NANOGEN INC
Form 10-Q
May 15, 2003

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

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

For the quarterly period ended March 31, 2003

OR

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

For the transition period from to

Commission File Number 000-23541

NANOGEN, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**33-0489621**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
10398 Pacific Center Court, San Diego, CA	**92121**
(Address of principal executive offices)	(Zip code)

(858) 410-4600

(Registrant s telephone number, including area code)

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 ý NO o

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act).

YES o NO ý

As of May 12, 2003, 22,053,701 shares of the Registrant s Common Stock were outstanding.

NANOGEN, INC.

FORM 10-Q

INDEX

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

NANOGEN, INC.

CONSOLIDATED BALANCE SHEETS

(in thousands, except share data)

	March 31, 2003 (unaudited)	December 31, 2002
ASSETS		
Current assets:		
Cash and cash equivalents	$ 11,686	$ 9,353
Short-term investments	25,167	43,376
Receivables, net	1,406	1,754
Inventories, net	4,642	4,717
Other current assets	1,530	1,781
Total current assets	44,431	60,981
Property and equipment, net	4,855	4,982
Acquired technology rights, net	4,294	4,544
Other assets, net	505	789
Restricted cash	64	64
	$ 54,149	$ 71,360
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Accounts payable	$ 615	$ 753
Accrued liabilities	4,543	5,901
Deferred revenue	359	472
Current portion of capital lease obligations	825	805
Total current liabilities	6,342	7,931
Capital lease obligations, less current portion	923	1,134
Other long-term liabilities	3,088	3,085
Total long-term liabilities	4,011	4,219
Minority interest in consolidated subsidiary	1,269	1,817
Stockholders equity:		
Convertible preferred stock, $0.001 par value, 5,000,000 shares authorized; no shares issued and outstanding at March 31, 2003 (unaudited) and December 31, 2002		
	22	22

Common stock, $0.001 par value, 50,000,000 shares authorized; 22,053,701 and 21,981,115 shares issued and outstanding at March 31, 2003 (unaudited) and December 31, 2002, respectively		
Additional paid-in capital	199,591	199,483
Accumulated other comprehensive income	317	4,926
Deferred compensation	(142)	(156)
Notes receivable from officers		(513)
Accumulated deficit	(156,339)	(145,659)
Treasury stock, at cost, 500,189 and 366,857 shares at March 31, 2003 (unaudited) and December 31, 2002, respectively	(922)	(710)
Total stockholders equity	42,527	57,393
	$ 54,149	$ 71,360

See accompanying notes

NANOGEN, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(unaudited)

(in thousands, except per share data)

	Three months ended March 31,	
	2003	**2002**
Revenues:		
Product sales	$ 228	$ 812
Sponsored research	375	313
Contract and grant	597	408
Total revenues	1,200	1,533
Operating expenses:		
Cost of product sales	274	557
Research and development	4,710	4,863
Selling, general and administrative	4,066	4,602
Litigation and settlement of patent matter		370
Total operating expenses	9,050	10,392
Loss from operations	(7,850)	(8,859)
Interest income, net	195	760
Other income	27	6
Loss on sale of investments	(3,600)	
Minority interest in loss of consolidated subsidiary	548	561
Net loss	$ (10,680)	$ (7,532)
Net loss per share basic and diluted	$ (0.50)	$ (0.35)
Number of shares used in computing net loss per share basic and diluted	21,540	21,620

See accompanying notes.

NANOGEN, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(unaudited)

(in thousands)

	Three months ended March 31,	
	2003	**2002**
Operating activities:		
Net loss	$ (10,680)	$ (7,532)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	980	961
Amortization related to short-term investments	53	4
Stock-based compensation expense	9	22
Interest capitalized on notes receivables from officers		(14)
Minority interest in loss of consolidated subsidiary	(548)	(561)
Loss (gain) on sale of short-term investments	3,579	(18)
Changes in operating assets and liabilities:		
Receivables	349	2,095
Inventories	75	(1,191)
Other assets	252	707
Accounts payable	(138)	(216)
Accrued liabilities	(780)	(1,114)
Deferred revenue	(113)	(64)
Net cash used in operating activities	(6,962)	(6,921)
Investing activities:		
Purchase of short-term investments	(1,551)	(4,321)
Proceeds from sale and maturities of short-term investments	11,439	8,511
Purchase of equipment	(430)	(60)
Purchase of patents and technology rights	(3)	(225)
Net cash provided by investing activities	9,455	3,905
Financing activities:		
Principal payments on capital lease obligations	(240)	(443)
Issuance of common stock, net of repurchases		201
Net cash used in financing activities	(240)	(242)
Effect of exchange rate changes	80	(71)
Net increase (decrease) in cash and cash equivalents	2,333	(3,329)
Cash and cash equivalents at beginning of period	9,353	10,455
Cash and cash equivalents at end of period	$ 11,686	$ 7,126
Supplemental disclosure of cash flow information:		
Interest paid	$ 52	$ 39

Supplemental schedule of noncash investing and financing activities:				
Equipment acquired under capital leases	$	49	$	2
Unrealized loss on short-term investments	$	4,689	$	500
Accrued fee for purchase of technology rights	$		$	225
Acquisition of treasury stock in exchange for cancellation of officer note receivable	$	212	$	
Common stock issued in connection with employee benefit plan, net of forfeitures	$	(3)	$	95
Common stock issued to employees, accrued in prior period	$	115	$	
Repayment of note receivable	$	300	$	

See accompanying notes.

NANOGEN, INC.

Notes to Consolidated Financial Statements

(unaudited)

March 31, 2003

1. Basis of Presentation

The accompanying unaudited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and disclosures required by accounting principles generally accepted in the United States of America for complete financial statements. The consolidated balance sheet as of March 31, 2003, consolidated statements of operations for the three months ended March 31, 2003 and 2002, and the consolidated statements of cash flows for the three months ended March 31, 2003 and 2002 are unaudited, but include all adjustments (consisting of normal recurring adjustments) which the Company considers necessary for a fair presentation of the financial position, results of operations and cash flows for the periods presented. The results of operations for the three months ended March 31, 2003 shown herein are not necessarily indicative of the results that may be expected for the year ending December 31, 2003.

For more complete financial information, these financial statements, and notes thereto, should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2002 included in the Nanogen, Inc. Annual Report on Form 10-K for the year ended December 31, 2002, filed with the Securities and Exchange Commission.

Net Loss per Share

The Company computes net loss per share in accordance with Statement of Financial Accounting Standards (SFAS) No. 128, Earnings per Share. Under the provisions of SFAS No. 128, basic net income (loss) per share is computed by dividing the net income (loss) available to common stockholders for the period by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing the net income (loss) for the period by the weighted average number of common shares outstanding during the period and dilutive common shares outstanding computed using the treasury stock method. The weighted average common shares outstanding during the period does not include those shares issued pursuant to the exercise of stock options prior to vesting and shares issued under the Company s 401K benefit plan prior to vesting. Due to the losses incurred by the Company during the three months ended March 31, 2003 and 2002, common stock equivalents resulting from the assumed exercise of outstanding stock options and warrants have been excluded from the computation of diluted net loss per share as their effect would be anti-dilutive.

Recent Accounting Pronouncements

In June 2002, the Financial Accounting Standards Board (FASB) issued Statement No. 146, or SFAS No. 146, Accounting for Costs Associated with Exit or Disposal. SFAS No. 146 addresses financial accounting and reporting for costs associated with exit or disposal activities and nullifies 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). The principal difference between Statement 146 and Issue 94-3 relates to Statement 146 s requirements for recognition of a liability for a cost associated with an exit or disposal activity. Statement 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred. Under Issue 94-3, a liability for an exit cost as generally defined in Issue 94-3 was recognized at the date of an entity s commitment to an exit plan. The provisions of this Statement 146 are effective for exit or disposal activities that are initiated after December 31, 2002, with early application encouraged. The adoption of SFAS No. 146 did not have a material impact on the consolidated financial statements.

In December 2002, the FASB issued Statement No. 148, Accounting for Stock-Based Compensation Transition and Disclosure 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, this Statement amends the disclosure requirements of Statement 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method on reported results. The adoption of these standards did not have a material impact on the Company s results of operations and financial position.

As permitted by SFAS No. 123, the Company has elected to follow Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, and related Interpretations (APB 25), in accounting for its employee stock options. Under APB 25, when the exercise price of the Company s employee stock options is equal to or exceeds the fair value of the underlying stock on the date of grant, no compensation expense is recognized.

Adjusted pro forma information regarding net loss is required by SFAS 123 and has been determined as if the Company had accounted for its employee stock options under the fair value method of SFAS 123. The fair value for these options was estimated at the date of grant using the Black-Scholes valuation model for option pricing with the following assumptions for three months ended March 31, 2003 and 2002, respectively: a risk-free interest rate of 3.0% and 5.0%, respectively, a dividend yield of zero; volatility factors of the expected market price of the Company s common stock of 84% and 74%, respectively, and a weighted average expected life of the option of five years. For purposes of adjusted pro forma disclosures, the estimated fair value of the options is amortized to expense over the vesting period. The Company s adjusted pro forma information is as follows (in thousands):

	Three months ended March 31,	
	2003	2002
Adjusted pro forma net loss	$ (11,677)	$ (9,280)
Adjusted pro forma net loss per share	$ (0.54)	$ (0.43)

The pro forma effect on net loss for three months ended March 31, 2003 and 2002 is not necessarily indicative of potential pro forma effects on results for future years.

Reclassification

Certain prior period amounts have been reclassified to conform to current period presentation.

2. Inventories

Inventories consist of the following (in thousands):

	March 31, 2003	December 31, 2002

	(unaudited)	
Raw materials	$ 1,420	$ 1,062
Work in process	1,762	1,485
Finished goods	4,028	4,428
	7,210	6,975
Reserve for obsolescence	(2,568)	(2,258)
	$ 4,642	$ 4,717

Finished goods includes $2.5 million and $3.2 million of NanoChip® Molecular Biology Workstations (NanoChip® Workstations) at March 31, 2003 and December 31, 2002, respectively, that are installed at customer sites where title has not transferred to the customer. The majority of these instruments are placed at customer sites under development site agreements. Under these arrangements, a NanoChip® Workstation is placed at a customer site for a period normally between six and nine months for the purpose of developing content and optimizing assays which may result in the creation or enhancement of intellectual property that the Company may license in the future.

The customer has the option to purchase the NanoChip® Workstation during the period of the arrangement or at its expiration. The Company provides warranty for these NanoChip® Workstations as well as insures them during the development site period. Development site customers are normally required to purchase any cartridges to be used on the instrument from the Company during the development site period. As of March 31, 2003, the Company had a total of twenty-nine NanoChip® Workstations under agreements whereby the Company retains title to the Workstation. The Company classifies this inventory as consignment inventory and includes this within finished goods. The Company accrues refurbishment costs for each unit included in consignment inventory for the purpose of resale in the event the unit is returned under this arrangement. This reserve totaled $513,000 and $489,000 at March 31, 2003 and December 31, 2002, respectively. In addition, the Company has recorded a reserve related to the older production units which may be deemed obsolete or may be sold to the customer at a discount due to the depreciation of the unit during the development site period. This reserve totaled $1.6 million at March 31, 2003 and December 31, 2002.

The Company s manufacturing agreement with Hitachi, Ltd. (Hitachi) requires that the Company provide annual purchase commitments to Hitachi for NanoChip® Workstations. As of March 31, 2003, the Company had commitments to purchase approximately $2.4 million in NanoChip® Workstations through July 31, 2003. At March 31, 2003, the inventory under our purchase commitment with Hitachi is within our expected usage levels based upon current and estimated future demands.

3. Licensed Technology

The Company has acquired various licenses to technologies which are incorporated into certain of the Company s current products or products under development. The Company capitalizes the cost (which includes cash and/or equity consideration) in conjunction with the acquisition of these licenses and amortizes the cost over the expected life of the product. In June 2002, the Company issued 254,151 shares of the Company s common stock valued at $750,000, based on the closing price of the Company s stock at the effective date, to a licensor in exchange for license rights in a private stock transaction. In April 2002, the Company issued a warrant exercisable through April 12, 2007 to purchase 50,000 shares of the Company s common stock at a per share price of $4.10, the fair market value on the effective date of the agreement. The value of the warrant was determined to be $122,000 using the Black-Scholes valuation model. Assumptions used in determining the value of the warrant were as follows: dividend yield of 0%, expected volatility of 65%, risk-free interest rate of 5.5%, expected life of 5 years, stock price of $4.10 per share, and an exercise price of $4.10 per share. The warrant has a term of five years, and was issued in return for license rights.

4. Comprehensive Loss

SFAS No. 130, Reporting Comprehensive Income, requires the Company to report, in addition to net income (loss), comprehensive income (loss) and its components. A summary is as follows (in thousands):

	Three months ended March 31,	
	2003	2002
Comprehensive loss:		
Net unrealized loss	$ (4,689)	$ (500)
Foreign currency translation adjustment	80	147
Net loss	(10,680)	(7,532)
Comprehensive loss	$ (15,289)	$ (7,885)

5. Collaborative Alliances

Hitachi, Ltd.

Manufacturing Agreement

In January 2000, the Company executed an agreement with Hitachi, Ltd., effective as of December 15, 1999, for the full-scale commercial manufacturing and distribution of the NanoChip® Molecular Biology Workstation in specified research markets. Hitachi, Ltd. s Instrument Group provides technology and technical support to aid in the manufacturing of the NanoChip® Molecular Biology Workstation s components.

Pursuant to the agreement, Hitachi, Ltd. has the right to be the sole distributor of NanoChip® Molecular Biology Workstations in Japan. Hitachi, Ltd. also has the non-exclusive right to distribute NanoChip® Cartridges in Japan. Under this arrangement, the Company receives a royalty for NanoChip® Molecular Biology Workstations sold by Hitachi, Ltd. in Japan. The Company retained the right to distribute, directly or through others, NanoChip® Molecular Biology Workstations outside of Japan. In addition, the Company manufactures NanoChip® Cartridges at its San Diego, California facility for distribution worldwide. The Company also retained the right to form other manufacturing and distribution agreements.

Pursuant to our manufacturing agreement with Hitachi, the Company is required to provide annual purchase commitments to Hitachi for NanoChip® Workstations. As of March 31, 2003, the Company had a commitment to purchase approximately $2.4 million in NanoChip® Workstations from Hitachi through July 31, 2003.

Research Collaboration Agreement

In July 2000, the Company executed a ten-year agreement with Hitachi, Ltd., Nissei Sangyo Co. Ltd. and Hitachi Instruments Service Co. Ltd. of Japan (collectively, Hitachi) to develop, manufacture and distribute additional potential products based on the parties proprietary technologies, potentially including, among other things, reduced-size instruments for genetic testing, integrated amplification and point-of-care detection. The agreement provides that the parties will jointly determine which projects to prioritize over the term of the agreement. The agreement may be terminated before its expiration by either party, subject to certain restrictions. Pursuant to the terms of the agreement, Hitachi and the Company each may contribute, toward the research and development efforts of the Company, up to $28.5 million in cash over the ten-year period. At a minimum, the Company is required to contribute on an annual basis funding for its own general technology development in an amount equal to or greater than payments made by Hitachi. In addition, the Company is liable to repay to Hitachi fifty percent of all funding provided by Hitachi over an indefinite period of time. Repayment amounts are determined as a percentage of the Company s gross NanoChip® Cartridge sales until the liability is paid in full. Furthermore, Hitachi made an equity investment in the Company by purchasing 74,590 shares of the Company s common stock worth approximately $2.0 million pursuant to a private sale by the Company based on a per share price of $26.813 (the fair market value as of the signing date of the Hitachi agreement). Hitachi has the right to be the exclusive distributor of collaboration products in Japan and, based upon the attainment of minimum sales targets to be mutually agreed upon, in other Asian countries. The Company retains the exclusive right to distribute collaboration products outside of these countries.

Sponsored research revenue recognized under this agreement totaled $375,000 and $313,000 for the three months ended March 31, 2003 and 2002, respectively. In accordance with SFAS No. 68, the Company records sponsored research revenue under this arrangement as expenses are incurred not exceeding scheduled payments under the agreement. The Company records a long-term liability for fifty percent of the funds received from Hitachi upon the receipt of such funds. The amount owed to Hitachi for proceeds received under this agreement was $3.0 million at March 31, 2003 and December 31, 2002. The current portion of the long-term liability remains immaterial as payment amounts due under this obligation are determined as a percentage of the Company s gross

NanoChip® Cartridge sales which have not been significant to date. As such, the Company has classified the entire balance of this liability as long-term.

Service Agreement

In October 2000, the Company entered into an agreement with Hitachi for the service by Hitachi of the NanoChip® Molecular Biology Workstations in the United States after their sale or placement by the Company with the Company s customers. The Company pays an agreed-upon amount (as specified in the agreement) to Hitachi for annual service for each Workstation covered under the agreement. Nanogen amortizes the cost of the warranty agreement over the service period. As the Company provides the first year of warranty at no charge to the customer, the Company defers the portion of the Workstation sale revenue that relates to the warranty agreement. This deferred revenue is then amortized into revenue ratably over the annual service period. In subsequent years, the customer can pay an annual service fee to the Company and the Company will in turn pay Hitachi the annual service amount as specified in the agreement. The amount charged to the customer by the Company is based upon the cost of the service (i.e. the payment to Hitachi) plus an industry accepted profit margin for comparable service on similar types of products. Both the service revenue and the service expense are amortized ratably over the service period, generally one year.

Aventis Research and Technologies

In June 2001, the Company entered into agreements with Hoechst AG (Aventis) to create a new company, Nanogen Recognomics GmbH (Nanogen Recognomics). Nanogen Recognomics was established to develop new products and applications for the NanoChip® System. Nanogen Recognomics is sixty percent owned by the Company and forty percent owned by Aventis and is based in Frankfurt, Germany. Aventis provided the first $5 million of funding for the operations of Nanogen Recognomics and also contributed intellectual property in the form of eighteen patents. The Company is also required to spend an aggregate of $5.5 million, at the rate of $1.1 million per year beginning April 1, 2001, for its own general technology development which benefits the commercialization and development of potential Nanogen Recognomics products. This funding is recorded as research and development expense in the Company s statement of operations as incurred. The amounts contributed by Aventis are spent by the joint venture and reported in the operating results of the joint venture. Aventis has no further commitments to provide funding beyond the first five years of operation. In addition, Nanogen Recognomics will own several patent applications filed jointly by the Company and Aventis. The Company has licensed certain aspects of its NanoChip® technology to Nanogen Recognomics and will seek to commercialize new products and applications developed by Nanogen Recognomics. Aventis retains the right to utilize the former Aventis patent portfolio in fields outside of Nanogen Recognomics. In conjunction with the agreement to form Nanogen Recognomics, the Company issued a warrant to Aventis to purchase 315,863 shares of common stock exercisable through July 17, 2006 at an agreed upon price of $9.828 per share. The value of this warrant, as determined by the Black-Scholes valuation model, was $1.2 million, is included in other assets in the accompanying consolidated financial statements and is being amortized over a two and a half year period, the estimated period for which the $5 million in funding will provide for operating expenses. Assumptions used in determining the value of the warrant were as follows: dividend yield of 0%, expected volatility of 70%, risk-free interest rate of 6.5%, expected life of 5 years, stock price of $6.79 per share, and an exercise price of $9.828 per share. In the event Nanogen Recognomics should run out of funds, the Company is required pursuant to the agreement to take over wind-down costs and Nanogen may restructure Nanogen Recognomics to hold the original patents contributed by Aventis and any jointly owned patents. Such a restructured company will collect royalties, if any, and pay the equity owners accordingly. Our exclusive commercialization license will continue for 10 years after restructuring.

The results of operations for Recognomics are fully consolidated in the Company s financial statements. The total operating loss of Recognomics is reflected as a reduction of the minority interest in consolidated subsidiary liability account and totaled $548,000 and $561,000 for the three months ended March 31, 2003 and 2002, respectively.

6. Litigation

In September 2002, the Company entered into a settlement agreement with CombiMatrix Corp. (CombiMatrix) and Dr. Donald Montgomery concluding pending litigation in the U.S. District Court for the Southern District of California. Pursuant to the settlement agreement, Nanogen agreed to drop its claims against CombiMatrix and Dr. Montgomery that include certain causes of action relating to U.S. patent Nos. 6,093,302 and 6,280,595 (the patented technology) that were assigned by Dr. Montgomery, an ex-Nanogen employee, to CombiMatrix in 1995 and assertions relating to other matters. In exchange, CombiMatrix agreed to pay $1.0 million as a reimbursement of legal costs; issue 4,016,346 shares of CombiMatrix tracking common stock that as of December 18, 2002 became publicly tradable on the Nasdaq National Market and were initially valued upon receipt at $10.8 million, which represents seventeen and one-half percent (17.5%) of its outstanding common stock; and make royalty payments of twelve and one-half percent (12.5%) on sales of products by either CombiMatrix or its affiliates that incorporate the patented technology. Of the $1.0 million due the Company, $500,000 was paid in October 2002 and the remaining $500,000 is due by September 2003. Also, as part of the settlement agreement, CombiMatrix and Dr. Montgomery agreed to drop their counterclaims against Nanogen and CombiMatrix retained sole ownership of the patented technology. In February 2003, the Company sold 3,000,000 shares of CombiMatrix common stock for net proceeds totaling $4.5 million and recognized a realized loss of approximately $3.6 million during the three months ended March 31, 2003.

The costs associated with the litigation and settlement of the CombiMatrix and Dr. Montgomery litigation patent matter totaled approximately $370,000 for the three months ended March 31, 2002 and no expenses of this type were recorded in 2003. A receivable totaling $500,000 has been recorded in the Company s financial statements which represents the unpaid balance of the $1.0 million settlement as of March 31, 2003.

In December, 2002, Oxford Gene Technologies (OGT) filed a complaint against the Company in the United States District Court for the District of Delaware claiming that Nanogen infringes U.S. Patent No. 6,054,270 (the 270 Patent) entitled Analyzing Polynucleotide Sequences. In April 2003, Nanogen filed an answer to the complaint that denies that it infringes the 270 Patent. Nevertheless, if the litigation continues, significant attorneys costs and fees could result. Although it is Nanogen s position that OGT s assertions of infringement have no merit, neither the outcome of the litigation nor the amount and range of potential fees can yet be assessed. No assurances can be given that the Company will prevail in the lawsuit or that it can successfully defend itself against the claim and the Company may not prevail in the action, which could have a material adverse effect on the Company.

7. Stock Transaction

In January 2003, the Compensation Committee of the Board of Directors approved the issuance of common stock pursuant to the Company s Stock Bonus Plan. During the three months ended March 31, 2003, the Company issued 73,119 shares of common stock under the Plan valued at approximately $115,000 based on the value of the shares at the date of issuance.

8. Related Party Transactions

In December 2002, the Company entered into a separation agreement with its then Chief Executive Officer. Under the terms of the agreement, the Company made a net severance payment of $58,000 in January 2003 to settle all outstanding obligations between the two parties, including indebtedness to the Company amounting to $167,000.

Also in December 2002, Nanogen s then President resigned effective in January 2003. In connection with the former President s resignation, the Company made a net payment of approximately $384,000 in January 2003 to settle all outstanding obligations between the two parties, including indebtedness to the Company amounting to approximately $300,000.

Mr. Birndorf, Chief Executive Officer, owned an aircraft which was leased by a local charter aircraft company. For the three months ended March 31, 2003, the Company paid approximately $25,000 to the local charter aircraft company for the Company s use of Mr. Birndorf s aircraft for business related travel. Mr. Birndorf receives $1,500 per hour of usage when his aircraft is leased to outside parties. Mr. Birndorf received approximately $15,000 as a result of the Company s use of Mr. Birndorf s aircraft during the three months ended March 31, 2003. The Company believes that the terms of the charter arrangements are no less favorable to the Company than those that could be obtained from unrelated third parties, based on review of lease fees published by other charter aircraft companies.

9. Subsequent Event

In April 2003, the Company reduced its workforce by approximately 20%. A severance charge of approximately $500,000 will be recognized in the second quarter of fiscal 2003 related to this event.

Item 2. Management s Discussion and Analysis of Financial Condition and Results of Operations

This report includes forward-looking statements about our business and results of operations that are subject to risks and uncertainties that could cause our actual results to vary materially from those reflected in the forward-looking statements. These risks and uncertainties include possible delays in the introduction of new products, customer acceptance of existing products, price competition, the actions of competitors, infringement of intellectual property rights and licenses of the Company or others, the effects of government regulation, both foreign and domestic, availability of funded research and government contracts and grants, preservation of productive relationships with our manufacturer and collaborator Hitachi and our distributors, ability to manage our capital resources and other factors. Words such as believes, anticipates, plans, estimates, future, could, may, should, expect, envision, potentially, variations of such words and similar expressions are intended to forward-looking statements. The forward-looking statements contained in this Form 10-Q may include, but are not limited to, statements about matters including the following: (i) the development of the markets and demand for our products and services; (ii) our product development plans and anticipated activities designed to pursue these plans, including collaborations and other corporate partnering arrangements; (iii) our ability to operate substantial revenues from sales of products and consumable cartridges and reagents and continuing revenues from reagent rental agreements; (iv) the ability of our product platform to affect the market and become an industry standard; (v) our ability to generate license and other fee revenue in the future; (vi) the amounts we invest in research and development activities in the future; (vii) future levels of selling, general and administrative expenses and other expenses associated with our business; (viii) future levels of interest income; (ix) any amounts we may be able to realize from the liquidation of our investments, including our investments in short-term securities; (x) operating results of joint ventures and other corporate partnering arrangements; (xi) the amounts and timing of our contractual obligations and capital commitments and (xii) our future capital needs and our ability to fund those needs. Factors that could cause or contribute to these differences include those discussed below under the caption Factors that May Affect Results and elsewhere in this Quarterly Report on Form 10-Q and which are described in our Annual Report on Form 10-K for the year ended December 31, 2002. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. We disclaim any intent or obligation to update these forward-looking statements.

Overview

It is our goal to become a leading provider of molecular diagnostic tests and services. We integrate advanced microelectronics and molecular biology into a core technology platform with potentially broad and diverse commercial applications. Our primary areas of focus have been in genomics and biomedical research, medical diagnostics, biodefense, forensics and drug discovery. The Company s current commercially available products include (1) the NanoChip® Molecular Biology Workstation, an automated, multi-purpose instrument primarily used for DNA-based analyses, (2) the NanoChip® Cartridge, which incorporates the NanoChip® Electronic Microarray and provides a flexible tool for the rapid identification and precise analysis of biological test samples containing charged molecules, (3) various Analyte Specific Reagents (ASRs) for detecting gene mutations associated with diseases such as cystic fibrosis, Alzheimer s disease and hereditary hemochromotosis and (4) Assay Toolbox™, a product designed to help customers develop their own assays on the NanoChip® System. The Company also has several other ASRs and applications of its proprietary technology under development. The Company provides technical support and field applications assistance to its customers.

Since commencing operations in 1993, we have applied substantially all of our resources to our research and development programs. We have incurred losses since inception and, as of March 31, 2003, had an accumulated deficit of $156.3 million. We expect to continue to incur significant losses over at least the next few years as we attempt to further commercialize our products as well as expand the menu of applications for our current products.

We introduced our first two products into the marketplace in 2000. While we recognized revenue from product sales during the quarter ended March 31, 2003 and the years ended December 31, 2002, and 2001, our main sources of revenues during these periods were payments under our sponsored research agreements, contracts and grants and, in 2002, a license fee valued at $10.8 million received from a litigation settlement with CombiMatrix Corp. We believe that in future periods, however, our revenue base will shift to being more product driven as certain research collaboration agreements expire and new products are introduced by us to the marketplace. We believe our future operating results may be subject to quarterly fluctuations due to a variety of factors, including, but not limited to, market acceptance of the NanoChip® System, other products currently being sold by the Company and potential products under development, the type of acquisition program our potential customers may choose, whether and when new products are successfully developed and introduced by us or our competitors, and the achievement of milestones under our collaborative agreements with Hitachi and various government agencies. The recognition of revenue under contracts, grants and sponsored research agreements will be subject to significant fluctuations in both timing and amount and therefore our results of operations for any period may not be comparable to the results of operations for any other period.

Critical Accounting Policies and Estimates

This Management s Discussion and Analysis of Financial Condition and Results of Operations discusses our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, we evaluate our estimates and judgments, including those related to bad debts, inventories, investments, intangible assets, service obligations and contingencies. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies, among others, affect our more significant judgments and estimates used in the preparation of our consolidated financial statements:

Revenue recognition

We generate product revenue by the sale of our commercial products and services under various sales programs to the end user or through distribution channels. We recognize revenue in accordance with Staff Accounting Bulletin 101 Revenue Recognition in Financial Statements and record revenues as follows:

We offer our NanoChip® Molecular Biology Workstations under various commercial programs such as direct sales, lease arrangements, reagent rental programs and cost-per-test agreements. We also offer our Workstations to customers under development site programs that may result in one of the above commercial transactions. We sell our Workstations direct to the end user and to distributors. Revenue from the sale of consumables is recognized upon shipment (f.o.b. shipping point) as we do not sell consumables with a right of return.

Revenue from the direct sale of NanoChip® Molecular Biology Workstations is recognized following receipt of a purchase order, shipment (f.o.b. shipping point) of product, and transfer of title when sold directly to the end user or to a distributor. In transactions where a right-of-return exists, revenue is deferred until acceptance has occurred and the period for the right-of-return has lapsed. The NanoChip® Molecular Biology Workstation is sold with a one-year warranty contract. The fair value of the warranty is recorded as deferred revenue and recognized ratably over the warranty period included in the customer contract. The fair value of the warranty is based on the renewal price paid

by the same customer. This renewal price for the maintenance contract is consistent for all customers. We provide for the estimated cost of product warranty at the time revenue is recognized.

We also recognize revenue from the sale of our NanoChip® System under reagent rental and cost-per-test transactions whereby customers pay a premium for our consumable products (NanoChip® Cartridges or ASRs) over a number of years that is intended to cover the sales price of the NanoChip® Workstation, consumables and warranty. Under a reagent rental transaction, the customer commits to purchasing a fixed minimum number of

consumable products on a periodic basis for a specified period of time (i.e. a certain number of cartridges for a certain number of years). Revenue for the Workstation, consumables and warranty under reagent rental transactions is recognized as consumable products are shipped, over a period of generally two to five years, depending on the specific customer arrangement as they may vary by customer. We reclassify the recorded value of the Workstation from inventory to fixed assets, recognizing the depreciation expense as cost of sales ratably over the period of the arrangement. Under a cost-per-test transaction, the customer agrees to purchase a certain number of consumable products on a periodic basis determined by the customer s volume of reported test results (to third parties) from the use of our consumable products. We recognize revenue under this type of transaction at the time we receive evidence of the customer s test results reported to third parties. Under these arrangements, we provide product warranty coverage for the Workstation over the period of the contract. Under both of these commercial transactions, the fair value of the warranty is recognized ratably over the warranty period included in the customer contract. The cost of sales related to the consumables is recorded in line with the revenue (i.e. as consumables are shipped or consumed, depending on the terms of the contract).

We also place our NanoChip® Molecular Biology Workstations at customer sites under programs, such as development site arrangements, where title of the NanoChip® Workstation does not transfer to the customer. No revenues are recognized at the time of placement under these agreements. These arrangements are for a period normally between six and nine months for the purpose of developing content and optimizing assays that may result in the creation or enhancement of intellectual property that we may license in the future. In addition, a primary intent of the program is for the customer to purchase the NanoChip® Workstation during the period of the arrangement or at its expiration. We provide a warranty for these NanoChip® Workstations as well as insure them during the development site period. Warranty expense is recorded ratably over the period of the arrangement within selling, general, and administrative (SG&A) expenses. Development site customers are normally required to purchase any consumables to be used on the instrument from us during the development site period. We classify this inventory as consignment inventory and include this within finished goods. We record a reserve for the refurbishment costs, recorded within SG&A, for each unit included in consignment inventory for the purpose of resale in the event the unit is returned under this arrangement. This reserve totaled approximately $513,000 and $489,000 at March 31, 2003 and December 31, 2002, respectively, and is included in accrued liabilities. In addition, we have recorded a reserve related to the older production units that may be deemed obsolete or sold to the customer at a discount due to the age of the unit during the development site period. Transactions under these types of programs do not result in the recognition of revenue. However, if the customer opts to purchase the NanoChip® Workstation at any time, sales revenue is recognized upon receipt of a purchase order. Cost of sales for the Workstation is provided for at the time revenue is recognized. For the three months ended March 31, 2003, we converted one development site agreement. There were no development site agreement conversions during the three months ended March 31, 2002.

Workstations sold to distributors are sold outright with title transferring at point of shipment (i.e., f.o.b. shipping point) without a right of return. Workstations are sold at a discount to the standard sales price (but not below the cost of manufacturing the instrument) and without warranty coverage.

Sales revenue is subject to fluctuation due to the type of acquisition program our customers may choose. Sponsored research and contract and grant revenue are generally recorded as the costs and expenses to perform the research are incurred. Under certain arrangements revenue is recorded ratably over the term of the arrangement as funding is provided for contractually on a scheduled basis. Payments received in advance under these arrangements are recorded as deferred revenue until the expenses are incurred. Continuation of certain sponsored research and contracts and grants are dependent upon our achieving specific contractual milestones.

License fees include nonrefundable fees generated from the licensing of the Company s technology. Revenue is recognized immediately when the Company has no further obligation to perform and collections are reasonably assured.

Bad debts

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. We record additions to our reserve based on specific analysis of each customer s balance due us. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances would be required.

Inventory

We reduce the carrying value of our inventory, including NanoChip® Molecular Biology Workstations placed under development site arrangements, for estimated obsolescence or non-marketability after considering future purchase commitments and based upon assumptions about future demand and market conditions. If actual future demand or market conditions are less favorable than those projected by us, additional inventory write-downs may be required.

Intangible Assets

We have intangible assets related to acquired technology rights. The determination of related estimated useful lives and whether or not these assets are impaired involves significant judgments. Changes in strategy and/or market conditions could significantly impact these judgments and require adjustments to recorded asset balances.

Results of Operations

Revenues

Product Revenues. For the three months ended March 31, 2003, sales totaled $228,000 compared to $812,000 for the three months ended March 31, 2002. Product sales revenue during the three months ended March 31, 2003 included the sale of one partial NanoChip® Molecular Biology Workstation as well as sales of NanoChip® Cartridges, reagents and warranty revenue. For the three months ended March 31, 2002, sales revenue included sales of five NanoChip® Molecular Biology Workstations in addition to sales of NanoChip® Cartridges and warranty revenue. All revenue recorded related to sales of our NanoChip® Molecular Biology Workstation resulted from outright sales transactions where title of the instrument passed to the customer. We offer our products to customers under several different types of acquisition programs, some of which pass title of the instrument to the customer and some of which do not pass title to the customer. Our sales revenue may vary from year to year due to, among other things, the types of acquisition programs our potential customers may choose.

Sponsored Research. For the three months ended March 31, 2003, revenues from sponsored research totaled $375,000 compared to $313,000 for the three months ended March 31, 2002. Revenues are primarily recorded under these arrangements as expenses are incurred. Payments received in advance under these arrangements are recorded as deferred revenue until the expenses are incurred. Sponsored research revenue recognized during the three months ended March 31, 2003 and 2002 primarily represent revenue earned in connection with our development agreement entered into in July 2000 with Hitachi. We are currently on schedule with project milestones with the Hitachi development agreement and expect to continue to receive funding under this collaboration pursuant to terms of the agreement.

Contracts and Grants. We fund some of our research and development efforts through contracts and grants awarded by various federal and state agencies. Revenues are recognized under these contracts and grants as expenses are incurred, and totaled $597,000 and $408,000 for the three months ended March 31, 2003 and 2002, respectively.

Cost of Product Sales and Gross Margins. Cost of product sales totaled $274,000 for the three months ended March 31, 2003, compared to $557,000 for the three months ended March 31, 2002. The gross margin on product sales revenue was a negative 20% for the three months ended March 31, 2003 compared to a positive margin of 31% for the three months ended March 31, 2002. Cost of product sales during the three months ended March 31, 2003 were adversely impacted by lower sales volume, underabsorbed overhead costs due to underutilized capacity, and manufacturing scrap as a result of lower yields on new products released into production. The cost per unit of our products remains high, as our volume of production relative to the available capacity remains low. As we are still in the early stages of commercialization, we expect to continue to incur significant costs associated with excess production capacity within our manufacturing facility in 2003. In addition to underabsorbed overhead costs, cost of product sales for the period ended March 31, 2002 was further impacted by a reserve for obsolete inventory totaling $278,000. This reserve relates primarily to excess instrument parts and accessory items in our inventory that could potentially become obsolete prior to their consumption. If necessary, these parts will be used as replacement parts for Nanogen Systems located both internally and at customer sites. Gross margins during the period ended March 31, 2002

were further impacted by sales of NanoChip® Workstations to certain customers under various discount programs and by sales to distributors, which are generally at a discount. Gross margins in future periods may be further impaired by minimum product royalties or potential adjustments made to reflect the impairment of intangible assets related to products sold.

Research and Development Expenses. For the three months ended March 31, 2003 and 2002, research and development expenses totaled $4.7 million compared to $4.9 million, respectively. During these periods, research and development expenses included the cost of salaries and benefits for scientific, engineering and operations personnel, costs associated with improving and refining our current products as well as development of potential new products and protocols, lab supplies, consulting, travel, facilities, and other expenditures associated with our research and product development activities. For the three months ended March 31, 2003 research and development activities primarily related to the development of new ASRs. We anticipate that we will continue to invest in research and product development at approximately this same level for the foreseeable future.

Selling, General and Administrative Expenses. For the three months ended March 31, 2003 and 2002, selling, general and administrative expenses totaled $4.1 million and $4.6 million, respectively. Selling, general and administrative expenses include salaries, benefits, consulting, travel and other expenditures related to executive, legal, finance, human resources, sales and marketing personnel. In addition, these expenses include costs related to enhancing and maintaining our intellectual property portfolio. The decline in selling, general, and administrative expense for the three months ended March 31, 2003 as compared to the same period during the prior year is primarily the result of decreased expenditures associated with the launch of products. Selling, general and administrative expenses are expected to continue at the current level for the foreseeable future as we continue to market and sell our current and potential future products.

Litigation and Settlement of Patent Matter, Net. For the three months ended March 31, 2002, litigation and settlement of patent matter totaled $370,000. There were no expenses of this type in 2003. These expenses related to a dispute with CombiMatrix and Dr. Montgomery. As a settlement between all parties was reached in September 2002, there were no expenses related to this matter in 2003.

Interest Income, Net. For the three months ended March 31, 2003, net interest income totaled $195,000 compared to $760,000 for the three months ended March 31, 2002. The decrease in net interest income is a result of lower average cash and investment balances as well as lower yields on outstanding cash and investment balances during the three month period ending March 31, 2003 when compared to the three months ended March 31, 2002. Based on the continued consumption of cash and short-term investments to augment operating activities, we expect net interest income to decline during 2003.

Minority Interest in Loss of Consolidated Subsidiary. We had losses relating to our majority-owned subsidiary, Nanogen Recognomics GmbH, of $548,000 for the three months ended March 31, 2003 compared to $561,000 for the three months ended March 31, 2002. We expect to experience continued losses with the majority-owned subsidiary similar to levels incurred during 2002. These losses are funded by the investment from minority interest investors and are

therefore offset against the minority interest balance in the respective balance sheet. In June 2001, we entered into agreements with Aventis to create a new company, Nanogen Recognomics GmbH (Nanogen Recognomics). Nanogen Recognomics was established to develop new products and applications for the NanoChip® System. Nanogen Recognomics is sixty percent owned by us and forty percent owned by Aventis.

Liquidity and Capital Resources

At March 31, 2003, we had $36.9 million in cash, cash equivalents and short-term investments, compared to $52.7 million at December 31, 2002. The decrease is primarily due to cash used in operations during the three months ended March 31, 2003 totaling $7.0 million and realized and unrealized losses in short-term investments of approximately $8.3 million related primarily to CombiMatrix securities. While the CombiMatrix securities are included within short-term investments, we expect significant market value fluctuations in this investment that had a market value of approximately $2.0 million at March 31, 2003.

Net cash used in operating activities was $7.0 million and $6.9 million for the three months ended March 31, 2003 and 2002, respectively. Cash used for operations during the three months ended March 31, 2003 was primarily

related to costs associated with commercializing our products including the expansion, development and support of our sales and marketing organization; the procurement of inventory pursuant to our manufacturing arrangement with Hitachi, Ltd; support of our continuing research and development efforts including development of the ASRs for the detection of mutations in the CFTR gene associated with cystic fibrosis, the ASRs for mutations in the HFE gene associated with the hereditary hemochromotosis, and the other ASRs and other products recently introduced by Nanogen; and legal fees relating to establishing, maintaining and defending our intellectual property portfolio.

Net cash provided by investing activities was $9.5 million and $3.9 million for the three months ended March 31, 2003 and 2002, respectively. We purchase short-term investments in order to enhance the yield on our cash balances. These securities mature from time to time or are sold to fund operating expenses.

We fund much of our equipment acquisitions and leasehold improvements through capital leasing facilities. We anticipate that we will continue to use capital equipment leasing or debt facilities to fund much of our equipment acquisitions and leasehold improvements. As of March 31, 2003, we had approximately $1.0 million of available funding under our equipment lease lines.

Our manufacturing agreement with Hitachi, Ltd. requires that we provide annual purchase commitments to Hitachi for NanoChip® Molecular Biology Workstations. As of March 31, 2003, the Company had commitments to purchase approximately $2.4 million in NanoChip® Workstations through July 31, 2003. At March 31, 2003, the inventory under our purchase commitment with Hitachi is within our expected usage levels based upon current and estimated future demands.

We are a party to development site agreements with various entities and to license agreements under which we acquired rights to pay license fees, annual minimum royalties or product royalties for any customer owned or licensed intellectual property used to develop any Nanogen commercial products. None of these agreements individually are considered material.

We are also party to transactions known as reagent rentals and cost-per-test agreements. Under these types of transactions, we place a workstation at a customer site with no upfront cost to the customer. The value of the instrument is typically recaptured through a contracted stream of future reagent sales, sold at a premium to cover the cost of the system. Many of our reagent rentals and cost-per-test agreements entered into to date require customer acceptance of our CFTR ASRs as a pre-condition to this commitment. These reagent rentals and cost-per-test agreements might have an adverse impact on our short-term instrument sales revenue and cash flow as the revenues and cash received under these agreements are over the life of the contract, as reagents are shipped to the customer. We expect that our existing capital resources, combined with anticipated revenues from potential product sales, reagent rentals, leases or other types of acquisition programs for the NanoChip® System, sponsored research agreements, contracts and grants will be sufficient to support our planned operations for at least one year from the date of this filing at our current rate of expenditures. This estimate of the period for which we expect our available sources of liquidity to be sufficient to meet our capital requirements is a forward-looking statement that involves risks and uncertainties, and actual results may differ materially. Our future liquidity and capital funding requirements will depend on numerous factors including, but not limited to, commercial success of our products, or lack thereof, of our current products, the extent to which our products under development are successfully developed and gain market acceptance, the timing of regulatory actions regarding our potential products, the costs and timing of expansion of sales, marketing and manufacturing activities, prosecution and enforcement of patents important to our business and any litigation related thereto, the results of clinical trials, competitive developments, and our ability to maintain existing collaborations and to enter into additional collaborative arrangements. We have incurred negative cash flow from operations since inception and do not expect to generate positive cash flow to fund our operations for at least the next several years. We may need to raise additional capital to fund our research and development programs, to scale-up manufacturing activities and expand our sales and marketing efforts to support the commercialization of our products under development. Additional capital may not be available on terms acceptable to us, or at all. If adequate funds are not available, we may be required to curtail our operations significantly or to obtain funds through entering into collaborative agreements or other arrangements on unfavorable terms. Our failure to raise capital on acceptable terms when needed could have a material adverse effect on our business, financial condition or results of operations.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Short-term investments. We invest our excess cash in short-term, interest-bearing investment-grade securities that primarily are held for the duration of the term of the respective instrument. We have not utilized derivative financial instruments, derivative commodity instruments or other market risk sensitive instruments, positions or transactions in any material fashion. Accordingly, we believe that, while the instruments we hold are subject to changes in the financial standing of the issuer of such securities, we are not subject to any material risks arising from changes in interest rates, foreign currency exchange rates, commodity prices, equity prices or other market changes that affect market risk sensitive instruments.

Foreign currency rate fluctuations. The functional currency for our Netherlands and German subsidiaries is the U.S. dollar and euro, respectively. The German subsidiary s accounts are translated from the euro to the U.S. dollar using the current exchange rate in effect at the balance sheet date for balance sheet accounts, and using the average exchange rate during the period for revenues and expense accounts. The effects of translation are recorded in accumulated other comprehensive income in the consolidated financial statements included herein. In certain instances, our subsidiaries conduct business with customers and vendors in euros or in other local European currencies. Exchange gains and losses arising from these transactions are recorded using the actual exchange rate differences on the date of the transaction. We have not taken any action to reduce our exposure to changes in foreign currency exchange rates, such as options or futures contracts, with respect to transactions with our European customers and vendors. The net tangible assets of our subsidiaries, excluding intercompany balances, is $2.2 million at March 31, 2003.

Item 4. Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act Filings and Reports is recorded, processed, summarized and reported within the timelines specified in the Security and Exchange Commission s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives.

Within 90 days prior to the date of this report, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded as of the date of their evaluation, that our disclosure controls and procedures were effective.

There have been no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date we carried out this evaluation.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

Please see discussion of legal proceedings at note 6 in the Notes to the Consolidated Financial Statements included elsewhere in this report.

Item 6. Exhibits and Reports on Form 8-K

(a) Exhibits

99.1 Chief Executive Officer and Chief Financial Officer Certification Letters, dated May 13, 2003

(b) Reports on Form 8-K

There were no reports on Form 8-K filed during the three months ended March 31, 2003.

NANOGEN, INC.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

NANOGEN, INC.

Date	**May 13, 2003**	**/s/ Howard C. Birndorf** **Howard C. Birndorf** **Executive Chairman and Chief Executive Officer** **Principal Executive Officer)**
Date	**May 13, 2003**	**/s/ Gerard A. Wills** **Gerard A. Wills** **Vice President, Chief Financial Officer and Treasurer** **(Principal Financial and Accounting Officer)**

Chief Executive Officer Certification

I, Howard C. Birndorf, Chairman of the Board and Executive Chairman of Nanogen, Inc. certify that:

(1) I have reviewed this Quarterly Report on Form 10-Q of Nanogen, Inc. (the registrant);

(2) Based on my knowledge, this Quarterly Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Quarterly Report;

(3) Based on my knowledge, the financial statements, and other financial information included in this Quarterly Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Quarterly Report;

(4) The registrant s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as such term is defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

(i) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Quarterly Report is being prepared;

(ii) evaluated the effectiveness of the registrant s disclosure controls and procedures as of a date within 90 days prior to the filing date of this Quarterly Report (the Evaluation Date); and

(iii) presented in this Quarterly Report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

(5) The registrant s other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant s auditors and the audit committee of the board of directors (or persons fulfilling the equivalent function):

(i) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant s ability to record, process, summarize and report financial data and have identified for the registrant s auditors any material weaknesses in internal controls; and

(ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant s internal controls; and

(6) The registrant s other certifying officers and I have indicated in this Quarterly Report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Dated May 13, 2003

/s/ Howard C. Birndorf
Howard C. Birndorf
Chairman of the Board and
Executive Chairman of Nanogen Inc.
(Principal Executive Officer)

Chief Financial Officer Certification

I, Gerard A. Wills, Vice President, Chief Financial Officer and Treasurer of Nanogen, Inc. certify that:

(1) I have reviewed this Quarterly Report on Form 10-Q of Nanogen, Inc. (the registrant);

(2) Based on my knowledge, this Quarterly Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Quarterly Report;

(3) Based on my knowledge, the financial statements, and other financial information included in this Quarterly Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Quarterly Report;

(4) The registrant s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as such term is defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

(i) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Quarterly Report is being prepared;

(ii) evaluated the effectiveness of the registrant s disclosure controls and procedures as of a date within 90 days prior to the filing date of this Quarterly Report (the Evaluation Date); and

(iii) presented in this Quarterly Report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

(5) The registrant s other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant s auditors and the audit committee of the board of directors (or persons fulfilling the equivalent function):

(ii) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant s ability to record, process, summarize and report financial data and have identified for the registrant s auditors any material weaknesses in internal controls; and

(ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant s internal controls; and

(6) The registrant s other certifying officers and I have indicated in this Quarterly Report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Dated May 13, 2003

/s/ Gerard A. Wills

Gerard A. Wills
Vice President, Chief Financial Officer and
Treasurer of Nanogen, Inc.
(Principal Financial and Accounting Officer)

NANOGEN, INC.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Chief Executive Officer and Chief Financial Officer Certification Letter, dated May 13, 2003