

LION BIOSCIENCE AG
Form 20-F
September 30, 2003
Table of Contents

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

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

For the fiscal year ended March 31, 2003

OR

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

For the transition period from _____ to _____

LION bioscience Aktiengesellschaft

(Exact name of Registrant as specified in its charter)

Federal Republic of Germany

(Jurisdiction of incorporation or organization)

Waldhofer Str. 98

D-69123 Heidelberg

Federal Republic of Germany

(Address of principal executive offices)

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
NONE	N/A

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Ordinary shares, no par value, but with a notional value of 1.00 per share.

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

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

The number of outstanding shares of each of the issuer's classes of capital or common stock as of March 31, 2003: 19,870,175 ordinary shares, no par value, but with a notional value of 1.00 per share.

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 No

Indicate by check mark which financial statement item the registrant has elected to follow: Item 17 Item 18

Table of Contents**TABLE OF CONTENTS**

	Page
PART I	
<u>Item 1: Identity of Directors, Senior Management and Advisers*</u>	1
<u>Item 2: Offer Statistics and Expected Timetable*</u>	1
<u>Item 3: Key Information on the Company</u>	1
<u>Item 4: Information on the Company</u>	21
<u>Item 5: Operating and Financial Review and Prospects</u>	40
<u>Item 6: Directors, Senior Management and Employees</u>	64
<u>Item 7: Major Shareholders and Related Party Transactions</u>	74
<u>Item 8: Financial Information</u>	77
<u>Item 9: The Offer and Listing</u>	79
<u>Item 10: Additional Information</u>	82
<u>Item 11: Quantitative and Qualitative Disclosure About Market Risk</u>	97
<u>Item 12: Description of Securities other than Equity Securities</u>	97
PART II	
<u>Item 13: Defaults, Dividend Arrearages and Delinquencies*</u>	98
<u>Item 14: Material Modifications to the Rights of Security Holders and Use of Proceeds**</u>	98
<u>Item 15: Controls and Procedures</u>	98
Item 16: Reserved	
<u>Item 16A: Audit Committee Financial Expert</u>	99
<u>Item 16B: Code of Ethics</u>	99
<u>Item 16C: Principal Accountant Fees and Services</u>	99
PART III	
<u>Item 17: Financial Statements**</u>	100
<u>Item 18: Financial Statements</u>	100
<u>Item 19: Exhibits</u>	100

* Omitted because the Item is not applicable or the answer is negative.

** The Registrant has responded to Item 18 in lieu of this Item.

In this Form 20-F, references to our company are to LION bioscience Aktiengesellschaft, and references to our , we , us or LION bioscience are to LION bioscience Aktiengesellschaft and, unless the context otherwise requires, to its subsidiaries. References to Trega are to Trega Biosciences Inc., a San Diego, CA based corporation acquired by our company effective March 14, 2001 and subsequently merged into our subsidiary LION bioscience Inc. References to NetGenics are to NetGenics, Inc., a corporation having its principal place of business in Cleveland, OH, USA until June 30, 2003, and, unless the context otherwise requires, to its subsidiaries. Our company acquired NetGenics effective January 30, 2002.

Our consolidated financial statements are prepared in accordance with U.S. GAAP. Our consolidated financial statements are expressed in euro, the currency of the European Economic and Monetary Union, which was introduced on January 1, 1999. In this annual report, references to euro

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

or are to euro, references to DM are to Deutsche Mark and references to U.S. dollars or \$ are to United States dollars. Our financial year ends March 31 of each calendar year. References to any financial year or to FY refer to the year ended March 31 of the calendar year specified.

Unless the context otherwise requires, references in this annual report to our company's shares are to the ordinary shares of LION bioscience AG without par value. References to our company's ADSs are to the American Depositary Shares of LION bioscience AG, each representing one ordinary share of our company.

Table of Contents

By resolution adopted at our company's annual general shareholders' meeting of May 15, 2000, all of the existing preferred shares of the company were converted into ordinary shares of the company on a share for share basis. The amount of subscribed capital for ordinary shares was therefore increased by the amount of the outstanding preferred shares on the effective date of the conversion.

On June 28, 2000, our company effected a division of our capital stock by means of a seven-for-one stock split of the ordinary shares. All share and related information in this annual report regarding shares of our company for periods prior to the effectiveness of the share split have been adjusted to give effect, retroactively, to the share split.

LION bioscience, the LION bioscience logo, iD3, LSI, Life Science Informatics, LION DiscoveryCenter, LION Target Engine, LION I Engine, LION SolutionCenter, bioSCOUT, LION Hosted Services, iDEA, iDEA pkEXPRESS,³ ChemBioLog, and our other product and service names referenced in this annual report are trademarks or registered trademarks of our company in Germany and/or in other countries. This annual report also contains product and service names of companies other than LION bioscience that are trademarks of their respective owners.

We intend to make this annual report and other periodic reports publicly available on our Internet web site (<http://www.lionbioscience.com>) without charge immediately following our filing with the U.S. Securities and Exchange Commission (or SEC). We assume no obligation to update or revise any part of this annual report, whether as a result of new information, future events or otherwise, unless we are required to do so by applicable law.

FORWARD LOOKING STATEMENTS

This annual report contains certain forward-looking statements and information relating to us that are based on beliefs and current expectations of our management as well as assumptions made by us and information currently available to us about future events, including general economic and business conditions, our R&D efforts, our product and solution development activities and product releases, meeting requirements of our customers and collaborators, competition by other companies and the internal IT departments of our customers, and the implementation of our business strategy.

Any statements contained in this annual report that are not historical facts are forward-looking statements as defined in the U.S. Private Securities Litigation Reform Act of 1995 or other applicable law. When used in this document, the words anticipate, believe, estimate, expect, intend, plan, project, continue, count on, is confident, forecast, may, predict, should, wants, will, would and similar words used by us or our management, are intended to identify forward-looking statements. Such statements are subject to risks, uncertainties and assumptions.

Many factors could cause our actual results, performance or achievements to be materially different from future results, performance or achievements that may be expressed or implied by these forward-looking statements, including the factors discussed more fully under Item 3: Key Information on the Company - Risk Factors, as well as elsewhere in this annual report and in our other filings with the SEC.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their respective dates. Should one or more of these risks materialize, or should underlying assumptions prove incorrect, our actual results may vary materially from those described in our forward-looking statements. We do not intend, and do not assume any obligation, to publicly update or revise any forward-looking statements.

Table of Contents

PART I

Item 1: Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2: Offer Statistics and Expected Timetable

Not applicable.

Item 3: Key Information on the Company

Selected Consolidated Financial and Statistical Data

The table below presents our selected historical consolidated financial data derived from our historical consolidated financial statements for the periods indicated. You should read this selected consolidated financial data in conjunction with our audited consolidated financial statements, the related notes and Item 5: Operating and Financial Review and Prospects, all of which appear elsewhere in this annual report.

The selected consolidated financial data for the financial years ended March 31, 1999, 2000, 2001, 2002 and 2003 are a summary of, are derived from and are qualified by reference to our consolidated financial statements and notes thereto for these periods. Our audited consolidated financial statements for these periods were prepared in accordance with United States generally accepted accounting principles (US-GAAP) and audited by Ernst & Young Deutsche Allgemeine Treuhand AG, Wirtschaftsprüfungsgesellschaft, our independent auditors. Our company also prepares audited unconsolidated financial statements for each fiscal year in accordance with the accounting regulations set out in the German Commercial Code (Handelsgesetzbuch or HGB). Only our consolidated financial statements are prepared in accordance with US-GAAP.

The audited consolidated statements of operations, consolidated statements of cash flows and consolidated statements of shareholders' equity for the years ended March 31, 2003, 2002 and 2001, and the consolidated balance sheets at March 31, 2003 and 2002 are included in Item 18. Financial Statements.

Our consolidated financial statements are expressed in euros, the currency of the European Economic and Monetary Union. The euro was introduced on January 1, 1999. Prior to March 31, 2000, our financial statements were prepared in Deutsche Marks. After that date, our consolidated financial statements were prepared in euros. All Deutsche Mark amounts appearing in or derived from our consolidated financial statements have been translated into euros at the official fixed exchange rate of 1.00 = DM 1.95583.

For convenience, this annual report contains unaudited translations of euro amounts into U.S. dollars at the rate of 1.00 = \$1.09, the noon buying rate published by the Federal Reserve Bank of New York for euros on March 31, 2003. The noon buying rate for euros on September 2,

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

2003 was 1.00 = \$1.0872. For more information regarding exchange rates, see the section entitled Exchange Rate Information below.

For all periods, we have presented our consolidated financial statements and selected consolidated financial data including our accounts and those of our wholly-owned subsidiaries. The revenue and expense items of our consolidated statements of operations are translated at a weighted average of exchange rates during the relevant fiscal year. Our consolidated balance sheet accounts are translated into euro at the exchange rates in effect at the end of the reporting period, except for shareholders' equity which is translated at the rates in effect at the time the underlying transactions are reported. Our consolidated balance sheet as of March 31, 2003 was prepared by translating dollar amounts into euro amounts at the rate of 1.00 = \$1.0895, the exchange rate published by the European Central Bank on March 31, 2003.

Table of Contents

On March 14, 2001, our company acquired Trega Biosciences Inc., a corporation at the time located in San Diego, California, whose common stock was listed on the Nasdaq National Market. We consolidated Trega's accounts commencing on March 31, 2001 under the purchase method. Trega's most recent fiscal year prior to the acquisition ended on December 31, 2001. Trega's operations for the interim period from March 14 through March 31 were not included in our statement of operations for FY 2001 but were fully included in our statement of operations for FY 2002.

On January 30, 2002, our company acquired NetGenics, Inc., a corporation at the time having its principle place of business in Cleveland, Ohio. We consolidated NetGenics' accounts commencing on January 31, 2002 under the purchase method. NetGenics' operations for the period from January 31, 2002 through March 31, 2002 were included in our statement of operations for FY 2002.

We have made certain reclassifications of certain amounts and added certain new line items in our financial statements for FY 1999, 2000, 2001 and 2002 to conform to the financial presentation for FY 2003. For example, effective December 31, 2002, we closed down our internal drug discovery activities called iD³. Accordingly, we show the revenue and expenses relating to our internal drug discovery activities as a separate item in our consolidated statement of operations for FY 2003 under "discontinued operations". We have reclassified revenue and expenses relating to our iD³ activities for FY 2002 as discontinued operations to enable comparisons to the information set forth for FY 2003. No revenues or expenses were generated or incurred in FY 1999, FY 2000 or FY 2001 related to iD³ activities.

Likewise, we show the assets relating to our iD³ activities as a separate item under "assets held for sale" in our consolidated balance sheet as of March 31, 2003, and we have reclassified the assets relating to our iD³ activities on our consolidated balance sheet as of March 31, 2002 as "assets held for sale" to enable balance sheet comparisons.

We have established a global professional service organization to provide expert guidance in design, implementation and ongoing optimization of our IT solutions. Starting with our consolidated statement of operations for FY 2003, we accordingly show revenue from our professional services as a separate item. We have reclassified revenue amounts for FY 1999, FY 2000, FY 2001, and FY 2002 to enable comparisons to the information set forth for FY 2003.

As part of our strategy to focus on our core competencies, our business activities are now centered around our LSI business rather than our internal drug discovery activities (iD³), which we have discontinued. Our LSI business is primarily responsible for the development of our IT solutions and products as well as for providing professional services to customers related to these solutions and products. Starting with our consolidated statement of operations for FY 2003, we accordingly show these and other costs of sales as a separate item. We have also reclassified amounts for the FY 1999, FY 2000, FY 2001 and FY 2002 as "costs of sale" to enable comparisons to the information set forth for FY 2003.

Table of Contents**SELECTED CONSOLIDATED FINANCIAL DATA**

	As of and for the fiscal year ended March 31(1)					
	1999	2000	2001	2002	2003	2003(2)
	(\$)					
Selected Consolidated Statement of Operations Data						
Revenues:						
Drug discovery	1,944	3,457	2,421	3,048	1,614	1,759
Licenses	729	1,751	6,292	15,145	14,111	15,381
Professional services	1,786	4,684	13,374	18,613	12,068	13,154
Maintenance and support	160	296	1,188	2,500	1,864	2,032
Total revenues	4,619	10,187	23,275	39,306	29,657	32,326
Cost-of-sales	0	1,326	9,184	11,395	18,677	20,358
Costs and expenses:						
Selling costs	445	1,795	5,719	12,546	11,229	12,240
General and administrative costs	2,363	4,967	7,501	18,369	21,490	23,424
Research and development costs	4,872	11,068	17,688	33,900	34,225	37,305
Other operating income and expenses	(84)	542	(727)	(1,104)	(1,733)	(1,889)
Conversion of preferred into ordinary shares			8,743			
Total costs and expenses (incl. cost-of-sales)	7,596	19,698	48,108	75,106	83,888	91,438
Operating results before depreciation and amortization	(2,978)	(9,511)	(24,833)	(35,800)	(54,231)	(59,112)
Depreciation of property, plant and equipment and amortization of intangible assets	1,333	3,060	4,218	11,885	14,021	15,283
Impairment of goodwill					58,526	63,793
Operating results	(4,310)	(12,572)	(29,051)	(47,685)	(126,778)	(138,188)
Interest income/(expense), net	(200)	8	5,234	6,302	3,654	3,983
Results from marketable securities and other long-term investments				(3,493)	(13,594)	(14,817)
Loss before taxes from continuing operations	(4,510)	(12,563)	(23,817)	(44,876)	(136,718)	(149,023)
Tax expense		(22)	(127)	(261)	(313)	(341)
Net loss for the year from continuing operations	(4,510)	(12,585)	(23,944)	(45,137)	(137,031)	(149,364)
Loss on discontinued operations (net of tax of 0).				(9,549)	(15,465)	(16,857)
Net loss for the year	(4,510)	(12,585)	(23,944)	(54,686)	(152,496)	(166,221)
Preferred stock dividend	(55)	(99)	(25)			
Deemed preferred stock dividend			(14,410)			
Net loss attributable to ordinary shares after preferred stock dividend and after deemed preferred stock dividend	(4,565)	(12,684)	(38,379)	(54,686)	(152,496)	(166,221)
Basic and diluted net loss per share from continuing operations (3)	(1.01)	(1.97)	(2.52)	(2.39)	(6.89)	(7.51)
Basic and diluted net loss per share from discontinued operations (3)				(0.50)	(0.78)	(0.85)
Basic and diluted net loss per share from total operations after preferred stock dividend and deemed preferred stock dividend (3)	(1.01)	(1.97)	(2.52)	(2.89)	(7.67)	(8.36)

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Selected Consolidated Balance Sheet Data						
Cash and cash equivalents	685	6,648	67,197	19,184	60,102	65,511
Marketable securities			114,139	104,839	12,762	13,911
Assets held for sale				4,735	322	351
Property, plant and equipment, net	4,518	7,398	16,896	13,403	6,890	7,510
Long-term investments, at cost		13,080	19,695	10,760	549	598
Total assets	9,071	31,495	277,871	237,990	93,296	101,693
Short-term borrowings	1,753					
Deferred income and advance payments	757	3,503	10,764	5,032	3,640	3,968
Long-term debt	3,334	4,641	3,129	2,560	1,991	2,170
Shareholders' equity/(deficit)	(2,380)	16,616	241,978	217,106	68,681	74,862
Selected Consolidated Cash Flow Statement Data						
Net cash used in operating activities	(3,083)	(4,687)	(13,381)	(51,500)	(42,734)	(46,580)
Net cash (used in) provided by investing activities	(4,643)	(20,033)	(127,917)	5,044	86,694	94,496
Net cash (used in) provided by financing activities	7,947	30,509	201,522	(1,586)	(703)	(766)

Table of Contents

- (1) Columns may not add due to rounding.
- (2) Amounts in the column are unaudited and translated for the convenience of the reader at 1.00 = U.S.\$1.09, the noon buying rate published by the Federal Reserve Bank of New York for euros on March 31, 2003.
- (3) Net loss per share data for FY 1999 and FY 2000 assume that 4,487,672 and 6,433,882 shares, the weighted number of shares outstanding immediately prior to our initial public offering in August 2000, after giving effect to the stock-split referred to above, were outstanding for the respective periods presented. During FY 2001, the weighted average number of our company's shares outstanding was 15,247,146 (basic and fully diluted). During FY 2002, the weighted average number of our company's shares outstanding was 18,940,029 (basic and fully diluted). During FY 2003, the weighted average number of our company's shares outstanding was 19,870,175 (basic and fully diluted). At March 31, 2003, the number of our company's shares outstanding was 19,870,175.

Exchange Rate Information

The prices for ordinary shares traded on German stock exchanges are denominated in euros. Fluctuations in the exchange rate between the euro and the U.S. dollar will affect the U.S. dollar equivalent of the euro price of the ordinary shares traded on the German stock exchanges and, as a result, may affect the price of our company's American Depositary Shares traded in the United States, each representing one ordinary share (ADSs). In addition, our company will pay any dividends in euros so that exchange rate fluctuations will also affect the U.S. dollar amounts received by the holders of our company's ADSs on the conversion into U.S. dollars of cash dividends paid in euros on the ordinary shares represented by the ADSs.

A significant portion of our revenue and expenses is denominated in U.S. dollars rather than the euro. Therefore, movements in the exchange rate between the euro, on the one hand, and the U.S. dollar, on the other hand, may materially affect our consolidated financial position, results of operations and cash flows. See Risk Factors, Item 5: Operating and Financial Review and Prospects and Item 11: Quantitative and Qualitative Disclosure About Market Risk Foreign Currency Exchange Risk below.

Since the euro did not exist prior to January 1, 1999, we cannot present actual exchange rates between the euro and the U.S. dollar for earlier periods in our audited consolidated financial statements and in the other financial information discussed in this annual report. To enable you to ascertain how the trends in our financial results might have appeared had they been expressed in U.S. dollars, the table below shows the average exchange rates of U.S. dollars per euro for the periods shown. For all periods prior to the creation of the euro on January 1, 1999, this information has been calculated using the Federal Reserve Bank of New York's noon buying rates for the Deutsche Mark per \$1.00 for each period, as translated into euro at the official fixed rate of 1.00 = DM 1.95583. The average is computed using the Federal Reserve Bank of New York's noon buying rate for the Deutsche Mark, for periods prior to January 1, 1999, and for the euro, for periods after January 1, 1999, on the last business day of each month during the period indicated.

Table of Contents**Average exchange rates of U.S. dollars per euro**

	<u>Average</u>
Financial year ended March 31, 1999	0.8915
Financial year ended March 31, 2000	1.0235
Financial year ended March 31, 2001	0.9114
Financial year ended March 31, 2002	0.8800
Financial year ended March 31, 2003	1.0033

The table below shows the high and low exchange rate of U.S. dollars per euro for each of the six months from March 2003 to August 2003:

Recent exchange rates of U.S. dollars per euro

	<u>High</u>	<u>Low</u>
March 2003	1.1062	1.0545
April 2003	1.1180	1.0621
May 2003	1.1853	1.1200
June 2003	1.1870	1.1423
July 2003	1.1580	1.1164
August 2003	1.390	1.0871

The noon buying rate on September 2, 2003 was 1.00 = \$1.0872.

Risk Factors

We operate in a dynamic and rapidly changing environment that involves numerous risks and uncertainties, many of which are beyond our control. You should carefully consider the risks described below before purchasing our company's ordinary shares or ADSs. The occurrence of any of the following events could harm us. If these events occur, the trading price of our company's ordinary shares or ADSs could decline, and you may lose all or part of your investment. Additional risks not currently known to us or that we currently deem immaterial may also harm us and affect your investment.

Risks Relating to Our Business

We have incurred net losses to date and may not become profitable.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Our company was formed on March 4, 1997 and has a limited operating history. Our consolidated net losses amounted to 152,496 million in our fiscal year ended March 31, 2003, 54.686 million in our fiscal year ended March 31, 2002, and 23.944 million in our fiscal year ended March 31, 2001. We expect that we will continue to incur net losses for the foreseeable future. We face significant and potentially costly challenges in simultaneously pursuing key R&D goals and attracting customers for our products and services. As a result, we may not become profitable in the future. Even if we become profitable, we may not be able to maintain profitability, as our results of operations are, and will continue to be, difficult to predict and may vary from quarter to quarter.

Table of Contents

Substantial, prolonged declines in the biotechnology and pharmaceutical industries across Europe, North America and Asia may cause our revenues and cash flows to suffer.

Implementation of our LSI products and solutions can constitute a significant portion of our customer's research and development, or R&D, and/or information technology, or IT, budgets, and the amount customers are willing to invest in acquiring and implementing our products and solutions and the timing of our customer's investment has tended to vary due to business conditions existing in the biotechnology and pharmaceutical industries. Recently, there has been a slowdown in the biotechnology and pharmaceutical industries as a result of general economic weakness and circumstances specific to these industries. Continued weakness in these sectors could undermine our efforts to obtain new customers and encourage existing customers not to renew or to seek to renegotiate existing contracts with us resulting in less favorable terms than those currently in place. Either outcome could have a material adverse effect on our business and cash flows as we derive our revenue primarily from software licenses and professional services in those markets.

We must retain existing customers, add new customers and achieve milestones under existing customer contracts if we are to achieve our goals.

We have a small number of customers, the revenues from which offset only a portion of our expenses. In order to generate significant additional revenues, we must retain our existing customers and add additional customers. Our ability to do so depends upon our customer's belief that our products, solutions and services can help accelerate their life science R&D activities, particularly in the areas of drug discovery and development. We must also expand our existing customer relationships to include new products, solutions and services. Although many of our customer agreements have multi-year terms, we cannot assure you that any of them will be renewed upon expiration or that our customers will not terminate them on short notice. Nor can we assure you that our existing customers will enter into new agreements with us for additional products or upgrades of licensed products, solutions or services.

In addition, future revenues under our customer agreements may depend in whole or in part upon our ability to meet milestones set out in those agreements. We may not meet these milestones on a timely basis or at all. We will not receive milestone payments if we fail to meet any of these milestones and this failure could result in the termination of one or more of these agreements. The failure to receive milestone payments or the termination of an agreement with a customer could adversely affect our business, results of operations and/or financial condition.

Delays in release of new software products or solutions or undetected errors in our software products or solutions may result in increased costs to us, delayed market acceptance of our products and delayed or lost revenues.

To achieve market acceptance, new LSI products or solutions and product or solution enhancements can require long development and testing periods, which may result in delays in scheduled introduction. Any delays in the release schedule for new LSI products or solutions and product or solution enhancements may delay market acceptance of these products or solutions and may result in delays in new customer orders for these new products or solutions or the loss of customer orders. In addition, new LSI products or solutions and enhancements may contain a number of undetected errors or "bugs" when they are first released. As a result, in the months following the introduction of certain releases, we generally devote significant resources, primarily consulting and development services, to work with early customers to correct these errors. There can be no assurance, however, that all of these errors can be corrected to the customer's satisfaction, with the result that certain customers may bring claims for damages, refunds or replacement software. Although we test each new product and solution and enhancement release before introducing it to the market, there can be no assurance that significant errors will not be found in existing or future releases of our LSI products or solutions, with the possible result that significant resources and expenditures may be required in order to correct such errors or otherwise satisfy customer demands. Significant undetected errors or delays in the release of new LSI products or solutions or enhancements may affect market acceptance of our LSI products and solutions, significantly increase our development costs and result in delayed or lost revenue. Any of these outcomes could have a material adverse effect on our business, results of operations and/or financial condition.

Table of Contents

The market in which we compete continues to evolve and, if it does not grow rapidly in the future, our business will be adversely affected.

We have invested, and continue to invest, significant resources in further developing and marketing new and enhanced products and solutions. In FY 2004, we have already released four new software products or solutions: a new version of our integration platform LION DiscoveryCenter, our new biology solution called LION Target Engine, and a new module of our iDEA prediction and simulation software, iDEA pkEXPRESS. In addition, we plan to release our new chemistry solution called LION Lead Engine in FY 2004. Demand and market and customer acceptance for these recently introduced products and solutions are subject to a high level of uncertainty. We expect to derive a substantial portion of our future revenue from these products and solutions. In addition, our LION Lead Engine and LION Target Engine solutions are designed to function with our LION DiscoveryCenter integration platform. Accordingly, a delay in market acceptance of our LION DiscoveryCenter solution could materially impact our ability to successfully market these two solutions.

Our business requires the formation and maintenance of alliances with other companies. If we are unable to form and maintain these alliances, our ability to compete will suffer and our business will be harmed.

Our success depends on our ability to establish and maintain alliances and licensing arrangements with customers, strategic partners and academic collaborators. We may not be able to establish additional alliances or licensing arrangements on terms acceptable to us or at all. If we do establish these relationships, we cannot assure you that we will be successful. We cannot control the amount and timing of resources our partners or collaborators devote to our programs, products or services.

For example, we have entered into relationships with various companies, including in particular Tripos and Paradigm Genetics, to jointly develop and market new software products or solutions. Under our collaboration with Tripos, we have outsourced certain projects of our development agreement with Bayer AG to Tripos United Kingdom subsidiary, Tripos UK. In order to perform our obligations under the development agreement, including achieving the deliverables and milestones thereunder, we require the cooperation of Tripos UK in accordance with the terms of our project agreement with Tripos UK. We have also entered into a joint venture agreement with Paradigm Genetics to jointly perform a five-year research and development project partly funded by the U.S. National Institute of Standards and Technology (NIST) with a \$11.7 million Advanced Technology Program (ATP) grant. The joint venture agreement with Paradigm Genetics governs our joint R&D efforts under this project and the use of our respective technologies and the results of this R&D effort. In order to perform this research project for NIST, we require the cooperation of Paradigm Genetics in accordance with the terms of our joint venture agreement with Paradigm Genetics.

Our joint development and marketing relationships can be difficult to implement and may not succeed for various reasons, including:

operating differences between the companies or between their respective employees;

financial difficulties experienced by the partners;

difficulties in coordinating product or solution development, sales and marketing efforts;

technical obstacles to combining existing software products or solutions or developing new compatible products or solutions; and

the need to divert significant management attention, technical and sales personnel and capital to these relationships.

Table of Contents

There can be no assurance that these joint development and marketing relationships will lead to successful new products, greater market penetration or increased revenue for us. Should these joint developments efforts fail, amounts we have invested, including equity investments, may not be recoverable, and we may not be able to deliver products or solutions to our customers, which may result in adverse effects on our financial position and results of operations. In addition, we might be required to pay termination fees or damages if we were to decide not to pursue these relationships further or to terminate any of them early. The failure of any of our partners or collaborators to assist in continuing to develop and commercialize our products or services or the payment of any termination fees or early termination damages would result in a reduction of our revenues and an increase in our costs and could harm our business, results of operations and financial condition.

We depend on a few key customers, and our revenue could be negatively affected by the loss or early termination of a contract with one of these customers.

We derive a significant portion of our revenue from a small number of customers. For example, Bayer accounted for approximately 33% of our revenues in FY 2003 and approximately 46% of our revenues in FY 2002. Although we generally have multi-year contracts with our customers, our customers may cancel their contracts on short notice, including in circumstances where we fail to accomplish contractual milestones. Our business and cash flows would be adversely affected if one or more of our key customers were to unexpectedly discontinue or significantly reduce the use of our products, solutions or services.

We derive revenues from a project funded by the U.S. government. Government grants are subject to immediate termination and are heavily regulated and audited, and the termination of this project or the government's funding could have a negative impact on our business, results of operations and financial condition.

The U.S. National Institute of Standards and Technology (NIST) has awarded a five-year, \$11.7 million Advanced Technology Program (ATP) grant to us and to Paradigm Genetics to partially fund a development project by us and Paradigm. We have entered into a joint venture agreement with Paradigm that governs our joint R&D efforts under this project and the commercialization of the results thereof, if any, and intellectual property ownership rights between us and Paradigm Genetics. In addition, each of Paradigm Genetics and us entered into a cooperative agreement with NIST in connection with the performance of this project and the funding under the ATP grant.

U.S. government funded projects are subject to oversight audits by government representatives and contain provisions permitting, among other things, termination, in whole or in part, without prior notice at the government's convenience upon the payment of compensation only for work done and commitments made at the time of termination. It is possible that NIST will terminate this project and our agreement with NIST in the future.

Our revenues for the performance of this project are dependent on our performance of this project, our compliance with the terms of the cooperative agreement with NIST and the applicable government rules and regulations and our obligations under the joint venture with Paradigm. Our failure to so perform or comply with our obligations could result in a loss of anticipated future revenues attributable to this project. That could, among other consequences, have a negative impact on our business, results of operations and financial condition. In addition, our failure to so perform or comply with our obligations to NIST, or Paradigm Genetics under the joint venture, could expose us to claims by Paradigm Genetics, in particular if NIST were to terminate the project as a result. We have no prior experience in performing a project funded by the U.S. government. For more information regarding our participation in this project, see Item 4: Information on the Company Alliances Paradigm Genetics .

If we are unable to keep up with rapid technological changes, we may not be able to compete effectively.

Table of Contents

Our future success will depend in part upon our ability to:

continue to enhance and expand our existing products and services;

provide quality, high performance products, solutions and services; and

develop and introduce new products and provide new services that satisfy increasingly sophisticated customer requirements, that keep pace with technological developments and that are accepted in the market.

We continue to provide solutions for increasing efficiencies and speeding up the drug discovery process for biotechnology and pharmaceutical companies. There can be no assurance that we will be successful in anticipating and developing product enhancements or new solutions and services to adequately address changing technologies and customer requirements in the life science industry. Any such enhancements, solutions or services may not be successful in these markets or may not generate revenue. We may fail to anticipate and develop technological improvements, to adapt our products to technological change, emerging industry standards and changing customer requirements or to produce high-quality products, enhancements and releases in a timely and cost-effective manner in order to compete with applications offered by our competitors in the life science industry.

Customer implementation and installation involves significant resources and is subject to significant risks.

Our products represent comprehensive solutions for increasing R&D productivity of life sciences companies by integrating the IT systems, data and expertise of the various R&D departments within a single life science organization. Accordingly, implementation of our products is a process that involves a significant commitment of resources and time on the part of our clients and is subject to a number of significant risks over which we may have no control. Some of our customers have experienced protracted implementation times in connection with the implementation of our products. We can offer no assurance that similar delays and extra costs will not occur in the future in connection with the implementation of our products for other customers or with respect to our other products or solutions, despite the existence and support of our professional services staff. Excessive delays and pricing disparities could undermine our efforts to license our products and services in the life science industry, potentially adversely impacting our future revenue growth and cash flows.

If we cannot find a collaborator, investor or licensor for our discontinued internal drug discovery activities, we may not be able to recover our expenses, including in particular our R&D expenses, related to these activities and may not realize any future revenues or royalties from R&D efforts related to these activities.

We have invested substantial efforts in our internal drug discovery activities, which we call *iD*, both at our San Diego, California, and our Heidelberg, Germany, facilities, in particular related to nuclear receptor research. As a result, we have incurred substantial expenses related to this R&D effort. In addition, prior to our acquisition of Trega, Trega invested substantial efforts in researching and developing melanocortin related compounds as part of Trega's internal drug discovery activities. As a result, Trega incurred substantial expenses related to this R&D effort. We have ceased our internal drug discovery activities effective December 31, 2002, and made the strategic decision to seek an investor or licensee for our internal drug discovery efforts. If we cannot find such an investor or licensee or reach mutually acceptable license or sales terms, including royalty and license fees with respect to our own R&D efforts to be paid by this investor or licensee, we may not be able to recover the R&D expenses we incurred with respect to these internal R&D activities and we may not realize any future revenues or royalties from these R&D efforts.

Our business model and strategy is novel and largely unproven. If our business model proves unsuccessful, our business, results of operations and financial condition will suffer.

Table of Contents

We recently refined our strategy and business model. The success of our business model and strategy will depend on:

our ability to develop and market IT solutions based on our technologies, in particular a modular data and application integration platform and to create a knowledge management and decision support environment for the R&D processes of life sciences companies;

the degree to which the life sciences industry adopts our Life Science Informatics products, solutions and services in its R&D process; and

the performance of our technologies, solutions, products and services in accelerating the drug discovery process and the acceptance of these technologies, solutions, products and services.

The addition of new products, solutions and services will add further complexity to our organization and thus require additional management attention and resources as new markets are addressed. Our products and services involve a new approach to the conduct of business of organizations within the life science industry. Demand and market acceptance is therefore uncertain. While we will continue to pursue marketing and sales efforts to educate potential customers or the advantages of adopting our solutions for drug discovery, we can provide no assurance that a market will develop for such products and services. Our success depends on broad market acceptance and demand for our products and the solutions we offer for increasing efficiencies in the drug discovery process.

We are subject to pricing pressure.

In response to competition and general adverse economic conditions, we may be required to modify our pricing practices. This development may adversely affect our revenue and earnings. We generally license our software products and solutions on a right to use basis pursuant to licenses over a specified period of time and providing for license fees based on the number and types of users or other applicable criteria. Changes in our pricing model or any other future broadly-based changes to our prices and pricing policies could lead to a decline or delay in revenue as our sales force and customers adjust to the new pricing policies.

Our revenue mix may vary and may adversely affect the amount of revenue and our ability to break-even.

We derive revenue from software licenses, software support and maintenance services for our customers, professional services engagements and collaborations with our customers and drug discovery activities that we have not terminated. Our revenue recognition policy is different for multi-year or perpetual licenses than for our services and drug discovery activities. We generally recognize revenue in the form of license fees from these licenses up-front whereas we recognize revenue in the form of service fees on a pro-rata, percentage-of-completion or milestone basis. Our revenue from support and maintenance services typically lags behind license fees. Therefore variances or slowdowns in our licensing activities may have an adverse impact on our revenue. In addition, growth in professional service revenue will depend on our ability to compete effectively in obtaining customer engagements or collaborations to provide services related to our products or solutions. Profit margins on professional service engagements are less than profit margins on revenue from software licenses. Our professional service engagements or collaborations with a customer may require us to develop complex customizations or software solutions for a customer over a lengthy period of time. Our service fees are typically tied to achieving certain milestones and delivering certain deliverables. We may be forced to expend additional efforts and resources to accomplish these milestones and deliver these deliverables. Given the smaller profit margins on these professional service engagements, we may be required to perform services for a customer at a net loss to us. For example, we are currently performing our collaboration with Bayer in the area of pharmacophore informatics at a net loss. Any decrease in the percentage of our total revenue derived from long-term software licensing could have a material adverse effect on our business, financial position, or results of operations.

Our sales forecasts and/or revenue projections may not be accurate.

We use a pipeline system, a common industry practice, to forecast sales and trends in our business. Our sales personnel monitor the status of proposals, including the date when they estimate a customer will make a purchase decision and the potential revenue from the sale. We aggregate these estimates on a rolling six-month basis in order to generate a sales pipeline. We compare the pipeline at various points in time to look for trends in our business. While the pipeline process provides us with some guidance in business planning and budgeting, it is based on estimates only and is therefore subject to risks and uncertainties. A variation in the conversion of the pipeline into revenue or the pipeline itself could cause us to improperly plan or budget and thereby adversely affect our business, results of operations and financial condition. For example, softness in the general economy or in the life sciences market could negatively influence the capital spending decisions of a life science market participant, causing the customer to delay purchasing our products or solutions or reducing the amount of such purchase or canceling a purchase decision entirely. Any one of these outcomes could reduce the pipeline conversion rate for the relevant time period.

Table of Contents

Terrorist attacks, war or other international hostilities could adversely impact our business.

Further terrorist attacks like those of September 11, 2001, war or other international hostilities could damage the world economy and adversely affect our customers' investment and purchase decisions over an extended period of time. As a vendor of software solutions, which are effectively capital goods, we operate in a sector of the economy that may be impacted by the effects of any such attack.

Revenue recognition accounting pronouncements may adversely affect our policies on recognition of revenue.

In October 1997, the American Institute of Certified Public Accountants (AICPA) issued Statement of Position 97-2, as amended by Statement of Position No. 98-4 and Statement of Position No. 98-9 (together, "SOP 97-2"), which provides guidance on applying U.S. generally accepted accounting principles for software revenue recognition transactions. In December 1999, the SEC issued Staff Accounting Bulletin No. 101,

Revenue Recognition in Financial Statements ("SAB 101"), which provides the SEC's interpretations of existing revenue recognition rules. In addition, the SEC issued a Frequently Asked Questions and Answers document in October 2000 to provide additional details. We are subject to the revenue recognition rules set out in SOP 97-2 and SAB 101. The accounting profession continues to review certain provisions of SOP 97-2 and SAB 101, with the objective of providing additional guidance on implementing these provisions. We continuously review our compliance with all new and existing revenue recognition accounting pronouncements. Depending upon the outcome of these reviews and the issuance of implementation guidelines and interpretations, we may be required to modify our revenue recognition policies and business practices which could have a material adverse effect on our results of operation. Our existing revenue recognition policies are described under "Item 5: Operating and Financial Review and Prospects - Critical Accounting Policies" and in note A.3 to our consolidated financial statements included in "Item 18: Financial Statements" of this annual report.

Our management's use of assumptions and estimates may adversely affect our results of operations and financial condition.

Our financial statements are based upon the accounting policies as described in note A of our consolidated financial statements and included in "Item 18. Financial Statements" in this Annual Report on Form 20-F. Such policies may require management to make significant estimates and assumptions. Facts and circumstances which management uses in making estimates and judgments may change from time to time and may result in significant variations, including adverse effects on our results of operations or financial condition. For a description of these critical accounting policies, see "Item 5. Operating and Financial Review and Prospects - Critical Accounting Policies".

We record revenues and expenses denominated in both euros and dollars. Fluctuations in the exchange rate between these two currencies could have the effect of decreasing our reported revenues or increasing our reported expenses.

Table of Contents

We report our results of operations in euros. In our financial year ended March 31, 2003, approximately 65% of our revenues and approximately 50% of our expenses were denominated in U.S. dollars. As a result of our sales and marketing activities in the United States, an even greater proportion of our revenues may be denominated in U.S. dollars while our restructuring activities in the United States may result in decreased expenses from our U.S. operations. Accordingly, our business and results of operations can be hurt by changes in exchange rates, particularly between the euro and the U.S. dollar. In addition, the balance sheet impact of translation adjustments may be material.

Our internal risk management policies and procedures may not be sufficient for us to identify, analyze and respond appropriately in a timely manner.

We cannot assure you that our risk management policies and procedures will identify, analyze or respond to all risks appropriately in a timely manner, especially those which are outside of our control.

Our competitive position may depend on trademark, patent, copyright, and license protection. If this protection is not sufficiently available, our business will be harmed.

Our ability to compete and achieve profitability may be affected by our ability to protect our proprietary technology and other intellectual property. While we currently depend primarily on revenues from our Life Science Informatics, or LSI, business, obtaining patent protection may also be important in connection with the sale or licensing of the assets from our iD³ activities. We currently pursue copyright and patent protection for improvements of our various LSI products and solutions and compounds and our other efforts relating to nuclear receptor research and development.

Patent law affecting our business is uncertain and, as a result, we may not be able to prevent competitors from developing similar subject matter. Any issued patents that cover our proprietary technologies may not provide us with substantial protection or be commercially beneficial to us. Issuance of a patent is not conclusive as to its validity, enforceability or its scope. In addition, disputes may arise between us and our collaborators over ownership rights to intellectual property, know-how or technologies developed jointly with these collaborators or arrangements with collaborators may require us to provide identical technologies, compounds or information to multiple parties. Patents may not issue from our pending or future patent applications. In addition, third parties may have filed patent applications for technology that we use or that is covered by our pending patent applications without our being aware of these applications.

We are also dependent on protecting, through copyright law and contractual licensing agreements, our products and services, such as our LSI systems, including our SRS data integration technology, our LION DiscoveryCenter data and application integration technology, our future solutions on the basis of our LION DiscoveryCenter system and our iDEA predictive ADME simulation systems, to prevent other organizations from copying and reselling them. Copyright law and licensing law currently provides uncertain protections for some of our products and technologies. We are therefore uncertain whether it can prevent their copying or resale. Changes in copyright law, licensing law or patent law could reduce the extent to which we are able to protect our intellectual property, which could harm our business.

We are also the licensee or exclusive licensee of proprietary technology and other intellectual property of third parties that we rely on for our business. We have only limited control over these licensors and cannot assure you that these licensors have complied with and continue to comply with their contractual obligations and the license restrictions under these licensing arrangements. In the absence of this compliance, our commercial opportunities may be reduced and we may incur substantial costs in seeking to enforce or protect our rights under these licenses.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

We have protected, or seek legal protection of, the trade names for our products and solutions, as well as for our company, including through applications to register these trade names as trademarks or service marks in our relevant markets. These applications may not be granted. In addition, a trademark or service mark registration is not conclusive as to infringement challenges by third parties concerning the use of a trade name.

Table of Contents

Lion Electronics International Computer Discount 2000 GmbH, Germany has asserted rights to rights the trade name LION based on its trademark filings with the German trademark office. Lion Electronics International Computer Discount 2000 has objected to our company's application for the LION trademark in Germany. We have entered into settlement negotiations with Lion Electronics International Computer Discount 2000 and reached agreement in principle to settle this dispute. We expect to enter into a final written agreement in the near future. Failure by us to enter into the final written agreement with Lion Electronics International Computer Discount 2000 could harm our business.

The protection of our intellectual property and licenses may require us to pursue others, such as our licensees or licensors or other third parties, including through costly infringement or breach of license litigation or similar proceedings, to enforce our intellectual property rights or to invalidate intellectual property rights or licenses claimed by others. We cannot predict the outcome and effectiveness of any such litigation in protecting our intellectual property and licenses due to the uncertainty surrounding the applicable copyright, licensing and other intellectual property law. In addition, the cost to us of any such litigation could be substantial, could be protracted and may absorb significant management time. Moreover, pursuing any such litigation may not be an effective deterrent against the unauthorized use of our intellectual property or breach of our licenses.

The pendency of any infringement litigation and our failure or inability to enforce or protect our intellectual property rights and licenses could have a material adverse effect on our business, results of operations and financial condition.

Our competitive position may depend on our ability to protect trade secrets. If we are unable to protect our trade secrets, other companies may be able to compete more effectively against us, and our business could suffer.

We rely on trade secret protection for our confidential and proprietary information and procedures. We currently protect such information and procedures as trade secrets through recognized practices, including confidentiality agreements with employees, consultants, collaborators and customers. These confidentiality agreements may be breached, however, and we may not have adequate remedies for any breach. In addition, these trade secrets may otherwise become known to or be independently discovered by competitors, through the defection of employees to competitors or otherwise. If our trade secrets were to become known to, or be independently discovered by competitors, we could face more intense competition and our business could suffer.

We may infringe the intellectual property rights of third parties and may become involved in expensive intellectual property litigation. Any intellectual property litigation could impose a significant strain on our resources, and a finding that we have infringed the intellectual property rights of third parties could require us to limit our business activities or pay damages or license fees. In either case, our business, results of operations and financial condition could suffer.

The intellectual property rights of companies operating in the life sciences industry are generally uncertain and involve complex legal, scientific and factual questions. Our success in the markets in which we operate may depend on our ability to operate without infringing the intellectual property rights of others and to prevent others from infringing our intellectual property rights.

There has been substantial litigation regarding patents and other intellectual property rights in the life sciences industry. We may become a party to patent litigation or proceedings to determine our patent, copyright or other intellectual property rights with respect to third parties, including potentially our customers. Infringement proceedings may be necessary to establish which party was the first to discover such intellectual property. The cost to us of intellectual property rights litigation or similar proceeding could be substantial, and it may absorb significant management time. The pendency of any such intellectual property rights litigation may also adversely affect our company's ADS or share price. If infringement litigation against us is resolved unfavorably, we may be enjoined from providing some or all of our products or services without

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

a license from a third party. We may not be able to obtain the requisite license on commercially acceptable terms or at all. Any of these outcomes could harm our business, financial condition and results of operations.

Table of Contents

Our business requires personnel with substantial technical and management expertise. If we are unable to hire or retain personnel with the requisite expertise, our business could suffer.

Our products and services are highly technical. As a result, our key personnel must have specialized training or advanced degrees in order to develop and refine these products and services. There is a shortage of qualified scientific, management and software and IT development personnel who possess the technical background necessary to adequately understand and improve our products, solutions and services. The loss of any of these persons' expertise may be difficult to replace.

Competition for the highly qualified personnel we require is intense, particularly in the areas of information technologies and life sciences. We compete for these persons with pharmaceutical and other biotechnology companies, software firms, academic institutions and government entities. The process of hiring suitably qualified personnel is often lengthy. We have in the past experienced, and may in the future experience, difficulties in recruiting the personnel our business requires on a timely basis. Any loss of the services of key personnel, or any inability to attract and retain the additional employees with the necessary expertise, could have a material adverse effect on our business, results of operations and financial condition.

The length of time between our initial contact with a customer and conclusion of a signed agreement can be lengthy. As a result, we may spend considerable resources on unsuccessful sales efforts or may not be able to make sales on the schedule anticipated. If we devote extensive resources to generate sales that do not materialize, our revenues could fall below expectations which could adversely affect our business and cash flows.

Our ability to obtain new customers for our products and services depends on our customer's belief that we can help accelerate their life science R&D efforts, particularly in the area of drug discovery and development. The length of time between our initial contact with a customer and conclusion of a signed agreement can be lengthy because our solutions, products and services are complex and cut across many aspects of a potential customer's organization. We therefore need to educate a variety of constituencies within potential customers about the benefits of our products and services in order to make a sale. In addition, many of the agreements that we enter into involve the negotiation of individual terms. We may therefore expend substantial funds and management effort with no assurance that an agreement will result.

We may not be able to effectively manage our previous expansion, which could adversely affect our business and strain our existing resources.

Since our formation, we have experienced significant growth in the scope of our operations and the number of our employees. Our ability to manage our growth effectively will depend on our ability to further strengthen our management team and our ability to attract and retain skilled employees. Our success will also depend on the ability of our management and key employees to continue to integrate and improve our operations, management information and financial control systems and to train and manage our work force. If we are unable to manage our growth effectively, our business, results of operations and financial condition could be harmed. As a result of our expansion, we have development teams located in Germany, the United States and the United Kingdom. In addition, we have recently reorganized our global software development organization. The decentralization and reorganization of our development activities may adversely impact our ability to coordinate our software development activities and to introduce new products and solutions or new versions of our existing products or solutions into the market in accordance with our release plans.

Our strategy contemplates the possibility of future investments, which may absorb significant resources. If future or existing investments are unsuccessful, our business, results of operations and financial condition will suffer.

Table of Contents

As part of our strategy, we have pursued, and may continue to pursue, investments and other relationships and alliances. Transactions of this sort have involved and may involve significant cash expenditures, debt incurrence, additional operating losses, dilutive issuances of equity or convertible debt securities and expenses that could have a material adverse effect on our financial condition and results of operations. We have limited experience in concluding investments and similar transactions, and it may be difficult for us to complete such transactions quickly and to integrate these businesses efficiently into our current business. In addition, we may face difficulties in the assimilation of new technologies, the diversion of resources from our existing business, the maintenance of uniform standards, controls and procedures, and the impairment of relationships with our customers and employees. In addition, some of these companies may perform poorly, possibly resulting in the bankruptcy or liquidation of such companies. Any impairment of the carrying value of our investments that is other than temporary may require us to write-down the carrying value of the investment and record an amortization expense. For example, in FY 2003, we determined that the goodwill on our balance sheet from our acquisitions of Trega Biosciences and NetGenics was impaired such that this decline was other than temporary. Accordingly, we determined to write off the entire goodwill and recorded a one time amortization expense of \$58.5 million on our consolidated statement of operations for FY 2003. See Item 5: Operating and Financial Review and Prospects B Critical Accounting Policies. Additionally, due to changes in German tax laws in 2000 and effective January 1, 2001, capital losses or write-downs of equity securities are no longer tax-deductible. Any of these difficulties may have a negative impact on our business, financial condition and results of operations.

Most of our LSI products or solutions require third party software and database components. If we are unable to procure licenses for the use of these third party software and database components for our customers or if our customers cannot obtain these licenses directly from these third parties, our business could suffer.

Most of our LSI products, including our iDEA predictive ADME simulation system, our LION DiscoveryCenter data and application integration system and our solutions based on our LION DiscoveryCenter system, require third party software or database components. If we are unable to continue licensing the use of these third party software and database components to our customers or if our customers cannot obtain these licenses directly from these third parties, we may be required to obtain similar licenses from other third party providers at higher costs or develop these software or database components by ourselves, which would delay our marketing and selling efforts with respect to these products or solutions. Either outcome would likely have a material adverse effect on our business, results of operations and financial condition.

Because our products and solutions are important to the R&D processes of our customers, we could incur substantial costs as a result of warranty or product liability claims.

The use of our LSI products and solutions by customers in business-critical R&D applications and processes creates the risk that customers or other third parties may pursue warranty or other claims against us in the event of actual or alleged failures of our products, solutions or services provided by us. Any claim, regardless of its merits, could entail substantial expense and require the devotion of significant time and attention by key management and development personnel. In addition, certain of our Internet browser-enabled products include security features that are intended to protect the privacy and integrity of customer or third party data. Despite these security features, our products may be vulnerable to break-ins and similar problems caused by Internet users, such as hackers bypassing firewalls and misappropriating confidential information. Such break-ins or other disruptions could jeopardize the security of information stored in and transmitted through the computer systems of our customers. Addressing problems and claims associated with such actual or alleged failures could have a material adverse effect on our business, results of operations and financial condition.

Competition for our products, solutions and services is intense. If competitors develop products or solutions that are more competitive than ours, we may lose sales, and our commercial opportunity may be reduced or eliminated.

The industry in which we operate is highly competitive and is characterized by extensive research efforts and rapid technological progress. We face and will continue to face intense competition from the in-house software development teams of pharmaceutical and other life science

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

companies as well as from a wide range of other competitors, such as third-party commercial software developers, bioinformatics, cheminformatics and genomics companies, universities and other academic research institutions, governmental agencies and other life science companies, including some of our customers. Our competitors may develop products or solutions that are more effective and/or less costly than any of our current or future products and solutions.

Table of Contents

Many of our competitors have substantially greater capital resources, larger and more experienced R&D and other staffs, superior R&D facilities, greater experience in software development and greater marketing capabilities than we have.

To remain competitive, we must expand and enhance the capabilities of our LSI products, solutions and professional services so that they remain more advanced than those of our competitors. We must also introduce enhancements and new systems, products and solutions faster than the potentially competing products, solutions and technologies of our competitors. If we are unable to do any of these things, our ability to obtain and retain revenues from customers would be adversely affected, and our commercial opportunity could be reduced or eliminated.

We operate in rapidly evolving markets and we may have to change our business model or strategy, perhaps materially, to adapt to the changing needs of our customers. If we are unable to change our business model or strategy as required in a timely manner, our business, results of operations and financial condition will suffer.

We operate in rapidly evolving markets and we may have to change our business model or strategy, perhaps materially, to adapt to the changing needs of our customers. These changes may be rapid and significant and could materially affect how we operate. We cannot foresee these changes and may not be successful in changing our business model or strategy to meet the needs of our customers or markets. If we fail to modify our business model or strategy in response to these changes, our business could suffer. Changes in our business model or strategy may intensify the risks described in this annual report or subject us to new risks.

We may need to raise additional funds in the future. If such funds are not available to us, our business, results of operations and financial condition could suffer.

We believe that the net proceeds of our initial public offering, together with existing cash and cash equivalents and marketable securities, will be sufficient to fund our current operations and activities for at least FY 2004. Nevertheless, we may be required to raise additional capital to pursue expansion plans, in response to competitive pressures, to invest in new technologies or to develop and commercialize products, solutions or services.

This additional financing may not be available when needed or, if available, may not be available on favorable or even commercially reasonable terms. If adequate financing is not available, we may be required to significantly reduce or refocus our operations. We may also choose to raise additional capital due to market conditions or strategic considerations, even if we have sufficient funds for our current business plan. If additional financing is obtained through additional public or private equity offerings or convertible securities offerings, existing shareholders may suffer dilution.

Our insurance coverage may not be sufficient to avoid negative impacts on our financial position or results of operations resulting from claims or liabilities against us.

We maintain insurance coverage for protection against many risks of liability. The extent of our insurance coverage is under continuous review and is modified as we deem it necessary. Despite this insurance, it is possible that claims or liabilities against us may have a significant adverse impact on our financial position or results of operations.

Our sales are subject to quarterly fluctuations.

Table of Contents

Our revenue and operating results vary, sometimes substantially, from quarter to quarter. Orders may increase in the fourth quarter of each calendar year, as business customers attempt to make full use of their IT purchase budgets before year end, and to a somewhat lesser degree in the first quarter of each calendar year, as business customers attempt to make first use of their IT purchase budgets. Our revenue is difficult to forecast for a number of reasons, including the relatively long sales cycles for our products and solutions, the size and timing of individual license and consulting transactions, and the timing of the introduction of new products or product enhancements by us or our competitors.

The life sciences industry is consolidating, leading to greater competition to sell products, solutions and services to a reduced number of potential customers. This process could harm our efforts to market or sell our products and services.

Consolidation within the life sciences industry, particularly within the pharmaceutical and biotechnology industries, has heightened competition for products, solutions and services of the type we provide. If this trend toward consolidation continues, it may result in fewer customers for our products, solutions and services, price erosion and greater competition between us and our competitors. Any consolidation could shrink the available market for our products, solutions and services and adversely affect our ability to market our products, solutions and services.

Use of information derived from genomics and/or proteomics research to develop or commercialize products is unproven. If genomics or proteomics-derived information proves unsuitable to develop or commercialize products, demand for our products, solutions and services will decline.

The development of new drugs based on information derived from genomics or proteomics research is unproven. Few therapeutic products based on discoveries in genomics or proteomics have been developed and commercialized, and to date, no one has developed or commercialized any therapeutic product based on our technologies. Development of new products by our customers may be subject to risks of failure, including that products will be found to be ineffective or toxic, fail to receive regulatory approvals, infringe the proprietary rights of others, or be subject to the successful marketing of similar products by competitors.

If our customers are unsuccessful in developing and commercializing products based on our products, solutions or services, we and our customers may be unable to generate sufficient revenues to meet our respective expenses. Our business may suffer as a result.

Health care reform and restrictions on reimbursement may affect the ability of pharmaceutical and biotechnology companies to purchase or license our products, solutions and services, which may affect our results of operations and financial condition.

The continuing efforts of government and third party payors in our markets to contain or reduce the costs of health care may reduce the profitability of pharmaceutical and biotechnology companies. For example, in some foreign markets, the government controls pricing or profitability of prescription pharmaceuticals. In the United States, we expect the continuation of federal and state proposals to implement similar governmental control. We cannot predict what actions federal, state or private payors for health care goods and services may take in response to any health care reform proposals or legislation. We currently expect to derive almost all of our revenues in the foreseeable future from the pharmaceutical and biotechnology industries. Accordingly, our success will depend, in part, upon the success of the companies within those industries and their demand for our products, solutions and services. Any reduction in the profitability of actual or prospective customers for our products, solutions and services could result in reduced revenues for us.

Security risks in electronic commerce or unfavorable Internet regulations may deter future use of our products and services.

Table of Contents

We make selected LSI products, such as our SRS data integration system and our bioSCOUT® software, available to customers on our own Internet portal on a subscription basis. In addition, some of our customers use our SRS technology to make their proprietary databases available to their customers through Internet-based portals. Our ability and the ability of those who offer our products over the Internet to provide secure transmissions of confidential information over the Internet may limit on-line uses and purchases of products. A breach of security measures may result in the misappropriation of our customers' or third party proprietary information or confidential information. The security measures we adopt may not be sufficient to prevent breaches, and we may be required to incur significant costs to protect against security breaches or to alleviate problems caused by breaches. Further, security breaches in general may result in customers not using the Internet to access our products. The U.S. federal or state governments could enact laws, rules and regulations that would affect our business and operations. The European Union, individual countries or other foreign jurisdictions could also enact laws regulating the use of the Internet. If enacted, these federal, state or foreign laws, rules and regulations could limit the growth and development of our Internet-enabled products and services. Any of these outcomes could harm our business, results of operations and financial condition.

The use of life science products can be subject to ethical, legal, social or privacy concerns among the public. If these concerns were to limit demand for our customers' products, demand for our own products could suffer.

The use of genetic information in various areas of the life sciences industry, particularly in the areas of food production, medicine and pharmaceutical research, has raised issues regarding the appropriate uses of the resulting information. This could lead to governmental authorities calling for limits on or regulation of the use of genetic information or prohibiting testing for genetic predisposition to certain diseases, particularly for those that have no known cure. Any of these scenarios could reduce the potential markets for the products of our customers and could reduce the potential markets for our own products and services.

Risks Related to Holding Our Company's ADSs and Shares

You may be unable to enforce a judgment against our company or members of our company's management board or supervisory board.

Our company is a stock corporation organized under the laws of the Federal Republic of Germany. A German stock corporation may not give the same protections to shareholders or holders of ADSs as a corporation incorporated in the United States. None of the current members of our company's management board or supervisory board is a resident of the United States. The assets of these individuals may be located outside the United States. Likewise, all or substantially all of the assets of our company are located outside the United States. As a result, it may not be possible for you to enforce against these individuals or our company judgments obtained in U.S. courts based on the civil liability provisions of the U.S. securities laws. The enforcement in Germany of civil liabilities based solely upon U.S. securities laws in original actions or in actions for the enforcement of judgments of U.S. courts may encounter difficulties. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in Germany.

Sales of ordinary shares by our principal shareholders could adversely affect the price of our capital stock.

Dr. von Bohlen und Halbach, the Chief Executive Officer of our company, together with his spouse and children, beneficially owns at least 18% of the outstanding ordinary shares in our company. In addition, various individuals had significant shareholdings in our company prior to our company's initial public offering of its shares in August 2000. Our most important customer, Bayer, holds at least 1.4 million shares in our company. The sale of a large number of ordinary shares by any of these principal shareholders could have a negative effect on the trading price of our company's ADSs or ordinary shares. We are not aware of any restrictions on the transferability of the shares owned by the principal shareholders, any of their immediate family members or any related entity.

Table of Contents

Our principal shareholders may be able to exert significant influence over our future direction and operations.

The amount of ordinary shares held by Dr. von Bohlen und Halbach and his family may enable Dr. von Bohlen von Halbach to exert influence over our future direction and operations, including by voting these shares at our company's shareholders' meetings.

You will be subject to exchange rate risks, and the market price of our company's ADSs may decline if the value of the euro falls against the dollar.

Individuals and entities located in the United States who hold our company's ADSs and our company's shares will bear exchange rate risk. An increase in the value of the euro relative to the dollar will cause a decrease in the dollar value of our company's shares, which will also affect the market price of our company's ADSs on U.S. securities markets. You may receive a reduced dollar value upon the sale of our company's ADSs or shares held by you as the result of the dollar/euro exchange rate in effect at that time which may have no relation to the operations or prospects of our company.

You may have less access to information about our company and less opportunity to exercise your rights as a shareholder if you hold our company's shares through our company's ADSs.

There are risks associated with holding our company's shares through ADSs, as our company is a stock corporation organized under the laws of the Federal Republic of Germany. Our company is subject to German laws and regulations, and to its articles of association (*Satzung*). Your rights as a holder of our company's ADSs will differ in various ways from a shareholder's rights, and you may be affected in other ways, including:

you will not receive dividends or other distributions directly from our company but from the depository;

you may not be able to participate in rights offerings or dividend alternatives;

you may not receive copies of reports and may have to go to the office of the depository to inspect any reports issued, or may only be able to request a report to be sent to you at your own expense;

the deposit agreement may be amended by our company and the depository, or may be terminated by our company or the depository, without your consent in a manner that could prejudice your rights;

the deposit agreement limits our company's obligations and liabilities and those of the depository; and

you have no right to vote in shareholders' meetings unless you receive a power of attorney from the depository bank.

German law requires less corporate disclosure than the laws of the United States, which means that publicly available information about our company is less extensive and may become available later than publicly available information about a domestic company that is publicly traded in the United States.

There is less publicly available information about our company as a foreign issuer of securities publicly traded in the United States than is regularly published by or about domestic issuers of publicly traded securities. Therefore, our company's shareholders may receive less information about our performance than shareholders receive about a domestic company that is publicly traded in the United States.

Our company is subject to the disclosure requirements mandated by German law and the rules of the Frankfurt Stock Exchange, including those of the Prime Standard segment of the Frankfurt Stock Exchange. The provisions thereunder generally impose less extensive disclosure requirements than their U.S. counterparts. For example, under German law, our company is required to make year-end financials available to its shareholders upon request within eight months and file them with the Heidelberg company registrar without delay after submission to its shareholders within twelve months after the close of each financial year at the latest. The rules of the Prime Standard segment of the Frankfurt Stock Exchange also require our company to prepare quarterly consolidated financial accounts without delay within two months after the close of each quarter at the latest. Subsequently, the Frankfurt Stock Exchange makes such reports publicly available.

Table of Contents

As a foreign private issuer under U.S. securities laws:

our company is required to file an annual report on Form 20-F with the SEC within six months after the close of each financial year; if our company were a domestic U.S. public company, it would be required to file an annual report on Form 10-K with the SEC within 90 days after the close of each fiscal year;

our company is not required to file quarterly or current reports with the SEC, except to the extent required to do so under the rules of the Prime Standard segment of the Frankfurt Stock Exchange; U.S. public companies are required to file quarterly reports on Form 10-Q with the SEC within 45 days of the end of each of their first three quarters of each financial year.

The market price for our ADSs and ordinary shares may be volatile.

The trading prices of our company's ADSs and ordinary shares have experienced and may continue to experience significant volatility. The current trading price of the ADSs and ordinary shares reflect certain expectations about the future performance and growth of our company, particularly on a quarterly basis. However, our revenue and expenses can vary, sometimes substantially, from quarter to quarter, causing significant variations in operating results during certain quarters and in growth rates compared to prior periods. Any shortfall in revenue, expenses or net losses or earnings from levels projected or estimated by us or annual, quarterly or other projections or estimates made by securities analysts could have an immediate and significant adverse effect on the trading price of our company's ADSs or the ordinary shares in any given period. Additionally, we may not be able to confirm any such shortfalls until late in the quarter or following the end of the quarter because license or service agreements are often executed late in a quarter. Finally, the stock prices for many companies in the software and biotechnology sectors have experienced wide fluctuations, which may not have been directly related to our company's operating performance. The trading price of our company's ADSs or the ordinary shares may fluctuate in response to the announcement of new products or product enhancements by us or our competitors, technological innovation by us or our competitors, quarterly variations in our competitors' results of operations, changes in revenue and revenue growth rates on a consolidated basis or for specific geographic areas, business units, products or product categories, speculation in the press or analyst community and general market conditions specific to particular industries. In the past, companies that have experienced volatility in the market price of their stock have been the subject of securities class action litigation. Any such securities class action litigation against us, with or without merit, could result in substantial costs to us and the diversion of management's attention and resources.

Table of Contents

Item 4: Information on the Company

Organization and History

The legal name of our company is LION bioscience Aktiengesellschaft. Our company, located in Heidelberg, Germany, was founded in March 1997 around a nucleus of six scientists from the European Molecular Biology Laboratory in Heidelberg, Germany and the University of Heidelberg, together with the chairman of our management board, Dr. Friedrich von Bohlen und Halbach. Our company is a stock corporation organized in the Federal Republic of Germany under the Stock Corporation Act (Aktiengesetz) and was incorporated on March 4, 1997 by registration with the commercial register (Handelsregister) of the lower court (Amtsgericht) in Heidelberg, Germany, under the entry number HRB 5706. We have subsidiaries in the United Kingdom and the United States of America and in addition to our headquarters in Heidelberg, Germany, we maintain sites in Cambridge, United Kingdom, Cambridge, Massachusetts, and San Diego, California. We also maintain a site in Columbus, Ohio, which we expect to close by September 30, 2003.

We offer and develop software products and solutions for use by research organizations of life sciences companies, including in particular data and application integration as well as information and knowledge management solutions designed to accelerate the drug discovery process. We also offer global professional services to customers related to these products and solutions.

In August 2000, our company completed the initial public offering of its ordinary shares and ADSs consisting of public offerings in Germany and the United States and an offering to institutional investors outside the United States and Germany. The net proceeds to us from these offerings totaled approximately 209.29 million. Our ordinary shares are listed on the Frankfurt Stock Exchange in the market segment Geregelter Markt with additional qualifications (Prime Standard). From August 11, 2000 until December 31, 2002, our ordinary shares were listed in the market segment *Neuer Markt* of the Frankfurt Stock Exchange. Our ADSs have been quoted on the Nasdaq National Market since August 11, 2000. For further information concerning our company's initial public offering and the stock market listings of our company's shares and ADSs, see Item 9: The Offer and Listing .

On March 14, 2001, we acquired Trega, which was merged into our subsidiary LION Bioscience Inc. On January 30, 2002, we acquired NetGenics. We ceased our internal drug discovery activities, iD³TM, in FY 2003.

The principal office of our company is located at Waldhofer Str. 98, 69123 Heidelberg, Germany. Our company's telephone number is: +49 (0) (6221) 4038-100. The principal office of LION bioscience Inc., our main U.S. subsidiary, is 141 Portland Street, 10th Floor, Cambridge, MA 02139. Our agent for service in the United States is CT Corporation System located at 111 Eighth Avenue, New York, NY 10011. Our Internet address is <http://www.lionbioscience.com>. None of the information on our Web site is incorporated by reference into this annual report.

Industry Challenges

As a result of enormous advances in the understanding of genetics in particular and of biology beginning in the 1980's, the life sciences industry is undergoing a paradigm shift, as biology increasingly supplants chemistry as the basis for product development. This shift from chemistry to biology and the introduction of high-throughput technologies as well as new research areas, such as proteomics and pharmacogenomics, as the basis for product discovery has presented life science companies with significant new challenges. The foremost of these challenges is managing the enormous volume, diversity and complexity of data generated and the large number of disparate data analysis tools and software applications and the consequent impact on the R&D decision-making processes.

Turning data from a particular scientific discipline into information requires integration and analysis of the data in the context of background information contained in the scientific literature and patents of that discipline and, increasingly, related disciplines. Converting this information into knowledge about a particular disease, drug, target, gene or drug in turn requires the accumulation, integration, and analysis of this information by teams of researchers that currently use disparate data analysis tools and software applications throughout their discovery and development departments. Converting this knowledge into predictions about the future performance of a potential drug target already at the early stages of the drug discovery process requires sophisticated models and algorithms built from large volumes of experimental data and knowledge derived from scientific literature.

Table of Contents

At the same time, the life science industry has been under strong pressure to raise the productivity of drug discovery and accelerate the entire drug discovery process, as the product pipeline of many pharmaceutical companies is shrinking and several key product patents will soon expire. This effort to speed up the entire R&D process extends to the early discovery stages, the so-called target validation and lead optimization stages, as well.

We believe that through the use of effective, integrated IT solutions in the drug discovery process, companies in the life sciences industry may be able to evaluate scientific data faster, more cost-effectively and more comprehensively to create new product candidates and to select the more promising candidates at earlier stages of the discovery and development process. We have identified the following key bottlenecks that R&D organizations at life sciences companies experience when using IT systems for their R&D processes:

Data and application integration: The diversity, complexity and volume of data from the various phases of the drug discovery process (biological, chemical, pre-clinical and clinical phase) pose significant challenges in integrating this data. In addition, a large number of disparate data analysis tools and software applications are used in these various phases.

Validation of biological targets: Another challenge facing the R&D organizations of life sciences companies is to utilize all available data and information in the early stages of the drug discovery process in order to select the most promising biological targets for further product development. The decoding of the human genome, recent successes in identifying and characterizing proteins and the launch of faster and more miniaturized tests and measurement processes have all generated a profusion of biological and chemical data – all of which must be managed and analyzed effectively using IT systems in order to convert this information into useful knowledge about each biological target. This process, which is called *in silico* validation of biological targets, involves the simulation of experimental analysis using IT systems.

Optimizing potential targets: Life sciences companies are increasingly engaged in efforts to use IT systems for predicting the so-called compound characteristics of a potential chemical target. The compound characteristics are the specific properties of physiological behavior of the human body, such as the absorption, distribution, metabolism, and excretion (or ADME) of a chemical target by the human body, as well as the toxicological reaction of the human body to the chemical target. Historically, inappropriate properties of a chemical compound have been a principal reason for the failure of compounds to be developed into effective drugs in later stages of the drug discovery process. With the adoption of high throughput screening, combinatorial chemistry and parallel synthesis in drug discovery, the need for early information on a compound's ADME and toxicological properties has become increasingly important in the lead selection and optimization process. In order to identify potential problems with chemical targets at these earlier stages in the drug discovery process, IT-based predictive systems must be based on sophisticated models and algorithms and be capable of integration into these early stages of the drug discovery process.

LION's Strategy

We strive to become the world leader in providing IT-driven R&D solutions for the life sciences industry. Our solutions aim to improve the efficiency of the drug discovery process and to increase R&D productivity of life sciences companies. Our solutions are built from an open, scalable and modular integration platform that can be tailored to the specific needs of each R&D organization.

Our core IT-offering is LION DiscoveryCenter, our proprietary data and application integration platform. An integral part of LION DiscoveryCenter is SRS, our leading technology for integrating diverse types of biological data and databases. Our LION DiscoveryCenter platform is capable of integrating disparate data analysis and IT applications that are used throughout the life sciences R&D process, in particular bioinformatics and cheminformatics tools and applications, and the diverse data structure and databases, in particular biological and chemical data. LION DiscoveryCenter is thus designed to enable R&D organizations to manage the enormous volume, diversity and complexity

of their data and to integrate this data with the disparate analysis tools and applications across the different R&D departments. We released LION DiscoveryCenter in January 2003.

Table of Contents

Due to its scalable and modular nature, LION DiscoveryCenter is designed to accommodate a growing number of users and to meet new technology and content requirements. Its open environment allows customers to continue using their internally developed or licensed third party software tools and applications and third party databases. Our professional services group, LION SolutionCenter, can assist life science companies with integrating their internally developed or licensed third-party software tools and applications or databases and with developing customized software solutions on the basis of the LION DiscoveryCenter platform.

We also plan to offer a number of domain-specific software solution modules for use with LION DiscoveryCenter platform. In June 2003, we released LION Target Engine, a solution module, for use in the biology phase of the drug discovery process for identifying and validating biological targets. LION Target Engine is based in part on functionalities and technologies developed for Bayer as part of our so-called *i*-biology collaboration. In the future, we plan to release LION Lead Engine, another stand-alone solution module to be used in the chemistry phase of the drug discovery process for identifying, categorizing and optimizing chemical compounds. LION Target Engine and LION Lead Engine can be easily combined with LION DiscoveryCenter, permitting, among other things, the standardization of biological and chemical data for uniform data presentation.

We also offer a stand-alone IT solution for enabling researchers to quickly predict the specific physiological properties of a lead chemical compound. Our iDEA (in vitro Determination for the Estimation of ADME) simulation system is designed to predict the relevant ADME properties of a chemical compound. This IT-solution enables scientists to accelerate the decision-making process with respect to further product development of chemical compounds at an early stage in the drug discovery process by processing the vast amounts of data generated through such techniques as high-throughout screening, combinatorial chemistry and parallel lead optimizing. Our iDEA solution can seamlessly be integrated into the existing cheminformatics systems of life science companies.

We continue to offer our industry-leading SRS integration system as a stand-alone software suite for the integration of biological databases for at least fiscal year 2004. However, existing SRS customers may switch to our LION DiscoveryCenter integration platform, a functional upgrade to our SRS integration technology that offers additional data integration capabilities as well as software application capabilities.

Our goal is for the life science industry to adopt our solutions for use in their R&D activities across the entire drug discovery process on the basis of LION DiscoveryCenter. These solutions ultimately involve reengineering a life science customer's R&D organization to integrate IT systems and expertise into each individual research group, to facilitate the communication between these research groups, to manage and share knowledge throughout the customer's R&D organization and to support the R&D decision-making process.

The customization and implementation of our solutions are complex and may cut across many aspects of a customer's R&D organization. We may perform these complex integration and customization projects through dedicated centers of excellence that are staffed by our consultants and life science informaticians as part of collaboration arrangements with a particular life science customer.

We may also provide additional value-added research services and solutions for these customers. For example, we may collaborate with life sciences companies on research projects that utilize our solutions to produce specific research results, such as in the area of genomics or nuclear receptors. Our so-called *i*-biology collaboration with Bayer AG demonstrates this approach. Pursuant to this collaboration, we maintain a dedicated center of excellence, LION bioscience Research Inc. in Cambridge, Massachusetts, that provides value-added target discovery services for Bayer and develops, implements and manages an IT solution for Bayer's drug discovery activities.

Table of Contents

Our solutions are primarily focused on the R&D organizations of companies active in the life sciences industry, in particular pharmaceutical companies, established biotechnology companies and diversified food and agriculture companies. The length of time between our initial contact with a customer and conclusion of a signed agreement for our solutions can be lengthy because our solutions are complex and may cut across many aspects of a potential customer's R&D organization. Accordingly, we typically do not generate revenues from any customer until substantially after we make initial contact with that customer. Because many of the agreements that we conclude are individually negotiated with the customer, the length of time before we recognize revenues under any contract, and the terms of each contract, may vary substantially from customer to customer.

With this strategy, we are focusing on our core competencies and responding to the market demands and opportunities that we have identified. Accordingly, we have streamlined our software product portfolio and IT development activities. We currently expect to continue to market and support our established software tools and applications, such as bioSCOUT®; however, we no longer offer any other software products on a stand-alone basis.

Consistent with our strategy to focus on our core competencies, we ceased our internal drug discovery program, which we called *iD*³ by the end of calendar year 2002. We have leased equipment and licensed intellectual property and the results of our research from our *iD*³ activities to PheneX AG, a Heidelberg based company founded by former *iD*³ employees, until October 31, 2003. PheneX also acts as our distributor to procure the sale or licensing of our *iD*³ equipment, intellectual property and other assets until December 31, 2003.

Our Technologies, Solutions, and Products

Data and Application Integration Technologies

Our core business is the development of data integration and application integration technologies for managing the enormous volume, diversity and complexity of data generated in the life sciences R&D process and integrating the large number of disparate data analysis tools and software applications used to process such data.

SRS Software Suite

SRS is a software suite for the collection, integration and administration of data during the biological phase of the drug discovery process. SRS is capable of integrating the diverse universe of biological data from heterogeneous data sources by connecting customers' internally developed and licensed third party databases with over 400 public domain databases through a single query and navigation interface without losing data in file and format conversions. SRS is designed to query and integrate data from so-called "flat file" databases, as the vast majority of biological databases contained flat file database structures. SRS is also capable of integrating and querying databases containing data in the XML format. SRS provides customers with an expandable framework for their data integration needs. Using SRS' extensive platform, researchers can integrate new databases into the system and exploit the links between different databases. SRS is designed to grow with the increasing volume and complexity of biological data. SRS also enables bioinformaticians to develop applications and algorithms on top of SRS. The SRS software is regarded as a market leader for biological data integration and is used by over 280 commercial and academic customers.

We provide value-added modules as part of the SRS software suite to enable our customers to expand the SRS system:

SRS Prisma . SRS Prisma is a software tool that organizes all of the routine tasks necessary to integrate public data into the SRS environment. SRS Prisma automates the daily integration of all relevant life science data into a customer's own bioinformatics network. SRS Prisma supports the mirroring of numerous public domain databases and can easily be configured to monitor and update new databases. SRS Prisma thereby enables scientists to access the most current data in multiple databases. At the same time it facilitates the efficient administration of the customer's IT infrastructure.

Table of Contents

SRS Objects . SRS Objects is a set of user-friendly programming interfaces for creating customized features within SRS. SRS Objects provides a suite of tools to facilitate fast and efficient software development around SRS. This user-friendly software lets programmers access and deploy the full range of SRS capabilities tailored to each user's specific needs. SRS Objects thereby eases access and promotes the use of integrated data within a particular SRS installation. SRS Objects supports all common programming languages.

SRS 3D . With SRS 3D, molecular scientists can easily use structures to gain insight into potential drug targets. Through a state-of-the-art viewer the user has access to public and customer data within the integrated SRS environment.

SRS Relational . By adding the SRS Relational module, our customers can conduct queries across flat file and XML databases as well as relational databases. SRS Relational enables customers to expand the capabilities of SRS to integrate ORACLE and MySQL relational databases. By using SRS Relational, data contained in these relational databases can be queried through the standard SRS user interface.

We offer the entire SRS software suite, including all of these modules, as well as a professional services package for software installation and customization under the name SRS Evolution.

LION DiscoveryCenter

Our LION DiscoveryCenter, which we released in January 2003, is an open, scalable and modular integration platform that incorporates our SRS data integration technology. LION DiscoveryCenter is capable of integrating disparate data analysis and IT applications that are used in the life sciences R&D process, in particular bioinformatics and cheminformatics tools and applications, as well as diverse data structure and databases, in particular biological and chemical data.

LION DiscoveryCenter is compatible with all major data formats, databases and database management systems in the life sciences industry. LION DiscoveryCenter has the capability of integrating with analytical and visualization tools and web sites developed by third party suppliers as well as by the internal IT organization of our customers, in particular software tools and applications used in the biology and chemistry stages of the drug discovery process. Documented and standardized application programming interfaces (APIs) allow companies to integrate these internally developed and or third-party licensed applications themselves or with the assistance of LION's professional services organization.

LION DiscoveryCenter provides an integrated view of chemical and biological information held in both internal and external repositories, including comprehensive summary views. These summaries display, annotate, and cross-reference all of the information about a given topic (e.g. sequence, small molecule, assay, gene and target) in a single, user-friendly interface. LION DiscoveryCenter enables users to annotate their discoveries on relevant data objects and to choose whether or not to share these annotations with their colleagues, including on a project basis. LION DiscoveryCenter maintains a history of each data object, listing all the events and annotations, and alerts the user of new relevant information appearing in databases.

LION DiscoveryCenter takes advantage of IBM's DiscoveryLink technology to support the user when building complex queries involving chemical and biological information. We have obtained a development license to DiscoveryLink as part of our collaboration with IBM. A customer will have to license DiscoveryLink directly from IBM if the customer wishes to add the capabilities of IBM's DiscoveryLink to our LION DiscoveryCenter platform.

Research Software Applications

Table of Contents

We offer a number of IT products and solutions to manage and analyze the life science R&D process and to convert this information into useful knowledge about each biological target. These research software applications are designed for use in the earlier stages of the drug discovery process.

LION Target Engine

LION Target Engine is a stand-alone application solution built on our LION DiscoveryCenter platform. LION Target Engine is used in the biology research phase of the drug discovery process. It is designed to speed up the identification, prioritization, and validation of biological targets for further development by offering an extensive range of functions from targeted data analyses and visualization through analysis and interpretation of biological information. LION Target Engine, which was released in June 2003, incorporates proprietary technologies and functionalities developed by us as part of our *i*-biology collaboration with Bayer.

LION Lead Engine

LION Lead Engine, which we plan to release in calendar year 2004, will be a stand-alone application solution built on our LION DiscoveryCenter platform. LION Lead Engine is designed for use in the chemistry research phase of the drug discovery process as well as in pre-clinical tests and analyses. It is intended to assist researchers identify and categorize successful chemical compound leads at an early stage in the discovery process in order to focus further development on the most promising candidates.

iDEA

iDEA is a comprehensive software package developed to predict relevant ADME characteristics of potential drugs. We offer customers the system for desktop deployment under the name iDEA pkEXPRESS, which we released in May 2003. Customers can also deploy the system as an ADME compute engine in a larger cheminformatics system. Our iDEA pkEXPRESS simulation and prediction system comprises the following models:

Physiological Absorption Model. This model is a computational system designed to predict the rate and extent of absorption in the human digestive system of orally applied chemical compounds. The absorption module can be utilized in prioritizing hits from high throughput screens during the early phase of drug discovery and lead optimization, permitting our customers to focus their optimization efforts and limited resources on a small number of compounds rather than relying only on animal testing or in vitro assays in the later stages of the drug discovery process. This module also allows customers to explore how solubility and permeability affect absorption. Results can be displayed either graphically or in tabular form for individual intestinal regions or the total for all regions.

Physiological Metabolism Model. This model is designed to predict the extent of first pass metabolism for a compound. The metabolism model is based upon a physiological metabolism model that is built on a proprietary database of clinically tested compounds. The model correlates a compound's predicted absorption from the absorption module, protein binding, metabolic turnover measured in hepatocytes and human clinical data to predict the bioavailability of drugs in humans.

Physiological Distribution and Elimination Model. This model uses published human physiological blood flow rates and organ and tissue volumes to predict a compound's plasma level time curve and to determine other relevant pharmacokinetic parameters. The Distribution and Elimination Model uses protein binding, red blood cell partitioning ratio and either predicted rate of absorption or metabolism, from the Absorption and Metabolism Models to predict the distribution and elimination of potential drugs.

Sensitivity Analysis. Sensitivity analysis can be used to investigate the impact various input parameters have on iDEA predictions. By using one or two dimensional sensitivity analysis, customers can determine quickly the degree of effect a parameter has in determining a compound's absorption, metabolism and distribution/elimination. The information can be used to (i) assess which assays are the most important to perform, (ii) identify critical properties on which to focus lead optimization resources, or (iii) identify compounds with ADME liabilities that are too difficult to overcome.

Table of Contents

Other Research Software Applications

In addition, we currently market and support the following software tools and applications, although we expect to discontinue doing so in the future.

bioSCOUT[®]. Our bioSCOUT[®] bioinformatics software provides easy-to-use automated methods for the comprehensive and simultaneous annotation of single or multiple gene and protein sequences, eliminating the tedium of repetitive manual sequence analysis. bioSCOUT[®] simplifies and automates all essential steps of this analysis, from data compilation to the prediction of gene function, thereby accelerating the prediction of function and the generation of biological knowledge. bioSCOUT[®] accomplishes this by allowing the user to enter a sequence and then launch an automated analysis of the sequence. The software's algorithms then perform a range of different search, comparison and interpretation processes to produce a report summarizing the results of each of these steps and providing hyperlinks to more detailed information. bioSCOUT[®] is integrated with our SRS system to provide a comprehensive solution for simultaneous sequence annotation and data integration.

genomeSCOUT. genomeSCOUT is our genome comparison and analysis software system, which performs computational comparisons of genomes. genomeSCOUT enables scientists to identify the unique genes within an organism and explore the similarities and differences between entire genomes. genomeSCOUT comes with precomputed comparison databases to enable scientists to quickly perform comparative genomics experiments entirely by computer. This software was developed primarily for the analysis of microbial genomes, with applications in the identification of microbial drug targets and for the development of vaccines. The software is a valuable tool for handling complex and diverse projects ranging from the optimization of microorganisms for industrial production to the identification of pathogenic principles in microbes and viruses.

Consistent with our strategy to focus on providing customized IT-driven solutions for our customers, we have streamlined our portfolio of research software applications. We no longer offer certain of our research software applications, such as SRSeverEST, arraySCOUT, piSCOUT, and pathSCOUT, on a stand-alone basis. Furthermore, we no longer offer our LION Web-Based Training Bioinformatics software. In addition, we have ceased further development of our SNP-SCOUT and GT/PT-SCOUT prototype products. The core functionalities of these applications and products have been incorporated into LION Target Engine as optional components.

Global Professional Services

We provide professional services in respect of our products and solutions through our LION SolutionCenter. The Center is a global professional services organization designed to enable companies to transition from conventional R&D processes to efficient and productive IT-driven R&D processes. In this connection, our professional services staff provides expert guidance in design, implementation and optimization of new solutions based on our SRS and LION DiscoveryCenter technologies and LION Target Engine. We also provide SRS and LION DiscoveryCenter administrators or programmers with the skills they need to work effectively with our data and application integration technologies. In addition, we offer training and on and off-site installation and configuration assistance. We have significantly expanded our professional services organization over the last years. As of March 31, 2003, LION SolutionCenter employed a total of 77 consultants on a full-time equivalent basis at our sites in Germany, the United Kingdom and the United States.

LION Hosted Services

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Our IT products and solutions have significant hardware requirements. In order to enable customers to use some of these products and solutions without having to make these hardware investments, we offer an Internet portal, which we call LION Hosted Services. This portal allows our customers to remotely access our SRS integration system as well as our bioSCOUT[®] software on a subscription basis utilizing only an Internet connection and web browser. Customers can access public domain life science databases as well as integrate their own databases or third party databases that they have licensed. Access to the portal is secure to ensure the confidentiality of our customers' research and data. Starting in January 2003, we outsourced the administration and hosting of this Internet portal to our collaboration partner IBM. IBM has also agreed to market our hosted services. IBM replaced our previous hosting service provider, SimUtility, Inc.

Table of Contents

Internal Drug Discovery Activities

We conducted a variety of internal drug discovery activities using our own IT products prior to the end of calendar year 2002. We pursued these efforts to not only test our IT products and solutions and establish the validity of an IT-driven R&D approach for drug discovery, but also to discover promising drug candidates from our own R&D program, which we called *iD*³, particularly in the areas of nuclear receptor research and diagnostic analysis of various chemical compounds stemming from our acquisition of Trega's Chem.Folio[®] compound libraries.

Consistent with our strategy to focus on our core competencies and to respond to demands and opportunities in the life sciences industry, we decided to focus solely on providing IT products and solutions to external life sciences companies. Accordingly, we ceased our internal drug discovery program by the end of calendar year 2002. We have leased equipment and licensed intellectual property and the results of our research from our *iD*³ activities to PheneX AG, a Heidelberg based company founded by former *iD*³ employees, until October 31, 2003. PheneX also acts as our distributor to procure the sale or licensing of our *iD*³ equipment, intellectual property and other assets until December 31, 2003. PheneX will receive a commission from us from any such sale or licensing transactions with a third party. We have also sold other laboratory equipment and inventory not leased by PheneX.

We continue to sell the Chem.Folio[®] libraries of chemical compounds that we obtained from Trega in connection with our acquisition of that company. We also plan to continue selling our arrayTAG and arrayBASE products, although we may in the future market and sell these products primarily or exclusively through third party distributors. arrayTAG is a collection of clones of mouse, rat and dog cDNA, which are generated by a novel technology developed as a result of our *iD*³ activities to specifically tailor cDNA clones for chip technology. These newly designed clones facilitate the production of high-quality microarrays. arrayTAG is directly linked to our integrated annotation database arrayBASE to speed up access to in-depth information about differentially expressed genes. We may also continue to license other technologies and intellectual property resulting from our acquisition of Trega or developed internally, such as our exclusive license to the Caco-2 cell line from the Sloan-Kettering Institute.

Customers

We currently have more than 100 for-profit customers throughout the global life science and health care industries.

Our most important customer relationship is with Bayer. We also have a significant customer relationship with Schering AG.

Our Customer Relationship with Bayer

For more information on our arrangements with Bayer, see [Overview](#) under Item 5 and [Material Contracts](#) under Item 10 of this annual report.

Table of Contents

Our i-biology Arrangement with Bayer

Effective July 1, 1999, we entered into a range of agreements to implement a customized solution for Bayer, which we call *i-biology*. Through this five-year arrangement, we are developing and applying new IT systems for high-throughput identification and validation of new drug targets, diagnostic markers and SNPs from genomics sources as an integral part of Bayer's own gene discovery activities. In addition, the arrangement requires us to identify a number of potential drug target genes, annotate the function of a number of drug target candidates provided by Bayer, and identify and validate certain genetic markers. We also established and expanded an intranet-based research information management framework for all of Bayer's research sites in North America, Europe and Japan and set up an organizational infrastructure to implement a new model of gene-based drug discovery based on this IT infrastructure.

We established LION bioscience Research, Inc., a wholly owned subsidiary in Cambridge, Massachusetts, that acts to perform this *i-biology* arrangement, including the development of these customized IT solutions for Bayer. Bayer holds a veto right with respect to proposed members of LION bioscience Research's board of directors. Bayer initially held a controlling vote on a joint LION/Bayer steering committee, which approves revisions to LION bioscience Research's annual budget and the implementation of its R&D plan.

The parties have agreed that all rights and title to all information technology developed by LION bioscience Research will belong to our company, subject to a grant to Bayer of a license to use such information technology for Bayer's internal purposes only. Our company has agreed not to market or distribute any resulting IT products or solutions commercially for a period of one year from the time the relevant information technology becomes workable and has been tested and accepted by Bayer.

The agreement ends on June 30, 2004. Bayer holds an option, exercisable within six months prior to the expiration of the agreement, to acquire all of the shares of LION bioscience Research from our company for a price corresponding to the equity paid in by our company, which was \$1.0 million as of March 31, 2003. If Bayer chooses to exercise this option, Bayer is required to change the name of LION bioscience Research.

In June 2000, we expanded this arrangement with Bayer into the areas of plant protection and animal health. In October 2000, we entered into an amendment to this agreement with Bayer to remove Bayer's controlling vote on the joint LION/Bayer steering committee. In February 2002, we amended this agreement to reflect a success payment for the accelerated performance of our obligations under the agreement.

In June 2003, we amended this agreement further to modify our delivery requirements for drug targets and our software development obligations. Pursuant to the amendment, we are no longer required to deliver any novel drug targets. Instead, we agreed to use our best efforts to analyze a specified number of genes as drug targets that belong to certain gene classes known to be successful in drug development as specified further in a Target Validation Plan and provide certain analysis and annotation services relating to these targets. In addition, our software development activities will be pursuant to a Bioinformatics Development Plan that specifies our software development projects for the remainder of the term of the basic agreement.

Our Development Agreement with Bayer

In October 2000, we agreed with Bayer to expand our collaboration into the areas of pharmacophore informatics and cheminformatics. Under a separate development agreement, we agreed to provide Bayer with an integrated pharmacophore and informatics technology platform to speed Bayer's identification of lead candidates for its drug and agricultural chemical programs. Under this arrangement, we deliver existing, and

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

develop future, information technology and software, such as pharmacophore and informatics tools, for Bayer to significantly enhance Bayer's lead identification and optimization capabilities for pharmaceutical and agrochemical discovery.

Our performance under the agreement was originally divided into four successive milestones and the agreement originally was to expire when Bayer accepted our performance of the fourth milestone, which was originally due on March 1, 2003. Bayer did not accept the deliverables under the first milestone. As a result, we entered into amendments to the development agreement with Bayer in December 2001 and March, June and December 2002, which extended the due dates for the deliverables due Bayer, with the final deliverable under the development agreement, as amended, now due in July of 2004.

Table of Contents

As part of the amendment of December 2002, Bayer has agreed to the use of our LION Discovery Center integration platform for key parts of the development project. In addition, the parties have agreed to reduce future fees due to us under the project. At the same time, we will assume additional responsibilities for developing analysis and visualization software components, thus increasing our share of the total project. We had previously relied on a subcontractor for development of various of these components.

Under the development agreement as amended, future milestone payments are tied to achieving corresponding deliverables. If we do not timely achieve these future milestones, Bayer may withhold the corresponding milestone payment and may terminate the development agreement. The aggregate amount still due to us under the development agreement, as amended, as of September 1, 2003, was approximately \$3 million provided we achieve all of the milestones under the development agreement, as amended. The failure to receive milestone payments or the termination of our development agreement with Bayer could have a material adverse effect on our business.

Our Customer Relationship with Schering

In May 2001, NetGenics entered into a Software License and Project Agreement with Schering AG to carry out a project for the development of a corporate gene database for Schering. Pursuant to this agreement, NetGenics also granted to Schering AG software licenses for the software solutions developed as part of this project and agreed to provide certain maintenance and support services with respect to the software. We assumed this agreement as a result of our acquisition of NetGenics in January 2002.

In March 2003, we entered into a new Corporate Gene Database Project Agreement with Schering AG that restated and replaced the original Software License and Project Agreement. Under the agreement, we agreed to continue performing the corporate gene database project which Schering had originally contracted for with NetGenics in May 2001 and which we had continued performing after our acquisition of NetGenics by developing and delivering to Schering the remaining software deliverables under the project using our LION DiscoveryCenter and SRS software platforms. Schering agreed to make an aggregate payment of approximately \$1.2 million to us for all deliverables under this project in installments based upon achievement of project milestones. Schering made the final payment of \$0.2 million after final acceptance by Schering of the third software deliverable on March 31, 2003.

In March 2003, we entered into Non-Exclusive License Agreements and Maintenance and Support Agreements with Schering for a combined term of six years, subject to Schering's right to terminate the agreements effective at the end of the third year of the term. Under these agreements, Schering has licensed the software deliverables developed under the project agreements, which comprise customized and standard components of LION DiscoveryCenter and SRS, to be used for a limited number of Schering users and purchased software maintenance and support services from us. In addition, as part of our maintenance and support obligations, we delivered to Schering a maintenance release comprising corrections and software functionalities to the software solutions developed under the Corporate Gene Database Project Agreement by August 31, 2003, which release is subject to acceptance by Schering. We expect Schering to complete acceptance testing prior to the end of 2003. The aggregate license and maintenance and support fees for the first three years of the license term are slightly in excess of \$1.5 million. Schering has agreed to pay an additional \$1.6 million in license and support and maintenance fees for years four through six of the six year term (unless Schering has elected to terminate the agreement early as described above). License and maintenance and support fees would also increase if Schering added additional users for this software solution.

Table of Contents**Revenue by Geographic Region**

For information regarding a distribution of revenues by geographic market, see Item 5: Operating and Financial Review and Prospects FY 2003 Compared with FY 2002 Revenues .

Revenue by Segment of Operations

The following table sets forth the total revenues attributable to the different segments of our continuing operations for the years ended March 31, 2003, 2002 and 2001.

	2003	2002	2001
	_____	_____	_____
	(in millions,)		
Drug Discovery	1.614	3.048	2.421
Licenses	14.111	15.145	6.292
Professional Services	12.068	18.613	13.374
Maintenance and Support	1.864	2.500	1.188
Total Revenue	29.657	39.306	23.275

For additional information regarding revenues by areas of operations, see Item 5: Operating and Financial Review and Prospects FY 2003 Compared with FY 2002 Revenues .

Research and Development***In-house activities***

We are actively engaged in R&D programs to develop new software products and provide additional value-added solutions to customers in the broader life sciences industries. Our research and development expenses related to the development of our IT products and solutions remained high and actually increased compared with previous fiscal years. Excluding R&D expenses from our internal drug discovery program, which we discontinued by the end of calendar year 2002, our R&D expenses totaled 34.225 million in FY 2003, 33.900 million in FY 2002 and 17.688 million in FY 2001.

Our R&D activities focus primarily on the continued development of our integration platform technologies and the related application solution systems for the biological, chemical and pre-clinical phases of the drug discovery process. The increased R&D expenses in FY 2003 were due primarily to our efforts to complete our LION DiscoveryCenter integration platform, our LION Target Engine and iDEA pkEXPRESS solutions and a new version of our SRS system. In addition, these increased costs reflect the restructuring of our global R&D organization.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

In FY 2003, we commenced an integration and restructuring program of our global R&D organization. The goal of this program is to streamline the operational structure of our R&D organization, reduce organizational complexity and concentrate development efforts for products and solutions in individual centers of excellence dedicated to those technologies. Accordingly, we are in the process of streamlining our R&D sites. We closed our Cleveland, Ohio site by June 30, 2003, and we expect to close our Columbus, Ohio site by September 30, 2003. We are in the process of transitioning IT development work to our sites in Heidelberg, Germany and Cambridge, United Kingdom.

Table of Contents

As a result of this integration and restructuring program, we have reduced the number of employees working in our worldwide IT development organization. As of March 31, 2003, a total of 177 full-time equivalent employees worked in our global IT development organization, compared with 278 full-time equivalent employees in R&D as of March 31, 2002. This number has declined as a result of the closing our Cleveland site and will decline further as a result of the anticipated closing of our Columbus site. We may undertake further integration and restructuring efforts in the future.

Alliances

As part of our strategy, we have entered into a number of strategic alliances and collaborations with other leading industry participants for the creation and development of our IT solutions and for the application of our solutions to new areas of life science R&D. The following are the more significant of our current arrangements.

Celera

In October 2000, we entered into a strategic alliance with Applera Corporation – Celera Genomics Group to develop and deliver new software tools and technologies for the Celera Discovery System (or CDS), Celera’s Internet-based portal through which a variety of customers access Celera’s expanding databases and analysis tools. We also licensed our SRS data integration system to Celera to power CDS. We collaborate with Celera to create improved software tools to enable scientists to more efficiently manage and analyze the large volumes of biological and medical data generated and acquired by Celera and made available on the Celera Discovery System. As a result of this collaboration, new functionalities were included in our SRS software .

IBM

In November 2001, we entered into a strategic alliance with International Business Machines Corporation (or IBM). Under the terms of this strategic alliance, IBM and LION plan to develop and market joint life sciences informatics solutions based on our and IBM product offerings and joint enterprise-wide drug discovery solutions and services, including enterprise-wide solutions and services to specified customers, which will combine IBM and our technologies to expedite the drug discovery process. The initial term of this strategic alliance is two years.

As part of this strategic alliance, we have agreed to collaborate with IBM to combine our SRS data integration system with IBM’s DiscoveryLink data integration software. LION and IBM Life Sciences will jointly provide services for integrating our SRS system with IBM’s DiscoveryLink to joint customers. We have granted IBM a limited developer license to SRS that allows IBM to use SRS to provide integration services for integrating SRS and DiscoveryLink to joint integration customers and for integrating IBM middleware with SRS with our consent. IBM has granted us a developer license to DiscoveryLink. We have also agreed to port and make SRS and other specified IT product offerings available on IBM hardware platforms and integrate them with IBM middleware, including IBM’s WebSphere® Internet infrastructure software. IBM Life Sciences has agreed to provide us with assistance and support to facilitate this porting. In FY 2003, we successfully ported SRS and certain specified IT offerings to IBM’s AIX operating system. In addition, we developed the software to combine SRS with DiscoveryLink during FY 2003.

In August 2002, we expanded our relationship with IBM to include LION Hosting Services (or LHS). Under the arrangement, IBM acts as the hardware and hosting services provider for our LHS offering and is selling and co-marketing LHS as a cost-efficient means of accessing life

science informatics. For more information regarding LHS, see the section entitled LION Hosted Services under Item 4 of this annual report.

Paradigm Genetics

Table of Contents

In June 2002, the U.S. National Institute of Standards and Technology (or NIST) announced its award of a five-year, \$11.7 million Advanced Technology Program (or ATP) grant to our U.S. subsidiary, LION bioscience Inc., and to Paradigm Genetics, Inc. The federal funding is designed to support the development of a Target Assessment Technologies Suite (TATS) by us and Paradigm. This suite of technologies was intended to increase the number and success rate of validated targets for product development in the pharmaceutical and other life sciences industries. The project's main goal was to enable higher quality decision support by ensuring that the data scientists work with are of a known quality and origin and that their relationships are well understood. According to NIST, both companies participate equally in the grant. The grant is a matching program, which means that we must match the funds we receive under this grant to support our R&D efforts with corresponding R&D expenditures. We have entered into a joint venture agreement with Paradigm that governs our joint R&D efforts under this project and governs intellectual property ownership rights between us and Paradigm relating to the use of our respective technologies and the results of this R&D effort, as well as the commercialization of these results. In June 2002, each of LION bioscience Inc. and Paradigm Genetics also entered into a cooperative agreement with the U.S. government which imposed additional obligations on us in performing the development work under the ATP grant. In FY 2003, we received \$105,000 in grant money from the U.S. government under this grant.

We are presently engaged in discussions with Paradigm and NIST concerning possible changes to the project funded through the ATP grant and to our joint venture with Paradigm. As of the date of this annual report, no final set of project changes has been submitted formally in writing to NIST for its approval.

We are currently in the process of closing our Columbus, Ohio site, which we expect to close by September 30, 2003. Prior to the closing of this site, we performed this project using staff primarily located in Ohio.

During FY 2003, we terminated our other collaborations with Paradigm Genetics by mutual consent. We own 400,000 shares of common stock issued by Paradigm.

Silicon Genetics

In May 2003, we entered into a Development License and Reseller Agreement with Silicon Genetics, Inc. Under the three-year agreement, each party granted the other party a limited license to use certain specified software solely for internal developmental purposes. In addition, Silicon Genetics granted us the right to resell certain Silicon Genetics software worldwide but only when such products are bundled with LION Target Engine or SRS. We will pay Silicon Genetics a percentage of the fees we collect in connection with any Silicon Genetics software that we sell pursuant to this arrangement.

Tripes

We have entered into a strategic alliance with Tripes, Inc. As part of our collaboration with Tripes, we entered into a project agreement with Tripes's United Kingdom subsidiary, Tripes UK, in October 2000 to perform certain aspects of our development agreement with Bayer to provide Bayer with an integrated pharmacophore and informatics technology platform. For more information about our pharmacophore informatics arrangement with Bayer, see the section entitled "Customers" under Item 4.

Under our project agreement, we share the total payments from Bayer with Tripes UK based upon Tripes UK's relative contribution to the development of the software required by Bayer. We retain joint rights with Tripes UK for the immediate resale of software systems and

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

solutions developed jointly as part of this project. Software derived from the intellectual property of either party will be owned by that party. Software developed jointly by us and Tripos UK will be owned jointly based upon a pro rata allocation of ownership rights in accordance with the relative contribution of each party.

In January 2002 we amended our project agreement with Tripos UK to reflect the new milestone and payment schedule under our amended development agreement with Bayer.

Table of Contents

In December 2002, we again amended the project agreement to reflect, in part, the revised terms of the development agreement with Bayer pursuant to the fourth amendment between Bayer and LION. Under the amendment, Tripos agreed to deliver to Bayer certain software modules in exchange for payment of approximately \$2 million from us upon the acceptance by Bayer of such deliverables. The amendment terminates Tripos' continued involvement in the development project with Bayer, except to the extent LION and Bayer allocate additional projects to Tripos from time to time. In January 2003, Tripos received a payment of approximately \$2 million from us reflecting full payment for the delivery and acceptance by Bayer of certain software modules.

In April 2003, we entered into a Support Agreement with Tripos pursuant to which Tripos will provide certain IT support services to LION and Bayer until December 31, 2003. LION and Bayer may elect to engage Tripos for additional services at specified rates that expire March 31, 2004.

Production

Our software production operations consist of assembling, packaging on CD-ROMs and shipping our software products and documentation as needed to fulfill orders. CD-ROM duplication, printing of documentation and product assembly are conducted in-house. Customers may also download some of our software, such as our SRS data integration suite, as well as software updates or patches, from our servers. Customers of our LHS offering have secure online access to our SRS and bioSCOUT offerings and customers of our arrayBASE database have secure online access to that database via the Internet.

Sales, Marketing and Distribution

We use a variety of channels to market and distribute our solutions, products and services.

We market and sell our solutions, products and services through our direct sales force in all markets other than Japan, Taiwan and India, where marketing and distribution are handled by distributors. As of March 31, 2003, our sales and marketing organization consisted of approximately 30 full-time equivalent employees. Our sales and marketing organization maintains offices in the United States, the United Kingdom, and Germany and representatives in France and Singapore.

As part of our global marketing strategy to establish SRS as the standard biological database integration platform in the life sciences industry, and pursuant to the terms of our exclusive SRS licensing arrangement with the EMBL, we have made SRS available to academic institutions free of charge for their internal research purposes. Leading academic and research institutions around the world take advantage of SRS, including the Institute Pasteur, the German Cancer Research Institute, the Sanger Centre, and the European Molecular Biology Laboratory. As part of this marketing strategy and to demonstrate the powerful search capabilities of SRS, we have authorized select academic licensees to make online access to basic versions of SRS available on the Internet to enable users to conduct unsecured online queries of third party databases free of charge. Under the terms of our academic license agreements, academic institutions may enable free online access to the most recent SRS version only to non-commercial users. We have the right to monitor and enforce this restriction on the non-commercial use of our SRS software.

We have also entered into exclusive distribution agreements for our arrayTAG and arrayBASE products for Germany and Austria and for Japan. As part of our strategy to focus on our core competencies, we expect to distribute our arrayTAG and arrayBase products primarily through these distribution arrangements and may retain distributors for other geographic regions as well.

We also exhibit our products and services at various scientific conferences and trade exhibitions. Our scientists publish and present results of original research at these and other conferences throughout the world.

Table of Contents

Competition

Our principal competitors include third-party commercial software developers, bioinformatics and genomics companies, academic institutions and in-house software development teams at life science companies. Our competitors with respect to our SRS and LION DiscoveryCenter integration systems and our research software applications include Tripos, MDL, Accelrys, IBM, and SimulationPlus. In addition to direct commercial competitors, the most important other source of competition comes from IT development teams within life science companies. In some cases, life science companies maintain software development teams that rival, or surpass in size, those at commercial IT development companies.

Many of these companies, either alone or together with their collaborative partners, have substantially greater financial resources and larger research and development staffs than we do. In addition, many of these competitors, either alone or together with their collaborative partners, have significantly greater experience than we do in developing IT-products and solutions. Accordingly, our competitors may succeed in developing or commercializing products or obtaining patent or other intellectual property protection before us. In-house IT development departments of our customers may develop IT solutions that are similar to ours or customized to their R&D organizations needs, thereby reducing the demand for our IT solutions or products by these R&D organizations. Developments by others may render our product candidates or technologies obsolete or noncompetitive.

Intellectual Property

Our business and competitive position is dependent, in part, upon our ability to protect our proprietary technologies, processes, databases and information systems. Additionally, we may seek protection for inventions that do not belong to our core business when they promise to be of commercial or strategic interest. We protect our intellectual property primarily through a combination of patent, trade secret and copyright law as well as non-disclosure, license and other contractual arrangements.

Patents, Copyrights and Trade Secrets

Our intellectual property strategy focuses on ensuring copyright and trade secret protection for our IT products and solutions. As a result, it is our general policy not to disclose the source code of our software to third parties. Our customers and collaborators typically receive our software in object code only. Our software license agreements with customers customarily contain provisions to strengthen the copyright and trade secret protection of our IT products and solutions.

In addition, we may apply for patent protection of certain IT products, solutions or technologies, covering our core markets in the United States, Europe and, on a case-by-case basis, Japan. Our patent applications seek the broadest possible patent protection for inventions related to our IT platform.

In addition, we may continue to pursue important patent applications filed on the research results from our internal drug discovery activities, called *iD*³. These applications involve inventions related to drug targets, diagnostic substances and/or procedures as well as novel targets and lead compound series with a potent activity against one or more specific nuclear receptors. As of September 1, 2003, we held 4 granted or allowed patents and 66 pending patent applications related to our IT development activities that we may continue pursuing. Our IT patent applications make up about 20 families or groups of patent applications relating to the same underlying information technology.

The granting of patents on software and genomics is uncertain worldwide, currently under review and revision in many countries and may be difficult to enforce. We believe that, as a result of recent decisions and rulings in this field by national patent offices and governments, the uncertainty surrounding the patentability of such inventions has been substantially removed. However, we cannot give any assurances that any changes to, or interpretations of, the patent laws will not adversely affect our intellectual property. In addition, we cannot give you any assurances that the validity of any patent granted to us will not become subject to a successful legal challenge from a third party.

Table of Contents

Licenses

We grant software licenses pertaining to our LSI solutions and products to our customers. For a description of our licensing policies, see Overview Sales and Customers and Critical Accounting Policies Revenue Recognition under Item 5 below. We do not charge license fees to academic licensees of our SRS software.

Our end-user licenses typically entitle the licensee to use our licensed software product for their internal research purposes only. In FY 2003, we entered into internal use license agreements for our SRS software with three major pharmaceutical companies, AstraZeneca, Eli Lilly and Johnson & Johnson. In addition, in connection with the settlement of a lawsuit with GeneProt, we amended our non-exclusive license agreement with GeneProt Inc. pursuant to which we granted GeneProt a perpetual license to use our SRS and LION DiscoveryCenter software together with one year of software support and maintenance and the license termination for other software licensed from us in return for payment by GeneProt of approximately \$2.3 million in aggregate license and support and maintenance and termination fees. We also terminated our professional services and marketing agreements with GeneProt.

We have also granted select customers the right to use our SRS technology for their Internet portals. For example, in May 2001, we granted a license for our data integration system SRS to Affymetrix, a leading manufacturer of DNA microarrays, to build an Internet portal for its customers as well as for internal use. This web portal will supply detailed information relating to Affymetrix GeneChip[®] probe arrays and related products. Affymetrix's portal is expected to provide access to a wide range of biological data including genomes, genes, transcripts, proteins, and literature annotation.

In March 2002, we entered into an agreement with Incyte Genomics, a leading provider of genomics information and related products, to develop and license a customized solution based on our SRS technology that gives Incyte customers a user-friendly web-based interface to access and analyze the wealth of genomic and proteomic data and technology that Incyte provides through its information product offerings. Customers of the Incyte database offering must license this customized SRS solution directly from us.

In FY 2002, Derwent Information, a leading provider of life sciences information, entered into an agreement with us to develop, license and host a solution consisting of an Internet-based portal that allows Derwent customers to access and query Derwent's GENESEQ and GENESEQ FASTAlert databases based on our SRS technology and our LION Hosted Services portal hosting capabilities.

SRS also serves as the web portal platform for the Celera Discovery System, established in March 2000, of our collaboration partner Celera, which allows for rapid access to human genome data.

As part of our marketing strategy, select academic licensees are also entitled to make basic versions of SRS available on the Internet to enable users to conduct non-secure online queries of third party databases free of charge, provided that access to the most current SRS version is restricted to non-commercial users only. Additionally, we may license intellectual property rights to third parties for strategic or commercial reasons, including in particular in connection with our collaborations and our customized solutions.

We license software and other important technology from third parties, including in particular all earlier versions of SRS from EMBL pursuant to a worldwide exclusive license, as well as EMBL's Gene Quiz software pursuant to a worldwide non-exclusive license. EMBL's Gene Quiz software is a predecessor of our bioSCOUT[®] software. For a discussion of our exclusive SRS license from EMBL, see Item 10: Additional

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Information Material Contracts Exclusive License Arrangement with EMBL Concerning SRS .

Table of Contents

We have also licensed software in the field of expression analysis from the German Cancer Research Center on a non-exclusive basis. In addition, we have licensed software and databases that are embedded in, or necessary to use, our LION DiscoveryCenter, LION Target Engine and bioSCOUT® software. We are either entitled to sublicense this software or these databases to end-users, or end-users must obtain a license for these databases or software directly from the third-party licensor.

In July 2001, we licensed a wide range of chemical informatics applications and databases from MDL Information Systems, Inc, including MDL's ISIS, Assay Explorer, Apex, Afferent and CrossFire Beilstein software. We obtained the right from MDL to develop and commercialize software applications that can interface with these software products of MDL, which allows us to enable our customers to integrate our research software applications and databases with the cheminformatics products of MDL on the basis of our integration platform.

In May 2003, we entered into a three-year agreement with Silicon Genetics pursuant to which each party granted the other party a limited license to use certain specified software solely for internal developmental purposes.

We have reached agreement in principle with Lion Electronics International Computer Discount 2000 GmbH, Germany to license the trade name LION. For more information about this arrangement, see Item 8: Financial Information - Legal Proceedings .

Governmental Regulation

Our IT solutions, products, and services are not currently regulated by governmental agencies, such as the Food and Drug Administration in the United States (FDA) or similar agencies in the jurisdictions in which we do business. Nonetheless, the products of many of the life science research companies to which we market these products are regulated by the FDA and similar agencies.

Seasonality

As is the case with other companies distributing software products, there may be a seasonal variability to our business relating to the receipt of orders for our LSI products and solutions. Orders may increase in the fourth quarter of each calendar year, as business customers attempt to make full use of their IT purchase budgets before year end, and to a somewhat lesser degree in the first quarter of each calendar year, as business customer attempt to make first use of their IT purchase budgets.

Facilities

We do not own any real estate, but lease all of our facilities.

Our principal administrative, sales and marketing facilities are located in leased premises of 43,466 square feet in Heidelberg, Germany. The lease expires on December 31, 2006. We currently pay a monthly base rent of \$40,000 and estimated monthly operating and maintenance

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

expenses of 20,000. The base rent and operating expenses are subject to period adjustments. In August 2001, our company also entered into a lease agreement with a lease term of 5 years for office space of approximately 2,800 square meters in Heidelberg in anticipation of future staff growth. As this increase did not materialize, our company terminated this lease agreement in October 2002 in return for a one-time termination payment of 900,000.

Our iD³ activities in Germany were based in another leased facility in Heidelberg, with some 23,994 square feet of laboratory space. The lease for this facility was terminated in its entirety in February 2003 as a result of the discontinuation of our internal drug-discovery activities. We paid monthly base rent equal to 20,500 and monthly operating and maintenance expenses equal to 25,000. In consideration for the early termination of this lease, we transferred ownership to tenant improvements to the facility to the landlord.

Table of Contents

We have a facility in Cambridge, United Kingdom, which is the center for developing our SRS system and related products. Our initial lease for the facility runs until July 17, 2005. We have leased a total of 8,390 square feet, which includes space rented under a second lease that runs until at least July 17, 2005. We currently pay monthly base rent equal to approximately 13,500 British pounds for the entire facility and monthly operating and maintenance expenses equal to 8,600. The base rent and operating expenses are subject to period adjustments. In addition, we leased a small facility in Oxford, United Kingdom until January 2003 at a monthly base rent equal to 2,300 British pounds and estimated monthly operating and maintenance expenses equal to 648 British pounds.

We maintain offices in leased premises in Cambridge, Massachusetts, which is principally responsible for the conduct of our *i*-biology collaboration with Bayer and from which we coordinate our U.S. sales and marketing activities. Our lease runs until August 31, 2004. We currently pay a monthly base rent of \$60,300 and monthly operating and maintenance expenses of \$6,500 for 19,705 square feet of space. The base rent and operating expenses are subject to period adjustments.

We lease a facility in San Diego (La Jolla), California, of 71,510 square feet, including approximately 55,000 square feet of laboratory and office space under a lease agreement that expires April 30, 2008. Our current monthly base rent amounts to approximately \$184,000 and monthly additional rent, including operating and maintenance expenses, of approximately \$29,000. As part of our restructuring activities, we entered into an amendment to this lease in June 2003, which became effective in July 2003. Under the amendment, we agreed to deliver a letter of credit for the benefit of the landlord in an amount equal to approximately \$3.7 million for the purpose of satisfying all of our payment obligations under the lease, including payments for base rent and additional rent, from August 1, 2003 until at least February 2004. The landlord will draw upon this letter of credit to satisfy our monthly payment obligations. Pursuant to this amendment, we may exercise an early lease termination option in February 2004. In consideration for the grant of this option, we agreed to transfer the security deposit under the lease of approximately \$161,000 to the landlord. If we exercise our termination option in February 2004, the landlord will retain the balance of the \$3.7 million deposit not already drawn on the letter of credit and used for our payment obligations under the lease by then as a termination fee. We currently intend to exercise this option. If we do not exercise our early termination option, the landlord will continue to apply the remainder of the deposit to our payment obligations under the lease. If we exercise the early termination option, we remain liable to the landlord for any environmental pollution that may have been caused by our use and disposal of hazardous materials at the facility.

We have subleased approximately 23% of this facility in San Diego to MediGene Inc. until 2005. In accordance with the sublease agreement, we receive monthly rent payments from the subtenant totaling approximately 23% of our required annual rent and additional payments. In addition, we provide services to MediGene, including facilities and receptionist services, telephone system, utilities, and conferencing services, pursuant to a services agreement that expires in 2005. We entered into a sublease and services termination agreement with MediGene in May 2003. Pursuant to the terms of this termination agreement, MediGene will continue to make monthly payments for rent, its share of additional rent, and services under the sublease and services agreement until January 31, 2004. In addition, MediGene will pay to us a termination fee in the amount of \$300,000 in February 2004 in consideration of the early termination of the sublease and services agreement. MediGene's parent company, MediGene AG, has delivered a letter of credit to us of approximately \$728,000 to secure MediGene's payment obligations to us.

MediGene must vacate the subleased premises by January 31, 2004 and must obtain governmental clearances and permits for the removal of hazardous waste, including in particular clearance from the State of California for the removal of radioactive materials from the subleased premises, by January 31, 2004. If MediGene fails to vacate the premises and has not obtained all necessary governmental clearances, the landlord may hold us liable for MediGene's failure to do so even if we have exercised our early termination option, and require us to continue paying monthly base rent and additional rent until MediGene has vacated the premises and obtained all governmental clearances. This could harm our business.

Table of Contents

In addition, we leased 3,120 square feet of office space in San Diego (La Jolla), California, under a lease agreement that expired on July 31, 2003. During FY 2003, we paid a monthly base rent of approximately \$7,000 and monthly operating and maintenance expenses of \$1,500 under this lease.

The lease for our offices in Cleveland, Ohio expired effective June 30, 2003 and we did not renew this lease due to the discontinuation of our IT development activities in Cleveland, Ohio as part of our restructuring. We had leased 26,666 square feet of office space and paid monthly base rent of approximately \$43,000 and monthly operating and maintenance expenses of approximately \$16,000.

We leased 2,549 square feet of office space, in Columbus (near Worthington), Ohio, under a lease that expired on May 31, 2003. We paid monthly base rent of approximately \$2,300 and monthly operating and maintenance expenses of approximately \$1,000 under that lease in FY 2003. As of June 1, 2003, the monthly base rent decreased to approximately \$1,500 and the expiration date was extended to May 31, 2005. Effective August 1, 2003, we relocated our offices, leasing different space from the same landlord at a location near the space in Columbus (near Worthington), Ohio that we previously leased. The new lease, which expires June 14, 2006, replaces the prior lease. Under the new lease, we pay monthly base rent of approximately \$4,700 for 6,550 square feet of space under that lease. We expect to cease operations in Columbus, Ohio effective September 30, 2003 as part our restructuring and intend to either sublease this new space for the remainder of the lease term, or terminate the lease. If we terminate the lease, we will be required to make a termination payment to the landlord. Our total liability under the lease of our new space is approximately \$300,000 including rent and operating expenses for the remainder of the lease term.

We believe that our existing facilities are adequate for our current needs and that additional space, should it be needed, will be available.

Subsidiaries

We currently have four wholly-owned subsidiaries with active business operations. The following table shows information relating to each of these subsidiaries:

Group Structure as of March 31, 2003

<u>Corporate name</u>	<u>Country of incorporation</u>	<u>Field of activity</u>
LION bioscience Ltd.(1)	United Kingdom (Wales)	SRS and DiscoveryCenter integration platform development
LION bioscience Inc.(2)	United States (Delaware)	Marketing and sales, distribution, global professional services
LION bioscience Research Inc.(3)	United States (Delaware)	Center of excellence for performing Bayer <i>i</i> -biology agreement

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

NetGenics Inc.(4)

United States (Delaware)

Management of assets and liabilities not transferred to our company or LION bioscience Inc. after our acquisition of NetGenics

- (1) Wholly owned by LION bioscience AG.
- (2) Wholly owned by LION bioscience AG. In April 2002, we merged former Trega Bioscience Inc. into LION bioscience Inc.

Table of Contents

- (3) LION bioscience Research Inc. is wholly owned by LION bioscience Inc. Bayer holds an option to acquire all of the shares of LION bioscience Research Inc. See the section entitled Item 10: Additional Information Material Contracts Agreements with Bayer Basic Agreement below.
- (4) Wholly owned by LION bioscience Inc.

Item 5: Operating and Financial Review and Prospects

You should read the following discussion of our financial condition and results of operations in conjunction with our audited consolidated financial statements and the related notes and the other financial information included elsewhere in this annual report.

Overview

General

We have organized our business activities around our IT development business, which we called Life Science Informatics or LSI. Our IT development business is primarily responsible for the development of our IT solutions and products as well as for providing professional services to customers related to these solutions and products. In the past, we also focused on sequencing and genomics research projects on a fee-for-service basis in our research laboratory. However, we ceased these fee-for-service projects in FY 2001. We then shifted the resources from these projects to pursue our own internal IT-driven drug discovery and diagnostics activities which we called iD³.

Our iD³ activities applied IT solutions, including those developed by our IT development business, as well our professional services organization to our own drug discovery efforts. This approach assisted our IT development business in the development of our IT solutions and products and related professional services. As a result, our IT product or solution development activities and professional services projects were staffed by IT development and iD³ employees under the leadership of our IT development business. In light of this close interaction and collaboration, starting with FY 2002, we no longer allocated revenues and operating losses among IT development and internal drug discovery activities, as we effectively managed our business as one integrated operation. We discontinued our iD³ activities effective December 31, 2002. For more information on the discontinuation of our internal drug discovery activities, see Restructuring Activities below.

We have a strong commitment to our research and development activities (R&D) and expect our R&D expenses, in particular IT development activities, to continue to comprise a substantial part of our total expenses. As is the case with many other companies in the life sciences industry, we receive grants from third parties, including the German government. Depending on the structure of the grant, we account for grant money as revenue or as a subsidy that reduces related expenses. Government grants that are intended to reimburse us for general costs of a program such as salaries, equipment, and general and administrative expenses are recorded as drug discovery revenues in the period earned. Accordingly, grant money we received under the Advanced Technology Program (ATP) from the U.S. National Institute of Standards and Technology (NIST) is shown as revenue from drug discovery activities. For a description of this award, see Item 4: Information on our Company Research and Development Alliances Paradigm Genetics . In FY 2003, we recognized revenue from the ATP grant in a total amount of 105,000. Government grants to defray the costs of research and development are offset on receipt against the related expenses. The total amount of subsidies came to 0.631 million in FY 2003 compared to 1.317 million in FY 2002 and 0.731 million in FY 2001. We have reduced our R&D expenses for these fiscal years by these amounts. We also adjusted R&D expenses for FY 2002 and FY 2001 to reflect the reclassification of some R&D expenses to cost-of-sales and discontinued operations.

Table of Contents

We capitalize software development costs incurred after technological feasibility of the technology to be developed has been established. Under our software development process, technological feasibility is established when a working model has been completed. Once technological feasibility has been established, the related development expenses are capitalized until market launch of the software. Software development costs are amortized on a product-by-product basis, using the greater of

the ratio of current gross revenue for a software product to the total of current revenue and anticipated gross revenue for that product, or

the straight-line method over a maximum of three years.

We did not capitalize any software development costs in FY 2003 and FY 2002 compared to 0.817 million that we capitalized in FY 2001. We reported amortization expenses in the amount of 0.358 million in FY 2003, 0.604 million in FY 2002 and 0.537 million in FY 2001. Residual book values as of March 31, 2003, 2002 and 2001 were 227,800, 585,300 and 1,188,800 respectively.

We granted stock options to our management board and our employees during FY 2001 and FY 2002 pursuant to our 2000 Stock Option Plan and our 2001 Stock Option Plan. We did not grant any stock options under our 2002 Stock Option Plan. No stock options were granted in FY 2003. For a discussion of these stock option plans and the options we have granted, please see Item 6: Directors, Senior Management and Employees Share Ownership. We account for options granted under our stock option plans under the fair-value method according to SFAS 123. As a result, we record non-cash compensation expense based on the fair value of the option on the date of grant until the option vests. We therefore allocated the expenses of these outstanding stock options, which amounted to 4.2 million in FY 2002, and 1.7 million in FY 2001 among R&D and selling and general and administrative expenses as non-cash compensation.

In FY 2003, all option holders under our 2001 Stock Option Plan and 2002 Stock Option Plan irrevocably waived their rights to exercise their options. Subject to approval by our shareholders, we paid the holders the then current market value of their options in return for these waivers. Total cash payments to the option holders came to approximately 0.2 million. Our company's shareholders approved the payment at the annual general shareholders meeting on August 7, 2003. Our company's shareholders also approved the termination of all of our stock option plans and the cancellation of our company's conditional capital previously reserved for the issuance of shares under these stock option plans. As a result of the waiver of all outstanding options and the early termination of all of our stock option plans, we allocated the remaining outstanding value of these stock options, which amounted to 4.361 million among R&D, selling and general and administrative expenses for FY 2003 as non-cash compensation expense.

Our reporting currency is the euro. Balance sheet accounts are translated to the euro at the exchange rates in effect at the end of the reporting period, except for shareholders' equity, which is translated at the rates in effect when the underlying transactions were originally recorded. Revenue and expense accounts are translated at a weighted average of exchange rates during our fiscal year. In FY 2003, approximately 65% of our revenues and approximately 50% of our expenses were denominated in U.S. dollars. The relative strength of the euro compared to the U.S. dollar during FY 2003 compared with FY 2002 thus had the effect of decreasing our reported revenue and our reported expenses for FY 2003. We do not engage in any active currency hedging measures to reduce risks resulting from changes in exchange rates, particularly between the euro and the U.S. dollar.

We have reclassified various amounts in our balance sheet, statements of operations and statements of cash flows for the financial years prior to FY 2003 to enable comparisons to the information set forth in our financial statements for FY 2003. Note 16 to our audited consolidated financial statements shows the reclassification of revenue amounts.

Table of Contents***Sales and Customers***

The global economy continued to weaken through 2002 and into 2003. Anxiety resulting from the global financial and economic situation curbed companies' willingness to commit to capital projects. This also impacted IT vendors and service providers to the life sciences industry. Faced with having to limit spending because of acute pressure on costs, many life sciences companies responded by cutting back IT budgets or building up their internal IT development organizations. Many companies downscaled or postponed their plans to implement new software or to expand hardware and network capacity. Major long-term strategic investments lost favor to smaller tactical projects offering a quick return on investment. These developments impacted our revenue in FY 2003.

Our revenues consist of fees from our licensing activities, maintenance and support, drug discovery activities that we have not discontinued, and our professional services. Our licensing revenue derives from licensing fees for our IT products and solutions. Our revenues from maintenance and support consist of fees for support and maintenance provided to customers related to our IT solutions and products. Revenues generated from drug discovery activities comprise fees from the licensing or sale to customers of biological or chemical products created by our drug discovery activities, such as the sale of our arrayTAG clone collections and the sale of compounds from our Chem.Folio® chemical compound libraries. Revenue from our professional services derives from fees for professional services related to our IT products and IT solutions and also includes revenues generated from our collaboration and service agreements, such as our *i*-biology arrangement and development agreement with Bayer in the area of pharmacophore informatics and our collaboration with Schering AG to develop a comprehensive corporate gene database and gene data integration solution for Schering. We established a global professional service organization to provide expert guidance in design, implementation and ongoing optimization of our IT solutions. Starting in FY 2003, we accordingly show revenue from our professional services as a separate item in our consolidated statement of operations. We have also reclassified revenue amounts for FY 2002 and FY 2001 to enable comparisons to the information set forth for FY 2003. For a description of our revenue recognition policies, please see the discussion under Critical Accounting Policies - Revenue Recognition below.

For our IT products and solutions, professional services and customer collaboration arrangements, the length of time between our initial contact with a customer and conclusion of a signed agreement can be lengthy because our products, services and solutions are complex and cut across many aspects of a potential customer's business. Accordingly, a substantial period of time may elapse between the time we make initial contact with that customer and the time we generate revenues from such customer. Because many of the agreements that we conclude are individually negotiated with the customer, the length of time before we recognize revenues under any contract, and the terms of each contract, vary substantially from customer to customer.

Our most important customer is Bayer AG, revenues from which accounted for 33% of our total revenues from continuing operations in FY 2003, 48% of our total revenues from continuing operations in FY 2002, and 61% of our total revenues from continuing operations in FY 2001. We receive revenues from Bayer for a number of different projects. For more information on these projects, see the section entitled Customers under Item 4 of this annual report. The outstanding accounts receivable from Bayer as of March 31, 2003 amounted to 0.376 million compared to 0.222 million as of March 31, 2002.

As part of our strategy to focus on our core competencies, our business activities are now centered around our IT development business, including the professional services we provide to customers related to our IT solutions and products. Starting in FY 2003, we accordingly show these and other costs of sales as a separate item in our consolidated statement of operations. We have also reclassified amounts for FY 2002 and FY 2001 as costs of sales to enable comparisons to the information set forth for FY 2003.

Investments

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Effective March 14, 2001, we acquired Trega Biosciences, Inc., located in San Diego, California, by means of a stock-for-stock merger accounted for using the purchase method of accounting. Trega's results of operations were first consolidated with ours commencing on March 31, 2001, and, accordingly, Trega's results of operations were not included in our results of operations for FY 2001 but are included in our results of operations for FY 2002 and FY 2003. We initially allocated \$7.519 million of the total acquisition costs of \$38,497 million to various intangible assets with useful lives of up to two years from March 31, 2001, including software and technology and assembled workforce, and the balance of \$30.978 million to goodwill. We determined the amortization period based on our management's assessment of the expected benefit and related future cash flows from the assets. In accordance with Statement of Financial Accounting Standard No. 142, Goodwill and Other Intangible Assets (SFAS No. 142) issued by the Financial Accounting Standards Board (FASB) in July 2001, we allocated the value of Trega's assembled workforce in the amount of \$2.5 million to goodwill in FY 2002. For a description of our application of SFAS No. 142, see Critical Accounting Policies Goodwill .

Table of Contents

Effective January 30, 2002, we acquired NetGenics Inc., which had its principal place of business in Cleveland, OH until June 30, 2003, by means of a stock-for-stock merger accounted for using the purchase method of accounting. NetGenics' operating results are included in our results of operations for the period from January 31, 2002 until March 31, 2002 of FY 2002. Of the total acquisition costs in the amount of 23.723 million, we allocated 2.665 million to intangible assets in form of software and technology with useful lives of up to two years from January 31, 2002, 0.695 million to customer relationships, with useful lives of up to two years from January 31, 2002 and 0.695 million to in process R&D. The remaining net acquisition costs of 19.668 million were allocated to goodwill. During FY 2003, the goodwill of NetGenics was adjusted subsequently in the amount of 137 thousand due to adjustment to the final purchase price allocation. We determined the amortization periods based on our management's assessment of the expected benefit and related future cash flows from the assets.

SFAS No. 142 changed the accounting for goodwill and other intangible assets by, among other things, requiring companies to cease amortizing goodwill and certain intangible assets with an indefinite useful life created by business combinations accounted for using the purchase method of accounting. In lieu of amortization, we are required to perform an impairment review of our goodwill during each financial year and at other times during the financial year when indicators of impairment exist.

We adopted SFAS No. 142 effective April 1, 2001 and did not amortize the goodwill created by our acquisitions of Trega Biosciences and NetGenics. As of March 31, 2002, we had recorded goodwill in the aggregate amount of 58.663 million from these transactions. This accounting rule required us to assess the impairment of this goodwill whenever events or changes in circumstances indicated that this carrying value may not be recoverable. In particular, we were required to perform this review in the event our company's share price declined significantly for a sustained period and our market capitalization fell below our net book value. For more information on the application of this accounting rule, see Critical Accounting Policies - Goodwill below.

Due to the decline in our company's share price since the beginning of FY 2003, our market capitalization continued to be well below our net book value. In addition, no clear indicators existed that the share price would recover by the end of the FY 2003. As a result, we performed an impairment review in connection with the preparation of our results of operations for the six months ended September 30, 2002. Based on this review, we determined that the goodwill created by the Trega Biosciences and NetGenics acquisitions was impaired and that this decline was other than temporary. Accordingly, we determined to write off the aggregate goodwill from both acquisitions and recorded a one-time, non-cash amortization expense in the aggregate amount of 58.526 million. In addition, we reviewed the recoverability of all of our long-lived assets according to SFAS No. 144 in connection with the preparation of our results of operations for the six months ended September 30, 2002. Based on this review we determined the value of our intangible assets resulting from our acquisitions of Trega Biosciences and NetGenics to be zero and decided to fully write off the remaining book values of these assets in the amount of 3.485 million.

During FY 2003 and FY 2002, we reviewed our various shareholdings in other companies and our investments in available-for-sale securities. For a description of our accounting policies with respect to our investments, please see Critical Accounting Policies - Marketable Securities and Other Financial Assets below. Based on our review, we determined to adjust the value of these shareholdings and investments and to record the following losses in FY 2003 and FY 2002:

Table of Contents

We recorded losses from marketable securities and other long-term investments in FY 2003 as follows:

We recorded a loss in the amount of 8.509 million from our shareholding in Geneva, Switzerland based GeneProt Inc. As part of our collaboration with GeneProt, we had acquired 681,818 preferred shares issued by GeneProt in March 2002, representing approximately 2% of all outstanding shares of GeneProt on a fully diluted basis. Based on GeneProt's performance, we determined the fair value to be zero and to completely write off this investment.

We recorded a loss in the amount of 1.374 million from our shareholding in Chemnavigator, based in San Diego, California. We acquired ownership in Chemnavigator held by Trega Biosciences as a result of our acquisition of Trega Biosciences. Based on Chemnavigator's performance, we determined the fair value to be zero and to completely write off this investment.

We lowered the value of our investments in available-for-sale securities in the form of fixed income securities. In previous years, we invested approximately 47.750 million in these securities. Based on the performance of these securities, we reduced the value of our investments in these funds by 1.388 million, which we recorded as a realized loss as we determined that this decline was other than temporary.

We recorded losses from marketable securities and other long-term investments in FY 2002 as follows:

We recorded a loss in the amount of 8.830 million from our shareholding in Munich based Gesellschaft für Medizinische Datenverarbeitung mbH (GMD). As part of our collaboration with GMD, in February 2001 we acquired 46,600 shares of GMD, representing approximately 16% of all outstanding shares of GMD on a fully diluted basis. Based on GMD's performance, we determined the fair value to be zero and to completely write off this investment.

We recorded a loss in the amount of 1.726 million from our shareholding in SimUtility, Inc. As part of our collaboration with SimUtility, a Westford, Massachusetts based company, we had acquired an equity interest in SimUtility of less than 20% in May 2001 for a total purchase price of \$1.5 million (1.726 million). Based on SimUtility's performance and our decision not to continue our collaboration with SimUtility, we determined the fair value to be zero and to completely write off this investment.

We lowered the value of our investments in available-for-sale securities. In November 2000, we invested approximately 30.4 million in diversified funds that are listed on the Frankfurt Stock Exchange consisting of available-for-sale securities. Based on the performance of these funds, we reduced the value of our investments in these funds by 7.218 million, as measured by the closing price per fund unit, which we recorded as a realized loss as we determined that this decline was other than temporary.

We hold 400,000 shares in Paradigm Genetics, which we had acquired in January 2000 for a total purchase price of \$2 million. At the end of fiscal year 2002 we reviewed the value of our Paradigm Genetics stock and concluded that the reduction in its value was permanent. Based upon the trading price for Paradigm Genetics' shares on the Nasdaq National Market of \$ 1.62 per share at the end of FY 2002, we lowered the value of our shareholding in Paradigm Genetics by 1.237 million, which we recorded as a realized loss as we determined that this decline was other than temporary. At December 31, 2002, Paradigm Genetics stock had a fair market value of \$0.29 per share. Because of the ongoing decline in the stock price during the previous nine months we concluded that this reduction in value is other than temporary. As a result, we recorded a decrease in the fair market value of 0.632 million in our results from marketable securities and other long-term investments. As of March 31, 2003, Paradigm Genetics' share price increased to \$0.65. We reported the corresponding increase in the market value of the Paradigm stock held by us in the amount of 0.128 million in other comprehensive income on our balance sheet.

Table of Contents

In early February 2002, we sold all of our shareholdings in Tripos, Inc. We had purchased 409,091 shares of convertible preferred stock from Tripos in early February 2000 for a total purchase price of \$9 million. In late January 2002, we converted these shares into 818,182 shares of Tripos common stock. At that time, Tripos paid us an accrued dividend on the shares of convertible preferred stock of more than \$0.890 million (0.982 million). In early February 2002, we sold all of our shares of Tripos common stock. The net proceeds to us from this sale after deducting the sales commission and related expenses were approximately \$21.6 million. We thus recorded income of approximately \$13.5 million (14.536 million) from this transaction in FY 2002.

Since the beginning of FY 2003 we have reclassified all of our marketable securities previously classified as held-to-maturity as available-for-sale marketable securities and report all of these securities as short-term securities available-for-sale because we intend to sell these securities for current and future cash flow needs and will not hold them until their maturity. Therefore, in FY 2003, we adjusted the value of these marketable securities at their fair market value and recorded all unrealized gains and losses as other comprehensive income on our balance sheet. The net carrying amount of the transferred securities amounted to 37.616 million and the related unrealized gain recorded in other comprehensive income amounted to 0.258 million. Prior to FY 2003, securities were classified as held to maturity and carried at cost unless a decline in fair market value was considered other-than-temporary in which case they would be written down to fair market value. All of the marketable securities held by us are classified as current assets

In FY 2003 we sold our available-for-sale marketable securities in the form of equity investment funds and shifted all of our fund investments to fixed income equity and fixed income debt securities. In FY 2003, we also sold all of the fixed income equity securities that we held in FY 2003. As a result, we have limited our risks from these securities to issuer credit and liquidity risks and to general market interest rate changes. Proceeds from sales of available-for-sale securities in the first nine months of fiscal year 2003 totaled 94.378 million. The realized losses related to the sales of these securities amounted to 2.583 million. Our only equity investment remaining in marketable securities is our investment in Paradigm Genetics.

Restructuring Activities

We engaged in a number of restructuring activities in FY 2003 and FY 2002. The purpose of these restructuring activities was to reduce expenses and the complexity of our organization and to implement the changes in our strategy. For more information about the refinement of our strategy, see Item 4: Information about our Company Strategy.

Following the acquisition of Trega in March 2001, we restructured our new San Diego facility to create a research and development center of excellence to focus on the development of our iDEA predictive ADME simulation system and on our internal drug discovery efforts related to nuclear receptor research. We discontinued Trega's other drug discovery efforts in FY 2002. As part of this restructuring, we reduced the Trega workforce by 18% shortly after the acquisition. In February 2002, we further reduced the workforce at our San Diego and Cambridge, Massachusetts facilities by 8%.

Following the acquisition of NetGenics, we restructured NetGenics' operations in Cleveland and Columbus, Ohio to focus on the development of our LION DiscoveryCenter integration platform and to provide professional services related to our LSI solutions. As part of this restructuring, we reduced the NetGenics workforce by 18% in February 2002.

In FY 2002, we initiated measures to further reduce our expenses. As part of these measures, we did not renew employment agreements and issued employment termination notices to 45 employees of our iD³ activities at our facilities in Heidelberg, Germany, in December 2001. In addition, in February 2002, we issued employment termination notices to 38 employees at our facilities in Heidelberg and 3 employees at our

facilities in Cambridge, UK. These terminations became effective between March and June, 2002.

Table of Contents

We recorded a total charge of 0.8 million in FY 2002 in connection with these workforce reductions, all of which were paid prior to March 31, 2002. As a result of this workforce reduction, we also recorded an impairment charge of 1.1 million in FY 2002 for equipment and facilities that are no longer in use as a result of this workforce reduction.

Effective December 31, 2002, we closed down our *iD*³ activities. Accordingly, we reflected the revenue and expenses relating to our internal drug discovery activities as a separate item in our consolidated statement of operations under discontinued operations. We also reclassified revenue and expenses relating to our *iD*³ activities for FY 2002 as discontinued operations to enable comparisons to the information set forth for FY 2003. Likewise, we show the assets relating to our *iD*³ activities as a separate item under assets held for sale in our consolidated balance sheet as of March 31, 2003, and we reclassified the assets relating to our *iD*³ activities on our consolidated balance sheet as of March 31, 2002 as assets held for sale to enable balance sheet comparisons.

Revenues from discontinued operations include revenues from drug discovery collaborations that we have discontinued. Expenses related to discontinued operations include R&D expenses and general and administrative expenses directly related to discontinued operations, including severance payments to former *iD*³ employees, as well as depreciation and amortization expenses relating to assets used by our *iD*³ activities. Expenses related to severance payments and lease termination payments of approximately 1.9 million and 0.9 million, respectively, have been allocated to discontinued operations for FY 2003. A total of 83 employees were terminated in connection with the closure. No costs or revenues were incurred or earned during FY 2001. We reduced our expenses from discontinued operations by income received from the sale of equipment and other assets used in our internal drug discovery activities. Revenue and expenses related to our drug discovery activities that we have not discontinued are not allocated to discontinued operations. These revenues and expenses involve primarily our arrayTAG and Chem.Folio products that we continue to license or sell to customers.

In FY2003, we also terminated a five-year lease agreement for approximately 2,800 square meters of office space in Heidelberg that our company had leased in August 2001 in anticipation of future staff growth. We made a one-time termination payment of 900,000 in consideration for this lease termination.

In FY 2003, we also adopted a number of further restructuring measures that concluded in the second quarter of the current fiscal year. These measures include the following:

The termination of employees at our sites in the United States, Cambridge, United Kingdom and Heidelberg, Germany. We accrued severance payments to employees expected to be affected by these terminations.

The consolidation of the operations of our site at Cleveland, Ohio into our site at Columbus, Ohio, including the relocation of a number of employees from Cleveland to Columbus.

The restructuring of our lease for our laboratory facility in San Diego, California. The original lease ran until April 2008. We have entered into an amendment to this long-term lease agreement, granting us the option to terminate the lease in February 2004. In consideration for the grant of this option, we agreed to transfer the security deposit under the lease of approximately \$161,000 to the landlord. If we exercise this option, we are required to make a termination payment to the landlord. For the determination of this termination fee, see Item 4: Information on our Company Facilities above. We currently intend to exercise this option. Our monthly payment to the landlord for rent and other expenses under the lease agreement until February 2003 as well as the early lease termination payment are secured by a letter of credit we have given to the landlord and upon which the landlord will draw to satisfy our monthly payment obligations and payment of the early termination fee. We have subleased a portion of the laboratory facility in San Diego to MediGene Inc. We entered into a sublease termination agreement with MediGene, pursuant to which, the sublease will end effective January 31, 2004. MediGene will continue to make monthly sublease, operating expense and service payments until the sublease termination date and will pay us a termination fee in the

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

amount of \$300,000 upon the sublease s termination. For more information about this lease and the sublease arrangements, see Item 4: Information on Our Company Facilities .

Table of Contents

We accrued the necessary restructuring obligations for these measures in a total amount of \$5.598 million as of March 31, 2003, and included accruals for aggregate severance payments and net lease termination payments after deducting MediGene's sublease and termination payment obligations. These restructuring measures were adopted prior to December 31, 2002 and followed the guidance in EITF 94-3 Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity .

We allocated these accrued expenses among our general and administrative expenses, R&D expenses and discontinued operations.

Critical Accounting Policies

We have identified the following as critical accounting policies to our company due to the estimation processes involved in each revenue recognition, accounting for goodwill, accounting for income taxes, and accounting for our marketable securities and other financial assets.

Revenue Recognition

We derive the principal portion of our revenue from licensing activities, which consists of license fees for our IT products and solutions, and fees for support and maintenance provided to customers related to these products and solutions, and milestone payments for professional services related to these products and solutions. Management judgment may be made in connection with the application of the accounting rules related to revenue recognition. Material differences in the amount and timing of our revenue for any period might result if our management made different judgments or utilized different estimates.

Our IT products are typically licensed under non-cancelable license agreements with license periods ranging from one year to multiple years. For our one-year licenses, customers pay fees for use of the software at the beginning of the license term or following installation if installation is required by the customer. These licenses typically renew automatically for a further one-year period at our prevailing contractual license rates unless either party terminates. For our multiple-year licenses, our policy requires annual license payments in advance throughout the term of the license without contractual concessions. We also license various IT products under perpetual license agreements. Under our perpetual licenses, the customer pays a one-time license fee, that may be payable in installments, and may, at its option, pay additional annual fees for maintenance and support.

In addition, a customer pays, at the customer's option, an annual fee for support and maintenance of our IT products. The license and support and maintenance fees are typically determined on the basis of the number of servers or installation sites where the program is installed and, except for our SRS software licensed during FY 2001 and prior financial years, on the number of workstations or users. We also charge fees for product training and installation and software customization and related professional services.

We apply the provisions of Statement of Position 97-2, Software Revenue Recognition, as amended by Statement of Position 98-9 Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions to all transactions involving the licensing of our IT products and solutions. We recognize revenues in the form of license fees from the sale of both perpetual licenses and multiple-year licenses up-front when evidence of an arrangement exists, delivery has occurred, the fee is fixed and determinable collection of the fee is probable and, if required under the contract, customer acceptance has been obtained. Delivery generally occurs when product is received by the customer or made available for downloading by the customer from our servers. Revenue from license fees under short-term license agreements, *i.e.* those have a term of 12 months or less. Starting with FY 2004, we recognize revenue from these short-term license agreements on a straight-line basis over

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

the term of the license. We determined that this change with respect to revenue recognition from short-term license agreements had no material impact when applied to our revenue for FY 2003, FY 2002 and FY 2001. Revenue from support and maintenance fees from short-term, multiple-year and perpetual licenses are recognized ratably on a straight-line basis over the term of these services.

Table of Contents

At the time of the transaction, we assess whether the fee associated with our revenue transactions is fixed and determinable based on the payment terms associated with the transaction and whether or not collection is reasonably assured. We assess collection based on a number of factors, including past transaction history with the customer and the credit-worthiness of the customer. We do not request collateral from our customers. If we determine that collection of a fee is not reasonably assured, we defer the fee and recognize revenue at the time collection becomes reasonably assured, which is generally upon receipt of cash. For all sales, we use a signed license agreement as evidence of an arrangement. Sales through our distributors are evidenced by a master agreement governing the relationship together with binding purchase orders or license agreements on a transaction by transaction basis.

We typically ship our IT products on a data carrier such as CD, or make them available for downloading from our servers, promptly after the execution of a software license agreement. Accordingly, we do not generally have any significant software backlog, and believe that backlog at any particular time, or any fluctuation in backlog, is not indicative of sales of any succeeding period. We consider our IT products delivered when the customer has received the data carrier or has been provided with the password or other access information to download the IT product from our servers.

For arrangements with multiple elements (for example, license and maintenance and support), we allocate revenue to each component of the arrangement using the residual value method based on the fair value of the undelivered elements, which is specific to us. This means that we defer revenue from the arrangement fee equivalent to the fair value of the undelivered elements. Fair values for the ongoing maintenance and support obligations for both our multiple year licenses and perpetual licenses are initially based upon separate sales of renewals to other customers and thereafter upon renewal rates quoted in the contracts. Fair value of services, such as training, and installation services, is based upon our price lists for these services.

If an arrangement includes an acceptance provision, acceptance occurs upon the earlier of receipt of a written customer acceptance or expiration of the acceptance period.

Revenue from installation and training is recognized after these services have been rendered. We may enter into professional services arrangements related to our products, such as the development of customized solutions that require us to perform significant work either to alter our underlying software or to build additional complex interfaces or additional features so that the software performs as the customer requests based on our products.

Revenues from professional service arrangements sold separately are generally accounted for separately from new software license revenue because the arrangements qualify as services transactions as defined in SOP 97-2. The more significant factors considered in determining whether the revenue should be accounted for separately include the nature of services (i.e., consideration of whether the services are essential to the functionality of the licensed software product), degree of risk, availability of services from other vendors, timing of payments, and impact of milestones or acceptance criteria on the realizability of the software license fees. Revenues for professional services are generally recognized as the services are performed. If there is a significant uncertainty about project completion or receipt of payment for the professional services, revenue is deferred until the uncertainty is sufficiently resolved. We estimate the percentage of completion on contracts with fixed or not to exceed fees on a monthly basis utilizing hours incurred to date as a percentage of completion of total estimated hours to complete the project. If we do not have a sufficient basis to measure progress towards completion, revenue is recognized when we receive final acceptance from the customer of the corresponding project or project milestones. When total cost estimates exceed revenue, we accrue the estimated losses immediately based upon an average daily rate applicable to our professional services organization. The complexity of the estimation process and issues related to the assumptions, risks and uncertainties inherent with the application of the percentage of completion method of accounting affect the amount of revenue and related expenses reported in our consolidated financial statements. A number of internal and external factors can affect our estimates, including labor rates, utilization and efficiency variances and specification and testing or milestone acceptance changes

Table of Contents

If an arrangement does not qualify for separate accounting of the software license and professional service transactions, then new software license revenue is generally recognized together with the consulting services based on contract accounting using either the percentage-of-completion method or the completed contract method as described above. Contract accounting is applied to any arrangements that include milestone or customer specific acceptance criteria that may affect collection of the software license fees, where the services include significant modification or customization of our software, or where the software license payment is tied to the performance of professional services.

In light of our increased focus on providing IT solutions and related professional services for the life sciences industry as part of our business strategy, we expect a larger proportion of our revenue to come from professional services and license fees for customized solutions. For a discussion of our strategy, please see Item 4: Information on Our Company Strategy above.

We believe that accounting estimates applicable to our revenue recognition policies are critical because:

The determination that it is probable that the customer will pay for our products and services purchased is inherently judgmental;

The allocation of proceeds to certain elements in multiple-element arrangements is complex;

Establishing company-specific fair values of elements in multiple-element arrangements requires adjustments from time-to-time to reflect recent prices charged when each element is sold separately; and

The determination of the stage of completion for certain professional service arrangements is complex.

Goodwill

In July 2001, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 142, Goodwill and Other Intangible Assets . This standard changes the accounting for goodwill and other intangible assets by, among other things, requiring companies to cease amortizing goodwill and certain intangible assets with an indefinite useful life created by business combinations accounted for using the purchase method of accounting. In lieu of amortization, we are required to perform an impairment review of our goodwill during each financial year and other times during the financial year when indicators of impairment exist.

In accordance with the provisions of SFAS No. 142, we have adopted the statement effective April 1, 2001 and did not amortize the goodwill created by our acquisitions of Trega and NetGenics. Under SFAS No. 142, the workforce we acquired as part of our acquisition of Trega may no longer be considered an intangible asset. Therefore, 2.5 million was subsumed into goodwill in FY 2002. As of March 31, 2002, we therefore recorded goodwill in the aggregate amount of 58.6 million on our consolidated balance sheet.

We assess the impairment of goodwill annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that we consider important and that could trigger an impairment review include the following:

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

a significant decline in our share price for a sustained period;

our market capitalization relative to our net book value;

a significant underperformance by us relative to expected historical or projected operating results;

significant changes in our use of the acquired assets or the strategy for our overall business; and

significant negative industry or economic trends.

Table of Contents

In assessing the fair value and a possible impairment of goodwill, we must make assumptions regarding the development of our share price, market capitalization, estimated future cash flows and other factors. The fair value of goodwill is determined by allocating the fair value of the reporting unit to all of the assets and liabilities of that unit as if the unit had just been acquired in a business combination and the fair value of the reporting unit was the price paid to acquire the reporting unit.

We performed an impairment review in connection with the preparation of our results of operations for the six months ended September 30, 2002. Based on this review, we determined that the goodwill created by the Trega Biosciences and NetGenics acquisitions was impaired and that this decline was other than temporary. Accordingly, we determined to write off the aggregate goodwill from both acquisitions and recorded a non-cash expense in the aggregate amount of \$58.526 million.

Income Taxes

As part of the process of preparing our consolidated financial statements we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves us estimating our actual current tax exposure together with assessing temporary differences resulting from differing treatment of assets and liabilities for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheet.

We account for income taxes under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the amounts carried on the balance sheet of our financial statements for existing assets and liabilities and their respective tax bases, and net operating losses and net operating losses carried forward under applicable tax laws. Deferred tax assets and liabilities are determined on the basis of the tax rates applicable to taxable profits in the year in which we expect the differences to be recovered or settled.

We must assess the likelihood that our deferred tax assets will be recovered from future taxable income and, to the extent we believe that recovery is not likely, we must establish a valuation allowance. To the extent we establish a valuation allowance or increase this allowance in a period, we record an expense within the tax provision in our statement of operations.

Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. As of March 31, 2003, our aggregate net operating losses carried forward was \$378 million. German losses accounted for roughly \$228 million, and the losses from the operations of our U.S. subsidiaries for most of the remaining balance. While under applicable German law, these losses may be carried forward indefinitely, United States tax law as a general rule imposes a maximum period of 20 years. In view of the uncertainty regarding our company's future profitability and our ability to utilize these deferred tax assets before they expire, we have recorded a valuation allowance representing \$147 million.

This valuation allowance is based on our estimates of taxable income by jurisdiction in which we operate and the period over which our deferred tax assets will be recoverable. In the event that actual results differ from these estimates or we adjust these estimates in future periods we may need to establish an additional valuation allowance which could materially impact our financial position and results of operations. Our net deferred tax asset and liability as of March 31, 2003 was \$0.094 million after the adjustment for a valuation allowance of \$147 million.

Table of Contents

Marketable Securities and Other Financial Assets

We classify our investments in securities as marketable securities and other long-term investments .

Marketable Securities

We consider our securities to be marketable securities if they have a readily determinable fair market value and can be readily converted into cash. We classify our marketable securities as available-for-sale or held-for-maturity , and short-term and long-term, based on our intent with respect to these securities and the maturity dates of these securities. If our intent with respect to these securities changes, this could affect our results of operations.

Our available-for-sale securities consist of debt and equity securities that are publicly traded. During FY 2003 and FY 2002, our available-for-sale securities also included investments in diversified funds. We carry our available-for-sale investments at fair value, based on quoted market prices, and unrealized gains and losses, net of taxes, are included in accumulated other comprehensive income, which is reflected as a separate component of stockholders' equity. Gains and losses are recognized when realized on our consolidated statement of operations.

Our held-to-maturity marketable securities comprise debt securities with maturities of up to five years. We carry held-to-maturity investments at acquisition cost unless a decline in market value is considered other than temporary. We may sell held-to-maturity securities before their maturity date if we have classified them as short-term marketable securities. We classify held-to-maturity securities as long-term if their maturity dates extend beyond one year.

We have a policy in place to review our investments in available-for-sale and held-to-maturity marketable securities on a regular basis to evaluate whether or not these securities have experienced an other-than-temporary decline in fair value. In determining whether a decline is other-than-temporary, we consider the length of time and the extent to which such value has been less than our carrying value, if applicable, the financial condition and prospects for the underlying issuer of the securities, and our ability and intent to retain our investment for a period of time sufficient to allow for any anticipated recovery in value. If we believe that an other-than-temporary decline exists in our marketable securities, it is our policy to write down these investments to the market value and record the related write-down as an investment loss on our consolidated statement of operations. The determination whether a decline in value is deemed to be other-than-temporary involves significant judgment by our management. The amount and timing involved in recording these write-downs may have a material impact on our results of operations.

Effective the beginning of FY 2003 we reclassified all of our marketable securities previously classified as held-to-maturity as available-for-sale marketable securities and report all of these securities as short-term securities available-for-sale because we do not intend to hold these securities until their maturity. Therefore, in FY 2003, we adjusted the value of these marketable securities at their fair market value and recorded all unrealized gains and losses as other comprehensive income on our balance sheet. For more information about the effect of this reclassification, see Overview Investments above.

Other Long-Term Investments

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Our other long-term investments comprise investments in privately-held companies, in particular investments in our strategic alliance partners, that we intend to hold as a long-term investment. We accounted for these investments using the cost method of accounting. Our other long-term investments are in companies whose shares are not publicly traded, and, therefore, there is no established market for their securities. Accordingly, we determined the fair value of these investments without reference to a trading market. It is our policy to review the fair value of these companies on a regular basis to evaluate the carrying value of our investments in these companies.

Our review policy includes, but is not limited to, reviewing each of the companies' cash position, financing needs, earnings/revenue outlook, operational performance, management/ownership changes, and competition. The evaluation process is based on information that we receive or request from these privately-held companies. This information is not subject to the same disclosure regulations as U.S. public companies, and as such, our basis for these evaluations is subject to the timing and the accuracy of the data we receive from these companies. If we believe that the carrying value of our investment in a company is at an amount in excess of fair value, it is our policy to record a reserve and the related write-down is recorded as an investment loss on our consolidated statement of operations. Estimating the fair value of non-marketable equity investments in early-stage technology companies is inherently subjective, involves significant judgment by us, and may contribute to significant volatility in our reported results of operations.

Table of Contents

We recognize realized gains and losses upon sale or maturity of these investments using the specific identification method.

Based on our review, we determined to write-down the value of our shareholdings and investments in GeneProt, Chemnavigator, Gesellschaft für Medizinische Datenverarbeitung (GMD) and SimUtility, Inc. and to record realized losses in FY 2003 and FY 2002 corresponding to these write-downs. For a description of these write-downs and realized losses, see [Overview Investments](#) above.

Results of Operations

The table below sets forth information about our revenues by geographical regions:

Distribution of revenues from continuing operations(1)	FY 2003	FY 2002	FY 2001
Germany	21%	25%	37%
United States	56%	58%	43%
Other	23%	17%	20%
Total	100.0%	100.0%	100.0%

(1) Allocated based on location of the customer.

FY 2003 Compared with FY 2002***Revenues***

Our revenues for FY 2003 decreased to 29.657 million compared to 39.306 million in FY 2002. The weakness of the life sciences industry during FY 2003 and the continuing reluctance by life sciences companies during FY 2003 to make investments in IT-driven R&D solutions, as well as the weakness of the U.S. dollar compared to the euro, our reporting currency, in FY 2003 compared with FY 2002 contributed to this overall decline in our revenue.

Revenue from licenses decreased to 14.111 million in FY 2003 compared to 15.145 million during FY 2002. This decrease in licensing revenue is mainly attributable to the shift in our strategy to focus on IT solutions rather than individual software products, which resulted in a streamlining of our software product portfolio, including the discontinuation of various software products, and in a resulting decrease in the number of software license agreements. In addition, the sales cycle for our new IT solutions and products is lengthy. At the same time, market penetration of our SRS software suite has increased. The total number of new software licenses came to 42 in FY 2003 compared with 55 new software licenses in FY 2002, including global SRS license deals with three major pharmaceutical companies, AstraZeneca, Eli Lilly and Johnson & Johnson as well as license agreements with Schering AG and GeneProt for our new LION DiscoveryCenter integration platform. In addition, existing customers renewed their license agreements for software products that we did not discontinue.

Table of Contents

Revenue from software maintenance and support decreased to 1.864 million in FY 2003 compared to 2.500 million in FY 2002. This decrease is primarily attributable to the decrease in the number of software license agreements during FY 2003. In addition, we entered into new software licenses with significant maintenance and support fees primarily in the third and fourth quarters of FY 2003, which generated revenue from maintenance and support for the remainder of FY 2003 only.

Our revenue from professional services decreased to 12.068 million in FY 2003 compared to 18.613 million during FY 2002. This decrease in professional services revenue is primarily attributable to delays in our pharmacophore informatics project under our development agreement with Bayer. Specifically, Bayer delayed a \$2 million milestone payment to us due to delays in achieving corresponding milestones, extended the milestone schedule for the remaining deliverables under the development agreement into FY 2004 and FY 2005 and amended the development agreement by making milestone payments dependent upon us achieving the corresponding milestones and deliverables. As a result, we changed the revenue recognition method for the revenue under the amended development agreement with Bayer from percentage-of-completion to milestone dependent, resulting in a decrease in revenue from professional services. Bayer also made a one-time payment in FY 2002 in the amount of 2.62 million (\$2.310 million) pursuant to an amendment to our *i*-biology arrangement with Bayer. For a description of this amendment, see Item 10: Additional Information Material Contracts Our Agreements with Bayer AG Basic Agreement . In addition, our professional services revenue was adversely impacted by the reluctance of life science customers to enter into new professional services projects during FY 2003, as well as the lengthy sales cycle for our new IT solutions and products, such as our LION DiscoveryCenter integration platform, as our professional services are based on these IT solutions and products.

Revenue from our remaining drug discovery activities decreased to 1.614 million in FY 2003 compared to 3.048 million in FY 2002. This decrease is mainly attributable to a shift in focus by us to our own internal drug discovery research and the closing of our internal drug discovery activities, called *iD*³, effective December 31, 2002. Revenue from drug discovery activities which were not part of our *iD*³ activities derived primarily from sales and licenses of chemical compounds from our Chem.Folio[®] compound libraries and from sales of our arrayTAG clone collections and related arrayBase databases.

We experienced only slight changes in the geographic distribution of our revenue. The United States continued to be our most important market with about 56% of our revenue generated in the United States in FY 2003, compared to 58% in FY 2002. Germany accounted for about 21% of our revenue generated in FY 2003 compared to about 25% in FY 2002. This decrease is primarily attributable to the decline in revenue from Bayer under our pharmacophore informatics project resulting from delays in that project and the change in the revenue recognition method for the revenue under this project from percentage-of-completion to milestone dependent as well as a decline in revenue from new software license agreements with customers in Germany. Revenue contributions from other regions, including from Japan, where we sell our products through CTC, our Japanese distributor, increased to about 23% compared to about 17% in FY 2002. This increase is primarily attributable to our marketing and sales efforts to promote our products and services to customers in other countries, including in particular in other European countries.

Cost of Sales

Cost of sales increased to 18.677 million in FY 2003 compared with 11.395 million in FY 2002. This increase relates primarily to the pharmacophore informatics project for Bayer and other professional services engagements as well as costs for our LION Hosted Services (LHS) offering. Specifically, we made payments in FY 2003 to our subcontractor in connection with the performance of our amended development agreement with Bayer that we had held back due to delays in the performance of project milestones under that agreement . We also incurred one-time expenses in terminating our outsourcing agreement with a service provider for our LHS offering and switching these IT services to IBM as our new IT hosting service provider. In addition, we also continued to build-up our professional services organization in FY 2003 pursuant to our strategy shift.

Table of Contents*Selling Costs*

Selling expenses (without depreciation of property, plant and equipment or amortization of intangible assets) slightly decreased to 11.229 million in FY 2003 compared to 12.546 million in FY 2002. This decrease is primarily attributable to the implementation of our global sales force organization in FY 2003 and resulting cost synergies, including a shift in resources from the sales organization to our professional services organization, seasonal trade fair activities, and the impact of the strong euro compared to the U.S. dollar in FY 2003 compared to FY 2002. This decrease was offset by an increase in expenses incurred by us under our stock option plans and in obtaining stock option waivers from personnel in our sales and marketing organizations in FY 2003. For a description of the termination of our stock option plans, see the discussion in [Overview](#) [Our Stock Option Plans](#) .

General and Administrative Costs

Our general and administrative expenses (without depreciation of property, plant and equipment or amortization of intangible assets) increased to 21.490 million in FY 2003 compared to 18.369 million in FY 2002. This increase is mainly attributable to expenses related to the integration of NetGenics following our acquisition of NetGenics in January 2002, and expenses related to our activities under our global restructuring program, including in particular severance payments and accruals associated with administrative workforce reductions, the transfer of our U.S. headquarters from San Diego, California, to Cambridge, Massachusetts, and lease termination and restructuring payments and accruals in connection with the restructuring and termination of our lease obligations for office and laboratory space, as well as fees paid by us to Boston Consulting Group for various consulting projects in connection with the shift in our strategy. For a description of this restructuring program, see the discussion in [Overview](#) [Restructuring Activities](#) above. In addition, we incurred additional expenses under our stock option plans and in obtaining stock option waivers from personnel in our administrative organization in FY 2003. For a description of the termination of our stock option plans, see the discussion in [Overview](#) [Our Stock Option Plans](#) above.

Research and Development Costs

Our R&D expenses (without depreciation of property, plant and equipment or amortization of intangible assets) increased in FY 2003 to 34.225 million compared to 33.900 million in FY 2002. This slight increase in R&D expenses is primarily attributable to expenses related to our global IT development workforce and expenses related to our activities under our global restructuring program, including in particular severance payments and accruals associated with workforce reductions in our global IT development organization and the closing of our development site in Cleveland, Ohio, and increased IT development efforts in developing our new IT solutions. For a description of this restructuring program, see the discussion in [Overview](#) [Restructuring Activities](#) above. In addition, we incurred additional expenses under our stock option plans and in obtaining the stock option waivers of personnel in our administrative organization in FY 2003. For a description of the termination of our stock option plans, see the discussion in [Overview](#) [Our Stock Option Plans](#) above.

Expenses related to the discontinuation of *iD*³, our internal drug discovery activities, such as severance payments to the *iD*³ workforce, are not reflected in our R&D expenses. Instead, these expenses are included under discontinued operations.

Our actual R&D expenses in each of FY 2003 and FY 2002 were reduced by the receipt of subsidies and grants from third parties, including the German government. These payments totaled 0.631 million in FY 2003 and 1.317 million in FY 2002.

Other Operating Income and Expenses

Our gains from other operating income and expenses increased to 1.733 million in FY 2003 from 1.104 million in FY 2002. This slight increase is primarily attributable to gains and losses from translation of assets and liabilities in foreign currencies into euros, income from subleases and cash received from an account receivable previously written off.

Table of Contents

Depreciation of Property, Plant and Equipment and Amortization of Intangible Assets

Our depreciation and amortization expenses increased to 14.021 million in FY 2003 compared to 11.885 million in FY 2002. This increase is primarily attributable to depreciation of property, plant and equipment, including in particular software, hardware, furniture and office equipment, and leasehold improvements, and an impairment charge of 3.485 million attributable to intangible assets, specifically, software and technology and customer relationships, from our acquisitions of Trega Biosciences and NetGenics as well as amortization of intangible assets resulting from our acquisition of NetGenics before we recorded this impairment charge effective September 30, 2002. For a description of this impairment charge, see the discussion in [Overview Our Acquisitions](#) above.

Impairment of Goodwill

In FY 2003, we wrote off the impaired, aggregate goodwill from our acquisitions of NetGenics and Trega Biosciences in the total amount of 58.526 million after we determined that the goodwill created by these acquisitions was impaired and that this decline was other than temporary. For a description of this write-off, see the discussion in [Overview Our Acquisitions](#) and [Overview Critical Accounting Policies](#) above. We had no write-offs of goodwill in FY 2002.

Interest Income

Our interest income (net) decreased to 3.654 million in FY 2003 compared to 6.302 million in FY 2002. This decrease primarily results from the decline in our cash, cash equivalents and marketable securities during FY 2003 compared to FY 2002, as well as from lower interest rates.

Results from Marketable Securities and Other Long-Term Investments

We incurred a loss from marketable securities and other long-term investments (net) of 13.594 million in FY 2003 compared to 3.493 million in FY 2002. This loss was attributable to the write-off of the value of our shareholdings in GeneProt, Chemnavigator, and Paradigm Genetics. In addition, we realized losses from the sale of available-for-sale marketable securities when we shifted our investments to fixed income equity and fixed income debt securities. We also took impairment charges from our investments in these fixed income securities. For a description of these write-offs, losses, and impairment charges related to our investments, see the discussion in [Overview Investments](#) and [Overview Critical Accounting Policies](#) above.

Net Loss from Continuing Operations

We incurred a net loss from continuing operations of 137.031 million in FY 2003 compared to a net loss of 45.137 million in FY 2002. This increase is attributable to the decrease in our revenue and the significant increase in our expenses. Our expenses in FY 2003 include one-time, non-cash items in the total amount of 62.011 million with respect to the write-off of goodwill and intangible assets relating to our acquisitions of Trega Biosciences and NetGenics, losses, including non-recurring losses, from marketable securities and other long-term investments in the aggregate amount of 13.594 million, expenses and accruals, including non-recurring expenses and accruals, with respect to our activities under

our restructuring program, and non-recurring expenses in the aggregate amount of 4.361 million related to our employee stock option plans and the termination of these stock option plans in FY 2003.

Loss from Discontinued Operations

Loss from *iD*³, our internal drug discovery activities, which we discontinued effective December 31, 2002, came to 15.465 in FY 2003 compared to a loss of 9.549 million from discontinued operations in FY 2002. Revenues from discontinued operations decreased to 0.381 million in FY 2003 from 1.074 million in FY 2002. This decrease is mainly attributable to a shift in focus by us from drug discovery services activities to our own internal drug discovery research. Our total expenses from discontinued operations increased to 12.586 million in FY 2003 compared to 9.348 million in FY 2002. This increase is due primarily to the closing costs related to our R&D activities, such as severance payments for our *iD*³ employees, expenses related to the sale and disposal of equipment and assets used in discontinued operations and the termination of lease and other contractual obligations related to our *iD*³ activities. In addition, we recognized 1.8 million in losses from the sale of assets used in our discontinued operations in FY 2003. Depreciation and amortization expenses from discontinued operations increased to 3.260 million in FY 2003 compared with 1.275 million in FY 2002. This increase is due primarily to accelerated depreciation and amortization of assets used in our discontinued operations and the write-down of the estimated fair value of assets held-for-sale that were used in our discontinued operations. For a description of our discontinued operations, see the discussion in Overview Discontinued Operations above.

Table of Contents

FY 2002 Compared with FY 2001

Revenues

Our revenues for FY 2002 increased to 39.306 million compared to 23.275 million in FY 2001.

Revenue from licenses increased to 15.145 million in FY 2002 compared to 6.292 million during FY 2001. This increase in licensing revenue was mainly attributable to the increase in the number of license agreements for our LSI™ software products. The total number of new software licenses came to 55 in FY 2002 compared with 30 new software licenses in FY 2001. New customers that licensed our products include Affymetrix and GeneProt. In addition, existing customers renewed their license agreements for our software products.

Revenues from software maintenance and support increased to 2.500 million in FY 2002 compared to 1.188 million in FY 2001. This increase was primarily attributable to the increase in the number of software license agreements during FY 2002.

Our revenue from professional services increased to 18.613 million in FY 2002 compared to 13.374 million during FY 2001. This increase in professional services revenue was mainly attributable to our development agreement with Bayer, which expanded our collaboration with Bayer into the field of pharmacophore informatics. We used the percentage-of-completion to account for the revenue under the development agreement in FY 2002. Furthermore, Bayer made an additional one-time payment in the amount of 2.62 million (\$2.310 million) in FY 2002 pursuant to an amendment to our *i*-biology arrangement with Bayer. For a description of this amendment, see Item 10: Additional Information Material Contracts Our Agreements with Bayer AG Basic Agreement . Other customers, such as Derwent Information, Incyte Genomics, Schering, and Nestlé, also retained us to provide professional services and to provide them with customized software solutions.

Revenue from our drug discovery activities that we have not discontinued increased to 3.048 million in FY 2002 compared to 2.421 million in FY 2001. This increase was mainly attributable to drug discovery services for customers, sales and licenses of chemical compounds from our Chem.Folio® compound libraries and from sales of our arrayTAG clone collections and related arrayBase databases.

Our revenue for FY 2002 includes fees in the amount of approximately 2.0 million for products and services that Trega Biosciences had committed to providing to third parties prior to our acquisition of Trega. We recognized these fees as revenue in FY 2002 after we delivered the products and performed the services corresponding to these fees.

We expanded our sales and distribution activities in foreign markets. For example, the United States accounted for 58% of our total revenue in FY 2002 compared to 43% in FY 2001 while Germany accounted for 25% of total revenue in FY 2002 compared to 37% in FY 2001 and other countries, including Japan, where we sell our products through CTC, our Japanese distributor, contributed 17% of total revenue in FY 2002 compared to 20% in FY 2001.

Table of Contents

Cost of Sales

Cost of sales increased to 11.395 million in FY 2002 compared with 9.184 million in FY 2001. This increase relates primarily to the pharmacophore informatics project for Bayer, and other professional services engagements as well as costs for our LION Hosted Services (LHS) offering. Specifically, in FY 2002 we made payments to our subcontractor in connection with the performance of our amended development agreement with Bayer in the area of pharmacophore informatics. We also incurred expenses under our outsourcing agreement with a service provider for our LHS offering.

Selling Costs

Our selling expenses increased to 12.546 million in FY 2002 compared to 5.719 million in FY 2001. This increase was mainly attributable to the increase in staff within our sales and marketing departments and the further expansion of LION bioscience Inc, our U.S. subsidiary, which was focused on sales and marketing in the United States. In addition, our sales and marketing expenses increased as a result of the selling and distribution activities, which we acquired as part of our acquisition of NetGenics.

General and Administrative Costs

Our general and administrative expenses increased to 18.369 million in FY 2002 compared to 7.501 million in FY 2001. This increase was mainly attributable to the expansion of our operations in the United States as a result of our acquisitions of Trega Biosciences and NetGenics, and our consolidation of twelve months of activities for Trega s and two months of activities for NetGenics general and administrative expenses during FY 2002. In FY 2002, our San Diego facility also became the headquarters of our U.S. operations, which resulted in increased general and administrative expenses. In addition, we expanded our internal IT systems administration department in FY 2002. A portion of the expenses from the operations of this department were allocated to general and administrative expenses.

Conversion of Preferred Shares into Ordinary Shares

In FY 2001 we incurred a one time non-cash compensation charge of 8.743 million related to the conversion of preferred shares in our company into ordinary shares by several of our employees.

Research and Development Costs

Our R&D expenses increased in FY 2002 to 33.900 million compared to 17.688 million in FY 2001. This increase in R&D expenses was primarily attributable to the expansion of our R&D activities in the United States as a result of our acquisitions of Trega Biosciences and NetGenics, and our consolidation of Trega s and NetGenics R&D expenses during FY 2002. In addition, our R&D expenses increased during FY 2002 as a result of new product development activities, in particular with respect to new IT products. We also incurred additional expenses related to the purchase or in-licensing of products for use in our IT development activities, such as Affymetrix¹ GeneChip[®] probe arrays and related products and MDL software and databases.

Our actual R&D expenses in each of FY 2002 and FY 2001 were reduced by the receipt of certain subsidies and grants from third parties, including the German government. These payments totaled 1.317 million in FY 2002 and 0.731 million in FY 2001.

Other Operating Income and Expenses

Our gains from other operating income and expenses increased to 1.104 million in FY 2002 from 0.727 million in FY 2001. This increase was primarily attributable to gains from the conversion of assets and liabilities in foreign currencies into euros in the amount of 0.929 million in FY 2002 compared with losses of 0.501 million in FY 2001.

Table of Contents*Depreciation of Property, Plant and Equipment and Amortization of Intangible Assets*

Our depreciation and amortization expenses increased to \$11.885 million in FY 2002 compared to \$4.218 million in FY 2001. This increase was primarily attributable to depreciation of property, plant and equipment during FY 2002, including an impairment charge in the amount of \$1.1 million as a result of equipment write-down from our *iD³* activities in Heidelberg in December 2001, as well as amortization expense as a result of our depreciation of property, plant and equipment of Trega in the form of software, hardware, furniture and office equipment, and leasehold improvements and amortization of Trega's intangible assets in form of software and technology and, to a lesser extent, the amortization expense of NetGenics' intangible assets during the period from January 31 through March 31, 2002. In accordance with SFAS No. 142 our depreciation and amortization expenses did not include any amortization of goodwill resulting from our acquisitions of Trega and NetGenics. For a description of SFAS No. 142, please see "Critical Accounting Policies - Valuation of Goodwill and Other Assets" above.

Interest Income

Our interest income (net) increased to \$6.302 million in FY 2002 compared to \$5.234 million in FY 2001. We received interest income in FY 2001 and FY 2002 from our investment of a portion of the proceeds from our initial public offering in fixed income securities in November 2000. This increase was attributable mainly to the additional interest we received for the full financial year 2002 compared with interest payments we received during the investment period of November 2000 until March 31, 2001 of FY 2001.

Results from Marketable Securities and Other Long-Term Investments

We incurred a loss from investments (net) increased of \$3.493 million in FY 2002. This loss was reduced by the sale of all of our shareholdings in Tripos, Inc. in February 2002 and the payment of an accrued dividend on these shares in January 2002 in connection with this sale. We recorded a gain in the amount of \$15.518 million from this transaction. At the same time, as part of our strategy to focus on our core competencies, we reviewed our various shareholdings in GMD, Paradigm Genetics, SimUtility and our investments in available-for-sale securities. Based on our review, we determined to adjust the value of these shareholdings and investments to fair value and to record a combined total loss in the amount of \$19.011 million in FY 2002. For a description of this review and value adjustments, see the discussion in "Overview Investments" above.

Net Loss from Continuing Operations

We incurred a net loss of \$45.137 million in FY 2002 compared to a net loss of \$23.944 million in FY 2001. This increase was attributable mainly to the increase in our expenses, in particular our R&D expenses and depreciation and amortization expenses, relative to the increase in our revenue, resulting to a large extent from our expansion in the United States. In addition, we recorded one-time net losses in the amount of \$3.493 million as a result of value adjustments of our shareholdings in other companies and of our investments in available-for-sale securities that were reduced by the gains from the sale of all of our shareholdings in Tripos. We also recorded as an expense non-cash compensation for outstanding stock options and employee shares outstanding in the amount of \$4.542 million in FY 2002 and \$1.732 million in FY 2001. Our net loss in FY 2001 also includes a one-time non-cash compensation expense in the amount of \$8.743 million, resulting from the conversion of preferred shares of our company into ordinary shares.

Loss from Discontinued Operations

Loss from iD³, our internal drug discovery activities, which we discontinued effective December 31, 2002, came to 9.549 million in FY 2002. There were no revenues or expenses allocated to discontinued operations in FY 2001.

Table of Contents

Revenues from discontinued operations amounted to 1.074 million in FY 2002. For a description of our discontinued operations, see the discussion in Overview Discontinued Operations above.

Liquidity and Capital Resources

We fund our operations through our operating cash flow, bank debt and equity. Over the past three fiscal years, we have funded our operations principally from the issuance of equity, the proceeds of which have been used to fund operating deficits and to repay indebtedness. We anticipate that during FY 2004 we will continue to generate operating deficits, which will be funded from existing cash, cash equivalents and investments in, or sale of, marketable securities.

We believe that our liquid assets will be sufficient to fund our current plans for our business during the current fiscal year and the following fiscal year. Our belief is based on our current business plan and our refined strategy. However, our business plan and strategy could change in the future or new developments could occur, each of which may require additional funding sooner than anticipated. Even if we have sufficient liquidity for our current business plan, we may seek to raise additional funding because of favorable market conditions or other strategic factors.

Our future cash requirements depend on numerous factors, including:

the development of integrated IT solutions and other software for the life sciences industry;

our performance of complex or long-term customer projects;

the length of the sales cycle for our IT solutions, products and services;

our ability to attract subscribers and purchasers for our IT solutions, products and services;

our ability to establish, maintain and perform customer or R&D collaborations with others;

our reaction to technological developments of competitors and to market developments; and

the costs involved in enforcing or defending against patent and copyright claims and other intellectual property rights.

These factors may result in our need for significant additional funds in the future, which we may seek to raise through public or private offerings or debt financing. We cannot assure you that additional financing or payments from customer for our IT solutions, products or services will be available when needed or that, if available, such financing or funds will be obtained on favorable terms. If adequate funds are not available when needed, we may have to curtail our operations or attempt to raise funds on unattractive terms.

Cash Flow

During FY 2003 and FY 2002, we had net cash inflows of 43.257 million and net cash outflows of 48.042 million, respectively.

Operating Activities

The net cash used in our operating activities was 42.734 million in FY 2003, 51.500 million in FY 2002, and 13.381 million in FY 2001.

The decrease in the amount of net cash used in our operating activities in FY 2003 compared to FY 2002 was primarily attributable to our restructuring activities, including our cost-savings measures and the discontinuation of our iD³ activities in FY 2003. For a description of our restructuring activities, see [Item 5: Operating and Financial Review and Prospects](#) [Overview](#) [Restructuring Activities](#) .

Table of Contents

The substantial increase in the amount of net cash used in our operating activities in FY 2002 compared to FY 2001 was primarily attributable to our expansion in the United States as a result of our acquisitions of Trega and NetGenics as well as the build-up of our sales and marketing activities in the United States and higher R&D activities.

Investing Activities

Our investing activities provided 86.694 million in FY 2003 and 5.044 million in FY 2002 while we used net cash in the amount of 127.917 million in FY 2001 for our investing activities.

We experienced lower cash outflows of 2.583 million in FY 2003 compared to 7.960 million in FY 2002 from investments in property, plant and equipment due to our restructuring program, which required fewer investments in computer hardware and software and office equipment. In FY 2003, we also sold laboratory equipment that had been used in our iD3 activities which we discontinued effective December 31, 2003. Proceeds from these sales totaled 0.748 million. In addition, we sold available-for-sale marketable securities in FY 2003. Proceeds from these sales totaled 94.378 million. The realized losses related to the sales of these securities amounted to 2.609 million.

Cash outflows from our investing activities in FY 2002 are attributable mainly to our investments in ownership interests in our collaboration partners GeneProt, SimUtility and BioSolveIT, for a total of 10.805 million. In addition, we made improvements to our facilities in Heidelberg and purchased hardware totaling 7.960 million. These cash outflows from our investing activities in FY 2002 were more than offset by cash inflows in the amount of 23.720 million from the sale of all of our shares in Tripos in FY 2002 and the payment by Tripos of an accrued dividend immediately prior to the sale and cash inflows in the amount of 5.863 million from interest payments received from our investments in fixed-income securities.

The high level of investments in FY 2001 is attributable primarily to our investments in available-for-sale and held-to-maturity securities of 43.732 million and 71.531 million respectively, using proceeds from our initial public offering in August 2000, purchase of capillary sequencers and computer hardware, and the expansion of a new mainframe computer center totaling 8.245 million.

Financing Activities

Net cash used in our financing activities was 0.703 million in FY 2003 and 1.586 million in FY 2002 while our financing activities provided 201.522 million in cash during FY 2001.

The decrease in net cash used in our financing activities in FY 2003 compared to FY 2002 is attributable to fewer capital leases used by us to finance laboratory equipment and IT hardware, resulting in lower aggregate payments under these leases. The reduction in the number of ongoing capital leases results from the discontinuation of our iD3 activities and the sale of laboratory equipment previously used in these activities and sold by us during FY 2003. We made payments under capital leases in a total amount of 0.134 million in FY 2003 compared with 0.863 million in aggregate capital lease payments in FY 2002. In addition, we made payments of principal under our loan agreement with Bayerische Hypo- und Vereinsbank in the amount of 0.569 million in each of FY 2003 and FY 2002.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Financing activities provided 201.522 million in cash during FY 2001. These funds are primarily attributable to the fact that we conducted our initial public offering in August 2000 and listed our company's ordinary shares on the Neuer Markt segment of the Frankfurt Stock Exchange and on the Nasdaq National Market in the form of ADSs. We offered 4,575,375 ordinary shares, as well as an additional 685,625 ordinary shares to cover over-allotments, at 44.00 a share and \$39.68 per ADS. We used a portion of the proceeds received from this public offering to repay approximately 6.6 million, which represented the total amount drawn under a 11.00 million bridge loan facility provided to us by Deutsche Bank Aktiengesellschaft on April 5, 2000, which was used to finance operations. Amounts drawn under this credit facility bore interest at an annual rate of 10%.

Table of Contents

Liquidity

Our cash, cash equivalents and marketable securities amounted to 72.864 million at March 31, 2003.

Loan Agreement

In December 1997, we entered into a loan agreement with Bayerische Hypo- und Vereinsbank for the financing of research and development activities. Under the loan agreement, we may borrow up to 4.55 million through September 30, 2007. At March 31, 2000, we had fully utilized the facility. The loan principal is due in 16 equal semi-annual payments in the amount of 284,406, which began on March 31, 2000. At March 31, 2003, we had repaid approximately 2.559 million of the total principal amount borrowed under this facility. Interest is paid in quarterly installments at a rate of 4.75% per annum. In connection with the loan we granted the lender a security interest in one position of our fixed income securities. We expect to pay off the entire principal amount and outstanding interest under this facility by September 30, 2003.

Capital Expenditures

We had no material capital commitments for capital expenditures at March 31, 2003. We expect our capital expenditures to remain on this level, mainly for replacements.

Impact of Inflation

Inflation has not had a material effect on our business.

Impact of Foreign Currency Fluctuation

For more information regarding the impact of foreign currency fluctuation on LION and its business, see Item 11: Quantitative and Qualitative Disclosure About Market Risk Foreign Currency Exchange Risk

Off-Balance Sheet Arrangements

We have not entered into any significant off-balance sheet arrangements, transactions or other relationships with unconsolidated entities.

Aggregate Contractual Obligations

The following table presents our aggregate contractual obligations as of March 31, 2003 with payments due in the periods indicated:

Table of Contents

Contractual Obligations	Total Payments due	Payments due by no later than March 31, 2004	Payments due by	Payments due by	Payments due after April 1, 2009
			no later than	no later than	
			between April 1, 2004 and March 31, 2007	between April 1, 2007 and March 31, 2009	
Long Term Debt Obligations	2,560,000	569,000	1,707,000	,284,000	0
Capital Lease Obligations	98,000	24,000	48,000	26,000	0
Operating Lease Obligations	3,973,000	1,703,000	2,270,000	0	0
Lease Obligations	(7,143,000 with committed payments for San Diego lease termination)	(4,873,000 with committed payments for San Diego lease termination)			
Purchase Obligations	2,566,000	1,172,000	1,394,000	0	0
Other Long Term Obligations	1,700,000	1,412,000	288,000	0	0
Total	10,897,000	4,880,000 (8,050,000 with committed payments for San Diego lease termination)	5,707,000	310,000	0
	(14,067,000 with committed payments for San Diego lease termination)				

Our long-term debt obligations represent our loan agreement with Bayerische Hypo- und Vereinsbank. However, we expect to pay off the entire principal amount and outstanding interest rate under this facility by September 30, 2003. For a description of this Agreement, see [Loan Agreement](#) above.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Our capital lease obligations include payments resulting from capital lease arrangements for computer hardware and office equipment entered between 1997 and 1999.

Operating lease obligations with committed payments for San Diego lease termination include payments under the lease agreements for our sites outside of California as well as the payments to the landlord of our laboratory facility in San Diego, California in connection with the early termination of our long-term lease agreement for that facility pursuant to the first lease amendment. Pursuant to that amendment, we delivered a letter of credit to the landlord in an amount equal to approximately \$3.7 million for the purpose of satisfying all of our payment obligations under the lease, including payments for base rent and additional rent, from August 1, 2003 until at least February 2004. The amendment grants us an early lease termination option exercisable in February 2004. If we exercise our termination option, the landlord will retain the balance of the \$3.7 million not already drawn on the letter of credit and used for our payment obligations under the lease by then as a termination fee. We currently intend to exercise this option.

Table of Contents

We have subleased a portion of the laboratory facility in San Diego to MediGene Inc. The payments set forth above do not account for the sublease and service payments we receive from MediGene nor the termination fee MediGene has agreed to pay us to terminate the sublease agreement effective January 31, 2004. We have accrued our net future lease obligations, including the anticipated early termination fee, with respect to our San Diego laboratory facility after deducting MediGene's sublease and termination payment obligations in our audited consolidated financial statements for FY 2003. For a description of our arrangements with the landlord of our laboratory facility in San Diego and our sublease arrangement with MediGene, see Item 5: Operating and Financial Review and Prospects Overview Restructuring and Item 4: Information on our Company- Facilities above and Note 23 of our audited consolidated financial statements below.

Purchase obligations include payment of license fees and maintenance and support payments under long-term software and database in-licensing agreements entered into by us. For example, in July 2001, we licensed a wide range of chemical informatics applications and databases from MDL Information Systems.

Other long-term obligations include service agreements, such as our outsourcing agreement with IBM for our LHS offering, and our subcontracting arrangement with Tripos UK concerning the performance of the pharmacophore informatics project under our amended development agreement with Bayer.

Research and Development

For more information regarding the company's R&D activities, see Item 4: Information on the Company Research and Development .

Recent Accounting Announcements

In August 2001, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 143 Accounting for Asset Retirement Obligations. This Statement deals with the accounting and reporting duties with regard to obligations and related expenses that arise in connection with the disposal or retirement of long-lived tangible assets. SFAS No. 143 requires a company to set up an accrual for the fair value of the obligation in the period in which it accepts a legal obligation associated with the disposal or retirement of a long-lived tangible asset. The Statement further requires that the carrying amount of the tangible asset be increased by the estimated liabilities. The increase in the carrying amount of the tangible asset is then regularly depreciated over the remaining term. In valuing the accrued liability, the effects of accrued interest and changes in estimated future cash flow must be taken into account in every period. SFAS No. 143 must be applied in all fiscal years commencing after June 15, 2002, but may be applied earlier. We will apply SFAS No. 143 beginning April 1, 2003 and do not believe the application of this statement will have any material effect on our net assets, financial position, or results of operations.

In June 2002, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 146 Accounting for Costs Associated with Exit or Disposal Activities . SFAS No. 146 replaces Emerging Issues Task Force (EITF) Issue No. 94-3, Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring). This Statement deals with the accounting and reporting for costs associated with exit or disposal activities. SFAS No. 146 requires a company to set up a liability for a cost associated with an exit or disposal activity to be recognized when the liability is incurred. A fundamental conclusion in this Statement is that an entity's commitment to a plan, by itself, does not create a present obligation to others that meets the definition of a liability. Therefore, this Statement eliminates the definition and requirements for recognition of exit costs in Issue 94-3. This Statement also establishes that fair value is the objective for initial measurement of the liability. SFAS No. 146 must be applied for all exit or disposal activities that are initiated after December 31, 2002, with early application encouraged. We have applied SFAS No. 146 starting January 1, 2003.

Table of Contents

In November 2002, the Emerging Issues Task Force (EITF) reached a final consensus on EITF 00-21, Revenue Arrangements with Multiple Deliverables. EITF 00-21 addresses certain aspects of the accounting of revenue arrangements with multiple deliverables by a vendor. The issue outlines an approach to determine when a revenue arrangement for multiple deliverables should be divided into separate units of accounting and, if separation is appropriate, how the arrangement consideration should be allocated to the identified accounting units. The consensus reached in the issue will be effective for us for revenue arrangements, other than software, entered into after June 30, 2003.

In November 2002, the FASB issued FASB Interpretation (FIN) 45, Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others—an interpretation of FASB statements 5, 57, and 107 and rescission of FASB Interpretation 34. This Interpretation elaborates on the disclosure to be made by a guarantor in its financial statements regarding obligations under certain guarantees that it has issued. FIN 45 also clarifies that a guarantor is required to recognize, at inception of a guarantee, a liability for the fair value of the obligation due to the issuance of the guarantee. Disclosure requirements are effective for financial statements of interim and annual periods ending after December 15, 2002. The recognition and measurement provisions are effective for guarantees issued or modified after December 31, 2002. We do not believe the application of this statement will have any material effect on our net assets, financial position, or results of operations.

In December 2002, the FASB issued SFAS No. 148, Accounting for Stock-Based Compensation Transition and Disclosure—an amendment of FASB Statement No. 123. SFAS No. 148 amends SFAS No. 123, Accounting for Stock-Based Compensation to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS No. 148 requires more prominent disclosures in both interim and annual financial statements about the method of accounting used for stock-based employee compensation and the effect of the method used on reported results. We adopted SFAS No. 148 beginning January 2003 and have included all required information in our consolidated financial statements.

Item 6: Directors, Senior Management and Employees

Directors and Senior Management

In contrast to corporations organized in the United States, our company, as a German stock corporation, is governed by three separate bodies: the supervisory board and the management board (so-called two tier board system) as well as the ordinary or extraordinary shareholders meeting. Their roles are defined by German law, by our company's articles of incorporation (Satzung), by the rules of procedure for the management board and the supervisory board and our company's service agreements with the members of the management board.

Our supervisory and management boards are separate, and no individual may simultaneously be a member of both boards. The management board is responsible for managing our company's business in accordance with applicable laws and our company's articles of association and the rules of procedure. It represents our company in its dealings with third parties. The supervisory board appoints and removes the members of the management board and oversees the management of our company but is not permitted to make management decisions.

Under German law, the supervisory board members and executive board members owe a duty of loyalty and care to our company. In carrying out their duties, members of both the management board and supervisory board must exercise the standard of care of a prudent and diligent businessperson, and they are jointly and severally liable to our company for any resulting damages if they fail to do so. If their actions are validly approved by resolution at a shareholders' meeting their liability to our company is excluded while any liability to third parties remains unaffected. Both boards are required to take into account a broad range of considerations in their decisions, including the interests of our company and its shareholders, employees, creditors and, to some extent, the common interest. The management board is generally required to respect shareholders' rights to equal treatment and equal information.

Table of Contents

As a general rule under German law, a shareholder has no direct recourse against the members of the management board or the supervisory board in the event that they are believed to have breached a duty to our company. Apart from insolvency or other special circumstances, only our company has the right to claim damages from members of either board. Our company may only waive these damages or settle these claims if at least three years have passed and if its shareholders approve the waiver or settlement at the shareholders' meeting with a simple majority, provided that opposing shareholders do not hold, in the aggregate, one-tenth or more of the share capital of our company and do not have their opposition formally noted in the minutes of the shareholders' meeting.

In February 2002, the German government published the German Code of Corporate Governance, which was issued by a government appointed commission. This Corporate Governance Code recommends specific governance practices. After an amendment to the German Stock Corporation Act, the supervisory board and the management board of a company whose shares are listed on a stock exchange are required to declare annually whether or not the company complies with the recommendations listed in this Corporate Governance Code. Our company has determined to implement all of the recommendations of the German Corporate Governance Code to the extent it has not already practiced the corporate governance principles. In accordance with the new German legal requirement our company has publicly declared that it intends to fully comply with all of the recommendations of the German Corporate Governance Code. Our company is currently in the process of implementing the new recommendations. Certain recommendations, that required changes to our articles of incorporation, have been approved by vote of our company's shareholders at our annual general shareholders meeting on August 7, 2003.

The shareholder vote on the ratification of the actions of our company's management board and supervisory board at our company's annual general shareholders' meeting. At the annual general shareholders' meeting, our company's shareholders must approve the amount of the appropriation of retained earnings, the appointment of an independent auditor and certain significant corporate transactions, if any. The management board calls the annual general shareholders' meeting. The annual general shareholders' meeting must be held within the first eight months of each fiscal year.

Supervisory Board

The principal task of the supervisory board is to supervise our board of management. To ensure that these functions are carried out properly, the management board must, among other things, regularly report to the supervisory board with regard to current business operations and future business planning. The supervisory board is also entitled to request special reports at any time.

The supervisory board appoints and removes the members of the management board and oversees the management of our company. German law prohibits the supervisory board from making management decisions. However, the supervisory board may resolve that certain transactions require the approval of the supervisory board. The supervisory board is also responsible for representing our company vis-à-vis the management board members.

Our company's supervisory board currently consists of three members. In the past, our company's supervisory board consisted of six members. However, at the annual general shareholders' meeting on August 7, 2003, our company's shareholders approved our company's proposal to amend our company's articles of association to reduce the number of supervisory board seats from six to three. Our company's shareholders elect the members of the supervisory board at the annual general shareholders' meeting. In the event of a vacancy on the supervisory board, the commercial register of the lower court in Heidelberg, Germany may appoint, upon application by the management board, a successor to fill this vacancy for the remainder of the departing member's term. Our company's shareholders may remove any member of the supervisory board by a majority of votes cast at an annual general shareholders' meeting. Our company has not entered into contracts with any member of the supervisory board that provide for benefits upon a termination of the services of the member.

Table of Contents

The members of the Supervisory Board are each elected for the same fixed term of approximately five years. Unless the shareholders specify a reduced term when electing individual members of the supervisory board or the entire supervisory board, the maximum term of office of each member of the supervisory board expires at the end of the annual general shareholders meeting for the fourth fiscal year following the fiscal year in which the member was elected. Reelection is possible. The term of a member of the supervisory board appointed by the court to cure a deficiency in the composition of the supervisory board ends at the time when such deficiency is cured. The term of a member of the supervisory board elected by the shareholders to succeed a departing member ends at the time when the term of the original member would have ended. A substitute member of the supervisory board may be elected by the shareholders at the same time as a member to replace such member in case he or she departs. The term of a substitute member who replaces a departing member ends with the conclusion of the next annual general shareholders meeting where members of the supervisory board are elected or, at the latest, at the time when the term of the original member would have ended.

The supervisory board elects a chairman and one deputy chairman from among its members by majority vote of its members. The participation of all three members, which would include abstaining from voting, is required for the supervisory board to act. The supervisory board normally acts by simple majority vote of the votes cast, with the chairman having a deciding vote in the event of a deadlock in a second vote on the same matter. The supervisory board may set forth in its rules of procedure that any resolutions by the supervisory board and its committees may be passed in writing, by telegram, telephone, facsimile, telex, or similar means, including in particular by way of video conference.

Under our company's articles of association, the supervisory board should meet at least once during each quarter of the calendar year. The supervisory board is required to meet at least twice during each half of a calendar year. The remuneration of the members of the Supervisory Board is determined by the Articles of Incorporation.

Our company's supervisory board has adopted rules of procedure. According to these rules of procedure, no more than one member of our company's supervisory board may be a former member of our company's management board. In addition, no member of the supervisory board may be a member of more than five supervisory boards of other publicly traded companies. In general, supervisory board meetings are called upon 14 days prior notice. However, in urgent matters the chairman of the supervisory board may shorten the notice period and may even call ad hoc meetings. Notices of a supervisory board meeting must be submitted together with an agenda to the members of the supervisory board members. As a general matter, resolutions may only be passed only with regard to the agenda. Resolutions with regard to other topics may only be passed if no member of the supervisory board objects. Our company's supervisory board adopts resolutions with simple majority unless applicable law or our company's articles of association require another majority. Our company's articles of association do not require a unanimous vote of the supervisory board members on any matter.

Consistent with the requirements of the Sarbanes-Oxley Act, a U.S. law on corporate governance and financial reporting that came into effect on July 30, 2002, and applicable U.S. securities regulations, our supervisory board also acts as our company's audit committee.

Our company's supervisory board may appoint committees from among its members and may, to the extent permitted by law, entrusts committees with the authority to make decisions. Our supervisory board has, consistent with the recommendations of the German Corporate Governance Code, created an audit committee, consisting of all of the members of the supervisory board. The chairman of the audit committee is Professor Dr. Klaus Pohle, the former Chief Financial Officer of Schering AG. The responsibilities of the audit committee include selecting an independent auditor to be proposed to our company's general shareholders meeting for appointment as auditor. The audit committee is also charged with reviewing our company's independent auditor's work and reports and our consolidated financial statements and also determines special audit areas and directly discusses and reviews audit issues identified by our company's independent auditors. The audit committee supervises the independent auditor's performance. The audit committee's responsibilities also include monitoring and supervising our company's risk management and negotiating the fees for services provided by our auditors. The audit committee's meetings are to be called upon five business days prior notice. Notices of an audit committee meeting must be submitted together with an agenda to the committee members. The Chief Financial Officer of our company is to be invited to attend all meetings of the company's audit committee. The audit committee may only pass resolutions if all committee members vote on the proposed resolution.

Table of Contents

Our company's audit committee has adopted its own rules of procedure. The audit committee's rules of procedure provide that the auditor is to notify the audit committee promptly of any matters of significance to the supervisory board that result from any audits as well as matters that would contradict our company's stated compliance with the German corporate governance code. The rules of procedure also provide for a process with respect to the prior approval of all non-audit services to be performed by the independent auditors for our company. The audit committee's rules of procedure generally prohibit our company from retaining our company's auditors for services, including certain specified services, such as bookkeeping, financial information systems design and implementation, appraisal and valuation, actuarial, human resources, investment, and legal services, that would compromise the independence of our company's auditors.

The audit committee may authorize our company's chief financial officer to retain the auditors without the prior approval of the audit committee if services to be rendered by the auditors are in the ordinary course, are not likely to compromise the auditor's independence and the fees for such services do not exceed 15,000 per project and 120,000 per year in the aggregate. The supervisory board also reviews the internal control, disclosure and audit processes of the company.

The present members of our company's supervisory board, their ages, the date when they were first elected or appointed to the supervisory board, the date when their terms expire, and their current principal occupations and memberships on the boards of other companies are as follows:

Supervisory Board Members

Name	Date First			Principal Occupation
	Age	Elected/Appointed	Term expires	
Jürgen Dormann Chairman	63	July 19, 2002(1)	August 7, 2008	President & Chief Executive Officer, and Chairman of the Board of ABB, Ltd.; Supervisory Board Chairman of Aventis S.A.; Supervisory Board Member of Allianz AG (1)
Prof. Dr. Klaus Pohle Deputy Chairman	65	August 7, 2003(2)	August 7, 2008	President of the German Standardization Council; member of the board of DWS Investment GmbH, Frankfurt am Main; member of the board of directors of Coty Inc., New York City, USA
Richard Roy	48	May 16, 2003(3)	August 7, 2008	Business Consultant; Member of the Board of Directors of Swisscom Group AG; Deputy Chairman of the Supervisory Board of Ixos AG; Deputy Chairman of the Supervisory Board of Realtech AG (3)

- (1) Mr. Dormann was elected by the annual general shareholders' meeting on July 19, 2002 to fill the vacancy left by the resignation of Lorenzo Giulini. Mr. Giulini resigned from our company's supervisory board effective July 19, 2002 for personal reasons. Mr. Dormann was reelected at our company's annual general shareholders' meeting on August 7, 2003 to serve for a five-year term. Mr. Dormann was also a member of the board of directors of International Business Machines Corporation (IBM) until April 29, 2003.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

- (2) Professor Dr. Pohle served as Chief Financial Officer and a member of the management board of Schering AG until April 2003.
- (3) Mr. Roy was appointed to our company's supervisory board effective April 16, 2003 by the lower court of the commercial register in Heidelberg, Germany to fill the vacancy left by the resignation of Klaus Tschirra. Dr. h.c. Tschirra resigned from our company's supervisory board effective December 31, 2002 for personal reasons. Mr. Roy was reelected at our company's annual general shareholders meeting on August 7, 2003 to serve for a five year term. Mr. Roy served as Vice President Corporate Strategy EMEA (Europe, Middle East, Africa) at Microsoft Inc. until June 2002.

Table of Contents

Management Board

Our company's management board manages our company's business and represents it in dealings with third parties. The management board is also required to ensure appropriate risk management within our company and to establish an internal monitoring system. The management board regularly reports to the supervisory board about our operations and business strategies, and prepares special reports upon request.

Under our company's articles of association, the supervisory board determines the size of the management board. Our company's management board currently consists of three members.

Resolutions of the management board may be taken either in meetings, by circulating written consents or verbally in a telephone conference among the board members in lieu of a meeting. Our company's articles of association provide that if the management board consists of two members, the attendance of both members is required for a quorum. If the management board consists of more than two members, a quorum requires the attendance of two thirds of the members of the management board. The management board acts by simple majority vote of the members present unless another majority is required by applicable law. If the management board consists of more than two members, the chairman of the management board has a casting vote in the event of a tie.

In addition to matters requiring the consent of the supervisory board under German law, the supervisory board adopted the management board's rules of procedure which require that the management board may only engage in certain transactions with approval of the supervisory board. These transactions include investments exceeding 1 million, mergers and acquisitions, establishment and termination of business divisions, certain financial transactions, such as borrowings exceeding 2 million, the issuance of debt securities, the granting of security interests, the granting of pensions to key employees, and other specified transactions exceeding specified threshold amounts, such as lease agreements, service agreements, consulting agreements, and the appointment of holders of a general power of attorney (Prokurist). The management board's rules of procedure further provide that the entire management board must vote on matters of significance to our company or its subsidiaries, our annual report, matters to be submitted to the supervisory board, and matters relating to any meeting of our company's shareholders.

The supervisory board appoints the members of the management board for a maximum term of five years. The initial term of office for a member of management is one year. At the end of this initial one-year, the term automatically extends for four more years, unless our company's supervisory board gives notice of termination within three months prior to expiration of the initial one-year term. Members of the management board may be reappointed or have their term extended for one or more terms of up to five years each. The supervisory board may remove a member of the management board prior to expiration of his term for good cause, for example in the case of a serious breach of duty or a good faith vote of no confidence at an ordinary or extraordinary shareholders meeting. A member of the management board may not vote on matters relating to certain contractual agreements between that member and our company and may be liable to our company if he has a material interest in any contractual agreement between our company and a third party, which was not disclosed to, and approved by, the supervisory board.

Our company has not entered into contracts with any member of the management board that provide for benefits upon a termination of employment of the member. Our company has entered into severance agreements in the form of consulting agreements with two former members of our company's management board, Dr. Jan Mous and Dr. Reinhard Schneider. For a description of these agreements, see Item 7: Major Shareholders and Related Party Transactions - Related Party Transactions below.

Our company may be represented by two members of the management board or by a member of the management board together with a holder of a general power of attorney (Prokura). According to our company's articles of association, the supervisory board may grant sole power of representation to the members of the management board. Our company's supervisory board has used this authority and has granted sole power of

representation to Dr. von Bohlen und Halbach, the Chairman of our management board.

Table of Contents

The present members of our company's management board, their ages, date when they were first appointed to the management board, the date when their terms expire and their positions are as follows:

Management Board Members

Name	Age	Date First	Term	Position
		Appointed	Expires	
Dr. Friedrich von Bohlen und Halbach	40	March 3, 1997	March 3, 2007	Chairman, Chief Executive Officer
Martin Hollenhorst	43	April 1, 2002	March 31, 2007	Chief Financial Officer
Dr. Daniel Keesman	40	June 27, 2002	June 30, 2007	Chief Business Officer

Dr. Friedrich von Bohlen und Halbach has been chairman of our company's management board and its Chief Executive Officer since our company was founded in March 1997. Previously, Dr. von Bohlen und Halbach was the Chief Executive Officer of WASAG Chemie AG, Essen. Before joining WASAG, Dr. von Bohlen und Halbach held the position of assistant to the chairman of the management board of FAG Kugelfischer KGaA, Schweinfurt, Germany. He started his career as a trainee in research and development at Fresenius AG, Oberursel, Germany, and holds a Ph.D. in neurobiology from the Swiss Federal Institute of Technology (FTII), Zurich.

Martin Hollenhorst joined our company as Chief Financial Officer and a member of our management board in April 2002. Mr. Hollenhorst has accumulated extensive finance, controlling and management experience working for a variety of companies operating on an international scale. Prior to joining our company, he worked as an independent management consultant in Washington, D.C., specializing in advising German-American companies on strategic and acquisition matters. Prior to that, he was Chief Executive Officer of A.N.N. Systems ASA, a German-American software company, and prior to that, he worked for seven years for the Vossloh group, a publicly traded finance and management holding company with an international portfolio of industrial subsidiaries, where he was responsible for finances and controlling. In addition, he was General Manager of Hegenscheidt MFD GmbH, based in Erkelenz, Germany, and Detroit, Michigan. Martin Hollenhorst also worked for six years at the accounting firm Deloitte & Touche, eighteen months of which he spent in the US working as a consultant for mergers and acquisitions.

Effective June 27, 2002, our company's supervisory board appointed Dr. Daniel Keesman as Chief Business Officer and a member of our company's management board. Dr. Keesman joined our company in March 2001 as Vice President of Global Sales and Marketing and was subsequently promoted to Executive Vice President, Global Business. Prior to joining us, he served as Vice President for MDL Information Systems Europe and Managing Director of MDL Information Systems GmbH, Frankfurt. He had also held various other positions within MDL, one of which was Director, Professional Services Europe. He received his Ph.D. in chemistry from the University of Stuttgart, Germany.

Senior Management

Joseph Donahue leads our North American operations as President of our US subsidiary LION bioscience Inc. He joined us in May 2003 from Spotfire, where he most recently served as Vice President of Global Life Sciences and Chemicals Markets. Prior to joining Spotfire, Mr. Donahue was Vice President of North American Sales at MDL Information Systems. During a fifteen-year tenure at MDL, Mr. Donahue held numerous positions of increasing responsibility in sales and marketing. He received degrees in Chemistry and Computer Science from Villanova University.

Other members of our senior management include the following:

Table of Contents

Dr. Anthony Caruso joined our U.S. subsidiary LION Bioscience Research, Inc. (LBRI), in March 2000, as Director of Bioinformatics. He is leading the effort of building Bayer's i-biology platform under our i-biology arrangement with Bayer. In March 2001, Dr. Caruso was promoted to Managing Director of LBRI and became LBRI's President in February 2003. He is currently responsible for all aspects of the LBRI collaboration in Cambridge, MA. Before joining LBRI, Dr. Caruso worked at Cereon Genomics on the that company's SNP and pathway research projects. Prior to that, Dr. Caruso was Group Leader of the Computational Biology Group at Genome Therapeutics Corporation in support of DNA sequencing, microbial genomics, functional genomics and human genetics. Dr. Caruso transitioned from the laboratory research work to bioinformatics while at Genetics Institute, where his career started as a molecular biologist in the department of Hematopoiesis. Dr. Caruso graduated from the University of Massachusetts with a degree in Biology Biotechnology option.

Günter Dielmann joined our company in December 2002 as Vice President Investor Relations. From 1983 to December 2002 Mr. Dielmann worked in the investment banking industry focusing primarily on equity research and portfolio management. Mr. Dielmann received a degree in engineering with an emphasis in business science from the University of Karlsruhe, Germany in 1983.

Dr. Werner Eberhardt serves as Vice President Global Marketing. He joined our company in July 2001 and was initially responsible for support services. Prior to joining our company, Dr. Eberhardt worked for five years each in product marketing and management positions for Merck KGaA and Hewlett-Packard/Agilent. Werner received his Ph.D. at the Max Planck Institute for Biochemistry in Martinsried, Germany and received his Diploma in Analytical Chemistry from the University of Saarbrücken in Germany.

Dr. Thure Etzold joined our company in July 1998 and currently serves as President of our subsidiary LION bioscience Ltd. in Cambridge, U.K. He also serves as Senior Vice President Technologies and Corporate Research at LION. He is a group leader in the research program at the EBI (European Bioinformatics Institute) in Hinxton, U.K. Prior to joining our company, he was a staff scientist at the EMBL (European Molecular Biology Laboratory) in Heidelberg, Germany. Dr. Etzold holds a PhD from the Max-Planck-Institut für Züchtungsforschung in Köln, Germany and joined the Ph.D. program at the EMBL in Heidelberg, Germany.

Dr. Rupert Lück joined our company in March 1998. He currently serves as Senior Director Global System Administration with responsibility for LION's global IT infrastructure. Dr. Lück held several IT lead positions with our company, where he was responsible for building LION's IT systems infrastructure including the high performance computing center at its headquarters in Heidelberg and the integration of our sites in the United Kingdom and in the United States. Prior to joining our company, he worked as an IT consultant for several companies, such as Lufthansa Systems. Dr. Lück received a degree in biophysics and biochemistry and holds a Ph.D. in bioinformatics, both from the University of Düsseldorf, Germany.

Thomas Hein joined our company as Vice President Global Professional Services in November 2001. Since August 2003, he is responsible for our IT development and professional services organizations as Vice President Global Development and Services. Mr. Hein has 18 years of experience in IT architecture and system integration. Before he joined our company, he served as Lead IT architect for Celera Genomics, Rockville, MD. At Celera, he was responsible for the design and implementation of the compute infrastructure used to discover and assemble the human genome. Prior to that appointment, he worked as a consultant for Digital Equipment and Compaq in various customer projects and internal engineering support centers. During that time, he served as the lead IT architect for one of the largest SAP R/3 installations for Ericsson in Sweden. Mr. Hein obtained his Mechanical Engineering degree from the University of Bingen in Germany.

Dr. Kevin Holme serves as Vice President, Cheminformatics Research for our U.S. subsidiary LION bioscience Inc., in San Diego, California. He has responsibility for the development of our predictive ADME technology and products. Dr. Holme joined our company as a result of our acquisition of Trega Biosciences in 2001. At Trega, Dr. Holme was Director of Project Management and was responsible for managing internal drug discovery and technology projects and R&D collaborations. In previous positions with Ligand Pharmaceuticals and Glycomed, he led medicinal chemistry activities focused on the discovery of therapeutics in the area of Inflammation and Cancer. Dr. Holme completed his

doctoral studies in Organic Chemistry at the University of British Columbia, Canada.

Table of Contents

Sven Riethmueller serves as Vice President and General Counsel (head of IP and legal department) and head of the U.S. human resources department. Mr. Riethmueller joined our company in 2000 as U.S. General Counsel. Prior to joining our company, Mr. Riethmueller was an attorney with the international law firm of Sullivan & Cromwell at the firm's London and Frankfurt offices. Mr. Riethmueller holds a Juris Doctor degree from Columbia University School of Law and a Bachelor of the Arts degree from Dartmouth College.

Dr. Jason Theodosiou serves as Vice President Sales Europe & Asia Pacific. Prior to joining our company, Dr. Theodosiou was Vice President Europe for EMAX Solutions a SciQuest.com company offering e-business solutions in the Life Science market. Before that he spent 12 years with MDL Information Systems Inc. His last position with MDL was Regional Manager for Southern Europe. Dr. Theodosiou holds an BSc/MSc and Ph.D. in Organic and Computer Chemistry from the University of Marseilles and an MBA from the ESCP Business School of Paris.

Dr. Hartmut Voss is a co-founder of our company and has been with our company since its beginning in March 1997. He holds the position of Vice President Scientific Content & Sales Support, responsible for the scientific excellence of our offerings for use in the drug discovery process chain. Before joining our company, he worked for 10 years at the European Molecular Laboratory (EMBL) in Heidelberg. Dr. Voss holds a Ph.D. in Molecular Biology from the University of Kaiserslautern, Germany.

Peter Willinger joined our company in November 1998 as Director Controlling and has served as Vice President Global Finance & Operations since October 2001. After studying business economics at the Mannheim University where he received his BA, Mr. Willinger worked as a controller for Rudolf Wild GmbH & Co KG in Heidelberg for eight years before he joined our company.

Compensation

The aggregate compensation of our company's supervisory board, which consisted of six members during FY 2003, was 134,000 for FY 2003. Under our company's articles of association, the compensation for each member of the supervisory board is currently 25,000 per fiscal year. The chairman of the supervisory board currently receives three times this amount. In addition, the members of the supervisory board will receive variable compensation in the amount of 10% of the fixed compensation for the first fiscal year during which we have achieved a positive return on equity. Thereafter, the variable compensation will be a proportionate share of the fixed compensation that is equal to the proportionate return on equity (percentage) based upon our annual financial statements. Each supervisory board member acting as chairman of a supervisory board committee that meets at least twice a year also receives additional annual compensation in the amount of 10,000.00. The shareholders of our company may increase the amount of compensation of the supervisory board by vote at the annual general shareholders meeting. Our company also reimburses the costs incurred by the members of the supervisory board in connection with performing their duties as supervisory board members and any value-added tax (VAT). Members of the supervisory board have received no compensation from any of our company's subsidiaries. None of the members of our supervisory board hold any options to purchase shares in our company. For more information regarding the compensation of our supervisory board, please refer to note 28 to our consolidated financial statements.

The aggregate compensation of our company's entire management board during FY 2003 was 1.16 million, including discretionary bonuses in the aggregate amount of 149,000. The members of the management board have received no compensation from any of our company's subsidiaries. For more information regarding the compensation of our management board, please refer to note 28 to our consolidated financial statements.

Effective March 31, 2003, our company entered into new employment agreements with the current members of our management board. Pursuant to his new employment agreement, our Chief Executive Officer, Dr. von Bohlen und Halbach, will receive a fixed annual salary of 255,645.96.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

He is also entitled to receive variable compensation of up to 65% of the amount of his fixed annual salary. Pursuant to their new employment agreements, our Chief Financial Officer, Martin Hollenhorst, and our Chief Business Officer, Dr. Daniel Keesman, will each receive a fixed annual salary of 205,000. In addition, each of them is also entitled to receive variable compensation of up to 50% of the amount of their fixed annual salary. The actual amount of the variable compensation to be paid to each member of the management board will be determined by our company's supervisory board and will be based upon each member's performance of his respective responsibilities, the performance of the management board as a whole and our success with particular emphasis on whether we reach break-even in the fourth quarter of FY 2004.

Table of Contents

In addition to salaried remuneration and any discretionary bonus, the members of our company's management board receive benefits in the form of automobile allowance, allowance for life or accident insurance, allowance for housing expenses, as well as continued payment of salary in the event of illness for up to three months and payment of relocation expenses. The members of our management board may also elect to have our company contribute up to 10% of their fixed salary to a pension fund or equivalent entity.

The members of our supervisory and management board are also entitled to receive liability insurance coverage, including insurance against liabilities under U.S. securities laws. We currently provide such coverage at no cost to the members of our company's supervisory and management boards.

We did not provide any loans, warranties or guaranties to members of our company's supervisory or management boards during FY 2003, FY 2002 or FY 2001.

Our company has entered into severance agreements in the form of consulting agreements with Dr. Reinhard Schneider and Dr. Jan Mous, two former members of our management board in connection with their resignation as board members and their departure from our Company. We have not paid any consideration to these two former board members for their waiver of options held by them to purchase ordinary shares of our company. We paid 8,350 to Dr. Keesman in consideration for his waiver of 30,000 options held by him to purchase ordinary shares of our company. For more information concerning these arrangements with Dr. Schneider and Dr. Mous, see Item 7: Major Shareholders and Related Party Transactions .

Under our employment arrangements with the head executive of our US subsidiary LION bioscience Inc., the head executive receives remuneration composed of a fixed salary and a annual bonus in an amount determined by the board of directors of LION bioscience Inc. in its discretion. The aggregate compensation paid to Dr. Potenzzone, the Chief Executive Officer of LION bioscience Inc. during FY 2003 was \$384,750, including payment of discretionary bonuses in the aggregate amount of \$84,750 but not including payments made to Dr. Potenzzone under our severance agreement entered into with him in March 2003. For a description of this agreement, see Item 7: Major Shareholders and Related Party Transactions Relationship with Dr. Rudolph Potenzzone .

In April 2003, we hired Joseph Donahue as President of LION bioscience Inc. Mr. Donahue receives an annual fixed salary of \$152,000. He is also eligible to receive a quarterly bonus of up to \$25,000 provided he meets certain quarterly performance milestones to be determined by the board of directors of LION bioscience Inc. Mr. Donahue also received a \$35,000 signing bonus which he must repay to the company if his employment is terminated for cause or he leaves LION bioscience Inc., during the first year of his employment. In addition, our company entered into a consulting agreement with Mr. Donahue in May 2003. Under the terms of this agreement Mr. Donahue receives fees of \$4,000 per month for advisory and training services to our company's German employees in the field of U.S.-related sales, professional services and marketing and treatment of U.S. professionals.

In addition to salaried remuneration and any discretionary bonus, the head executive of LION bioscience Inc. receives benefits in the form of automobile allowance, allowance for life insurance, participation in LION bioscience's 401k plan and health insurance plan.

We did not provide any loans, warranties or guaranties to the head executive of LION bioscience Inc. during FY 2003, FY 2002 or FY 2001 except for a loan to Dr. Rudolph Potenzzone. For a description of this loan, see Item 7: Major Shareholders and Related Party Transactions Relationship with Dr. Rudolph Potenzzone .

Table of Contents**Employees**

The following table sets forth the number of our full-time equivalent employees by job category at the end of each of the last three financial years.

Worldwide Employees

	March 31, 2001	March 31, 2002	March 31, 2003
IT Development	163	278	177
Internal Drug Development (iD3)	155	127	0
Marketing and Sales	41	91	30
Professional services	0	0	77
Administration	82	94	53
Total	441	590	337

Of our full-time equivalent employees at March 31, 2003, 154 were based in Germany or elsewhere in continental Europe, 47 were based in the United Kingdom and 136 were based in the United States of America.

Effective June 30, 2003, we closed our site in Cleveland, Ohio and transferred operations to our Columbus, Ohio site. On August 7, 2003, we announced the closing of our Columbus, Ohio site with a target closing date of September 30, 2003. Accordingly, we expect to reduce the number of our employees on a full-time equivalent basis to approximately 270 by September 30, 2003 to streamline our organization and reduce organizational complexity at our various sites. See [Item 5: Operating and Financial Review and Prospects Overview Restructuring Activities](#) for more information about our restructuring activities.

We do not have a workers council. None of our employees are subject to a collective bargaining agreement. We have not experienced any major labor disputes resulting in work stoppages since our formation.

The employees of our company have formed an improvement committee, consisting of three active representatives elected by our company's employees on an annual or biannual basis. Members of our management generally meet with the improvement committee on a monthly basis and our management board briefs the committee at least once each quarter on our business activities. Our company has agreed with the improvement committee to keep the committee timely informed about our company's business activities and to afford the improvement committee an opportunity to discuss certain actions by our company, including changes to the company's operations or organizational structure, changes to salary or compensation structure, and employment terminations, disciplinary measures and resolution of employee disputes, prior to their implementation. The improvement committee does not represent or bind the employees of our subsidiaries and the committee's notice and participation rights to not extend to actions by our subsidiaries.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

The improvement committee's notice and participation rights are not intended to prevent our company from either creating or eliminating positions of employment. However, if the improvement committee expressly declines to endorse the termination of an individual employee of our company without cause, our company may not proceed with the termination unless urgent action is required. If the committee and management cannot reach a mutually acceptable resolution in a mediation, the matter will be referred to an independent mediator appointed by the local labor court in Heidelberg, Germany. The mediator's decision is binding on our company. Our company pays for the costs of the court-appointed mediation.

Our company has also agreed to consult with the improvement committee in advance of workforce reductions concerning compensatory measures. However, our company is not required to follow the committee's recommendations or to provide a redundancy plan. Our company bears the costs resulting from the activities of the improvement committee, including related travel and legal costs, and provides the necessary meeting and communications facilities. The members of the improvement committee have confidentiality obligations concerning management and employees.

Table of Contents**Share Ownership**

According to the notices we have received, each member of our supervisory board and our management board, other than Dr. Friedrich von Bohlen und Halbach, beneficially own less than one percent of our shares. Dr. von Bohlen und Halbach's share ownership is disclosed in Item 7: Major Shareholders and Related Party Transactions .

Stock-Based Compensation Plans

Our company no longer maintains any employee stock option plans. Prior to our company's annual shareholders meeting on August 7, 2003, our company maintained a 2000 Stock Option Plan, a 2001 Stock Option Plan and a 2002 Stock Option Plan for the benefit of our company's executives and employees and those of our company's subsidiaries as well as the members of our management board.

No options had been issued under the 2002 Stock Option Plan. In March 2003, all holders of options issued under our 2000 and 2001 Stock Option Plans irrevocably waived all of their options and right to purchase our company's ordinary shares under these plans. We paid these option holders consideration for this irrevocable waiver, subject to shareholder approval at the annual general shareholders' meeting on August 7, 2003, in the aggregate amount of approximately 180,000. The shareholders approved payment of this consideration and voted to terminate all of our company's stock option plans and the entire contingent capital reserved for issuances of shares under these stock option plans. See Item 5: Operating and Financial Review and Prospects Overview for more information concerning this option waiver program.

Item 7: Major Shareholders and Related Party Transactions

The share capital of our company consists of ordinary shares, which are issued in bearer form. Accordingly, we generally have no way of determining who our company's shareholders are or how many shares a particular shareholder owns. However, under Section 21 of the German Securities Trading Act (Wertpapierhandelsgesetz), holders of voting securities of a German company admitted to official trading on a stock exchange within the European Union or the European Economic Area are obligated to notify a company of the level of their holdings whenever such holdings reach, exceed or fall below certain thresholds, which have been set at 5%, 10%, 25%, 50% and 75% of a company's outstanding voting rights.

The following table shows the current beneficial ownership of our company's share capital as of September 1, 2003 based on the notifications under the German Securities Trading Act. Our company is not directly or indirectly owned or controlled by any foreign government, any other corporation or by any other natural or legal person(s). Except as noted in the footnotes to the following table, there has been no significant change in the percentage ownership held by any of the beneficial owners of our shares listed in the table during the past three years. None of the listed major shareholders has any special voting rights as a result of their holdings.

<u>Name and address of beneficial owner</u>	Shares beneficially owned	
	Amount of beneficial ownership	Percent of shares

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Dr. Friedrich von Bohlen und Halbach	2,270,868(1)	11.43
Dr. Anna Caterina von Bohlen und Halbach	833,726(2)	4.2
Bayer AG	1,400,000	7.0

Table of Contents

- (1) Does not include 150,000 shares that had been transferred in 2002 by Dr. Friedrich von Bohlen und Halbach to the three underage children of Dr. Friedrich von Bohlen und Halbach and his spouse, Dr. Anna Caterina von Bohlen und Halbach, by way of a gift for estate planning purposes. Dr. von Bohlen und Halbach and Dr. Anna Caterina von Bohlen und Halbach may vote the shares of their children while they are underage. Also does not include 877,800 shares previously held in trust by Dr. von Bohlen und Halbach for third parties. All of these trust relationships have been terminated. In 2002, Dr. Friedrich von Bohlen und Halbach acquired 92,333 shares of our company from his cousin Eckbert von Bohlen und Halbach for a purchase price of 2.54 per share.
- (2) Includes 35,000 shares previously held by Dr. Anna Caterina von Bohlen und Halbach, Dr. Friedrich von Bohlen und Halbach's spouse, in trust for Huberta Giuliani, and 35,000 shares held by Dr. Anna Caterina von Bohlen und Halbach in trust for Hans-Jochen Giuliani. These shares were subsequently transferred to Dr. Anna Caterina von Bohlen und Halbach. Does not include 90,000 shares that had been transferred by Dr. Anna Caterina von Bohlen und Halbach to the three underage children of Dr. Friedrich von Bohlen und Halbach and Dr. Anna Caterina von Bohlen und Halbach by way of a gift for estate planning purposes in 2002. Dr. von Bohlen und Halbach and Dr. Anna Caterina von Bohlen und Halbach may vote the shares of their children while they are underage. In 2002, Dr. Anna Caterina von Bohlen und Halbach sold 387,759 shares of our company on the Frankfurt Stock Exchange.

Related Party Transactions

Relationship with Bohlen Industrie

Bohlen Industrie GmbH, a German corporation, periodically provides insurance brokerage services to us. Bohlen Industrie is owned by relatives of Dr. Friedrich von Bohlen und Halbach, the Chairman and Chief Executive Officer of our company. Bohlen Industrie receives commissions for these services from the insurance companies that we purchase insurance policies from. We have not paid Bohlen Industrie any compensation for these services.

Relationship with Dr. Reinhard Schneider

Our company has entered into a severance agreement in the form of a consulting agreement with Dr. Reinhard Schneider, the former Chief Information Officer and a former member of our company's management board, for consulting services starting in March 2003. The agreement is designed to ensure knowledge transfer from Dr. Schneider to our company. We have agreed to pay Dr. Schneider a total of 15,500 per month under this agreement until September 30, 2005, provided however that if Dr. Schneider provides services to a third party or becomes employed by a third party, this agreement terminates automatically at the end of the calendar year in which such engagement commences and our company will be required to make reduced monthly payments to Dr. Schneider until the effective termination date. Under the agreement, we paid Dr. Schneider a total of 15,400 during FY 2003.

Dr. Schneider, a former member of our management board, held options to purchase 37,100 shares under our company's 2000 stock option plan. These options were granted in August 2000. In March 2003, Dr. Schneider irrevocably waived these options. We did not pay any consideration to Dr. Schneider for this irrevocable waiver. See Item 6: Directors, Senior Management and Employees Share Ownership and Item 5: Operating and Financial Review and Prospects Overview Restructuring Activities for more information about this waiver program.

Table of Contents

Relationship with Dr. Jan Mous

Our company has entered into a severance agreement in the form of a limited consulting agreement with Dr. Jan Mous, the former Chief Science Officer and a former member of our company's management board, for consulting services starting on January 1, 2003. The agreement was designed to ensure knowledge transfer from Dr. Mous to our company. During FY 2003, we paid Dr. Mous a total of \$46,500 under this severance agreement. We paid Dr. Mous an additional \$176,500 during the period from April 1 until June 30, 2003. We have no further payment obligations to Dr. Mous under this agreement, as he took on new employment with a third party in July 2003.

Dr. Mous, a former member of our management board, held options to purchase 105,000 shares under our company's 2000 stock option plan. These options were granted in August 2000. In March 2003, Dr. Mous irrevocably waived these options. We did not pay any consideration to Dr. Mous for this irrevocable waiver. See Item 6: Directors, Senior Management and Employees' Share Ownership and Item 5: Operating and Financial Review and Prospects' Overview' Restructuring Activities' for more information about this waiver program.

Relationship with Dr. Rudolph Potenzzone

In connection with our restructuring activities and the termination of employment of Rudolph Potenzzone, Ph.D., as Chief Executive Officer of our company's U.S. subsidiary LION bioscience Inc., we entered into a severance agreement with Dr. Potenzzone in March 2003. Pursuant to that agreement, we paid Dr. Potenzzone \$50,000 in April 2003 in return for a general release of claims by Dr. Potenzzone. In addition, we agreed to waive Dr. Potenzzone's repayment obligations under a loan agreement made by us to Dr. Potenzzone in March 2001, pursuant to which we had loaned Dr. Potenzzone approximately \$151,000 at an interest rate of 6.5% per year. Under the terms of the severance agreement, we also paid to Dr. Potenzzone a performance based bonus in an aggregate amount of approximately \$32,000 in April 2003. Dr. Potenzzone also held options to purchase a total of 40,000 shares under our company's stock option plans. These options were granted in March and December 2001. In March 2003, Dr. Potenzzone irrevocably waived these options. We paid \$11,280 to Dr. Potenzzone for this waiver.

Relationship with Manual Glynias

In the course of our acquisition of NetGenics, Inc., we entered into a 12-month employment agreement, dated January 31, 2002, with Manual Glynias, the former Chief Executive Officer of NetGenics, to join our U.S. subsidiary LION bioscience Inc. as Senior Vice President. The employment agreement provided that if we terminated Mr. Glynias for other than cause during the term, we agreed to pay him as severance benefits a lump sum equal to his annual base salary. In connection with our restructuring activities and the termination of employment of Mr. Glynias in June 2002, we paid Mr. Glynias \$292,500, his annual base salary prior to his dismissal, during FY 2003. In addition, we loaned Mr. Glynias a total of approximately \$50,000 in February 2002. Mr. Glynias repaid this loan in full upon the termination of his employment with us.

Relationship with Dr. Mark Canales

In connection with our restructuring activities and the termination of employment of Mark Canales, Ph.D., as Chief Technology Officer of our company's U.S. subsidiary LION bioscience Inc., we entered into a severance agreement with Dr. Canales in January 2003. Pursuant to that agreement, we paid Dr. Canales a total of \$30,000 in FY 2003 and a total of \$42,000 during the period from April 1 until May 30, 2003 for total consideration of \$72,000 in return for a general release of claims by Dr. Canales.

Relationship with Dr. John Kiely

In connection with our restructuring activities and the termination of employment of Dr. John Kiely, Ph.D., as Vice President Chemistry of our company's U.S. subsidiary LION bioscience Inc., we entered into a retention and severance agreement with Dr. Kiely in October 2002. Pursuant to that agreement, we paid Dr. Kiely retention and severance benefits totaling approximately \$40,000 in FY 2003 in return for a Dr. Kiely's services prior to the closing of our iD³ activities at our San Diego site and a general release of claims by Dr. Kiely. In addition, we entered into a consulting agreement with Dr. Kiely in October 2002. Under the terms of this consulting agreement, Dr. Kiely agreed to provide consulting services concerning the closing and decommissioning of our iD³ activities at our San Diego site and the transfer and management of assets and intellectual property related to our iD³ activities. During FY 2003, we paid a total of approximately \$58,000 to Dr. Kiely for consulting services rendered by him under this agreement.

Table of Contents

Relationship with Dr. Michael Steiner

Dr. Michael Steiner, a former member of our company's supervisory board, was formerly a partner at Boston Consulting Group in Germany before becoming a partner at Bain & Company in New York, New York. In December 2001 our company retained the Boston Consulting Group to conduct a strategic study of the biotechnology market and to assist us with the refinement of our strategy in response to this study. We paid the Boston Consulting Group a total of approximately 0.6 million in FY 2002 and a total of approximately 1.4 million in FY 2003. Our company's transaction with the Boston Consulting Group was approved by our company's supervisory board.

Item 8: Financial Information

Consolidated Financial Statements

See Item 18. Financial Statements and pages F-1 through F-35.

Other Financial Information

Legal Proceedings

We are not a party to any material litigation or administrative proceedings, nor are we currently aware of any pending or threatened litigation or arbitration proceedings that could have a material adverse effect upon our business, results of operations or financial condition except as follows: Lion Electronics International Computer Discount 2000 GmbH, Germany, a company which sells computer hardware equipment as well as software, and its managing shareholder have asserted rights to the trade name LION based on its trademark filings with the German trademark office. Lion Electronics International Computer Discount 2000 has objected to our company's application for the LION trademark in Germany. We have entered into settlement negotiations with Lion Electronics International Computer Discount 2000 and its managing shareholder to settle this dispute. We intend to reach a settlement agreement that would provide for Lion Electronics International Computer Discount 2000 and its managing shareholder to withdraw their objections to our trademark filings and not to object to or oppose our continued use of the trade name LION, including our logo, for our software products, solutions and services in the areas of biotechnology and life sciences. We expect to enter into a final settlement agreement in the near future. Failure by us to enter into the final settlement agreement with Lion Electronics International Computer Discount 2000 and its managing shareholder could harm our business.

We may become subject to other legal proceedings and claims, either asserted or unasserted, in the future. Any litigation involves potential risk and potentially significant litigation costs, and therefore there can be no assurance that any litigation which may arise in the future would not have such a material adverse effect on our business, financial position, results of operations or cash flows.

Dividend Policy

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Payment of dividends, if any, are approved at our company's annual general shareholders meeting and are paid once a year, although we currently cannot pay any dividends. We can only pay dividends when our company is profitable. Upon proposal by our management board and supervisory board, our company's annual general shareholders meeting approves the allocation of our company's net profits, which our company determines on the basis of our company's unconsolidated financial statements prepared in accordance with the accounting principles generally accepted in Germany. The management board and the supervisory board are authorized to allocate, in their discretion, up to one half of our company's net profit in any fiscal year to other retained earnings (andere Gewinnrücklagen). Shareholders participate in dividends in proportion to the number of shares held by each shareholder.

Table of Contents

We have never declared or paid any dividends. We expect to retain our future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying any dividends in the foreseeable future.

Dividends approved at the annual general shareholders meeting are payable on the first stock exchange trading day after that meeting, unless decided otherwise at the meeting. When shareholders hold shares that are entitled to dividends in a clearing system, the dividends are paid according to that clearing system's rules. We will publish notice of dividends paid and the paying agent or agents appointed in the Internet version of the Federal Gazette (www.ebundesanzeiger.de).

We will not pay any dividends directly to holders of our company's American Depositary Shares (ADSs). Instead, we will pay dividends and make other distributions to the depositary's nominee who acts as the registered owner of the shares underlying our company's ADSs. JPMorgan Chase Bank currently acts as the depositary for our company's ADSs.

The depositary has agreed to pay ADS holders cash dividends or other distributions it receives on our company's ordinary shares or other deposited securities, after deducting expenses. Such distributions, if any, will be made in proportion to the number of underlying shares represented by a holder's ADSs.

We may make various types of distributions with respect to our securities. Except as stated below, to the extent the depositary is legally permitted, it will deliver such distributions to ADS holders in proportion to their interests in the following manner:

Cash. The depositary will convert cash distributions from foreign currency to US dollars as promptly as practicable if this is permissible and can be done on a reasonable basis. The depositary will endeavor to distribute such cash in a practicable manner, and may deduct any taxes required to be withheld, any expenses of converting foreign currency and transferring funds to the United States, and certain other expenses and adjustments. In addition, before making a distribution, the depositary will deduct any taxes withheld. ADS holders bear the risk if the exchange rates fluctuate during a time when the depositary cannot convert the currency.

Shares. In the case of a distribution in shares, the depositary will issue additional ADSs to evidence the number of ADSs representing such shares. Only whole ADSs will be issued. Any shares which would result in fractional ADSs will be sold and the net proceeds will be distributed to the ADS holders entitled thereto.

Rights to Receive Additional Shares. In the case of a distribution of rights to subscribe for additional shares or other rights, if we provide satisfactory evidence that the depositary may lawfully distribute such rights, the depositary may arrange for ADS holders to instruct the depositary as to the exercise of such rights. However, if we do not furnish such evidence, the depositary may:

Sell such rights on the German stock exchange on which they are traded, if practicable, and distribute the net proceeds as cash; or

Allow such rights to lapse, whereupon ADS holders will receive nothing.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

We have no obligation to file a registration statement under the Securities Act in order to make any rights available to ADS holders. If we do not choose to file a registration statement, the Securities Act will restrict the sale, deposit, cancellation and transfer of ADSs issued upon the exercise of rights.

Table of Contents

Other Distributions. In the case of a distribution of securities other than those described above, the depositary may either

Distribute such securities in any manner it deems fair and equitable; or

Sell such securities and distribute any net proceeds in the same way it distributes cash.

Fractional cents will be withheld without liability for interest and added to future cash distributions.

To the extent the depositary determines, after consultation with us, that any distribution is not lawful or practicable with respect to any holder, the depositary may make the distribution in a method that it deems lawful and practicable, including the distribution of foreign currency or securities. The depositary may also retain such items, without paying interest on or investing them, on behalf of the ADS holder as deposited securities.

There can be no assurances that the depositary will be able to convert any currency at a specific exchange rate or sell any property, rights, or shares or other securities at a specified price, or that any such transactions can be completed within a specified time period.

Significant Changes

No significant change has occurred since the dates of the annual financial statements included in this annual report.

Item 9: The Offer and Listing

Nature of Trading Market

General

The principal trading market for our company's ordinary shares is the Frankfurt Stock Exchange. American depositary shares (ADSs), each representing one ordinary share, are traded on the Nasdaq National Market and trade under the symbol LEON. The depositary for the ADSs is JPMorgan Chase Bank. As of March 31, 2003, there were a total of 1,298,968 ADSs outstanding, held by 222 holders of record having addresses in the United States and 10 holders of record with a non-U.S. address. As of September 1, 2003, there were a total of 1,136,438 ADSs outstanding, held by 189 holders of record having addresses in the United States and 8 holders of record with a non-U.S. address. Since our company's ordinary shares are in bearer form only, we have only limited ownership information concerning our publicly traded ordinary shares and are unable to determine the number of ordinary shares directly held by persons with U.S. addresses.

Trading on the Nasdaq National Market

ADSs representing our company's shares have traded on the Nasdaq National Market since August 11, 2000. The table below sets forth, for the periods indicated, the high and low closing prices for the ADSs on the Nasdaq National Market.

Table of Contents

	LION ADSs	
	Nasdaq National Market	
	High	Low
	\$	\$
Most Recent Fiscal Years		
Fiscal Year Ended March 31, 2001	106.50	18.75
Fiscal Year Ended March 31, 2002	37.80	7.20
Fiscal Year Ended March 31, 2003	10.35	2.25
Most Recent Fiscal Quarters		
April 1 through June 30, 2001	37.80	19.25
July 1 through September 30, 2001	26.00	7.20
October 1 through December 31, 2001	19.35	9.65
January 1 through March 31, 2002	18.00	8.90
April 1 through June 30, 2002	10.35	3.88
July 1 through September 30, 2002	4.34	2.55
October 1 through December 31, 2002	6.30	2.25
January 1 through March 31, 2003	5.96	2.90
April 1 through June 30, 2003	5.44	3.10
	High	Low
	\$	\$
Most Recent Six Months		
March 2003	3.82	2.80
April 2003	4.90	3.10
May 2003	5.62	4.55
June 2003	5.44	4.25
July 2003	4.85	3.73
August 2003	5.70	3.71

On September 2, 2003, the closing sales price per ADS on the Nasdaq National Market was \$4.75.

Trading on the Frankfurt Stock Exchange

Our company's ordinary shares have been listed in the Geregelter Markt segment (Prime Standard) of the Frankfurt Stock Exchange since January 1, 2003. Our company's shares are also included in the TecDAX index.

The TecDAX index comprises the Prime Standard's 30 largest companies of the technology sector which are not in the DAX index, the index which comprises the shares of the 30 largest German companies. Deutsche Börse AG, the operator of the Frankfurt Stock Exchange periodically reviews whether companies included in the TecDAX index still meet the index criteria, which are based in part on share trading volume and market capitalisation. If our company does not meet these criteria in the future, our company's shares may no longer be included in the TecDAX.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

From August 11, 2000 until December 31, 2002, our company's shares were traded on the Neuer Markt segment of the Frankfurt Stock Exchange. Neuer Markt is a market segment for tech companies that was established in 1997 based on a contractual relationship with the Frankfurt Stock Exchange. Following a transition period, the Neuer Markt was terminated as of June 5, 2003.

The Frankfurt Stock Exchange regulations effective as of January 1, 2003 introduced two new segments based on different transparency standards, the General Standard and the Prime Standard. Companies with shares listed in the General Standard are subject to the national minimum legal requirements of the official stock market or regulated stock market. Companies with shares listed in the Prime Standard must comply with additional international transparency requirements.

Table of Contents

The Frankfurt Stock Exchange is the largest of the eight German stock exchanges. The aggregate annual turnover of the Frankfurt Stock Exchange in calendar year 2002 amounted to 3.0 trillion (based on the Frankfurt Stock Exchange's practice of separately recording the sale and purchase components involved in any trade) for both equity and debt instruments. At December 31, 2002, the equity securities of 5,768 corporations, including 4,901 foreign corporations, were traded on the Frankfurt Stock Exchange.

Prices are continuously quoted on the Frankfurt Stock Exchange floor each business day between 9:00 a.m. and 8:00 p.m. Central European Time for the ordinary shares and for other actively traded securities. Markets in listed securities are generally of the auction type, but listed securities also change hands in inter-bank dealer markets both on and off the Stock Exchange. Price formation is determined by open outcry by state-appointed specialists (amtliche Kursmakler) who are themselves exchange members, but who do not, as a rule, deal with the public. The Exchange continuously quotes prices for active stocks during Stock Exchange hours.

Transactions on the Frankfurt Stock Exchange are settled on the second business day following trading. Transactions off the Frankfurt Stock Exchange (which may be the case if one of the parties to the transaction is foreign) are generally also settled on the second business day following trading (although a different period may be agreed upon by the parties). A quotation can be suspended if orderly stock exchange trading is temporarily endangered or if a suspension is necessary in order to protect the public interest. Under German law, customers' orders to buy or sell listed securities must be executed on a stock exchange unless the customer gives other specific instructions for an individual transaction or an indeterminate number of transactions.

Our company's ordinary shares are also traded on XETRA, a computerized trading system of the Frankfurt Stock Exchange. The trading hours for XETRA are from 9:00 a.m. until 8:00 p.m. Central European Time on each business day. Securities traded on XETRA include the securities of companies listed on the TecDAX segment of the Frankfurt Stock Exchange, as well as other stocks, warrants, and bonds. XETRA is subject to the rules and regulations of the Frankfurt Stock Exchange.

The table below sets forth, for the periods indicated, the high and low closing prices for our company's ordinary shares on the Frankfurt Stock Exchange, as reported by the Frankfurt Stock Exchange's XETRA trading system. Conversion of euros into dollars has been made at the daily conversion rate for each day during the respective period. This conversation is provided solely for your convenience.

	LION Ordinary Shares	
	Frankfurt Stock Market	
	High	Low
Most Recent Fiscal Years		
Fiscal Year Ended March 31, 2001	123.5	20.05
Fiscal Year Ended March 31, 2002	42.20	7.90
Fiscal Year Ended March 31, 2003	11.70	2.35
Most Recent Fiscal Quarters		
April 1 through June 30, 2001	42.20	23.00
July 1 through September 30, 2001	32.00	7.90

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

October 1 through December 31, 2001	22.45	10.85
January 1 through March 31, 2002	19.75	9.90
April 1 through June 30, 2002	11.70	3.70
July 1 through September 30, 2002	4.48	2.66
October 1 through December 31, 2002	6.20	2.35
January 1 through March 31, 2003	5.65	2.76
April 1 through June 30, 2003	4.85	2.90

Table of Contents

	<u>High</u>	<u>Low</u>
Most Recent Six Months		
March 2003	3.85	2.70
April 2003	4.55	2.76
May 2003	5.05	3.77
June 2003	4.65	3.75
July 2003	4.22	3.35
August 2003	4.59	3.28

On September 2, 2003, the closing sales price per share on the Frankfurt Stock Exchange was 4.43, equivalent to approximately \$4.07 per share, converted at the noon buying rate for September 2, 2003.

Item 10: Additional Information**Registration with the Commercial Register**

Our company is registered with the commercial register of the local court (*Amtsgericht*) in Heidelberg, Germany, under the number HRB 5706 and the corporate name LION bioscience Aktiengesellschaft. Its registered office (*Sitz*) is Heidelberg and its principal executive office is located at Waldhofer Str. 98, 69123 Heidelberg, Germany.

Corporate Governance Interested Transactions

For information regarding restrictions on the powers of a member of the supervisory board or the management board to vote on matters in which such member is interested, see Item 6: Directors, Senior Management and Employees .

Articles of Association

This section summarizes the material rights of our company's shareholders under German law, and the material provisions of our company's articles of association as amended by resolution adopted by the annual general meeting of our company's shareholders on August 7, 2003. This description does not describe the articles of association in their entirety. Copies of our company's articles of association are publicly available from the commercial register in Heidelberg, and an English translation of them has been filed with the SEC as Exhibit 1 to this annual report. See also Item 6: Directors, Senior Management and Employees for a description of the corporate governance of our company.

Share Capital

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Our company's share capital amounts to 19,870,175 divided into 19,870,175 ordinary bearer shares without par value. Our company may issue share certificates in global form. Our company has issued one global share certificate. Shareholders are not entitled to have single shares issued in certificate form. As of September 1, 2003, there were 19,870,175 shares of our company issued and outstanding, all of which were fully paid. Our shares are freely transferable.

Recent Increases in our Company's Share Capital

In March 2001, our company's management board resolved, with the consent of the supervisory board, to use authorized capital in the nominal amount of \$500,000 to issue 500,000 shares underlying our company's ADSs to Trega's former stockholders in connection with our acquisition of Trega.

Table of Contents

In January 2002, our company's management board resolved, with the consent of the supervisory board, to use authorized capital in the nominal amount of 1,116,175 to issue 1,116,175 shares underlying our company's ADSs to NetGenics' former stockholders in connection with our acquisition of NetGenics.

Authorized Capital (Genehmigtes Kapital)

Our company's articles of association currently authorize our company's management board to increase, in each case, with consent of the supervisory board, our company's share capital at any time and from time to time on or before July 1, 2007 by up to 9,935,087 by issuing new shares against either cash contributions or contributions in kind. Our company's management board is also authorized to exclude, in each case with the consent of the supervisory board, the preferential rights of the existing shareholders to subscribe for any issue of new shares in the following cases:

in case of a capital increase against cash contributions, if the capital increase does not exceed a nominal amount of 1,900,000 and 10% of the existing share capital and the issuing price is not significantly less than the share price quoted on any stock exchange on which our company's shares are traded; and

in case of a capital increase against contributions in kind, if the capital increase is effected to acquire other companies, company divisions, or shareholdings in companies.

Conditional Capital (Bedingtes Kapital)

By resolution approved at our company's annual general shareholders' meeting held on August 7, 2003, our company's entire conditional capital has been terminated.

Future Share Capital; Preferential Rights

Under German corporate law, our company's share capital may be increased against either contributions of cash or contributions in kind by a resolution adopted at an ordinary or extraordinary shareholders' meeting with a majority of three quarters of the share capital represented at the meeting at which the resolution is adopted, or by a resolution of the management board with the consent of the supervisory board by using our company's authorized capital.

In accordance with the German Stock Corporation Act (Aktengesetz), an existing shareholder in a stock corporation has a preferential right to subscribe for any issue of new shares, debt instruments convertible into shares and participating debt instruments (Genussrechte) in proportion to the number of shares held by that shareholder in the existing share capital of our company. The shareholders' meeting may exclude this preferential right by a majority of at least three quarters of the share capital represented at the meeting at which the resolution authorizing the capital increase is adopted. In addition to these formal procedural requirements, the exclusion requires a substantive justification. The management board is required to submit a written report concerning this justification to the general shareholders' meeting. The goal pursued by the company through the issuance of the new security must outweigh the exclusion of this preferential right and the goal could not be reasonably achieved without it. This precondition of a substantive justification is not required for any increase in the share capital for contributions in cash if the increase does not exceed 10% of the existing share capital and the issue price is not substantially less than the market price for shares that are

traded on a stock exchange.

The preferential rights are freely assignable and may be traded on German stock exchanges for a specified time within the subscription period. The preferential rights lapse if they are not used.

Table of Contents

Dividend and Liquidation Rights

Upon proposal by our company's management board and supervisory board, the allocation of our company's net profits, which our company determines on the basis of its unconsolidated financial statements prepared in accordance with the accounting principles generally accepted in Germany, is approved at the annual general shareholders meeting. The management board and the supervisory board are authorized to allocate, in their discretion, up to one-half of our company's net profit in any fiscal year to other retained earnings. Shareholders participate in dividends in proportion to the number of shares held by each shareholder. For more information regarding dividends, see Item 8: Financial Information Dividend Policy .

In accordance with the German Stock Corporation Act, upon our company's liquidation, shareholders will receive, in proportion to their shareholdings, any liquidation proceeds remaining after payment of all of our company's liabilities.

Voting Rights and General Meetings

A general shareholders' meeting may be called by our company's management board or supervisory board. Shareholders holding in the aggregate at least 5% of our company's issued share capital may also require the management board to call a meeting. The annual general shareholders meeting must take place within the first eight months of our company's financial year. The management board calls this meeting upon the receipt of the supervisory board's report on the annual financial statements.

Under our company's articles of association, our company must publish notices of shareholders meetings in the Internet version of the German Federal Gazette (*elektronischer Bundesanzeiger*, www.bundesanzeiger.de) at least one month before the last day on which the shareholders must deposit their shares for the meeting.

Under our company's articles of association, those shareholders who have deposited their shares during regular business hours before any general meeting with our company and left on deposit until the end of this general meeting, with a public notary, with a securities depository bank (Wertpapiersammelbank) or with any other place of deposit specified in the notice of the meeting, may participate in and vote in that general meeting. Shares are also deemed to have been deposited if, with the consent of an approved depository, they are deposited with a bank in a blocked security deposit until the end of the general meeting. The deposit must be made by no later than the seventh day before the day of the general meeting. If such day falls on a Saturday, Sunday, or national holiday at the place of deposit, the deposit may take place on the immediately following business day. Saturdays will not count as business days. The voting rights attached to the shares may be exercised by an authorized representative of the shareholder. This authorization must be in written form, and if so specified in the invitation to the general meeting, may be submitted to our company by facsimile or in electronic form.

Instead of voting in person at the meeting, shareholders may vote their shares by proxy after having conferred a power of attorney by signing and returning the proxy card mailed to them in advance of the meeting. Our company mails a meeting notice to our shareholders which includes a proxy card, and an agenda describing the items to be voted on at the meeting. As a foreign private issuer, we are not required to file a proxy statement under U.S. securities law.

A shareholder or a group of shareholders holding a minimum of either 5% or 500,000 of our company's registered capital may require that additional or modified proposals be made at the general meeting.

Each share carries one vote at general shareholder meetings. According to our company's articles of association, resolutions are generally passed with a simple majority of the votes cast. Under German stock corporate law and our articles of association, except in certain circumstances, as stated below, such a majority is required to amend the rights of our stockholders. German law requires that the following matters, among others, be approved by the affirmative vote of 75% of the shares present at the shareholders meeting at which the matter is proposed:

Table of Contents

changing the objects and purposes provision in the articles of association;

approving authorized and conditional capital increases and decreases;

excluding preemptive rights of shareholders to subscribe for new shares;

dissolving our company;

merging into, or consolidating with, another stock corporation;

transferring all or virtually all of our assets; and

changing our corporate form.

Although our company must notify shareholders of any ordinary or extraordinary general shareholders meeting as described above, neither the German Stock Corporation Act nor our company's articles of association fixes a minimum quorum requirement. This means that holders of a minority of our company's shares could control the outcome of resolutions not requiring approval by a specified majority of our company's outstanding share capital.

Change In Control

Our articles of associations do not contain any specific provisions that would have an effect of delaying, deferring or preventing a change in control in our company or that would only apply in the context of a merger, acquisition or corporate restructuring involving our company or any of our subsidiaries.

On January 1, 2002, the German Takeover Act (Wertpapiererwerbs-und Übernahmegesetz) became effective. It requires, among other things, that a bidder seeking control of a company with its corporate seat in Germany and traded on a European Union stock exchange must publish advance notice of a tender offer, submit a draft offer statement to the Federal Supervisory Authority for Securities (Bundesanstalt für Finanzdienstleistungsaufsicht, or BaFin) for review, and obtain certification from a qualified financial institution that adequate financing is in place to complete the offer. Once a bidder has acquired shares representing 30% of the voting power, it must make an offer for all remaining shares of the target. The Takeover Act requires the management board of the target to refrain from taking any measures that may frustrate the success of the takeover offer. However, the target's management board is permitted to take any action which a prudent and diligent management of a company that is not the target of a takeover bid would also take. Moreover, the target's management board may search for other bidders and, with the prior approval of the supervisory board, may take other defensive measures, provided that both boards act within the scope of their general authority under the German Stock Corporation Law. The management board may also adopt specific defensive measures if the supervisory board has approved such measures and if the measures were specifically authorized by the shareholders no later than 18 months in advance of a takeover bid by resolution of 75% of the votes cast.

Corporate Purpose

Under our company's articles of association, its corporate purpose is:

the analysis and interpretation of genetic information and functions in the field of biotechnology and their use;

the development, manufacture, distribution, implementation, sale of and trade in IT products, systems and processes in the area of biotechnology, as well as the provision of services in the area; and

consulting services in the area of biotechnology for the life sciences as well as scientific information and documentation.

Our company is entitled to enter into any and all business transactions and take any and all measures which directly or indirectly seem to be necessary or useful to achieve its purpose. For this reason, our company is entitled to establish branches at home and abroad, found, acquire and participate in other enterprises of the same or similar kind and take over their management or limit itself with respect to the management of the enterprise in which it holds an interest. Our company is entitled to spin off its business in whole or in part into affiliated companies.

Table of Contents

Disclosure of Shareholdings

As of January 1, 2002, under the revised German Security Trading Act (Wertpapierhandelsgesetz) holders of voting securities of a German company admitted to official trading on a stock exchange within the European Union or the European Economic Area whose voting rights reach, exceed or, after exceeding, fall below 5%, 10%, 25%, 50% or 75% of a company's outstanding voting rights are obligated to notify our company and the Federal Authority for the Supervisory of Financial Services (Bundesanstalt für Finanzdienstleistungsaufsicht, or BaFin) thereof. No rights shall attach to the ordinary shares in our company held by a company or person so long as it has not made this disclosure. These rules apply to holders of our ordinary shares and our ADSs, including foreign holders.

Notices, Paying Agent and Depository

In general, our company publishes official notices exclusively in the Internet version of the German Federal Gazette (elektronischer Bundesanzeiger, www.ebundesanzeiger.de), unless our company is required to publish notices in the print version of the German Federal Gazette (Bundesanzeiger). For example, our company is required to publish its annual report prepared in accordance with German law in the print version of the German Federal Gazette. In addition, our company publishes notices regarding its shares in at least one national newspaper designated for notices by the Frankfurt Stock Exchange as well as on our company's web-page. Any ad-hoc-notices are published, if necessary, via a separate service provider.

In addition, our company files information with the SEC as described under the section entitled Documents on Display.

Deutsche Bank Aktiengesellschaft is the German Paying and Depository Agent, at whose offices any measures regarding our company's shares may be taken free of charge.

Fiscal Year

Our financial year begins April 1 and ends March 31 of the following year.

Material Contracts

This section provides a summary of all material contracts to which we are a party and that have been entered into or amended during the two immediately preceding fiscal years.

Our Agreements with Bayer AG

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

We have two separate material long-term arrangements with Bayer, each of which were materially amended during the immediately preceding two fiscal years. The full text of the agreements and amendments discussed below along with English translations thereof, where applicable, is available as exhibits to this annual report, last fiscal year's annual report or our Registration Statement on Form F-1, Registration No. 333-12262, filed with the Securities and Exchange Commission (or SEC) on July 10, 2000, or our Registration Statement on Form F-4, Registration No. 333-13150, filed with the SEC on February 9, 2001.

Basic Agreement

Table of Contents

On June 18, 1999, our company entered into a basic agreement with Bayer providing for the development and implementation by us of an innovative Bio-IT solution for Bayer and for the establishment of a research and development cooperation between the two companies over a five-year period. Specifically, we agreed to establish and maintain a highly innovative IT environment to enable Bayer to more easily and successfully identify and qualify specified targets, such as novel genes or new annotations of genes that were already part of Bayer's gene discovery activities, new expression markers, and single nucleotide polymorphisms, from genomics sources. Accordingly, we agreed to:

Incorporate our IT solutions into the drug discovery programs of the Bayer group;

Identify and extract a significant number of specified targets from existing public and private data bases and other sources available to us;

Deliver novel annotations, including prediction of function and other significant features for genes that are already part of Bayer's gene discovery activities;

Develop life science informatics software systems and solutions as agreed upon jointly to provide faster identification of targets for drug discovery, more efficient validation and novelty check of drug target candidates, faster and better prediction of gene functions, novel search patterns and algorithms, and identification of diagnostic and pharmacogenomic markers.

The agreement required our company to establish LION bioscience Research Inc., based in Cambridge, Massachusetts, as a U.S. subsidiary wholly owned by our company as one of the vehicles through which LION would perform the basic agreement. Our company agreed to make available to LION bioscience Research the necessary information technology, as well as other services and supplies. Our company also agreed to staff LION bioscience Research with a sufficient number of expert scientists and engineers from its existing workforce.

In addition, we have agreed to establish and to maintain a Center of Excellence at or near the city of Boston, Massachusetts, throughout the term of the basic agreement. The Center of Excellence, which consists of a group of highly qualified bioinformaticians and other experts, provides consulting services to the Bayer group.

LION bioscience Research operates pursuant to a five-year business plan and annual budgets and conducts its research activities in accordance with annual research and development plans.

Bayer holds a veto right with respect to proposed members of LION bioscience Research's board of directors and the issuance of additional shares by LION bioscience Research. The agreement also sets up a steering committee consisting of two representatives of each party, which approves revisions to LION bioscience Research's five-year business plan, its annual budget, the implementation of its annual research and development plan and any other matters concerning LION bioscience Research's business activities brought before the committee by one of its members. The agreement initially provided the chairman of the steering committee, who is appointed by Bayer, with a tie-breaking vote.

The parties have agreed that all rights and title to all information technology by LION bioscience Research shall belong to our company. At the same time our company is required to grant Bayer a license to use such information technology for Bayer's internal purposes only. Our company has agreed not to market or distribute any of this information technology commercially for a period of one year from the time it becomes workable and has been tested and accepted by Bayer. The parties have also agreed that all right and title to targets and genetic markers identified by LION bioscience Research shall belong to Bayer.

In consideration for our services under the agreement, Bayer has agreed to reimburse our company for the operational costs of LION bioscience Research that are incurred pursuant to its annual budget, up to an annual amount of \$5 million. The steering committee may also agree to increase this figure by up to 10%, but the aggregate amount of these reimbursements may not exceed the amount of \$25 million during the term of the basic agreement.

Table of Contents

Bayer also pays our company an annual fixed fee in the amount of 1.28 million. In addition, Bayer also pays us a running fee on drugs and/or diagnostic products developed and marketed by Bayer based on the targets and genetic markers identified and found by LION bioscience Research or our company by means of the IT provided by our company or LION bioscience Research.

The basic agreement grants Bayer the option, exercisable within six months prior to the expiration of the basic agreement, to acquire all of the shares of LION bioscience Research from our company for a price corresponding to the equity paid in by our company, which was \$1.0 million as of March 31, 2003. If Bayer chooses to exercise this option, Bayer is required to change the name of LION bioscience Research. Our company has a right of first refusal to exploit commercially any new IT software developed by LION bioscience Research during a period of two years after any acquisition of the shares by Bayer, if this software competes with our activities and Bayer decides to exploit it commercially.

The basic agreement does not prevent us from selling our products, services or solutions to customers except for providing our integrated IT-solutions to other customers in the greater Boston, Massachusetts, area and except to the extent that providing such products, services or solutions would require our company to withdraw personnel from LION bioscience Research, in each case for a period of three years from the date of the basic agreement.

In June 2000, we expanded this arrangement with Bayer into the areas of plant protection and animal health.

In October 2000, we entered into an amendment to this agreement with Bayer to remove the provision that the chairman of the joint LION/Bayer steering committee, who is appointed by Bayer, holds a tie-breaking vote.

In February 2002, we entered into another amendment to this agreement with Bayer to provide for an additional one-time success payment to us of \$2.310 million to us to reflect our accelerated performance of our obligations related to targets under this agreement.

In June 2003, we entered into a further amendment to the Basic Agreement with Bayer to take into account the developments and changing needs at Bayer. Accordingly, our company and Bayer mutually clarified certain provisions of the Agreement, including in particular clarifications on payment terms and Bayer's use of our bioSCOUT software. In addition, the parties agreed to modify our obligations regarding the delivery of drug targets and IT solutions. Specifically, we are no longer obliged to deliver any further novel drug targets. Instead, we agreed to use our best efforts to analyze 1,200 genes as drug targets that belong to certain gene classes known to be successful in drug development as specified further in a Target Validation Plan including targets already analyzed by us in calendar year 2003 prior to the effective date of this amendment during the term of the basic agreement. We are to provide certain analysis and annotation services relating to each of these targets. In addition, the focus of our software development activities for the remainder of the term of the basic agreement is now defined in a Bioinformatics Development Plan. Under this plan, we are to concentrate our IT development activities on creating the Bayer Gene Catalogue, on text-mining and data-mining projects, algorithms research and central bioinformatics services as specified in the Bioinformatics Development Plan.

Development Agreement

On October 13, 2000, our company and Bayer entered into a development agreement, pursuant to which our company has agreed to provide Bayer with an integrated pharmacophore and informatics technology platform to speed Bayer's identification of lead candidates for its drug and agricultural chemical programs. Under this arrangement, we will deliver existing, and will develop future, information technology and software,

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

such as pharmacophore and informatics tools, for Bayer to significantly enhance Bayer's lead identification and optimization capabilities for pharmaceutical and agrochemical discovery and development.

Under this agreement, Bayer agreed to pay to our company total consideration in the amount of \$16.25 million for our performance of the development agreement, payable in installments over the course of the agreement, and one-time fees and license fees in an aggregate amount of \$2 million and a management fee in the amount of \$3.25 million, payable in six equal installments.

Table of Contents

Our performance under the agreement was originally divided into four successive milestones and the agreement would originally expire when Bayer accepted our performance of the fourth milestone, which was originally due on March 1, 2003 or when Bayer had twice objected to our performance of a milestone. Bayer did not accept the deliverables under the first milestone.

As a result, we entered into amendments to the development agreement with Bayer in December 2001 and March 2002 by revising the original milestone requirements and dates as well as the original payment schedule. Under the development agreement as amended, we were required to achieve a new milestone by April 1, 2002. Bayer did not accept the deliverable due on April 1, 2002 in connection with the milestone set for that date. Accordingly, the parties entered into a fourth amendment to the development agreement in December 2002, extending the due dates for the remaining deliverables due Bayer, with the final deliverable under the development agreement, as amended, now due in July 2004.

As part of the fourth amendment, Bayer has agreed to the use of our LION DiscoveryCenter integration platform for key parts of the development project. In addition, the parties have agreed to reduce future fees due to us under the project. At the same time, we will assume additional responsibilities for developing analysis and visualization software components, thus increasing our share of the total project. We had previously relied on a subcontractor for development of various of these components.

Under the development agreement as amended, future milestone payments are tied to achieving corresponding deliverables. If we do not timely achieve these future milestones, Bayer may withhold the corresponding milestone payment and may terminate the development agreement. The aggregate amount outstanding under the development agreement, as amended, as of September 1, 2003, is \$3 million. If we meet our milestone requirements as set forth in the development agreement as amended, Bayer will pay us a total of \$1.9 million in milestone payments for the remainder of FY 2004. The failure to receive milestone payments or the termination of our development agreement with Bayer could have a material adverse effect on our business.

Any software developed or invented under this development agreement and all other developments, inventions, know-how, whether patentable or not, will be owned by our company. We will grant to Bayer and the Bayer group an irrevocable, non-transferable, non-exclusive, worldwide license to use this software, inventions and know-how for internal purposes only for the maximum period of time legally possible. We have the unrestricted right to commercialize this software, inventions and know-how, provided that new software for pharmacophore identification and project tracking may not be commercialized until acceptance of our performance of the last milestone.

During the arrangement and for nine months after acceptance of the last milestone, we may have to pay to Bayer royalties in the amount of 10% of all payments received by us for new products created or services performed in the field of pharmacophore and informatics. The overall amount of such royalty payments for a single third party agreement is limited to a maximum of \$750,000. Our obligation to pay such royalties terminates after nine months from the date of acceptance of the last milestone under the development agreement.

Pursuant to the agreement, the parties have established a steering committee that will approve details of the software to be delivered by us and to approve any changes to the milestones. The parties have also agreed to set up an operational committee, which will coordinate the operational activities under this development agreement. Each party has the right to appoint four members to the operational committee with our company appointing the chairman and Bayer appointing the vice chairman of the committee.

Exclusive License Agreement with the EMBL Concerning SRS

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

On September 15, 1998, our company and EMBL entered into a worldwide, exclusive license agreement under which our company is exclusively entitled to use the Sequence Retrieval System (SRS) software version 5.1 developed at EMBL.

Table of Contents

On January 21, 2002, we entered into a comprehensive amendment to this exclusive agreement in the form of an exclusive software license and distribution agreement. Under the terms of this agreement, EMBL granted us an exclusive, irrevocable license to use and exploit all versions, up to and including version 5.1, of the SRS computer program and all associated versions of the computer programs IKARUS, and their respective source code, updates, upgrades and related documentation, whether released before or after the effective date of this agreement. The license is perpetual and covers the worldwide territory and all fields and extends to all commercial and non-commercial purposes, including the right to grant sublicenses to the SRS software, modify and develop the SRS software further, and distribute the software to our customers.

The parties further intend that we are authorized as an exclusive licensee to pursue copyright infringement actions against commercial infringers.

In consideration for the rights granted in this agreement, we agreed to pay to EMBL a total of DM 220,000 (112,484) in three annual installments commencing on January 1, 2002. EMBL is not entitled to any other remuneration, including any royalty payments.

Upon request, EMBL agrees to cooperate and assist us in enforcing our rights to the SRS software under this agreement, including through enforcement or termination of any third party licenses and providing evidence in support of any infringement or enforcement action brought by us against a third party and in our efforts to persuade or judicially enjoin third parties from distributing or offering our programs through the Internet. EMBL has also assigned us the right to pursue legal action, in particular infringement actions, to enforce licenses or agreements to which EMBL or its affiliate is a party concerning SRS, without joining EMBL.

Except for specified third parties, EMBL will, upon our request, inform non-academic third parties that have been granted or have asserted a license or use rights to SRS or that have downloaded SRS from EMBL's web site or ftp server as follows:

LION has held the worldwide exclusive rights to the commercial use and exploitation of SRS since September 1998 for SRS version 5.1 and since July 2001 for earlier versions.

Any non-academic third party licenses or use rights (except as specified in the agreement) for use of SRS that have been granted by EMBL are terminated effective immediately.

Any third party that has downloaded or obtained or intends to download or obtain SRS from any Internet web site or ftp server after the effective date of the September 1998 exclusive SRS license agreement has no right to use these SRS versions and infringes upon our rights.

Non-academic users of SRS should obtain a license for their use from us.

Exchange Controls and Other Limitations Affecting Security Holders

The euro is a fully convertible currency. At the present time, Germany does not restrict the export or import of capital, except for investments in certain areas in accordance with applicable resolutions adopted by the United Nations and the European Union. However, for statistical purposes only, every individual or corporation residing in Germany must report to the German Central Bank (Deutsche Bundesbank), subject only to certain immaterial exceptions, any payment received from or made to an individual or a corporation residing outside of Germany if such payment exceeds 12,500 (or the equivalent in a foreign currency). In addition, every individual or corporation residing in Germany must report

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

any claims against or any liabilities payable to an individual or a corporation residing outside of Germany if such claims or liabilities, in the aggregate, exceed 5 million (or the equivalent in a foreign currency) at the end of any calendar month. Residents are also required to report annually to the German Central Bank any shares or voting rights of 10% or more they hold in non-resident corporations with total assets of more than 3 million. Corporations residing in Germany with assets in excess of 3 million must report annually to the German Central Bank any shares or voting rights of 10% held by a nonresident. For a discussion of the treatment of remittance of dividends, interest or other payments to nonresident holders of ADSs or ordinary shares, see below Taxation .

Table of Contents

Neither German law nor our company's articles of association restricts the right of nonresident or foreign owners to hold and vote our company's shares or to receive dividends or other payments on these shares.

Taxation

The following discussion summarizes certain German tax and United States federal income tax consequences of the acquisition, ownership and disposition of ADSs or shares. Although the following discussion does not purport to describe all of the tax considerations that may be relevant to a prospective purchaser of ADSs or shares, this discussion summarizes the material German tax consequences to a holder of ADSs or shares, and certain material United States federal income tax consequences to a Qualified Holder (as that term is defined below) of ADSs or shares that is not resident (in the case of an individual) or domiciled (in the case of a legal entity) in Germany (in either case, referred to herein as "not resident" or as a "non-resident") and does not have a permanent establishment or fixed base located in Germany through which such ADSs or shares are held.

German Taxation

Taxation of Our Company

From April 1, 2002 until March 31, 2003, our company was subject to a corporation tax at the rate of 26.5%. An additional solidarity surcharge equal to 5.5% of the corporation tax is also imposed. The total corporation tax burden comes to 27.9575%. Beginning April 1, 2003, the corporation tax rate has been 25%. When adding the additional solidarity surcharge, the total corporation tax burden of our company is 26.375%.

Our company is also subject to an income-based trade tax. The tax rate depends on the municipality in which our company is located. Generally, the trade tax ranges between 15% and 21% of the income assessed for trade tax purposes. The trade tax is deductible as a business expense in determining the corporation tax.

The availability to our company of loss carry forwards for corporation tax or trade tax purposes is subject to limitation under certain circumstances.

Taxation of Dividends

Dividends are subject to a 20% withholding tax plus a solidarity surcharge equal to 5.5% of the corporation tax, for a total withholding tax of 21.1%. The United States-German income tax treaty (the "Income Tax Treaty") reduces the withholding tax rate to 15%. In the case of a United States corporation owning at least 10% of the voting stock of our company (a "10% Holder"), the total German withholding tax rate is reduced to 5% under the Income Tax Treaty.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

To receive this reduction in the withholding tax, the recipient of dividends must be eligible for treaty benefits and must apply to the German tax authorities located at the Bundesamt für Finanzen, Friedhofstrasse 1, D-53225 Bonn, Germany, for a refund within four years following the end of the calendar year in which the dividend is received. Copies of the form required for refund claims may be obtained from the German tax authorities at the same address, from the embassy of the Federal Republic of Germany located at 4645 Reservoir Road, N.W., Washington, D.C. 20007-1998 or on the Internet under <http://www.bff-online.de>. The refund claim must include the original bank voucher issued by the paying entity documenting the tax withheld (or a certified copy thereof) and certification of the filing of the taxpayer's last U.S. federal income tax return from the Internal Revenue Service (IRS) on Internal Revenue Service Form 6166. Certification is obtained from the office of the Director of the Internal Revenue Service Center by filing a request for certification with the IRS, Philadelphia Service Center Foreign Certification Request, P.O. Box 16347, Philadelphia, PA 19114-0447.

Table of Contents

For shares and ADSs that are kept in custody with a depository in the United States a collective procedure for the refund of German withholding tax and surtax have been introduced by the German tax authorities on a trial basis. The depository may submit claims for refunds payable to Qualified Holders under the Treaty collectively to the German tax authorities on behalf of these Qualified Holders under this procedure. The German Federal Tax Office (Bundesamt für Finanzen) will pay the refund amounts on a preliminary basis to the depository, which will redistribute these amounts Qualified Holders according to the regulations governing these procedure. The German Federal Tax Office may review whether the refund complies with applicable law within four years after making the payment to the depository. Details of this collective refund procedure are available from the depository. The depository for our company's ADSs is currently JPMorgan Chase Bank.

Taxation of Dispositions

Long term capital gains from the sale or other disposition of our company's ordinary shares or ADSs are not subject to tax in Germany unless a Qualified Holder has held, directly or indirectly, our company's shares or ADSs representing 1% or more of the registered share capital of our company at any time during the five-year period immediately preceding the disposition. If a Qualified Holder is eligible for the benefits under the Income Tax Treaty, the Qualified Holder will in general not be subject to capital gains tax in Germany.

Inheritance and Gift Tax

German gift or inheritance tax does not apply to a Qualified Holder's transfer of our company's ordinary shares or ADSs by gift or a Qualified Holder's death unless at the time of the transfer:

the Qualified Holder, the donee, the heir or other transferee were domiciled in Germany or were a German citizen who had not been continuously outside of Germany for more than five years (or were employed by or living in the household of a person employed by a German public authority); or

the Qualified Holder directly or with a related person held ordinary shares or ADSs of our company representing 10% or more of the registered share capital of our company.

The estate tax treaty between Germany and the United States provides that German gift or inheritance tax may be imposed generally only in the first situation described above. For persons giving up German residence, special rules apply during the first five years, and under specific circumstances, during the first ten years, after the end of the year in which the person left Germany. Special rules also apply for persons with dual residence in the United States of America and the Federal Republic of Germany.

Other Taxes

No German transfer, stamp or other similar taxes apply to the sale or other disposition of our company's ordinary shares or ADSs.

Proposed Tax Changes

In August 2003 the German government published draft legislation to amend the German taxation rules. These changes comprise the thin-capitalization rules, the trade tax system (including the deductibility of the trade tax as business expense), the corporate capital gain taxation, loss carry forward limitations and other tax rules. We cannot exclude that these proposed tax changes may have an adverse impact on our company's tax burden.

Table of Contents

United States Taxation

The following discussion generally summarizes certain United States federal income tax consequences of the acquisition, ownership and disposition of ADSs or ordinary shares of our company by a Qualified Holder. For purposes of this discussion, in general, a Qualified Holder means a beneficial owner of ordinary shares or ADSs of our company that

is a resident of the United States for purposes of the United States-German income tax treaty (the Income Tax Treaty), which generally includes an individual United States resident, a corporation created or organized under the laws of the United States, any state thereof or the District of Columbia and a partnership, estate or trust, to the extent its income is subject to taxation in the United States as the income of a United States resident, either in its hands or in the hands of its partners or beneficiaries,

does not hold ordinary shares or ADSs of our company as part of the business property of a permanent establishment located in Germany or as part of a fixed base of an individual located in Germany and used for the performance of independent personal services, and

if not an individual, is not subject to the limitation on benefits restrictions in the Income Tax Treaty.

This summary deals only with ADSs and shares that are held as capital assets and does not address tax considerations applicable to Qualified Holders that may be subject to special tax rules, such as dealers or traders in securities, financial institutions, insurance companies, tax-exempt entities, regulated investment companies, Qualified Holders that hold shares or ADSs as a part of a straddle, conversion transaction or other arrangement involving more than one position, Qualified Holders that own (or are deemed for United States tax purposes to own) 10% or more of the total combined voting power of all classes of voting stock of our company, Qualified Holders that have a principal place of business or tax home outside the United States, Qualified Holders whose functional currency is not the U.S. dollar, and Qualified Holders that hold ADSs or shares through partnerships or other pass-through entities.

The discussion below is based upon the United States Internal Revenue Code of 1986, as amended (the Code), the Income Tax Treaty and regulations, rulings and judicial decisions thereunder at the date of this Annual Report on Form 20-F. Any such authority may be repealed, revoked or modified, perhaps with retroactive effect, so as to result in United States federal income tax consequences different from those discussed below. No assurance can be given that the conclusions set out below would be sustained by a court if challenged by the IRS. The discussion below is based, in part, on representations of the depository and assumes that each obligation in the deposit agreement and any related agreements will be performed in accordance with its terms.

THE DISCUSSION BELOW IS INTENDED ONLY AS A SUMMARY OF CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES OF AN INVESTMENT IN ADSs OR SHARES OF OUR COMPANY. PROSPECTIVE INVESTORS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE APPLICATION TO THEIR PARTICULAR SITUATIONS OF THE TAX CONSIDERATIONS DISCUSSED BELOW, AS WELL AS THE APPLICATION OF STATE, LOCAL OR FOREIGN TAX LAW. THE STATEMENTS OF UNITED STATES TAX LAW SET OUT BELOW ARE BASED ON THE LAWS IN FORCE AND INTERPRETATIONS THEREOF AT THE DATE OF THIS ANNUAL REPORT ON FORM 20-F AND ARE SUBJECT TO ANY CHANGES OCCURRING AFTER THAT DATE.

For United States federal income tax purposes, a Qualified Holder of ADSs will be considered to own the shares represented thereby. Accordingly, unless the context otherwise requires, all references in this section to shares are deemed to refer likewise to ADSs representing an ownership interest in shares.

Table of Contents*Distributions*

Subject to the discussion below under *Passive Foreign Investment Company Considerations*, distributions made by our company with respect to shares (other than distributions in liquidation and certain distributions in redemption of stock), including the amount of German tax deemed to have been withheld in respect of such distributions, will be taxed to Qualified Holders as ordinary dividend income to the extent that such distributions do not exceed the current and accumulated earnings and profits of our company as computed for United States federal income tax purposes. As discussed above, a Qualified Holder may obtain a refund of German withholding tax to the extent that the German withholding tax exceeds 15% of the amount of the associated distribution. For example, if our company distributes a cash dividend equal to U.S. \$100 to a Qualified Holder, the distribution currently will be subject to German withholding tax of U.S. \$20 plus U.S. \$1.10 surtax, and the Qualified Holder will receive U.S. \$78.90. If the Qualified Holder obtains the Income Tax Treaty refund, he will receive an additional U.S. \$6.10 from the German tax authorities. For United States tax purposes, such Qualified Holder will be considered to have received a total distribution of U.S. \$100, which will be deemed to have been subject to German withholding tax of U.S. \$15 (15% of U.S. \$100) resulting in the net receipt of U.S. \$85. Distributions, if any, in excess of our company's current and accumulated earnings and profits will constitute a non-taxable return of capital to a Qualified Holder and will be applied against and reduce the Qualified Holder's tax basis in his or her shares. To the extent that such distributions exceed the tax basis of the Qualified Holder in his or her shares, the excess generally will be treated as capital gain.

A Qualified Holder's basis in our company's shares purchased with euro will be equal to the U.S. dollar value of the euro at the spot rate on the date of purchase (or in the case of cash basis and electing accrual basis taxpayers, the settlement date). If a Qualified Holder receives euro on the sale or other disposition of our company's shares, the Qualified Holder will realize an amount equal to the U.S. dollar value of the euro on the date of sale or other disposition (or in the case of cash basis and electing accrual basis taxpayers, the settlement date). A Qualified Holder will have a tax basis in the euro it receives equal to the U.S. dollar amount it realizes. Any gain or loss realized on a subsequent conversion of the euro into U.S. dollars generally will be U.S. source ordinary income or loss.

Dividends paid by our company generally will constitute *portfolio income* for purposes of the limitations on the use of passive activity losses (and, therefore, generally may not be offset by passive activity losses) and as *investment income* for purposes of the limitation on the deduction of investment interest expense. Dividends paid by our company will not be eligible for the dividends-received deduction generally allowed to United States corporations under Section 243 of the Code.

Sale or Exchange

In general, assuming that our company at no time is a passive foreign investment company, upon a sale or exchange of shares to a person other than our company, a Qualified Holder will recognize gain or loss in an amount equal to the difference between the amount realized on the sale or exchange and the Qualified Holder's adjusted tax basis in the shares. This gain or loss will be capital gain or loss and will be long-term capital gain (taxable at a reduced rate for individuals) if the shares were held for more than one year. The deductibility of capital losses is subject to significant limitations. Upon a sale of shares to our company, a Qualified Holder may recognize capital gain or loss or, alternatively, may be considered to have received a distribution with respect to the shares, in each case depending upon the application to such sale of the rules of Section 302 of the Code.

Deposit and withdrawal of shares in exchange for ADSs by a Qualified Holder will not result in its realization of gain or loss for United States federal income tax purposes.

Foreign Tax Credit

In general, in computing its United States federal income tax liability, a Qualified Holder may elect for each taxable year to claim a deduction or, subject to the limitations on foreign tax credits generally, a credit for foreign income taxes paid or accrued by it. For United States foreign tax credit purposes, subject to the applicable limitations under the foreign tax credit rules, the 15% German tax that is treated as having been withheld from dividends paid to a Qualified Holder will be eligible for credit against the Qualified Holder's federal income tax liability. Thus, in the numerical example set out above, a Qualified Holder who receives a cash distribution of U.S. \$85 from our company (U.S. \$100 of the initial distribution net of U.S. \$20 of German withholding tax and U.S. \$1.10 of surtax plus the Income Tax Treaty refund of U.S. \$6.10) will be treated as having been subject to German withholding tax in the amount of U.S. \$15 (15% of U.S. \$100) and will be able to claim the United States foreign tax credit, subject to applicable foreign tax credit limitations, in the amount of U.S. \$15.

Table of Contents

For United States foreign tax credit purposes, dividends paid by our company generally will be treated as foreign source income and as passive income (or in the case of certain holders, as financial services income). Gains or losses realized by a Qualified Holder on the sale or exchange of shares generally will be treated as U.S. source gain or loss. The availability of foreign tax credits depends on the particular circumstances of each Qualified Holder. Qualified Holders are advised to consult their own tax advisors.

Foreign Personal Holding Company Considerations

We do not believe that our company, or any of its subsidiaries, currently is a foreign personal holding company (an FPHC) for United States federal income tax purposes. We not aware of any changes that would affect this conclusion in the foreseeable future. A foreign corporation is an FPHC for a taxable year if

at any time during this taxable year, more than 50% of its stock (by vote or by value) is owned (directly, indirectly or by attribution) by or for not more than five individuals who are citizens or residents of the United States (the ownership requirement) and

at least 60% (50% in certain cases) of its gross income is FPHC income, which generally includes dividends, interest, royalties (except certain active business computer software royalties) and other types of investment income (the income requirement).

If our company or one of its subsidiaries were treated as an FPHC, then each Qualified Holder owning ADSs or shares on the last day in the taxable year on which the ownership requirement with respect to our company or its subsidiary was met would be required to include currently in taxable income as a dividend, a pro rata share of our company's or the subsidiary's undistributed FPHC income, which is, generally, our company's or the subsidiary's taxable income with certain adjustments and after reduction for certain dividend payments.

Our company does not believe that the ownership requirement is met at the date hereof with respect to our company or any of its subsidiaries. However, there can be no assurance that the ownership requirement will not be met at some later time. Whether the income requirement would be met with respect to our company or any of its subsidiaries at any such later date would depend on the nature and sources of our company's and each subsidiary's income at that time.

Passive Foreign Investment Company Considerations

Classification as a PFIC. Special and adverse United States tax rules apply to a Qualified Holder that holds an interest in a passive foreign investment company (a PFIC). In general, a PFIC is any non-United States corporation, if

75% or more of the gross income of such corporation for the taxable year is passive income (the income test) or

the average percentage of assets (by value) held by such corporation during the taxable year that produce passive income (e.g., dividends, interest, royalties, rents and annuities) or that are held for the production of passive income is at least 50% (the asset test).

Table of Contents

A corporation that owns, directly or indirectly, at least 25% by value of the stock of a second corporation must take into account its proportionate share of the second corporation's income and assets in applying the income test and the asset test.

Based on current projections concerning the composition of our company's income and assets, we do not believe that our company will be treated as a PFIC for its current or future taxable years. However, because this conclusion is based on our current projections and expectations as to its future business activity, we can provide no assurance that our company will not be treated as a PFIC in respect of its current or any future taxable years.

Consequences of PFIC Status. If our company is treated as a PFIC for any taxable year during which a Qualified Holder holds shares, then, subject to the discussion of the qualified electing fund (QEF) and mark-to-market rules below, the Qualified Holder generally will be subject to a special and adverse tax regime with respect to any gain realized on the disposition of the shares and with respect to certain excess distributions made to it by the company. The adverse tax consequences include taxation of such gain or excess distribution at ordinary-income rates and payment of an interest charge on tax, which is deemed to have been deferred with respect to such gain or excess distributions. Under the PFIC rules, excess distributions include dividends or other distributions received with respect to the shares if the aggregate amount of such distributions in any taxable year exceeds 125% of the average amount of distributions from the company made during a specified base period.

In some circumstances, a Qualified Holder may avoid certain of the unfavorable consequences of the PFIC rules by making a QEF election in respect of our company. A QEF election effectively would require an electing Qualified Holder to include in income currently its pro rata share of the ordinary earnings and net capital gain of our company. However, a Qualified Holder will not be able to elect QEF status with respect to our company, because our company does not intend to prepare the information that a Qualified Holder would need to make a QEF election.

A Qualified Holder that holds marketable stock in a PFIC may, in lieu of making a QEF election, also avoid certain unfavorable consequences of the PFIC rules by electing to mark the PFIC stock to market at the close of each taxable year. We expect that the shares will be marketable for this purpose. A Qualified Holder that makes the mark-to-market election will be required to include in income each year as ordinary income an amount equal to the excess, if any, of the fair market value of the stock at the close of the year over the Qualified Holder's adjusted tax basis in the stock. If, at the close of the year, the Qualified Holder's adjusted tax basis exceeds the fair market value of the stock, then the Qualified Holder may deduct any such excess from ordinary income, but only to the extent of net mark-to-market gains previously included in income. Any gain from the actual sale of the PFIC stock will be treated as ordinary income, and any loss will be treated as ordinary loss to the extent of net mark-to-market gains previously included in income.

Information Reporting and Backup Withholding

Proceeds from the sale of our company's shares or ADSs and dividends may be reported to the IRS unless you are a corporation or otherwise establish a basis for exemption.

Backup withholding tax may apply to amounts subject to reporting to the IRS if you fail to provide an accurate taxpayer identification number. The amount of any backup withholding tax will be allowed as a credit against your U.S. federal income tax liability if you provide the appropriate documentation or information to the IRS.

Taxation of Holders of ADSs or Shares in Other Countries

HOLDERS OR POTENTIAL HOLDERS OF OUR COMPANY S ADSs OR SHARES WHO ARE RESIDENT OR OTHERWISE TAXABLE IN COUNTRIES OTHER THAN GERMANY AND THE UNITED STATES ARE URGED TO CONSULT THEIR OWN TAX ADVISORS CONCERNING THE OVERALL TAX CONSEQUENCES OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF OUR COMPANY S ADSs OR SHARES.

Table of Contents

Documents on Display

Our company is subject to the informational requirements of the U.S. Securities Exchange Act of 1934, as amended. In accordance with these requirements, we file reports and other information with the Securities and Exchange Commission (or SEC). These materials, including this annual report and the exhibits thereto, may be inspected and copied at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549 and at the SEC's regional offices at 175 W. Jackson Blvd., Suite 900, Chicago, Illinois 60604, and 233 Broadway, New York, New York 10279. Copies of the materials may be obtained from the Public Reference Room of the SEC at 450 Fifth Street, N.W. Washington D.C. 20549 at prescribed rates. The public may obtain information on the operation of the SEC's Public Reference Room by calling the SEC in the United States at 1-800-SEC-0330. The SEC also maintains a web site at <http://www.sec.gov> that contains reports and other information regarding our company since we started filing our reports electronically with the SEC in June 2002.

Item 11: Quantitative and Qualitative Disclosure About Market Risk

We do not use market sensitive instruments, such as derivative financial instruments. Our primary market risk is in the area of currency exchange rate fluctuations, primarily between the euro and the U.S. dollar. See Item 11: Quantitative and Qualitative Disclosure About Market Risk Foreign Currency Exchange Risk and Risk Factors for more information about the risks from exchange rate fluctuations.

We maintain our cash balances in deposits at banks in highly liquid short-term investments, such as money market funds, which lowers our exposure to interest income risks. We do not consider our exposure to interest rate and exchange rate fluctuations risks to be material to our deposits and investments.

Interest Rate and Exchange Rate Risk

We have financial instruments that are subject to interest rate risk, principally short-term investments. We have not experienced material gains or losses due to interest rate changes. We do not consider our interest rate risk to be material to our short-term investments.

Foreign Currency Exchange Risk

We publish our consolidated financial statements in euros. Currency fluctuations can affect our financial results, particularly fluctuations between the euro and the U.S. dollar. The U.S. dollar denominated proportion of our revenues and expenses, respectively, are not fixed but vary. In FY 2003, approximately 65% of our revenues and approximately 50% of our expenses were denominated in U.S. dollars. Accordingly, any changes of the euro against the dollar would affect our reported income or losses.

We have not previously engaged in currency hedging transactions and do not currently contemplate doing so in the future. We may, however, enter into such transactions on a non-speculative basis to the extent that we may in the future have substantial foreign currency exposure, for example, in connection with payments from customers or collaboration partners or due to investments.

Item 12: Description of Securities Other Than Equity Securities

Not Applicable.

Table of Contents

PART II

Item 13: Defaults, Dividend Arrearages and Delinquencies

Not applicable.

Item 14: Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable

Item 15: Controls and Procedure

Within 90 days prior to the date of this report, our company performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures. Disclosure controls and procedures are designed to ensure that the material financial and non-financial information required to be disclosed in this annual report on Form 20-F and filed with the Securities and Exchange Commission is recorded, processed, summarized and reported in a timely manner. The evaluation was performed with the participation of our key corporate senior management, and under the supervision of our Chief Executive Officer (CEO), Dr. Friedrich von Bohlen, and our Chief Financial Officer (CFO), Martin Hollenhorst. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable, rather than absolute, assurances of achieving the desired control objectives, and management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the foregoing, our company's management, including the CEO and CFO, concluded that our company's disclosure controls and procedures were effective.

There have been no changes in our internal control over financial reporting subsequent to the date of our most recent evaluation that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Therefore, no corrective actions were taken.

Subsequent to the end of our FY 2003, the SEC amended the rules and regulations regarding the timing of the evaluation of the effectiveness of our disclosure controls and procedures and the review of our internal controls over financial reporting. Foreign private issuers are now required to evaluate the effectiveness of their disclosure controls and procedures and review whether any changes have been made to their internal controls over financial reporting as of the end of the period covered by the applicable report. Previously, such filers were required to conduct such an evaluation within 90 days of the date of such report and review their internal controls over financial reporting subsequent to the date of such evaluation. Because the amendment to the SEC's rules and regulations occurred well after the close of our 2003 fiscal year, we were unable to perform such an evaluation or such a review as of the end of such fiscal year.

Table of Contents

Item 16A. Audit Committee Financial Expert.

Our supervisory board has determined that the company has at least one audit committee financial expert, Professor Dr. Klaus Pohle, serving on its audit committee.

Item 16B. Code of Ethics.

Our company is currently in the process of developing a code of ethics that will be applicable to our management board and our senior management. This code will be consistent with the requirements of the German Code of Corporate Governance and the Nasdaq National Market.

Item 16C. Principal Accountant Fees and Services.

Ernst & Young Deutsche Allgemeine Treuhand AG, Wirtschaftsprüfungsgesellschaft, and its affiliates in the United States and the United Kingdom have acted as the independent auditors of our company and its subsidiaries in the United States and the United Kingdom for FY 2003.

Audit Fees

We were billed approximately 325,000 by Ernst & Young for audit services for FY 2003. We have not yet been billed by Ernst & Young for audit services in connection with this annual report on Form 20-F.

Audited-Related Fees

We were billed approximately 20,000 by Ernst & Young in FY 2003 for audit-related services. These services relate primarily to our 401k employee benefit plan.

Tax Fees

We were billed approximately 110,000 by Ernst & Young in FY 2003 for tax advice, tax compliance services, tax planning services and other tax consulting services.

All Other Fees

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

We were billed approximately 65,000 by Ernst & Young in FY 2003 for other services provided by Ernst & Young. These services relate primarily to accounting software consulting.

Prior to the engagement of Ernst & Young each year, the engagement is approved by our company's supervisory board and approved by vote of our shareholders at our annual general shareholders meeting. Our company's audit committee has also adopted its own rules of procedure. The audit committee's rules of procedure provide for a process with respect to the prior approval of all non-audit services to be performed by the independent auditors for our company. The supervisory board also reviews the internal control, disclosure and audit processes of the company.

Table of Contents

In FY 2003, our supervisory board, acting as the Company's audit committee, approved all of the audit services provided by Ernst & Young, none of the audit-related services or tax consulting services provided by Ernst & Young and none of the other services provided by Ernst & Young.

PART III

Item 17: Financial Statements

Not applicable.

Item 18: Financial Statements

See pages F-1 through F-35.

Item 19: Exhibits

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
1	Articles of Association of LION bioscience Aktiengesellschaft (English translation)
2.1	Form of American Depository Receipt (incorporated by reference to Exhibit 4.3 of our company's Registration Statement on Form F-1, File No. 333-12262)
2.2	Form of global share certificate for ordinary shares (English translation) (incorporated by reference to Exhibit 4.2 of our company's Registration Statement on Form F-1, File No. 333-12262)
4.1	Basic Agreement between Bayer AG and LION bioscience Aktiengesellschaft, dated June 17, 1999 (incorporated by reference to Exhibit 10.1 of our company's Registration Statement on Form F-1, File No. 333-12262)
4.2	Development Agreement between Bayer AG and LION bioscience Aktiengesellschaft, dated October 13, 2000 (incorporated by reference to Exhibit 10.4 of our company's Registration Statement on Form F-4, File No. 333-13150)
4.3	License Agreement concerning SRS between LION bioscience Aktiengesellschaft and the European Molecular Biology Laboratory, dated September 15, 1998 (incorporated by reference to Exhibit 10.2 of our company's Registration Statement on Form F-1, File No. 333-12262)
4.4	Amendment to Basic Agreement between Bayer AG and LION bioscience Aktiengesellschaft, dated February 15, 2003
4.5	Amendment to the Development Agreement between Bayer AG and LION bioscience Aktiengesellschaft, dated December 1, 2001 (incorporated by reference to Exhibit 4.5 of our company's Annual Report on Form 20-F, filed with the SEC on June 18, 2002, File No. 000-30850)
4.6	Amendment to the Development Agreement between Bayer AG and LION bioscience Aktiengesellschaft, dated March 29, 2002 (incorporated by reference to Exhibit 4.6 of our company's Annual Report on Form 20-F, filed with the SEC on June 18, 2002, File No. 000-30850)
4.7	Software License and Distribution Agreement between LION bioscience Aktiengesellschaft and the European Molecular Biology Laboratory, dated January 21, 2002 (incorporated by reference to Exhibit 4.7 of our company's Annual Report on Form 20-F, filed with the SEC on June 18, 2002, File No. 000-30850)

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

4.8	Amendment to Development Agreement between Bayer AG and Lion Bioscience AG, dated as of June 25, 2002
4.9	Amendment to Basic Agreement between Bayer AG and LION bioscience Aktiengesellschaft, dated October 13, 2000
4.10	Amendment to Basic Agreement between Bayer AG and LION bioscience Aktiengesellschaft, dated June 27, 2003
4.11	Amendment to the Development Agreement between Bayer AG and LION bioscience Aktiengesellschaft, dated as of December 16, 2002
4.12	Lease Agreement between Aid Association for Lutherans (predecessor in interest to ARE 9880 Campus Point Dr., LLC) and Trega Biosciences Inc., (predecessor in interest to LION bioscience Inc.) dated September 24, 1997
4.13	First Amendment to Lease Agreement between ARE 9880 Campus Point, LLC. and LION bioscience Inc., dated June 17, 2003
4.14	Form of Deposit Agreement, among LION bioscience AG, Morgan Guaranty Trust Company of New York, as Depository and all holders and beneficial owners from time to time of American Depository Receipts issued thereunder (incorporated by reference to Exhibit 4.1 of our company's Registration Statement on Form F-1, File No. 333-12262)
8	List of subsidiaries
12.1	Rule 13a-14(a)/15d-14(a) Certification
12.2	Rule 13a-14(a)/15d-14(a) Certification
13.1	Section 1350 Certification
13.2	Section 1350 Certification
14.1	Independent Auditor's Consent

Table of Contents

Consolidated Financial Statements

of

LION bioscience Aktiengesellschaft

Heidelberg, Germany

<u>Report of Independent Auditors</u>	F-2
<u>Consolidated Balance Sheet as of March 31, 2002 and 2003</u>	F-3
<u>Consolidated Statements of Operations for the Fiscal Year Ended March 31, 2001, 2002, and 2003</u>	F-4
<u>Consolidated Statements of Cash Flows for the Fiscal Year Ended March 31, 2001, 2002 and 2003</u>	F-5
<u>Consolidated Statements of Shareholders' Equity as of March 31, 2001, 2002 and 2003</u>	F-6
<u>Notes to the Consolidated Financial Statements</u>	F-7

F-1

Table of Contents

REPORT OF INDEPENDENT AUDITORS

To the Supervisory Board and Shareholders of LION bioscience AG:

We have audited the accompanying consolidated balance sheets of LION bioscience AG, as of March 31, 2003 and 2002 and the related consolidated statements of operations, shareholders' equity and cash flows for each of the three years in the period ended March 31, 2003. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of LION bioscience AG at March 31, 2003 and 2002 and the consolidated results of its operations and its cash flows for each of the three years in the period ended March 31, 2003 in conformity with accounting principles generally accepted in the United States of America.

Mannheim, May 23, 2003,

Ernst & Young

Deutsche Allgemeine Treuhand AG

Wirtschaftsprüfungsgesellschaft

G. Ketterle
Wirtschaftsprüfer
Certified Public Accountant

K. Berger
Wirtschaftsprüfer

Table of Contents**LION bioscience AG****CONSOLIDATED BALANCE SHEET (U.S. GAAP)****(in thousand euro, except for share and per-share data)**

	Notes No.	March 31, 2003	March 31, 2002
ASSETS			
Current assets			
Cash and cash equivalents	2	60,102	19,184
Marketable securities	2, 6	12,762	104,839
Trade accounts receivable, net	2	7,581	7,835
Prepaid expenses, short-term	3	1,799	2,396
Other assets	4	1,292	4,395
Assets held for sale	C	322	4,735
Total current assets		83,858	143,384
Property, plant and equipment, net	5	6,890	13,403
Other long-term investments	7	549	10,760
Goodwill, net	8	0	58,663
Other intangible assets, net	9	576	8,089
Trade accounts receivable, long-term	2	1,423	3,351
Prepaid expenses, long-term	3	0	340
		93,296	237,990
LIABILITIES AND SHAREHOLDERS EQUITY			
Current liabilities			
Trade accounts payable		1,770	2,298
Accrued liabilities	10	15,458	8,461
Current portion of long-term debt	11	569	569
Current portion of capital lease obligation	12	16	134
Deferred income and advance payments		3,640	5,032
Other current liabilities	11	1,102	1,745
Total current liabilities		22,555	18,239
Long-term debt less current portion	13	1,991	2,560
Capital lease obligations less current portion	12	69	85
Shareholders equity			
Ordinary shares, each with a notional par value of 1.00; 19,870,175 shares issued and outstanding as of March 31, 2003 and 2002, 29,805,262 and 23,825,000 shares authorized at March 31, 2003 and 2002		19,870	19,870
Additional paid-in capital		302,307	293,937
Accumulated other comprehensive income		(3,727)	572

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Accumulated losses	(249,769)	(97,273)
Total shareholders equity	68,681	217,106
	93,296	237,990

The accompanying notes are an integral part of these consolidated financial statements.

F-3

Table of Contents**LION bioscience AG****CONSOLIDATED STATEMENTS OF OPERATIONS (U.S. GAAP)**

(in thousand euro, except share and per-share data)

	Notes	Fiscal Year ended March 31		
		2003	2002	2001
	No.			
Revenues:				
Drug discovery	2,16, 26	1,614	3,048	2,421
Licenses	2,16, 26	14,111	15,145	6,292
Professional services	2,16, 26	12,068	18,613	13,374
Maintenance and support	2,16, 26	1,864	2,500	1,188
Total revenues		29,657	39,306	23,275
Cost-of-sales		18,677	11,395	9,184
Costs and expenses:				
Selling costs	2	11,229	12,546	5,719
General and administrative costs		21,490	18,369	7,501
Research and development costs	2	34,225	33,900	17,688
Other operating income and expenses		(1,733)	(1,104)	(727)
Conversion of preferred shares into ordinary shares		0	0	8,743
Total costs and expenses (incl. cost-of-sales)		83,888	75,106	48,108
Operating results before depreciation and amortization		(54,231)	(35,800)	(24,833)
Depreciation of property, plant and equipment and amortization of intangible assets	2, 5, 9, 17	14,021	11,885	4,218
Impairment of goodwill	8	58,526	0	0
Operating results		(126,778)	(47,685)	(29,051)
Interest income and expenses	18	3,654	6,302	5,234
Results from marketable securities and other long-term investments	19	(13,594)	(3,493)	0
Loss before taxes from continuing operations		(136,718)	(44,876)	(23,817)
Tax expense		(313)	(261)	(127)
Net loss for the year from continuing operations		(137,031)	(45,137)	(23,944)
Loss on discontinued operations (net of tax of 0) (incl. loss on disposal of 2.868 in fiscal year 2003)	C	(15,465)	(9,549)	0
Net loss for the year		(152,496)	(54,686)	(23,944)
Preferred stock dividend		0	0	25
Deemed preferred stock dividend		0	0	14,410

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Net loss attributable to ordinary shares after preferred stock dividend and deemed preferred stock dividend		(152,496)	(54,686)	(38,379)
Basic and diluted net loss per share from continuing operations		(6.89)	(2.39)	(2.52)
Basic and diluted net loss per share from discontinued operations		(0.78)	(0.50)	0.00
Basic and diluted net loss per share from total operations after preferred stock dividend and deemed preferred stock dividend	27	(7.67)	(2.89)	(2.52)
Average number of outstanding shares		19,870,175	18,940,029	15,247,146

The accompanying notes are an integral part of these consolidated financial statements.

F-4

Table of Contents**LION bioscience AG****CONSOLIDATED STATEMENTS OF CASH FLOWS (U.S. GAAP)****(in thousand euro)**

	Fiscal Year ended March 31		
	2003	2002	2001
Operating activities:			
Net loss	(152,496)	(54,686)	(23,944)
Adjustments to reconcile net loss to net cash used in operating activities:			
Conversion preferred shares into ordinary shares	0	0	8,743
Non-cash compensation for stock options and deferred compensation	8,550	4,542	1,732
Depreciation of property, plant and equipment	9,327	7,986	3,542
Amortization of intangible assets	7,954	5,174	676
Impairment of goodwill	58,526	0	0
Impairment of marketable securities and other long-term investments	10,985	19,010	0
Loss (gain) on sale of fixed assets	1,335	(56)	(224)
Loss (gain) on sale of marketable securities	2,609	(14,536)	0
Changes in operating assets and liabilities:			
Trade accounts receivable	2,182	(6,370)	(3,089)
Prepaid expenses and other current assets	3,102	332	(2,215)
Trade accounts payable	(528)	(3,963)	(1,594)
Accrued liabilities	6,997	3,281	1,001
Deferred income and advanced payments received	(454)	(5,052)	856
Other current liabilities	(823)	(7,162)	1,135
Net cash used in operating activities	(42,734)	(51,500)	(13,381)
Investing activities:			
Investments in property, plant and equipment	(2,583)	(7,960)	(8,245)
Proceeds from the sale of property, plant and equipment	748	56	243
Investments in other long-term investments	0	(10,805)	(1,737)
Investments in marketable securities	(5,849)	0	(115,257)
Proceeds from the sale of marketable securities	94,378	29,583	0
Investments in related-party notes	0	0	767
Investments in software development	0	0	(817)
Investments in other assets	0	(5,830)	(2,871)
Net cash (used in) provided from investing activities	86,694	5,044	(127,917)
Financing activities:			
Proceeds from issuance of ordinary shares	0	0	5,296
Increase (decrease) in additional paid-in capital	0	(154)	203,899
Payments on current loan	0	0	(524)
Principal payments on long-term debts	(569)	(569)	(6,031)
Principal payments on capital leases	(134)	(863)	(1,118)

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Net cash (used in) provided from financing activities	(703)	(1,586)	201,522
Increase (decrease) in cash	43,257	(48,042)	60,224
Currency adjustments	(2,339)	29	325
Cash and cash equivalents at beginning of period	19,184	67,197	6,648
	<u> </u>	<u> </u>	<u> </u>
Cash and cash equivalents at end of period	60,102	19,184	67,197
	<u> </u>	<u> </u>	<u> </u>

The accompanying notes are an integral part of these consolidated financial statements.

F-5

Table of Contents**LION bioscience AG****CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY (U.S. GAAP)**

(in thousand euro, except share and per-share data)

	Ordinary Shares		Preferred Shares		Preferred Shares subscribed		Additional Paid-In Capital	Accumulated Deficit	Accumulated other comprehensive income		Total Shareholders Equity	
	Shares	Amount	Shares	Amount	Shares	Amount			Cumulative translation adjustments	Available-for- sale-securities		
	Balances at March 31, 2000	1,000,000	2,556	772,300	1,975	40,000	102	30,503	(18,643)	122	0	16,615
	Conversion preferred shares subscribed into preferred shares			40,000	102	(40,000)	(102)					0
Conversion preferred shares into ordinary shares	812,300	2,077	(812,300)	(2,077)							0	
Conversion of employee preferred shares into ordinary shares							8,743				8,743	
Conversion of convertible note into ordinary shares	50,000	127									127	
Capital increase from company resources	11,205,000	8,299					(8,299)				0	
Ordinary shares issued against cash contributions	5,186,700	5,195					204,198				209,393	
Non-cash compensation for stock options							1,732				1,732	
Ordinary shares issued against contribution in kind	500,000	500					33,409				33,909	
Valuation of securities available-for-sale at market prices										(4,922)	(4,922)	
Adjustment items for foreign currency translation									325		325	
Net loss								(23,944)			(23,944)	
Balances at March 31, 2001	18,754,000	18,754	0	0	0	0	270,286	(42,587)	447	(4,922)	241,978	

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Non-cash compensation for stock options								4,225				4,225
Deferred compensation								317				317
Valuation of securities available-for-sale at market prices											5,018	5,018
IPO expenses								(154)				(154)
Adjustment items for foreign currency translation											29	29
Ordinary shares issued against contribution in kind	1,116,175	1,116						19,263				20,379
Net loss									(54,686)			(54,686)
Balances at March 31, 2002	19,870,175	19,870	0	0	0	0	293,937	(97,273)	476	96		217,106
Non-cash compensation for stock options								8,077				8,077
Deferred compensation								293				293
Valuation of securities available-for-sale at market prices											162	162
Adjustment items for foreign currency translation										(4,461)		(4,461)
Net loss									(152,496)			(152,496)
Balances at March 31, 2003	19,870,175	19,870	0	0	0	0	302,307	(249,769)	(3,985)	258		68,681

The accompanying notes are an integral part of these consolidated financial statements

Table of Contents

LION bioscience AG

Notes to the Consolidated Financial Statements (U.S. GAAP)

March 31, 2003

A. Basis of Presentation

1. General and Operations

LION bioscience AG (LION or the Company) was incorporated in Germany in March 1997. The Company offers drug discovery and knowledge management IT-solutions and develops information-management software and data integration and analysis systems to improve R&D performance in the life science industry.

Through December 31, 2002, LION also applied state-of-the-art high-throughput technologies and internally-produced information technology systems for its own drug discovery activities. As a result of focusing on the Company's core competencies, LION closed its drug discovery activities as of December 31, 2002.

Amounts included in the consolidated financial statements are reported in euro () unless otherwise stated.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the financial statements of LION bioscience AG and its wholly owned subsidiaries. All material intercompany accounts and transactions have been eliminated in the consolidation. The fiscal year of the companies in the group ends on March 31.

Use of Estimates

The preparation of consolidated financial statements requires the Company's management board to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses in the financial statements and disclosures of commitments and contingencies. Actual results can differ from those estimates.

Revenue Recognition

The Company's revenue consists of fees from licensing its software products (LSI fees earned from service and collaboration agreements performed by its professional services organization, fees earned from products and research agreements from the Company's drug discovery activities and fees for software maintenance and support.

The Company's LSI software is licensed under non-cancellable licensing agreements, which typically grant the customer the right to use the software for periods of one to three years. According to the Company's policy, payments resulting from these contracts are paid in advance every year throughout the term of the contract without any contract concessions. The Company also sells its software under perpetual licensing agreements. License agreements are generally extended automatically unless terminated by either party. Revenue from the sale of software under these licenses is recognized when evidence of an agreement exists, delivery has been made, the fee is fixed or determinable, collection of the fee is probable, and the customer has accepted delivery.

The Company's license agreements generally include the provision of telephone customer support and may also include basic training and consultation services. These services are billed separately and revenue is recognized as the services are performed. These services have no impact on the functionality of our software. For services provided by the Company conducted over a period of one year or longer separate contracts for maintenance and support are created. The revenues from these contracts are based upon vendor specific objective evidence of their fair values and are recognized on a straight-line basis over the term of the contract and reported separately as revenues from maintenance and support. Fair value of each element of an arrangement is determined based on normal pricing and discounting practice for those products and services when sold separately and additionally, by the renewal date. The Company guarantees its software for the term of the license period. The Company has received no warranty claims to date and, accordingly, has not built up a reserve for warranty costs.

Table of Contents

Revenue from service and collaboration agreements performed by our professional services organization is recognized in accordance with the terms of the respective agreement. Some of the research and development collaboration agreements involve milestones. Revenues from the attainment of milestone events are recognized when the Company and its customers agree that the scientific results or other milestones defined in the agreement have been achieved. As a general rule revenue from other contracts is recognized on a straight-line basis over the term of the contract, which generally represents the pattern of costs incurred by the Company.

In the preceding fiscal years the Company realized revenues from a long-term service agreement according to the percentage of completion method with estimates on the basis of total incurred costs in relation to total expected costs. Pursuant to an amendment of the agreement effective as of January 1, 2002, payments become due with the achievement of the milestones fixed in the contract. Revenues are realized only when the milestone is reached. Related costs are treated as expenses (cost-of-sales) of the period unless a loss is anticipated based on the Company's best estimates, in which case an accrual is made for the estimated loss.

Revenue from the Company's drug discovery activities consists of fees for products developed by the Company (e.g. clone collections (arrayTAG) and Chem.Folio compound libraries), and iD³-related (now discontinued), revenues from research agreements and is recognized when evidence of an agreement exists, delivery has been made, the fee is fixed or determinable, collection of the fee is probable, and the customer has accepted delivery.

Government Grants

The Company receives grants under various government programs. Depending on the nature of the grant, the Company either records the grants as revenue, or a decrease of the related costs. Government grants that are intended to reimburse the Company for general costs of a program such as salaries, equipment, and general and administrative are recorded as Drug Discovery revenues in the period earned. The total amount recorded as Drug Discovery revenue in fiscal year 2003 was 105,000 as compared to 0 in 2002 and 2001. Government grants to specifically defray the costs of research and development are offset on receipt against the related expenses. The total amount offset in fiscal year 2003 was 630,500, as compared to 1,316,900 and 730,600 in fiscal year 2002 and 2001, respectively.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs in fiscal year 2003 (excluding government grants) totaled 34,856,000, as compared to 35,216,800 in 2002 and 18,418,600 in 2001. The previous years' research and development costs have been adjusted to reflect the reclassification of some research and development costs to cost-of-sales and discontinued operations, respectively.

Advertising Costs

Costs for advertising and sales promotion are expensed as incurred. In fiscal year 2003 the costs for advertising and sales promotion totaled 2,002,100 as compared to 1,969,300 in 2002 and 1,226,600 in 2001.

Software Development

The Company capitalizes software development costs incurred subsequent to the establishment of technological feasibility. Under the Company's product development process, technological feasibility is established on completion of a working model. Once technological feasibility has been established, the costs involved are capitalized until the software has been marketed and is offered for sale. Software development costs are amortized on a product-by-product basis, using whichever is the greater of (a) the ratio of current gross revenue for a product to the total of current revenue and anticipated gross revenue for that product, or (b) the straight-line method over a maximum of three years. The Company capitalized no software development costs in fiscal year 2003 and 2002, as compared to \$816,800 capitalized in 2001. Amortization of \$357,500, \$603,500 and \$536,500 was reported in 2003, 2002, and 2001 respectively. Residual book values as of March 31, 2003, 2002 and 2001 were \$227,800, \$585,300 and \$1,188,800 respectively.

Table of Contents

Stock-Based Compensation

The Company accounts for its stock options under the fair-value method according SFAS No. 123. Accordingly, compensation expense is recorded over the period until vesting based on the fair value of the option on the date of grant. This expense estimate may not be representative of the actual costs in future reporting periods.

Marketable Securities

The Company is exposed to exchange risks with respect to its cash equivalents and securities available for sale. The Company invests almost exclusively its excess liquidity in money market funds, mortgage bonds, corporate debt securities, and commercial paper, with the objective of assuring both the liquidity and security of the capital invested. The Company's investments are restricted to securities of issuers with high credit ratings. Through fiscal year 2002 part of the securities were classified as held to maturity and carried at cost unless a decline in fair market value was considered other-than-temporary in which case they would be written down to fair market value. Since the beginning of fiscal year 2003 all of the securities held are classified as available for sale, because the Company intends to sell the securities for current cash flow needs and are thus adjusted to their fair market value. All securities are classified as current assets.

Other Long-Term Investments

Other long-term investments are generally carried at the lower of cost or fair market value.

Concentration of Credit Risks

The Company's accounts receivable are unsecured and thus the Company is at risk to the extent such amounts become uncollectible.

In the fiscal years 2003, 2002 and 2001, revenues with Bayer AG constituted 33%, 48% and 61%, respectively, of the Company's total revenues. The outstanding accounts receivable from Bayer AG as of March 31, 2003 amounted to 376,000 (March 31, 2002: 222,000). The percentages reflect the revenues adjusted for discontinued operations for fiscal year 2003 as well as 2002.

Cash and Cash Equivalents

Cash and cash equivalents consist of short-term, highly liquid cash investments with original maturities of less than three months from the date of acquisition.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable, short-term loans, and accrued liabilities approximate their fair value due to the short maturities of these instruments.

The carrying amount of long-term debt and capital lease obligations approximates their fair value, based on the market price for similar borrowings. The same applies to other financial assets.

Trade Accounts Receivable

The reported trade accounts receivable as of March 31, 2003 are reduced by an allowance for doubtful accounts amounting to 275,000 (March 31, 2002: 457,000). Allowances for doubtful accounts are recorded when the collectibility of a trade accounts receivable is determined to be unlikely. The allowance is determined on a specific basis. The trade accounts receivable is written-off against the allowance for doubtful accounts when collection efforts have ceased.

Property, Plant and Equipment

Table of Contents

Property, plant and equipment are recorded at acquisition cost less accumulated depreciation. Depreciation is computed on a straight-line basis over the estimated useful life of the assets as follows:

Laboratory equipment	5 to 10 years
Computer software	3 years
Furniture and office equipment	5 to 10 years

Leasehold improvements and equipment under capital lease are depreciated over their useful lives or the term of the lease, whichever is shorter.

Intangible Assets

Intangible assets are reported at acquisition cost less accumulated amortization. The amortization is computed on a straight-line basis over the estimated useful life of the assets as follows:

Software and technology and acquired customer relationship	2 years
Software licenses	3 years
Commercial rights and patents	4 years

Impairment of Long-Lived and Intangible Assets

The Company adopted SFAS No. 144, Accounting for the Impairment or Disposal of Long-lived assets beginning April 1, 2002. SFAS No. 144 requires that long-lived and intangible assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may no longer be recoverable. In the event that facts and circumstances indicate an impairment, the carrying amount of the asset is compared with the asset's fair value to determine whether a write-down to the lower fair value must be recorded. The fair value is calculated based on the estimated sales and market prices of long-lived assets and, in the case of intangible assets, based on discounted cash-flows expected over their estimated useful lives.

Currency Translation

The financial statements of the Company's subsidiaries are prepared in their functional currencies, i.e. their local currencies. Balance sheet accounts are translated to the reporting currency (the euro) at the exchange rates in effect at the end of the reporting period, except for shareholders' equity, which is translated at the rates in effect when the underlying transactions were originally recorded. Revenue and expense accounts are translated at a weighted average of exchange rates during the fiscal year. Differences resulting from translation are shown in a separate component of shareholders' equity (cumulative translation adjustments).

In fiscal year 2003, net exchange rate losses included in the statements of operations were 69,300, as compared to gains of 928,600 in 2002 and losses of 501,200 in 2001, representing the translation of assets and liabilities denominated in foreign currencies.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

The exchange rates of key currencies affecting the Company are as follows:

		Closing rate at		Average rate fiscal year		
		3/31/2003	3/31/2002	2003	2002	2001
		to 1.00	to 1.00	to 1.00	to 1.00	to 1.00
US dollar	US\$	1.0895	0.8724	0.9942	0.8840	0.9080
British pound	GBP	0.6896	0.6130	0.6426	0.6174	0.6140

F-10

Table of Contents

Income Taxes

The Company accounts for income taxes under the asset and liability method (balance sheet method) and, accordingly, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and net operating losses and tax credit carryforwards. Deferred tax assets and liabilities are determined on the basis of the tax rates applicable to taxable profits in the year in which the differences are expected to be recovered or settled. The effect of changes in the tax rates on deferred tax assets and liabilities is recognized in the period in which the amended tax rates are passed. A valuation allowance is established against deferred tax assets when it is determined that it is more likely than not that they cannot be recovered from future taxable income.

Basic and Diluted Net Loss per Ordinary Share

The basic loss per share is computed by dividing consolidated net loss by the weighted number of common shares outstanding, including common-share equivalents. Common-share equivalents resulting from stock-based compensation represented by out-of-money options are excluded from the calculation, as their effect is anti-dilutive.

Reclassifications

Several values of the previous years' balance sheet, statements of operations and statements of cash flows have been reclassified to achieve a comparability with the statements for fiscal year ended March 31, 2003.

New Accounting Regulations

In August 2001, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 143 Accounting for Asset Retirement Obligations. This Statement deals with the accounting and reporting duties with regard to obligations and related expenses that arise in connection with the disposal or retirement of long-lived tangible assets. SFAS No. 143 requires a company to set up an accrual for the fair value of the obligation in the period in which it accepts a legal obligation associated with the disposal or retirement of a long-lived tangible asset. The Statement further requires that the carrying amount of the tangible asset be increased by the estimated liabilities. The increase in the carrying amount of the tangible asset is then regularly depreciated over the remaining term. In valuing the accrued liability, the effects of accrued interest and changes in estimated future cash flow must be taken into account in every period. SFAS No. 143 must be applied in all fiscal years commencing after June 15, 2002, but may be applied earlier. The Company will apply SFAS No. 143 beginning April 1, 2003 and does not believe the application of this statement will have any material effect on its net assets, financial position, or results of operations.

In June 2002, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 146 Accounting for Costs Associated with Exit or Disposal Activities. SFAS No. 146 replaces Emerging Issues Task Force (EITF) Issue No. 94-3, Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring). This Statement deals with the accounting and reporting for costs associated with exit or disposal activities. SFAS No. 146 requires a company to set up a liability for a cost associated with an exit or disposal activity to be recognized when the liability is incurred. A fundamental conclusion in this Statement is that an entity's commitment to a plan, by itself, does not create a present obligation to others that

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

meets the definition of a liability. Therefore, this Statement eliminates the definition and requirements for recognition of exit costs in Issue 94-3. This Statement also establishes that fair value is the objective for initial measurement of the liability. SFAS No. 146 must be applied for all exit or disposal activities that are initiated after December 31, 2002, with early application encouraged. The Company has applied SFAS No. 146 starting January 1, 2003.

In November 2002, the Emerging Issue Task Force (EITF) reached a final consensus on EITF 00-21, Revenue Arrangements with Multiple Deliverables. EITF 00-21 addresses certain aspects of the accounting of revenue arrangements with multiple deliverables by a vendor. The issue outlines an approach to determine when a revenue arrangement for multiple deliverables should be divided into separate units of accounting and, if separation is appropriate, how the arrangement consideration should be allocated to the identified accounting units. The consensus reached in the issue will be effective for the Company for revenue arrangements, other than software, entered into after June 30, 2003.

F-11

Table of Contents

Also in November 2002, the FASB issued FASB Interpretation (FIN) 45, Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others – an interpretation of FASB statements 5, 57, and 107 and rescission of FASB Interpretation 34. This Interpretation elaborates on the disclosure to be made by a guarantor in its financial statements regarding obligations under certain guarantees that it has issued. FIN 45 also clarifies that a guarantor is required to recognize, at inception of a guarantee, a liability for the fair value of the obligation due to the issuance of the guarantee. Disclosure requirements are effective for financial statements of interim and annual periods ending after December 15, 2002. The recognition and measurement provisions are effective for guarantees issued or modified after December 31, 2002. The adoption of this interpretation did not have any material effect on its net assets, financial position, or results of operations.

In December 2002, the FASB issued SFAS No. 148, Accounting for Stock-Based Compensation - Transition and Disclosure - an amendment of FASB Statement No. 123. SFAS No. 148 amends SFAS No. 123, Accounting for Stock-Based Compensation to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS No. 148 requires more prominent disclosures in both interim and annual financial statements about the method of accounting used for stock-based employee compensation and the effect of the method used on reported results. The Company adopted SFAS No. 148 beginning January 2003 and has included all required information in the consolidated financial statements.

Table of Contents**B. Additional Balance Sheet Information****3. Prepaid Expenses, Deferred Items**

	<u>3/31/2003</u>	<u>3/31/2002</u>
	(in thousand euro)	
Current:		
Capitalized license fee (Metalayer), short-term portion	278	461
License and maintenance fees	399	1,062
Insurances	504	510
Rent	299	58
Other	319	305
	<u>1,799</u>	<u>2,396</u>
Long-term:		
Capitalized license fee (Metalayer), less short-term portion	0	340

4. Other Assets

	<u>3/31/2003</u>	<u>3/31/2002</u>
	(in thousand euro)	
Accrued interest on fixed income securities	309	1,904
Creditable capital gains tax	525	1,069
Sales tax (VAT) receivable	8	14
Other	450	1,408
	<u>1,292</u>	<u>4,395</u>

5. Property, Plant and Equipment

	<u>3/31/2003</u>	<u>3/31/2002</u>
	(in thousand euro)	
Laboratory equipment	860	1,654
Laboratory equipment (capital lease)	67	159
Computer software	1,047	1,597
Computer hardware (capital lease)	9	42

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Furniture and office equipment	2,931	6,598
Leasehold improvements	1,976	3,145
Construction in progress	0	208
	<u>6,890</u>	<u>13,403</u>

The reported net book values are derived from acquisition costs as of March 31, 2003 of 29,013,600 and 29,599,000 as of March 31, 2002 and accumulated depreciation of 22,123,300 as of March 31, 2003 and 16,195,600 as of March 31, 2002

The net book values as of March 31, 2003 includes accumulated depreciation of 2,346,900 (March 31, 2002: 2,748,100) relating to property, plant and equipment under capital lease.

Depreciation of property, plant and equipment totaled 9,326,800 in fiscal year 2003, as compared to 7,986,100 in 2002 and 3,542,100 in 2001. Of these totals 3,259,000 is included in discontinued operations, as compared to 1,275,000 in 2002 and 0 in 2001.

Table of Contents**6. Marketable Securities**

	<u>3/31/2003</u>	<u>3/31/2002</u>
	(in thousand euro)	
Equity securities	239	54,479
Debt securities	12,523	50,360
	<u>12,762</u>	<u>104,839</u>

The following table shows the Company's investments in marketable securities available for sale (in thousand euros):

	<u>3/31/2003</u>			
Securities available-for-sale	Acquisition	Market or	Unrealized	Unrealized
	costs	fair value	gains	losses
Equity securities	111	239	128	0
Debt securities	12,393	12,523	167	37
	<u>12,504</u>	<u>12,762</u>	<u>295</u>	<u>37</u>

	<u>3/31/2002</u>			
Securities available-for-sale	Acquisition	Market or	Unrealized	Unrealized
	costs	fair value	gains	losses
Equity securities	54,383	54,479	96	0
Debt securities	5,045	5,045	0	0
	<u>59,428</u>	<u>59,524</u>	<u>96</u>	<u>0</u>

	<u>3/31/2002</u>			
Securities held-to-maturity	Acquisition	Market or	Unrealized	Unrealized
	costs	fair value	gains	losses
Debt securities	45,315	45,188	0	127

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

The debt securities at March 31, 2003 have following maturities (in thousand euros):

	Acquisition costs	Market or fair value
After 1 year through 5 years	5,068	5,236
After 5 years through 10 years	2,280	2,280
After 10 years	5,045	5,007
	12,393	12,523

Effective as of the beginning of fiscal year 2003, the Company reclassified all of its securities previously classified as held-to-maturity to the category available-for-sale and reports all of its securities as short-term securities available-for-sale. This reclassification was necessary as a result of the Company's determination that the securities will need to be sold during fiscal year 2003 to cover existing cash flow needs. Therefore all securities have been valued at their fair market value and all unrealized gains and losses have been reported in other comprehensive income. The net carrying amount of the transferred securities amounted to 37.6 million and the related net unrealized gain included in other comprehensive income amounted to 0.3 million.

During fiscal year 2003 the Company sold available-for-sale marketable securities with historical acquisition costs of 104.2 million. The proceeds from these sales totaled 94.4 million, the realized losses related to the sales of these securities amounted to 2.6 million. In fiscal year 2002 the Company had already recognized an impairment charge of 7.2 million related to these securities which reduced the original acquisition costs of 104.2 million.

Table of Contents

In January 2000, the Company entered into a stock purchase agreement with Paradigm Genetics, Inc. (Paradigm), a U.S. corporation, whereby it acquired 400,000 Series C preferred shares in Paradigm for a total purchase price of \$ 2 million (2 million). At the time of Paradigm s initial public offering on May 10, 2000, the preferred shares were automatically converted to common shares at a 1:1 ratio.

At the end of fiscal year 2002 the Company reviewed the value of the Paradigm stock and concluded that a reduction in value in the stock from the purchase price paid by the Company was other than temporary. Therefore, the Company wrote off the investment to the lower market price of \$ 1.62 per share as of March 31, 2002. At December 31, 2002, the stock had a fair market value of \$ 0.29 per share. Because of the ongoing decline in the share price during the first nine months of fiscal year 2003 the Company concluded that the reduction in value is other-than-temporary and recorded a decrease in fair market value of 632,100 in the results of marketable securities and other long-term investments. As of March 31, 2003 the share price increased to \$ 0.65. The corresponding increase in the market value of the Paradigm stock held by the Company of 128,000 was reported in other comprehensive income.

7. Other Long-Term Investments

	<u>3/31/2003</u>	<u>3/31/2002</u>
	(in thousand euro)	
GeneProt Inc	0	8,509
ChemNavigator.com Inc	0	1,702
BioSolveIT GmbH	549	549
	<u>549</u>	<u>10,760</u>

In June 2001, the Company participated in founding BioSolveIT GmbH, Sankt Augustin, by acquiring a 15% interest at a price of 548,800, including incidental acquisition costs. For accounting purposes, the investment is reported at the lower of cost or market. LION intends to hold the shares in BioSolveIT GmbH as a long-term investment.

In March 2002, the Company entered into a stock purchase agreement with GeneProt, Inc. (GeneProt), a U.S. corporation, whereby it acquired 681,818 Series B preferred shares for \$ 7.5 million. For accounting purposes, the investment is reported at the lower of cost or market. The Company reviewed the value of this investment at the end of the second quarter of fiscal year 2003. Due to the results of this review the Company has fully written-off the investment at September 30, 2002.

In connection with the Company s acquisition in fiscal year 2001 of Trega Biosciences Inc. (Trega) the Company is also a shareholder in ChemNavigator.com Inc., San Diego, USA. Based on its review of financial information provided by ChemNavigator.com Inc., LION determined to fully write off the investment as of March 31, 2003.

8. Goodwill

<u>3/31/2003</u>	<u>3/31/2002</u>
------------------	------------------

	(in thousand euro)	
Trega Biosciences/NaviCyte operations	38,995	38,995
NetGenics operations	19,531	19,668
	58,526	58,663
Less write-off	(58,526)	0
	0	58,663

The Company adopted SFAS No. 142 "Goodwill and Intangible Assets" beginning April 1, 2001. According to SFAS No. 142, acquired goodwill is no longer subject to scheduled amortization. Rather, the Company must conduct an annual impairment test, or on an interim basis if events occur or circumstances change that would more likely than not reduce the fair value of the reporting unit below its carrying amount. During the first and second quarters fiscal year 2003, the Company's share price declined significantly, indicating potential goodwill impairment. On September 30, the Company's market capitalization adds up to approximately 62 million, the Company's equity adds up to approximately 167 million. An analysis of the recovery of goodwill was performed, and an impairment charge was recorded for the full amount of the carrying amount of goodwill. This was based on the extended length of time that the Company's share price was depressed, and the lack of any clear indicators that the share price will recover by year-end 2003. During fiscal year 2003, the goodwill of NetGenics was adjusted subsequently in the amount of 137 thousand due to adjustment to the final purchase price allocation. The write-off was adjusted accordingly.

Table of Contents**9. Other Intangible Assets**

	Estimated useful life	3/31/2003	3/31/2002
(in thousand euro)			
Licenses	4 years	163	1,562
Software and technology	2 years	0	4,481
Customer relationships	2 years	0	1,090
Internally developed software	3 years	228	585
Clone collections	3 years	185	371
		576	8,089

The reported net book values are derived from acquisition costs as of March 31, 2003 of 14,633,100 and 14,787,100 as of March 31, 2002 and accumulated amortization of 14,057,600 as of March 31, 2003 and 6,698,300 as of March 31, 2002

According to SFAS No. 144, long-lived assets are required to be tested for recoverability whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. Due to the decline in the Company's share price as mentioned in Note 8, the Company determined it was necessary to test its long-lived assets for impairment. The results of this review resulted in an impairment charge related to software and technology and Customer Relationships, which were acquired in the acquisitions of Trega and NetGenics. The impairment charge was recorded in the second quarter of fiscal year 2003 based on the lower than expected revenues and cash flows from the acquisitions, and the significant decline in the Company's share price. The impairment charge related to other intangible assets was 3,485,000 and is included in amortization expense in the statements of operations, and is broken down as follows:

	3/31/2003
(in thousand euro)	
Software and technology	2,795
Customer relationships	690
	3,485

Amortization of other intangible assets, without consideration of impairment charges, amounted to 4,468,700 in the fiscal year 2003, as compared to 5,173,500 in 2002 and 676,300 in 2001.

Amortization of other intangible assets for the following fiscal years is scheduled to be as follows:

FY	(in thousand euro)
2004:	562

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

2005:	14
<hr/>	
Total:	576
<hr/>	

F-16

Table of Contents**10. Accrued Liabilities**

	<u>3/31/2003</u>	<u>3/31/2002</u>
	(in thousand euro)	
Outstanding invoices	360	3,460
Vacation accrual	1,317	1,881
Consulting services	469	738
Supervisory Board	128	108
Audit of annual accounts, annual report and general shareholders meeting	625	850
Bonus payments	1,483	450
Lease and restructuring obligations	5,598	0
Firm commitments	2,759	0
Loss contracts	1,483	0
Royalties	390	250
Contribution to Workmen's compensation	120	75
Other	726	649
	<u>15,458</u>	<u>8,461</u>

Firm commitments

Firm commitments relate to obligations under long-term license agreements. The Company is contractually obligated to make future annual payments related to licenses and support and maintenance, which management has determined to be of no future value. The full amount of the obligation has been accrued.

Loss contracts

The loss contract accrual relates to estimated future losses on long-term contracts. The accrual is based on management's best estimate of the excess of costs to be incurred over the estimated revenues.

Restructuring

As part of a cost reduction and restructuring program formally adopted by the Company, the Company has accrued the necessary restructuring obligations as of March 31, 2003. The program was adopted prior to December 31, 2002 and followed the guidance in EITF 94-3 Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity. These expenses include retention and severance payments in connection with the termination of employees at the U.S. subsidiary and at the Company in Germany which will become effective in the first and second quarters of fiscal year 2004, and lease termination payments in connection with the early termination of the Company's long-term lease of a building with laboratory space in San Diego during the third quarter of fiscal year 2003. The program involves the following major items:

- termination of employees at U.S. and UK subsidiaries as well as in Germany
- consolidation of the U.S. subsidiary's two Ohio sites (in Cleveland and Columbus) into the Columbus site
- termination of building lease for laboratory space in San Diego, CA
- relocation of employees of U.S. subsidiary working from the laboratory space in the San Diego building to another location in San Diego

Retention and severance payments are expected to be paid to up to 34 employees who are employed at several locations in the United States and 18 employees who are employed in Germany in several departments. The Company's U.S. subsidiary expects to reach agreement with the landlord of the laboratory building in San Diego for early termination of the lease by February 2004. The original lease term ran until 2008. The U.S. subsidiary has also reached agreement with its subtenant of a portion of the San Diego building for the early termination of the sublease in February 2004 subject to the early termination of the main lease of the San Diego building in February 2004. The net termination to the landlord includes all rent payments and related charges up to and including the February lease termination date.

Table of Contents

The expenses are classified in the following line items of the statements of operations for the fiscal year ended March 31, 2003:

In thousand euro	
General and administrative costs	59
Research and development costs	4,189
Discontinued operations	1,350
	—
Total	5,598
	—

11. Other Current Liabilities

	<u>3/31/2003</u>	<u>3/31/2002</u>
	(in thousand euro)	
Payroll-related taxes and social security contributions	663	991
Stock options	180	0
Payroll liabilities	3	20
Other	256	734
	1,102	1,745
	—	—

12. Capital Lease

The Company has entered into leases for laboratory equipment and IT hardware that are treated as capital leases. Future minimum lease payments under capital lease obligations as of March 31, 2003 are:

	(in thousand euro)
2004	24
2005	16
2006	16
2007	16
2008	16
Thereafter	10
	—
Total minimum lease payments	98
Less: amounts representing imputed interest	(13)
	—
Present value of minimum lease payments	85
Less: current portion	(16)
	—
Non-current portion of capital lease obligations	69
	—

13. Long-Term Debt

In December 1998, the Company entered into a loan agreement with Bayerische Hypo- und Vereinsbank to finance the Company's research and development activities, under which it was entitled to borrow amounts up to 4.6 million until September 30, 2007. As of March 31, 2000, the Company had made full use of this loan agreement. The loan amount is repayable in 16 equal, semi-annual installments, beginning on March 31, 2000. Interest is payable quarterly at a rate of 4.75% per annum. In connection with this loan, the Company granted the lender a security interest in one position of the Company's fixed income securities.

	<u>3/31/2003</u>	<u>3/31/2002</u>
	(in thousand euro)	
Loans, total	2,560	3,129
Short-term portion	(569)	(569)
	<u>1,991</u>	<u>2,560</u>
Total long-term debt	<u>1,991</u>	<u>2,560</u>

Table of Contents

As of March 31, 2003, principal payments on long-term debt for the next five years and thereafter are as follows:

	(in thousand euro)
2004	569
2005	569
2006	569
2007	569
2008	284
	2,560

14. Shareholders Equity**Ordinary Shares**

By resolution of the management board of April 19, 2000, and with the consent of the supervisory board, the Company further increased its capital stock by DM 26,000 (€ 13,293.80) against a cash contribution. Klaus Sprockamp, a former member of the Company's management board, subscribed for 5,200 of the newly issued bearer preferred shares at an issue price of DM 244.02 (€ 124.77) per share and paid the cash contribution in full. The capital increase was entered in the commercial register on June 19, 2000.

By resolution of the general shareholders' meeting on November 19, 1998, entered in the commercial register on March 31, 1999, the Company created conditional capital in the amount of DM 250,000 (€ 127,823) to accommodate the conversion of 10 convertible bearer bonds in the nominal amount of DM 5,000 each (total: DM 50,000), which were issued to Bayerische Hypo- und Vereinsbank AG and were to be converted prior to a public offering of the Company's shares. As the holder of the convertible bonds, Bayerische Hypo- und Vereinsbank AG declared on June 19, 2000 that it would convert these into 50,000 shares of common stock. The conditional capital was thus utilized. In accordance with the terms of the convertible bonds, the bank paid a premium of DM 200,000 (€ 102,260). This capital increase was entered in the commercial register on June 27, 2000.

On June 28, 2000, the Company's general shareholders' meeting adopted a resolution to convert its capital stock from DM 9,337,500 to 4,774,187.94 and to increase the capital stock by € 8,298,312.06 from Company funds from 4,774,187.94 to 13,072,500. The Company's capital stock was redivided into 13,072,500 no par value bearer shares, each representing a nominal € 1 of the stated capital stock. These capital measures were entered in the commercial register on August 7, 2000.

Preferred Shares

By resolution of the general shareholders' meeting of May 15, 2000, all existing preferred shares were converted into common stock. The holders of the preferred shares consented to this conversion by special resolution on May 15, 2000. The commercial register has entered the conversion on June 19, 2000. In addition, the general shareholders' meeting annulled the management board's authorization, contained in its resolution of October 6, 1998, to increase the Company's capital stock by DM 2,050,000 (€ 1,048,165) on or before September 30, 2003 with respect to the

residual sum of DM 112,500 (57,266).

Conversion of Preferred Shares to Common Stock

The general shareholders' meeting adopted a resolution on May 15, 2000 on the conversion of existing preferred shares to common stock. The holders of the preferred shares consented to this by special resolution on May 15, 2000. The commercial register entered the conversion on June 19, 2000. Under U.S. GAAP, converting preferred shares to common stock is treated as a repurchase of the stock originally issued and a subsequent new issue of stock.

The difference between the fair value of the shares originally issued and that of the newly issued shares at the conversion date resulted in a non-cash expense for Company employees of 8,743,000. For other shareholders, the conversion is classified as a deemed dividend (not affecting net income) of 14,410,000. These mentioned amounts were recognized in the first quarter of fiscal 2001.

Capital Increases in Connection with the Initial Public Offering

On June 28, 2000, the Company's general shareholders' meeting adopted a resolution to increase its capital stock from 13,072,500 to 17,647,875 against a cash contribution of 4,575,375. Morgan Stanley & Co. International Ltd. subscribed for the newly issued shares in its own name and on behalf of the underwriters at an issue amount per share equivalent to the portion of the Company's capital stock represented by each no par value share, on the condition that the new shares would be made available under the public offering. The difference between the issue price and the purchase price for the new shares created as part of the capital increase was paid to the Company.

Table of Contents

Moreover, on June 28, 2000, the general shareholders meeting authorized the management board, with the consent of the supervisory board, to increase the Company's capital stock by up to 352,125 on one or more occasions on or before June 1, 2005 through the issuance of new common bearer shares against cash contributions. This authorized capital was mainly created to accommodate the exercise of the over-allotment option on a total of 606,125 shares. The preemptive rights of existing shareholders may be excluded if Morgan Stanley & Co. International Ltd. subscribes for the up to 352,125 new shares within 30 days of their being listed on a national or foreign stock exchange on its own behalf and for the account of the underwriters and agrees to pay the Company the difference between the issue price and the purchase price for the new shares created as part of the capital increase. Shareholders' preemptive rights may also be excluded if the Company issues new shares against cash contributions and this capital increase, together with any shares issued from the authorized capital in the amount of 5,825,000 and any of the Company's own shares purchased by it, does not exceed 10% of the existing capital stock, and the issue price is not significantly lower than the market price. These capital measures were entered in the commercial register on August 7, 2000.

In connection with these capital measures, 5,181,500 shares were issued at a price of 44.00, bringing the gross issue proceeds to 227,986,000. After deduction of the IPO costs, the net proceeds came to approximately 209 million.

In fiscal 2002, additional IPO-related expenses were incurred in the amount of 154,000 and have been booked against additional paid-in capital.

Contingent capital I

The contingent capital I of 1,239,000 is reserved to grant option rights to shares in the Company to the Managing Board and employees of the Company and its subsidiaries through December 31, 2004.

Contingent capital II

By resolution of the General Meeting on July 18, 2001 the contingent capital was increased by 636,400. The contingent capital II is reserved to grant option rights to shares in the Company to the Managing Board and employees of the Company and its subsidiaries through December 31, 2005.

Contingent capital III

By resolution of the General Meeting on July 19, 2002 the contingent capital was increased by 111,617. The contingent capital III is reserved to grant option rights to shares in the Company to the Managing Board and employees of the Company and its subsidiaries through December 31, 2006.

Capital Increases

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

By agreement dated December 27, 2000 (Merger Agreement), LION and Trega agreed that LION would acquire 100% of the shares of Trega in exchange for LION stock, represented by LION American Depository Shares. This agreement was based on an assessment of Trega's value at approximately \$34 million, subject to certain adjustments when the transaction was executed (which are described in detail in the agreement). The final exchange ratio was determined by a series of factors, including changes in the market value of LION shares. After the transaction was completed, Trega became a wholly owned subsidiary of LION.

LION's supervisory board approved the agreement at its meeting on December 21, 2000.

Execution of the transaction was dependent on the fulfillment of certain conditions, including approval by Trega's shareholders. The agreement was approved at a separate shareholders' meeting held on March 12, 2001. Thereafter, the LION management board adopted a resolution on March 13, 2001 (ratified by the supervisory board on March 13 and 14) issuing 500,000 shares from authorized capital.

Table of Contents

The Company used 1,116,175 authorized capital in connection with the acquisition of NetGenics. Based on the authorization granted to the management board by § 4 (4) of the bylaws of June 28, 2000, the management board increased the Company's capital stock by 1,116,175 to 19,870,175 (with the approval of the supervisory board). The capital increase was entered in the commercial register on March 4, 2002.

Accumulated other comprehensive income

Due to the decline in market prices of several marketable securities, the Company determined these decreases as other than temporary and therefore reclassified 2,020,400 in fiscal year 2003 as compared to 8,455,700 in 2002 and 0 in 2001 from accumulated other comprehensive income on its balance sheets to the results from marketable securities and other long-term investments in the statements of operations.

Employee Shares

During the acquisition of Trega Biosciences Inc., Trega's employees were issued shares of LION in exchange for their Trega stock options. The difference between the purchase price and the fair value of the shares are recorded pro rata as a compensation expense over the two-year waiting period. In fiscal year 2003, approximately 292,400 was recorded as a compensation expense as compared to 316,400 and 0 in fiscal year 2002 and 2001, respectively.

Stock Option Plans

As of March 31, 2003 LION had set-up three option plans. LION has granted stock options from two of these plans to its employees. As the exercise prices of these options exceed the current share market price of the LION stock, the Company agreed to offer a cash-settlement for all outstanding options based on the fair value of the options as calculated according to the Black-Scholes method. This offer is subject to the approval at the Annual General Meeting. Under the terms of the offer, the option holder had to irrevocably waive any and all rights to the options. In the event the offer is not subsequently approved at the Annual General Meeting, the option holder has to repay the cash consideration. The waiver however remains irrevocable even if approval is not obtained at the Annual General Meeting. As of March 31, 2003 this offer was accepted by all option holders of LION and its subsidiaries. The cash settlement is treated as an accelerated vesting of the options, so that unrecognized non-cash compensation expense in the amount of 4,361,000 for both stock option plans has been recognized as of March 31, 2003. This amount has been included in the discussions below related to the two stock option plans. The cash settlement of 180,000 has been charged against additional paid in capital at March 31, 2003.

2000 Stock Option Plan

Under a stock option plan adopted by the Company on March 13, 2000 (the 2000 Option Plan), and amended by resolutions adopted at the general shareholders' meetings on May 15, 2000 and June 28, 2000, the Company's management board is authorized to grant non-transferable options to acquire the Company's shares to employees (up to 757,050) and members of the management board (up to 184,800) in Germany on or before December 31, 2004. In addition, members of the management boards and employees of LION subsidiaries may be granted options up to 82,250 and 214,900 of the Company's shares, respectively.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

All permanent employees of LION AG and its subsidiaries are entitled to take part in the stock option program. In addition to imposing a vesting period of several years, the program contains defined performance targets to be achieved before options can be exercised. The program is designed to encourage individual employees to remain with the Company over the long term and to increase employees' identification with the Company and its objectives.

The Company may grant a maximum of 1,239,000 stock options under the 2000 Option Plan. Options granted may not be exercised unless the market value of the Company's shares exceeds the exercise price of the options by at least 40%. Holders of the options may exercise them at least two years and no more than eight years after the grant date. Holders may exercise up to 33% of their options after two years, up to 66% in the third year, and all of them in the fourth year after the options are granted. However, the option holders may not exercise them during the following blocking periods:

- a) 10 stock-exchange working days before the publication of figures for the first, second, and third quarters of any fiscal year;
- b) between the end of a fiscal year and the conclusion of the regular general shareholders' meeting,
- c) 10 stock-exchange working days before extraordinary general shareholders' meetings of LION bioscience AG.

F-21

Table of Contents

In this respect, a non-cash compensation expense of 4,662,600 was recorded in fiscal year 2003 as compared to 3,776,100 in 2002 and 1,731,600 in 2001. Of these totals 434,000 is included in discontinued operations as compared to 422,800 in 2002 and 0 in 2001.

In accordance with FASB No. 123, the fair value of options is determined on the basis of the Black Scholes method. The following factors are relevant at the time the options are granted:

	<u>Tranche 1</u>	<u>Tranche 2</u>	<u>Tranche 3</u>	<u>Tranche 4</u>
Risk-free interest rate	5.50%	5.50%	5.50%	4.00%
Anticipated dividend distribution	0	0	0	0
Anticipated volatility	0.01%	75.00%	75.00%	75.00%
Anticipated option term	3 years	3 years	3 years	3 years
Remaining contractual life	5.25 years	5.75 years	6.00 years	6.75 years
Weighted average market price per option at grant date	6	41	14	10
Exercise price	40.46	78.29	30.61	19.72

Changes in stock options at March 31, 2003 were as follows:

	<u>Stock options</u>	<u>Actual</u>	<u>Stock options</u>
	<u>Number</u>	<u>exercise price</u>	<u>yet to be issued</u>
	<u>Number</u>		<u>Number</u>
In existence on April 1, 2000	0		1,239,000
Granted 1. tranche	1,113,000	40	
Granted 2. tranche	96,375	78	
Granted 3. tranche	63,000	31	
Exercised	0		
Expired	55,125		
Lapsed	0		
In existence on March 31, 2001	1,217,250		21,750
Exercisable on March 31, 2001	0		
In existence on April 1, 2001	1,217,250		21,750
Granted 4. tranche	38,600	20	
Exercised	0		
Expired	174,950		
Lapsed	0		
In existence on March 31, 2002	1,080,900		158,100
Exercisable on March 31, 2002	0		
In existence on April 1, 2002	1,080,900		158,100

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Exercised	0	
Expired	286,125	
Settled	794,775	
Lapsed	0	
	<u> </u>	<u> </u>
In existence on March 31, 2003	0	0
	<u> </u>	<u> </u>
Exercisable on March 31, 2003	0	
	<u> </u>	

2001 Stock Option Plan

Table of Contents

Under an additional stock option plan (2001 Option Plan), which was approved by a resolution adopted at the general shareholders meeting dated July 18, 2001, the Company s management board is authorized to grant up to 636,400 non-transferable options for acquiring the Company s shares to employees and members of the management board and employees and members of the management boards of LION subsidiaries on or before December 31, 2005. Up to 17% of all options may be granted to members of the Company s management board, up to 5% to the members of the management boards of LION subsidiaries, and up to 78% to employees of the Company and its subsidiaries.

The options have a term of five years from the date of grant. The options must be exercised within this period. Options may not be exercised until the vesting period has expired. For 50% of the options in a tranche granted to an eligible employee, the vesting period is two years from the grant date. For the other 50%, the vesting period is three years from the grant date. At the time of issue, participants in an option plan must be in good standing with the Company or a LION subsidiary.

The exercise price for a new share of LION bioscience AG is the price of the Company s shares when the option was granted plus a premium of at least 20% as a performance goal.

The price for LION bioscience AG shares at the time the options are granted is determined based on the arithmetic average of the market prices for the Company s shares in the final XETRA index on the Frankfurt Stock Exchange (or a comparable successor system) on the last 20 trading days before the grant date.

In connection with options granted under the 2001 Option Plan a non-cash compensation expense of 3,595,000 was recorded in the fiscal year 2003 as compared to 449,400 in fiscal year 2002. Of these totals 526,300 is included in discontinued operations as compared to 65,800 in 2002.

Table of Contents

In accordance with FASB No. 123, the fair value of options is determined on the basis of the Black Scholes method. The following factors were relevant at the time the options were granted:

	<u>Tranche 1</u>
Risk-free interest rate	4.00%
Anticipated dividend distribution	0
Anticipated volatility	75.00%
Anticipated option term	2.5 years
Remaining contractual life	3.75 years
Weighted average market price per option at grant date	8
Exercise price	28

Changes in stock options at March 31, 2003 were as follows:

	Actual	Stock options
	exercise price	yet to be issued
Stock options		
Number		Number
In existence on April 1, 2001	0	636,400
Granted	593,300	28
Exercised	0	
Expired	0	
Lapsed	0	
	<u>593,300</u>	<u>28</u>
In existence on March 31, 2002	593,300	43,100
Exercisable on March 31, 2002	0	
In existence on April 1, 2002	593,300	43,100
Granted	0	
Exercised	0	
Expired	210,800	
Settled	382,500	
Lapsed	0	
	<u>0</u>	<u>43,100</u>
In existence on March 31, 2003	0	43,100
Exercisable on March 31, 2003	0	

2002 Stock Option Plan

Under an additional stock option plan (2002 Option Plan), which was approved by a resolution adopted at the general shareholders meeting on July 19, 2002, the Company's management board is authorized to grant up to 111,617 non-transferable options to acquire the Company's shares to employees and members of the management board in Germany and employees and members of the management boards of LION subsidiaries on or before December 31, 2006. No stock options have been granted from the 2002 Option Plan as of March 31, 2003.

15. Income Taxes

As required by SFAS No. 109, Accounting for Income Taxes, deferred tax assets and liabilities are reported for temporary differences between the financial statements and the tax accounts.

The reconciliation of actual tax expenses and the amount resulting from applying the German statutory corporate-tax rate to the pre-tax loss is as follows:

	Fiscal year ended March 31		
	2003	2002	2001
	(in thousand euro)		
Corporation tax and trade income tax at approximately 39%	(58,870)	(21,206)	(9,289)
Foreign taxes	313	261	127
Tax write-off of investment	12,870	0	0
Tax changes of loss carryforwards	19,355	0	0
Increase in valuation discount on deferred taxes	26,645	21,206	9,289
	313	261	127

Table of Contents

Deferred tax assets and liabilities arising from timing differences between the financial statements and the valuation of assets and liabilities for tax purposes are shown in the following table:

	March 31	
	2003	2002
	(in thousand euro)	
Deferred Tax Assets:		
Loss carryforward	147,355	123,203
Less valuation allowance	(147,261)	(120,616)
	<u>94</u>	<u>2,587</u>
Deferred Tax Liabilities		
Capitalized software	94	305
Software and technology	0	1,834
Customer relationships	0	448
	<u>94</u>	<u>2,587</u>

As of March 31, 2003, loss carryforwards totaled 378 million. Losses at German operations account for approximately 228 million, and the U.S. subsidiaries for most of the rest. Loss carryforwards attributable to the recently acquired business of Trega Biosciences Inc. and NetGenics Inc. are also included. During fiscal year 2003, some of the loss carryforwards have been reversed due to U.S. assessment. Whereas in Germany losses can be carried forward indefinitely, as a rule, American tax law imposes a maximum period of 20 years.

In view of the uncertainty regarding the Company's future profitability and, accordingly, regarding the Company's ability to utilize these losses, the Company has recorded a valuation allowance representing the balance of the net deferred tax assets.

C. Discontinued Operations

In October 2001, FASB issued SFAS No. 144 Accounting for the Impairment or Disposal of Long-Lived Assets, which deals with the accounting for and reporting of impairment and disposal of long-lived assets. SFAS No. 144 replaces both SFAS No. 121 Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of and APB Opinion No. 30, Reporting the Results of Operations Reporting the Effect of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions. However, SFAS No. 144 retains many of the basic provisions of SFAS No. 121. Similarly, SFAS No. 144 adopts the obligation of Opinion No. 30 that discontinued operations must be reported separately. The scope of the reporting obligation is expanded to include components of an entity that are disposed of by sale, retirement, demerger or spin off or that are held for sale. SFAS No. 144 must be applied in fiscal years commencing after December 15, 2001, but may be applied earlier. The Company applied SFAS No. 144 starting April 1, 2002.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

The Company closed down its in-house drug discovery (iD3) at December 31, 2002 to focus on its core competencies, the development and implementation of software solutions for the Life Science industry. The Company has closed down its iD3 activities in the US during the third quarter of fiscal year 2003 and in Heidelberg at December 31, 2003. The Company plans to finish the total execution, including for example the sale of all assets held-for-sale, during fiscal year 2004.

The consolidated financial statements therefore have been reclassified to reflect iD3 business as a discontinued operation. Accordingly, the revenues, costs and expenses, assets and liabilities have been excluded from the respective captions in the consolidated statements of income and balance sheets and have been reported as discontinued operations for fiscal year 2003 and 2002. No costs or revenues were incurred or earned during fiscal year 2001 related to iD3 activities. Only direct costs and expenses are reported as discontinued operations. Expenses related to severance payments and lease termination payments of approximately 1.9 million and 0.9 million, respectively, have been incurred directly as result of the decision to close the inhouse drug discovery operations have been allocated to discontinued operations. A total of 82 employees were terminated in connection with the closure. The prior year results have been adjusted accordingly.

F-25

Table of Contents

The assets held-for-sale consist of:

	<u>3/31/2003</u>	<u>3/31/2002</u>
	(in thousand)	
Laboratory equipment	262	3,722
Computer software	39	56
Furniture and office equipment	21	654
Leasehold improvements	0	303
	<u>322</u>	<u>4,735</u>

The Company sold part of these assets in third and fourth quarter of fiscal year 2003. The Company plans to sell the remaining assets during fiscal year 2004. The net book value recorded as of March 31, 2003 of these assets of 322,000 corresponds to the expected proceeds from the sale of these assets. During fiscal year 2003, the Company recognized 1.8 million in losses from the write down to the estimated fair value and 1.1 million from the loss on sale of assets, which are reported as discontinued operations.

Table of Contents

The following table shows a reconciliation for each line item in the statements of operations between discontinued and continued operations:

(in thousand)	Fiscal year ended March 31, 2003			Fiscal year ended March 31, 2002		
	As previously	Discon-	As reclassified	As previously	Discon-	As reclassified
	reported	tinued		reported	tinued	
Drug Discovery	1,995	381	1,614	4,122	1,074	3,048
Licenses	14,111	0	14,111	15,145	0	15,145
Professional Services	12,068	0	12,068	18,613	0	18,613
Maintenance and Support	1,864	0	1,864	2,500	0	2,500
Total revenues	30,038	381	29,657	40,380	1,074	39,306
Cost-of-sales	18,677	0	18,677	11,395	0	11,395
Selling costs	11,233	4	11,229	12,546	0	12,546
General and administrative costs	22,334	844	21,490	18,737	368	18,369
Research and development costs	44,932	10,707	34,225	42,880	8,980	33,900
Other operating income and expenses	(702)	1,031	(1,733)	(1,104)	0	(1,104)
Total costs and expenses (incl. COS)	96,474	12,586	83,888	84,454	9,348	75,106
Operating results before depreciation/amortization	(66,436)	(12,205)	(54,231)	(44,074)	(8,274)	(35,800)
Depreciation of property, plant & equipment and amortization of intangible assets	17,281	3,260	14,021	13,160	1,275	11,885
Impairment of goodwill	58,526	0	58,526	0	0	0
Operating results	(142,243)	(15,465)	(126,778)	(57,234)	(9,549)	(47,685)

There were no revenues and expenses allocable to discontinued operations in fiscal year 2001.

Table of Contents**D. Notes to the Statements of Operations****16. Revenues**

Since the beginning of fiscal year 2003 the Company has reclassified revenues to provide additional information related to its business and operations. The following table shows a reconciliation from the revenues as previously reported to the revenues as reclassified in the consolidated statements of operations.

(in thousand euro)	Fiscal year ended March 31, 2003			Fiscal year ended March 31, 2002		
	As previously reported:			As previously reported:		
	R&D	Licenses		R&D	Licenses	
As reclassified:						
Drug Discovery	1,995	0	1,995	4,122	0	4,122
Licenses	0	14,111	14,111	0	15,145	15,145
Professional Services	8,391	3,677	12,068	17,060	1,553	18,613
Maintenance and Support	0	1,864	1,864	0	2,500	2,500
	10,386	19,652	30,038	21,182	19,198	40,380
less Discontinued Operations (iD ³)	(381)	0	(381)	(1,074)	0	(1,074)
Total	10,005	19,652	29,657	20,108	19,198	39,306

As reclassified:	Fiscal year ended March 31, 2001		
	As previously reported:		
	R&D	Licenses	
Drug Discovery	2,421	0	2,421
Licenses	0	6,292	6,292
Professional Services	12,074	1,300	13,374
Maintenance and Support	0	1,188	1,188
	14,495	8,780	23,275
less Discontinued Operations (iD ³)	0	0	0
Total	14,495	8,780	23,275

17. Depreciation and Amortization

The components of depreciation and amortization are as follows:

	Fiscal year ended		
	March 31		
	2003	2002	2001
	(in thousand euro)		
Property, plant and equipment	9,327	7,986	3,542
Other intangible assets	4,469	5,174	676
Other intangible assets (Impairment)	3,485	0	0
	<u>17,281</u>	<u>13,160</u>	<u>4,218</u>
Depreciation/amortization of PP&E and Other intangible assets	17,281	13,160	4,218
Goodwill (Impairment)	58,526	0	0
	<u>75,807</u>	<u>13,160</u>	<u>4,218</u>
Total depreciation and amortization	75,807	13,160	4,218
Thereof one-time charges	62,846	0	0
Thereof discontinued operations	3,260	1,275	0

Table of Contents**18. Interest result**

	Fiscal year ended		
	March 31		
	2003	2002	2001
	(in thousand euro)		
Interest income	3,810	6,517	5,691
Interest expense	(156)	(215)	(457)
Net	3,654	6,302	5,234

19. Results from Marketable Securities and Other Long-Term Investments

The components of results from marketable securities and other long-term investments are as follows:

	Fiscal year ended		
	March 31		
	2003	2002	2001
	(in thousand euro)		
Impairment of GeneProt investment	(8,509)	0	0
Impairment of Paradigm shares	(632)	(1,237)	0
Impairment of GMD investment	0	(8,830)	0
Impairment of Chemnavigator investment	(1,374)	0	0
Impairment of SimUtility investment	0	(1,726)	0
Impairment of fixed income equity securities	(919)	0	0
Impairment of fixed income securities	(469)	0	0
Income from the sale of Tripos shares	0	14,536	0
Tripos dividend payment	0	982	0
Impairment of investment funds	0	(7,218)	0
Realized loss on sales of investment funds	(1,612)	0	0
Realized gain/(loss) on sale of fixed income securities	(79)	0	0
Results from marketable securities / other long-term investments	(13,594)	(3,493)	0

In February 2000, the Company entered into a stock purchase agreement with Tripos Inc. (Tripos), a U.S. corporation, whereby it acquired 409,091 preferred shares for a total purchase price of \$ 9 million. The Company reported the investment at cost. The preferred shares are convertible at the Company's option into common stock at a ratio of 1:1 (subject to adjustments for stock splits, capital increases, and comparable equity transactions). The Tripos preferred shares are subject to mandatory conversion if the price of common shares exceeds a certain level on

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

30 consecutive days. Effective February 5, 2001, Tripos had a 2:1 stock split, which gave the Company 818,182 preferred shares. At the end of January 2002, the Company converted the preferred shares into common stock at a ratio of 1:1. At that time, Tripos paid LION accumulated dividends of about \$ 890,000 on the convertible preferred shares. On February 7, 2002, the Company sold its entire portfolio of Tripos common shares for a total of 23.7 million. The realised profit amounted to 14.5 million.

In February 2001, the Company acquired an approximate 16% interest in Gesellschaft für medizinische Datenverarbeitung mbH (GMD), Munich, at a price of 8,774,906 plus incidental acquisition costs. As part of its program of focusing on its core lines of business, the Company examined the value of GMD and, as a result, fully wrote-off the investment in fiscal 2002.

In May 2001, the Company entered into a stock purchase agreement with SimUtility Inc., a U.S. corporation, whereby it acquired 937,500 common shares in the company at a price of \$ 1.5 million. As a result of a change in strategic direction, the Company will not continue its collaboration with SimUtility Inc. In making this decision, the Company reviewed the value of SimUtility and has fully written-off the investment in fiscal 2002.

Table of Contents**E. Other Information****20. Supplemental Disclosure of Cash Flow Information**

	Fiscal year ended		
	March 31		
	2003	2002	2001
	(in thousand euro)		
<u>Cash paid during the year</u>			
Interest expenses	156	215	457
Income taxes	313	261	127
<u>Non-cash financing and investing activities</u>			
Trega contribution in kind	0	0	34,458
Conversion of convertible note into capital stock	0	0	26
Conversion of preferred shares into common stock	0	0	2,077
Capital increase from company resources	0	0	8,299
Conversion of preferred shares into common stock of employees	0	0	8,743
Acquisition of GMD	0	0	7,001
NetGenics contribution in kind	0	20,379	0

21. Acquisition of Trega Biosciences, Inc.

Effective on March 14, 2001, the Company acquired Trega Biosciences, Inc. (Trega) at a purchase price of \$ 34 million. Trega was founded in 1991 and was incorporated in Delaware. The company is based in San Diego, California (USA).

Pro-Forma Information on Trega Biosciences Inc.

The first consolidation of Trega was executed on March 31, 2001. Accordingly no revenues and expenditures are included in the consolidated income statement of fiscal 2001. If Trega had been purchased on April 1, 2000, the following selected key data would have resulted:

	FY 2001
in thousand euro, except for share and per share data	()
Net sales	35,411
Loss for the year	53,337
Loss and diluted loss per share	3.50

22. Acquisition of NetGenics, Inc.

Company Description

Effective March 4, 2002, the Company acquired NetGenics Inc. (NetGenics). NetGenics was incorporated in Delaware (USA) in 1996 and is based in Cleveland, OH (USA).

The purpose of the company is the development and marketing of software products and solutions and related consulting services for use by the pharmaceutical and biotech industries in integrating biological and chemical data. NetGenics collaborated on a research program with Schering AG, which was taken over by the Company after the acquisition.

In connection with the acquisition of NetGenics, it was decided in February 2002 to make a number of personnel changes and realignments. The affected employees were informed of the details, and the measures were completed by mid-March 2002. The associated costs of approximately 500,000 were taken into account in calculating acquisition costs.

Table of Contents**Contractual Basis**

By contract dated January 14, 2002 (Merger Agreement) LION and NetGenics agreed that LION would acquire 100 % of the equity in NetGenics in exchange for shares in LION, represented by LION American Depository Shares. This agreement was based on a valuation of approximately \$20 million for NetGenics, subject to certain adjustments on completion of the transaction, as detailed in the agreement. The exchange ratio was set forth in the Merger Agreement. On completion of the transaction, NetGenics became a wholly-owned subsidiary of LION.

Pro Forma Information on NetGenics Inc.

NetGenics was first consolidated as of January 31, 2002, and accordingly its revenues and expenses for February and March 2002 are included in the consolidated statements of operations for fiscal 2002. If NetGenics had been acquired as of April 1, 2001 or April 1, 2000, selected key figures for fiscal 2001 and 2002 would have been as follows:

In thousand euro, except per-share data	Fiscal year ended March 31	
	2002	2001
Revenues	43,051	37,558
Net loss	69,967	70,389
Basic and diluted loss per share	3.52	4.30

The pro forma information for fiscal year 2001 stated above includes the pro forma figures for Trega Biosciences Inc.

23. Commitments and Contingencies**Operating Leases**

The Company leases offices, laboratory space and equipment under non-cancellable operating leases. Future minimum lease payments under these agreements as of March 31, 2003 were:

	in thousand euro
2004	1,703
2005	1,176
2006	668

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

2007	426
2008	0
Thereafter	0
	<hr/>
Total minimum lease payments	3,973
	<hr/>

Rental costs for fiscal year 2003 totaled 11,832,400, as compared to 5,165,900 in 2002 and 2,005,400 in 2001. The rental expense in fiscal year 2003 includes an accrual for net future lease obligations due to the closing of the drug discovery business and restructuring of the U.S. activities. The sublease rental income amounted to 136,400 in fiscal year 2003, as compared to 256,800 in 2002 and 0 in 2001.

Litigation

From time to time the Company has been involved in litigations arising from its business activities. The Company is not aware of any such action that would have a material adverse effect on its earnings, liquidity, or financial position.

Table of Contents

24. Collaboration and Service Agreements

On June 18, 1999, the Company entered into a basic agreement with Bayer AG (Bayer), under which it was to develop and launch an innovative bio-IT solution for Bayer. The agreement also governs collaboration in research and development between the two companies over five years.

The basic agreement required the Company to establish LION bioscience Research Inc. (LBRI), based in Cambridge, Massachusetts, as a wholly-owned U.S. subsidiary of LION and one of the vehicles through which LION would perform the basic agreement. LION is also obligated to provide LBRI with adequate numbers of scientific experts and engineers from its existing staff. LBRI is to operate on the basis of a five-year plan and annual budgets and will conduct research activities in accordance with a research and development plan.

Under the basic agreement, all rights and claims to the technology developed by LBRI are the property of LION. At the same time, LION grants Bayer a license to use this information technology exclusively for internal purposes. LION may not market or distribute any of these information technologies within one year of their becoming functional. The parties have also agreed that all rights and claims to targets and genetic markers found by LBRI belong to Bayer.

As consideration for the services of LION under this basic agreement, Bayer is obligated to pay LION a sum equal to the LBRI operating costs pursuant to the annual budget, subject to a maximum budget increase of up to 10%. The total sums due over the term of the agreement may not exceed \$ 26.8 million. LBRI's operating costs are payable to LION by Bayer in advance at the beginning of July and January of each calendar year on the basis of the approved budget for the pertinent half year. Since LBRI incurs these costs, the Company recognizes the sums paid by Bayer as revenue. Advance payments received from Bayer that have not yet been reported as revenue, are shown as deferred revenue. Bayer also pays LION a fixed annual fee of 1,283,000. This fixed annual fee is also reported as revenue on a straight-line basis over twelve months. In addition, Bayer pays license fees with respect to drugs and diagnostic products developed and marketed by Bayer on the basis of targets or genetic markers found by LBRI or LION or with the assistance of IT solutions supplied by LION or LBRI. For the fiscal years 2003, 2002 and 2001, the Company reported revenues of 6,445,000, 10,997,000 and 7,755,000, respectively, under this agreement.

The basic agreement grants Bayer an option to acquire all the shares in LBRI from LION at a price equal to the capital paid in by LION (\$1.0 million). For two years after any acquisition of the shares by Bayer, LION has a right of first refusal with regard to the commercial exploitation of new IT software developed by LBRI, in the event this software is in competition with LION's activities and Bayer has decided to market the software commercially.

The agreement expires on June 30, 2004, but can be terminated by either party, on an annual basis, on the grounds of non-performance.

Service Agreement

On October 13, 2000, the Company entered into a research and development agreement (Development Agreement) with Bayer AG, Leverkusen. The objective of the Development Agreement is to improve and speed up Bayer's pre-clinical research process, to integrate chemical data and to develop customer-specific software for the analysis of high-throughput screening and structural activity data, in order to arrive at lead compounds faster and reduce the failure rate in the subsequent research process.

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

On December 11, 2001 (First Amendment), and March 29, 2002 (Second Amendment) amendments to the Development Agreement effective January 1, 2002 established a new schedule for reaching five milestones and extended the contract until January 1, 2004. The achievement of the agreed-upon milestones triggers the acceptance test by Bayer. Payments are dependent on Bayer's acceptance of the predetermined milestones.

Effective June 25, 2002, the development agreement was amended again (Third Amendment). The parties agreed to postpone the milestone due in the first quarter to the third quarter of fiscal year 2003. At the same time the term of the development agreement was extended until July 1, 2004. Effective December 16, 2002 a fourth amendment (Fourth amendment) was signed, which supersedes the previous three amendments. The postponed milestone has been accepted, a new schedule for deliverables and payments has been established and the total volume of the project has been reduced. Revenues related to this agreement are recorded when the milestone has been accepted by Bayer.

The Company reported revenues in fiscal years 2003, 2002 and 2001 of 3,299,000, 7,579,000 and 5,390,000, respectively, under this collaboration agreement. In addition, based on the Company's best estimates, a loss on the contract is anticipated in fulfilling its obligations under the contract. Therefore, the Company has accrued 920,000 as a loss contract provision, which is included in cost-of-sales in fiscal year 2003.

Table of Contents

On May, 16, 2002 the Company entered into a collaborative research and development agreement with Paradigm. This agreement defines the cooperation of both parties within the ATP grant. The parties have applied to participate in the Advanced Technology Program (ATP) administered by the National Institute of Standards and Technology (NIST) as a contractual joint venture with the objective of assembling and developing a software suite and data solution that allows users to better identify targets for lead compound discovery and product development by integrating large streams of biological and biochemical data from heterogeneous sources into coherent data sets that accurately represent underlying biological relationships (the Target Assessment Technologies Suite or (TATS)). The grant award amounts to \$ 11.7 million and will run for five years. Both parties will each receive approximately 50 % of the grant. Based on the annual budgets, pending the approval by NIST, the parties will receive up to 50 % of the costs incurred. Any intellectual property developed by LION will be fully owned by LION for its own use. Any IP developed jointly by Paradigm and LION will be jointly owned.

25. Related Party Transactions

The Company has entered into several research and development agreements with Bayer, which is a shareholder of the Company. It also has contractual relationships with EMBL and DKFZ, which are also shareholders of the Company. None of these shareholders have a material influence on the company.

26. Business Segments and Foreign Business Activities

Due to the acquisition of Trega on March 31, 2001 and the associated changes in management structure, the Group is currently managed as one segment for purposes of segment reporting requirements.

The following amounts relating to geographical locations are included in the consolidated financial statements:

	Fiscal year ended March 31		
	2003	2002	2001
	(in thousand euro)		
Revenues (1)			
Germany	6,297	9,643	8,697
United States	16,652	22,699	9,958
Other	6,708	6,964	4,620
Group	29,657	39,306	23,275
Operating results before Depreciation and Amortization			
Germany	(15,758)	(8,293)	(15,468)
United States	(33,483)	(23,297)	(6,949)
Other	(4,990)	(4,210)	(2,416)
Group	(54,231)	(35,800)	(24,833)

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

Long-Lived Assets			
Germany	3,555	5,486	8,119
United States	2,704	7,209	8,118
Other	631	708	659
	<u> </u>	<u> </u>	<u> </u>
Group	6,890	13,403	16,896
	<u> </u>	<u> </u>	<u> </u>

(1) Revenues are allocated based on customer location.

F-33

Table of Contents**27. Loss per Ordinary Share**

The following table shows the calculation of the basic and diluted net loss per common share:

In thousand euro, except share and per-share data

	Fiscal year ended March 31		
	2003	2002	2001
Numerator			
Net loss for the year from continuing operations	(137,031)	(45,137)	(23,944)
Net loss for the year from discontinued operations	(15,465)	(9,549)	0
Net loss for the year, total	(152,496)	(54,686)	(23,944)
Dividends on preferred shares	0	0	(25)
Net loss attributable to ordinary shares before deemed preferred stock dividend	(152,496)	(54,686)	(23,969)
Deemed preferred stock dividend	0	0	(14,410)
Net loss attributable to ordinary shares after deemed preferred stock dividend	(152,496)	(54,686)	(38,379)
Denominator			
Weighted averages of ordinary shares outstanding	19,870,175	18,940,029	15,247,146
Basic and diluted net loss per ordinary share from continuing operations	(6.89)	(2.39)	(1.57)
Basic and diluted net loss per ordinary share from discontinued operations	(0.78)	(0.50)	0
Basic and diluted net loss per ordinary share before deemed preferred stock dividend	(7.67)	(2.89)	(1.57)
Deemed preferred stock dividend per share	0	0	(0.95)
Basic and diluted net loss per ordinary share after deemed preferred stock dividend	(7.67)	(2.89)	(2.52)

Stock options issued are not considered in calculating the diluted net loss per common share, due to their anti-dilutive effect.

28. Compensation of the Governing Bodies**a) Management board**

In the previous fiscal year, the members of the management board received total compensation 926,000, in fiscal year 2003 the amount is:

Edgar Filing: LION BIOSCIENCE AG - Form 20-F

<u>Name</u>	<u>Period</u>		<u>Fix Salary</u>	<u>Variable</u>		<u>Total</u>
				<u>Salary</u>		
Friedrich von Bohlen	04/01/2002	03/31/2003	281,000	60,000		342,000
Martin Hollenhorst	04/01/2002	03/31/2003	232,000	48,000		280,000
Daniel Keesman	06/27/2002	03/31/2003	155,000	40,000		195,000
Jan Mous	04/01/2002	12/31/2002	173,000			173,000
Reinhard Schneider	04/01/2002	02/28/2003	170,000			170,000
Total			1,011,000	149,000		1,160,000

F-34

Table of Contents

Additionally the company accrued severances for resigned board members an amount of 851,000.

b) Supervisory Board

In fiscal year 2003, the members of the supervisory board received total compensation of 134,000 (previous year: 107,000).

Jürgen Dormann	46,000	(9 months)
Dr. Thomas Schürle	21,000	(4 months chairman, 8 months member)
Jörn Aldag	15,000	
Markus Metyas	15,000	
Dr. Michael Steiner	15,000	
Lorenzo Giuliani	5,000	(4 months)
Dr. Klaus Tschira	12,000	(9 months)
Travel Expenses	5,000	
	<hr/>	
Total	134,000	
	<hr/>	

F-35

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant certifies that it meets all of the requirements for filing this annual report on Form 20-F and has duly caused this annual report to be signed on our behalf by the undersigned, thereunto duly authorized.

Date: September 29, 2003

LION BIOSCIENCE AKTIENGESELLSCHAFT

/s/ DR. FRIEDRICH VON BOHLEN UND HALBACH

Dr. Friedrich von Bohlen und Halbach

Chief Executive Officer

/s/ MARTIN HOLLENHORST

Martin Hollenhorst

Chief Financial Officer