MICROFLUIDICS INTERNATIONAL CORP Form 10-Q May 17, 2010 Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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: 0-11625

MICROFLUIDICS INTERNATIONAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

04-2793022

(I.R.S. Employer Identification No.)

30 Ossipee Road, Newton, Massachusetts

(Address of principal executive offices)

02464 (Zip Code)

(617) 969-5452

(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 x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes o No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer o

Accelerated filer o

Non-accelerated filer o (Do not check if a smaller reporting company)

Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No x

As of May 12, 2010, 10,412,282 shares of the registrant s Common Stock, par value \$.01 per share, were outstanding.

MICROFLUIDICS INTERNATIONAL CORPORATION

TABLE OF CONTENTS

		Page
PART I.	FINANCIAL INFORMATION	
Item 1.	Condensed Consolidated Financial Statements (unaudited):	
	Condensed Consolidated Balance Sheets at March 31, 2010 and December 31, 2009	3
	Condensed Consolidated Statements of Operations for the three months ended March 31, 2010 and 2009	4
	Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2010 and 2009	5
	Notes to Condensed Consolidated Financial Statements	6-10
Item 2.	Management s Discussion and Analysis of Financial Condition and Results of Operations	11-15
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	15
Item 4.	Controls and Procedures	16
<u>PART II.</u>	OTHER INFORMATION	
Item 1.	<u>Legal Proceedings</u>	16
Item 1A.	Risk Factors	16-22
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	23
Item 3.	<u>Defaults Upon Senior Securities</u>	23
Item 4.	(Removed and Reserved)	23
Item 5.	Other Information	23
Item 6.	<u>Exhibits</u>	23
	<u>Signatures</u>	24
	2	

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

MICROFLUIDICS INTERNATIONAL CORPORATION

Condensed Consolidated Balance Sheets

(Unaudited - in thousands, except share and per share amounts)

		March 31, 2010		December 31, 2009
ASSETS				
Current assets:				
Cash and cash equivalents	\$	2,157	\$	2,185
Accounts receivable, net of allowance of \$44 as of March 31, 2010 and December 31, 2009		2,486		2,571
Inventories		2,714		2,916
Prepaid expenses and other current assets		359		280
Total current assets		7,716		7,952
Property and equipment, net		821		891
Other non-current assets		489		535
Total assets	\$	9,026	\$	9,378
LIABILITIES AND STOCKHOLDERS EQUITY				
Current liabilities:				
Accounts payable	\$	822	\$	545
Accrued expenses	-	1,513	Ť	1,727
Customer advances		531		1,137
Total current liabilities		2,866		3,409
Long-term liabilities				
Convertible debt		4,693		4,679
Total liabilities		7,559		8,088
Stockholders equity:				
Common stock; \$.01 par value; 30,000,000 and 30,000,000 shares authorized; 10,647,728 and 10,630,228 shares issued; 10,412,282 and 10,394,782 shares outstanding as of March 31,				
2010 and December 31, 2009, respectively		106		106
Additional paid-in capital		18,325		18,254
Accumulated deficit		(16,295)		(16,401)
Treasury stock, 235,446 shares, at cost, as of March 31, 2010 and December 31, 2009		(669)		(669)
Total stockholders equity		1,467		1,290
Total liabilities and stockholders equity	\$	9,026	\$	9,378

See notes to unaudited condensed consolidated financial statements.

MICROFLUIDICS INTERNATIONAL CORPORATION

Condensed Consolidated Statements of Operations

(Unaudited - in thousands, except share and per share amounts)

	For The Three Months Ended March 31,			
		2010		2009
Revenues	\$	4,315	\$	3,559
Cost of sales		1,731		1,653
Gross profit		2,584		1,906
Operating expenses:				
Research and development		467		458
Selling		1,055		1,221
General and administrative		770		779
Total operating expenses		2,292		2,458
Income (loss) from operations		292		(552)
Interest expense		(186)		(140)
Interest income				2
Income (loss) before taxes		106		(690)
Provision for income taxes				
Net income (loss)	\$	106	\$	(690)
Net income (loss) per common share:				
Basic	\$	0.01	\$	(0.07)
Diluted	\$	0.01	\$	(0.07)
Weighted average number of common and common equivalent shares outstanding:				
Basic		10,400,615		10,370,628
Diluted		10,618,255		10,370,628

See notes to unaudited condensed consolidated financial statements.

MICROFLUIDICS INTERNATIONAL CORPORATION

Condensed Consolidated Statements of Cash Flows

(Unaudited - in thousands)

For The Three Months Ended March 31, 2010 2009 Cash flows from operating activities: \$ \$ (690)106 Net income (loss) Adjustments to reconcile net income (loss) to net cash flows: Depreciation 30 38 Amortization of leasehold improvements 43 41 Amortization of intangibles 1 1 Amortization of deferred financing fees 45 14 Non-cash interest 14 13 Share-based compensation 65 26 Changes in assets and liabilities: Accounts receivable 85 (355)Inventories 202 (14)Prepaid expenses and other current assets 95 (79)Other non-current assets (11)Accounts payable 277 98 Accrued expenses (214)(82)Customer advances (606)(156)Net cash flows used in operating activities (31)(982)Cash flows used in investing activities: Purchase of property, plant and equipment (3) (67) Net cash flows used in investing activities (3) (67)Cash flows from financing activities: Net proceeds from issuance of common stock 6 4 Net cash flows provided by financing activities 6 4 Net change in cash and cash equivalents (28)(1.045)Cash and cash equivalents at beginning of period 2,185 1,895 Cash and cash equivalents at end of period \$ 2.157 \$ 850

See notes to unaudited condensed consolidated financial statements.

MICROFLUIDICS INTERNATIONAL CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(unaudited)

1. Description of Business
Company Overview
References herein to we, us, our, or the Company are to Microfluidics International Corporation.
We, along with our wholly-owned subsidiary, Microfluidics Corporation (Microfluidics), operate in one segment, producing and marketing a broad line of proprietary high-shear fluid processing systems used primarily in the pharmaceutical, biotechnology, chemical, nutraceutical/food, energy, academics and cosmetics industries.
The condensed consolidated financial statements include the accounts of our Company and our wholly-owned subsidiary, Microfluidics. All intercompany balances and transactions have been eliminated.
Our corporate headquarters and manufacturing operations are located in Newton, Massachusetts.
Certain accounts in the condensed consolidated financial statements and related notes have been reclassified to conform to current period presentation.
2. Interim Financial Statements

The condensed consolidated financial information for the three months ended March 31, 2010 are unaudited but include all adjustments (consisting only of normal recurring adjustments) that the Company considers necessary for a fair presentation of the financial position at such date and of the operating results and cash flows for the period. The results of operations for the three months ended March 31, 2010 and 2009 are not necessarily indicative of results that may be expected for the entire year. The information contained in this Form 10-Q should be read in conjunction with the Company s audited financial statements, included in its Annual Report on Form 10-K for the year ended December 31, 2009 filed with the Securities and Exchange Commission (SEC) on March 29, 2010.

The balance sheet as of December 31, 2009 has been derived from our audited consolidated financial statements at that date but does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements.

3. Significant Accounting Policies

The significant accounting policies followed by the Company and its subsidiary in preparing its unaudited condensed consolidated financial statements are set forth in Note 1 to the consolidated financial statements included in the Company s Annual Report on Form 10-K for the year ended December 31, 2009.

4. Revenue Recognition

Revenue is recognized when all of the following criteria are met: i) persuasive evidence of an arrangement exists, ii) delivery has occurred, iii) the price to the customer is fixed and determinable, and iv) collectability is reasonably assured. In revenue transactions where support services are requested, revenue is recognized on shipment since this supportive service obligation is not essential to the functionality of the delivered products. Revenue transactions involving non-essential support services obligations are those which can generally be completed in a short period of time at insignificant cost and the skills required to complete these installations are not unique to the Company and in many cases can be provided by third parties or the customers. The customer s purchase obligations are not contingent upon performance of support services, if any, by the Company. Proceeds received in advance of product shipment are recorded as customer advances in the consolidated balance sheets. Returns and customer credits are infrequent and recorded as a reduction to sales. Right of returns are not included in sales arrangements. Discounts from list prices are recorded as a reduction to sales. On occasion, the Company provides machines available for rent by customers. Income for the rental of equipment is recognized on a straight-line basis over the rental term. Rental income and product sales are classified in revenues in the consolidated statement of operations.

5. Recent Accounting Pronouncements

In October 2009, the Financial Accounting Standards Board (FASB) issued Accounting Standards Updated (ASU) No. 2009-13 - Revenue Recognition (Topic 605): Multiple-Deliverable Revenue Arrangements (formerly Emerging Issues Task Force Issue No. 08-1). This ASU establishes the accounting and reporting guidance for arrangements including multiple revenue-

Table of Contents

generating activities. This ASU provides amendments to the criteria for separating deliverables, and measuring and allocating arrangement consideration to one or more units of accounting. The amendments in this ASU also establish a selling price hierarchy for determining the selling price of a deliverable. Significantly enhanced disclosures are also required to provide information about a vendor s multiple-deliverable revenue arrangements, including information about the nature and terms, significant deliverables, and its performance within arrangements. The amendments also require providing information about the significant judgments made and changes to those judgments and about how the application of the relative selling-price method affects the timing or amount of revenue recognition. The amendments in this ASU are effective prospectively for revenue arrangements entered into or materially modified in the fiscal years beginning on or after June 15, 2010. Early application is permitted. We believe adoption of this guidance will not have a material impact on our consolidated results of operations or financial position.

In June 2009, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 168, The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles a replacement of FASB Statement No. 162. SFAS No. 168 was codified as Accounting Standards Codification (ASC) Topic 105-10 and replaces SFAS No. 162, The Hierarchy of Generally Accepted Accounting Principles, to establish the FASB ASC as the source of authoritative accounting principles recognized by the FASB to be applied by nongovernmental entities in preparation of financial statements in conformity with generally accepted accounting principles in the United States. We adopted ASC Topic 105-10 effective for the quarter ended September 30, 2009 and the adoption did not result in a significant impact on our financial statements.

6. Stock Based Compensation

We account for stock-based compensation in accordance with the provisions of ASC 718, which requires us to recognize compensation expense for all stock-based payment awards made to employees and directors. Stock-based compensation expense recognized under ASC 718 for the three months ended March 31, 2010 and 2009 was \$65,000 and \$26,000, respectively and allocated as follows:

		Months I March 31,		
(in thousands)	2010		2009	
Research and development	\$ 1	6 \$		6
Selling	1	4		5
General and administrative	3	5		15
Total	\$ 6	5 \$		26

The Company did not capitalize any stock-based compensation. The Company has established a valuation allowance for net deferred tax assets. Accordingly, no significant tax benefit on the stock-based compensation was recorded during the three month period ended March 31, 2010 and 2009.

The fair value of each option granted during the three month periods ended March 31, 2010 and 2009 is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions:

Three Months Ended March 31.

	2010	2009
Dividend yield	None	None
Expected volatility	117%	111%
Risk-free interest rate	2.55%	2.00%
Expected life	5 years	5 years

The weighted average fair value of stock options granted during the three months ended March 31, 2010 and 2009 was \$0.79 and \$0.51 per share, respectively. We estimate forfeitures related to option grants at an annual rate of 9% and 11% for 2010 and 2009, respectively.

Total unrecognized stock-based compensation expense related to unvested stock options, expected to be recognized over the service period, generally 4 years, amounted to approximately \$867,000 and \$823,000 at March 31, 2010 and 2009, respectively.

The Company has three (3) shareholder approved stock option plans (collectively, the Stock Option Plans) as follows: (i) the 1988 Stock Plan, which authorized the grant of stock rights for up to 3,500,000 shares of common stock (the 1988 Plan); (ii) the 1989 Non-Employee Director Stock Option Plan (the 1989 Plan), which authorized the grant of nonqualified stock

Table of Contents

options for up to 500,000 shares of common stock; and (iii) the 2006 Stock Plan (the 2006 Plan) which authorizes the grant of stock rights for up to 4,000,000 shares of common stock, decreased by the number of shares of common stock issued and issuable pursuant to options outstanding under either the 1988 Plan or the 1989 Plan (together, the Prior Plans). The 2006 Plan was approved by our shareholders at the Annual Meeting of Shareholders held on June 20, 2006. Upon adoption of the 2006 Plan by our shareholders, we ceased granting new options under the Prior Plans. The Prior Plans permitted, and the 2006 Plan permits, the granting of stock awards to employees, officers, and non-employee members of the Board of Directors. Options granted under the Prior Plans and the 2006 Plan permit vesting over a 3-to-5 year period and expire 5-to-10 years from the date of grant. At March 31, 2010, 272,170 shares were available for future grants under the 2006 Plan and no shares were available for future grants under the Prior Plans.

During the three months ended March 31, 2010 and 2009, the Company issued 425,500 and 385,000 stock options pursuant to the 2006 Plan, respectively, at exercise prices equal to or greater than the fair market value of the Company s common stock on the date of the grant. During the three months ended March 31, 2010 and 2009, approximately 22,250 shares and 200,000 shares, respectively, were forfeited and approximately 110,703 shares and 38,000 shares were vested, respectively under the 2006 Plan.

Information regarding option activity for the three months ended March 31, 2010 under the 2006 Plan is summarized below:

	Options Outstanding	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term in Years
Options outstanding as of January 1, 2010	1,434,609	\$ 1.10	8.24
Granted	425,500	.90	6.12
Exercised	(7,500)	.36	
Cancelled	(22,250)	2.60	
Options outstanding as of March 31, 2010	1,830,359	\$ 1.04	8.08
Options exercisable as of March 31, 2010	713,375	\$ 1.20	6.50

7. Inventories

Inventories consist of the following:

(in thousands)	March 31, 2010	D	ecember 31, 2009
Raw materials	\$ 1,917	\$	2,037
Work in progress	346		174
Finished goods	647		901
	2,910		3,112
Less: provision for excess inventory	(196)		(196)
Total inventories	\$ 2,714	\$	2,916

8. Property, Plant and Equipment

Property, plant and equipment consist of the following:

(in thousands)	M	arch 31, 2010	D	ecember 31, 2009
Furniture, fixtures and office equipment	\$	923	\$	923
Machinery, equipment and tooling		530		530
Leasehold improvements		909		906
		2,362		2,359
Less: accumulated depreciation and amortization		(1,541)		(1,468)
	\$	821	\$	891

For the three months ended March 31, 2010 and 2009, depreciation expense and amortization of leasehold improvements was approximately \$73,000 and \$79,000, respectively.

Table of Contents

9. Accrued Expenses

Accrued expenses consist of the following:

	March 31,	December 31,
(in thousands)	2010	2009
Accrued expenses	\$ 281	\$ 319
Accrued wages, bonus and vacation pay	394	644
Accrued commissions	314	367
Accrued interest	465	338
Accrued warranty	59	59
•	\$ 1,513	\$ 1,727

10. Earnings Per Share

Basic net income (loss) per common share was determined by dividing net income (loss) applicable to common stockholders by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock, unless the effects of dilution would be anti-dilutive.

	Three Months March 3	
(in thousands)	2010	2009
Shares for computation of basic net loss per share	10,401	10,371
Shares for computation of diluted net loss per share	10,618	10,371

11. Industry Segment, Geographic and Enterprise-Wide Information

The Company has determined that it conducts its operations in one business segment: producing and marketing a broad line of proprietary high shear fluid processing systems used primarily in the pharmaceutical, biotechnology, chemical, nutraceutical/food, and cosmetics industries. The Company has less than 3% of total assets in foreign countries. As a result, the financial information disclosed herein represents all of the material financial information related to the Company s principal operating segment.

Approximate sales to customers by geographic markets, and percentage of total sales by geographic market, are as follows:

Three Months Ended March 31,

(\$ in thousands)	2010		2009	
North America	\$ 2,673	61.9%	\$ 2,439	68.5%
Asia	478	11.1%	396	11.1%
Europe	1,164	27.0%	724	20.4%
•	\$ 4.315	100.0%	\$ 3,559	100.0%

One customer accounted for 18.8% of the Company s revenues for the three months ended March 31, 2010. For the three months ended March 31, 2009, no customer accounted for greater than 10% of revenue. One customer accounted for 18.5% of the trade accounts receivable as of March 31, 2010. No customer accounted for greater than 10% of the trade accounts receivable as of March 31, 2009.

12. Stockholders Equity

During the three months ended March 31, 2010, the Company issued 7,500 shares of common stock as a result of the exercise of options by a former director. During the three months ended March 31, 2009, the Company issued no shares of common stock as a result of the exercise of options by employees and directors under its stock plans. During the three months ended March 31, 2010 and 2009, the Company issued 10,000 and 15,000 shares of common stock, respectively, under the Employee Stock Purchase Plan. Issuance of shares of common stock during the three months ended March 31, 2010 and 2009 generated cash proceeds of approximately \$6,100 and \$4,000, respectively.

Table of Contents

13. Credit Facility

On October 23, 2009, the Company and its subsidiary entered into a senior secured \$1 million revolving line of credit pursuant to a loan agreement (the Revolving Line of Credit) with Webster Bank, National Association, as lender (Webster Bank). The Revolving Line of Credit matures on October 22, 2010. We may extend the Revolving Line of Credit for one year without the consent of Global Strategic Partners LLC (GSP). The actual amount of credit that is available from time to time under the Revolving Line of Credit is limited to a borrowing base amount that is determined according to, among other things, a percentage of the value of eligible accounts receivables. The Revolving Line of Credit contains customary representations and warranties and restrictive covenants relating to matters, such as indebtedness, liens, investments, acquisitions, mergers, dispositions and dividends. The Revolving Line of Credit also has two financial covenants that require the Company to maintain a senior debt to twelve month trailing EBITDA (Earnings Before Interest, Taxation, Depreciation and Amortization) of 2:1, and requires the Company to maintain \$500,000 of available cash or excess availability under the Revolving Line of Credit. The proceeds of any borrowings under the Revolving Line of Credit are available for working capital and other general corporate purposes.

The Company s borrowings under the Revolving Line of Credit will generally accrue interest at a margin of 5.50% over the London Interbank Offered Rate (LIBOR) (LIBOR at March 31, 2010 was 0.29150%) and are secured by a lien on substantially all of its personal property. The Revolving Line of Credit generally contains customary events of default for credit facilities of this type. Upon an event of default that is not cured or waived within any applicable cure periods, in addition to other remedies that may be available to Webster Bank, the obligations under the Revolving Line of Credit may be accelerated and remedies may be exercised against the collateral.

In connection with the closing of the Revolving Line of Credit, the Company also amended the Convertible Debenture and Agreement with GSP (each as defined below) to permit the Revolving Line of Credit as senior indebtedness and provide for certain other covenants, including a cross default provision with the Revolving Line of Credit, and GSP agreed to subordinate the indebtedness under the Convertible Debenture and Agreement to our indebtedness to Webster Bank. As of March 31, 2010, we had not drawn down on the Revolving Line of Credit.

14. Long-Term Debt

Long-term debt as of the following dates consisted of:

(in thousands)	March 31, 2010	December 31, 2009
Convertible debt, (net of discount of \$307 in 2010 and		
\$321 in 2009)	\$ 4,693	\$ 4,679
Less: current portion		
Long-term debt, net of current portion	\$ 4,693	\$ 4,679

On November 14, 2008 we entered into the Convertible Debenture and Warrant Purchase Agreement (the Agreement) with GSP. The total amount of the Convertible Debenture is \$5,000,000 and bears interest at nine percent (9.0%) per annum payable quarterly in arrears. The Convertible Debenture is due and payable on the earlier to occur of (i) November 14, 2015 or (ii) the acceleration of the maturity of the Convertible Debenture upon the occurrence of an event of default. GSP may, at its option, on any of the maturity date, the date that any interest payment is due, or the date on which a change of control occurs, convert all or any portion of the outstanding principal amount of the Convertible Debenture into shares of our common stock at a \$1.25 per share. In May 2009, after an initial quarterly interest payment of

approximately \$113,000, GSP agreed to defer the interest payments due and payable under the Convertible Debenture on each of July 1, 2009, October 1, 2009 and January 4, 2010. The deferred payments will accrue interest at nine percent per annum and will be payable in eight equal quarterly installments on the first day of such quarter beginning on April 1, 2010. The Convertible Debenture is secured by all assets, property rights and interests of the Company, and is subordinate to our Revolving Line of Credit with Webster Bank. As of March 31, 2010, a total of approximately \$465,000 of accrued interest expense is included as part of accrued expenses. The Convertible Debenture is presented net of the discount of approximately \$307,000 and \$321,000 as of March 31, 2010 and December 31, 2009, respectively. The discount represents the value of the warrants granted as part of the financing which was approximately \$382,000, at the date of grant, which is being accreted over the seven year life of the loan as interest expense.

Table of Contents

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

Future Operating Results

This report may contain forward-looking statements that are subject to certain risks and uncertainties including statements relating to our plan to achieve, maintain, and/or increase revenue growth, and/or operating profitability, and to achieve, maintain, and/or increase net operating profitability. Such statements are based on our current expectations and are subject to a number of factors and uncertainties that could cause actual results achieved by us to differ materially from those described in the forward-looking statements. We caution investors that there can be no assurance that the actual results or business conditions will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors, including but not limited to, the following risks and uncertainties: (i) whether the performance advantages of our Microfluidizer® materials processing equipment will be realized commercially or that a commercial market for the equipment will continue to develop, (ii) whether the timing of orders will significantly affect quarter to quarter revenues and resulting net income results for a particular quarter, which may cause increased volatility in our stock price, (iii) whether we will have access to sufficient working capital through continued and improving cash flow from sales and ongoing borrowing availability, the latter being subject to our ability to maintain compliance with the covenants and terms of our financing agreements, (iv) whether our technology will be adopted by customers as a means of producing MRT innovative materials in large quantities, (v) whether we will be able to deploy further prototype Microfluidics Reaction Technology systems for nanoparticle production and then manufacture and introduce commercial production Microfluidics Reaction Technology equipment, (vi) whether we will achieve a greater proportion of our sales in the future through the sale of advanced processor production systems, and (vii) those risks set forth in Item 1A, Risk Factors and our other periodic reports filed with the SEC. We assume no responsibility to update any forward-looking statements as a result of new information, future events, or otherwise.

Overview

We have, for over 25 years, specialized in manufacturing and marketing a broad line of materials processing systems, more specifically known as high shear fluid processors, which are used in numerous applications in the pharmaceutical, biotechnology, chemical, nutraceutical/food, energy, academics and cosmetics industries.

Our line of lab and production equipment, marketed under our Microfluidizer® trademark and trade name, process premixed formulations to produce small, uniform structures, usually of the submicron and nanoscale size (commonly defined as particles having dimensions less than 100 nanometers) including nanoemulsions and nanosuspensions.

Additionally, our equipment is used for cell disruption to harvest the cultivated contents of cells such as e.coli, bacterial yeast, mammalian and /or plant cells and for liposomal encapsulation of materials primarily for the pharmaceutical, biotechnology, nutraceutical/ and cosmetic industries.

The technology embodied within our Microfluidizer high shear fluid processors is used in formulating products that are normally very difficult to mix and stabilize. We believe that our Microfluidizer processors, through process intensification, allow manufacturers to produce higher quality products with better characteristics, on a more consistent basis, than with other blending, mixing or homogenizing techniques. Further, our processor equipment is able to scale up formulations and results from flow rates as low as 100 to 200 milliliters per minute on our laboratory

and bench top models to more than 15 gallons per minute on our production models, which is a competitive advantage for our customers.

We have begun to sell beta versions and associated process technology consulting services to our commercial customers related to our proprietary equipment for the continuous production of precipitated submicron or nanoscale particles by interaction of discrete streams of reacting materials (Microfluidics Reaction Technology or MRT). In 2009 we launched the MRT processor, the CR5. The combination of the process development and processor was used successfully to produce drug suspensions of the desired particle size via crystallization. Our management believes that once commercialized, the manufacturing capability of our processing equipment and our Microfluidics Reaction Technology may enable our pharmaceutical and other customers to implement further their nanotechnology based products.

In August 1997, we filed a patent application for the MRT processor device and its processes with the United States Patent and Trademark Office (USPTO), and filed a Patent Cooperation Treaty (PCT) application on May 5, 1998 and we intend to file for protection in selected countries in 2010. In July and November 2000, we were issued by the USPTO notices of allowances of utility patent claims regarding the MMR and the use thereof. In April 2010, the Company applied for a Japanese patent on MRT entitled Apparatus and Methods for Nanoparticle Generation and Process Intensification of Transport and Reaction Systems .

On September 18, 2002, the European Patent Office advised us it would grant its MMR patent substantially as applied for, including its device and process claims. We have gained national entry of the patent in France, Germany, Italy, The Netherlands, and the United Kingdom.

Table of Contents

We were incorporated in Delaware in 1983 under the name Biotechnology Development Corporation. Our principal executive offices are located at 30 Ossipee Road, in Newton, Massachusetts 02464 and our telephone number is (617) 969-5452.

Critical Accounting Policies

Our significant accounting policies are summarized in Note 1 to our consolidated financial statements included in Item 8 of our Annual Report on Form 10-K for the period ended December 31, 2009 as filed with the SEC on March 29, 2010. Certain of our accounting policies require the application of significant judgment by our management, and such judgments are reflected in the amounts reported in our consolidated financial statements. In applying these policies, our management uses their judgment to determine the appropriate assumptions to be used in the determination of estimates. Those estimates are based on our historical experience, terms of existing contracts, our observance of market trends, information provided by our strategic partners and information available from other outside sources, as appropriate. Actual results may differ significantly from the estimates contained in our consolidated financial statements. Our critical accounting policies are as follows:

- Revenue Recognition. Revenue is recognized when all of the following criteria are met: i) persuasive evidence of an arrangement exists, ii) delivery has occurred, iii) the price to the customer is fixed and determinable, and iv) collectability is reasonably assured. In revenue transactions where support services are requested, revenue is recognized on shipment since this supportive service obligation is not essential to the functionality of the delivered products. Revenue transactions involving non-essential support services obligations are those which can generally be completed in a short period of time at insignificant cost and the skills required to complete these installations are not unique to the Company and in many cases can be provided by third parties or the customer. The customer s purchase obligations are not contingent upon performance of support services, if any, by the Company. Proceeds received in advance of product shipment are recorded as customer advances in the consolidated balance sheets. Returns and customer credits are infrequent and recorded as a reduction to sales. Rights of returns are not included in sales arrangements. Discounts from list prices are recorded as a reduction to sales. On occasion, the Company provides machines for rent by customers. Income for the rental of equipment is recognized on a straight-line basis over the rental term. Rental income and product sales are classified in revenues in the consolidated statement of operations.
- Accounts Receivable Valuation. We perform various analyses to evaluate accounts receivable balances and record an allowance for bad debts based on the estimated collectability of the accounts, such that the amounts reflect estimated net realizable value. If actual uncollectible amounts significantly exceed the estimated allowance, our operating results would be significantly and adversely affected.
- Inventory Valuation. We value our inventory at the lower of our actual cost or the current estimated market value. We regularly review inventory quantities on hand and inventory commitments with suppliers and record a provision for excess and obsolete inventory based primarily on our historical usage for the prior twenty-four month period. Although we make every effort to ensure the accuracy of our forecasts of future product demand, any significant unanticipated change in demand or technological developments could have a significant impact on the value of our inventory and our reported operating results.
- *Product Warranties.* Our products are generally sold with a twelve month warranty provision that requires us to remedy deficiencies in quality or performance of our products at no cost to our customers only after it has been determined that the cause of the deficiency is not due to the actions of the machine operator or product used in the machine. We have established a policy for replacing parts that wear out or break prematurely. The policy called for replacing the parts or repairing a machine within one year of the sale.

Results of Operations

Three Months	Ended	March 31.	2010	vs.	March 31	. 2009

Revenues

Total revenues for the three months ended March 31, 2010 were approximately \$4,315,000, as compared to revenues of \$3,559,000 for the comparable prior year period, an increase of approximately \$756,000, or 21.2%.

North American sales for the three months ended March 31, 2010 increased to approximately \$2,673,000, or 9.6%, as compared to sales of approximately \$2,439,000 for the three months ended March 31, 2009. The increase in North American sales was principally due to an increase in the sale of spare parts of approximately \$712,000, offset by a reduction in new lab machine sales of approximately \$311,000, and a decrease in production machine sales of \$167,000.

Foreign sales were approximately \$1,642,000 for the three months ended March 31, 2010, compared to \$1,120,000 for the three months ended March 31, 2009, an increase of \$522,000, or 46.6% primarily resulting from an increase in the number of production and lab machines sold during the first quarter of 2010 and slightly higher sales of spare parts.

Table of Contents
Cost of Sales
Cost of sales for the three months ended March 31, 2010 was approximately \$1,731,000, or 40.1% of revenue, compared to \$1,653,000, or 46.4% of revenue, for the comparable prior year period.
The decrease in cost of sales as a percentage of revenue is primarily attributable to a higher percentage of sales coming from the sale of spare parts which generally have higher profit margins than the sale of production or lab machines. The Company s major product lines have different profit margins, as well as multiple profit margins within each product line and the makeup of the sales for a quarter can cause swings in our gross margins.
Research and Development Expenses
Research and development expenses for the three months ended March 31, 2010 were approximately \$467,000, compared to \$458,000 for the comparable prior year period, an increase of approximately \$9,000, or 2.0%. The increase in research and development expenses was primarily due to stock based compensation of approximately \$10,000, partially offset by reductions in payroll and related costs of approximately \$15,000.
Selling Expenses
Selling expenses for the three months ended March 31, 2010 were approximately \$1,055,000, compared to \$1,221,000 for the comparable prior year period, a decrease of \$166,000, or 13.6%. The decrease is primarily related to a decrease in payroll and related costs of approximately \$76,000, a decrease in commissions of approximately \$76,000, a decrease in travel related expenses of approximately \$45,000, a decrease in advertising expenses of approximately \$31,000, and a decrease in direct mail expenses of approximately \$21,000, partially offset by an increase in sales meeting expenses of approximately \$78,000, and stock based compensation of approximately \$9,000.
General and Administrative Expenses
General and administrative expenses for the three months ended March 31, 2010, were approximately \$770,000, compared to \$779,000 for the comparable prior year period, a decrease of approximately \$9,000, or 1.2%. The decrease is primarily attributable to a decrease in payroll related costs of approximately \$44,000, a decrease in corporate expenses of approximately \$70,000 and a decrease in travel related changes of \$32,000, partially offset by investor relations and professional fees of approximately \$67,000 and stock based compensation expense of approximately \$20,000. Additionally, for the three months ended March 31, 2010, the Company recorded a foreign currency loss of approximately \$33,000 as compared to a foreign currency gain of \$13,000 for the comparable period in 2009.

Interest Expense

Interest expense for the three months ended March 31, 2010 was approximately \$186,000 compared to \$140,000 for the comparable prior year
period, an increase of approximately \$46,000, or 32.9%. The increase is due to the amortization of financing costs related to the Revolving Line
of Credit with Webster Bank.

Income Tax Provision

As described in Note 9 to our consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2009 filed with the SEC on March 29, 2010, we have recorded a full valuation allowance for the amount of the deferred tax assets.

As of December 31, 2010, the Company has available federal net operating loss carry forwards for income tax purposes of approximately \$12,757,000 and state net operating loss carry forwards of approximately \$2,784,000, which expire at various dates through 2029, and federal research and development credit carry forwards of approximately \$356,000 expiring in varying amounts during the period through 2024. Ownership changes, as defined in the Internal Revenue Code, may limit the amount of operating loss carry forwards that can be utilized annually to offset future taxable income. Subsequent ownership changes could further affect the limitation in future years.

As of March 31, 2010, the Company has approximately \$135,000 of prepaid German taxes which the Company expects to collect in 2010.

13

Table of	Contents
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Liquidity and Capital Resources

Liquidity

We fund our working capital requirements primarily through the proceeds from our term loan, funds generated from operations and customer deposits. We expect to fund our liquidity requirements, including interest on our convertible debt and capital expenditures, primarily through revenue and bookings for which we receive deposits in advance of shipment and our new working capital line with Webster Bank. We anticipate that with our expected revenues and customer deposits, together with our existing cash balance at March 31, 2010 and our working capital line, we will have sufficient capital to meet our working capital requirements for the next twelve months. However, if we do not achieve the revenues and customer deposits as and when planned, and/or if we are unable to access our secured working capital line, we may face substantial liquidity pressures that we may not be able to sustain if we are unable to access additional sources of liquidity.

Long Term Debt

On November 14, 2008 we entered into the Convertible Debenture and Warrant Purchase Agreement (the Agreement) with GSP. The Convertible Debenture issued pursuant to the terms of the Agreement (the Convertible Debenture) bears interest at nine percent (9.0%) per annum payable quarterly in arrears. The Convertible Debenture is due and payable on the earlier to occur of (i) November 14, 2015 or (ii) the acceleration of the maturity of the Convertible Debenture upon the occurrence of an Event of Default (as defined in the Agreement). GSP may, at its option, on any of the maturity dates, the date that any interest payment is due, or the date on which a change of control occurs, convert all or any portion of the outstanding principal amount of the Convertible Debenture into shares of our common stock at a \$1.25 per share. In May 2009, GSP agreed to defer the interest payments due and payable under the Convertible Debenture on each of July 1, 2009, October 1, 2009 and January 4, 2010. The deferred payments will accrue interest at nine percent (9.0%) per annum and will be payable in eight equal quarterly installments on the first day of such quarter beginning on April 1, 2010. The Convertible Debenture is secured by all assets, property rights and interests of the Company, and is subordinate to the working capital line with Webster Bank.

On November 14, 2008 we also issued the Warrant to GSP pursuant to the terms of the Agreement, giving it the right to purchase up to fifty percent (50%) of our outstanding common stock, on a fully diluted basis, less the number of shares of common stock into which the Convertible Debenture is convertible. The Warrant can be exercised by GSP in two (2) tranches at any time prior to the earlier to occur of: (i) the seventh anniversary of the date of the Agreement, (ii) the third anniversary of the date of the Agreement in the event that we retire the Convertible Debenture on or before such date (the Third Anniversary) or (iii) such time as GSP has acquired fifty percent (50%) of the total number of shares of our common stock then outstanding on a fully diluted basis. The first tranche is exercisable at \$2.00 per share up to forty percent (40%) of our common stock then outstanding on a fully diluted basis and the second tranche is exercisable at \$3.00 per share up to fifty percent (50%) of our common stock then outstanding on a fully diluted basis.

The aggregate number of shares of Common Stock (the Tranche One Maximum) that may be purchased pursuant to one or more tranche one exercises of the Warrant (the Tranche One Exercises) is forty percent (40%) of the Common Stock then outstanding on a fully diluted basis, minus that number of shares of Common Stock that GSP is or was entitled to acquire (or has theretofore acquired) upon exercise of the conversion feature of the Convertible Debenture. Notwithstanding the preceding sentence, if all or any portion of the principal amount of the Convertible Debenture has been prepaid by us prior to the Third Anniversary, then the Tranche One Maximum will also include a number of shares of common stock equal to the quotient of: (i) the amount of the Convertible Debenture s principal amount that was so repaid by the Third Anniversary, divided by (ii) \$1.25 (the Prepayment Shares).

The aggregate number of shares of Common Stock that may be purchased pursuant to one or more tranche two exercises of the Warrant (the Tranche Two Exercises) is equal to (a) fifty percent (50%) of the common stock then outstanding on a fully diluted basis, minus (b) that number of shares of common stock that GSP is or was entitled to acquire (or has theretofore acquired) upon (i) exercise of the conversion feature of the Convertible Debenture, and (ii) the Tranche One Exercise, plus (c) the Prepayment Shares. A Tranche Two Exercise may only be made after the full number of shares exercisable pursuant to Tranche One Exercises have been purchased.

Revolving Line of Credit

On October 23, 2009, we entered into a senior secured \$1 million Revolving Line of Credit with Webster Bank described above in Footnote 13 to our unaudited consolidated financial statements for the three months ended March 31, 2010. The Revolving Line of Credit matures on October 22, 2010. We may extend the Revolving Credit for one year without the consent of GSP. As noted above, the actual amount of credit that is available from time to time under the Revolving Line of Credit is limited to a borrowing base amount that is determined according to, among other things, a percentage of the value of eligible accounts receivables. The Revolving Line of Credit contains customary representations and warranties and restrictive covenants relating to matters, such as indebtedness, liens, investments, acquisitions, mergers, dispositions and dividends. The Revolving Line of Credit also has two financial covenants that require us to maintain a senior debt to twelve month trailing EBITDA of 2:1, with the initial twelve month trailing EBITDA, and requires us to maintain \$500,000 of available cash or excess availability under the Revolving Line of Credit. The proceeds of any borrowings under the Revolving Line of Credit are available for working capital and other general corporate purposes.

14

Table of Contents

Our borrowings under the Revolving Line of Credit will generally accrue interest at a margin of 5.50% over LIBOR and are secured by a lien on substantially all of its personal property, which is senior in rights to our Debenture. The Revolving Line of Credit generally contains customary events of default for credit facilities of this type. Upon an event of default that is not cured or waived within any applicable cure periods, in addition to other remedies that may be available to Webster Bank, the obligations under the Loan Agreement may be accelerated and remedies may be exercised against the collateral.

In connection with the closing of the Revolving Line of Credit, we also amended the Agreement and Debenture with GSP to permit the Revolving Line of Credit as senior indebtedness and provide for certain other covenants, including a cross default provision with the Revolving Line of Credit.

As of March 31, 2010, we had not drawn upon the Revolving Line of Credit.

Operating, Investing and Financing Activities

As of March 31, 2010, we had approximately \$2,157,000 in cash and cash equivalents, compared to \$2,185,000 as of December 31, 2009. In the three months ended March 31, 2010, the decrease of approximately \$28,000 in cash resulted primarily from changes in working capital, particularly due to lower customer advances.

Our operating activities used cash of approximately \$31,000 for the three months ended March 31, 2010 compared to approximately \$982,000 for the three months ended March 31, 2009. The decrease in cash flows from operations was primarily due to changes in working capital year to year.

The Company used cash of \$3,000 and \$67,000 for investing activities for the three months ended March 31, 2010 and 2009, respectively, for the purchase of capital equipment, and renovations to the Company s facilities in 2009.

Contractual Obligations

Our contractual obligations as of March 31, 2010 are as follows:

					Payment du	e by pe	riod		
		L	ess than 1					Mo	ore than 5
(in thousands)	Total		year	1 -	- 3 years	3 -	5 years		years
Convertible debt (1)	\$ 8,192	\$	651	\$	1,078	\$	900	\$	5,563
Operating leases	679		411		268				
	40		40						

Purchase obligations (2)					
	\$ 8,911	\$ 1,102	\$ 1,346	\$ 900	\$ 5,563

- (1) Includes principal and interest payments, principal is due only at maturity unless called upon following an event of default under the convertible debenture agreement. (See discussion above on interest in *Long Term Debt.*)
- (2) Purchase obligations consist of commitments for production materials and supplies.

Off-Balance Sheet Arrangements

We are not a party to any off-balance sheet arrangements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Our financial instruments are generally not subject to changes in market value as a result of changes in interest rates due to the short maturities of the instruments. Our fixed rate debt is not exposed to cash flow or interest rate changes but is exposed to fair market value changes in the event of refinancing this fixed rate debt. The Revolving Line of Credit accrues interest at a margin of 5.50% over LIBOR. As of March 31, 2010, we had not drawn upon the Revolving Line of Credit.

Although we have a significant percentage of sales from foreign counties, our sales are predominately denominated in U.S. dollars. However, sales to foreign government sponsored organizations or universities are often required to be denominated in their local currency. Additionally, we maintain a cash balance in a German bank to facilitate our European operations. As a result, sales in foreign currency and our German bank account may result in exposure to fluctuations in foreign currency exchange rates. A significant increase in foreign sales that require denomination in local currency may expose the Company to additional risk.

Table of Contents

For additional information about our financial instruments, see Note 7 to our consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2009 filed with the SEC on March 29, 2010.

Item 4T. Controls and Procedures

The certificates of the Company s principal executive officer and principal financial officer attached as Exhibits 31.1 and 31.2 to this Quarterly Report on Form 10-Q include, in paragraph 4 of such certifications, information concerning the Company s disclosure controls and procedures, and internal control over financial reporting. Such certifications should be read in conjunction with the information contained in this Item 4 for a more complete understanding of the matters covered by such certifications.

Disclosure Controls and Procedures

The Company s management, with the participation of the Company s chief executive officer and principal financial and accounting officer, evaluated the effectiveness of the Company s disclosure controls and procedures as of March 31, 2010. The term disclosure controls and procedures , as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in the SEC s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company s management, including its chief executive officer and principal financial and accounting officer, as appropriate, to allow timely decisions to be made regarding required disclosure. It should be noted that any system of controls and procedures, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system are met and that management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of the Company s disclosure controls and procedures as of March 31, 2010, the Company s chief executive officer and principal financial and accounting officer concluded that, as of such date, the Company s disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There were no changes to the Company s internal control over financial reporting during the quarter ended March 31, 2010 that have materially affected, or are reasonably likely to materially affect, the Company s internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

The Company is not a party to any material legal proceedings.

Item 1A. Risk Factors.

You should carefully consider the risks and uncertainties described below and the other information in this filing before deciding to purchase our common stock. If any of these risks or uncertainties occurs, our business, financial condition or operating results could be materially harmed. In that case the trading price of our common stock could decline and you could lose all or part of your investment. The risks and uncertainties described below are not the only ones we may face. We believe that this filing contains forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are subject to a number of risks and uncertainties, including the ones described below. Such statements are based on management s current expectations and are subject to facts that could cause results to differ materially from the forward-looking statements. For further information you are encouraged to review our filings with the Securities and Exchange Commission, including our Annual Report on Form 10K for the period ended December 31, 2009.

We have experienced operating losses in four of our last five fiscal years, including the fiscal year ended December 31, 2009, and we may not be able to achieve consistent profitability in the future.

For four of the past five fiscal years, including for fiscal 2009, we have experienced losses from continuing operations. For the year ended December 31, 2009 and the year ended December 31, 2008, we had a net loss of \$362,000 and \$4,011,000, respectively. Although we have significantly improved our operating results during fiscal 2009 and the first three months of 2010, including recording positive net income in the third and fourth quarters of 2009 and the first quarter of 2010, in the future the Company may not be able to achieve consistent profitability on a quarter by quarter and year over year basis.

Table of Contents

The Company must remain cash-flow positive.

We believe that our expected revenues and customer advances, together with our existing cash balance at March 31, 2010 and the availability under our working capital line should be sufficient to meet our working capital requirements for the next twelve months. In the first quarter of 2009, we initiated an aggressive cost reduction program that includes headcount reductions as well as the elimination of all non-essential discretionary spending such as travel, consulting and marketing programs. As a result of these initiatives and the cost reduction program, the Company was cash-flow positive for the year ended December 31, 2009, as well as for the three months ending March 31, 2010. However, if we sustain a revenue shortfall that we can t compensate with additional cost cuts, or our current credit facility is withdrawn or not renewed, it is possible that we could face unsustainable liquidity pressures. This concern is accentuated by the fact that current credit markets, coupled with our history of losses, has made it possible that we would not be able to obtain alternative or additional financing. Under these circumstances, it is possible that we could default under our financing agreements, which default could force us to seek protection under the bankruptcy laws and cause our investors to sustain a loss of their investment in our shares.

Increased concerns about the financial markets, economic conditions, and corporate profits may exacerbate certain risks affecting our business.

We cannot predict the extent of the impact of the economic environment specific to our industry. Continued or increased concerns about credit markets, consumer confidence, economic conditions, volatile corporate profits and reduced capital spending could negatively impact demand for our products. In the future, we may experience reduced demand for our products because of the uncertainties in the general economic environment in which our customers and we operate. The on-going tightening of credit in financial markets may adversely affect the ability of our customers and suppliers to obtain financing, which could result in a decrease in, or deferrals or cancellations of, the sale of our products. Although there have been signs of an improving economy, if global economic and market conditions, or economic conditions in the United States, remain uncertain, deteriorate or enter into a period with no or flat growth, we may experience a material adverse effect on our business, operating results and financial condition. Unstable economic, political and social conditions make it difficult for our customers, our suppliers and us to accurately forecast and plan future business activities. If such conditions persist, our business, financial condition and results of operations could suffer. We cannot project the extent of the impact of the economic environment specific to our industry.

The failure of any banking institution in which we deposit our funds or the failure of such banking institution to provide services in the current economic environment could have a material adverse effect on our results of operations, financial condition or access to borrowings.

The capital and credit markets have been experiencing extreme volatility and disruption. In some cases, the markets have exerted downward pressure on stock prices and credit capacity for certain issuers, as well as pressured the solvency of some financial institutions. Some of these financial institutions, including banks, have had difficulty performing regular services and in some cases have failed or otherwise been largely taken over by governments. If we are unable to access some or all of our cash on deposit, either temporarily or permanently, or are unable to access our Revolving Line of Credit with Webster Bank, it could have a negative impact on our operations, including our reported net income, or our financial position, or both.

The occurrence of an event of default under our financing arrangements could result in substantial losses to our stockholders.

Both our Revolving Line of Credit and our Convertible Debenture contain events of defaults, which are more fully described in our Form 8-Ks filed by the Company with the Securities and Exchange Commission on October 26, 2009 with respect to the Revolving Line of Credit and November 20, 2008 with respect to the Convertible Debenture. In addition, the Revolving Line of Credit and Convertible Debenture contain cross default provisions, which provides that an event of default under our Revolving Line of Credit or Convertible Debenture may also trigger an event of default under the other financing agreement. If we were to experience an event of default under our Revolving Line of Credit or our Convertible Debenture, that is not cured or waived within any applicable cure periods, in addition to other remedies that may be available to Webster Bank and GSP, the parties may accelerate the obligations under these financing arrangements and they may exercise their remedies against the secured collateral, which is substantially all of our assets. If an event of default occurs, there can be no assurance that we would be able to repay the obligations under these financing arrangements or be able to raise additional funds to make such payments. Failure to repay these financing arrangements could force us to reorganize our debts, possibly in bankruptcy, in which event our common stock could likely become worthless.

Our ownership structure includes several investors who own large blocks of common stock or convertible securities whose interests and rights in our Company may differ in important respects from those of our other common stock investors.

Several investors in the Company own large concentrations of our common stock or securities convertible into our common stock, making our shares more illiquid than if our ownership structure were more widely distributed. The concentration in the ownership of our common stock and the rights of the holder of our Convertible Debenture and warrants impact the trading liquidity of our common shares, our corporate governance, and the relative economic stake that our common stock and

Table of Contents

Convertible Debenture and Warrants have in the enterprise value of our business. Although a more active trading market may develop in the future, the limited market liquidity for our common stock may affect your ability to sell at a price that is satisfactory to you. The market price of our common stock may be adversely effected should the one large investor convert the Convertible Debenture and Warrants into common stock or several large investors sell at the same time. Additionally, if the holder of our Convertible Debenture and Warrant were to convert and sell such shares or a large stockholder were to sell their shares our stock price may be adversely effected.

We face intense competition in many of our markets.

Our Microfluidizer product line of high-shear fluid processors has direct competition in its major markets, including its most important markets in the pharmaceutical, biotechnology and coatings/chemical industries. The severity of the competition that we confront requires that we continuously invest in research and development in order to keep our product line competitive. Despite such expenditures, however, there can be no assurance that we will be able to meet the enhancement challenges posed by our competitors, or that we will be able to create or exploit the kinds of innovations, such as our Microfluidics Reaction Technology, needed to drive future sales.

In addition, we face, and will continue to face, intense competition from other companies who manufacture and sell fluid processing systems used in particle size reduction, mixing, milling, dispersing, homogenizing, cell disruption and liposomal encapsulation applications. We expect competition to intensify in the fluid processing systems field as technical advances are made and become more widely known, and such increased competition may have a material adverse effect upon our business.

Our future success will depend in large part on our ability to maintain a technologically superior product line. Rapid technological development by us or others may result in our products or technologies becoming obsolete before we recover the expenses we incur in connection with their development. Products offered by us could be made obsolete by less expensive or more effective technologies, or may never achieve market acceptance. There can be no assurance that we will be able to make the enhancements to our technology successful in the enhancement, introduction, manufacturing and marketing of any new technologies, products or product innovations, or develop and introduce, in a timely manner, innovations to our existing technologies or products that satisfy our customers needs or achieve market acceptance to compete successfully with newly emerging technologies and products of our competitors.

If we fail to retain key personnel and hire, train and retain qualified employees, we may not be able to compete effectively, which could result in reduced revenue or increased costs.

Our success is highly dependent on the continued services of key management, technical and scientific personnel. Our management and other employees may voluntarily terminate their employment at any time upon short notice. The loss of the services of any member of the senior management team, including the Chief Executive Officer, Michael Ferrara, Peter Byczko, the Chief Accounting Officer, William Conroy, the Senior Vice President of Operations and Engineering, Thomai Panagiotou, Chief Technology Officer, William Kober, Vice President of Sales The Americas and Western Asia, Xavier Leroy, Vice President of Sales EMEA and South East Asia or any of the managerial, technical or scientific staff may significantly delay or prevent the achievement of product development and other business objectives. Our future success will also depend on our ability to identify, recruit and retain additional qualified scientific, technical and managerial personnel. Competition for qualified personnel in the technology area is intense where labor markets are particularly competitive, including Boston, Massachusetts and where demand for personnel with these skills is extremely high and is likely to remain high. As a result, competition for qualified personnel is intense, particularly in the areas of general management, finance, information technology, engineering and science, and the process of hiring suitably qualified personnel is often lengthy and expensive, and may become more expensive in the future. If we are unable to hire and retain a sufficient number of qualified employees, our ability to conduct and expand our business could be seriously reduced.

We may be unsuccessful in developing new products for existing markets.

Our strategy includes developing new products to drive organic growth in our businesses. We may be unsuccessful developing new products that will be well received in existing markets. The products we develop may have less market demand than we anticipate or the demand may be at substantially lower prices than we anticipate. Our competitors may develop new products or technologies that diminish demand for our new products. Our customers may receive decreased funding levels, which may cause their demand for our products to decrease. Our efforts to develop new intellectual property and new products may be costly. Substantial failure in our new product development program could have a material impact on our results of operations and our financial condition.

We may be unsuccessful in launching new products or expanding product offerings.

We recently announced the launch of our new LV1 Microfluidizer High Shear Fluid Processor on March 17, 2010. We also announced that we intend to develop a series of service offerings to address what we believe is a long-term growth opportunity

18

Table of Contents

within our customer base. Although we believe the new product and service offerings will present long-term opportunities for the Company, we may be unsuccessful in identifying and pursuing such opportunities. We may be unsuccessful in introducing the new product and service offerings, expanding current product offerings and commercializing new technologies. In addition, there may be a lack of demand in the present or in the future for the products that we introduce.

Our future growth is dependent upon the development of new products, which require significant research and development, and customer testing, all of which are very expensive and time consuming.

In order to develop new products and improve current product offerings, we focus our research and development programs largely on the development of next generation and novel technology offerings. The research, development, testing and commercialization of our MRT Processor and other novel technology is expensive and time consuming. We are in the early stages of commercialization of our MRT Processor, with certain potential customers testing beta products and receiving consulting services. We may experience significant delays in the testing process. Additionally, there are no assurances that our MRT Processor or any of our other next generation or novel technology offerings will gain market acceptance. The failure to gain or a prolonged delay in market acceptance or an extended testing period may have a material adverse effect on our results of operations and financial conditions.

We are dependent on a relatively small number of customers for a significant portion of our net sales.

A significant portion of our net sales is derived from a relatively small number of customers with sales to three customers accounting for 33% and 25% of our revenues for the three months ended March 31, 2010 and 2009, respectively. We expect to continue to depend upon our principal customers for a significant portion of our sales, although our principal customers may not continue to purchase products and services from us at current levels, if at all. The loss of one or more major customers or a change in their buying patterns could have a material adverse effect on our business, financial condition, and results of operations.

We rely on suppliers, vendors and subcontractors.

We do not manufacture most of the components contained in our Microfluidizer materials processor equipment, but rather subcontract the manufacture of most components. Based on quality, price, and performance, we have selected certain suppliers, vendors, and subcontractors that provide parts, subassemblies, machining and finishing of components that are assembled by our production staff. It is possible that, as a result of the recent economic slowdown or other reasons, one or more of our suppliers, vendors or subcontractors could go out of business, or not ship on open account, or otherwise be unable to supply our needs. Although we have identified alternate sources for parts, components, machining and finishing integral to the manufacture of our products, there can be no assurance that a transition to an alternative source would not entail quality assurance or quality control difficulties, on-time delivery problems, or other transition problems, any or all of which could have an impact on our production of equipment and could have a material adverse effect on our business, financial condition, or results of operations.

Many of our current and potential customers are from the pharmaceutical and biotechnology industries and are subject to risks faced by those industries.

We derive a substantial portion of our revenues from pharmaceutical and biotechnology companies. We expect that pharmaceutical and biotechnology companies will continue to be our major sources of revenues for the foreseeable future. As a result, we are subject to risks and uncertainties that affect the pharmaceutical and biotechnology industries, such as pricing pressures as third-party payers continue challenging the pricing of medical products and services, government regulation, ongoing consolidation and uncertainty of technological change, and to reductions and delays in research and development expenditures by companies in these industries.

In particular, the biotechnology industry is dependent on raising capital to fund operations. If biotechnology companies are unable to obtain the financing necessary to purchase our products, our business and results of operations could be materially adversely affected. As it relates to both the biotechnology and pharmaceutical industries, many companies have significant patents that have expired or are about to expire, which could result in reduced revenues for those companies. If pharmaceutical companies suffer reduced revenues as a result of these patent expirations, they may be unable to purchase our products, and our business and results of operations could be materially adversely affected.

In addition, we are dependent, both directly and indirectly, upon general health care spending patterns, particularly in the research and development budgets of the pharmaceutical and biotechnology industries, as well as upon the financial condition and purchasing patterns of various governments and government agencies. Many of our customers, including universities, government research laboratories, private foundations and other institutions, obtain funding for the purchase of products from grants by governments or government agencies. There exists the risk of potential decrease in the level of governmental spending allocated to scientific and medical research, which could substantially reduce or even eliminate these grants. If government funding necessary to purchase our products were to decrease, our business and results of operations could be materially adversely affected.

Table of Contents

Lastly, because our Financing was provided by an affiliate of a pharmaceutical company that competes with other pharmaceutical companies, it is possible that the other companies might decide against doing business with us in the future for competitive reasons. If a significant number of pharmaceutical companies were to reduce their purchases of our products for this or any other reason, our business and results of operations could be materially adversely affected. General health care spending patterns may also be affected by federal regulation, including the recent health care bills before congress, which may effect research budgets.

We have only one manufacturing facility.

We have a single manufacturing facility located in Newton, Massachusetts. Our success depends on the efficient and uninterrupted operation of that facility. Whether as a result of a fire, natural disaster, or other cause, any disruption to our manufacturing operations would significantly impair our ability to operate our business on a day-to-day basis. Although we maintain business interruption insurance, our business would be injured by any extended interruption of the operations of our manufacturing facility. Further our insurance coverage may not be adequate to compensate us for all losses that may occur, or may not continue to be available to us. Finally, if we seek to replicate our manufacturing operations at another location, we will face a number of technical as well as financial challenges, which we may not be able to address successfully.

We rely on our trade secrets to protect our technology.

Our Microfluidizer processor equipment method patent expired on March 13, 2007 and our device patent expired on August 6, 2002. In addition, we have neither sought patent protection for our Microfluidizer processor or our interaction chamber nor trademark protection of our Microfluidizer trade name in any country other than the United States. As such, our proprietary rights are not subject to the protection of patent or trademark laws of foreign countries where our equipment is sold. Although we have made many alterations, improvements and advances to our equipment over the years and continue to make such advancements with such modifications and innovations having been and being treated by us as trade secrets, the lack of our patent protections will expose us to potential competition that would likely have a material adverse effect on us.

To protect our proprietary rights, we rely on a combination of trademark laws, trade secrets, confidentiality agreements, contractual provisions and technical means. In the event of a breach of these protections, there can be no assurance that these measures will prove to have been adequate to protect our interests, or that we will have sufficient resources to prosecute or prevail in an action against a third party.

We have recently filed patent applications for our MRT Technology. If we are unable to obtain or maintain patent protection or if our patents do not provide protection against competitive products of our MRT Technology, our results of operations may be adversely affected.

Our future success is dependent in part on our ability to obtain and maintain patent protection for our MRT Technology. In 1997 we completed development of a novel adaptation of our Microfluidizer processor equipment - a Multiple Stream High Pressure Mixer/Reactor , commercially designated as the Microfluidizer Mixer/Reactor (MMR). In August 1997, we filed a patent application for the device and its processes with the United States Patent and Trademark Office (USPTO), and filed a Patent Cooperation Treaty (PCT) application on May 5, 1998. In July and November, 2000, the USPTO issued us notices of allowances of utility patent claims regarding the MMR and the use thereof. On September 18, 2002, the European Patent Office advised us it would grant our MMR patent substantially as applied for, including our device and process

claims. We are in the process of pursuing national entry in France, Germany, Italy, The Netherlands, and the United Kingdom. We are currently pursuing our MMR patent application in Canada.

We are pursuing patent protection in the United States and select foreign jurisdictions with respect to proprietary aspects of our MRT Processor. We filed a U.S Patent application for this technology in March 2008 and a Patent Convention Treaty (PCT) in March 2009 and plan to file selected national patents in 2010. In April 2010, the Company applied for a Japanese patent on MRT entitled Apparatus and Methods for Nanoparticle Generation and Process Intensification of Transport and Reaction Systems . We are awaiting responses to these filings.

There can be no assurance that (i) any patents issued to us will provide us with any competitive advantages or adequate protection for our inventions; (ii) any patents issued to us will not be challenged, invalidated or circumvented by others; or (iii) issued patents, or patents that may be issued, will provide protection against competitive products or otherwise be commercially valuable. Furthermore, patent law relating to the scope of claims in the fields of healthcare and biosciences is still evolving, and our patent rights are subject to this uncertainty. European and United States patent authorities have not adopted a consistent policy regarding the breadth of claims allowed for health and bioscience patents. Our patent rights on our products therefore might conflict with the patent rights of others, whether existing now or in the future.

In order to protect or enforce our patent rights, we may initiate patent litigation against third parties. We may also become subject to interference proceedings conducted in the patent and trademark offices of various countries to determine the priority of inventions. The defense and prosecution, if necessary, of intellectual property suits, interference proceedings and related legal and administrative proceedings would be costly and divert our technical and management personnel from their normal responsibilities.

Table of Contents

We may not prevail in any of these suits should they occur. An adverse determination of any litigation or defense proceedings could put our patent applications at risk of not issuing.

We may be subjected to increased government regulation that could affect our ability to sell our products outside of the United States.

Although United States governmental restrictions on technology transfer, import, export and customs regulations and other similar local, state or federal regulations, have not had a significant effect on us historically, any future legislation or administrative action restricting our ability to sell our products to certain countries outside the United States could significantly affect our ability to make certain foreign sales. The extent of adverse governmental regulation, which might result from future legislation or administrative action, cannot be accurately predicted. In particular, the USA Patriot Act and other governmental regulations may impose export restrictions on sale of equipment or transfer of technology to certain countries or groups. There can be no assurance that sale of our equipment will not be impacted by any such legislation or designation. Depending upon which countries and sales may be designated for trade restriction, such actions could have a material adverse effect on our business, financial condition, or results of operations. Also, certain agreements that may be entered into by us involving exclusive license rights may also be subject to national or supranational antitrust regulatory control, the effect of which cannot be predicted.

Our stock is listed on the OTC Bulletin Board and may experience a high level of volatility due to the market in general and certain other factors including the liquidity in the trading in our shares.

Our common stock is quoted on the OTC Bulletin Board, which provides significantly less liquidity than a securities exchange (such as the NYSE Amex, New York Stock Exchanges or The NASDAQ Stock Market). In general, over the past two years, fewer than 20,000 shares of our common stock have traded on a daily basis. Although a more active trading market may develop in the future, the limited market liquidity for our stock may affect your ability to sell at a price that is satisfactory to you. The market price of our common stock may have increased volatile and could decline in the future in response to various factors including:

- volatility of the financial markets
- uncertainty regarding the domestic and foreign economies
- technological innovations by competitors or competing technologies
- quarterly revenues and operating results fluctuating or failing to meet the expectations of management
- conditions or trends in the pharmaceutical and biotechnology industries
- announcement of significant changes in financing or strategic partnerships

Because we may experience a high level of volatility in our common stock, you should not invest in our stock unless you are prepared to absorb a significant loss of your capital. At any given time, you may not be able to sell your shares at a price that you think is acceptable.

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Our quarterly r	evenues ana	stock peri	ormance are	varianie.

The timing of orders including completion of our factory acceptance testing can impact the actual shipment date, which will significantly affect quarterly revenues and net income results for particular quarters which may cause increased volatility in both our revenues and stock price.

We allow our customers to lease some of our products and those leases may not turn into sales.

We sometimes rent our products to our customers prior to or instead of selling a product to a customer. Our products are expensive, and customers frequently want to test out a product s capabilities prior to purchase. We have had reasonable success in converting rentals into subsequent sales of the same or a newer product; however, there is no guarantee that we will continue to be able to convert any of our leases into sales.

We may be subject to product liability claims from our customers or by persons harmed by our customers products.

We maintain what we deem to be reasonable levels of product liability coverage through insurance policies with a reasonably small deductible. Nonetheless, inasmuch as we sell our equipment to a number of customers who make pharmaceutical preparations and consumer cosmetics, there can be no assurance that if a consumer of end products is injured or dies from such product that a suit by an injured party (or a class of similar situated plaintiffs) will not include us as well as the maker of the drug or cosmetic. Although we may have no control over the manufacture of end-products made on our equipment, we may not be able to bar a plaintiff s claims against all parties whose products and equipment were involved in the manufacturing process under a variety of legal theories of liability. We may be required to present a vigorous and costly defense if we cannot be dismissed from such an action. The cost of such legal defense may significantly impact our cash flow.

Table of Contents

Our international business operations expose us to a variety of risks.

For the three months ending March 31, 2010 and 2009, shipments outside of North America accounted for approximately 38.1% and 31.5%, respectively, of our net revenues in those periods. In particular, approximately 3.7% and 1.0% of our net revenues in the three months ended March 31, 2010 and 2009, respectively, resulted from sales to Japan and approximately 7.3% and 3.1% of our net revenues in the three months ended March 31, 2010 and 2009, respectively resulted from sales to China. Approximately 20.3% and 20.3% of our net revenues resulted from sales to Europe in the three months ended March 31, 2010 and 2009, respectively. We expect that shipments outside of North America will continue to account for a significant portion of our total net product revenues.

We attempt to reduce some of our risk related to sales and shipments outside of the United States by requiring that our contracts generally be paid in United States Dollars. Nevertheless, a downturn in the economies of Japan, Korea or Europe might reduce investment in new technology or products while a weakening of foreign currency against the United States Dollar would make our products more expensive, each of which could have a substantial impact on our operating results. Additionally, the Company may have exposure to fluctuations in foreign currency exchange rates as it maintains a cash balance in a German bank and has certain sales contracts in local currency.

In addition, a significant portion of our total net revenue is subject to the risks associated with shipping to foreign markets in general, including unexpected changes in legal and regulatory requirements; inability to collect receivables, seasonality of our revenue in Europe; changes in tariffs; political and economic instability; risk of terrorism; difficulties in managing distributors and representatives; difficulties in protecting our intellectual property overseas; and natural disasters, any of which could have a negative impact on our operating results.

We may experience difficulties in the future in complying with Sarbanes-Oxley Section 404 (Section 404); and continued implementation and maintenance of internal controls necessary for continued compliance with Section 404 may result in our incurring of additional costs.

We are required to evaluate our internal controls under Section 404 of the Sarbanes-Oxley Act of 2002. We were also required to furnish a report by our management on our internal controls over financial reporting beginning with our annual report on Form 10-K for the fiscal year ended December 31, 2008. Such report contains, among other matters, an assessment of the effectiveness of our internal control over financial reporting as of the end of our fiscal year, including a statement as to whether or not our internal control over financial reporting is effective. While we have completed our self-assessment as to the effectiveness of internal control over financial reporting for the year ended December 31, 2009, which did not identify material weaknesses in our internal control systems will not be identified as a result of changing financial or operating conditions. In addition, although we are currently not required to subject our internal controls to audit by our independent registered public accounting firm until at least our fiscal year ending December 31, 2010, there can be no assurance that an audit of our internal controls will not result in the identification of a material weakness. If we fail to maintain proper and effective internal controls in future periods, it could adversely affect our operating results, financial condition and our ability to run our business effectively and could cause investors to lose confidence in our financial reporting. In the event that it is determined that our internal control over financial reporting is not effective, as defined under Section 404, investor confidence in us may be adversely affected and could cause a decline in the market price of our stock.

Future changes in financial accounting standards may adversely affect our reported results of operations.

A change in accounting standards can have a significant effect on our reported financial results. New accounting pronouncements and varying interpretations of accounting pronouncements have occurred and may occur in the future. These new accounting pronouncements may adversely affect our reported financial results.

If our accounting estimates are not correct, our financial results could be adversely affected.

Management judgment and estimates are necessarily required in the application of our Critical Accounting Policies. We discuss these estimates in the subsection entitled Critical Accounting Policies beginning on page 12 included in the Management s Discussion and Analysis of Financial Condition and Results of Operations section of this report If our estimates are incorrect, our future financial operating results and financial condition could be adversely affected.

Table of Contents

Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds.
None.	
Item 3.	Defaults Upon Senior Securities.
None.	
Item 4.	(Removed and Reserved).
Item 5.	Other Information.
None.	
Item 6.	Exhibits.
Exhibits	
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
	23

Table of Contents

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.

MICROFLUIDICS INTERNATIONAL CORPORATION

By: /s/ Michael C. Ferrara Michael C. Ferrara President and Chief Executive Officer (Principal Executive Officer)

By: /s/ Peter F. Byczko
Peter F. Byczko
Vice President of Finance & Chief Accounting Officer
(Principal Financial and Accounting Officer)

Dated: May 17, 2010