Gentium S.p.A. Form 20-F April 30, 2007

As filed with the Securities and Exchange Commission on April 30, 2007

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

FORM 20-F

° REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 þ

For the Fiscal Year Ended: December 31, 2006

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

o SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

000-51341 (Commission file number)

GENTIUM S.p.A.

(Exact Name of Registrant as Specified in its Charter)

NOT APPLICABLE

(Translation of Registrant's Name into English)

Italy

(Jurisdiction of incorporation or organization)

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)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class American Depositary Shares Ordinary shares with a par value of €1.00 each*

Name of each exchange on which registered The Nasdaq Global Market The Nasdaq Global Market

(Title of Class)

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

11,773,613 ordinary shares

Not for trading, but only in connection with the registration of the American Depositary Shares.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes o No b

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes o No b

Note - Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes b No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o Accelerated filer b Non-accelerated filer o

Indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 o Item 18 b

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

No þ

Yes o

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by S 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan	•
by a court.	
Not applicable.	
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PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

GENTIUM S.P.A.

We are a biopharmaceutical company focused on the research, development and manufacture of drugs to treat and prevent a variety of vascular diseases and conditions related to cancer and cancer treatments.

SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with "Operating and Financial Review and Prospects" and our financial statements and the related notes appearing elsewhere in this annual report. The selected financial data as of December 31, 2005 and December 31, 2006 and for each of the three years ended December 31, 2006 are derived from our audited financial statements, which are included in this annual report. The selected financial data as of December 31, 2003 and December 31, 2004 and for the years ended December 31, 2002 and December 31, 2003 has been derived from our audited financial statements, which are not included in this annual report. The selected financial data as of December 31, 2002 has been derived from our unaudited financial statements, which are not included in this annual report. 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. The convenience translation into U.S. dollars has been done solely for the benefit of the reader, and does not imply that our results would actually have been these amounts in U.S. dollars had the U.S. dollar been our functional currency.

Statement of Operations

Data: For the Years Ended December 31, (000s omitted except per

share data)	20	02		2003		2004		2005		2006	2	$006^{(1)}$
Revenues:												
Sales to affiliates	€ :	5,915	€	6,532	€	2,870	€	3,260	€	3,754	\$	4,954
Third party product sales		_	_	_	_	243		101		321		424
Total product sales		5,915		6,532		3,113		3,361		4,075		5,378
Other income and revenues		392		1,843		583		280		249		329
Total revenues	(6,307		8,375		3,696		3,641		4,324		5,706
Operating costs and expenses:												
Cost of goods sold	:	2,135		2,435		2,579		2,911		3,092		4,081
Charges from affiliates		_	_	1,485		1,665		1,047		854		1,127
Research and development		2,909		2,253		2,922		4,557		8,927		11,781
General and administrative		864		854		1,194		2,284		5,421		7,154
Depreciation and												
amortization		102		67		89		118		261		344
		6,010		7,094		8,449		10,917		18,555		24,487
Operating income (loss)		297		1,281		(4,753)		(7,276)		(14,231)		(18,781)
Other income		195		_	_	_	_	_	_	-		
Foreign currency exchange												
gain (loss), net		268		156		(55)		(249)		(627)		(827)
Interest income (expense), net		(105)		(71)		(2,192)		(4,148)		490		646
Pre-tax income (loss)		655		1,366		(7,000)		(11,673)		(14,368)		(18,961)
Income tax expense (benefit):												
Current		128		243		65		_	_	-		-
Deferred		108		(84)		(37)		646		-		-
		236		159		28		646		-		-

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Net income (loss)	€	419	€	1,207	€	(7,028) €	(12,319)	€	(14,368)	\$ (18,961)
Net income (loss) per share:										
Basic and Diluted	€	0.08	€	0.24	€	(1.41) €	(1.78)	€	(1.33)	\$ (1.76)

⁽¹⁾ Euro amounts are translated into U.S. dollars using the Noon Buying Rate for the Euro on December 29, 2006, of US\$1.3197 per Euro. No representation is made that the Euro amounts referred to in this annual report could have been or could be converted into U.S. dollars at any particular rate or at all.

The following table summarizes certain of our balance sheet data.

	As of December 31,											
(000's omitted)	2002		2003		2004		2005		2006		$2006^{(1)}$	
Balance Sheet Data:												
Cash and cash equivalents	€	346	€	23	€	2,461	€	12,785	€	10,205	\$	13,468
Working capital (deficit)		(1,822)		(3,037)		(7,611)		11,758		13,543		17,873
Property, net		1,736		4,045		8,543		8,631		9,394		12,397
Total assets		6,643		9,013		15,909		26,113		35,393		46,708
Long-term debt, net of current												
maturities		1,238		1,112		3,361		2,485		5,683		7,500
Shareholders' equity (deficit)		(1,015)		217		(2,074)		17,474		21,687		28,620

⁽¹⁾ Euro amounts are translated into U.S. dollars using the Noon Buying Rate for the Euro on December 29, 2006, of US\$1.3197 per Euro. No representation is made that the Euro amounts referred to in this annual report could have been or could be converted into U.S. dollars at any particular rate or at all.

Exchange Rate Information

Fluctuations in the exchange rates between the Euro and the U.S. dollar will affect the U.S. dollar amounts received by owners of ADSs on conversion by the depositary of dividends, if any, paid in euros on the ordinary shares represented by the ADSs. Moreover, such fluctuations may also affect the U.S. dollar price of the ADSs on the Nasdaq Global Market. The following table sets forth information regarding the exchange rates of U.S. dollars per Euro for the periods indicated, calculated by using the average of the noon buying rates on the last day of each month during the periods presented.

	U.S. Dollar per Euro								
Year	Average	Period End							
2001	0.8909	0.8901							
2002	0.9495	1.0485							
2003	1.1411	1.2597							
2004	1.2478	1.3538							
2005	1.2400	1.1842							
2006	1.2661	1.3197							

Source: Federal Reserve Statistical Release H.10

The following table sets forth information regarding the high and low exchange rates of U.S. dollars per Euro for the periods indicated using the noon buying rate on each day of such period.

	U.S. Dollar per Euro							
Month	High	Low						
October 2006	1.2744	1.2502						
November 2006	1.3162	1.2705						
December 2006	1.3327	1.3073						
January 2007	1.3286	1.2904						
February 2007	1.3246	1.2933						
March 2007	1.3374	1.3094						
April 2007 (through April 27, 2007	1.3647	1.3363						

Source: Federal Reserve Statistical Release H.10

On April 27, 2007, the noon buying rate was €1.00 to \$1.3625.

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We use the Euro as our native currency for financial reporting. This annual report contains translations of euros into U.S. dollars at specified rates solely for the convenience of the reader. No representation is made that the Euro amounts referred to in this annual report could have been or could be converted into U.S. dollars at any particular rate or at all.

CAPITALIZATION AND INDEBTEDNESS

Not applicable.

REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

RISK FACTORS

You should carefully consider the risks described below, in conjunction with the other information and financial statements and related notes included elsewhere in this annual report, before making an investment decision. You should pay particular attention to the fact that we conduct our operations in Italy and are governed by a legal and regulatory environment that in some respects differs significantly from the environment that prevails in other countries with which you may be familiar. Our business, financial condition or results of operations could be affected materially and adversely by any or all of these risks. In that event, the market price of our ADSs could decline and you could lose all or part of your investment.

Risks Relating to Our Business

We have generated limited revenues from commercial sales of our products to date and we do not know whether we will ever generate significant revenues or achieve profitability.

We are focused on product development and have generated limited revenue from commercial sales of our products to date. We had total product sales of $\in 3.113$ million, $\in 3.361$ millioand $\in 4.075$ million in 2004, 2005 and 2006, respectively. We do not expect our total product sales to materially increase unless we are able to sell our product candidates.

We expect to continue to incur significant expenses as we research, develop, test and seek regulatory approval for our product candidates. We incurred a net loss of €7.0 million, €12.3 million and €14.4 million in 2004, 2005 and 2006, respectively. We cannot assure you that we will ever become profitable. If we fail to achieve profitability within the time frame expected by investors or securities analysts, the market price of our ADSs may decline.

We currently do not have any regulatory approvals to sell defibrotide to treat or prevent VOD or defibrotide to treat multiple myeloma or any of our other product candidates and we cannot guarantee that we will ever be able to sell any of these products anywhere in the world.

We must demonstrate that our product candidates satisfy rigorous standards of safety and effectiveness before the FDA, the European Commission and other regulatory authorities will approve the products for commercial marketing. We or others must conduct clinical trials of those products which must be approved by the FDA or other regulatory agencies. These trials are time consuming and expensive, and we cannot guarantee whether they will be successful. Currently, the only regulatory approvals we have relate to the use of defibrotide to prevent vascular disease with risk of thrombosis in Italy. We do not have approval to sell defibrotide to treat or prevent VOD, defibrotide to treat multiple myeloma or any of our other product candidates anywhere in the world. We will need to conduct significant additional research, preclinical testing and clinical testing before we can file applications with the FDA, the European

Commission and other regulatory authorities for approval of our product candidates. In addition, to compete effectively, our future products must be easy to use, cost-effective and economical to manufacture on a commercial scale. We may not achieve any of these objectives, and, as a result, may not be able to sell any of our product candidates anywhere in the world.

We may not successfully enroll patients in our current Phase III clinical trial of defibrotide to treat Veno-Occlusive Disease with multiple-organ failure or the related historical trial.

Our current Phase III clinical trial of defibrotide to treat Veno-Occlusive Disease (VOD) with multiple-organ failure in the United States has two elements: the prospective arm, in which defibrotide is administered to the patients, and a historical control arm. We are not conducting a traditional control group of patients who receive no treatment for the reasons discussed in the risk factor below. The protocol for the treatment trial is extremely strict, meaning that only patients who meet very specific criteria are eligible to enroll. The protocol calls for a total enrollment of 80 patients in the prospective arm. Due to the small number of patients who meet the protocol enrollment criteria, we may not be able to enroll these 80 patients in a timely manner or at all.

The related historical control arm measures the historical result of patients who contracted VOD with multiple-organ failure at the centers participating in the treatment trial in the past (prior to the start of the treatment trial) and were not treated with defibrotide. We believe that many of the centers participating in our current treatment trial treated patients with defibrotide on a compassionate use (emergency protocol, single IND) for several years before the treatment trial started, and as a result, there may be few patients eligible to enroll in the historical arm of this trial. The historical arm protocol calls for a total enrollment of 80 patients. Again, due to the small number of patients who meet the protocol historical enrollment criteria, we may not be able to enroll these 80 patients in a timely manner or at all, or we may need to expand the number of patients we review to find 80 patients who meet the enrollment criteria, which could result in additional expense to the Company.

In such events, we may have to restructure this trial, which would substantially delay the time period before we could commercialize this product. Since our other advanced product candidates are dependent in part upon approval of this lead product candidate, such a delay would also slow development of our other product candidates.

The FDA and other regulatory authorities may require us to conduct other clinical trials of defibrotide to treat VOD with multiple-organ failure.

The Dana-Farber Cancer Institute at Harvard University conducted a Phase II clinical trial in the United States for the use of defibrotide to treat VOD with multiple-organ failure that concluded in December 2005. Based upon a historical trial by Dana-Farber at three centers consisting of 20 patients and our review of more than 200 articles in the medical literature, we believe that the survival rate for this disease is approximately 20%. As a result of this research and belief and the fact that we believe that there are no approved treatments available at this time, the Dana-Farber clinical investigators did not establish a control group of patients who do not receive the drug, as is customarily done in the FDA approval process, on the basis that it would be unethical to refuse treatment to patients when the treatment being investigated could potentially save their lives. The FDA has stated a preference for a double-blind study that utilizes a control group but indicated that they would review a trial using a historical control only. Our Phase III clinical trial of defibrotide to treat VOD with multiple-organ failure that is currently underway uses historical control only. The FDA, upon reviewing this trial, may require us to conduct a new clinical trial using a control group and other regulatory authorities may take the same position. This could significantly delay the filing of a New Drug Application with the FDA or applications for other regulatory approval for this use because one or more of the clinical centers where the clinical trial is to be conducted may not be willing to conduct such a clinical trial, again on the basis that it is unethical to refuse treatment to patients when the treatment being investigated could potentially save their lives. The committee of clinical investigators who sponsored a Phase II/III clinical trial of defibrotide to treat VOD in Europe conducted by Consorzio Mario Negri Sud, which had a control group, cancelled the trial in October 2005 due to a lack of patients enrolling. We believe that patients were reluctant to enroll due to the possibility of being placed into the control group and not receiving treatment. A requirement for a control group would also require the expenditure of more funds on clinical trials and delay our ability to generate revenue from this product candidate.

In addition, the FDA may determine that the Phase III clinical trial and previous clinical trials do not include enough patients to conclusively demonstrate the product candidate's safety, and could require us to perform additional trials to establish such safety. Such a requirement would require the expenditure of more funds and delay our ability to generate revenue from this product candidate.

At present, we do not have sole control of the distribution of defibrotide, and we may not be able to gain such control, which may adversely affect our clinical trials and our pricing of defibrotide.

Because defibrotide has been on the market in Italy, we believe it has been purchased and sold in other countries where its use is not licensed or permitted. This could impact our ability to enroll patients in our trials and the timing of such enrollments.

Our additional product candidates are at early stages of development and will require clinical trials which may not be successful.

We intend to apply for FDA and other regulatory agency approval for our additional product candidates, including other uses of defibrotide, in the future, and these additional product candidates will require that we conduct clinical trials and undergo the regulatory approval process. The commencement and completion of these clinical trials could be delayed or prevented by a variety of factors, including:

·delays in identifying and reaching agreement on acceptable terms with institutional review boards of clinical trial providers and prospective clinical trial sites;

delays in obtaining FDA or other regulatory agency clearance to commence a clinical trial;

. delays in the enrollment of patients;

. lack of effectiveness of the product candidate during clinical trials; or

adverse events or safety issues.

We do not know whether these future clinical trials will be initiated or completed at all. Significant delays in clinical trials will impede our ability to commercialize these additional product candidates and generate revenue, and could significantly increase our development costs.

We may be required to suspend or discontinue clinical trials due to adverse events or other safety issues that could preclude approval of our products or due to difficulty enrolling participants.

Our clinical trials may be suspended at any time for a number of safety-related reasons. For example, we may voluntarily suspend or terminate our clinical trials if at any time we believe that our product candidates present an unacceptable risk to the clinical trial patients. In addition, institutional review boards of clinical trial providers or regulatory agencies may order the temporary or permanent discontinuation of our clinical trials at any time if they believe that the clinical trials are not being conducted in accordance with applicable regulatory requirements, including if they present an unacceptable safety risk to patients.

Administering any product candidate to humans may produce undesirable side effects. VOD and VOD with multiple-organ failure are complications associated with high dose chemotherapy and stem cell transplantation. Adverse events involving vascular disorders, coagulation, and potentially life-threatening bleeding have been reported in patients with VOD treated with defibrotide which potentially could be related to the defibrotide therapy. Hypotension has been reported as a possibly related serious adverse event in the trials of defibrotide to treat VOD with multiple-organ failure. Also, we discontinued a 69-patient Phase I/II clinical trial of defibrotide to prevent deep vein thrombosis after hip surgery in Denmark in 2002 after three patients experienced hypotension after receiving the defibrotide intravenously. That trial was discontinued due to the hypotension and because defibrotide can also be administered orally to prevent deep vein thrombosis. These adverse events reports will be weighed by FDA and other regulatory authorities in determining whether defibrotide can, from a risk-benefit perspective, be considered to be safe and effective to treat VOD with multiple-organ failure, to prevent deep vein thrombosis or any other indication for which approval is sought.

It is possible that as further data are collected and analyzed, additional adverse events or safety issues could emerge which could impact conclusions relating to the safety of these additional product candidates. As one of our current products and many of our product candidates utilize or will utilize defibrotide, any problems that arise from the use of this drug would severely harm our business operations, since most of our anticipated primary revenue sources would be negatively affected.

Furthermore, the committee of clinical investigators who sponsored a Phase II/III clinical trial of defibrotide to treat VOD in Europe that was conducted by Consorzio Mario Negri Sud cancelled the trial in October 2005 due to a lack of enrollees. In addition, the National Institute of Tumors in Milan cancelled a Phase I clinical trial of defibrotide to increase the number of stem cells available for transplant in December 2005 due to a lack of eligible enrollees. We are co-sponsoring with the European Group for Blood and Marrow Transplantation a Phase II/III clinical trial in Europe of defibrotide to prevent VOD in children. The participants in this trial randomly receive either defibrotide or no treatment. We may have difficulty enrolling participants in this trial as patients may be reluctant to take the risk of not receiving treatment with defibrotide. Our other clinical trials may also be discontinued if we or the sponsors are not successful in enrolling participants.

We expect to rely upon Sirton to process defibrotide both for current sales in Italy and future sales outside of Italy, and we may not be able to quickly replace Sirton if it fails in its duties.

Currently we sell defibrotide to our affiliate, Sirton, which processes it into ampoule or oral formulations and then sells the finished product to Crinos, who resells it in Italy. In connection with our purchase of the Italian marketing authorizations to defibrotide in Italy and related trademarks in Italy, we expect to revise enter into a new contract with Sirton in the near future whereby we hire Sirton to do the processing for us and then we sell the finished product to

Crinos, which will distribute them to the Italian market. In addition, we expect to hire Sirton to process defibrotide if and when our advanced product candidates are approved for commercialization. Sirton has experienced financial difficulties recently. If Sirton is not able to perform any processing contract for any reason, it may take us time to find a replacement processor. Such a delay could potentially put us in breach of our distribution agreement with Crinos or other contractual obligations into which we may enter, and could violate local laws requiring us to deliver the product to those in need.

Our products could be subject to restrictions or withdrawal from the market and we may be subject to penalties if we fail to comply with regulatory requirements, if and when any of our product candidates are approved.

Any product for which we obtain marketing approval, together with the manufacturing processes, post-approval commitments, and advertising and promotional activities for such product, will be subject to continued regulation by the FDA and other regulatory agencies. Later discovery of previously unknown problems with our products or their manufacture, or failure to comply with regulatory requirements, may result in:

	restrictions on such products or manufacturing processes;
	withdrawal of the products from the market;
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	voluntary or mandatory recalls;
	fines;
	suspension of regulatory approvals;
•	product seizures; or

injunctions or the imposition of civil or criminal penalties.

If we are slow to adapt, or unable to adapt, to changes in existing regulatory requirements or adoption of new regulatory requirements or policies, we may lose marketing approval for our products when and if any of them are approved.

Our manufacturing facility is subject to continuing regulation by Italian authorities and is subject to inspection and regulation by the FDA and European regulatory. These authorities could force us to stop manufacturing our products if they determine that we are not complying with applicable regulations or require us to complete further costly alterations to our facility.

In addition to researching and developing drugs, we also manufacture drugs, active pharmaceutical ingredients and other products at our manufacturing facility located near Como, Italy. This facility is subject to continuing regulation by the Italian Health Authority and other Italian regulatory authorities. During biannual inspections of our manufacturing facility by the Italian Health Authority in October 2004 and February 2007, the Italian Health Authority noted by way of observations certain minor deficiencies in regard to the operation of our facility. We corrected all of the October 2004 deficiencies and we have a plan on how to correct the February 2007 deficiencies. No penalties were imposed, our facility was not shut down and our manufacturing activities were not otherwise limited or curtailed as a result of the Italian Health Authorities' notation of these deficiencies.

Our manufacturing facility is subject to inspection and regulation by the FDA and European regulatory authorities with respect to manufacturing our product candidates for investigational use. Also, part of the process for obtaining approval from the FDA and European regulatory authorities for our product candidates is approval by those authorities of our manufacturing facility's compliance with current good manufacturing practices. After receiving initial approval, if any, the FDA or those European regulatory authorities will continue to inspect our manufacturing facility, including inspecting it unannounced, to confirm whether we are complying with the good manufacturing practices.

These regulators may require us to stop manufacturing our products and product candidates if they determine that we are not complying with applicable regulations or require us to complete costly alterations to our facility. We spent approximately €7.2 million in 2004 to substantially upgrade our facility in anticipation of the FDA and European regulatory approval process for our product candidates.

If our third-party clinical trial vendors fail to comply with strict regulations, the clinical trials for our product candidates may be delayed or unsuccessful.

We do not have the personnel capacity to conduct or manage all of the clinical trials that we intend for our product candidates. We rely on third parties to assist us in managing, monitoring and conducting most of our clinical trials. We have entered into and expect to continue to enter into clinical trial agreements with numerous centers in the United States, Canada and possibly other countries regarding our Phase III clinical trial of defibrotide to treat VOD with multiple-organ failure. We have entered into a co-sponsoring agreement with the European Group for Blood and Marrow Transplantation, regarding a Phase II/III clinical trial of defibrotide to prevent VOD in children in Europe.

We have entered into an agreement with MDS Pharma Services (U.S.) Inc. to perform clinical research project management services in connection with clinical trials conducted in the United States and agreements with KKS-UKT, GmbH and MDS Pharma Services SpA to provide such services for our clinical trials in Europe. If these third parties fail to comply with applicable regulations or do not adequately fulfill their obligations under the terms of our agreements with them, we may not be able to enter into alternative arrangements without undue delay or additional expenditures, and therefore the clinical trials for our product candidates may be delayed or unsuccessful.

Furthermore, the FDA can be expected to inspect some or all of the clinical sites participating in our clinical trials, or our third party vendors' sites, to determine if our clinical trials are being conducted according to current good clinical practices. If the FDA determines that our third-party vendors are not in compliance with applicable regulations, we may be required to delay, repeat or terminate the clinical trials. Any delay, repetition or termination of our clinical trials could materially harm our business.

Our failure to raise additional funds in the future may delay the development of certain of our product candidates and sale of our products.

The development and approval of our product candidates and the acquisition and development of additional products or product candidates by us, as well as the expansion of our research, regulatory and manufacturing operations, will require a commitment of substantial funds. Our future capital requirements are dependent upon many factors, some of which are beyond our control, including:

· the successful and continued development of our existing product candidates in preclinical and clinical testing;

- the costs associated with protecting and expanding our patent and other intellectual property rights;
- . future payments, if any, received or made under existing or possible future collaborative arrangements;
 - the costs associated with building a future commercial infrastructure;
 - the timing of regulatory approvals needed to market our product candidates; and

market acceptance of our products.

We will need additional funds before we have completed the development of our product candidates. We have no committed sources of additional funds. We cannot assure you that funds will be available to us in the future on favorable terms, if at all. If adequate funds are not available to us on terms that we find acceptable, or at all, we may be required to delay, reduce the scope of, or eliminate research and development efforts or clinical trials on any or all of our product candidates. We may also be forced to curtail or restructure our operations, obtain funds by entering into arrangements with collaborators on unattractive terms or relinquish rights to certain technologies or product candidates that we would not otherwise relinquish in order to continue independent operations.

We are currently dependent on third parties to market and distribute our products in finished dosage form, and we may continue to be dependent on third parties to market and distribute our products and product candidates.

Our internal ability to handle the marketing and distribution functions for our current products and our product candidates is limited and we do not expect to develop the capability to provide marketing and distribution for all of our future products. Our long-term strategy includes either developing marketing and distribution capacity internally or entering into alliances with third parties to assist in the marketing and distribution of our product candidates. We have entered into an agreement with Sigma-Tau Pharmaceuticals, Inc. to market defibrotide to treat VOD in North America, Central America and South America and we may need to develop these capabilities internally or enter into similar agreements to market and distribute our other product candidates. We face, and will continue to face, intense competition from other companies for collaborative arrangements with pharmaceutical and biotechnology companies, for establishing relationships with academic and research institutions, for attracting investigators and sites capable of conducting our clinical trials and for licenses of proprietary technology. Moreover, these arrangements are complex to negotiate and time-consuming to document. Our future profitability will depend in large part on our ability to enter into effective marketing agreements and our product revenues will depend on those marketers' efforts, which may not be successful.

If we are unable to attract and retain key personnel, we may be unable to successfully develop and commercialize our product candidates or otherwise manage our business effectively.

We are highly dependent on our senior management, whose services are critical to the successful implementation of our product acquisition, development and regulatory strategies. If we lose their services or the services of one or more of the other members of our senior management or other key employees, our ability to successfully commercialize our product candidates or otherwise manage our business effectively could be seriously harmed.

Replacing key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of specific skills and experience required to develop, gain regulatory approval of and commercialize products successfully. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key personnel. In addition, under Italian law, we must pay our employees a severance amount based on their salary and years of service if they leave their employment, even if we terminate them for cause or they resign.

In order to expand our operations, we will need to hire additional personnel and add corporate functions that we currently do not have. Our ability to manage our operations and growth will require us to continue to improve our operational, financial and management controls and reporting system and procedures, or contract with third parties to provide these capabilities for us.

All of our manufacturing capability is located in one facility that is vulnerable to natural disasters, telecommunication and information system failures, terrorism and similar problems, and we are not insured for losses caused by all of these incidents.

We conduct all of our manufacturing operations in one facility located in Villa Guardia, near Como, Italy. This facility could be damaged by fire, floods, earthquake, power loss, telecommunication and information system failures, terrorism or similar events. Our insurance covers losses to our facility, including the buildings, machinery, electronic equipment and goods, for approximately €15 million, but does not insure against all of the losses listed above, including terrorism and some types of flooding. Although we believe that our insurance coverage is adequate for our current and proposed operations, there can be no guarantee that it will adequately compensate us for any losses that may occur. We are not insured for business interruption and we have no replacement manufacturing facility readily available.

Our industry is highly competitive and subject to rapid technological changes. As a result, we may be unable to compete successfully or to develop innovative products, which could harm our business.

Our industry is highly competitive and subject to significant and rapid technological change as researchers learn more about diseases and develop new technologies and treatments. While we are unaware of any other products or product candidates that treat or prevent VOD or the apoptosis that our product candidate oligotide is designed to treat, we believe that other companies have products or are currently developing products to treat some of the same disorders and diseases that our other product candidates are designed to treat. These companies include British Biotech plc, Boehringer Ingelheim, Millennium Pharmaceuticals, Inc., ARIAD Pharmaceuticals, Inc., Celgene Corp., Cell Genesys, Inc., Human Genome Sciences, Inc., Chugai Pharmaceutical Co., Ltd., Seattle Genetics, Inc., EntreMed, Inc., Xcyte Therapies, Inc., Amgen, Inc., CuraGen Corporation and Aesgen, Inc.

Many of these competitors have substantially greater research and development capabilities and experience, and greater manufacturing, marketing and financial resources, than we do. In addition, these companies' products and product candidates are in more advanced stages of development than ours or have been approved for sale by the FDA and other regulatory agencies. As a result, these companies may be able to develop their product candidates faster than we can or establish their products in the market before we can. Their products may also prove to be more effective, safer or less costly than our product candidates. This could hurt our ability to recognize any significant revenues from our product candidates.

In May 2003, the FDA designated defibrotide as an orphan drug to treat VOD. In January 2007, the FDA designated defibrotide as an option drug to prevent VOD as well. If the FDA approves the New Drug Applications that we intend to file before approving a New Drug Application filed by anyone else for these uses of defibrotide, the orphan drug status will provide us with limited market exclusivity for seven years from the date of the FDA's approval of our New Drug Application. However, a marketing authorization may be granted for the same therapeutic indications to a similar medicinal product if we give our consent to the second applicant, we are unable to supply sufficient quantities of defibrotide, or the second applicant can establish in its application that the second medicinal product, although similar to defibrotide, is safer, more effective or otherwise clinically superior. In that case, our products would not have market exclusivity. Additionally, while we are not aware of any other company researching defibrotide for these uses, if another company does develop defibrotide for these uses, there is no guarantee that the FDA will approve our New Drug Application before approving anyone else's defibrotide product for these uses, in which case the first product approved would have market exclusivity and our products would not be eligible for approval until that exclusivity expires.

In July 2004, the European Commission designated defibrotide as an orphan medicinal product to both treat and prevent VOD. If the European regulators grant us a marketing authorization for those uses of defibrotide, we will have limited market exclusivity for those uses for ten years after the date of the approval. However, a marketing authorization may be granted for the same therapeutic indications to a similar medicinal product if we give our consent to the second applicant, we are unable to supply sufficient quantities of defibrotide, or the second applicant can establish in its application that the second medicinal product, although similar to defibrotide, is safer, more effective or otherwise clinically superior. In that case, our product would not have market exclusivity.

If we are unable to adequately protect our intellectual property, our ability to compete could be impaired.

Our long-term success largely depends on our ability to create and market competitive products and to protect those creations. Our pending patent applications, or those we may file in the future, may not result in patents being issued. Until a patent is issued, the claims covered by the patent may be narrowed or removed entirely, and therefore we may not obtain adequate patent protection. As a result, we may face unanticipated competition, or conclude that without patent rights the risk of bringing products to the market is too great, thus adversely affecting our operating results.

Because of the extensive time required for the development, testing and regulatory review of a product candidate, it is possible that before any of our product candidates can be approved for sale and commercialized, our relevant patent rights may expire or remain in force for only a short period following commercialization. Our issued United States patents expire between 2008 and 2019, and our United States patents for which we have submitted applications will expire between 2008 and 2026. Our United States patent covering defibrotide expires in 2010, and our U.S. patent covering the chemical process for extracting defibrotide expires in 2008. Our European patent covering both defibrotide and the chemical process for extracting defibrotide expired in April 2007. There may be no opportunities to extend these patents and thereby extend FDA and European approval exclusivity, in which case we could face increased competition for our products that are derived from defibrotide. Patent expiration could adversely affect our ability to protect future product development and, consequently, our operating results and financial position.

We also rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. We intend to eventually license or sell our products in China, Korea and other countries which do not have the same level of protection of intellectual property rights as exists in the United Sates and Europe. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

Risks Related to Ownership of the ADSs

Our largest shareholder exercises significant control over us, which may make it more difficult for you to elect or replace directors or management and approve or reject mergers and other important corporate events.

Our largest shareholder, FinSirton, owned approximately 26.4% of our outstanding ordinary shares at March 31, 2007. Dr. Laura Ferro, who is our Chief Executive Officer and President and one of our directors, together with members of her family, controls FinSirton. As a result, Dr. Ferro and her family, through FinSirton, may substantially control the outcome of all matters requiring approval by our shareholders, including the election of directors and the approval of mergers or other important corporate events. They may exercise this ability in a manner that advances their best interests and not necessarily yours. In particular, Dr. Ferro may use her control over FinSirton's shareholdings in our company to resist any attempts to replace her or other members of our board of directors or management or approve or reject mergers and other important corporate events. Also, the concentration of our beneficial ownership may have the effect of delaying, deterring or preventing a change in our control, or may discourage bids for the ADSs or our ordinary shares at a premium over the market price of the ADSs. The significant concentration of share ownership may adversely affect the trading price of the ADSs due to investors' perception that conflicts of interest may exist or arise.

If a significant number of ADSs are sold into the market, the market price of the ADSs could significantly decline, even if our business is doing well.

Our outstanding ordinary shares, ordinary shares issuable upon exercise of warrants and ordinary shares issuable upon exercise of options are not subject to lock-up agreements. We have filed registration statements registering the resale of most of our outstanding ordinary shares and related ADSs and all of our ordinary shares and related ADSs issuable upon exercise of our outstanding warrants and options. Such registration and ultimate sale of the securities in the markets may adversely affect the market for the ADSs.

Risks Relating to Being an Italian Corporation

The process of seeking to raise additional funds is cumbersome, subject to the verification of a notary public as to compliance with our bylaws and applicable law and may require prior approval of our shareholders at an extraordinary meeting of shareholders.

We were incorporated under the laws of the Republic of Italy. The principal laws and regulations that apply to our operations, those of Italy and the European Union, are different from those of the United States. In order to issue new equity or debt securities convertible into equity, with some exceptions, we must increase our authorized capital. In order to do so, our board must meet and resolve to recommend to our shareholders that they approve an amendment to our bylaws to increase our capital. Our shareholders must then approve that amendment to our bylaws in a formal meeting duly called, with the favorable vote of the required majority, which may change depending on whether the meeting is held on a first or subsequent call. These meetings take time to call. In addition, a notary public must verify

the compliance of the capital increase with our bylaws and applicable Italian law. Further, under Italian law, our existing shareholders and any holders of convertible securities sometimes have preemptive rights to acquire any such shares on the same terms as are approved concurrent with the new increase of the authorized capital pro rata based on their percentage interests in our company. Also, our shareholders can authorize the board of directors to increase our capital, but the board may exercise such power for only five years. If the authorized capital is not issued by the end of those five years, the authorized capital expires, and our board and shareholders would need to meet again to authorize a new capital increase. This means that any warrants we issue pursuant to this authorization would have a maximum term of 5 years, and, to the degree issued after the shareholder meeting, would have a term of less than 5 years. Our shareholders authorized our board of directors to increase our capital by up to €90 million of par value for ordinary shares and €10 million for ordinary shares issuable upon conversion of convertible bonds on April 28, 2006. Italian law also provides that if the shareholders vote to increase our capital, dissenting, abstaining or absent shareholders representing more than 5% of the outstanding shares of our company may, for a period of 90 days following the filing of the shareholders' approval with the Registry of Companies, challenge such capital increase if the increase was not in compliance with Italian law. In certain cases (if, for example, a shareholders' meeting was not called), any interested person may challenge the capital increase for a period of 180 days following the filing of the shareholders' approval with the Registry of Companies. Finally, once our shareholders authorize a capital increase, we must issue all of those authorized shares before the shareholders may authorize a new capital increase, unless the shareholders vote to cancel the previously authorized shares. These restrictions could limit our ability to issue new equity or convertible debt securities on a timely basis.

We are restricted under Italian law as to the amount of debt securities that we may issue relative to our equity.

Italian law provides that we may not issue debt securities for an amount exceeding twice the amount of the sum of the aggregate par value of our ordinary shares (which we call our capital), our legal reserve and any other disposable reserves appearing on our latest Italian GAAP balance sheet approved by our shareholders. The legal reserve is a reserve to which we allocate 5% of our Italian GAAP net income each year until it equals at least 20% of our Italian GAAP capital. One of the other reserves that we maintain on our balance sheet is a "share premium reserve", meaning amounts paid for our ordinary shares in excess of the capital. At December 31, 2006, the sum of our capital, legal reserves and other reserves on our Italian GAAP balance sheet was €35.527 million. If we issue debt securities in the future, until such debt securities are repaid in full, we may not voluntarily reduce our capital or our reserves (such as by declaring dividends) if it results in the aggregate of the capital and reserves being less than half of the outstanding amount of the debt. If our equity is reduced by losses or otherwise such that the amount of the outstanding debt securities is more than twice the amount of our equity, some legal scholars are of the opinion that the ratio must be restored by a recapitalization of our company. If our equity is reduced, we could recapitalize by issuing new shares or having our shareholders contribute additional capital to our company, although there can be no assurance that we would be able to find purchasers for new shares or that any of our current shareholders would be willing to contribute additional capital.

If we suffer losses that reduce our capital to less than €120 thousand, we would need to either recapitalize, change our form of entity or be liquidated.

Italian law requires us to reduce our shareholders' equity and, in particular, our capital (aggregate par value of our ordinary shares) to reflect on-going losses. We are also required to maintain a minimum capital of €120 thousand. At December 31, 2006, our Italian GAAP capital was approximately €11.774 million. If we suffer losses from operations that would reduce our capital to less than €120 thousand, then either we must increase our capital (which we could do by issuing new shares or having our shareholders contribute additional capital to our company) or convert the form of our company into an S.r.l., which has a lower capital requirement of €10 thousand. If we did not take these steps, a court could liquidate our company.

You may not have the same voting rights as the holders of our ordinary shares and may not receive voting materials in time to be able to exercise your right to vote.

Except as described in this annual report and in the deposit agreement for the ADSs, with our depositary, holders of the ADSs will not be able to exercise voting rights attaching to the ordinary shares evidenced by the ADSs on an individual basis. Holders of the ADSs will have the right to instruct the depositary as their representative to exercise the rights attached to the ordinary shares represented by the ADSs. You may not receive voting materials in time to instruct the depositary to vote, and it is possible that you, or persons who hold their ADSs through brokers, dealers or other third parties, will not have the opportunity to exercise a right to vote.

You may not be able to participate in rights offerings and may experience dilution of your holdings as a result.

We may from time to time distribute rights to our shareholders, including rights to acquire our securities. Under our deposit agreement for the ADSs with our depositary, the depositary will not offer those rights to ADS holders unless both the rights and the underlying securities to be distributed to ADS holders are either registered under the Securities Act of 1933, as amended, or exempt from registration under the Securities Act with respect to all holders of ADSs. We are under no obligation to file a registration statement with respect to any such rights or underlying securities or to endeavor to cause such a registration statement to be declared effective. In addition, we may not be able to take advantage of any exemptions from registration under the Securities Act. Accordingly, holders of our ADSs may be unable to participate in our rights offerings and may experience dilution in their holdings as a result.

You may be subject to limitations on transfer of your ADSs.

Your ADSs represented by the ADRs are transferable on the books of the depositary. However, the depositary may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary deem it advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason.

Due to the differences between Italian and U.S. law, the depositary (on your behalf) may have fewer rights as a shareholder than you would if you were a shareholder of a U.S. company.

We are incorporated under the laws of the Republic of Italy. As a result, the rights and obligations of our shareholders are governed by Italian law and our bylaws, and are in some ways different from those that apply to U.S. corporations. Some of these differences may result in the depositary (on your behalf) having fewer rights as a shareholder than you would if you were a shareholder of a U.S. corporation. We have presented a detailed comparison of the Italian laws applicable to our company against Delaware law in "Item 10, Additional Information, Comparison of Italian and Delaware Corporate Laws." We compared the Italian laws applicable to our company against Delaware law because Delaware is the most common state of incorporation for U.S. public companies.

Italian labor laws could impair our flexibility to restructure our business.

In Italy, our employees are protected by various laws giving them, through local and central works councils, rights of consultation with respect to specific matters regarding their employers' business and operations, including the downsizing or closure of facilities and employee terminations. These laws and the collective bargaining agreements to which we are subject could impair our flexibility if we need to restructure our business.

FORWARD-LOOKING STATEMENTS

This annual report may contain forward-looking statements that involve substantial risks and uncertainties regarding future events or our future performance. When used in this annual report, the words "anticipate," "believe," "estimate," "may," "intent," "continue," "will," "plan," "intend," and "expect" and similar expressions identify forward-looking statements. should read statements that contain these words carefully because they discuss our future expectations, contain projections of our future results of operations or of our financial condition or state other "forward-looking" information. We believe that it is important to communicate our future expectations to our investors. Although we believe that our expectations reflected in any forward-looking statements are reasonable, these expectations may not be achieved. The factors listed in the section captioned "Risk Factors," as well as any cautionary language included in this annual report or incorporated by reference, provide examples of risks, uncertainties and events that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. Before you invest in our ordinary shares, you should be aware that the occurrence of the events described in the "Risk Factors" section and elsewhere in this annual report could have a material adverse effect on our business, performance, operating results and financial condition. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements set forth in this annual report. Except as required by federal securities laws, we are under no obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.

You should rely only on the information contained in this annual report. We have not authorized anyone to provide you with information different from that contained in this annual report. The information contained in this annual report is accurate only as of the date of this annual report.

ITEM 4. INFORMATION ON THE COMPANY

HISTORY AND DEVELOPMENT OF THE COMPANY

We are a biopharmaceutical company engaged in the research, development and manufacture 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. Our primary focus is on development of defibrotide for other uses in the United States and Europe,

including to treat and prevent VOD and to treat multiple myeloma. In addition to defibrotide, we sell urokinase and calcium heparin, which are active pharmaceutical ingredients used to make other drugs, sulglicotide, which is intended to be used to treat peptic ulcers, and other miscellaneous pharmaceutical products. We will need to raise additional financing and/or enter into collaborative or licensing agreements in the future to fund continuing research and development for our product candidates.

In May 2006, we transitioned trading of our ADSs from the American Stock Exchange to the Nasdaq Global Market. In June 2006, we consummated a private placement of 1,551,125 ordinary shares together with warrants to purchase 620,450 ordinary shares for gross proceeds of \$17.667 million. In February 2007, we consummated a private placement of 2,354,000 ordinary shares for gross proceeds of \$47.480 million.

We have Italian, United States and international trademark rights in "Gentium," United States and European Union trademark rights in "Gentide," international and Italian trademark rights in "Oligotide" and Italian trademark rights to "Pharma Research" and "Dinelasi". We also have a number of patent registrations issued and pending in Italy, the United States and other countries. This annual report 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 annual report contains market data and industry forecasts that were obtained from industry publications and third parties.

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 annual report. 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. Under our current bylaws, the duration of our company will expire on December 31, 2050. We are incorporated in the Republic of Italy and are governed by the Italian Civil Code.

CAPITAL EXPENDITURES

The following table sets forth our capital expenditures, before retirements, for each year in the three-year period ended December 31, 2006. Most of our 2004 expenditures relate to the major upgrade of our facility we completed in 2004.

	For the Year Ended December 31,									
(in thousands)		2004		2005		2006				
Land and buildings	€	1,244	€	109	€	7				
Plant and machinery		3,690		642		793				
Industrial equipment		169		50		254				
Other		75		88		108				
Leasehold improvements		-		-		46				
Computer Software		-		123		259				
Construction in progress		-		292		16				
Total	€	5,178	€	1,304	€	1,483				

All of these capital expenditures are in Italy. We are financing these expenditures from offerings of our ordinary shares and loans from third parties.

BUSINESS OVERVIEW

We are a biopharmaceutical company engaged in the research, development and manufacture 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. In addition to defibrotide, we sell urokinase and calcium heparin, which are active pharmaceutical ingredients used to make other drugs, sulglicotide, which is intended to be used to treat peptic ulcers, and other miscellaneous pharmaceutical products.

We are building upon our extensive experience with defibrotide, which our predecessors discovered over 20 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 a historical trial conducted by Dana-Farber of 20 patients in 3 centers and 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 41% after treatment with defibrotide, although those results were based upon the treatment of only 150 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.

In May 2003, the FDA designated defibrotide as an orphan drug for use to treat VOD and made grants of \$525 thousand to Dana-Farber supporting research into the use of defibrotide to treat VOD with multiple-organ failure. In 2006, the FDA agreed to make additional grants aggregating up \$800 thousand to Dana-Farber supporting this research, which is being applied against the costs of our Phase III clinical trial of this product candidate that we would otherwise have to pay. We have supported this research with a grant of \$480 thousand to Dana-Farber. In January 2007, the FDA designated defibrotide as an orphan drug for prevention of VOD. In July 2004, the European Commission granted us orphan medicinal product designation for the use of defibrotide to both treat and prevent VOD.

Due to the historically low survival rate and lack of treatments for this condition, we believe there is an immediate need for a drug to treat VOD with multiple-organ failure. The FDA has a "fast track" designation program which is designed to facilitate the development and expedite their review of new drugs that are intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet medical needs. The FDA has approved our application for "fast track" designation for defibrotide to treat VOD with multiple-organ failure occurring after stem cell transplantation by means of injection. The FDA approval process for defibrotide for this use remains dependent upon the successful completion of clinical trials.

If we are successful in obtaining FDA approval and/or European regulatory approval for the initial use of defibrotide, we expect that the cash flows from operations generated by this use of defibrotide will contribute towards our working capital requirements and funding for the further development of defibrotide for other uses and our ultimate goal of FDA and European regulatory approval for other uses of defibrotide, including to prevent VOD and treat multiple myeloma. However, we will need to raise additional funds through debt and/or equity financings, or enter into licensing or similar collaborative arrangements, or both, in addition to cash flow we may generate from operations, to complete the development of these other uses of defibrotide.

If we are successful in bringing these advanced product candidates to market, we intend to use the cash flow from operations generated by them and our current products to continue to discover and develop additional uses of defibrotide, and to develop other drugs, such as oligotide which we believe may protect against damage to blood vessel wall cells caused by a particular cancer treatment and treat renal and kidney failure. These product candidates will be very expensive to develop, and it is likely that we will need to either raise additional funds through debt and/or equity financings, or enter into licensing or similar collaborative arrangements, or both, in addition to cash flow we may generate from operations, to complete these developments.

Our strategy is to continue to enter into collaborative and strategic agreements to assist us in the development, manufacturing and marketing of our products and product candidates. To date, we have licensed 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.

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. Almost all of our revenues during the past three years have come from sales of these products to Sirton. Our revenues from the sales of these products to date have been generated primarily in Italy and, to a small degree, in Korea and amounted to €3.1 million, €3.4 million and €4.1 million in 2004, 2005 and 2006, 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.

Market Overview

The American Cancer Society estimated that in 2007 approximately 1.45 million new patients in the United States will be diagnosed with cancer and that there will be approximately 559,650 patient deaths in 2007 attributable to cancer. Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it can result in death. Most cancer patients will receive one or more of chemotherapy, radiation therapy and hormone therapy.

Chemotherapy, radiation therapy and hormone therapy treatments for cancer are used to target and kill cancer cells. In some cases, the therapy treats the cancer directly; in other cases, it is administered to prepare the patient for a stem cell or bone marrow transplant, which treats cancer or other diseases. Unfortunately, these therapies often have significant negative side effects, including damage to the cells that line the blood vessel walls. The damage to these cells can lead to various disorders of the vascular system. Some patients may not be able to continue with cancer treatments because they develop these vascular system complications; other patients considered at high risk of developing these vascular system complications may not receive optimal cancer treatments or any treatment at all.

VOD. One of the disorders of the vascular system that can result from chemotherapy, radiation therapy, hormone therapy and stem cell and bone marrow transplants is VOD. These therapies can cause extensive damage to the cells that line the walls of small veins in the liver. The body's natural response is to swell or clot the sites of injury, but this blocks or "occludes" the vein. This blockage of the veins is called "Veno-Occlusive Disease." VOD can cause damage to the liver and, in its severe form, leads to failure of the liver and other organs (multiple-organ failure), which usually results in death. The International Bone Marrow Transplant Registry estimates that approximately 45,000 people worldwide received blood and bone marrow transplants, which are types of stem cell transplants, in 2002. Based upon a historical trial conducted by Dana-Farber at three centers consisting of 20 patients and our review of more than 200 articles in the medical literature, we believe that approximately 20% of patients who undergo stem cell transplants develop VOD, approximately one-third of those patients progress to VOD with multiple-organ failure, and only approximately 20% of patients who develop VOD with multiple-organ failure survive more than 100 days after the stem cell transplant. VOD poses a severe risk to the victim's health. We believe that there are no FDA or European regulatory approved treatments at this time for VOD.

Multiple myeloma. Multiple myeloma is a cancer of the plasma cell. The American Cancer Society estimates that about 19,900 new cases of multiple myeloma will be diagnosed in the U.S. during 2007. Approximately 10,790 Americans are expected to die of multiple myeloma in 2007. The 5-year survival rate for patients with multiple myeloma for 1996 - 2002 was approximately 33%.

Strategy

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

- Obtain FDA approval to use defibrotide to treat VOD with multiple-organ failure. The Dana-Farber investigator presented the results from its Phase II clinical trial of defibrotide in patients with VOD with multiple-organ failure at the 47th Annual Meeting of the American Society of Hematology held on December 12, 2005. Results show that the survival rate after 100 days for the 150 patients treated was approximately 41% after 100 days as compared to the historical 100 day survival rate of approximately 20%. The FDA has approved our application for "fast track" designation for defibrotide to treat VOD with multiple-organ failure occurring after stem cell transplantation by means of injection. The FDA approval process for defibrotide for this use remains dependent upon the successful completion of clinical trials. We are sponsoring a Phase III clinical trial of defibrotide for this use in the United States.
- Obtain European regulatory approval to use defibrotide to treat VOD with multiple-organ failure. We believe that we may be able to use results from U.S. clinical trials of defibrotide to treat VOD with multiple-organ failure to apply for European regulatory approval of this product candidate without the need to replicate the clinical trials in Europe.
- Expand approval of defibrotide to include prevention of VOD in Europe and the United States. A preliminary study indicated that defibrotide may provide safe and effective protection against VOD. We are co-sponsoring a Phase II/III clinical trial for this use of defibrotide in children in Europe. We intend to start a Phase II/III clinical trial in the United States of this product candidate and of defibrotide for both the prevention of VOD and the prevention of transplant-associated micro-angiopathy in Europe upon completion of our Phase III clinical trial of defibrotide to treat VOD in the United States. If the clinical trials confirm the preliminary indications, we intend to pursue further development in Europe and the United States, and ultimately to apply for FDA and European regulatory approval for this use.
- Expand approval of defibrotide to include treatment of multiple myeloma. Based on preclinical studies conducted at the Jerome Lipper Multiple Myeloma Center at Harvard University's Dana Farber Cancer Institute, a Phase I/II clinical study of defibrotide to treat multiple myeloma started in December 2005 which we expect will include approximately 10 cancer centers in Italy. The principal investigator for the clinical trial is Dr. Mario Boccadoro, M.D., Division of Hematology, University of Turin, Italy.
- Discover and develop additional product candidates. We and others have conducted preclinical studies of other uses of defibrotide and of other drugs in our pipeline. We plan to continue to develop these product candidates and to further expand the possible markets for our products and product candidates. If we are successful in bringing our initial product candidates to market, our cash flow from operations will fund some of the costs needed to develop these product candidates. These product candidates will be very expensive to develop, and we will need to either raise additional funds through debt and/or equity financings, or enter into strategic partnerships, or both, to complete these developments.

• Increase our marketing capacity, including the use of strategic partnerships. We have entered into a strategic license agreement with Sigma-Tau Pharmaceuticals, Inc. to market defibrotide to treat VOD in North America, Central America and South America upon regulatory approval and have granted Sigma-Tau Pharmaceuticals, Inc. a right of first refusal in those territories to market defibrotide to prevent VOD, to mobilize and increase the number of stem cells available for transplant and in non-intravenous forms. We intend to develop the capacity to market defibrotide in other jurisdictions and to market our other product candidates internally and/or pursue similar marketing agreements with other strategic partners.

Advanced Product Candidates

We have extensive experience developing and manufacturing drugs derived from DNA extracted from natural sources and drugs that are synthetic oligonucleotides. Our most advanced product candidates utilize defibrotide, a drug which our founding company discovered and we currently manufacture and license to others for sale in Italy, to treat and prevent VOD and to treat multiple myeloma. Our most advanced product candidates and their stages of development are set forth below.

The FDA's designation of a product candidate as an orphan drug means that if the FDA approves our New Drug Application for that product candidate before approving a New Drug Application filed by anyone else for that product candidate, we will have limited market exclusivity for that product candidate for seven years from the date of the FDA's approval of our New Drug Application. If the FDA were to approve a New Drug Application filed by someone else for a product candidate prior to the FDA approving our New Drug Application for the product candidate, our ability to market the product candidate would be restricted by their orphan drug exclusivity. Similarly, the Commission of the European Communities designation of a product candidate as an orphan medicinal product means that if the European regulators grant us a marketing authorization for that product candidate, we will have limited market exclusivity for that product candidate for ten years after date of the approval. If the European regulators were to grant a marketing authorization filed by someone else for a product candidate prior to the European regulators granting a marketing authorization for the product candidate, our ability to market the product candidate could be restricted.

The following table sets forth the clinical trials of our advanced product candidates completed or being conducted to date.

Product candidate	Orphan drug designation	trial	Sponsor of clinical trial	Number of centers that participated or are expected to participate in clinical trial	Number of patients that participated or are expected to participate in clinical trial
Defibrotide to treat VOD with multiple-organ failure	United States and Europe	Europe, "Compassionate use" study, results published in 2000	eCommittee of clinical investigators	5	40
		United States, Phase I/II, results published in 2002	Investigator at Dana-Farber Cancer Institute at Harvard University	11	88
		United States, Phase II, results published in December 2005	Investigator at Dana-Farber Cancer Institute at Harvard University	10	150
		United States, Canada and Israel, Phase III, currently enrolling patients	Gentium	35	160
Defibrotide to prevent VOD	United States and Europe	Switzerland, preliminary pilot clinical study completed	University Hospital of Geneva	1	104
				35	270

	Europe and Israel, Phase II/III, pediatric, currently enrolling patients	Gentium and European Group for Blood and Marrow Transplantation		
Defibrotide to treat multiple myeloma	United States, preclinical studies, completed	Investigator at Dana-Farber Cancer Institute at Harvard University	1	0 (study was in rodents)
	Italy, Phase I/II currently enrolling patients	Investigator at the University of Turin	10	24 in the Phase I trial and 50 in the Phase II trial

Defibrotide to treat VOD with multiple-organ failure

Our leading product candidate is defibrotide to treat VOD, and in particular VOD with multiple-organ failure. In May 2003, the FDA designated defibrotide as an orphan drug to treat VOD. In July 2004, the Commission of the European Communities designated defibrotide to treat VOD as an orphan medicinal product, which is similar to being designated an orphan drug by the FDA.

In 2000, the British Journal of Hematology published the results of a 40 patient "compassionate use" study of defibrotide to treat VOD conducted in 19 centers in Europe from December 1997 to June 1999. Nineteen patients, or 47.5%, survived more than 100 days. The publication indicated that four of the 19 patients who survived more than 100 days subsequently died. Twenty-eight patients were judged likely to die or had evidence of multiple-organ failure, and 10, or 36%, of these patients survived more than 100 days. The 100 day survival rate is a milestone generally used to determine transplant success. This publication stated that the defibrotide was generally safely administered with no significant side-effects.

In 2002, the results from 88 patients with VOD with multiple-organ failure following stem cell transplants who were treated with defibrotide from March 1995 to May 2001 were published in *Blood*, the Journal of the American Society of Hematology. This publication reported data on 19 patients treated under individual Investigational New Drug Applications and on a subsequent 69 patient multi-center Phase I/II clinical trial that was conducted under an Investigational New Drug Application filed by a Dana-Farber investigator. The primary goal of the trial was the assessment of the potential effectiveness of the drug and its side effects, if any. All patients in the clinical trial received defibrotide on an emergency basis. This publication stated that 31 patients, or 35.2%, of those patients survived at least 100 days after stem cell transplant with minimal adverse side effects, primarily transient mild hypotension. Thirteen of those 31 patients who had survived more than 100 days had died by October 2001, the latest date for which survival information was available. No mortality from VOD or other toxicity related to the cancer treatment was seen more than 134 days after treatment with defibrotide, with the most common cause of later death being relapse.

The Dana-Farber investigator also sponsored, under its Investigational New Drug Application, a Phase II clinical trial in the United States of defibrotide which enrolled 150 stem cell transplant patients with VOD with multiple-organ failure at eight cancer centers. This trial was funded by us and \$525 thousand in grants from the orphan drug division of the FDA. The purpose of this trial was to evaluate the effectiveness of this drug, including the effect of the drug on the survival rate of patients with VOD with multiple-organ failure, the effective dosage and potential adverse side effects.

The Dana-Farber investigator presented the results from this Phase II clinical trial at the 47th Annual Meeting of the American Society of Hematology on December 12, 2005. Results show that the survival rate after 100 days for the 150 patients treated was approximately 41% after 100 days with minimal adverse events as compared to the historical 100 day survival rate of approximately 20%. We do not have information about the survival rate after 100 days.

The FDA has approved our application for "fast track" designation for defibrotide to treat VOD with multiple-organ failure occurring after stem cell transplantation by means of injection. The FDA approval process for defibrotide for this use remains dependent upon the successful completion of clinical trials. Fast track designation may shorten and facilitate the approval process.

We started a historically controlled Phase III clinical trial in the United States, Canada and Israel for this use in December 2005 in patients with severe VOD. We are the sponsor and will conduct the Phase III clinical trial and any additional clinical trials required by the FDA under our own Investigational New Drug Application that we submitted to the FDA in December 2003. Sponsoring and conducting the additional clinical trials under our own Investigational New Drug Application will allow us to communicate directly with the FDA regarding the development of this drug for marketing approval. In 2006, the FDA agreed to make additional grants aggregating up to \$800 thousand to Dana-Farber supporting this research, which is being applied against the costs of our Phase III clinical trial of this product candidate that we would otherwise have to pay.

Consorzio Mario Negri Sud had been conducting a multi-center Phase II/III clinical trial in Europe and Israel of defibrotide to treat VOD after stem cell transplants that was sponsored by a committee of clinical investigators. The trial was scheduled to include approximately 340 patients, of which approximately 60 had been enrolled at December 31, 2004. We were funding the costs of this clinical trial. The committee of clinical investigators cancelled the trial in October 2005 due to a lack of patients enrolled in the trial. This trial included a randomly selected control group. We believe that patients may have been reluctant to enroll due to the possibility of being placed in the control group and not receiving treatment.

Defibrotide to prevent VOD

We believe there is a significant market opportunity for defibrotide to prevent VOD for patients at risk of developing VOD. Based on our experience researching VOD, we believe that many recipients of high doses of chemotherapy, radiation therapy or hormone therapy or of therapies that prepare for stem cell transplants have an elevated risk of developing VOD. In January 2007, the FDA designated defibrotide as an orphan drug to prevent VOD. In July 2004, the Commission of European communities designated defibrotide to prevent VOD, an orphan medicinal product, which is similar to being designated an orphan drug by the FDA. We believe that there are no FDA or European regulatory approved drugs to prevent VOD at this time.

A preliminary pilot clinical study in Switzerland by the University Hospital of Geneva on defibrotide, in patients at high risk of VOD, suggested that defibrotide may provide effective and safe prevention against VOD. The study tested patients who received stem cell transplants. None of 52 successive transplant patients who received defibrotide as a preventative agent developed VOD. By comparison, 10 of 52 patients who underwent transplants in the same center before the study developed VOD, which was fatal in three cases. The study report indicated that mild to moderate toxicity such as mild nausea, fever and abdominal cramps was documented, although the report stated that it was

difficult to determine whether the toxicity was directly attributable to the defibrotide, the chemotherapy that preceded the stem cell transplants or other drugs used during the stem cell transplants. The study report did not indicate the number of patients who experienced this toxicity.

We are co-sponsoring with the European Group for Blood and Marrow Transplantation, a not-for-profit scientific society, a Phase II/III clinical trial in Europe and Israel of defibrotide to prevent VOD in children. We expect this study, which began enrollment in the first quarter of 2006, to include 270 patients enrolled by several centers in Europe, who will randomly receive either defibrotide or no treatment.

We also plan to co-sponsor with the European Group for Blood and Marrow Transplantation a second Phase II/III clinical trial in Europe of defibrotide to prevent VOD and transplant associated microangiopathy in adults and sponsor a Phase II/III clinical trial of defibrotide to prevent VOD in the United States upon completion of our Phase III clinical trial of defibrotide to treat VOD in the United States.

Defibrotide to treat multiple myeloma

Preclinical studies conducted by the Myeloma Center of the Dana-Farber Cancer Institute at Harvard University on human multiple myeloma in rodents suggests that defibrotide's effect on the cells of blood vessel walls may help increase the effectiveness of other treatments for multiple myeloma. In particular, the overall survival rate of rodents with human multiple myeloma increased and tumor volume decreased when the animals were administered defibrotide in combination with other chemotherapy agents. The Myeloma Center of Dana-Farber is conducting additional preclinical studies of defibrotide's effects on multiple myeloma.

An independent Phase I/II clinical study of defibrotide to treat multiple myeloma in combination with melphalan, prednisone, and thalidomide (MPT) started in December 2005 which we expect to include approximately 10 cancer centers in Italy. The principal investigator for the clinical trial is Dr. Mario Boccadoro, M.D., Division of Hematology, University of Turin, Italy. We will pay part of the costs of this trial. The trial is scheduled to be a dose-escalating, multi-center, non-comparative, open label study designed to assess the safety and the efficacy of Defibrotide with MPT regimen as a salvage treatment in advanced refractory MM patients. The Phase I component of the trial will combine oral MPT with escalating doses of defibrotide to determine the maximum tolerated dosage of defibrotide combined with MPT in 24 patients (three cohorts of eight patients). In the Phase II component of the trial, the oral MPT regimen will be combined with the maximum tolerated dosage of defibrotide and administered to consecutive patients to assess response rate and clinical efficacy.

Additional Product Candidate - Oligotide

We are developing oligotide, another product derived from natural DNA, to further expand our possible markets. One particular chemotherapy agent, fludarabine, is used to treat chronic lymphocytic leukemia. Fludarabine interferes with the growth of cancer cells, but it also causes damage, specifically apoptosis (a series of events in a cell that leads to its death), to blood vessel wall cells, which is an undesirable toxic effect of the chemotherapy. Researchers at the University of Regensburg, Germany, performed preclinical studies showing that oligotide, when used in combination with fludarabine, reduced the level of apoptosis in the cells of blood vessel walls to approximately the same level normally found in cells that have not been treated with fludarabine. We believe there is a potential market for oligotide to be used in conjunction with fludarabine and other cancer therapies to reduce the undesirable toxic effects of these cancer therapies. We may conduct further research on oligotide to investigate its effectiveness in protecting blood vessel cell walls against cancer therapies. In addition, we may explore oligotide's ability to treat and/or prevent renal failure.

If we are successful in bringing our advanced product candidates to market, we intend to use our cash flow from operations generated by them and our current products to continue to fund some of the costs needed to develop oligotide. Oligotide will be very expensive to develop, and we will need to either raise additional funds through debt and/or equity financings, or enter into strategic partnerships, or both, to complete this development.

Current Products

Our current products are all pharmaceutical products. The principal market for these products is Italy. In 2004, 7.8% of our product sales were in Korea, and in 2006, 7.5% of our product sales were in Korea. Our revenues from the sales of our current products were €5.9 million, €6.5 million, €3.1 million, €3.4 million and €4.1 million in 2002, 2003, 2004, 2005 and 2006, respectively. We and our predecessors have manufactured defibrotide since 1986 using a

manufacturing process on which we hold a U.S. patent and a European patent granted in 1991. In addition to defibrotide, we manufacture and sell urokinase and calcium heparin, which are active pharmaceutical ingredients used to make other drugs, sulglicotide, which is intended to treat peptic ulcers, and other miscellaneous pharmaceutical products.

Defibrotide

Currently, we manufacture defibrotide for Sirton, our affiliate. Sirton focuses on processing the defibrotide for either oral administration or intra-venous administration and sells the finished products to Crinos. Crinos markets defibrotide in Italy to both treat and prevent vascular disease with risk of thrombosis under a semi-exclusive license agreement. We have the right to grant a second license in Italy but only to a third party that has been expressly approved by Crinos.

Urokinase

Urokinase is made from human urine and has the potential to dissolve fibrin clots and, as such, is used to treat various vascular disorders such as deep vein thrombosis and pulmonary embolisms. We sell urokinase to Sirton, who uses it as an ingredient in the manufacture of generic drugs. Sirton sells the final formulated generic drugs to other companies, which then sell the drugs to hospitals and pharmacies.

Heparin Calcium

Heparin calcium is made from pig intestines and prevents the blood from clotting. Decreasing clot formation diminishes the likelihood of strokes and heart attacks. Heparin calcium has numerous uses including the treatment of certain types of lung, blood vessel, and heart disorders, and administration during or after certain types of surgery, such as open heart and bypass surgeries. Other uses include the flushing of catheters and other medical equipment. Heparin calcium and its salts are also part of many topical preparations to treat various inflammatory disorders. We sell heparin calcium to Sirton, who uses it as an ingredient in the manufacture of generic drugs. Sirton sells the final formulated generic drugs to other companies, which then sell the drugs to hospitals and pharmacies.

Sulglicotide

Sulglicotide is developed from pig intestines and appears to have ulcer healing and gastrointestinal protective properties. The effects of this drug have prompted us to commission a preclinical investigation by Epistem Ltd., an United Kingdom contract research organization specializing in studies of mucositis caused by anticancer or radiation therapies, into its function in potential prevention and treatment of mucous membrane damage. We also sell sulglicotide to Sirton for use in contract manufacturing of Gliptide, a drug marketed in Italy to treat peptic ulcers. In 2004, we sold sulglicotide to Samil, a Korean company, for use in manufacturing a product of Samil's in Korea. Samil used this supply to manufacture its product for launch and marketing activities. In 2006, we sold 818kg of sulglicotide to Samil. As April 30, 2007, we have received purchase orders from Samil for up to 1.560 kg of sulglicotide in 2007.

Seasonality

Seasonality does not affect our business, except that historically we had higher product sales during the second and fourth quarters. The timing of manufacturer orders can cause variability in sales.

Regulatory Matters

Overview

The preclinical and clinical testing, manufacture, labeling, storage, distribution, promotion, sale, import and export, reporting and record-keeping of our product candidates are subject to extensive regulation by governmental authorities in the United States, principally the FDA and corresponding state agencies, and regulatory agencies in foreign countries.

Non-compliance with applicable regulatory requirements can result in, among other things, injunctions, seizure of products, total or partial suspension of product manufacturing and marketing, failure of the government to grant approval, withdrawal of marketing approvals, civil penalty actions and criminal prosecution. Except as discussed below, we believe that we are in substantial compliance in all material respects with each of the currently applicable laws, rules and regulations mentioned in this section. During biannual inspections of our manufacturing facility by the Italian Health Authority in October 2004 and February 2007, the Italian Health Authority noted by way of observations certain deficiencies in regard to the operation of our facility. We have corrected all of the October 2004 deficiencies, and have a plan to correct the February 2007 deficiencies. Also, a regional Italian regulatory inspector, during an April 2005 inspection of our manufacturing facility, requested that we install an exhaust vent on one of our machines. We have installed this device. In order to obtain FDA approval for the sale of any of our product candidates, the FDA must determine that this facility meets their current good manufacturing practices, or GMP, including requirements for equipment verification and validation of our manufacturing and cleaning processes. The FDA has not yet inspected our facility, but we have recently completed an approximately €7.2 million major overhaul and upgrade in anticipation of such an inspection. We are not aware of any other situation that could be characterized as an incidence of non-compliance in the last three years.

United States Regulatory Approval

FDA regulations require us to undertake a long and rigorous process before any of our product candidates may be marketed or sold in the United States. This regulatory process typically includes the following general steps:

- ·our performance of satisfactory preclinical laboratory and animal studies under the FDA's good laboratory practices regulations;
- ·our obtaining the approval of independent Institutional Review Boards at each clinical site to protect the welfare and rights of human subjects in clinical trials;
- our submission to and acceptance by the FDA of an Investigational New Drug Application (IND) which must become effective before human clinical trials may begin in the United States;
- ·our successful completion of a series of adequate and well-controlled human clinical trials to establish the safety, purity, potency and effectiveness of any product candidate for its intended use;

- ·our submission to, and review and approval by, the FDA of a marketing application prior to any commercial sale or shipment of a product; and
- ·our development and demonstration of manufacturing processes which conform to FDA-mandated current good manufacturing practices.

This process requires a substantial amount of time and financial resources. In 2002, the FDA announced a reorganization that has resulted in the shift of the oversight and approval process for certain therapeutic biologic drugs and the related staff from the Center for Biologics Evaluation and Research to the Center for Drug Evaluation and Research. Our initial product candidate, defibrotide to treat VOD with multiple-organ failure, is being regulated through the latter.

Preclinical Testing

Preclinical tests generally include laboratory evaluation of a product candidate, its chemistry, formulation, stability and toxicity, as well as certain animal studies to assess its potential safety and effectiveness. We must submit the results of these preclinical tests, together with manufacturing information, analytical data and the clinical trial protocol, to the FDA as part of an Investigational New Drug Application, which must become effective before we may begin any human clinical trials. An application automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within this 30-day time period, raises concerns or questions about the intended conduct of the trials and imposes what is referred to as a clinical hold. If one or more of our products is placed on clinical hold, we would be required to resolve any outstanding issues to the satisfaction of the FDA before we could begin clinical trials. Preclinical studies generally take several years to complete, and there is no guarantee that an Investigational New Drug Application based on those studies will become effective, allowing clinical testing to begin.

Clinical Trials

In addition to FDA review of an application, each clinical institution that desires to participate in a proposed clinical trial must have the clinical protocol reviewed and approved by an independent Institutional Review Board. The independent Institutional Review Boards consider, among other things, ethical factors, informed consent and the selection and safety of human subjects. Clinical trials must be conducted in accordance with the FDA's good clinical practices requirements. Prior to commencement of each clinical trial, the sponsor must submit to the FDA a clinical plan, or protocol, accompanied by the approval of the committee responsible for overseeing clinical trials at one of the clinical trial sites. The FDA, and/or the Institutional Review Board at each institution at which a clinical trial is being performed, may order the temporary or permanent discontinuation of a clinical trial at any time if it believes that the clinical trial is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients.

Human clinical trials are typically conducted in three sequential phases that may overlap, including the following:

Phase I

In Phase I clinical trials, a product candidate is typically given to either healthy people or patients with the medical condition for which the new drug is intended to be used. The main purpose of the trial is to assess a product candidate's safety and the ability of the human body to tolerate the product candidate, and may also assess the dosage, absorption, distribution, excretion and metabolism of the product candidate.

Phase II

During Phase II, a product candidate is given to a limited number of patients with the disease or medical condition for which it is intended to be used in order to:

further identify any possible adverse side effects and safety risks;

·assess the preliminary or potential effectiveness of the product candidate for the specific targeted disease or medical condition; and

• assess dosage tolerance and determine the optimal dose for a Phase III trial.

Phase III

If and when one or more Phase II trials demonstrate that a specific dose or range of doses of a product candidate is likely to be effective and has an acceptable safety profile, one or more Phase III trials are generally undertaken to demonstrate clinical effectiveness and to further test for safety in an expanded patient population with the goal of evaluating the overall risk-benefit relationship of the product candidate. The successful demonstration of clinical effectiveness and safety in one or more Phase III trials is typically a prerequisite to the filing of an application for FDA approval of a product candidate.

After approval, the FDA may also require a Phase IV clinical trial to continue to monitor the safety and effectiveness of the product candidate.

The sponsor must submit to the FDA the results of the pre-clinical and clinical trials, together with, among other things, detailed information on the manufacturing and composition of the product, in the form of New Drug Application or a Biologics License Application. Once the submission has been accepted for filing, the FDA has 180 days to review the application and respond to the applicant. The review process is often significantly extended by FDA requests for additional information or clarification.

Post-Approval Regulations

If a product candidate receives regulatory approval, the approval is typically limited to specific clinical uses. Subsequent discovery of previously unknown problems with a product may result in restrictions on its use or even complete withdrawal of the product from the market. Any FDA-approved products manufactured or distributed by us are subject to continuing regulation by the FDA, including record-keeping requirements and reporting of adverse events or experiences. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and state agencies, and are subject to periodic inspections by the FDA and state agencies for compliance with current good manufacturing practices, or GMPs, which impose rigorous procedural and documentation requirements upon us and our contract manufacturers. Failure to comply with these requirements may result in, among other things, total or partial suspension of production activities, failure of the FDA to grant approval for marketing, and withdrawal, suspension, or revocation of marketing approvals.

If the FDA approves one or more of our product candidates, we and our contract manufacturers must provide certain updated safety and effectiveness information. Product changes, as well as changes in the manufacturing process or facilities where the manufacturing occurs or other post-approval changes, may necessitate additional FDA review and approval. The labeling, advertising, promotion, marketing and distribution of a drug or biologic product also must be in compliance with FDA requirements which include, among others, standards and regulations for direct-to-consumer advertising, communication of information relating to off-label uses, industry sponsored scientific and educational activities and promotional activities involving the Internet. The FDA has very broad enforcement authority, and failure to abide by these regulations can result in penalties, including the issuance of a warning letter directing a company to correct deviations from regulatory standards and enforcement actions that can include seizures, fines, injunctions and criminal prosecution.

Fast track and orphan drug designation

The FDA has developed "fast track" policies, which provide the potential for expedited review of an application. However, there is no assurance that the FDA will, in fact, accelerate the review process for a fast track product candidate. Fast track status is provided only for new and novel therapies that are intended to treat persons with life-threatening and severely debilitating diseases, where there is a defined unmet medical need, especially where no satisfactory alternative therapy exists or the new therapy is significantly superior to alternative therapies. During the development of product candidates that qualify for this status, the FDA may expedite consultations and reviews of these experimental therapies. Furthermore, an accelerated approval process is potentially available to product candidates that have been studied for their safety and effectiveness in treating serious or life-threatening illnesses. The FDA can base approval of a marketing application for a fast track product on an effect on a clinical endpoint, or on a surrogate endpoint that is reasonably likely to predict clinical benefit. The FDA may condition the approval of an application for certain fast track products on additional post-approval studies to validate the surrogate endpoint or confirm the effect on the clinical endpoint. Fast track status also provides the potential for a product candidate to have a "priority review." A priority review allows for portions of the application to be submitted to the FDA for review prior to the completion of the entire application, which could result in a reduction in the length of time it would otherwise take the FDA to complete its review of the application. Fast track status may be revoked by the FDA at any time if the clinical results of a trial fail to continue to support the assertion that the respective product candidate has the potential to address an unmet medical need. A product approved under a "fast track" designation is subject to expedited

withdrawal procedures and to enhanced scrutiny by the FDA of promotional materials.

The FDA may grant orphan drug status to drugs intended to treat a "rare disease or condition," which is generally a disease or condition that affects fewer than 200,000 individuals in the United States. If and when the FDA grants orphan drug status, the generic name and trade name of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Aside from guidance concerning the non-clinical laboratory studies and clinical investigations necessary for approval of the application, orphan drug status does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. The FDA may grant orphan drug designations to multiple competing product candidates targeting the same uses. A product that has been designated as an orphan drug that subsequently receives the first FDA approval for the designated orphan use is entitled to orphan drug exclusivity, which means the FDA may not approve any other applications to market the same drug for the same indication, except in very limited circumstances, for seven years from the date of FDA approval. Orphan drug status may also provide certain tax benefits. Finally, the FDA may fund the development of orphan drugs through its grants program for clinical studies.

The FDA has designated defibrotide as an orphan drug both to treat VOD and to prevent VOD and has provided funding for clinical studies for defibrotide to treat VOD. The FDA has approved the Company's application for "fast track" designation for defibrotide to treat VOD with multiple-organ failure occurring after stem cell transplantation by means of injection. The FDA approval process for defibrotide for this use remains dependent upon the successful completion of clinical trials. If our other product candidates meet the criteria, we may also apply for orphan drug status and fast track status for such products.

Market Exclusivity

In addition to orphan drug exclusivity, a product regulated by the FDA as a "new drug" is potentially entitled to non-patent and/or patent exclusivity under the FFDCA against a third party obtaining an abbreviated approval of a generic product during the exclusivity period. An abbreviated approval allows an applicant to obtain FDA approval without generating, or obtaining a right of reference to, the basic safety and effectiveness data necessary to support the initial approval of the drug product or active ingredient. In the case of a new chemical entity (an active ingredient which has not been previously approved with respect to any drug product) non-patent exclusivity precludes an applicant for abbreviated approval from submitting an abbreviated application until five years after the approval of the new chemical entity. In the case of any drug substance (active ingredient), drug product (formulation and composition) and method of use patents listed with the FDA, patent exclusivity under the FFDCA precludes FDA from granting effective approval of an abbreviated application of a generic product until the relevant patent(s) expire, unless the abbreviated applicant certifies that the relevant listed patents are invalid, not infringed or unenforceable and the NDA/patent holder does not bring an infringement action within 45 days of receipt of notification of the certification or an infringement action is brought within 45 days and a court determines that the relevant patent(s) are invalid, not infringed or un-enforceable or 30 months have elapsed without a court decision of infringement.

User Fees

A New Drug Application for a prescription drug product that has been designated as an orphan drug is not subject to the payment of user fees to the FDA unless the application includes as indication for other than a orphan indication.

A supplement proposing to include a new indication for a designated orphan disease or condition in an application is also not subject to a user fee, if the drug has been designated an orphan drug with regard to the indication proposed in such supplement.

There is no specific exemption for orphan drug products from annual product and establishment fees. However, sponsors of orphan drugs can request a waiver of such fees on hardship or other grounds.

Other federal legislation may affect our ability to obtain certain health information in conjunction with our research activities. The Health Insurance Portability and Accountability Act of 1996, or HIPAA, mandates, among other things, the adoption of standards designed to safeguard the privacy and security of individually identifiable health information. In relevant part, the U.S. Department of Health and Human Services, or HHS, has released two rules to date mandating the use of new standards with respect to such health information. The first rule imposes new standards relating to the privacy of individually identifiable health information. These standards restrict the manner and circumstances under which covered entities may use and disclose protected health information so as to protect the privacy of that information. The second rule released by HHS establishes minimum standards for the security of electronic health information. While we do not believe we are directly regulated as a covered entity under HIPAA, the HIPAA standards impose requirements on covered entities conducting research activities regarding the use and disclosure of individually identifiable health information collected in the course of conducting the research. As a result, unless they meet these HIPAA requirements, covered entities conducting clinical trials for us may not be able to share with us any results from clinical trials that include such health information.

Foreign Regulatory Approval

Outside of the United States, our ability to market our product candidates will also be contingent upon our receiving marketing authorizations from the appropriate foreign regulatory authorities whether or not FDA approval has been obtained. The foreign regulatory approval process in most industrialized countries generally includes risks that are similar with the FDA approval process we have described herein. The requirements governing conduct of clinical

trials and marketing authorizations, and the time required to obtain requisite approvals may vary widely from country to country and differ from that required for FDA approval.

European Union Regulatory Approval

Under the current European Union regulatory system, applications for marketing authorizations may be submitted either under a centralized or decentralized procedure. The centralized procedure (which is compulsory for certain categories of drugs) provides for the grant of a single marketing authorization that is valid for all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization that is obtained in accordance with the procedure and requirements applicable in the member state concerned may submit an application to the remaining member states. Within 90 days of receiving the applications and assessment report, each member state must decide whether to recognize approval. The mutual recognition process results in separate national marketing authorizations in the reference member state and each concerned member state.

The centralized procedure

An applicant under the centralized procedure must be a person who is domiciled in the European Union or an entity established in the European Union. The applicant must file a preliminary request containing the information regarding the product candidate, including its description and the location of the production plant, as well as the payment of the application fees. The European Agency for the Evaluation of Medicinal Products (an European Union statutory entity) formally evaluates the preliminary request and indicates either an initial approval to review a full application or a rejection. If the European Agency indicates an initial approval to review a full application, the applicant must submit the application to the European Agency. This application must indicate certain specific information regarding the product candidate, including the composition (quality and quantity) of all the substances contained in the product, therapeutic indications and adverse events, modalities of use, the results of physical, chemical, biological and microbiological tests, pharmacological and toxicity tests, clinical tests, a description of production and related control procedures, a summary of the characteristics of the product as required by the European legislation and samples of labels and information to consumers. The applicant must also file copies of marketing authorizations obtained, applications filed and denials received for the same product in other countries, and must prove that the manufacturer of the product candidate is duly authorized to produce it in its country.

The European Agency (through its internal Committee for Proprietary Medicinal Products) examines the documents and information filed and may carry out technical tests regarding the product, request information from the member state concerned with regard to the manufacturer of the product candidate and, when it deems necessary, inspect the manufacturing facility in order to verify that the manufacturing facility is consistent with the specifications of the product candidate, as indicated in the application.

The Committee generates and submits its final opinion to the European Commission, the member states and the applicant. The Commission then issues its decision, which is binding on all member states. However, if the Commission approves the application, member states still have authority to determine the pricing of the product in their territories before it can be actually marketed.

The European Agency may reject the application if the Agency decides that the quality, safety and effectiveness of the product candidate have not been adequately and sufficiently proved by the applicant, or if the information and documents filed are incomplete, or where the labeling and packaging information proposed by the applicant do not comply with the relevant European rules.

The European Agency has also established an accelerated evaluation procedure applying to product candidates aimed at serious diseases or conditions for which no suitable therapy exists, if it is possible to predict a substantial beneficial effect for patients.

The marketing authorization is valid for five years and may be renewed, upon application, for further five year terms. After the issue of the authorization the holder must constantly take into consideration scientific and technical progress so that the product is manufactured and controlled in accordance with scientific methods generally accepted.

We plan to apply for approvals for our product candidates under the centralized procedure. We believe that the centralized procedure will result in a quicker approval of our product candidates than the decentralized procedure due to the fact that we intend to market our product candidates in many European Union member states, rather than just one.

The decentralized procedure

The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization—obtained in accordance with the procedure and requirements applicable in the member state concerned (see the description below for Italy)—may submit an application to the remaining member states. Within 90 days of receiving the applications and assessment report, each member state must decide whether to recognize approval. The mutual recognition process results in separate national marketing authorizations in the reference member state and each concerned member state.

An application under the decentralized procedure begins with the applicant obtaining a national marketing authorization. An example of the process for obtaining a national marketing authorization in Italy is set forth below. The applicant then submits an application for authorization in other member states and the European Agency. If any of the member states refuses to recognize the authorization by the original member state, the matter is deferred to arbitration proceedings, unless the applicant withdraws its request in the member state refusing recognition. The characteristics of the product in the new applications must be identical to those approved in the original member state.

Italian Regulatory Approval

An application for marketing authorization in Italy must be filed with the competent office of the Italian Agency for the Evaluation of Medical Products ("AIFA") and must contain certain specific information, including the composition (quality and quantity) of all the substances contained in the product, therapeutic indications and adverse events, modalities of use, the results of physical, chemical, biological and microbiological tests, pharmacological and toxicity tests, clinical tests, a description of production and related control procedures and samples of labels and information to consumers. Italian legislation (in accordance with European laws) regulates in great detail the information to be indicated on the packaging. Marketing authorization includes a 10-year protection period during which no one else may use the results of the clinical trials included in the application to apply for a substantially similar drug. This period may be extended where there are new therapeutic indications for the same product, which require new complete clinical studies and justify the same protection as that granted to a new drug.

The AIFA may grant or deny the national authorization after a review of the contents of the application, both from a formal and substantial viewpoint. If an authorization is granted, it is valid for an initial period of five years and, upon application, may be renewed for subsequent five year terms. In particular, the AIFA examines the quality, effectiveness and safety of the product. The AIFA may also order further tests prior to granting or denying the authorization regarding the suitability of the production and control methods described in the application. The AIFA may reject the authorization if the ordinary use of the drug has adverse events, the quality and quantity of the ingredients of the drugs do not correspond to the data indicated in the application, there is a lack, either total or partial, of beneficial therapeutic effects or the information and the documents included in the application do not comply with the requirements provided by law. After the AIFA grants a national authorization, the AIFA may temporarily suspend or revoke the authorization if the information disclosed in the relevant application turns out to be incorrect, the drug no longer meets the necessary quality, effectiveness or safety requirements, or adequate production controls have not been carried out.

Clinical Trials

Italy has recently implemented European legislation regarding good practices in drug clinical trials. As a result, clinical trials are now governed in great detail and failure to comply with these rules means that the results of the trials will not be taken into consideration in evaluating an application for a marketing authorization.

Prior to starting any clinical trial, the organizing and/or financing entity must obtain the approval of the competent health authorities (which vary depending on the type of drug concerned) and obtain the favorable opinion of the Ethical Committee, an independent body. Good practice rules include the following principles:

- •the predictable risks and inconveniences shall not outweigh the beneficial effects for the person subject to the trials and for the other current and future patients;
- •the person participating in the trials must have been duly informed of all the relevant circumstances and in particular of the right to interrupt the experimentation at any time without any prejudicial consequence, and must have given consent after having been properly informed;
- •the right of the participants to their physical and mental integrity, as well as their right to privacy, shall be respected;
- •the entity organizing the trial must have obtained adequate insurance coverage for any damage that may derive to the participants because of the trial;
 - the name of a person to be contacted for any information must be communicated to the participant; and
 - the trial must be conducted by suitably qualified medical personnel.

The trial must be constantly monitored, in particular with regard to serious adverse events which are not envisaged in the approved clinical protocol. Whenever the safety of the participants is in danger due to unexpected serious adverse events, the AIFA must be promptly informed by the entity organizing the trials. Italian legislation provides sanctions (criminal sanctions and administrative fines) in case of violation of specific good practice rules.

Post-approval issues

There are many national legislative instruments (implementing European Union rules) governing controls on drugs in the post-authorization phase. For instance, the holder of the national marketing authorization must promptly record in detail and notify any adverse reaction to the drug of which it becomes aware, regardless of the country where the

reaction occurs, also preparing periodic update reports on these adverse events. For these and other purposes, the holder of the authorization must hire and maintain in its organization a person expert in the field and responsible for all drug controlling and reporting activities.

Moreover, any form of information and advertising aimed at promoting the sale of drugs is governed by specific national legislation (also implementing European Union rules), which provides for the requirements and limitations of advertising messages in general, as well as of other particular promotional activities, such as the organization of conferences regarding certain drugs and the distribution of free samples.

The export of drugs from Italy is not subject to authorization (except for plasma and blood-related products), but the import into Italy from non-European Union countries must be authorized by the Ministry of Health, on the basis of the adequacy of the quality controls to be carried out on the imported drugs.

European orphan drug status

European legislation lays down a particular procedure for the designation of medicinal products as orphan drugs. Such designation may include incentives for the research, development and marketing of these orphan drugs and, in case of a subsequent successful application for a marketing authorization regarding the same therapeutic indications, grants a substantial period of market exclusivity.

A medicinal product - at any stage of its development but in any case prior to the filing of any application for the marketing authorization - may be designated as an orphan drug if the person/entity that has applied for the designation can establish that it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting no more than five persons out of every ten thousand persons in the European Union, or that it is intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition in the European Union and that without incentives it is unlikely that the marketing of the medicinal product would generate sufficient income to cover the necessary investments. Moreover, the sponsor must prove that there is no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the European Union or, if such method exists, that the medicinal product will be of significant benefit to those affected by that condition.

In order to obtain the designation of a medicinal product as an orphan drug, the sponsor shall submit an application to the European Agency for the Evaluation of Medical Products, which must describe the indication of the active ingredients of the medicinal product, the proposed therapeutic indications and proof that the criteria established by the relevant European legislation are met.

The European Agency reviews the application and prepares a summary report to a special Committee for Orphan Medicinal Products, which issues an opinion within 90 days of the receipt of the application. The European Commission must adopt a decision within 30 days of the receipt of the committee's opinion. If the European Commission approves the application, the designated medicinal product is entered in the European Register of Orphan Medicinal Products and the product is eligible for incentives made available by the European Union and by member states to support research into, and development and availability of, orphan drugs.

After the registration, the sponsor must submit to the European Agency an annual report on the state of development of the designated orphan drug. A designated orphan drug may be removed from the Register of Orphan Medicinal Products in three cases:

at the request of the sponsor;

- · if it is established, before the market authorization is granted, that the requirements laid down in the European orphan drug legislation are no longer met; or
 - at the end of the period of market exclusivity (as explained below).

Orphan drug market exclusivity means that the European Union shall not, for a period of 10 years from the grant of the marketing authorization for an orphan drug, accept any other application for a marketing authorization, grant a marketing authorization or accept an application to extend an existing marketing authorization, for the same therapeutic indications in respect of a similar medicinal product. This period, however, may be reduced to six years if

at the end of the fifth year it is established that the criteria laid down in the legislation are no longer met by the orphan drug, or where the available evidence shows that the orphan drug is sufficiently profitable, so that market exclusivity is no longer justified.

However, as an exception to orphan drug market exclusivity, a marketing authorization may be granted for the same therapeutic indications to a similar medicinal product if:

- the holder of the marketing authorization for the orphan drug has given his consent to the second applicant;
- •the holder of the marketing authorization for the orphan drug is unable to supply sufficient quantities of the latter; or
- •the second applicant can establish in its application that the second medicinal product, although similar to the authorized orphan drug, is safer, more effective or otherwise clinically superior.

Raw Materials

We extract many of our products and product candidates from the DNA of pig intestines through well-established processes used by others to manufacture many other drugs. In particular, we extract defibrotide and calcium heparin from swine intestinal mucosa and sulglicotide from swine duodenum. In 2004, we entered into supply agreements with La.bu.nat. S.r.l. for La.bu.nat. to supply us with the swine intestinal mucosa and swine duodenum we need to produce defibrotide, calcium heparin and sulglicotide. We believe La.bu.nat can meet our current and near-term supply needs.

The initial contract term of the swine intestinal mucosa supply agreement expires on December 31, 2007, with automatically renewable three year periods, unless either party notifies the other party in writing six months prior to the annual date of termination. We must give written purchase orders to La.bu.nat at least two months in advance of the date of delivery. For the year ending as of December 31, 2007, the purchase price has been fixed at €0.1757 per kg. After December 31, 2007, both parties may request renegotiation of the price with reference to market trends and manufacturing costs. In the event that the parties cannot agree on a renegotiated price, an arbitrator will determine the new price.

The initial contract term of the swine duodenum supply agreement expires on December 31, 2007, with automatically renewable three year periods, unless either party notifies the other party in writing six months prior to the annual date of termination. We must give written purchase orders to La.bu.nat at least four months in advance of the date of delivery. For the year ending as of December 31, 2007, the purchase price has been fixed at €1.0157 per kg, subject to a 5% discount for quantities purchased over 90,000 kg.

While we have no current arrangements with any other supplier of our critical raw material, we believe there are suitable alternative sources of pig intestine. The FDA and other regulatory bodies may evaluate La.bu.nat.'s or any other supplier's processing centers as part of approving our product candidates and our ongoing production of our products.

Our other product, urokinase, is derived from human urine, which is subject to similar regulatory review. While we currently purchase the urine from only one supplier of urine and do not have a fixed supply agreement with that supplier, we believe there are suitable alternative sources of the material.

Historically, there has been no significant price volatility for any of our raw materials. It is possible that widespread illness or destruction of pigs could result in volatility of the price of pig intestines.

Competition

Our industry is highly competitive and characterized by rapid technological change. Significant competitive factors in our industry include:

controlling the manufacturing costs;

the effectiveness and safety of products;

the timing and scope of regulatory approvals;

- •the willingness of private insurance companies and government sponsored health care programs to reimburse patients or otherwise pay for the drugs and the related treatments;
- •the availability of alternative treatments for the disorders as well as the availability of alternatives to the treatments which cause or contribute to these disorders (such as chemotherapy, radiation therapy, stem cell transplants, etc.);

the ability to perform clinical trials, independently or with others;

intellectual property and patent rights and their protection; and

sales and marketing capabilities.

We face competition in both the development and marketing of our product candidates. During development alternative treatments for similar or completely different disorders may limit our ability to get participants or co-sponsors for clinical trials with our product candidates. Any product candidates that we successfully develop that are approved for sale by the FDA or similar regulatory authorities in other countries may compete with products currently being used or that may become available in the future. Many organizations, including large pharmaceutical and biopharmaceutical companies, as well as academic and research organizations and government agencies, may be interested in pursuing the research and development of drug therapies that target the blood vessel wall. Many of these organizations have substantially greater capital resources than we have, and greater capabilities and resources for basic research, conducting preclinical studies and clinical trials, regulatory affairs, manufacturing, marketing and sales. As a result, our competitors may develop or license products or other novel technologies that are more effective, safer or less costly than our existing products or products that are being developed by us, or may obtain regulatory approval for products before we do. Clinical development by others may render our products or product candidates noncompetitive.

While we are unaware of any other products or product candidates that treat or prevent VOD or the apoptosis that our product candidate oligotide is designed to treat, we believe that other companies have products or are currently developing products to treat some of the same disorders and diseases that our other product candidates are designed to treat.

Our statements above are based on our general knowledge of and familiarity with our competitors.

Legal Proceedings

Currently, we are not a party to or engaged in any material legal proceedings.

ORGANIZATIONAL STRUCTURE

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. In 1993, FinSirton formed our company as Pharma Research S.r.L., an Italian private limited company, to pursue research and development activities of prospective pharmaceutical specialty products. FinSirton is our largest shareholder, and is controlled by Dr. Laura Ferro, who is our Chief Executive Officer and President and one of our directors, together with her family. In December 2000, we changed from a private limited company to a corporation and 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 have no subsidiaries.

PROPERTY, PLANT AND EQUIPMENT

Manufacturing and Facilities

We own a manufacturing facility near Como, Italy which, at December 31, 2006, is subject to a mortgage securing repayment of an aggregate of €2.8 million of debt owed to Banca Nazionale del Lavoro. The manufacturing facility is 2,350 square meters in size. In order to obtain FDA approval for the sale of any of our product candidates, the FDA must determine that this facility meets their current good manufacturing practices, or GMP, including requirements for equipment verification and validation of our manufacturing and cleaning processes. The FDA has not yet inspected our facility, but in 2004 we completed an approximately €7.2 million major overhaul and upgrade in anticipation of such an inspection. We have also upgraded our quality control laboratory equipment and upgrade equipment for our molecular biology and cell culture laboratories in 2005 in further anticipation of an FDA inspection at a cost of approximately €513 thousand.

We incurred costs of €207 thousand to purchase an electrical meter and back-up electrical power generator, including an advance payment to the utility company. We currently use Sirton's electrical meter, but Italian law requires us to have separate equipment. We are waiting for permission from a local authority to install a back-up generator that we have bought. In the event of a power outage, such back-up generator would prevent interruption of our operations and allow us to be independent from Sirton. We are planning to install it by December 2007, when the manufacturing facility halts production and closes down for annual maintenance. We are also planning to replace storage tanks and distribution piping for certain solvents. We anticipate that the replacement of the storage tanks will be necessary to satisfy the FDA that the facility meets their good manufacturing practices. We expect to complete these upgrades in 2007.

We raised the money to fund these improvements from our sale of our Series A notes and our initial public offering, and we may also use some of the net proceeds of our initial public offering and our October 2005 private placement, June 2006 private placement and February 2007 private placement to pay for future improvements.

We produce defibrotide, sulglicotide and calcium heparin at this facility. Defibrotide and calcium heparin are produced simultaneously. In 2006, we replaced a principal reactor in the defibrotide production line and separated the defibrotide production line from the sulglicotide line by installing an additional reactor. These improvements allow us to produce both defibrotide and sulglicotide simultaneously and will allow us to double our potential capacity to

manufacture defibrotide and sulglicotide, although we would have to hire new employees to do so.

We typically operate our manufacturing facility on two eight hour shifts per day. Our estimated current production, our production capacity (assuming we do not hire additional employees to produce any sulglicotide at the same time) and percentage of utilization for defibrotide and calcium heparin for the fiscal year 2007 are set forth below:

Estimated Current Production Levels (kilograms/year)	Maximum Production Capacity With Two Eight Hour Shifts (kilograms/year)	Percentage of Utilization	
4,000	4,400		90%
Estimated Current Production Levels (millions of units/year)	Maximum Production Capacity With Two Eight Hour Shifts (millions of units/year)	Percentage of Utilization	
18,700	41,000		46%
	Production Levels (kilograms/year) 4,000 Estimated Current Production Levels (millions of units/year)	Estimated Current Production Levels (kilograms/year) 4,000 Estimated Current Production Estimated Current Production Levels (millions of units/year) Production Capacity With Two Eight Hour Shifts (millions of units/year) Production Capacity With Two Eight Hour Shifts (millions of units/year)	Estimated Current Production Production Levels (kilograms/year) 4,000 Maximum Production Estimated Current Production Estimated Current Capacity With Two Production Estimated Current Capacity With Two Production Levels (millions of (millions of units/year) Utilization Production Estimated Current Capacity With Two Production Levels (millions of Utilization) Percentage of Utilization

We currently manufacture defibrotide to treat and prevent venous thrombosis in Italy. Compared to the dosage necessary to treat and prevent VOD and to treat multiple myeloma, the treatment for this current use is significantly longer and therefore the overall amount of defibrotide is much larger than would be used to treat or prevent VOD or to treat multiple myeloma. Accordingly, if we obtain FDA or European regulatory approvals for those new uses, a smaller portion of our maximum capacity would be required for the manufacture of defibrotide for those additional uses.

Our estimated current production, production capacity (assuming we do not hire additional employees to produce defibrotide or calcium heparin at the same time) and percentage of utilization for sulglicotide for the fiscal year 2007 are set forth below:

		Maximum	
		Production	
	Estimated Current	Capacity With Two	
	Production Level		Percentage of
Product	(kilograms/year)	(kilograms/year)	Utilization
Sulglicotide	2,200	2,750	80%

Our contract with Samil requires us to increase our production of sulglicotide to 2,600 kilograms in the period from June 20, 2005 to June 20, 2006 and to 3,400 kilograms in the period from June 20, 2006 to June 20, 2007. However, we believe it would be possible to increase the production of our products and to manufacture defibrotide and sulglicotide simultaneously by adding additional shifts of employees. In August 2006, we installed a new reactor totally dedicated to the production of sulglicotide and we are planning to replace storage tanks and distribution pipings for certain solvents. Such installation will allow us to increase the production capacity of both defibrotide and sulglicotide, although we would need to hire additional employees to run both simultaneously.

Our estimated current production, production capacity and percentage of utilization for urokinase for the fiscal year 2007 are set forth below:

Product Estimated Current Percentage of

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	Production Level (millions of units/year)	Maximum Production Capacity With One Eight Hour Shift (millions of	Utilization
		units/year)	
Urokinase	19.2	37	52%

Our facility is subject to customary regulation by regional agencies regarding worker health and safety, fire department, water, air, noise and environmental pollution and protection by Azienda Sanitaria Locale and Agenzia Regionale Prevenzione e Ambiente. We have engaged Lariana Depur, a consortium that specializes in the treatment of waste water, to treat our waste water. We monitor our waste water to control the levels of nitrogen, chlorides and chemical oxygen before delivering the waste water to Lariana Depur for additional treatment. We do not expect any difficulties in complying with these regulations. Also, we installed two scrubbers to reduce the odors and chemicals released into the air by the facility to comply with Italian regulations.

We lease 2,350 square meters of office and laboratory space from FinSirton. We also lease 100 square meters of laboratory and manufacturing space for urokinase from Sirton.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion together with the financial statements, related notes and other financial information included elsewhere in this annual report. This discussion may contain predictions, estimates and other forward-looking statements that involve risks and uncertainties, including those discussed under "Risk Factors" and elsewhere in this annual report. These risks could cause our actual results to differ materially from any future performance suggested below.

OPERATING RESULTS

Overview

We manufacture defibrotide at our facility. We expect that by the second quarter of 2007, we will engage our affiliate, Sirton, to process the defibrotide and then we will sell the finished product to Crinos S.p.A., a subsidiary of Stada Arzneimittel AG. Currently, we sell the defibrotide to Sirton, which processes it and sells the finished products to Crinos. Crinos markets defibrotide in Italy to both treat and prevent vascular disease with thrombosis under a distribution agreement with us. We also manufacture and sell to Sirton two active pharmaceutical ingredients, urokinase and calcium heparin, used by Sirton to make generic drugs, and sulglicotide, which is intended to be used to treat peptic ulcers. We sell sulglicotide to unrelated third parties. We also manufacture a variety of other miscellaneous pharmaceutical products.

For each of the five years ended December 31, 2006, the sale of defibrotide, urokinase, calcium heparin, sulglicotide and our other products to Sirton amounted to approximately 100%, 100%, 92%, 97% and 92%, respectively, of our total product sales. The price of defibrotide to Sirton was based on comparable sale prices in years prior to 2002 to unrelated third-parties. The price for urokinase, calcium heparin, sulglicotide and our other products is based on comparable market prices charged by other manufacturers.

We have also generated revenue from research and development agreements with co-development partners, from the sale of rights to our intellectual property, and from licensing agreements. Our licensing agreements have included up-front payments, some of which are paid based on achieving defined milestones and royalties from product sales in the licensed territories. Our revenues by type are as described below:

(in thousands)		2004	2005	2006
Product sales:				
Defibrotide	€	1,424 €	2,476 €	2,316
Urokinase		1,316	684	1,271
Calcium heparin		51	125	89
Sulglicotide		243	53	375
Other		79	23	24
Total product sales		3,113	3,361	4,075
Other income		583	280	249

Total revenue ϵ 3,696 ϵ 3,641 ϵ 4,324

Of our product sales in the periods shown in the table above, all were sales in Italy except for 7.8% during the year ended December 31, 2004, and 7.5% during the year ended December 31, 2006 which were sales of sulglicotide in Korea. Substantially most of our other income was for licensing the rights to our product candidates in the United States and Canada.

Our cost of goods sold consists of material costs, direct labor and related benefits and payroll burden, utilities, quality control expenses, depreciation of our facility and other indirect costs of our facility.

The gross margin from our current revenues contributes towards our general and administrative expenses, research and development expenses, and capital expenditures. Our general and administrative expenses include compensation for our executive officers, office facilities, accounting and human resources, information technology services, professional fees and other corporate expenses, including public company expenses. Some of these services were provided pursuant to contracts with Sirton and FinSirton. We have implemented plans to decrease our reliance on shared services from these affiliates over time. As of December 31, 2006, we are providing our own purchasing, logistic, quality assurance, accounting, controlling and reporting services, treasury, regulatory and information technology departments and continue to obtain corporate services, payroll services, infrastructure costs and quality control services from these affiliates. In 2007, we are planning to internalize some of these services.

We expect to continue to incur net losses as we continue the development of our product candidates, apply for regulatory approvals and expand our operations.

As of December 31, 2006, substantially all of our cash and cash equivalents were held in accounts at financial institutions located in the Republic of Italy and the United States, that we believe are of acceptable credit quality. We invest our cash in liquid instruments that meet high credit quality standards and generally have maturity at the date of purchase of less than three months. We are exposed to exchange rate risk with respect to certain of our cash balances that are denominated in U.S. dollar. As of December 31, 2006, we held a cash balance of \$8.8 million that was denominated in U.S. dollar. This dollar-based cash balance is available to be used for future acquisitions and other liquidity requirements that may be denominated in such currency. We are exposed to unfavorable and potentially volatile fluctuations of the U.S. dollar against the Euro (our functional currency).

Any increase (decrease) in the value of the U.S. dollar against the Euro will result in unrealized foreign currency translation losses (gains) with respect to the Euro. The value of the Euro against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in political and economic conditions. Any change in the value of the Euro relative to other currencies that we transact business with in the future could materially and adversely effect our cash flows, revenues and financial condition. To the extent we hold assets denominated in U.S. dollars, any appreciation of the Euro against the U.S. dollar could result in a charge to our operating results and a reduction in the value of our U.S. dollar denominated assets upon remeasurement.

In addition, we are exposed to foreign currency risks to the extent that we enter into transactions denominated in currencies other than our functional currency, such as investments, programming costs, payables that are denominated in currency other than our functional currency. Changes in exchange rates with respect to these items will result in unrealized or realized foreign currency transaction gains and losses upon settlement of the transactions.

We are exposed to changes in interest rates primarily as a result of our borrowings. Our primary exposure to variable rate debt is through the EURIBOR and we have entered into various derivative transactions to manage exposure to movements in interest rates. We use interest rate cap agreements that lock in a maximum interest rate should variable rates rise, but which enable it to otherwise pay lower market rates.

Other than as described in this annual report, we do not believe that there are any governmental economic, fiscal, monetary or political policies or factors that have materially affected, or could materially affect, directly or indirectly, our current operations or investments by Americans. When and if our product candidates are approved for commercialization, we will be subject to a number of additional such policies and factors, including, for example, reimbursement by Medicare and Medicaid and similar European policies.

Critical Accounting Policies and Estimates

Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. Actual results could differ from those estimates.

We believe the following policies to be the most critical to an understanding of our financial conditions and results of operations because they require us to make estimates, assumptions and judgments about matters that are inherently uncertain.

Revenue Recognition

Through 2006, our primary source of revenue was from the sale of products to our affiliate, Sirton. We recognize revenue from product sales when ownership of the product is transferred to and accepted by the customer, the sales price is fixed and determinable, and collectibility is reasonably assured. Provisions for returns and other adjustments related to sales are provided in the same period the related sales are recorded on the basis of historical rates of return. Historically our returns have been insignificant. However, given our intent to grow our non-affiliate revenues, we expect that in the future we will be required to periodically estimate the amount of goods subject to return.

Licensing and royalty agreements generally contemplate that our technology or intellectual property will be utilized to commercialize or produce certain pharmaceutical products and that we will receive certain fees pursuant to these agreements. Up-front payments related to licensing agreements are deferred and recognized ratably over the life of the agreement. Royalty revenues are recognized in proportion to the underlying sales. We also derive revenues from research and development agreements with co-development partners. We initially defer milestone revenues on such arrangements and subsequently recognize them as income in proportion to the costs incurred for the related development phase and in accordance with the contract terms. Performance milestone payments are not subject to forfeiture. We recognize revenue from these contractual arrangements according to Staff Accounting Bulletin No. 104, "Revenue Recognition." When necessary, we divide our agreements into separate units of accounting as required by Emerging Issues Task Force No. 00-21, "Revenue Arrangements with Multiple Deliverables" before using the applicable revenue recognition policy for each arrangement within the agreement. Accordingly, we recognize revenues on performance milestones contracts only when we have met specific targets or milestones set forth in the contracts. We defer and recognize as revenue non-refundable payments received in advance that are related to future performance over the life of the related research project.

We have used and expect to continue to enter into arrangements that have multiple deliverables. The timing and amount of revenue recognition is subject to our estimates of the relative fair values of the individual components of an agreement. In connection with recording revenue, we must make estimates and assumptions determining the expected conversion of the revenue streams to cash collected. The cash conversion estimation process requires that our management make assumptions based on historical results, future expectations, the economic and competitive environment and changes in the credit worthiness of customers, and other relevant factors. If these assumptions prove to be incorrect, our actual conversion rate of recorded revenue to cash may be lower than expected and we would be required to increase our allowance for doubtful accounts.

Our current estimate of bad debt expense is zero, as approximately 95% of our product sales are with one affiliate. If we increased our estimate of bad debt to 1% of sales, our operating results would have been lower by approximately €31 thousand, €34 thousand and €41 thousand for the three years ended December 31, 2004, 2005 and 2006, respectively. These amounts would have a material impact on our results of operation and our shareholder's equity, but no impact on our cash flow in those periods.

Inventories

We state inventories at the lower of cost or market, determining cost on an average cost basis. We periodically review inventories and reduce items that we consider outdated or obsolete to their estimated net realizable value. We estimate reserves for excess and obsolete inventories based on inventory levels on hand, future purchase commitments, and current and forecast product demand. Our reserve level and as a result our overall profitability, is therefore subject to our ability to reasonably forecast future sales levels versus quantities on hand and existing purchase commitments. Forecasting of demand and resource planning are subject to extensive assumptions that we must make regarding, among other variables, expected market changes, overall demand, pricing incentives and raw material availability. Significant changes in these estimates could indicate that inventory levels are excessive, which would require us to reduce inventories to their estimated net realizable value. We capitalize inventory costs associated with certain by-products, based on management's judgment of probable future commercial use and net realizable value. We could be required to permanently write down previously capitalized costs related to commercial inventory upon change in such judgment, a delay in commercialization, delay of approval by regulatory bodies, or other potential factors. In the highly regulated industry in which we operate, raw materials, work in progress and finished goods inventories have expiration dates that must be factored into our judgments about the recoverability of inventory cost. Additionally, if our estimate of a product's demand and pricing is such that we may not fully recover the cost of inventory, we must consider that in our judgment as well. In the context of reflecting inventory at the lower of cost or market, we will record a permanent inventory write-down as soon as a need for such a write down is determined.

Impairment of Long-lived Assets

Our long-lived assets consist primarily of product rights and property and equipment. In accordance with Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" (SFAS 144), we evaluate our ability to recover the carrying value of long-lived assets used in our business, considering changes in the business environment or other facts and circumstances that suggest their value may be impaired.

To assess impairment of property, manufacturing facility and equipment and amortizing intangible assets for purposes of U.S. generally accepted accounting principles, we use the guidance outlined in SFAS 144. If, based on the preceding discussion, our management has concluded that impairment indicators exist, we will initially review by assessing the undiscounted cash flows expected to be derived from the asset or group of assets, comparing the lowest level of total expected undiscounted cash flow to the carrying value. If the carrying value of the asset or the group of assets exceeds the sum of the undiscounted cash flows, impairment is considered to exist. An impairment charge is assessed by comparing the assets' fair value to the carrying value. Fair value can be calculated by a number of different

approaches, including discounted cash flow, comparables, market valuations or quoted market prices. The process and steps required to assess the possible impairments of assets, including the identification of possible impairment indicators, assessing undiscounted cash flows, selecting the appropriate discount rate, the calculation of the weighted average cost of capital and the discounts or premiums inherent in market prices requires a substantial amount of management discretion and judgment. If actual results differ from these estimates, or if we adjust these estimates in future periods, operating results could be significantly affected.

Research and Development Expenses

We have several activities and cost drivers that we collectively refer to as "research and development." These activities include salaries and benefits of our direct employees, facility costs, overhead costs, clinical trial costs and related trial product manufacturing costs, contracted services, subcontractor costs and other research and or developmental related costs. Research and development costs, including any upfront payments and milestones paid to collaborators, are expensed as incurred. The timing of upfront fees and milestone payments in the future may cause variability in future research and development expenses. Clinical trial costs include costs associated with contract research organizations. The billings that we receive from contract research organizations for services rendered can lag for several months. We accrue the estimated costs of the contract research organizations related services based on our estimate of management fees, site management and monitoring costs and data management costs. Our research and development department is in continuous communication with our contract research organizations suppliers to assess both their progress on the underlying study and the reasonableness of their cost estimates. Differences between estimated trial costs and actual have not been material to date, and any changes have been made when they become known. Under this policy, research and development expense can vary due to accrual adjustments related to the underlying clinical trials and the expenses incurred by the contract research organizations. For the years ended December 31, 2004, 2005 and 2006, we have incurred research and development expenses of €2.922 million, €4.557 million and €8.927 million, respectively. As of December 31, 2006, we had €13.158 million of future payables under outstanding contracts with various contract research organizations that are not revocable. Most of these contracts are on a cost plus basis or actual cost basis.

Share-Based Compensation

We have adopted the fair value based method of accounting for share-based employee compensation in accordance with the provisions of Statement of Financial Accounting Standards No. 123R, "Share Based Payment" (SFAS 123R). SFAS 123R requires us to estimate a significant number of variables in order to derive a fair value of an equity based instrument. For example, the risk of the underlying deliverable equity instruments (i.e., our ordinary shares) as compared to the market as a whole, is generally reflected in our unique "Beta". This is a unique measurement to each company, and requires several assumptions. The most common and generally accepted valuation models related to option pricing also include many significant assumptions related to such variables as dividend yields, share prices and the estimated life of the option before being exercised. The actual selection of which valuation model to use requires judgment, as there are several models to choose from.

In using the option pricing model that we have selected, changes in the underlying assumptions have the following effect on the resulting fair value output:

	Results in a fair value		
An increase to the:	estimate that is:		
Price of the underlying share	Higher		
Exercise price of option	Lower		
Expected volatility of stock	Higher		
Expected dividends on stock	Lower		
Risk-free interest rate	Higher		
Expected term of option	Higher		

In our current valuation, we consider the volatility factor to be critical. We have used a weighted average 40% factor based on what we believe is a representative sample of similar biopharmaceutical companies. However, this sample is not perfect as it omits, for example, Italian companies, due to the fact that there are a limited number of companies such as ourselves publicly traded in the U.S. market. If we increased our volatility factor to 80%, the fair value of our

stock options granted in 2004, 2005 and 2006 would have increased by \$41 thousand, \$1,857 thousand and \$443 thousand, respectively, and would have resulted in \$23 thousand, \$140 thousand and \$173 thousand in additional compensation expense in 2004, 2005 and 2006, respectively. Therefore, significant changes to these estimates could have a material impact on the results of our operations.

Accounting for income taxes

We use the liability method of accounting for income taxes, as set forth in Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes." Under this method, we recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax basis of assets and liabilities and net operating loss carry-forwards, all of which we calculate using presently enacted tax rates. We establish valuation allowances when necessary to reduce deferred tax assets to the amount that we expect to be realized.

In our accompanying financial statements we have reserved for all of our deferred tax assets as we currently believe that it is more likely than not that the assets will not be recoverable during their estimated life. In establishing our deferred tax position, in particular deferred tax assets, we only establish the tax asset if we believe that it is probable that this asset will be an allowable deduction in our tax jurisdiction. The assessment of the "recoverability" of that asset is a separate exercise, which uses the "more likely than not" criteria. In Italy, which is currently the only taxing jurisdiction where we are required to file a tax return, we have assessed that due to the limited lives of our net operating losses (limited to 5 years), we believe that these assets will not be recoverable before expiration. Although we have paid some corporate income taxes in the past, the significant amount of other tax assets in conjunction with the higher level of expected expenditures, the already existing net operating losses and limited taxable income expected in the near future resulted in our estimating that a complete valuation allowance was necessary. Significant changes either to the underlying facts, such as an increase in the net operating loss life in Italy, or our estimates, such as our ability to generate meaningful taxable income, could result in changes to our existing valuation allowance. Such changes could have a material impact on our results of operations or financial position.

Recent Accounting Pronouncements

On July 13, 2006, FASB Interpretation (FIN) No. 48, Accounting for Uncertainty in Income Taxes — An Interpretation of FASB Statement No. 109, was issued. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, Accounting for Income Taxes. FIN 48 also prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The new FASB standard also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition and is effective for fiscal years beginning after December 15, 2006. We are currently evaluating the impact of this standard on our financial statements.

On September 6, 2006, FASB Statement No 157, Fair Value Measurements, or SFAS 157, was issued. This Statement defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles (GAAP), and expands disclosures about fair value measurements. This Statement applies under other accounting pronouncements that require or permit fair value measurements, the Board having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, this Statement does not require any new fair value measurements. The statement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. We are currently evaluating the impact of this standard on our financial statements.

On September 13, 2006, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 108, Considering the Effects of Prior Year Misstatements When Quantifying Misstatements in Current Year Financial Statements, or SAB 108. SAB 108 provides guidance on how prior year misstatements should be taken into consideration when quantifying misstatements in current year financial statements for the purposes of determining whether the current year's financial statements are materially misstated. SAB 108 becomes effective for accounting years ending after November 15, 2006. The adoption of this SAB did not have any impact on our financial statements.

Results of Operations

The following tables set forth our results of operations:

		For The Years Ended December 31,				
		2004 2005			2006	
Amounts in thousands except share and per share						
data		Amount		Amount		Amount
Sales to affiliates	€	2,870	€	3,260	€	3,754
Third party product sales		243		101		321
Total product sales		3,113		3,361		4,075
Other income and revenues		583		280		249
Total Revenues		3,696		3,641		4,324
Operating costs and expenses:						
Cost of goods sold		2,579		2,911		3,092
Charges from affiliates		1,665		1,047		854
Research and development		2,922		4,557		8,927
General and administrative		1,194		2,284		5,421
Depreciation and amortization		89		118		261
Depreciation and amortization		8,449		10,917		18,555
		0,112		10,517		10,555
Operating loss		(4,753)		(7,276)		(14,231)
Foreign currency exchange gain (loss), net		(55)		(249)		(627)
Interest income (expense) net		(2,192)		(4,148)		490
interest income (expense) net		(2,1)2)		(1,110)		.,,
Pre-tax loss		(7,000)		(11,673)		(14,368)
Income tax expense (benefit)						
Current		65				-
Deferred		(37)		646		-
Total income tax expense		28		646		-
Net loss	€	(7,028)	€	(12,319)	€	(14,368)
Net loss per share:						
Basic and diluted net loss per share		(1.41)		(1.78)		(1.33)
Weighted average shares used to compute basic and						
diluted net loss per share		5,000,000		6,933,104		10,808,890

Year Ended December 31, 2006 Compared to Year Ended December 31, 2005

Product sales.

Our sales were ≤ 4.08 million for 2006 compared to ≤ 3.36 million in 2005. The timing of customer orders can cause variability in sales. In 2006 total product sales increased 21.2%. The increase in product sales is mainly due to the increase in sales volume. Sales to affiliates represented 92% of the total product sales and increased 15% to ≤ 3.75 million. The increase in sales to affiliates is mainly due to the higher sales volume of our active pharmaceutical ingredient urokinase, which represents 31% (or ≤ 1.27 million) and 20% (or ≤ 684 million) of the total product sales in

2006 and 2005, respectively. Sales to third parties increased to €321 thousand mainly due to higher sales volume of the active pharmaceutical ingredient sulglicotide in the Korean market. We expect future growth in sulglicotide revenue due to higher penetration and positioning of the finished product in the Korean market.

Other income and revenues

Our other income and revenues was €249 thousand for 2006 compared to €280 thousand in 2005. Other income is primarily due to our recognition of revenues for performance milestone payments received under our license agreement with Sigma-Tau and upfront payments recognized ratably over the expected life of the research period.

Cost of goods sold.

Our cost of goods sold was €3.09 million for 2006 compared to €2.91 million in 2005. In 2006, we wrote down €144 thousand of inventory which failed to meet quality specifications. Cost of goods sold as percent of product sales was 75.9% in 2006 and 86.6% in 2005. The decrease in costs as a percentage of sales was due to the revised estimate on manufacturing facilities and equipment useful life which resulted in lower depreciation expenses allocated to cost of goods sold.

Research and development expenses.

We incurred research and development expenses of €8.93 million for 2006 compared to €4.56 million in 2005. The expenses were primarily for the development of defibrotide to treat and prevent VOD. The difference between the periods is primarily due to the timing and expenses incurred for clinical trials, including clinical research organizations charges, regulatory activities, costs associated with the set-up, initiation and execution of our Phase III clinical trial of defibrotide to treat VOD, our Phase II/III clinical trial of defibrotide to prevent VOD and manufacturing expenses. Also contributing to the increase was an increase in headcount and outside services to support increased activity in our clinical trials and stock based compensation of €288 thousand.

General and administrative expenses.

Our general and administrative expenses were €5.42 million in 2006 compared to €2.28 million in 2005. The increase in 2006 was primarily due to increased headcount and facilities related expenses, general corporate expenses of being a public company, legal and other professionals fees and increased administrative costs resulting from performing administrative function internally as opposed to through affiliated administrative service agreements and stock based compensation expense of €619 thousand.

Depreciation and amortization expense.

Depreciation and amortization expense was €261 thousand in 2006 compared to €118 thousand in 2005. The increase is primarily attributable to capital expenditures for an infrastructure upgrade and amortization of the intellectual property portfolio. Depreciation expense excludes depreciation on our manufacturing facilities which are included in cost of goods sold.

Interest income (expense), net.

The components of interest income (expense) on a net basis have changed primarily due to the effects of the repayment and conversion of our Series A senior convertible notes in 2005 and the amount of invested funds we had following our private placement offering in June 2006. In 2005, interest expense on the Series A notes was $\{4.095$ million, including non-cash interest expense of $\{3.837$ million from amortization of the issue discount and issue cost. These notes were converted or redeemed in June 2005. Additionally, interest income increased to $\{708$ thousand as the result of a higher amount of invested funds.

Income taxes.

Income tax expense was nil and €646 thousand for the year ended December 31, 2006 and 2005, respectively. In 2005 our income tax expense included an update of our assumptions underlying the recovery of a pre-paid tax asset that we inherited from the original spin-off from Sirton. We believe that the tax benefits related to the prepayment will no longer be available, therefore in 2005 we wrote off the entire pre-paid tax asset.

Net loss.

Our net loss was €14.4 million in 2006 compared to €12.3 million in 2005. The difference was primarily due to increases in research and development expenses, general and administrative expenses and stock based compensation partially offset by a decrease in interest expense in 2006 compared to 2005 and an increase in revenue.

Year Ended December 31, 2005 Compared to Year Ended December 31, 2004

Product sales.

Our sales were €3.36 milliorfor 2005 compared to €3.11 million in 2004. The timing of manufacturer orders can cause variability in sales. Total product sales in 2005 were in line with the prior period although sales to our affiliate increased 13% to €3.26 million and sales to third parties decreased 58% to €101 thousand. Sales to affiliates increased due to higher sales volume of our main product, defibrotide, which represents 74% (or €2.47 million) and 46% (or €1.42 million) of the total product sales in 2005 and 2004, respectively. The increase in affiliate sales of defibrotide was partially offset by a decrease in sales of urokinase which decreased from 42% (or €1.31 million) to 20% (or €684 thousand) of the total product sales. The decrease is due to Crinos, the principal customer of our affiliate Sirton, selling urokinase in only a single dose, which has a more limited market than multiple doses. Third party product sales decreased primarily due to lower sales volume of sulglicotide to a Korean customer. The Korean customer delayed the launch of a new product which uses sulglicotide. We expect future growth in sulglicotide revenue due to the expected launch of the Korean customer's product in 2006.

Other income and revenues

Our other income and revenues was €280 thousand for 2005 compared t€583 thousandn 2004. In 2004, the Company recognized a milestone payment of €273 thousand under its license agreement with Sigma-Tau Pharmaceuticals, Inc. due to the issuance of an investigational new drug application for the Phase III clinical trial of defibrotide to treat VOD.

Cost of goods sold.

Our cost of goods sold was €2.91 million for 2005 compared t€2.58 millionin 2004. In 2005, we wrote down €291 thousand of inventory which failed to meet quality specifications. Cost of goods sold as percent of product sales was 86.6% in 2005 and 82.8% in 2004. The slight increase in costs as a percentage of sales was due to the revised estimate on manufacturing facilities and equipment useful life which resulted in lower depreciation expenses allocated to cost of goods sold in the fourth quarter of 2005 offset by the increase in inventory write-off and quality control expenses.

Research and development expenses.

We incurred research and development expenses of €4.56 million for 2005 compared to €2.92 million in 2004. The increase was primarily related to the timing and amount of research and development expenses for the development of defibrotide to treat and prevent VOD and performance of related obligations under our license agreement with Sigma-Tau. Also contributing to the increase were growth in headcount and outside services to support increased activity in our clinical trials, including the preparation of regulatory filings and clinical production costs and stock based compensation expense of €117.

General and administrative expenses.

Our general and administrative expenses were €2.28 million in 2005 compared to €1.19 million 2004. The increase in 2005 was primarily due to increased headcount and facilities related expenses, general corporate expenses of being a public company, increase in internally provided administrative services to replace administrative services previously provided by affiliates and stock based compensation expense of €329 thousand.

Depreciation and amortization expense.

Depreciation and amortization expense was €118 thousand in 2005 compared to €89 thousand in 2004. Depreciation expense excludes depreciation on our manufacturing facilities which are included in cost of goods sold.

Interest income (expense), net.

The components of interest expense have changed primarily due to the effects of our issuance of our Series A senior convertible promissory notes in the fourth quarter of 2004 and first quarter of 2005. In the 2005 period, interest expense on the Series A notes was €4.095 million, including non-cash interest expense of €3.837 million from amortization of the issue discount and issue cost. Interest expense for the 2004 period is net of interest which was capitalized as part of our manufacturing facility overhaul. The increase in interest expense was partially offset by income amounting to €156 resulting from higher level of invested funds due to the completion of our initial public offering in June 2005.

Income taxes.

Income tax expense was €646 thousand on a pre-tax loss of €11.67 million for the year ended December 31, 2005. We incurred income tax expense of €28 thousand on a pre-tax loss of €7 million for the year ended December 31, 2004. In the 2005 period our income tax expense included an update of our assumptions underlying the recovery of a pre-paid tax asset that we inherited from the original spin-off from Sirton. We believe that the tax benefits related to the prepayment will no longer be available, therefore we have written off the entire pre-paid tax asset.

Net loss.

Our net loss was €12.3 million in 2005 compared to €7.0 million in 2004. The increase was primarily due to the increase in interest expense, stock based compensation, research and development, general and administrative expenses, deferred tax write-off and a decrease in other income and revenue.

LIQUIDITY AND CAPITAL RESOURCES

During 2004, we used €4.377 million of cash to fund operating activities and working capital requirements, including research and development, and incurred €5.178 million in capital expenditures. We funded these amounts from the following sources:

€5.629 million in loans; and

€6.098 in gross proceeds from the sale of our Series A notes.

During 2005, we used approximately €8.9 million of cash to fund operations and working capital requirements, including research and development, and incurred capital expenditures and other intangibles of approximately €1.4 million. We funded these amounts from the following sources:

€1.912 million in gross proceeds from the sales of Series A notes;

€3.9 million in capital contributions from our then-majority shareholder, FinSirton;

\$24.3 million in gross proceeds from our initial public offering of 2.7 million of our ordinary shares;

•\$10.9 million in gross proceeds from a private placement of 1,551,125 of our ordinary shares together with warrants to purchase 620,450 ordinary shares; and

€2.5 million in cash available at December 31, 2004.

During 2006, we used approximately €12.2 million of cash to fund operations and working capital requirements, including research development, incurred capital expenditures and other intangibles of approximately €1.9 million, paid €4 million to Crinos and paid €4 million into escrow for the benefit of Crinos. We funded these amounts from the following sources:

•\$22.1 million in gross proceeds from a private placement of 1,943,525 of our ordinary shares together with warrants to purchase 388,705 ordinary shares;

\$2.2 million in gross proceeds from exercise of warrants and stock options

€5.5 million in loans; and

€12 million from cash available at December 31, 2005.

At December 31, 2006, we had an aggregate of €6.4 million in debt outstanding. Additional information about the maturity and repayment obligations for this debt and interest rate structure and our material commitments for capital expenditures is provided below under "Contractual Obligations and Commitments."

We expect to devote substantial resources to continue our research and development efforts, on regulatory expenses, and to expand our licensing and collaboration efforts. Our funding requirements will depend on numerous factors including:

whether we are able to commercialize and sell defibrotide for the uses for which we are developing it;

- the scope and results of our clinical trials;
- · advancement of other product candidates in development;
- the timing of, and the costs involved in, obtaining regulatory approvals;
 - the cost of manufacturing activities;
- the costs associated with building a future commercial infrastructure;
- ·the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims and other patent-related costs, including litigation costs and results of such litigation; and
 - our ability to establish and maintain additional collaborative arrangements.

We do not expect our revenues to increase significantly until we successfully obtain FDA and European regulatory marketing approval for, and begin selling, defibrotide to treat VOD with multiple-organ failure. We believe that some of the key factors that will affect our internal and external sources of cash are:

·our ability to obtain FDA and European regulatory marketing approval for and to commercially launch defibrotide to treat VOD with multiple-organ failure;

- •the success of our other clinical and pre-clinical development programs, including development of defibrotide to prevent VOD and to treat multiple myeloma;
 - the receptivity of the capital markets to financings of biotechnology companies; and
- ·our ability to enter into additional strategic agreements with corporate and academic collaborators and the success of such relationships.

In February 2007, we received gross proceeds of \$47.5 million from a private placement of 2,354,000 of our ordinary shares. We believe that our working capital is sufficient for our present needs. Changes in our operating plans, delays in obtaining approval to market our product candidates, lower than anticipated revenues, increased expenses or other events, including those described in "Risk Factors," may cause us to seek additional debt or equity financing on an accelerated basis. Financing may not be available on acceptable terms, or at all, and our failure to raise capital when needed could negatively impact our growth plans and our financial condition and results of operations. Additional equity financing may be dilutive to the holders of our ordinary shares and debt financing, if available, may involve significant cash payment obligations and covenants and/or financial ratios that restrict our ability to operate our business.

Italian law provides for limits and restrictions on our issuance of debt securities, described in our risk factor entitled, "We are restricted under Italian law as to the amount of debt securities that we may issue relative to our equity." In order to issue new equity or debt securities convertible into equity, with some exceptions, we must increase our authorized capital through a process described in our risk factor entitled, "The process of seeking to raise additional funds is cumbersome, subject to the verification of a notary public as to compliance with our bylaws and applicable law and may require piror approval of our shareholders at an extraordinary meeting."

If we are unable to obtain additional financing, we may be required to reduce the scope of, or delay or eliminate some or all of our planned research, development and commercialization activities, which could harm our financing condition and operating results.

RESEARCH AND DEVELOPMENT

We discover, research and conduct initial development of our product candidates at our facilities in Italy, and also hire consultants to do so in various countries in Europe and the United States. We typically conduct preclinical laboratory and animal studies of product candidates either ourselves or through other research facilities. We typically engage medical centers to conduct clinical trials of our product candidates. In certain cases, where we believe the development costs will be substantial, we may enter into strategic partnerships to help us develop those product candidates. We expense research and development costs as incurred.

Research and Development Expenses

Our research and development expenses consist primarily of costs associated with research, preclinical development and clinical trials for our product candidates. During the years ended December 31, 2004, 2005 and 2006, we had four major categories of research projects relating to our advanced product candidates: defibrotide to treat VOD, defibrotide to prevent VOD, defibrotide to treat multiple myeloma and assorted other projects. The table below presents our research and development expenses by project for each of the years ended December 31, 2004, 2005 and 2006.

For the Year Ended December 31, 2004 2005 2006

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Defibrotide to treat VOD	€	2,521	€	4,123	€	7,067
Defibrotide to prevent VOD		112		175		590
Multiple myeloma		_		50		59
Others		289		209		1,211
Total	€	2,922	€	4,557	€	8,927

The Dana-Farber Cancer Institute at Harvard University sponsored and completed in December 2005 a Phase II clinical trial in the United States of defibrotide to treat VOD with multiple-organ failure. We started enrollment of patients in a Phase III clinical trial of this product candidate in the United States in the second quarter of 2006. We do not anticipate obtaining FDA or European regulatory approval of this product candidate before 2008. The table above also includes research and development expenses that we incurred in connection with a Phase II/III clinical trial of defibrotide to treat VOD in Europe and Israel that was sponsored by a committee of clinical investigators and conducted by Consorzio Mario Negri Sud. The committee of clinical investigators terminated this trial in October 2005.

Defibrotide to prevent VOD is also currently in a Phase II/III clinical trial of children in Europe sponsored by our company and the European Group for Blood and Marrow Transplantation. We do not anticipate obtaining European regulatory approval of this product candidate before 2009.

An independent Phase I/II clinical trial in Italy of defibrotide, in combination with melphalan, prednisone and thalidomide, to treat patients with advanced and refractory multiple myeloma started in December 2005. This clinical trial is being conducted at approximately 10 cancer centers in Italy, starting with Hospital Molinette of Torino, and the principal investigator is Dr. Mario Boccadoro, M.D., at the Division of Hematology, University of Turin, Italy.

The table above includes research and development expenses that we incurred in connection with a Phase I clinical trial of defibrotide to mobilize and increase the number of stem cells available in patients' and donors' blood for subsequent stem cell transplantation sponsored by the National Institute of Tumors of Milan. The National Institute of Tumors of Milan terminated this trial in December 2005.

We expect to continue to increase our research and development expenses for the research and development of defibrotide to treat and prevent VOD and the treatment of multiple myeloma and possibly for other indications for defibrotide. This will involve sponsoring or funding, or both, clinical trials in both the United States and Europe. Development timelines and costs are difficult to estimate and may vary significantly for each product candidate and from quarter to quarter. The process of seeking regulatory approvals, and the subsequent compliance with applicable regulations, requires the expenditure of substantial resources. We expect that we will need additional funds before we have completed the development of our product candidates. We may seek to raise these funds through licensing and other collaboration agreements or through the sale of debt or equity securities. There can be no assurance that we will be successful in raising additional funds or that if we are, it will be on favorable terms.

A further discussion of the risks and uncertainties associated with developing our product candidates and certain consequences of failing to do so are set forth in the risk factors under the heading "Risks Relating to Our Business" as well as other risk factors.

Intellectual Property Rights And Patents

As of December 31, 2006, we had seven issued U.S. patents, five pending U.S. patent applications, 25 issued foreign patents, 103 pending foreign patent applications and two international patent applications (not nationalized yet). These include the following. The United States Patent & Trademark Office issued a patent covering our manufacturing process of defibrotide in 1991, which expires in 2008. In April 2001, we filed a patent application with the United States Patent & Trademark Office and corresponding patent applications in certain foreign countries regarding the use of defibrotide in stem cell transplants, which expires in 2021.

Patent rights and other proprietary rights are important in our business. We have sought, and intend to continue to seek, patent protection for our inventions and rely upon patents, trademarks, trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain a competitive advantage.

However, the patent positions of companies like ours involve complex legal and factual questions and, therefore, their enforceability cannot be predicted with any certainty. Our patents, those licensed to us, and those that may be issued to us in the future may be challenged, invalidated or circumvented, and the rights granted under them may not provide us with protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies or duplicate any technology developed by us. Because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any of our product candidates can be approved for sale and commercialized, our relevant patent rights may expire or remain in force for only a short period following commercialization.

TREND INFORMATION

As a result of the temporary cessation of operations from February through August of 2004 in connection with the upgrade of our manufacturing facility, comparison of our operating results in 2004 may not be meaningful.

In connection with the issue of our Series A senior convertible promissory notes, we incurred debt issues costs which are amortized over the term of the notes and included in interest expense. In addition, we recorded original issue discount on the notes due to the beneficial conversion feature of the notes and related detachable warrants. As of December 31, 2005, all of the notes had been repaid or converted into our ordinary shares. We incurred interest expense in 2005 on the notes in the amount of €4.095 million, including amortization of the issue costs and issue discount of €3.837 million.

As a public reporting company, we incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act of 2002, as well as new rules subsequently implemented by the Securities and Exchange Commission and the Nasdaq Global Market System, have required changes in corporate governance practices of public companies. We expect these new rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly. We also expect these new rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance.

In connection with our purchase of the Italian marketing rights to defibrotide and related trademarks from Crinos, we paid Crinos €4 million in 2006, placed another €4 million in escrow, which we expect to be released to Crinos in 2007, and agreed to pay Crinos two additional installments of €4 million by December 31, 2007 and December 31, 2008.

We expect our costs for the following current clinical trials and historical trials to increase substantially in 2007 compared to 2006 as we enroll patients and pay the related clinical trial centers and clinical research organizations:

- Phase III clinical trial of defibrotide to treat VOD in the United States;
- · Historical trial of defibrotide to treat VOD in the United States; and
- Phase II/III clinical trial of defibrotied to prevent VOD in children in Europe.

In addition, we expect to incur substantial costs when and if we initiate a Phase III clinical trial of defibrotide to prevent VOD in adults in the United States and Europe after we complete our Phase III trial of defibrotide to treat VOD in the United States.

OFF-BALANCE SHEET ARRANGEMENTS

We do not have any off-balance sheet arrangements.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

Contractual Obligations and Commitments

Our major contractual obligations and commitments relate to our real estate mortgages, other financing from banks and financial institutions, obligations to pay Crinos for the Italian defibrotide marketing rights and related trademarks and various service agreements (including those related to our clinical trials).

The following table summarizes our long-term commitments as of December 31, 2006.

Amounts in thousands except for share and per share data Long-Term Debt Obligations:		Total	1 Year	2	Years	3 Years	4`	Years	5 Ye	ears	More than ! Years	5
Mortgage loans	€	2,800 €	200	€	400	€ 400	€	400	€	200 €	1,20	00
Finance loans		955	165		182	195		202		211	,	_
Equipment loans		1,253	195		175	383		250		250		
Research loan		1,399	164		330	332		333		203		37
	€	6,407 €	724	€	1,087	€ 1,310	€	1,185	€	864 €	1,2	37
Purchase Obligations and Operating Leases:												
Crinos acquisition	€	12,000 €	8,000	€	4,000	€ .	€	_	€	-€	<u>.</u>	_
Operating Lease		652	163		163	163		163		_	-	_
Clinical research organizations		7,855	7,650		116	89		_	_	_	-	_
Research and development programs		1,127	875		240	12		_	_	_	-	_
Consultants		4,176	858		100	1,310		1,310		597		_
		25,810	17,546		4,619	1,574		1,473		597		
Total	€	32,217 €	18,270	€	5,706	€ 2,884	€	2,658	€ 1	,461 €	1,2	37

We received a loan commitment from the Minister for University and Research granted through San Paolo-IMI Bank in September 2000. The loan is for financing research and development of defibrotide to treat and prevent VOD, and it bears interest at 1.0% per annum. We will need to repay this loan in installments every six months beginning six months after the completion of the related research and development, but no later than January 2012. At December 31, 2006, the amount outstanding under this loan was €351 thousand.

On July 9, 2004, we obtained a loan in the approximate amount of €487 thousand from Cassa di Risparmio di Parma e Piacenza. The loan was obtained pursuant to Law No. 1329 of 28 November 1965 (Legge Sabatini), a law that facilitates the purchase and the lease of new production equipment. The loan is secured by a lien on our equipment and machinery. On August 4, 2004, we obtained an additional loan in the amount of €388 thousand from Cassa di Risparmio di Parma e Piacenza under the same terms and conditions. At December 31, 2006, the aggregate amount outstanding under these two loans was €481 thousand.

On April 20, 2006, we obtained a five year financing facility from Banca Intesa Medicredito S.p.A. of up to &1 million to finance our purchase and installation of two reactors in our manufacturing facility. The facility has a five-year term and bears interest at the three-month Euribor rate plus 1.7%. It is secured by Banca Intesa debt securities in the aggregate amount of &525 thousand that we purchased and which expire on May 10, 2011. We make installment payments on the facility of &131 thousand every six months until its final maturity in April 2011. At December 31, 2006, the aggregate amount outstanding under this facility was &1 million.

On June 28, 2006, we obtained a loan in the amount of €2.8 million from Banca Nazionale Del Lavoro S.p.A. The loan is secured by a mortgage on certain of our land and buildings. It bears interest at the six month Euribor rate plus 1.00%, the principal of which will be repaid in 14 installments, every six months, starting from December 27, 2007 until final maturity in 2014 and the interest on which will be paid every six months starting from June 27, 2006. At December 31, 2006, the amount outstanding under this loan was €2.8 million.

On June 30, 2006, we obtained a loan in the amount of €750 thousand from San Paolo IMI S.p.A. for the acquisition and installation of manufacturing equipment. The loan bears interest at the three month Euribor rate plus 1.20%. Beginning on June 15, 2008, the rate will be decreased to 1.02% if we complete our investment activities by January 21, 2007. The loan is payable in thirteen quarterly installments of approximately €58 beginnings on June 15, 2008 through June 15, 2011. Interest is due quarterly beginning on September 15, 2006. The agreement requires us to maintain a minimum level of net shareholders' equity determined in accordance with Italian generally accepted accounting principles.

On December 20, 2006 we obtained three loans from Banca Intesa S.p.A. The first of these loans is in the amount of €230 thousand for a term of 60 months, maturing on December 31, 2006. Principal and interest are due in 20 quarterly installments beginning on March 31, 2007. It bears interested at the three month Euribor rate plus 1%. At December 31, 2006, the amount outstanding under this loan was €230 thousand.

The second loan is in the amount of €500 thousand for a term of 60 months, maturing on December 31, 2011. Principal and interest are due in 60 monthly installments beginning on January 31, 2006. It bears interest at the three month Euribor rate plus 1%. At December 31, 2006, the amount outstanding under this loan was €500 thousand.

The third loan is in the amount of €225 thousand for a term of 57 months (after a technical preamortization period from December 20, 2006 to March 15, 2007) maturing on December 15, 2011. It must be used within six months for investments in the innovation of products and/or production processes or to buy manufacturing equipment. Principal and interest payments are due in quarterly installments starting on June 15, 2007. It bears interest at the three month Euribor rate plus 0.8%. At December 31, 2006, the amount outstanding under this loan was €225 thousand.

Our commitments for clinical research consist of fixed price contracts with third-party research organizations related to clinical trials for the development of defibrotide and related consulting services for advice regarding FDA issues. In particular, we expect to pay $\[\in \]$ 7.326 million in 2007 to MDS Pharma for our historical trial of defibrotide to treat VOD in the United States.

In connection with our purchase of the Italian marketing rights to defibrotide and related trademarks from Crinos, we paid Crinos €4 million in 2006, placed another €4 million in escrow, which we expect to be released to Crinos in 2007, and agreed to pay Crinos two additional installments of €4 million by December 31, 2007 and December 31, 2008.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

DIRECTORS AND SENIOR MANAGEMENT

Set forth below is the name, age, position and a brief account of the business experience of each of our executive officers, significant employees and directors as of April 30, 2007.

	Date of Birth	
Name	(mm/dd/yyyy)	Position
Dr. Laura Ferro	08/03/1951	President and Chief Executive Officer, Director
Gary Gemignani	05/26/1965	Executive Vice-President and Chief Financial
		Officer
Dr. Massimo Iacobelli	04/28/1959	Senior Vice-President, Scientific Director
Armando Cedro	07/16/1955	Chief of Manufacturing
Salvatore Calabrese	01/04/1970	Vice-President, Finance and Secretary
Dr. Kenneth Anderson (1)	10/03/1951	Director
Gigliola Bertoglio (2)	08/22/1934	Director
Luca Breveglieri (3)	01/23/1952	Director
Marco Codella	09/17/1959	Director
David Kroin	08/24/1975	Director
Dr. Lee M. Nadler (4)	05/22/1947	Director
Malcolm Sweeney (5)	01/21/1949	Director
Dr. Andrea Zambon (6)	01/14/1958	Director
(1)	Member	of the compensation committee.
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- (2) Member of the audit committee (chairperson) and nominating and corporate governance committee.
- (3) Member of the nominating and corporate governance committee (chairperson).
- (4) Member of the compensation committee and nominating and corporate governance committee.
- (5) Member of the audit committee.
- (6) Member of the audit committee and compensation committee (chairperson).

Dr. Laura Ferro has served as our President and Chief Executive Officer and one of our directors since 1991. Her current term as a director expires on the date of the ordinary shareholders' meeting approving our 2007 Italian GAAP financial statements, which would normally be held in April 2008. Dr. Ferro is also the President and Chief Executive Officer of our largest shareholder, FinSirton. She also serves as Vice President of Sirton, a subsidiary of FinSirton that specializes in manufacturing pharmaceutical products. Dr. Ferro is also a member of the board of directors of each of FinSirton, Sirton and Foltene Laboratories S.p.A., a former subsidiary of FinSirton that is in the hair care products business. From 1991 to 1997, Dr. Ferro held various executive positions at Sirton, including Chief Executive Officer and Chairperson of the research and development unit. Prior to that, Dr. Ferro was a practicing physician for 15 years. Dr. Ferro is the chairperson of the research committee of Europharm, the European Association of Small and Medium-Sized Pharmaceutical Companies, and is a member of the executive committee of Farmindustria, an Italian pharmaceutical industry group. She is also the President of the Gianfranco Ferro Foundation, a not-for-profit Italian organization with the mission of stimulating research, education and dissemination of information on the correct use of medications and adverse events of medicines. Dr. Ferro received her M.D. and Ph.D. degrees from the University of Milan, and a MBA from Bocconi University in Milan in 1994. Dr. Ferro is a licensed physician. She was certified in psychiatry at the University of Milan in 1981, and in Clinical Pharmacology at the University of Milan in 1994.

Gary G. Gemignani has served as our Executive Vice-President and Chief Financial Officer since June 2006. From 2004 to 2005, Mr. Gemignani was the Vice President and Controller of Financial Reporting and Accounting, US Pharmaceuticals Division, of Novartis Corporation, a pharmaceutical and consumer health company. From 1998 to 2004, he held a variety of vice-president level positions for Prudential Financial Inc., a financial products and services provider. From 1993 to 1998, Mr. Gemignani held a variety of senior financial positions at Wyeth (formerly American Home Products), a pharmaceutical, consumer healthcare and animal health company. From 1986 to 1993, he was an employee of Arthur Andersen & Co. Mr. Gemignani received a bachelor of science in accounting from St. Peter's College.

Dr. Massimo Iacobelli has served as our Senior Vice-President, Scientific Director since 2002 and as our Vice President, Clinical Development and Chief Medical Office from 1995 to 2002. From 1990 to 1994, he was the Senior Vice-President, Medical Marketing, at Sirton. From 1988 to 1989, Dr. Iacobelli directed the Drug Safety Department at Bayer S.p.A. He received a medical degree from Università degli Studi, Napoli, Italy.

Armando Cedro has served as our Chief of Manufacturing since 2003. From 1997 to 2003, he served as our Active Pharmaceutical Ingredient Production Manager. From 1987 to 1997, he served as the Chemical Research and Development Laboratories and Pilot Plant Manager at Sirton. From 1982 to 1987, he served as the Chemical Development Laboratory Manager at Societa Prodotti Antibiotici, a manufacturer of antibiotic pharmaceutical products. Mr. Cedro received a degree in Industrial Chemistry from the Universita degli Studi di Milano, Italy.

Salvatore Calabrese has served as our Vice-President, Finance and Secretary since February 2005. From December 2003 until February 2005, he was an Accounting and Finance Manager for Novuspharma, S.p.A., a development stage biopharmaceutical company focused on the discovery and development of cancer drugs and a

subsidiary of Cell Therapeutics, Inc., a public reporting company, which then merged into Cell Therapeutics, Inc. He reported to the Chief Financial Officer of Cell Therapeutics, Inc. and was responsible for cost containment, budgeting, financial reporting and the implementation of Sarbanes-Oxley compliance. From September 1996 until November 2003, Mr. Calabrese was employed by PricewaterhouseCoopers as an accountant and was a Manager in Assurance Business Advisory Services at the time of departure. From October 2000 to June 2003, Mr. Calabrese worked in the Boston, MA office of PricewaterhouseCoopers. He earned a Bachelors' Degree in Economics at the University of Messina and a Masters' Degree in Accounting, Audit and Financial Control at the University of Pavia. He is also a chartered accountant in the Republic of Italy.

Dr. Kenneth Anderson has served as one of our directors since June 2005. His current term expires on the date of the ordinary shareholders' meeting approving our 2007 Italian GAAP financial statements, which would normally be held in April 2008. Dr. Anderson has been a professor at the Dana-Farber Cancer Institute, Cancer Research and Clinical Care, since 1980, a professor of medicine at Harvard Medical School since 2000 and a Kraft Family professor of medicine at Harvard Medical School since 2002. He has been the Chief of the Division of Hematologic Neoplasia at the Dana-Farber Cancer Institute since 2002, the Vice Chair of the Joint Program in Transfusion Medicine at Harvard Medical School since 2000, the Director of the Jerome Lipper Multiple Myeloma Center at the Dana-Farber Cancer Institute since 2000, the Associate Medical Director of Brigham and Women's Hospital Blood Bank since 1998 and an attending physician at the Bone Marrow Transplantation Service at Brigham and Women's Hospital since 1997. Dr. Anderson is a member of 11 medical and scientific societies and on the editorial boards of 11 medical and scientific journals. He received a Bachelors' degree, summa cum laude, from Boston University in 1973, a M.D. from Johns Hopkins University School of Medicine in 1977 and a Masters' Degree in Art from Harvard University in 2000.

Gigliola Bertoglio has served as one of our directors since December 2004. Her current term as a director expires on the date of the ordinary shareholders' meeting approving our 2007 Italian GAAP financial statements, which would normally be held in April 2008. Ms. Bertoglio has been a self-employed consultant since January 2003. From 1970 through 2002 she was employed by Reconta Ernst & Young (the Italian affiliate of Ernst & Young LLP) and its predecessors and was an audit partner beginning in 1977. From 1998 until leaving the firm, she was responsible for the firm's Capital Market Group in Italy. From 1989 to 1998, she was responsible for directing the firm's Professional Standards Group and member of the Accounting and Auditing Standards Group of Ernst & Young International and as a coordinating audit partner on clients with international operations. From 1977 to 1989, Ms. Bertoglio was a partner of the Italian firm of Arthur Young & Co. (the predecessor to Ernst & Young) where she was responsible for directing the firm's Professional Standards Group and serving in an advisory role to the Accounting and Auditing Standards Group of Arthur Young International and as a coordinating audit partner on clients with international operations. From 1970 to 1977, she was an Audit Manager (1970 to 1974) and an Audit Principal (1975 to 1977) with the Italian firm of Arthur Young & Co. in its Rome and Milan offices. Prior to 1970, Ms. Bertoglio was employed in the New York offices of Horwath & Horwath and LKH&H, both of which were public accounting firms. She earned a degree in Public Accounting from New York University and a Diploma in Accounting from Economics Institution in Biella, Italy. She was a Certified Public Accountant (active license to August 31, 2002, inactive after that) in the United States and included in the Register of Authorized Auditors of Consob, the Italian Stock Exchanges regulatory agency of public companies.

Luca Breveglieri has served as one of our directors since April 2006. His current term expires on the date of the ordinary shareholders' meeting approving our 2007 Italian GAAP financial statements, which would normally be held in April 2008. Mr. Breveglieri is an Italian-qualified attorney and has been a partner of Breveglieri Verzini e Soci, an Italian law firm, since 2000. From 1982 to 2000, Mr. Breveglieri was the founding partner of Breveglieri e Associati. Mr. Breveglieri is an Italian certified public accountant. Mr. Breveglieri received a degree in law from Universita degli Studi, Pisa, Italy, in 1977.

Marco Codella has served as one of our directors since June 2005. His current term expires on the date of the ordinary shareholders' meeting approving our 2007 Italian GAAP financial statements, which would normally be held in April 2008. Mr. Codella has been the Chief Financial Officer of Sigma Tau Industrie Farmaceutiche Riunite S.p.A., an international family of pharmaceutical companies, since May 1999. Mr. Codella has been a professor of Economics and Management Accounting at University of Rome, La Sapienza since 2001. From 1997 to 1999, Mr. Codella was the Finance, IT and Logistics Director of Crown Cork & Seal Italy S.p.A., an Italian subsidiary of Crown Holdings, Inc., a manufacturer of packaging products to consumer marketing companies. From 1994 to 1997, Mr. Codella was the Finance and IT Director of Crown Cork & Seal Italy S.p.A. From 1990 to 1994, Mr. Codella held various finance positions at Digital Equipment Italia S.p.A., an Italian subsidiary of Digital Equipment Corporation, a computer company. From 1987 to 1990, Mr. Codella was the Finance Manager of an Italian subsidiary of Ampex

Corporation, a provider of technology for acquisition, storage and processing of visual information. From 1984 to 1987, Mr. Codella was an auditor at Deloitte, Haskins & Sells, an accounting firm. Mr. Codella is a director of Eubiotina Research S.p.A., Biosint S.p.A., Avantgarde S.p.A., SigmaTau Health Science S.p.A., Techogen S.p.A. and Kenton S.r.l., each of which is a subsidiary of Sigma Tau Finanziaria S.p.A., and Fonchim, a pension fund for chemical industry workers. Mr. Codella is an Italian certified public accountant. Mr. Codella graduated summa cum laude from Rome University in 1984 with a degree in economics.

David Kroin, has served as a member of our board of directors since November 2005. His current term as a director expires on the date of the ordinary shareholders' meeting approving our 2007 Italian GAAP financial statements, which would normally be held in April 2008. Mr. Kroin has been the Managing Director of Great Point Partners, LLC, an asset management firm focusing in the healthcare industry, with an emphasis on life sciences, since September 2003. From December 1998 to September 2003, Mr. Kroin was a senior member of the healthcare group at J.H. Whitney & Co., an alternative-asset-management firm. From June 1997 to December 1998, Mr. Kroin worked as an analyst in the corporate finance and mergers and acquisitions group at Merrill Lynch & Co., Inc. Mr. Kroin graduated from the University of Michigan with a B.S. in actuarial mathematics in May 1997. Mr. Kroin was nominated for election by Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd., two of the investors in our October 2005 private placement, pursuant to a voting agreement among the participants in the private placement and FinSirton.

Dr. Lee M. Nadler has served as one of our directors since June 2005. His current term expires on the date of the ordinary shareholders' meeting approving our 2007 Italian GAAP financial statements, which would normally be held in April 2008. Dr. Nadler is the Senior Vice President of Experimental Medicine at Harvard University's Dana-Farber Cancer Institute and a Professor of Medicine at Harvard University. He joined the staff of the Dana-Farber Cancer Institute in 1977, and was promoted to the faculty in 1980. He served as chief and chair of several departments, including serving as the First Chairperson of the Dana-Farber Cancer Institute's Department of Adult Oncology. Dr. Nadler received a medical degree from Harvard Medical School in 1973.

Malcolm Sweeney has served as one of our directors since April 2007. His current term expires on the date of the ordinary shareholders' meeting approving our 2007 Italian GAAP financial statements, which would normally be held in April 2008. From 2001 to 2005, Mr. Sweeney was the Head of Financial Reporting and Accounting of the Pharma Division at Novartis AG, a major international pharmaceutical company. From 1990 to 2000, Mr. Sweeney worked for IMS Health Inc., (formerly IMS International), a provider of market intelligence to the pharmaceutical and healthcare industries, and associated companies. He held the positions of Corporate Controller and Senior Director of Finance for IMS Health Inc., as well as that of Leader of European Shared Services for Dun and Bradstreet in 1994 and 1995 when Dun and Bradstreet used to own IMS Health Inc. and several other major information service providers. From 1974 to 1990, he held a variety of finance positions for divisions of General Electric. Mr. Sweeney resides in the U.K., is a chartered accountant, admitted to the Institute of England & Wales in 1974 when working for KPMG (formerly Peat, Marwick, Mitchell and Co.). He received a Bachelor of Science in Physics, Economics and Philosophy from the University of Exeter in 1970.

Dr. Andrea Zambon has served as one of our directors since June 2005. His current term expires on the date of the ordinary shareholders' meeting approving our 2007 Italian GAAP financial statements, which would normally be held in April 2008. Dr. Zambon was a co-founder and President of a web-based company, OKSalute S.p.A. serving the medical community from 2000 until 2002. From 2000 until 2004 he was President of Zambon, S.p.A, the holding company of Zambon Group, S.p.A., an Italian pharmaceutical and chemical company that operates in 19 countries in Europe, North and South America and Asia. From 1989 until 1999, he served in various capacities at Zambon Group S.p.A., including President and Chief Executive Officer from 1993 to 1999, Managing Director from 1991 to 1993, Managing Director of Zambon Research, S.p.A. in 1990, a research subsidiary of Zambon Research S.p.A., and manager of the international regulatory affairs unit in 1989. From 1988 to 1989, Dr. Zambon was employed by Smith Kline & Beckman in various departments, including clinical development, regulatory affairs, and market research, for three new chemical businesses. From 1986 to 1987 he was employed by Zambon Group, S.p.A. where he helped establish its research and development division. He has served on numerous corporate and industry association boards. Dr. Zambon earned a Medical Degree from the University of Milan Medical School.

Our Scientific Advisory Board

Our scientific advisory board advises us with respect to our product development strategy as well as the scientific and business merits of licensing opportunities or acquisition of compounds and the availability of opportunities for collaborations with other pharmaceutical companies. We have in the past compensated and in the future intend to compensate scientific advisory board members with cash fees for attending meetings. In addition to Dr. Lee Nadler and Dr. Kenneth Anderson, who are also directors, the current scientific advisory board members are:

Ralph B. D'Agostino, Sr. Ph.D. has been a Professor of Mathematics/Statistics at Boston University since 1977 and a Professor of Public Health at Boston University, School of Public Health, Department of Epidemiology and Biostatistics since 1982. He has been the editor of Statistics in Medicine since 1998. Dr. D'Agostino is also an Associate Editor of American Journal of Epidemiology, and on the editorial board of Current Therapeutic Research and the Journal of Hypertension. He has been the director of the Statistics and Consulting Unit at Boston University and Director of Data Management and Statistics at the Framingham Study. Dr. D'Agostino has served as an expert

consultant to the FDA since 1974. He is a Fellow of the American Statistical Association and the Cardiovascular Epidemiology section of the American Heart Association. He has twice, in 1981 and 1995, received the FDA Commissioner's Special Citation. He received an A.B. in Mathematics, summa cum laude, from Boston University in 1962, a A.M. in Mathematics from Boston University in 1964 and a Ph.D. in Mathematical Statistics from Harvard University in 1968.

Dr. Stephen Fredd M.D. has been a consultant to the pharmaceutical industry since 2002. From 1980 to 2002, Dr. Fredd was the Deputy Director of the Division of Cardi-Renal Drugs of the Center for Drug Evaluation and Research at the FDA. From 1987 to 1997, he was the Director and Founder of the Division of Gastrointestinal and Coagulation Drugs of the Center for Drug Evaluation and Research at the FDA. From 1982 to 1987, Dr. Fredd was a Medical Officer and the Acting Director of the Officer of Orphan Products Development of the Office of the Commissioner at the FDA. From 1980 to 1982, he was a Medical Officer at the Division of Antinflammatory, Oncological and Radiopharmaceutical Drugs of the Center for Drug Evaluation and Research at the FDA. From 1965 to 1980, Dr. Fredd was a privately practicing doctor of internal medicine. From 1977 to 1980, he was an Assistant Professor of Medicine at George Washington University Medical Center, and from 1965 to 1977, he was an Instructor in Medicine at New York University Medical Center. Dr. Fredd received FDA Awards of Merit in 1989 and 1997, FDA Commendable Service Awards in 1987 and 1998 and the FDA Commissioner's Special Citation in 1989. Dr. Fredd received an A.B., magna cum laude, from Princeton University in 1955 and a M.D. from New York University Medical Center in 1959.

Richard Champlin, M.D. has been a Professor of Medicine and Chairman of the Department of Blood and Marrow Transplantation at the University of Texas M. D. Anderson Cancer Center since 1990. From 1981 to 1990, Dr. Champlin was an Assistant and Associate Professor of Medicine and directed the Transplantation Biology Program at the UCLA Center for the Health Sciences. Dr. Champlin chaired the Working Committee on Alternative Donors and Cell Sources of the International Bone Marrow Transplant Registry from 1995 to 2000. He was the founding president of the American Society of Blood and Marrow Transplantation from 1992 to 1994 and president of the Council for Donor, Transplant and Collection Centers for the National Marrow Donor Program from 1990 to 1993. He has been a vice president of the Foundation for Accreditation of Hematocellular Therapy since 1996, was a member of the Biologic Response Modifiers Advisory Board for the FDA from 1999 to 2002 and was a member of the Hematology Board, American Board of Internal Medicine from 1996 to 2002. Dr. Champlin is a member of several scientific societies and serves on the Editorial Boards of Blood, Bone Marrow Transplantation and Journal of Hematotherapy. He has been the President of the Center for International Blood and Marrow Transplantation since 2003. Dr. Champlin received a M.D. from the University of Chicago's Pritzker School of Medicine in 1975.

COMPENSATION

Compensation of Directors and Executive Officers

For the year ended December 31, 2004, the aggregate cash compensation to our executive officers and directors as a group was approximately €669 thousand. For the year ended December 31, 2005, the aggregate cash compensation to our executive officers and directors as a group was approximately €752 thousand. For the year ended December 31, 2006, the aggregate cash compensation to our executive officers and directors as a group was approximately €843 thousand. During the year ended December 31, 2004, we granted an executive officer an option to purchase an aggregate of 85,000 shares that, as amended, has an exercise price of \$5.58 and expires on September 30, 2009. During the year ended December 31, 2005, we granted options to purchase an aggregate of 690,000 ordinary shares to our executive officers and directors at exercise prices ranging from \$8.00 to \$10.00 per share that, as amended, terminate in dates ranging from March 15, 2010 to November 29, 2015. During the year ended December 31, 2006, we granted options to purchase an aggregate of 130,000 ordinary shares to our executive officers and directors at exercise prices ranging from \$12.60 to \$17.35 that, as amended, terminate on dates ranging from April 28, 2016 to June 1, 2016.

Share-Based Compensation Plans

2004 Equity Incentive Plan

Our board of directors proposed a capital increase for our 2004 Equity Incentive Plan to our shareholders on September 2, 2004. Our shareholders approved that capital increase on September 30, 2004. Our board of directors approved the specific terms of our 2004 Equity Incentive Plan effective as of September 30, 2004. Our shareholders approved the specific terms of our 2004 Equity Incentive plan on April 28, 2005. On July 31, 2006, our board of directors approved an amended and restated version of our 2004 Equity Incentive Plan to reflect minor revisions, including an Italian law requirement that all shares issued under the plan be paid for in cash in at least an amount equal to €4.50 per share, which was the net worth of our company at the time of the capital increase relating to the plan. On March 26, 2007, our board of directors approved an amendment to the Amended and Restated 2004 Equity Incentive Plan, extending the term of the plan to 2019. Our shareholders approved this amendment on April 27, 2007.

The incentive plan authorizes 1,500,000 ordinary shares for issuance. The maximum number of shares that may be issued under the incentive plan subject to incentive share options is 1,500,000. At December 31, 2006, there were 1,077,000 shares underlying outstanding options, with a weighted average exercise price of \$9.59. Shares subject to share awards that have expired or otherwise terminated without having been exercised in full again become available

for the grant of awards under the incentive plan. In the event of a share split or other alteration in our capital structure, without the receipt of consideration, appropriate adjustments will be made to outstanding awards to prevent dilution or enlargement of participant's rights. The plan is governed by Italian law.

Our incentive plan provides for the grant of incentive share options (as defined in Section 422 of the U.S. Internal Revenue Code) to employees, including officers and employee-directors, and nonstatutory share options, restricted share purchase rights, restricted share unit awards, share appreciation rights and share bonuses to employees, including our officers, directors and consultants who are subject to tax in the United States. The incentive plan also provides for the periodic automatic grant of nonstatutory share options to our non-employee directors.

The incentive plan is administered by our board of directors or a committee appointed by our board of directors. The board or the committee determines recipients and types of awards to be granted, including the number of shares subject to an award, the vesting schedule of awards, the exercisability of awards, and subject to applicable restrictions, other terms of awards. The board of directors has delegated administration of the incentive plan to the compensation committee.

The term of share options granted under the incentive plan generally may not exceed ten years, although the capital increase relating to the ordinary shares issuable upon exercise of such options expires on September 30, 2019. Our compensation committee determines the price of share options granted under the incentive plan, provided that the exercise price for an incentive share option cannot be less than 100% of the fair market value of our ordinary shares on the date of grant. No incentive share option may be granted to any person who, at the time of the grant, owns (or is deemed to own) ordinary shares possessing more than 10% of our total voting ordinary shares, unless the option exercise price is at least 110% of the fair market value of the ordinary shares on the date of grant and the term of the incentive share option does not exceed five years from the date of grant. The exercise price for a nonstatutory share option can vary in accordance with a predetermined formula while the option is outstanding. In addition, the aggregate fair market value, determined at the time of grant, of the ordinary shares with respect to which an incentive share option first becomes exercisable during any calendar year (under the incentive plan and all of our other equity compensation plans) may not exceed \$100 thousand.

Options granted under the incentive plan vest at the rate determined by our compensation committee. Typically, options granted under the incentive plan vest over three years, at the rate of one-third of the shares covered by the option vesting each year.

Generally, the optionee may not transfer a share option other than by will or the laws of descent and distribution unless the optionee holds a nonstatutory share option that provides otherwise. However, an optionee may designate a beneficiary who may exercise the option following the optionee's death. An optionee whose service relationship with us ceases for any reason may exercise the option to the extent it was vested for the term provided in the share option agreement. Options generally expire three months after the termination of an optionee's service. However, if an optionee is permanently disabled or dies during his or her service, that person's options generally may be exercised up to 12 months following disability or death.

Share appreciation rights granted under our incentive plan may be paid in our ordinary shares, cash or a combination of the two, as determined by our board of directors. The grant of a share appreciation right may be granted subject to a vesting schedule determined by our board of directors.

Restricted share purchase rights granted under the incentive plan may be granted pursuant to a repurchase option in our favor that will lapse in accordance with a vesting schedule and at a price determined by the board of directors (or a committee appointed by the board of directors). Restricted share unit awards may be granted subject to a vesting schedule determined by the board of directors (or a duly appointed committee). Rights under a share bonus or a restricted share purchase award are transferable only upon such terms and conditions as are set forth in the relevant agreement, as determined by the board of directors (or the committee appointed by the board of directors) in its sole discretion.

When we become subject to Section 162(m) of the Internal Revenue Code which denies a deduction to publicly held companies for certain compensation paid to specified employees in a taxable year to the extent the compensation exceeds \$1.0 million, no person may be granted share options and/or share appreciation rights under the incentive plan covering more than 500,000 ordinary shares in any fiscal year. In addition, no person may be granted restricted share purchase rights, share units and/or share bonuses under the incentive plan covering more than 250,000 ordinary shares in any fiscal year. However, in connection with a participant's first year of employment, such participant may be

granted options and/or share appreciation rights covering up to 600,000 ordinary shares and restricted share purchase rights, share units and/or share bonuses covering up to 500,000 ordinary shares.

Each director (other than Dr. Nadler) who is not otherwise one of our employees or consultants automatically was granted a nonstatutory share option for 10,000 ordinary shares upon his or her initial election or appointment to our board of directors after the completion of our initial public offering. These grants vest one-third one year after the date of grant and the remainder in twenty-four equal monthly installments beginning one year and one month from the date of grant, provided that the person is still serving as a non-employee director on each such vesting date. Upon the conclusion of each regular annual meeting of our shareholders, each non-employee director receives a nonstatutory share option for 5,000 ordinary shares. These grants vest in twelve equal monthly installments beginning one month from the date of grant, provided that the person is still serving as a non-employee director on each such vesting date. The exercise price of the options granted to non-employee directors is equal to the fair market value of our ordinary shares on the date of grant and the term ends on the earlier of 10 years from the date of grant and September 30, 2019.

In the event of certain corporate transactions (including, but not limited to, a sale or other disposition of all or substantially all of our assets, a merger or a consolidation), all outstanding awards under the incentive plan will be subject to the terms and conditions of the agreement memorializing the transaction. The agreement may provide for the assumption or substitution of awards by any surviving entity, the acceleration of vesting (and exercisability, if applicable) or the cancellation of awards with or without consideration. In addition, at the time of grant, our board of directors may provide for acceleration of vesting in the event of a change in control. In the event of a change in control, non-employee director options outstanding under the incentive plan will automatically become vested and will terminate if not exercised prior to such a change in control.

The board of directors may amend the incentive plan at any time. Amendments will be submitted for shareholder approval to the extent required by applicable laws, rules and regulations. The incentive plan will terminate on September 30, 2019 unless sooner terminated by the board of directors or a committee appointed by the board of directors.

2004 Italy Stock Award Sub-Plan

Our Amended and Restated 2004 Italy Stock Award Sub-Plan is a part of our Amended and Restated 2004 Equity Incentive Plan and provides for the grant of share options and the issuance of share grants to certain of our employees who reside in the Republic of Italy and who are liable for income tax in the Republic of Italy. Generally, the exercise price for a share option under the Italy sub-plan cannot be less than the average of the closing price of our ordinary shares listed on the American Stock Exchange or The Nasdaq Global Market System, as applicable, over the 30 days preceding the date of grant. No share option granted under our Italy sub-plan may cover more than 10% of the voting rights in our annual meeting of shareholders or 10% of our capital or equity. Share grants will be made in consideration for past services.

Generally, a participant under the Italy sub-plan may not transfer a share award other than by applicable law. However, a participant under the Italy sub-plan may designate a beneficiary who may exercise the award following the participant's death.

In the event of certain corporate transactions (including, but not limited to, a sale or other disposition of all or substantially all of our assets, a merger or a consolidation), all outstanding awards under the Italy sub-plan will be subject to the terms and conditions of the agreement memorializing the transaction. The agreement may provide for the assumption or substitution of awards by any surviving entity, the acceleration of vesting (and exercisability, if applicable) or the cancellation of awards with or without consideration. In addition, at the time of grant, our board of directors may provide for acceleration of vesting in the event of a change in control.

The Italy sub-plan will terminate on September 30, 2019 unless sooner terminated by our board of directors.

2004 Nonstatutory Share Option Plan and Agreement

Our board of directors proposed a capital increase for our 2004 Nonstatutory Share Option Plan and Agreement to our shareholders on September 2, 2004 and our shareholders approved that capital increase on September 30, 2004. Our board adopted the specific terms of our 2004 Nonstatutory Share Option Plan and Agreement on October 1, 2004. Our shareholders approved the specific terms of our 2004 Nonstatutory Share Option Plan and Agreement on April 28, 2005. The sole person eligible to receive an option under the plan was Cary Grossman, our former Executive Vice President and Chief Financial Officer. On October 1, 2004, Mr. Grossman received an option to purchase all 60,000 shares authorized for issuance under the plan. The exercise price of the option issued under the plan is \$4.50. The option became fully vested on December 15, 2004. On March 23, 2006, we and Mr. Grossman amended and restated this option to have an exercise price of \$5.58 to comply with a requirement under Italian law. We entered into an agreement with Mr. Grossman whereby we agreed to pay him \$64,800 (the amount of the aggregate increase in the exercise price), subject to certain conditions, in return for amending the exercise price. In certain corporate transactions, a surviving or acquiring corporation may either assume the option or substitute other awards for the outstanding option. If the surviving or acquiring corporation does not assume or substitute the outstanding option, the option will terminate prior to the event if not otherwise exercised. The option has a term ending on September 30, 2009.

2007 Stock Option Plan

Our board of directors proposed a capital increase for our 2007 Stock Option Plan and the specific terms of such plan on March 26, 2007. Our shareholders approved the capital increase and the terms of the plan on April 27, 2007.

The 2007 Stock Option Plan authorizes 1,000,000 ordinary shares for issuance. Shares subject to options that have expired or otherwise terminated without being exercised in full again become available for issuance under the plan. In the event of a share split or other alteration in our capital structure, without the receipt of consideration, appropriate adjustments will be made to the outstanding awards to prevent dilution or enlargement of a participant's rights. The plan is governed by Italian law.

The 2007 Stock Option Plan provides for the grant of incentive stock options (as defined in Section 422 of the U.S. Internal Revenue Code) to employees, including officers and employee-directors, and nonstatutory stock options. The plan also provides for the periodic automatic grant of nonstatutory stock options to our non-employee directors.

The 2007 Stock Option Plan is administered by our board of directors or a committee appointed by our board of directors. The board or the committee determines recipients and types of options to be granted, including the number of shares subject to an option, the vesting schedule of options, the exercisability of options, and subject to applicable restrictions, other terms of options. The board of directors has delegated administration of the 2007 Stock Option Plan to the compensation committee.

The term of share options granted under the 2007 Stock Option Plan generally may not exceed the earlier of ten years and March 26, 2022. Our compensation committee determines the price of share options granted under the 2007 Stock Option Plan, provided that the exercise price for an incentive share option cannot be less than the higher of (i) 100% of the fair market value (110% for 10-percent shareholders) of our shares on the date of grant, (ii) an amount corresponding, as of the date of exercise, to €3.02 per share and (iii) an amount corresponding, as of the date of exercise, to the nominal value of each share. No incentive share option may be granted to any person who, at the time of the grant, owns (or is deemed to own) ordinary shares possessing more than 10% of our total voting ordinary shares, unless the option exercise price is at least 110% of the fair market value of the ordinary shares on the date of grant and the term of the incentive share option does not exceed five years from the date of grant. The exercise price for a nonstatutory share option can vary in accordance with a predetermined formula while the option is outstanding. In addition, the aggregate fair market value, determined at the time of grant, of the ordinary shares with respect to which an incentive share option first becomes exercisable during any calendar year (under the 2007 Stock Option Plan and all of our other equity compensation plans) may not exceed \$100 thousand.

Options granted under the 2007 Stock Option Plan vest at the rate determined by our compensation committee. Typically, options granted under the 2007 Stock Option Plan vest over three years, at the rate of one-third of the shares covered by the option vesting each year.

Generally, the optionee may not transfer a share option other than by will or the laws of descent and distribution unless the optionee holds a nonstatutory share option that provides otherwise. However, an optionee may designate a beneficiary who may exercise the option following the optionee's death. An optionee whose service relationship with us ceases for any reason may exercise the option to the extent it was vested for the term provided in the share option agreement. Options generally expire three months after the termination of an optionee's service. However, if an optionee is permanently disabled or dies during his or her service, that person's options generally may be exercised up to 12 months following disability or death.

Each director who is not otherwise one of our employees or consultants automatically is granted a nonstatutory share option for 10,000 ordinary shares upon his or her initial election or appointment to our board of directors. These grants vest one-third one year after the date of grant and the remainder in twenty-four equal monthly installments beginning one year and one month from the date of grant, provided that the person is still serving as a non-employee director on each such vesting date. Upon the conclusion of each regular annual meeting of our shareholders, each non-employee director receives a nonstatutory share option for 5,000 ordinary shares. These grants vest in twelve equal monthly installments beginning one month from the date of grant, provided that the person is still serving as a non-employee director on each such vesting date. The exercise price of the options granted to non-employee directors is equal to the fair market value of our ordinary shares on the date of grant and the term ends on the earlier of ten years after the date of the grant and March 26, 2022.

In the event of certain corporate transactions (including, but not limited to, a sale or other disposition of all or substantially all of our assets, a merger or a consolidation), all outstanding options under the 2007 Stock Option Plan will be subject to the terms and conditions of the agreement memorializing the transaction. The agreement may provide for the assumption or substitution of options by any surviving entity, the acceleration of vesting (and exercisability, if applicable) or the cancellation of options with or without consideration. In addition, at the time of grant, our board of directors may provide for acceleration of vesting in the event of a change in control. In the event of

a change in control, non-employee director options outstanding under the 2007 Stock Option Plan will automatically become vested and will terminate if not exercised prior to such a change in control.

The board of directors may amend the 2007 Stock Option Plan at any time. Amendments will be submitted for shareholder approval to the extent required by applicable laws, rules and regulations. The 2007 Stock Option Plan will terminate on March 26, 2022 unless sooner terminated by the board of directors or a committee appointed by the board of directors.

Other pension and retirement plans

We do not have any other pension or retirement plans.

BOARD PRACTICES

Board Composition

Our board of directors currently consists of nine members: Dr. Anderson, Ms. Bertoglio, Mr. Breveglieri, Mr. Codella, Dr. Ferro, Mr. Kroin, Dr. Nadler, Mr. Sweeney and Dr. Zambon. Dr. Anderson, Ms. Bertolglio, Mr. Breveglieri, Dr. Nadler, Mr. Sweeney and Dr. Zambon have never been employed by us or any of our subsidiaries and are independent directors. FinSirton agreed to vote its shares in favor of electing one person to be designated by Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd. for so long as such entities collectively own ADSs representing at least 5% of our outstanding ordinary shares. Mr. Kroin is the designee of those two shareholders. We do not have any agreements with any of our directors that provide for benefits upon termination of employment, although under Italian law, if directors are removed by the vote of shareholders at an ordinary shareholders' meeting prior to the end of their term without cause, they are entitled to receive the consideration that they would have received through the end of their term.

Our Compensation Committee recommends the compensation of our directors to our shareholders and our board of directors. Under Italian law, our shareholders determine the compensation of our directors relating to basic board service, such as annual fees for serving on the board and fees for attending board meetings. Our directors then determine "additional" compensation for our directors for serving on the various board committees and attending committee meetings. Our Compensation Committee, board of directors and shareholders have approved the following director compensation for the term from our April 2007 ordinary shareholder meeting to our April 2008 shareholder meeting. Each director would receive, as applicable:

€20 thousand per year for being a member of the board;

€2 thousand for each board meeting attended;

- •an additional €3 thousand for each board meeting attended in person that is held outside of the continent in which the director resides or that requires travel for more than 5 hours from his or her residence;
 - an additional €18 thousand per year for being the chairperson of the audit committee;
- .€2 thousand per committee meeting attended for the chairperson of the nominating and corporate governance committee and the chairperson of the compensation committee;
- . €1 thousand per committee meeting attended for the other members of the nominating and corporate governance committee and the compensation committee; and
- · €4 thousand per committee meeting attended for all members of the audit committee, including the chairperson.

Each of our non-employee directors (other than Dr. Nadler) receives an option to purchase 10,000 ordinary shares upon initial election to the board of directors. We granted Dr. Nadler additional cash compensation instead of options to purchase ordinary shares. Each of our non-employee directors also receive an option to purchase an additional 5,000 ordinary shares upon reelection at each annual shareholders' meeting.

Board Committees and Code of Ethics

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee.

Audit Committee. Our audit committee consists of Ms. Bertoglio, Mr. Sweeney and Dr. Zambon, each of whom is an independent director. Ms. Bertoglio and Mr. Sweeney are both audit committee financial experts. The audit committee is a standing committee of, and operates under a written charter adopted by, our board of directors. The audit committee:

- ·establishes procedures for the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters and the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters;
- ·has the authority to engage independent counsel and other advisors, as it determines necessary to carry out its duties, and determine the compensation of such counsel and advisors, as well as its ordinary administrative expenses; and

approves related party transactions.

Our audit committee directly oversees our independent accountants, including the resolution of disagreements between management and the independent accountants. As discussed below, under Italian law, our board of statutory auditors also oversees our independent accountants with respect to our Italian GAAP financial statements. Under Italian law, our shareholders must be the party that appoints, terminates and determines the compensation for our independent accountants, although our audit committee does make recommendations on such matters to our board of directors, which in turn makes recommendations to our shareholders.

We anticipate that the audit committee will prepare an "Organizational and Operational Model" permitted by Italian Legislative Decree of June 8, 2001 No. 231 (relating to the administrative responsibility of companies). We expect that this document will consist of:

operating procedures and reporting system;

internal supervisory and monitoring body; and

a disciplinary system.

Compensation Committee. Our compensation committee consists of Dr. Anderson, Dr. Nadler and Dr. Zambon, each of whom is independent director. Under Nasdaq rules, the compensation of a U.S. domestic company's chief executive officer and all other officers must be determined, or recommended to the board of directors, either by a compensation committee comprised of independent directors or a majority of the independent directors of its board of directors. Disclosure of individual management compensation information is mandated by the Exchange Act proxy rules, but foreign private issuers are generally exempt from that requirement. Our compensation committee performs the duties required by the rules of Nasdaq including making decisions and recommendations regarding salaries, benefits, and incentive compensation for our executive officers. Part of the compensation of our directors is fixed periodically by our shareholders at their annual ordinary shareholder meetings. We disclose the aggregate compensation of our executive officers and directors in our Exchange Act reports, but not individual compensation of those officers or directors.

Nominating and Corporate Governance Committee. Our nominating and corporate governance committee consists of Ms. Bertoglio, Mr. Breveglieri and Dr. Nadler, each of whom is an independent director. Under Nasdaq rules, the directors of a U.S. domestic company must be either selected or recommended for the board of directors' selection by either a nominating committee comprised solely of independent directors or by a majority of the independent directors. Under Italian law, directors may also be nominated by our shareholders. Our nominating and corporate governance committee performs the duties required by Nasdaq, including assisting the board of directors in fulfilling its responsibilities by:

identifying and approving individuals qualified to serve as members of our board of directors;

selecting director nominees for our annual meetings of shareholders;

evaluating our board's performance; and

·developing and recommending to our board corporate governance guidelines and oversight with respect to corporate governance and ethical conduct.

Our shareholders are able to nominate directors other than those nominated by the nominating committee.

Other Committees. Our board of directors may establish other committees as it deems necessary or appropriate from time to time, including, but not limited to, an executive committee.

Board of Statutory Auditors

Under Italian law, in addition to electing our board of directors, our shareholders also elect a board of statutory auditors. The statutory auditors are elected for a term of three years, may be reelected for successive terms and may be

removed only for cause and with the approval of a competent court. Each member of the board of statutory auditors must provide certain evidence that he or she is qualified to act in that capacity under Italian law, and that he or she meets certain professional standards. The board of statutory auditors is required to verify that we comply with applicable law and our by-laws, respect the principles of correct administration and maintain adequate organizational structure, internal controls and administrative and accounting system, and oversees our independent accountants with respect to our Italian GAAP financial statements.

The following table sets forth the names of the three members of our board of statutory auditors and the two alternate statutory auditors and their respective positions, as of the date of this annual report. The current board of statutory auditors was elected on April 28, 2006 for a term that ends at the date of the ordinary shareholders' meeting to approve our 2008 annual financial statements, which would normally be held in April 2009.

Name	Position			
Giorgio Iacobone	Chairman			
Carlo Ciardiello	Member			
Augusto Belloni	Member			
Domenico Ferrari	Alternate			
Romano Chiapponi	Alternate			

Mr. Belloni also serves as a member of the board of statutory auditors of Sirton.

Our board of statutory auditors met five times and attended two shareholder and board of directors meetings during 2003, and met five times and attended five shareholder and three board of directors meetings during 2004. In 2005, they met five times and attended four board of directors meetings and two shareholders meetings. In 2006, they met 5 times and attended 9 board of director meetings and 2 shareholder meetings. In 2006, we accrued \$84 thousand as compensation for their service as our statutory auditors.

Indemnification of Directors and Executive Officers and Limitation of Liability

We have entered into indemnification agreements with each of our directors and executive officers which may, in some cases, be broader than the specific indemnification provisions contained in Italian law.

At present, there is no pending litigation or proceeding involving any of our directors, officers, employees, or agents where indemnification by us will be required or permitted and we are not aware of any threatened litigation or proceeding that may result in a claim for such indemnification.

We have purchased directors' and officers' liability insurance, including liabilities arising under the Securities Act, and intend to maintain this insurance in the future.

EMPLOYEES

The table below shows the number, activity and geographic location of our permanent employees as of December 31, 2004, 2005 and 2006. All of our employees are in Italy, except for Gary Gemignani, our Executive Vice President and Chief Financial Officer, and an administrative assistant, who are based in the United States. Prior to June 2005, most of our administrative, accounting, finance and business development services were performed by employees of FinSirton and Sirton. In 2005 we established our administrative, finance and accounting department.

	As of December 31,			
	2004	2005	2006	
Administration, accounting, finance, business				
development	1	6	12	
R&D, clinical, regulatory	17	17	20	
Production, quality assurance control	17	26	33	
Total	35	49	65	

Italian law imposes certain confidentiality obligations on our employees and provides that either any intellectual property created by them while in our employ belong to us or we have a right of option on it, although we must compensate them for such intellectual property creation. Our employees in Italy are subject to national collective bargaining agreements. National agreements are negotiated collectively between the national associations of companies within a given industry and the respective national unions. National agreements provide a basic framework on working conditions, including, among other things, pay, security and other provisions. Our employees other than executive officers in Italy were subject to a collective bargaining agreement that was renewed on May 10, 2005 and expires on December 31, 2009. Our executive officers in Italy are subject to a collective bargaining agreement that was renewed on November 20, 2004 and expires on December 31, 2008. We believe that we maintain satisfactory relations with our employees.

Under Italian law, employees are entitled to amounts based on salary and years of service upon leaving their employment, even if we terminate them for cause or they resign. We had a liability for these termination indemnities of €682 thousandat December 31, 2006. Under Italian law, we make social security and national healthcare contributions for our employees to the Italian government, which provides pension and healthcare insurance benefits.

SHARE OWNERSHIP

Dr. Laura Ferro and members of her family control FinSirton. As a result, Dr. Ferro may be deemed to beneficially own FinSirton's shares of our company. Dr. Ferro disclaims such beneficial ownership. Dr. Ferro also holds options that, within 60 days of March 31, 2007, are vested as to 171,113 shares.

To our knowledge, none of our other directors and officers listed herein owned one percent or more of our ordinary shares at March 31, 2007. See "Item 7, Major Shareholders and Related Party Transactions."

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

MAJOR SHAREHOLDERS

The following table shows information with respect to the beneficial ownership of our ordinary shares as of March 31, 2007 by:

·each person, or group of affiliated persons, who we know owns beneficially 5% or more of our ordinary shares, and

all of our directors and executive officers as a group.

At March 31, 2007, we had 14,191,294 ordinary shares outstanding. Except as indicated in the footnotes to this table and subject to community property laws where applicable, the persons named in the table have sole voting and investment power with respect to all ordinary shares shown as beneficially owned by them. Beneficial ownership and percentage ownership are determined in accordance with the rules of the SEC. Ordinary shares underlying our convertible securities that are exercisable within 60 days from March 31, 2007 are deemed outstanding for computing the amount and percentage owned by the person or group holding such convertible securities, but are not deemed outstanding for computing the percentage owned by any other person or group.

	Number of Shares Beneficially	_
D · · 101 111	Owned	Percent
Principal Shareholders		
FinSirton S.p.A.(1)	3,750,000	26.4%
Paolo Cavazza (2)	1,621,499	11.3%
Dr. Jeffrey R. Jay (3)	1,489,362	10.3%
Great Point Partners, LLC (4)	1,489,362	10.3%
Claudio Cavazza (5)	1,408,172	9.9%
Sigma Tau Finanziaria S.p.A. (6)	1,320,505	9.2%
Israel A. Englander (7)	1,207,419	8.5%
Millennium Management, L.L.C. (8)	1,207,419	8.5%
Millenco, L.L.C. (9)	1,007,419	7.1%
Clipper Bay & Co. (10)	750,000	5.9%
SMALLCAP World Fund, Inc. (11)	750,000	5.9%
Capital Research and Management Company (12)	750,000	5.9%
Biomedical Value Fund, L.P. (13)	744,681	5.2%
Biomedical Offshore Value Fund, Ltd. (14)	744,681	5.2%
All directors and executive officers as a group (13 persons) (15)	4,147,234	28.4%

- (1) Address is Piazza XX Settembre 2, 22079 Villa Guardia (Como), Italy. The board of directors of FinSirton, including Dr. Laura Ferro, who is our Chief Executive Officer, President and one of our directors, may be deemed to share voting or dispositive control with FinSirton over the ordinary shares in Gentium that FinSirton beneficially owns. The members of the board of directors of FinSirton, including Dr. Ferro, disclaim beneficial ownership of such shares.
- (2) Based upon information obtained from a Schedule 13D filed with the SEC, as amended. Address is Via Tesserte, 10, Lugano, Switzerland. Consists of (i) 800,000 outstanding ordinary shares held by Sigma Tau Finanziaria S.p.A., (ii) 447,171 outstanding ordinary shares and ADSs held by Defiante Farmaceutica L.d.A., (iii) 73,334 ordinary shares issuable upon exercise of warrants currently exercisable held by Defiante; (iv) 240,043 outstanding

ADSs held by Chaumiere Consultadoria e Servicos S.A.; and (v) 60,951 ADSs issuable upon exercise of warrants currently exercisable held by Chaumiere Consultadoria e Servicos S.A. Mr. Paolo Cavazza owns, directly and indirectly, 40% of the outstanding equity of Sigma Tau Finanziaria S.p.A. and so may be deemed to beneficially own the shares beneficially owned by Sigma Tau Finanziaria S.p.A. In connection with a purchase by Sigma Tau Finanziaria S.p.A. of 800,000 ordinary shares from FinSirton in April 2005, FinSirton agreed that, if the per share price in a sale by our shareholders of all of our ordinary shares is less than \$5.00 per share, FinSirton will transfer to Sigma Tau Finanziaria S.p.A. an additional number of ordinary shares equal to (x) \$3.2 million divided by the product determined by multiplying (i) 0.8 by (ii) the per share sale price less (y) 800,000 ordinary shares. Sigma Tau Finanziaria S.p.A. owns, directly and indirectly, 100% of the outstanding equity of Defiante and so may be deemed to be the beneficial owner of the outstanding ordinary shares and ADSs held by Defiante and issuable upon exercise of Defiante's warrants. Mr. Paolo Cavazza and members of his family indirectly own Chaumiere and so may be deemed to beneficially own the ADSs beneficially owned by Chaumiere.

- (3) Based upon information obtained from a Schedule 13D filed with the SEC, as amended. Address is 2 Pickwick Plaza, Suite 450, Greenwich, Connecticut, 06830. Consists of (i) 531,915 ADSs owned by Biomedical Value Fund, L.P., (ii) 212,766 ADSs issuable upon exercise of warrants currently exercisable owned by Biomedical Value Fund, L.P., (iii) 531,915 ADSs owned by Biomedical Offshore Value Fund, Ltd. and (iv) 212,766 ADSs issuable upon exercise of warrants currently exercisable owned by Biomedical Offshore Value Fund, Ltd. Dr. Jay is the senior managing member of Great Point Partners, LLC, which is the investment manager of each of Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd. As a result, Dr. Jay has shared voting and investment power with respect to the ADSs owned by Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd., and may be deemed to be the beneficial owner of such ADSs. Dr. Jay disclaims beneficial ownership of such ADSs, except to the extent of any pecuniary interest.
- (4) Based upon information obtained from a Schedule 13D filed with the SEC, as amended. Address is 2 Pickwick Plaza, Suite 450, Greenwich, Connecticut, 06830. Consists of (i) 531,915 ADSs owned by Biomedical Value Fund, L.P., (ii) 212,766 ADSs issuable upon exercise of warrants currently exercisable owned by Biomedical Value Fund, L.P., (iii) 531,915 ADSs owned by Biomedical Offshore Value Fund, Ltd. and (iv) 212,766 ADSs issuable upon exercise of warrants currently exercisable owned by Biomedical Offshore Value Fund, Ltd. Great Point is the investment manager of each of Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd. As a result, Great Point has shared voting and investment power with respect to the ADSs owned by Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd., and may be deemed to be the beneficial owner of such ADSs. Great Point disclaims beneficial ownership of such ADSs, except to the extent of any pecuniary interest.
- (5) Based upon information obtained from a Schedule 13G filed with the SEC, as amended. Address is Via Sudafrica, 20, Rome, Italy 00144. Consists of (i) 800,000 outstanding ordinary shares held by Sigma Tau Finanziaria S.p.A., (ii) 447,171 outstanding ordinary shares and ADSs held by Defiante Farmaceutica L.d.A., (iii) 73,334 ordinary shares issuable upon exercise of warrants currently exercisable held by Defiante and (iv) 87,667 ADSs held by Inverlochy Consultadoria e Servicos LdA. Mr. Claudio Cavazza owns, directly and indirectly, 60% of the outstanding equity of Sigma Tau Finanziaria S.p.A. and so may be deemed to beneficially own the shares beneficially owned by Sigma Tau Finanziaria S.p.A. In connection with a purchase by Sigma Tau Finanziaria S.p.A. of 800,000 ordinary shares from FinSirton in April 2005, FinSirton agreed that, if the per share price in a sale by our shareholders of all of our ordinary shares is less than \$5.00 per share, FinSirton will transfer to Sigma Tau Finanziaria S.p.A. an additional number of ordinary shares equal to (x) \$3.2 million divided by the product determined by multiplying (i) 0.8 by (ii) the per share sale price less (y) 800,000 ordinary shares. Sigma Tau Finanziaria S.p.A. owns, directly and indirectly, 100% of the outstanding equity of Defiante and so may be deemed to be the beneficial owner of the outstanding ordinary shares and ADSs held by Defiante and issuable upon exercise of Defiante's warrants. Inverlochy Consultadoria e Servicos, LdA is indirectly wholly-owned by Mr. Claudio Cavazza. By reason of such relationship, Mr. Cavazza may be deemed to beneficially own the ADSs held by Inverlochy Consultadoria e Servicos, LdA.
- (6) Based upon information obtained from a Schedule 13D filed with the SEC, as amended. Address is Via Sudafrica 20, 00144 Roma, Italy. Consists of (i) 800,000 outstanding ordinary shares held by Sigma Tau Finanziaria S.p.A., (ii) 447,171 outstanding ordinary shares and ADSs held by Defiante and (iii) 73,334 ordinary shares issuable upon exercise of warrants currently exercisable held by Defiante. Sigma Tau Finanziaria S.p.A. owns, directly and indirectly, 100% of the outstanding equity of Defiante and so may be deemed to be the beneficial owner of the outstanding ordinary shares and ADSs held by Defiante and issuable upon exercise of Defiante's warrants. The board of directors of Sigma Tau Finanziaria S.p.A. may be deemed to share voting or dispositive power with Sigma Tau Finanziaria S.p.A. over the ordinary shares in our company that Sigma Tau Finanziaria S.p.A. beneficially owns, and so may be deemed to beneficially own the ordinary shares that Sigma Tau Finanziaria S.p.A. of 800,000 ordinary shares from FinSirton in April 2005, FinSirton agreed that, if the per share price in a sale by our shareholders of all of our ordinary shares is less than approximately \$5.00 per share, FinSirton will transfer to Sigma Tau Finanziaria

S.p.A. an additional number of ordinary shares equal to (x) \$3.2 million divided by the product determined by multiplying (i) 0.8 by (ii) the per share sale price less (y) 800,000 ordinary shares.

(7) Based on information obtained from Schedule 13G filed with the SEC. Address is c/o Millennium Management, L.L.C., 666 Fifth Avenue, New York, New York 10103. Consists of (i) 1,007,419 ADSs held by Millenco, L.L.C. and (ii) 200,000 ADSs held by Millennium Partners L.P. Mr. Eglander is the managing member of Millennium Management, L.L.C., which is the managing partner of Millennium Partners, L.P. and the manager of Millenco, L.L.C. As a result, Mr. Eglander may be deemed to be the beneficial owner of the ADSs held by Millennium Partners, L.P. and Millenco, L.L.C.

- (8) Based on information obtained form a Schedule 13G filed with the SEC. Address is 666 Fifth Avenue, New York, NY 10103. Consists of (i) 1,007,419 ADSs held by Millenco, L.L.C. Millennium Management, L.L.C. is the managing partner of Millennium Partners, L.P. and the manager of Millenco, L.L.C. As a result, Millennium Management, L.L.C. may be deemed to be the beneficial owner of the ADSs held by Millennium Partners, L.P. and Millenco, L.L.C.
- (9) Based on information obtained from Schedule 13G filed with the SEC. Address is c/o Millennium Management, L.L.C., 666 Fifth Avenue, New York, New York 10103.
- (10) Address is c/o Capital Research and Management Company, 333 South Hope Street, Los Angeles, California 90071. Clipperbay & Co. is the nominee name for SMALLCAP World Fund, Inc. Capital Research and Management Company is the investment adviser of SMALLCAP World Fund, Inc. By reason of such relationships, SMALLCAP World Fund Inc. and Capital Research and Management Company may be deemed to share voting and/or dispositive control over the ADSs beneficially owned and offered by Clipperbay & Co. and therefore may be deemed to be beneficial owners of such securities. Capital Research and Management Company disclaims any beneficial ownership of such securities.
- (11) Address is c/o Capital Research and Management Company, 333 South Hope Street, Los Angeles, California 90071. Clipperbay & Co. is the nominee name for SMALLCAP World Fund, Inc. By reason of such relationship, SMALLCAP World Fund Inc. may be deemed to share voting and/or dispositive control over the ADSs beneficially owned and offered by Clipperbay & Co. and therefore may be deemed to be beneficial owners of such securities. Capital Research and Management Company disclaims any beneficial ownership of such securities.
- (12) Address is Capital Research and Management Company, 333 South Hope Street, Los Angeles, California 90071. Clipperbay & Co. is the nominee name for SMALLCAP World Fund, Inc. Capital Research and Management Company is the investment adviser of SMALLCAP World Fund, Inc. By reason of such relationships, Capital Research and Management Company may be deemed to share voting and/or dispositive control over the ADSs beneficially owned and offered by Clipperbay & Co. and therefore may be deemed to be beneficial owners of such securities. Capital Research and Management Company disclaims any beneficial ownership of such securities.
- (13) Based upon information obtained from a Schedule 13D filed with the SEC, as amended. Address is 2 Pickwick Plaza, Suite 450, Greenwich, Connecticut, 06830. Includes 212,766 ADSs issuable upon exercise of warrants currently exercisable.
- (14) Based upon information obtained from a Schedule 13D filed with the SEC, as amended. Address is P.O. Box 1748 GT, Cayman Corporate Centre, 27 Hospital Road, Georgetown, Grand Cayman, Cayman Islands CJ08. Includes 212,766 ADSs issuable upon exercise of warrants currently exercisable.
- (15) Includes 397,234 ordinary shares issuable upon exercise of options currently exercisable and exercisable with 60 days of March 31, 2007.

As of March 31, 2007, there were no record holders of our ordinary shares located in the United States. There were no changes in percentage ownership by holders of 5% or more of our outstanding ordinary shares since January 1, 2004 except for the following.

· FinSirton sold 450,000 of our ordinary shares that it owned to third parties in January 2005 and an additional 800,000 shares in April 2005 to Sigma Tau Finanziaria S.p.A. Mr. Paolo Cavazza and Mr. Claudio Cavazza may be deemed to have acquired the ordinary shares acquired by Sigma Tau Finanziaria S.p.A.

- · In connection with our initial public offering in June 2005, Defiante acquired 359,505 ordinary shares upon the exercise of our Series A notes, and Mr. Paolo Cavazza, Mr. Claudio Cavazza and Sigma Tau Finanziaria S.p.A. may be deemed to have acquired such shares.
- \cdot All shareholders of our company prior to our initial public offering were substantially diluted by the shares issued in that public offering.
- · All shareholders of our company prior to our October 2005 private placement were substantially diluted by the shares issued in that private placement.
- · In our October 2005 private placement, Biomedical Value Fund, L.P. acquired 531,915 ordinary shares, Biomedical Offshore Value Fund, Ltd. acquired 531,915 ordinary shares and Chaumiere Consultadoria e Servicos S.A. acquired 152,376 ordinary shares. Dr. Jay may be deemed to have acquired the ordinary shares acquired by Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd. Mr. Paolo Cavazza may be deemed to have acquired the ordinary shares acquired by Chaumiere Consultadoria e Servicos S.A.

- · All shareholders of our company prior to our June 2006 private placement substantially diluted by the shares issued that private placement.
- · In our June 2006 private placement, Clipper Bay & Co. acquired 450,000 ordinary shares. SMALLCAP World Fund, Inc. and Capital Research and Management Company may be deemed to have acquired such ordinary shares.
- · All shareholders of our company prior to our February 2007 private placement were substantially diluted by the shares issued in that private placement.
- · In our February 2007 private placement, Chaumiere acquired 87,667 ordinary shares, Clipperbay & Co. acquired 300,000 ordinary shares, Defiante acquired 87,666 ordinary shares, Inverlochy acquired 87,667 ordinary shares and Millennium Partners, L.P. acquired 200,000 ordinary shares. Paolo Cavazza maybe deemed to have acquired the ordinary shares acquired by Chaumiere. SMALLCAP World Fund, Inc. and Capital Research and Management Company may be deemed to have acquired the ordinary shares acquired by Clipperbay & Co. Paolo Cavazza, Claudio Cavazza and Sigma Tau Finanziaria S.p.A. may be deemed to have acquired the ordinary shares acquired by Defiante. Claudio Cavazza may be deemed to have acquired the ordinary shares acquired by Inverlochy. Israel A. Englander and Millennium Management, L.L.C. may be deemed to have acquired the ordinary shares acquired by Millennium Partners, L.P.

The holders of 5% or more of our outstanding ordinary shares do not have different voting rights than other holders of our ordinary shares. Dr. Ferro and her family, through their ownership of 100% of the outstanding ordinary shares of FinSirton, effectively control all decisions and actions that must be made or taken by holders of our ordinary shares by virtue of the fact that FinSirton owned approximately 26.4% of our outstanding ordinary shares at March 31, 2007.

Change of control arrangements

There are no arrangements of which we are aware that could result in a change of control over us other than those described above and the following.

- We and certain parties are subject to certain registration rights, as described below.
- ·FinSirton has agreed to vote its ordinary shares in our company in favor of electing a nominee to our board of directors, as described below.

Registration Rights

Holders of shares issued upon conversion of Series A notes and warrants

We have registered the resale of 502,334 ordinary shares pursuant to an investor rights agreement with the purchasers of our Series A notes and related warrants with respect to the ordinary shares issued upon conversion of the Series A notes and issuable upon exercise of the warrants. The agreement provides that, beginning 270 days after the effective date of the registration statement relating to our initial public offering, the holders of a majority of the ordinary shares that were issued upon conversion of our Series A notes or exercise of our warrants would be entitled to demand that we register their shares for resale under the Securities Act of 1933, as amended. We are not required to effect more than three registrations for these holders under these demand registration rights. These demand rights terminate on June 21, 2008. No more than two of the demand registrations may be effected using a Form F-1 registration statement. The securities registered pursuant to F-1 registrations must have an aggregate offering price of \$2.5 million and any short-form or Form F-3 registrations must have an aggregate offering price of \$1.0 million.

The investor rights agreement also provides that if we propose to register any of our securities under the Securities Act, either for our own account or for the account of other shareholders exercising registration rights, the holders of warrants or ordinary shares received upon conversion of the Series A notes or warrants are entitled to notice of the registration and are entitled to include such ordinary shares in any such registration. These "piggyback rights" are subject to conditions and limitations, among them a minimum aggregate offering price of \$1.0 million each and the right of the underwriters of an offering to limit the number of ordinary shares included in the registration. These piggyback rights terminate on June 21, 2008.

We have registered ADSs representing such ordinary shares, in addition to the ordinary shares themselves. We are generally required to bear all of the expenses of these registrations, except underwriting discounts and selling commissions. Registration of these ADSs results in those ADSs becoming freely tradable without restriction under the Securities Act.

Alexandra Global Master Fund Ltd., Generation Capital Associates and Sigma Tau Finanziaria S.p.A.

We have registered the resale of 1,250,000 ordinary shares pursuant to an investor rights agreement with Alexandra Global Master Fund Ltd. and Generation Capital Associates with respect to an aggregate of 450,000 ADSs held by those parties and with Sigma Tau Finanziaria S.p.A. with respect to 800,000 ordinary shares held by Sigma Tau Finanziaria S.p.A. Each investor rights agreement provides that beginning six months after the effective date of the registration statement relating to our initial public offering, the holders of the majority of the ordinary shares covered by that agreement would be entitled to demand that we register their shares for resale under the Securities Act. These "demand rights" are subject to limitations described in the agreements. We are not required to effect more than two registrations under these demand registration rights pursuant to each agreement. These demand rights terminate on June 21, 2008. The securities registered pursuant to F-1 registrations must have an aggregate offering price of \$2.0 million and any short-form or Form F-3 registrations must have an aggregate offering price of \$1.0 million.

Each investor rights agreement also provides that if we propose to register any of our securities under the Securities Act, either for our own account or for the account of other shareholders exercising registration rights, the holders are entitled to notice of the registration and are entitled to include ordinary shares in any such registration. These "piggyback rights" are subject to conditions and limitations, among them a minimum aggregate offering price of \$1.0 million each and the right of the underwriters of an offering to limit the number of shares included in the registration. These piggyback rights terminate on June 21, 2008.

We have registered ADSs representing such ordinary shares in addition to the ordinary shares themselves. We are generally required to bear all of the expenses of these registrations, except underwriting discounts and selling commissions. Registration of these ADSs results in those ADSs becoming freely tradable without restriction under the Securities Act.

Underwriters of our initial public offering

We have registered the resale of 151,200 ordinary shares pursuant to warrants issued to the underwriters of our initial public offering. Each purchase option provides that, beginning one year after the effective date of the registration statement relating to our initial public offering and ending four years after the effective date of the registration statement relating to our initial public offering, the holders of a majority of all of the ordinary shares issuable upon exercise of the purchase options may, on one occasion, demand that we register for resale all or any portion of the purchase options and all of the ordinary shares issuable upon exercise of the purchase options and kept the registration statement effective for at least six consecutive months.

Each purchase option also provides that if we propose to register any of our securities under the Securities Act, either for our own account or for the account of other shareholders exercising registration rights, the holders are entitled to notice of the registration and are entitled to include ordinary shares in any such registration, which we must keep effective for at least six consecutive months. These "piggyback rights" commence one year after the effective date of the registration statement relating to our initial public offering and terminate on seven years after the effective date of the registration statement relating to our initial public offering.

We have registered ADSs representing such ordinary shares in addition to the ordinary shares themselves. We are generally required to bear all of the expenses of these registrations, except underwriting discounts and selling commissions. Registration of these ADSs results in those ADSs becoming freely tradable without restriction under the Securities Act.

October 2005 private placement participants

We have registered the resale of 2,264,643 ordinary shares pursuant to a registration rights agreement between us and the purchasers of our ordinary shares and warrants in our October 2005 private placement. We must keep the registration statement effective until all of the securities registered have been sold or may be sold without volume restrictions pursuant to Rule 144(k).

We have registered ADSs representing such ordinary shares in addition to the ordinary shares themselves. We are generally required to bear all of the expenses of these registrations, except underwriting discounts and selling commissions. Registration of these ADSs results in those ADSs becoming freely tradable without restriction under the Securities Act.

June 2006 private placement participants

We have registered the resale of 2,409,971 ordinary shares pursuant to a registration rights agreement between us and the purchasers of our ordinary shares and warrants in our June 2006 private placement. We must keep the registration statement effective until all of the securities registered have been sold or may be sold without volume restrictions pursuant to Rule 144.

We have registered ADSs representing such ordinary shares in addition to the ordinary shares themselves. We are generally required to bear all the expenses of these registrations, except underwriting discounts and selling commissions. Registration of these ADSs results in those ADSs being freely tradable without registration under the Security Act.

February 2007 private placement participants

We have registered the resale of 2,354,000 ordinary shares pursuant to a registration agreement between us and the purchasers of our ordinary shares in our February 2007 private placement. We must keep the registration statement effective until all of the securities registered have been sold or may be sold without volume restrictions pursuant to Rule 144.

We have registered ADSs representing such ordinary shares in addition to the ordinary shares themselves. We are generally required to bear all the expenses of these registrations, except underwriting discounts and selling commissions. Registration of these ADSs results in those ADSs being freely tradable without registration under the Security Act.

Voting Agreements

In connection with our October 2005 private placement, FinSirton agreed to vote its ordinary shares in our company in favor of electing one nominee to our board of directors selected by Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd. for so long as those entities collectively own ADSs representing 5% of our outstanding ordinary shares. Mr. Kroin is the designee of these entities.

RELATED PARTY TRANSACTIONS

Other than described below, since January 1, 2006, we have not entered into or proposed to enter into any transaction or loan with any affiliate of ours, any of our directors, executive officers, holders of 10% or more of our ordinary shares, any member of their immediate family or any enterprise over which any such person is able to exercise a significant influence other than our employment agreements with Dr. Laura Ferro, our President and Chief Executive Officer and Gary Gemignani, our Executive Vice-President and Chief Financial Officer.

Control by Dr. Ferro's Family

Dr. Laura Ferro, who is our Chief Executive Officer and President and one of our directors, and members of her family control FinSirton. As a result, Dr. Ferro and her family indirectly control approximately 26.4% of our outstanding ordinary shares at March 31, 2007.

Agreements with various entities

On January 2, 2006, we entered into a Service Agreement with FinSirton pursuant to which FinSirton supplies us with general management and personnel administration services. This agreement was amended in 2007 and is renewable automatically each year barring cancellation of the agreement, which requires notice one month prior to expiration.

Starting from January 2007, we pay FinSirton €975 per employee per year for personnel services and €54 thousand per year for general management services. This agreement allows us to revise the payroll service at €195 per employee per year if we manage internally some of the payroll activities.

On January 2, 2006, we entered into a Service Agreement with Sirton pursuant to which Sirton supplies us with a number of business services including quality control, analytical assistance for research and development, engineering services, general and car rental services, utilities services, and maintenance services. This agreement amended in 2007 and is renewable automatically each year barring cancellation of the agreement, which requires notice one month prior to expiration.

On January 1, 2007, we entered into a Commercial Lease Contract with FinSirton to lease additional space for offices, manufacturing space, laboratories and storage facilities. This agreement expires on December 31, 2013. The area leased is 607 square meters in size. The contract provides for an annual fee of €30 thousand which is updated each year on the basis of variation of the cost of living index.

On January 2, 2006, we entered into a Contract to Supply Active Ingredients with Sirton, pursuant to which we manufacture urokinase, calcium heparin, defibrotide, sulglicotide and glucidamine for Sirton, which Sirton uses to produce specialty pharmaceutical products. Sirton also processes and sells the defibrotide to Crinos. The agreement automatically renews each year unless one party gives written notice of its intent to terminate the agreement at least one month prior to the annual termination date. The prices were as follows: &53 per unit of urokinase, &2.300 per unit of defibrotide for injection, &660 per unit of oral defibrotide, &390 per unit of sulglicotide, and &160 per unit of glucidamine.

Effective December 31, 2006, FinSirton guaranteed Sirton's payment of its trade payable to us.

Three of the participants in our February 2007 private placement are affiliated with other shareholders, one of our commercial partners and one of our directors:

- · Defiante Farmaceutica, L.d.A. purchased 87,666 ordinary shares in the February 2007 private placement. Defiante also converted its Series A notes into 359,505 ordinary shares at the consummation of our initial public offering and holds warrants issued in connection with the Series A notes to purchase 73,334 ordinary shares;
- · Chaumiere Consultadoria e Servicos SDC Unipessoal LdA purchased 87,667 ordinary shares in the February 2007 private placement. Chaumiere also purchased which purchased 152,376 ordinary shares and warrants to purchase 60,951 ADSs in our October 2005 private placement; and
- · Inverlochy Consultadoria & Servicos LdA purchased 87,667 ordinary shares in the February 2007 private placement.

Each of these investors is an affiliate of Sigma Tau Finanziaria S.p.A., which owns 800,000 ordinary shares. Pursuant to a voting agreement between Sigma-Tau Finanziaria S.p.A. and FinSirton, a designee of Sigma-Tau Finanziaria S.p.A., Marco Codella, was elected to be a member of our board of directors upon consummation of our initial public offering in June 2005. Mr. Codella is the Chief Financial Officer of Sigma Tau Industrie Farmaceutice Reunite S.p.A., which is a wholly-owned subsidiary of Sigma-Tau Finanziaria S.p.A. Each of these three investors is also an affiliate of Sigma-Tau Pharmaceuticals, Inc., which is a party to a License and Supply Agreement with us pursuant to which we have licensed the right to market defibrotide to treat VOD in North America, Central America and South America to Sigma-Tau Pharmaceuticals, Inc. and pursuant to which Sigma-Tau Pharmaceuticals, Inc has agreed to purchase defibrotide for this use from us. This agreement is described in more detail in "Business—Our Strategic Alliances—License and Distribution Agreements." Sigma-Tau Pharmaceuticals, Inc. also has a right of first refusal to market defibrotide for certain other uses in North America, Central America and South America.

David Kroin, a member of Gentium's Board of Directors, is the Managing Director of Great Point Partners, LLC. Great Point Partners LLC is the investment manager of Biomedical Value Fund, LP and Biomedical Offshore Value Fund Ltd., each of which beneficially owns more than 5% of our outstanding ordinary shares at March 31, 2007. Mr. Kroin was elected to Gentium's board of directors pursuant to a voting agreement among the participants in the October 2005 private placement and FinSirton, Gentium's largest shareholder.

Nadler Consulting Agreement

We have entered into a consulting agreement, dated as of April 1, 2005, with Dr. Nadler, one of our directors, under which we have retained Dr. Nadler as an independent contractor in connection with providing consulting and advising services relating to our clinical development of defibrotide to treat VOD in the United States and participating in our scientific advisory board. In return, we have agreed to pay Dr. Nadler a fee of \$15,000 per year, a fee of \$5,000 per meeting of our scientific advisory board outside the United States and a fee of \$3,000 for each meeting of our scientific advisory board in the United States, as well as reimbursing Dr. Nadler for his reasonable and necessary expenses incurred in providing his services. The consulting agreement has an initial term of twelve months and is automatically renewed for additional one-year periods unless terminated by either party upon notice given at least 30 days prior to the end of such period.

Anderson Consulting Agreement

We have entered into a consulting agreement, dated as of April 27, 2006, with Dr. Anderson, one of our directors, under which we have retained Dr. Anderson as an independent contractor in connection with providing consulting and advisory services relating to our clinical development of defibrotide to treat VOD in the United States and

participating in our scientific advisory board. In return, we have agreed to pay Dr. Anderson a fee of \$15,000 per year, a fee of \$5,000 per meeting of our scientific advisory board outside the United States and a fee of \$3,000 for each meeting of our scientific advisory board in the United States, provided that such fees do not in the aggregate exceed \$60,000 in any calendar year. The agreement also provides that Dr. Anderson be reimbursed for his reasonable and necessary expenses incurred in providing his services. The consulting agreement has an initial term of twelve months and is automatically renewed for additional one-year periods unless terminated by either party upon notice given at least 30 days prior to the end of such period.

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and officers containing provisions that may require us to indemnify them against liabilities that may arise by reason of their status or service as directors or officers and to advance their expenses incurred as a result of any proceeding against them. However, we will not indemnify directors or officers with respect to liabilities arising from willful misconduct of a culpable nature.

INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

ITEM 8. FINANCIAL INFORMATION

CONSOLIDATED STATEMENTS

Please refer to Item 18, "Financial Statements" of this annual report.

OTHER FINANCIAL INFORMATION

Export Sales

Not applicable.

Legal Proceedings

We are not a party to any legal or governmental proceeding that is pending or, to our knowledge, threatened or contemplated against our company that, if determined adversely to us, would have a materially adverse effect, either individually or in the aggregate, on the business, financial condition or results of operations.

Dividend Policy

We have never declared or paid any cash dividends on our ordinary shares. We currently intend to retain all available funds to support our operations and to finance the growth and development of our business. We are not subject to any contractual restrictions on paying dividends. Under Italian law and our bylaws, our payment of any annual dividend must be proposed by our board of directors and is subject to the approval of our shareholders at the annual ordinary shareholders' meeting. Before dividends may be paid out of our net income in any year, we must allocate an amount equal to 5% of the net income to our legal reserve until such reserve is at least equal to 20% of the aggregate par value of our issued shares, which we call our "capital." If a loss in our capital occurs, we may not pay dividends until the capital is reconstituted or reduced by the amount of such losses. We may pay dividends out of available retained earnings from prior years, provided that after such payment, we will have a legal reserve at least equal to the legally required minimum of 20% of the capital. We may not approve or pay dividends until this minimum is met. If the minimum is met, the board of directors proposes the issuance of a dividend and the shareholders approve that issuance, the shareholders' resolution will specify the manner and the date for their payment.

Any dividend we declare will be paid to the holders of ADSs, subject to the terms of the deposit agreement, to the same extent as holders of our ordinary shares, less the fees and expenses payable under the deposit agreement. Any dividend we declare will be distributed by the depositary to the holders of the ADSs. Cash dividends on our ordinary shares, if any, will be paid in U.S. dollars.

If we issue debt securities in the future, until those debt securities are repaid in full, we may not declare dividends if it results in the aggregate of the capital and reserves being less than half of the outstanding amount of the debt.

The board of directors may not approve interim dividends at times between our annual ordinary shareholders' meetings. Any future determination relating to dividend policy will be made at the discretion of our board of directors and will depend on a number of factors, including our future earnings, capital requirements, financial condition, future prospects and other factors as the board of directors may deem relevant.

Under Italian law, Italian companies are required to supply to the Italian tax authorities certain information regarding the identity of non-resident shareholders in connection with the payment of dividends. Shareholders are required to provide their Italian tax identification number, if any, or alternatively, in the case of legal entities, their name, country of establishment and address, or in the case of individuals, their name, address and place and date of birth, or in the case of partnerships, the information required for individuals with respect to one of their representatives. In the case of ADSs owned by non-residents of Italy, we understand that the provision of information concerning the depositary, in its capacity as holder of record of the ordinary shares underlying the ADSs, will satisfy this requirement. However, beneficial U.S. ADS holders are entitled to a reduction of the withholding taxes applicable to dividends paid to them under the income tax convention currently in effect between the United States and Italy. In order for you to benefit from that reduction, we are required to furnish certain information concerning you to the Italian tax authorities, and therefor any claim by you for those benefits would need to be accompanied by the required information.

SIGNIFICANT CHANGES

No significant changes have occurred since the date of the most recent annual financial statements.

ITEM 9. THE OFFER AND LISTING

OFFER AND LISTING DETAILS

Our ADSs are listed on Nasdaq under the symbol "GENT." Neither our ordinary shares nor our ADSs are listed on a securities exchange outside the United States. The Bank of New York is our depositary for purposes of issuing the ADRs representing the ADSs. Each ADS represents one ordinary share.

Trading in our ADSs on the Nasdaq Global Market System commenced on May 16, 2006. Prior to this date, our ADSs were traded on the American Stock Exchange, beginning June 16, 2005 and ending on May 15, 2006, the date we de-listed. The following table sets forth, for each of the periods indicated, the high and low closing prices per ADS as reported by the American Stock Exchange and Nasdaq, as applicable.

	Price Range of ADSs				
		High		Low	
2005					
Second Quarter (beginning June 16, 2005)	\$	9.10	\$	8.77	
Third Quarter	\$	8.99	\$	6.92	
Fourth Quarter					