharmaceutical companies;

· Our license for the right to distribute our formulation of mesalazine to treat inflammatory bowel disease in Italy to Crinos, a subsidiary of Stada, a large European pharmaceutical company. Crinos also markets defibrotide in Italy to both treat and prevent vascular disease with risk of thrombosis under a semi-exclusive license agreement with us; and

· Our sale of the rights to develop and sell our formulation of mesalazine to treat inflammatory bowel disease in Canada, upon Health Canada approval, and in the United States, upon FDA approval, to Axcan Pharma, Inc., a specialty pharmaceutical company with offices in North America and Europe.

We intend to continue to seek similar agreements with strategic partners as to other products and product candidates. Our failure to do so or to obtain additional funding will have an adverse affect on our business prospects.

Manufacturing and Product Sales

We manufacture defibrotide, calcium heparin, sulglicotide and other miscellaneous pharmaceutical products at our manufacturing facility near Como, Italy, and we lease our affiliate Sirton's facility to manufacture urokinase. Urokinase and calcium heparin are active pharmaceutical ingredients used to make other drugs. Sulglicotide is intended to be used to treat peptic ulcers. During 2002, 2003, 2004 and the nine months ended September 30, 2005, 100%, 100%, 92% and 95%, respectively, of our total product sales came from sales of these products to Sirton. Our revenues from the sales of these products to date have been generated only in Italy and, in 2004, also in Korea and amounted to €5.9 million, €6.5 million, €3.1 million and €1.9 million in 2002, 2003, 2004 and the nine months ended September 30, 2005, respectively. In 2004 we completed an upgrade to our facilities that cost approximately €7.2 million which we believe will facilitate the FDA and European regulatory approval process for our product candidates and enable our future production. In anticipation of the renovations, we temporarily increased our production shifts and deliveries in 2003 and suspended our production for approximately seven months in 2004. Period to period comparisons of our results will therefore be difficult.

Risk Factors

We have generated limited revenues to date, most of which have been derived from sales to Sirton. Our general and administrative expenses have increased as we internalized certain of our administrative services which were

previously provided by Sirton and FinSirton and adapted to being a public reporting company. We do not have regulatory approvals for the sale of defibrotide to treat or prevent VOD and will be required to perform further clinical trials for these and other uses. The approval process for new drugs is lengthy and expensive and if we fail to raise additional funds in the future or enter into collaborative agreements, we may be unable to continue the development of our product candidates. Our most advanced product candidate, defibrotide to treat VOD with multiple-organ failure, will have a very limited market. See “Risk Factors.”

Corporate Information and Executive Offices

We were originally formed in 1993 as Pharma Research S.r.L., an Italian private limited company, to pursue research and development activities of prospective pharmaceutical specialty products. In December 2000, we changed from a private limited company to a corporation organized under the laws of the Republic of Italy. In July 2001 we changed our name to Gentium S.p.A. Under our current bylaws, the duration of our company will expire on December 31, 2050.

We are part of a group of pharmaceutical businesses founded in Italy in 1944 that has been involved in the research and development of drugs derived from DNA and DNA molecules since the 1970's. Our largest shareholder is FinSirton S.p.A., an Italian corporation. FinSirton is controlled by Dr. Laura Ferro, who is our Chief Executive Officer and President and one of our directors, and her family. We receive administrative and other services and lease office and manufacturing facilities from FinSirton and Sirton. The manufacturing facilities are 3,200 square meters in size.

Our principal executive offices are located at Piazza XX Settembre 2, 22079 Villa Guardia (Como), Italy. Our telephone number is +39 031 385111. Our website is located at www.gentium.it. The information contained on our website is not part of this prospectus. Our registered agent for service of process is CT Corporation System, located at 111 Eighth Avenue, 13th Floor, New York, New York 10011, telephone number (212) 894-8940.

United States and international trademark rights in "Gentium" and Italian trademark rights to "Pharma Research." We also have a number of patent registrations issued and pending in Italy, the United States and other countries. This prospectus also refers to brand names, trademarks, service marks, and trade names of other companies and organizations, and these brand names, trademarks, service marks, and trade names are the property of their respective holders.

This prospectus contains market data and industry forecasts that were obtained from industry publications.

SUMMARY FINANCIAL DATA

The following tables summarize our financial data, prepared using U.S. generally accepted accounting principles, for the periods presented. You should read the following financial information together with the information under "Selected Financial Data,""Operating and Financial Review and Prospects,""Risk Factors" and our financial statements and the notes to those financial statements appearing elsewhere in this prospectus. The summary financial data as of December 31, 2004 and for each of the three years ended December 31, 2004 are derived from our audited financial statements, which are included in this prospectus. The summary financial data as of September 30, 2005 and for each of the nine months ended September 30, 2004 and 2005 are derived from our unaudited financial statements, which are included in this prospectus. The summary financial data for the year ended December 31, 2001 is derived from our unaudited financial statements, which are not included in this prospectus. Our historical results are not necessarily indicative of results to be expected in any future period.

Certain reclassification of prior period amounts have been made to our financial statements to conform to the current period presentation.

Statement of Operations Data: *(000s omitted except per share data)*	**For The Years Ended December 31,**				**For The Nine Months Ended September 30,**	
	2001	**2002**	**2003**	**2004**	**2004**	**2005**
Revenues:					*(unaudited)*	
Sales to affiliates	€ 6,459	€ 5,915	€ 6,532	€ 2,870	€ 1,719	€ 1,900
Third party product sales	—	—	—	243	243	95
Total product sales	6,459	5,915	6,532	3,113	1,962	1,995
Other income and revenues	5	392	1,843	583	501	210
Total revenues	6,464	6,307	8,375	3,696	2,463	2,205
Operating costs and expenses:						
Cost of goods sold	2,531	2,135	2,435	2,579	1,453	1,721
Charges from affiliates	1,025	1,156	1,485	1,665	915	781
Research and development	2,206	1,753	2,253	2,922	2,461	3,117
General and administrative	793	864	854	815	602	1,375
Non-cash compensation	—	—	—	379	—	363
Depreciation and amortization	185	102	67	89	52	78
	6,740	6,010	7,094	8,449	5,483	7,435
Operating income (loss)	(276)	297	1,281	(4,753)	(3,020)	(5,230)
Other income	—	195	—	—	—	—
Foreign currency exchange gain (loss), net	—	268	156	(55)	42	(435)
Interest income (expense), net	(147)	(105)	(71)	(2,192)	(26)	(4,197)
Pre-tax income (loss)	(423)	655	1,366	(7,000)	(3,004)	(9,862)

Income tax expense (benefit):						
Current	145	128	243	65	48	48
Deferred	13	108	(84)	(37)	(28)	—
	158	236	159	28	20	48
Net income (loss)	€ (581)	€ 419	€ 1,207	€ (7,028)	€ (3,024)	€ (9,910)
Net income (loss) per share:						
Basic and Diluted	€ (0.12)	€ 0.08	€ 0.24	€ (1.41)	€ (0.60)	€ (1.62)

The following table summarizes certain of our balance sheet data at September 30, 2005 on an actual basis and on a pro forma basis adjusted to reflect our receipt and use of the net proceeds from a private placement in October 2005 of 1,551,125 of our ordinary shares at a price per share of $7.05 (approximately €5.83 based on the exchange rate on the date of closing) and warrants to purchase an aggregate of 620,450 ordinary shares after deducting placement fees of $656,126 (approximately €542,253) and estimated offering expenses of $363,975 (approximately €300,806), as if we had received and used the net proceeds on September 30, 2005.

(000's omitted)	**Pro Forma Condensed Balance Sheet As of September 30, 2005**