

Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

BIOPHAN TECHNOLOGIES INC  
Form 10-Q  
July 15, 2005

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

FORM 10-Q

QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934

For the quarterly period ended: May 31, 2005

OR

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File No. 0-26057

BIOPHAN TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Nevada

82-0507874

-----  
(State or other jurisdiction of  
incorporation or organization)

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

150 Lucius Gordon Drive, Suite 215  
West Henrietta, New  
York 14586

-----  
(Address of principal executive offices)  
(Zip Code)

(585) 214-2441

-----  
(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  No

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

Yes  No

Indicate the number of shares outstanding of each of the issuer's classes of common equity, as of the latest practicable date.

Class outstanding as of July 14, 2005 - Common Stock, \$.005 par value -  
74,602,213 shares

# Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

1

## INDEX

	Page Number
PART I. FINANCIAL INFORMATION	4-10
ITEM I. Financial Statements	4-10
Report of Independent Registered Public Accounting Firm	3
Condensed Consolidated Balance Sheets, May 31, 2005(Unaudited) and February 28, 2005	4
Condensed Consolidated Statements of Operations, Three Months Ended May 31, 2005 and 2004 (Unaudited), and from August 1, 1968 (Date of Inception) through May 31, 2005 (Unaudited)	5
Condensed Consolidated Statements of Cash Flows, Three Months Ended May 31, 2005 and 2004 (Unaudited) and from August 1, 1968 (Date of Inception) through May 31, 2005 (Unaudited)	6-7
Notes to Condensed Consolidated Financial Statements	8
ITEM 2. Plan of Operation	11-20
ITEM 3. Quantitative and Qualitative Disclosures About Market Risk	21
ITEM 4. Controls and Procedures	21
PART II. OTHER INFORMATION	21-23
ITEM 1. Legal Proceedings	21
ITEM 2. Unregistered Sales of Securities and Use of Proceeds	22
ITEM 3. Defaults Upon Senior Securities	23
ITEM 4. Submission of Matters to a Vote of Security Holders	24
ITEM 5. Other Information	22
ITEM 6. Exhibits	22
SIGNATURES	23

2

PART I. FINANCIAL INFORMATION

# Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

## Item 1. Financial Statements

### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors  
Biophan Technologies, Inc.

We have reviewed the accompanying condensed consolidated balance sheet of Biophan Technologies, Inc. and Subsidiaries (the "Company") as of May 31, 2005, and the related condensed consolidated statements of operations and cash flows for the three-month periods ended May 31, 2005 and 2004. These interim financial statements are the responsibility of the Company's management.

We conducted our reviews in accordance with the standards of the Public Company Accounting Oversight Board (United States). A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with standards of the Public Company Accounting Oversight Board, the objective of which is the expression of an opinion regarding the consolidated financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our reviews, we are not aware of any material modifications that should be made to the accompanying condensed consolidated interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with standards of the Public Company Accounting Oversight Board, the consolidated balance sheet of Biophan Technologies, Inc. and Subsidiaries as of February 28, 2005, and the related consolidated statements of operations, stockholders' deficiency, and cash flows for the year then ended and the amounts included in the cumulative column in the consolidated statements of operations and cash flows for the period from March 1, 2000 to February 28, 2005 (not presented herein). In our report dated April 6, 2005 we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated balance sheet as of February 28, 2005, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

GOLDSTEIN GOLUB KESSLER LLP  
New York, New York

July 7, 2005

3

BIOPHAN TECHNOLOGIES, INC. AND SUBSIDIARIES  
(A DEVELOPMENT STAGE COMPANY)  
CONDENSED CONSOLIDATED BALANCE SHEETS

	May 31, 2005	February 28, 2005
	-----	-----
ASSETS	(Unaudited)	
	-----	-----

Current Assets:

Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

Cash	\$ 236,975	\$ 753,288
Stock subscription receivable	150,000	900,000
Due from related parties	191,053	220,959
Prepaid expenses	75,757	91,596
Other current assets	35,428	41,338
	-----	-----
Total current assets	689,213	2,007,181
Property and Equipment, net	85,856	73,518
Other Assets:		
Intellectual property rights, net of amortization	984,095	997,738
Investment	100,000	100,000
Security deposit	3,800	2,933
Deferred tax asset, net of valuation allowance of \$5,438,000 and \$4,787,000, respectively	--	--
	-----	-----
	1,087,895	1,100,671
	-----	-----
	\$ 1,862,964	\$ 3,181,370
	=====	=====

LIABILITIES AND STOCKHOLDERS' EQUITY

Current Liabilities:		
Accounts payable and accrued expenses	\$ 1,032,058	\$ 1,037,103
Note payable	200,000	200,000
Deferred revenues	225,000	225,000
	-----	-----
Total current liabilities	1,457,058	1,462,103
Minority Interest	76,493	--
Stockholders' Equity :		
Common stock, \$.005 par value		
Authorized, 125,000,000 shares		
Issued and outstanding, 74,471,997 and 74,317,832 shares, respectively	372,360	371,589
Stock subscription receivable	--	(150,000)
Additional paid-in capital	20,852,166	18,982,952
Deficit accumulated during the development stage	(20,895,113)	(17,485,274)
	-----	-----
	329,413	1,719,267
	-----	-----
	\$ 1,862,964	\$ 3,181,370
	=====	=====

See Notes to Condensed Consolidated Financial Statements.

Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

	Three Months En May 31, 2005 -----
Revenues:	
Development payments	\$       --
Operating expenses:	
Research and development	1,537,968
General and administrative	1,957,758
Write-down of intellectual property rights	--
	-----
	3,495,726
	-----
Operating loss	(3,495,726)
Other income (expense):	
Interest expense	--
Interest income	2,749
Other income	83,138
Other expense	--
	-----
	85,887
	-----
Loss from continuing operations	(3,409,839)
Loss from discontinued operations	--
	-----
Net loss	\$ (3,409,839)
	=====
Loss per common share	\$       (0.05)
	=====
Weighted average shares outstanding	74,417,378
	=====

See Notes to Condensed Consolidated Financial Statements.

Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

Cash flows from operating activities:	
Net loss	\$(3,409,8
Adjustments to reconcile net loss to net cash used in operating activities:	
Amortization of patents	13,6
Depreciation	9,4
Loss on disposal of equipment	1,5
Realized and unrealized losses on marketable securities	--
Accrued interest on note converted to common stock	--
Amortization of interest on convertible notes payable	--
Write-down of intellectual property rights	--
Amortization of discount on payable to related party	--
Issuance of common stock for services	--
Issuance of common stock for interest	--
Grant of stock options for services	174,8
Vesting of contingent options	1,287,2
Expenses paid by stockholder	--
Minority interest	76,4
Changes in operating assets and liabilities:	
(Increase)decrease in advances receivable	--
(Increase)decrease in due from related parties	29,9
(Increase)decrease in prepaid expenses	15,8
(Increase)decrease in other assets	5,9
Increase in security deposits	(8
Increase(decrease) in accounts payable and accrued expenses	(5,0
Increase(decrease) in due to related parties	--
Increase in deferred revenues	--
	-----
Net cash used in operating activities	(1,800,9
	-----
Cash flows from investing activities:	
Purchases of property and equipment	(23,2
Sales of marketable securities	--
Purchase of investment	--
Cash paid for acquisition of Biophan Europe, net of cash received of \$107,956	--
Purchases of marketable securities	--
	-----
Net cash used in investing activities	(23,2
	-----

Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

Cash flows from financing activities:	
Proceeds of bridge loans	--
Loan from stockholder	--
Line of credit borrowing from related party	--
Line of credit payments	--
Net proceeds from sales of capital stock	900,000
Proceeds from exercise of options	112,541
Proceeds from exercise of warrants	--
Short swing profits	295,362
Equity placement costs	--
	-----
Net cash provided by financing activities	1,307,903
	-----
Net increase(decrease) in cash and cash equivalents	(516,313)
Cash and cash equivalents, beginning	753,288
	-----
Cash and cash equivalents, ending	\$ 236,975
	=====

Supplemental schedule of noncash investing and financing activities:

Common stock issued for subscription receivable	\$ --
	=====
Liabilities assumed in conjunction with acquisition of a 51% interest in Biophan Europe and certain intellectual property rights	\$ --
	=====
Intellectual property acquired through issuance of capital stock and assumption of related party payable	\$ --
	=====
Acquisition of intellectual property	\$ --
	=====
Issuance of common stock upon conversion of bridge loans	\$ --
	=====
Issuance of common stock upon conversion of related party loans	\$ --
	=====

See Notes to Condensed Consolidated Financial Statements.

BIOPHAN TECHNOLOGIES, INC. AND SUBSIDIARIES  
(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS  
May 31, 2005

INTERIM FINANCIAL STATEMENTS:

The condensed consolidated financial statements as of May 31, 2005 and for the

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

three months ended May 31, 2005 and 2004 are unaudited. However, in the opinion of management of the Company, these financial statements reflect all adjustments, consisting solely of normal recurring adjustments, necessary to present fairly the financial position and results of operations for such interim periods. The results of operations for the interim periods presented are not necessarily indicative of the results to be obtained for a full year. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-KSB for the fiscal year ended February 28, 2005.

### BASIS OF CONSOLIDATION:

The consolidated financial statements include the accounts of Biophan Technologies, Inc. ("Biophan"), its wholly owned subsidiaries, LTR Antisense Technology, Inc. ("Antisense") and Nanolution, LLC, formerly MRIC Drug Delivery Systems, LLC, ("Nanolution"), and its majority owned subsidiaries Biophan Europe GmbH ("Biophan Europe"), formerly aMRIs GmbH, and TE Bio LLC ("TE Bio"), collectively referred to as the "Company". All significant intercompany accounts and transactions have been eliminated in consolidation.

### COMPANY HISTORY:

The Company was incorporated under the laws of the State of Idaho on August 1, 1968 and on January 12, 2000, changed its domicile to Nevada by merging into a Nevada corporation, and on July 19, 2001, changed its name to Biophan Technologies, Inc.

From the inception of the current line of business on December 1, 2000, the Company has not generated any material revenues. Therefore, the Company is in the development stage and will remain so until the realization of significant revenues. The Company's ability to continue in business is dependent upon obtaining sufficient financing or attaining future profitable operations.

### PRINCIPAL BUSINESS ACTIVITIES:

The primary mission is to develop and commercially exploit technologies for improving the performance, and as a result, the competitiveness of biomedical devices manufactured by third party companies. The Company possesses technologies for enabling biomedical devices, both implantable and those used in diagnostic and interventional procedures, to be safe (do not harm the patient or physician) and compatible (allow effective imaging of the device and its surrounding tissue) with MRI (magnetic resonance imaging). The Company has also developed technologies for improving MRI contrast agents; for improved drug elution and drug delivery systems, including an MRI safe and image compatible ceramic motor; a system for generating power for implantable devices from body heat, and a series of implantable devices including an MRI-visible vena cava filter.

### ACCOUNTING FOR STOCK OPTIONS:

The Company has elected to apply Accounting Principles Board ("APB") Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations in accounting for its stock options issued to employees (intrinsic value) and has adopted the disclosure-only provisions of Statement of Financial Accounting Standards ("SFAS") No. 123, Accounting for Stock-Based Compensation. Had the Company elected to recognize compensation cost based on the fair value of the options granted at the grant date as prescribed by SFAS No. 123, the Company's net loss and loss per common share would have been as follows:



Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

Three months ended May 31,	2005	2004
	-----	-----
Net loss - as reported	\$ (3,409,839)	\$ (952,025)
Add: Stock-based employee compensation expense included in reported net loss, net of related tax effects	1,339,000	30,000
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(2,155,000)	(62,000)
	-----	-----
Net loss - pro forma	\$ (4,225,839)	\$ (984,025)
	=====	=====
Basic and diluted loss per share - as reported	\$ (.05)	\$ (.01)
Basic and diluted loss per share - pro forma	\$ (.06)	\$ (.01)
	=====	=====

In December 2004, the FASB issued SFAS No. 123 (revised 2004), "Share-Based Payment" ("SFAS No. 123R"), which replaces SFAS No. 123 and supersedes APB No. 25. SFAS No. 123R requires that the compensation cost relating to share-based payment transactions be recognized in financial statements based on alternative fair value models. The share-based compensation cost will be measured based on the fair value of the equity or liability instruments issued. Per APB No. 25, compensation expense was recognized only to the extent the fair value of common stock exceeded the stock option exercise price at the measurement date. In addition, the pro forma disclosures previously permitted under SFAS No. 123 no longer will be an alternative to financial statement recognition. SFAS No. 123R also requires the benefits of tax deductions in excess of recognized compensation cost to be reported as a financing cash flow rather than as an operating cash flow as required under current literature. Under the effective date provisions included in SFAS No. 123R, the Company would have been required to implement SFAS No. 123R as of the first interim or annual period that begins after June 15, 2005. On April 14, 2005, the SEC delayed the effective date which allows companies to implement SFAS No. 123R at the beginning of the first fiscal year after June 15, 2005, which would be March 1, 2006 for the Company. The Company is evaluating the requirements of SFAS No. 123R and expects that the adoption will have a material impact on the consolidated results of operations and earnings per share similar to the current pro-forma disclosures under SFAS No. 123, as per above.

During the current quarter ended May 31, 2005, the Company incurred a non-cash charge to earnings of \$1,462,082 for the grants of stock options for services and vesting of contingent options. Of this amount, \$1,287,250 is related to options previously granted to executive officers that vested on a contingent basis upon the achievement of a specified performance - based milestone. These particular options, because they are not "fixed and determinable", do not qualify under the accounting rules for "disclosure only" treatment and accordingly, must be expensed for any intrinsic value at the time and to the extent that they vest. The calculated amounts resulted in a non-cash charge in the statement of operations and an offsetting credit to additional paid-in capital.

RECLASSIFICATION

For comparative purposes, certain amounts in the accompanying statement of operations for fiscal 2005 have been reclassified to conform to the presentation used for fiscal 2006. These reclassifications had no effect on previously reported results of operations or accumulated deficit.

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

### REVENUE RECOGNITION:

The Company earns and recognizes revenue under development agreements when the phase of the agreement to which amounts relate is completed and the Company has no further performance obligation. Completion is determined by the attainment of specified milestones including a written progress report. Advance fees received on such agreements are deferred until recognized.

### LINE OF CREDIT AGREEMENT:

On May 27, 2005, the Company entered into an unsecured loan agreement with Biomed Solutions LLC, a related company, whereby Biomed has agreed to provide a line of credit facility of up to \$2 million. Borrowings under the line will bear interest at 8% per annum and are convertible into the Company's common stock at 90% of the average closing price for the 20 trading days preceding the date of borrowings under the line. In June 2005, the Company has taken down the entire \$2 million under the line and additionally, in accordance with the agreement, Biomed received warrants to purchase 500,000 shares of the Company's common stock at an exercise price of 110% of the average closing price for the 20 trading days preceding the date of execution of the credit agreement. The Company will record a discount on the notes of approximately \$550,000 due to the beneficial conversion feature of the note as well as for the value of the warrants. The discount will be amortized as additional interest expense over the term of the note which is payable on demand after November 27, 2005.

9

### CHANGES IN EQUITY:

During the quarter ended May 31, 2005, a total of 154,165 shares of common stock were issued upon exercise of options at prices ranging from \$.50 to \$1.00. Proceeds of \$112,541 were received increasing the capital stock account by \$771 and additional paid-in capital by \$111,770.

Additional paid-in capital was also increased by \$1,462,082 of expense related to stock option grants for services and vesting of contingent options. Of this amount, \$1,287,250 is related to options previously granted to executive officers that vested during the period upon the achievement of a specified milestone.

Additional paid-in capital was further increased by \$295,362 of profits from a related company owed pursuant the "short swing profit" rules of the Securities and Exchange Act of 1934.

On May 27, 2005, the previous financing agreement the Company had with SBI Brightline Consulting, LLC was cancelled and a new agreement was executed with SBI Brightline XI, LLC. The new agreement provides a \$30 million fixed price financing for up to 10,000,000 shares at prices ranging from \$2 to \$4 a share. The sales of stock must be taken in sequential tranches of 1 million shares each and the financing requires the shares to be registered for sale. There are no resets, warrants, finder's fees or commissions associated with this financing transaction.

10

### ITEM 2. PLAN OF OPERATION

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

### General

Our primary mission is to develop and commercially exploit technologies for improving the performance, and the corresponding competitiveness, of biomedical devices and pharmaceutical compounds manufactured by third party companies. We do not employ our own distribution but rather rely on that of the larger biomedical device manufacturers. We build strong intellectual property "patent thickets" around vertically oriented markets within the medical technology sector.

Our management team includes former executives from Johnson & Johnson and Angiotech who have been involved in all the aspects of the biomedical device business, including new business development, product engineering, research and development, regulatory affairs, sales and marketing, device coatings, project management, intellectual property, and much more.

We identify product capabilities and technological needs that are unfilled or inadequately addressed and develop internally and acquire proprietary, advantaged solutions. We build comprehensive, defensible intellectual property portfolios around each of the areas we target and generally command a significant overall advantage with important blocking patents in each category.

We are affiliated with world renowned scientists and engineers in each of the areas in which we operate, including relationships with consultants, academia, and large and small companies. While we currently employ only twelve direct employees, our extended enterprise includes nearly fifty professionals with expertise in all of the critical areas needed to provide a turnkey solution to a customer to deploy in their product lines. Our development partners include universities, small and large companies, and others. We are developing our biothermal power system with the NASA Ames Center for Nanotechnology. We have a joint development agreement with Boston Scientific for making devices MRI Safe and Image Compatible which has led to a license agreement and investment described further on in this report.

The following are the vertical market sectors we have, or are developing enhancing technology for:

- Pacemakers, implantable cardio-defibrillators
- Neurostimulators
- Stents
- Vena Cava Filters
- Guidewires and catheters
- Drug pumps
- Drug delivery systems
- Power systems (batteries)
- Others

Our capabilities include making these devices safe for use with MRI (many medical devices are contraindicated for use with MRI), image compatible with MRI (many devices have imaging problems with MRI). We are also developing improved contrast agents for use with MRI, and methods for improving the imaging of vulnerable plaque under MRI. We also offer an MRI safe and image compatible motor for drug pumps and robotic applications. For devices that rely on battery power, we are developing longer lasting power systems powered by body heat versus chemicals.

### Company Business

The Company is a technology development company with a strong market focus. We solve real-world technical challenges and limitations facing the medical device industry and, when selecting a specific market opportunity to address, generate a wide range of potential technical solutions. Each of the technical solutions

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

that we pursue is protected by intellectual property to ensure that solutions have the capability of being effectively marketed by the Company. Whenever possible, we attempt to create and patent multiple solutions for any given technology challenge.

Our multiple solutions for stent imaging and for pacemaker safety are examples of this approach. These solutions allow us to offer large manufacturers an opportunity for a sustainable competitive product advantage, making it much more attractive for the manufacturer to make the necessary investments in product development, regulatory approvals, and marketing; as well as pay appropriate compensation to the Company for access to the technology.

This approach has resulted in the development of a range of core technologies within the Company, and our presence in a number of different, but closely related, segments of the medical device market. We are aggressive in our development and defense of our intellectual property assets and have an intellectual property portfolio several times the size of many comparable sized companies.

11

Over the past quarterly period, we have been acquiring and developing:

- o Technology to improve vascular stents so they can be imaged with MRI to detect the presence of restenosis (blockage) after implantation;
- o Technology to enable an MRI visible vena cava, which allows MR imaging of blood clots that may be present and therefore pose a risk to removal of the device;
- o Technology to enhance the MRI safety and MRI image compatibility of pacemakers, cardio-defibrillators, neurostimulators, pain control devices, pumps, and virtually any implanted or interventional device which has elongated metal leads or metal components;
- o Technologies to improve MRI contrast agents;
- o Market opportunities for our MRI safe and image compatible ceramic motor, the Squiggle(TM) motor;
- o A system for generating power for implantable devices from body heat, in cooperation with NASA; and
- o Technology to improve drug elution and drug delivery systems, including providing "active release" using non-invasive or minimally invasive activation.

Over the past five years, our work in these technology areas, including development and accumulation of intellectual property, has allowed us to demonstrate working solutions for many of the critical MRI safety and imaging limitations associated with both implantable and interventional medical devices.

Over \$12 billion worth of medical devices ship each year with these technical limitations. We are continually demonstrating these solutions with medical device manufacturers and are at various stages of discussion and contract negotiation on the deployment of these solutions into existing and new generations of medical devices.

Products and Technologies

Stents and Vena Cava Filters

Stents are one of the fastest growing and most profitable technologies in the medical device arena. Drug eluting stents have been extremely successful in the market as a result of their ability to reduce restenosis that can occur after a stent is placed. Diagnosing restenosis currently requires an interventional medical procedure, which is usually done under fluoroscopy, combined with the administration of dyes, which can result in an allergic reaction. These procedures allow determination of stent blockage, but they do not permit imaging inside the stent.

Currently, marketed stents cannot be effectively imaged non-invasively using MRI due to a blockage of signals caused by the Faraday Cage effect, in which the stent blocks transmission of radio frequency (RF) fields necessary for imaging with MRI. Biophan has developed a series of solutions to this problem by modifying the stent structure, by adding a secondary structure or by applying a coating to the stent. In either case, the modification should not affect the physical performance of the stent but will permit imaging of the stent interior.

Biophan has, through both internal development and acquisition, acquired a broad range of issued and pending patents protecting these technologies, including thin film and thick film coatings that generate a resonant circuit to overcome the Faraday Cage effect. We have recently acquired the exclusive license for patents covering the use of resonant circuits to image medical devices and another which covers resonant circuits used on products that are "collapsible", such as stents. These technology solutions are also applicable to other medical devices, including vena cava filters, heart valves and many other types of implantable devices.

#### Pacemakers, Defibrillators and Neurostimulators

We have successfully demonstrated effective solutions for making devices safe for use with MRI, which apply to a number of devices which currently are contraindicated for use with MRI, such as pacemakers, defibrillators and neurostimulators, guidewires and catheters. Many of these devices can experience unsafe heating in an MRI field, and can experience induced voltages which also presents a safety concern. Today, approximately 3 million people have devices that cause them to be denied access to MRI when needed, due to safety concerns and FDA contraindications. Our technologies are designed to enable the manufacture of devices that are safe for use with MRI, in order to eliminate the need to deny future device recipients access to MRI.

12

Additionally, there is an evolving multi-billion dollar field of medicine known as minimally invasive surgery, which uses devices such as guidewires and catheters to perform many procedures that previously required very invasive surgery. Many procedures are now done in catheter labs equipped with X-ray or fluoroscopy for imaging and guiding the procedures. X-ray and fluoroscopy do not offer the advantages of soft tissue visualization nor the absence of ionizing radiation provided by MRI. Currently, the combined problems of device safety and image compatibility of these devices in MRI have limited the use of MRI in this rapidly growing area of medicine.

The desire and need for MRI is demonstrated by the advent of combined interventional labs, which integrate X-ray devices for guiding devices into the body, and MRI machines for evaluating progress and observing tissue and results. These new operating theaters require the patients to be moved back and forth on a conveyor belt-like system between the imaging devices and represents an expensive and inconvenient solution to the limitations of today's devices. For the past five years, Biophan has been actively engaged in solving the complex

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

problems associated with device safety and image compatibility with MRI. With our solutions, the industry will have the opportunity to manufacture devices that can be used with MRI, obviating the need for combined interventional labs.

Biophan has multiple solutions for resolving the heating of devices under MRI, including pacemaker leads, defibrillator leads and neurostimulator leads (such as the deep brain stimulation systems used for the treatment of Parkinson's and epilepsy). One solution is an RF filter, licensed from Johns Hopkins exclusively for implantable devices, which can resolve lead heating. Additionally, "anti-antenna" geometry modifications in these devices, patented by the Company, alter the way the devices are made to resolve the safety problems associated with these devices. Together, these solutions allow the manufacture of an MRI safe lead and device.

Since the recent issue of some of our patents in this area, we have publicly disclosed our solutions and have demonstrated the success of our approach to prospective customers and industry experts. We have begun manufacturing experimental prototypes of devices modified using our solutions, which we believe will prove to be very cost effective for device manufacturers to implement.

We recently received an issued U.S. patent, 6,829,509, for anti-antenna geometries. We believe that this patent, combined with Johns Hopkins' U.S. patent 5,217,010, for which we hold an exclusive license, gives us a very strong position in the emergence of MRI safe devices incorporating long wire leads, such as pacemakers, defibrillators, deep brain stimulators, pain management devices, and many others. We recently filed nine continuations to our U.S. patent 6,829,509, applying this innovation to other devices, such as stents, guidewires and catheters. These technologies address a large segment of the medical device market worldwide. To the best of our knowledge, no other issued U.S. patents exist for pacemaker safety. We have in the past declined several offers for licenses for pacemaker safety which did not meet our minimum royalty requirements. If an MRI safe pacemaker ships from a manufacturer who is not a licensee, we will acquire the device and conduct an infringement analysis. In the event infringement is found we intend to vigorously enforce our patents rights. We are in discussions with another pacemaker manufacturer regarding a license, and we have reached an understanding with another company on terms for a non-exclusive license for pacemaker safety.

### Interventional Guidewires and Catheters

In addition to improving the safety of devices such as pacemakers and neurostimulators, the large markets for interventional guidewires and catheters are limited both safety and image compatibility issues with MRI. The MRI safety limitations can be addressed using the same technologies used for pacemakers and neurostimulators, while image compatibility can be addressed by other technologies that we have developed or acquired. One technology that we employ involves thin film nanomagnetic particle coatings, developed by Nanoset, LLC in collaboration with Biophan. We have produced MRI images showing an aluminum rod, otherwise invisible under MRI, but seen clearly when an appropriate nanomagnetic coating was applied. An alternative approach, using a miniature resonant circuit applied to a catheter, makes it easy to track under MRI. These images are available on our website at [www.biophan.com](http://www.biophan.com). This capability is part of the suite of technologies that can help make MRI a viable solution for interventional diagnostics and surgery. These technologies are covered by both issued and pending patents possessed exclusively by Biophan for the medical device market. The advantage of a coating solution is that a manufacturer with a product in the market or in development does not have to radically change the physical design or its manufacturing process. Thus, the coating solutions we are pursuing have broad applications to many products, including the rapidly growing stent market.

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

### MRI Contrast Agents

Nanoset, our technology partner, and Biophan are developing a "particle tuning" technology for making a novel MRI contrast agent capable of providing multiple MRI signatures. This novel material could be attached to different recognition molecules, permitting improved specificity and multiple functionality as compared with existing agents. This work is still in the early stages, but the market for MRI contrast agents is currently approaching \$1 billion and is expected to grow with the expansion of MRI diagnostics. Our intent is to partner with other companies making recognition molecules and to license the technology to a partner or partners with established distribution channels.

13

### Biothermal Power Source

We acquired a 51% interest in TE Bio, LLC, a company developing implantable power systems that work on heat created by normal body metabolism, and not by electrochemical means as with traditional batteries. Our feasibility studies and modeling indicate that the amount of energy needed to power devices such as pacemakers can be generated by converting body heat to power. Further development may yield sufficient power for neurostimulators, small drug pumps and biosensors, or to continuously charge a battery for devices such as implantable defibrillators. We are working with NASA and several companies to develop this technology.

### Drug Delivery Technologies

As part of our research into nanomagnetic thin film particle coatings for medical devices, we have initiated a parallel program to develop methods of "tuning" the particles and coatings for specific responses to externally applied magnetic fields. Working with Nanoset, we are developing the capability of reloading the drug within a coated device such as a stent by attaching nanomagnetic particles to a drug molecule to guide it to a device such as a stent and to cause the drug to enter the coating for future drug release. By attaching the nanomagnetic particle to a drug molecule, the drug can be made non-active, in that it will not bind to tissue until the nanomagnetic particle is activated by a resonant frequency field and forced to vibrate and lose its attachment to the drug molecule. This innovation has broad applications in drug delivery and drug coatings. During 2004, Nanoset and Biophan filed an extensive patent application on methods of "active" drug elution and improvements on drug targeting and drug delivery. John Lanzafame was recruited by Biophan and now heads up Nanolution, our drug delivery division, where he is developing this technology into solutions which can be licensed to customers.

Additional technical information, audio-visual presentations, white papers and access to many of our issued and pending patents can be found on our website at [www.biophan.com](http://www.biophan.com). For additional information, please contact the Company.

### Sales and Marketing

The Company's business model consists of developing technologies and licensing these technologies and/or providing critical components to medical device manufacturers. We anticipate that products incorporating our technologies will be developed through collaboration with external companies or partners, and sold through companies with existing distribution channels. Our business plan consists of entering into licensing and R&D agreements with our development/marketing partners, generating revenue through license fees, milestone payments, annual minimum royalty payments, royalties on sales of products and providing critical components.

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

We anticipate licensing income in advance of product sales to tie up rights for each market segment and then ongoing royalties once these products are in the market. Potential revenue streams above any negotiated minimum license payments would likely commence six to nine months following approval by the FDA for product shipments. However, a typical transaction may include upfront license fees, milestone payments, and annual minimums.

### Markets

The global market for medical devices that could benefit from our technology related to operating safely and effectively in an MRI environment was approximately U.S.\$5 billion in the year 2002 and is growing annually by 15%. The market for devices that have imaging compatibility problems are in addition to the market opportunity for safer devices. We estimate the market for devices which have imaging limitations to be an additional U.S.\$5 billion or greater. These devices include implantable artificial hips, knees, bones, and other prosthetics, such as stents, shunts, screws, wires, and shanks.

We anticipate that we will license our technology to one or more development partners who would be responsible for developing commercial products, obtaining necessary approvals, manufacturing, marketing and distributing the products. Our research for development partners is global; however, we can not presently identify or predict the precise target markets, distribution methods or other marketing efforts of our potential development partners.

The potential market for additional technologies which we have under development is even larger. The total estimated market for drug delivery technologies is estimated to be U.S.\$40 billion and the market for MRI contrast agents currently stands at several hundred million dollars. The market for implantable batteries is \$500 million.

### Licensing and Joint Venture Strategy

Our strategy is to license our technologies to companies, segmented by technology type and market segment. In some cases, we may also offer critical components, coating machines, and other capabilities needed to put our innovations into practice. Our licensing strategy is to segment the market as finely as possible to maximize the royalty revenue achievable by our technology. Our upfront negotiations with each customer determine royalty rates for each market segment. Royalty rates are dependent upon the strength of our patent coverage, the strength of the market advantage provided by our technology, the availability of other technology options to solve a particular problem, as well as whether or not we grant an exclusive or non-exclusive license. We believe it is very important to demonstrate the value that we add to the product, and how that added value will improve our customer's position in the market, to achieve an acceptable royalty rate.

In situations where we possess several solutions to a problem, we expect that the customer will then wish to evaluate all of our technology options to determine which is the best solution and whether or not it should license all of our solutions. Those that are not licensed exclusively might be picked up by a competitor, who can then claim a comparable advantage. Broader license grants and stronger intellectual property positions can result in higher royalty rates. To ensure the highest possible royalty rates, resulting in the best long term benefit to our shareholders, we have aggressively patented and acquired technology solutions in the multiple markets in which we are active. For each company with whom we enter into discussions, we identify which market segments



## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

they are interested in and which technologies they wish to license. We generally wish to see a commitment to ship a product within a certain timeframe, certain annual minimum commitments, minimum royalty payments, milestone payments and an attractive royalty rate.

The degree of exclusivity is also a key parameter in determining achievable license terms and royalty rates; however, the decision to license exclusively or non-exclusively is dependent upon multiple factors. In some markets, such as the pacemaker market, we have elected not to pursue an exclusive license and instead to pursue multiple manufacturers as potential licensees. We have executed a term sheet which could result in our first non-exclusive license with a manufacturer. We believe that all pacemakers should be made to operate safely with MRI equipment, and it is our intent to eventually provide a license to all pacemaker manufacturers. Ultimately, our strategy related to exclusive versus non-exclusive licensing will be determined by market segment, and will be dependent upon market need, market fragmentation, competitive advantage market position and financial incentives offered by the potential licensees. For example, while giving one company a non-exclusive license, there remains the possibility for a second company to negotiate a "co-exclusive" license.

### Boston Scientific License

On June 30, 2005, we entered into a licensing agreement with the Scimed Division of Boston Scientific. The agreement provides Boston Scientific with the right to use Biophan's MRI safety and image compatibility technology and other technologies in a broad range of exclusive and non-exclusive product areas at royalty rates of 3% to 5%. The exclusive product area includes vascular implants and the non-exclusive product area covers a broad array of medical devices. Boston Scientific has the right to sub-license the exclusive product areas to third parties, with Biophan and Boston Scientific to share all proceeds from these parties. The agreement also provides for milestone payments to Biophan for specific product areas which may be as high as several million dollars per product. In addition, the agreement requires Boston Scientific to make an initial upfront payment to Biophan of \$750,000 (which will not be an offset to future earned royalties); make annual minimum royalty and substantial annual earned royalty payments; and receive a right of first negotiation on new technologies acquired by Biophan in the fields of MRI safety and image compatibility. The agreement further specifies that the initial \$750,000 payment must be made not later than August 15, 2005.

In addition to the license agreement, Boston Scientific has entered into an agreement to invest \$5 million in Biophan. The investment will be based on a stock price of Biophan, plus a 10% premium, calculated using the average closing price of Biophan shares during the 30-day period prior to the date of funding. Funding will take place once Biophan provides Boston Scientific with documentation confirming Biophan's ownership of certain patent rights resulting from its recent German acquisitions. This funding must also take place no later than August 15, 2005.

### Strategic Relationships

Leveraging strategic relationships is vital to our mission. These relationships help us validate our technology and also develop potential sales channels. We have entered into non-disclosure agreements with a number of major manufacturers of implanted biomedical and related devices. We are discussing with these companies potential strategic relationships that may include joint development projects, original equipment manufacturing arrangements and licensing agreements.

The transaction with Boston Scientific has provided a validation point for our technology that has resulted in increased interest and activity with other manufacturers. It is our goal to one day see all biomedical devices be MRI safe

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

and image compatible, and we feel that the Boston Scientific agreement facilitates this goal.

Biophan previously declined two offers from a major pacemaker manufacturer for an exclusive license to one of its patents, which management and our board of directors felt was not equitable. The Boston Scientific Agreement contains the types of provisions that management and the board feel are equitable and desirable for our shareholders.

In June 2004, we acquired a 51% interest in TE Bio LLC, a company developing an implantable biothermal battery using body heat gradients to power medical devices such as pacemakers, defibrillators, and drug pumps. The biothermal battery technology is based on a patented innovation in the utilization of thermoelectric materials, using nanoscale-based, thin-film materials to convert thermal energy produced naturally by the human body into electrical energy. The resulting power can be used to "trickle charge" batteries for medium-power devices such as defibrillators, or directly power low-energy devices like pacemakers. It is enabled by nanotechnology which provides the ability to put thousands and thousands of small semi-conductor nodes that convert heat to electricity in a space about the size of one or two postage stamps. Biophan is committed to contribute \$300,000 annually for a three-year period, and marketing and management support to TE Bio, in exchange for Biophan's 51% interest. TE Bio was founded by Biomed Solutions, LLC, an affiliate and the company from which Biophan spun out in December 2000. The independent board members of Biophan evaluated the technology and authorized the acquisition, after conclusion of a third party feasibility study.

15

Also in June 2004, we announced that we had acquired from New Scale Technologies, Inc. the exclusive worldwide distribution rights for the medical market for New Scale's ceramic "SQUIGGLE(TM) motor", including the multi-billion dollar drug delivery market. Developed to meet the growing demand for high precision, low cost actuation devices, the motor is currently on the market generating revenues and is available for OEM integration today. The motor uses no metal wire windings (one of the primary causes of image interference under MRI), is capable of both linear and rotational movement, and can move forward and backwards several inches at nanometer increments, thereby providing a controllable drug release environment.

As part of the exclusive distribution agreement, Biophan will provide sales and marketing to the medical device industry on behalf of New Scale and has also made a \$100,000 investment in the company for a 10% interest. The motor offers several advantages for driving drug pumps, and other medical applications. Using only four parts (other motors can have as many as 100 parts), it provides a unique combination of high reliability, flexibility, and power consumption advantages. By using ceramic components and no windings, it is very compatible with MRI imaging. The motor also has applications in MRI robotics and cryogenics.

This product also fits in with our strategic plan to be a provider of proprietary new technologies to our OEM customers and prospects. While we continue to offer solutions that will one day enable all biomedical devices to be MRI-safe and image compatible, we have expanded our focus to provide additional, proprietary innovations to our customers. We continue to maintain an ongoing and in-depth dialogue with both research and development and business development executives at many of the largest manufacturers of biomedical device companies. This interaction gives us a broad view of the short- and long-term needs of these companies for support of both their current and future product lines.

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

We share gross profit equally with New Scale Technologies, the inventor and manufacturer of the ceramic motor. Biophan provides sales and marketing, and a \$25,000 quarterly advance, reconcilable against current year sales, to New Scale, which enables New Scale to further develop unique capabilities for the medical market. The motor is already on the market for non-medical applications and evaluation units are being sold to customers around the world. The motor is currently under review by several biomedical device manufacturers of drug pumps and other devices.

On February 24, 2005, we acquired a 51% ownership interest in aMRIs GmbH (later renamed Biophan Europe), a leading German-based developer of MRI-safe and image-compatible technology solutions and biomedical devices. In connection with that acquisition, we also acquired the exclusive license to fifteen issued and pending patents covering imaging of devices such as stents and other vascular implants, significantly expanding the Company's intellectual property portfolio. The purchase of the subsidiary and the patents was made for total consideration of \$927,330 consisting of cash, a promissory note and restricted stock.

The acquisition provides Biophan with innovative products, technologies, and scientific expertise that extend Biophan's intellectual property portfolio of medical solutions in the fast-growing marketplace of products and procedures that are compatible with Magnetic Resonance Imaging (MRI).

Following the acquisition, Michael Friebe, Ph.D., was elected to our Board of Directors and serves as Chief Executive Officer of Biophan Europe. Andreas Melzer, M.D. joined our Scientific Advisory Board and serves as Biophan Europe's Research Physician and Chief Research Officer leading many of our medical device developments.

Dr. Friebe is a scientist and entrepreneur trained in MRI related physics at the University of California at San Francisco, one of the world's leading biomedical research centers, and at the University of Witten in Germany. He later started and then sold NEUROMED AG, later renamed UMS NEUROMED after being acquired by United Medical Systems (UMS), a publicly-traded German company. Dr. Friebe is a well-regarded radiology/cardiology oriented entrepreneur with an extensive business and customer network.

Dr. Melzer is a professor of applied biomedical engineering, Director and Chairman of the Board at the Institute for Medical Technologies and Management in Medicine INSITE med. at the University of Applied Sciences in Gelsenkirchen, Germany. He also holds a clinical position as part-time staff radiologist at the Department of Diagnostic and Interventional Radiology at St. Mary's Hospital Buer in Gelsenkirchen, Germany. Dr. Melzer has over 15 years of experience in the development of medical technology for laparo-endoscopic surgery, interventional radiology, Interventional and Intraoperative MRI and MR compatible Robotics, surgical instrumentation, and Nitinol devices. He has co-invented and patented some of the most exciting and important innovations in imaging of medical devices under MRI and he continues to develop and invent. As a practicing physician in radiology, Dr. Melzer has a unique understanding of the needs of patients, the medical device community, the physicians conducting procedures under MRI, and the scientific solutions that are possible. He has co-invented more than 30 patents and has authored over 150 publications. Additionally, Dr. Melzer is engaged as co-organizer, chairman, and invited speaker of various medical conferences and is a board member of several medical societies, as well as professional committees.

Among the Biophan Europe technology assets are an MRI-visible catheter marker,

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

an MRI-visible stent, a vena cava filter which is in late-stage development, and a series of MRI-visible medical devices in development. The Company's management and research staff provide world-class intellectual expertise in the field of MRI compatibility, and have been awarded several grants from government agencies to develop its next-generation biomedical technology for MRI. Biophan Europe and its principals have contractual and consulting agreements with many of the world's leading biomedical device and MRI machine manufacturers.

Based on discussions underway with several biomedical device manufacturers, and MRI manufacturers, both in the U.S. and overseas, we plan to expand the use of the technologies we have developed to make a wider range of devices compatible with MRI. These technologies reduce radio frequency interference, heating, and induced voltages. Since the beginning of fiscal 2005, we have expanded our development and partnering activities related to these technologies to include guidewires, stents, drug pumps, biopsy needles and other prosthetic and surgical tool devices, where the lack of MRI compatibility negatively impacts investigational and diagnostic procedures.

Discussions with these device manufacturers indicate a need for, and an interest in, solutions to additional problems based on our technology. We previously used both surrogate devices (such as copper rings) and actual manufactured implantable products, in a gel phantom, to demonstrate our ability to accurately image devices and their interior spaces in a manner that could not be done previously. The Biophan Europe technology builds extensively on our base and provides an additional ten years of expertise.

Additionally, as part of the Biophan Europe acquisition, we will have access to additional research grants which will enable us to further demonstrate the effectiveness of our products and capabilities. Moreover, we will increase the scope of products in discussion for prospective licensing agreements, in addition to licensing discussions underway between Biophan Europe and certain device manufacturers.

### Acquisition of Intellectual Assets

We currently have an overall estate of 142 U.S. patents, inclusive of those assigned and licensed, and including filed applications and allowed and issued patents. This represents a 2-1/2 fold over the number at this time last year. Additionally, we have 46 international patents or applications in process.

The technologies allowing visualization of implants have been developed at Biophan, and with technology partners under exclusive license, including aMRIs Patents GmbH in Germany (via an exclusive license); Aachen Resonance in Germany (via an exclusive license); and Nanoset, LLC in the U.S. (via an exclusive license). The patents include those licensed from Nanoset, LLC. Nanoset's technology can be used to reduce image artifacts on implantable and interventional medical devices and for a new class of applications to enhance the uptake, release and monitoring of drugs in medical device coatings.

The patents total also includes those licensed as part of the Biophan Europe acquisition whereby we obtained worldwide exclusive rights to a significant patent portfolio totaling fifteen issued and pending patents covering critical capabilities needed by the medical industry as the use of MRI interventional medicine and MRI diagnostics for examination of stents and other implants becomes standard medical procedure.

On an ongoing basis, we are aggressively pursuing internal research and development projects, as well as sourcing leading-edge providers of related technologies. We are currently reviewing several cardiovascular technologies which we feel have potential for exclusive licensing in, and subsequent product development and licensing out. Intellectual property, such as technology solutions and patents, may be developed internally, through joint ventures,

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

licensed in, or purchased. To ensure the continuing value of our intellectual assets, we intend to aggressively defend our patents and licensed technology, both domestically and abroad.

### Research and Development

Over the past year we have been developing:

- o A series of implantable devices including an MRI visible vena cava filter and MRI visible stents;
- o Market opportunities for an MRI safe and image compatible ceramic motor;
- o Additional technologies for improving MRI contrast agents;
- o Technology to improve drug elution and drug delivery systems; and
- o A system for generating power for implantable devices from body heat.

We have successfully demonstrated effective solutions for making devices which use long metal wire leads, such as pacemakers, defibrillators, neurostimulators, et al, safe for use with MRI and that these solutions provide a meaningful margin of safety. Our solutions address both the problems of device heating and induced voltages in pacemakers, defibrillators, and neurostimulators, which are the two primary problems associated with the use of MRI for patients with these devices. Today, approximately 3 million people have devices that cause them to be denied access to MRI when needed, due to safety concerns and regulatory (FDA and other) contraindications. We believe that if manufacturers of these devices incorporate our solutions into their products, they can be made safe for use with MRI.

17

Additionally, there is a rapidly growing field of medicine known as minimally invasive surgery, using "interventional" devices such as guidewires and catheters to do many procedures in cardiology, oncology and other specialties. The majority of procedures are done in catheter labs equipped with X-ray or fluoroscopy devices for imaging and guiding the procedures. Many of these devices do not offer the advantages of tissue visualization and discrimination provided by MRI. The combined problems of device safety (they heat up and may induce electrical stimulation), and the image artifacts created by these devices in MRI, have limited the use of MRI machines in this rapidly growing area of medicine. The desire and need for MRI is demonstrated by the advent of catheter labs which have both X-ray devices for guiding devices into the body, and MRI machines for evaluating progress and observing tissue and results. In these new operating theaters, the patients are moved back and forth on a conveyor belt-like system between the imaging devices. For the past five years, Biophan has been actively engaged in solving the complex problems associated with device safety and imaging under MRI. With the advent of our solutions, the industry has the opportunity to develop MRI safe and image compatible devices that can be used with MRI.

Biophan has two solutions for resolving the heating of wire leads, such as pacemaker leads (in which we include pacemaker and defibrillator leads) and neurostimulator leads (including deep brain stimulation, or DBS, systems for Parkinson's and epilepsy; systems for pain control, etc.). One solution is an RF filter, licensed from Johns Hopkins exclusively for implantable devices, and co-exclusively for non-implantable catheters) which can resolve lead heating (it

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

is the metal wire lead connecting a device to the body that is the cause of most of the MRI safety problems). Additionally, to resolve the problems associated with very long metal wires such as surgical guidewires and catheters, we have been developing "anti-antenna geometries" in these leads. By slightly altering the way the leads are made, we can create self-canceling attributes that resolve the radio frequency related problems that cause heating and induced voltages in the lead. Together, these solutions allow making an MRI-safe lead and device. Several broad patents for this innovation were filed several years ago, and one recently issued. As a result, we have now publicly disclosed our solutions, and we have demonstrated the success of our approach to prospective customers and industry experts. We have begun manufacturing samples of devices modified with our solution, which is extremely cost effective. We have modified a pacemaker lead for a pacemaker company concerned with pacemaker safety, which is currently being evaluated by that company. Recent publications by scientists and by personnel working for the U.S. Food and Drug Administration (FDA) have increased both the concern, and the interest in solutions that can resolve the safety problems that restrict the ability of virtually all recipients of pacemakers, cardio-defibrillators, neurostimulators, and pain devices, to be diagnosed using MRI. The FDA recently issued an advisory alert regarding neurostimulators, citing both injuries and deaths associated with MRI. This report is posted on our website and can be found at <http://www.fda.gov/cdrh/safety/neurostim.html>.

The April 2005 issue of PACE (Pacing and Clinical Electrophysiology) was devoted to the issues of MRI safety, and included editorial comments by Medtronic, Guidant, St. Jude, and the FDA, about patient safety. This increasing awareness and concern has caused renewed interest in Biophan's solutions, and greater appreciation for our grasp of the issues as well as our comprehensive solutions. We are currently engaged in discussions with several pacemaker manufacturers which may lead to licensing our technologies for the pacemaker, cardio-defibrillator, and neurostimulator markets.

During the past year, we received an issued patent, U.S. 6,829,509 for anti-antenna geometries, which we believe, along with Johns Hopkins patent U.S. 5,217,010, for which we hold an exclusive license for implanted medical devices, gives us a dominant position in the emergence of MRI safe devices using long wire leads, such as pacemakers, defibrillators, deep brain stimulators, pain devices, and many others. This modification of a metal device has broad application. It can also address a significant limitation associated with virtually all stents, medical devices used to keep vessels open. It is very difficult to image inside the stent to determine if blockage is occurring, once the stent is installed in the body. Currently, no diagnostic systems such as X-ray or fluoroscopy are effectively able to image inside of a stent.

We have demonstrated effective MRI imaging of the interior of stents. Researchers in Europe have also demonstrated at conferences that this approach works, and there are some stents shipping in Europe using this approach. The solution requires a change in the way most stents are made. We recently filed nine continuations of our original patent application, applying this innovation to other devices, such as stents, guidewires and catheters. The stent, guidewire and catheter businesses are very large and have many players who compete with one another for competitive advantage. This solution to both heating and stent imaging has broad implications

We are also working on coatings that can improve MRI imaging of devices such as guidewires and catheters that would otherwise be invisible under MRI, using thin film coatings described above. The advantage of a coating solution is that a manufacturer with a product in the market or in development does not have to radically change the physical design manufacturing process. Thus, the coating solution, which we are pursuing, has broad applications for the rapidly growing stent market.

There is increasing industry interest in these approaches to making devices imageable under MRI. The solution must be applied to the device itself, and is not something that can be incorporated in the MRI machine or its software. However, the solution is of interest to MRI manufacturers we have met with, all of whom benefit from seeing the aforementioned expansion in the use of MRI for interventional medicine and expanded diagnostics (as with stents, and other applications). MRI is also used extensively in oncology, due to its ability to discriminate tissue types.

Image compatibility also has benefits for a pacemaker device manufacturers. The goal of making pacemakers safe for MRI is to allow a pacemaker patient to receive an MRI scan for staging a cancer operation, and subsequent follow-up, or to diagnose a brain tumor, or back or knee problem, etc. However, a device made safe may still cause a significant image artifact. By adding "image compatibility" to a pacemaker made safe, it may be possible to enable a pacemaker patient to one day have an MRI angiogram, and avoid having an invasive procedure. Similarly, a patient with a Deep Brain Stimulator (DBS) device can undergo a full power MRI of the brain if their lead is not only safe, but also image compatible.

To manage the growing R&D and customer interactions in the MRI technology business and the biothermal business, we have expanded our staff to support these projects. John Lanzafame, an experienced medical device executive, joined Biophan in September 2004 as President of Biophan's Nanolution subsidiary and as Vice President of Business Development. He has focused on leveraging recent discoveries in nanotechnology such as Biophan's use of nanomagnetic particles for the purposes of drug delivery and drug elution from devices. Mr. Lanzafame has 15 years experience in the medical device industry, most recently as President of STS Biopolymers, a company specializing in customized surfaces, including drug eluting coatings for stents and indwelling catheters. STS Biopolymers was acquired in late 2003 by Angiotech Pharmaceuticals, which licensed the use of paclitaxel on stents to Boston Scientific. Mr. Lanzafame has experience in drug delivery, product development and sales and marketing, and has brought this breadth of experience both to our Nanolution drug delivery division, as well as to expand sales and marketing of our other Biophan technologies.

We have retained additional technical consultants to augment our staff's research and development efforts on the MRI safety and compatibility project and the biothermal battery project. Over thirty professionals, both full time and part time, now constitute the Biophan scientific and engineering organization.

We conduct our thin film coating research and development at Alfred University, in coordination with Nanoset, LLC. To facilitate this, we have helped Alfred construct a clean room facility to be used for our coating experiments and sample preparation. We have also entered into a consulting agreement with Isoflux in Rochester, New York, a leading developer of plasma coating equipment, such as that used to coat stents and long metal wires. Isoflux is headed by Dr. David Glocker, formerly head of the thin film R&D Group at Eastman Kodak Company, to assist in our device coatings experiments, testing, and design. Dr. Glocker is also a member of the Biophan Scientific Advisory Board.

Dr. Frank Shellock, a recognized leader in MRI safety testing, joined the Biophan Scientific Advisory Board, has conducted testing and research with Biophan' scientists and has co-authored a paper on MRI lead heating of pacing leads with Robert Gray of Biophan. The paper was accepted and presented at the Radiological Society of North America (RSNA) Conference Proceedings in Chicago in November, 2004.

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

As a result of the growing awareness of the problems outlined here and our broad patent portfolio, we are seeing an increased interest from the medical device industry in our solutions. We are in various stages of discussions and negotiations with an expanded group of companies, both in the United States and abroad, regarding the utilization of our technology. The value to our prospective customers is competitive advantage with the potential to gain increased market share.

Part of our strategic initiative for the current fiscal year will include expanding our technology offerings to the companies with whom we are already in discussions or collaborating. These arrangements may include payments for R&D, licensing, equipment and materials purchases, milestone payments, as well as possible strategic investments.

Our business plan does not include funding for FDA approvals. Rather, our strategy is to supply solutions to the major biomedical device manufacturers, who will incorporate our technology into their existing and future product lines. It will be the responsibility of these manufacturers to apply for and receive FDA approval of their products. Since our technologies are made of known biocompatible, non-toxic materials, and since we do not change the method by which the devices conduct diagnostic and/or therapeutic functionality, we anticipate reasonable timeframes for our customers to obtain FDA approvals of devices that add our capability for safety and/or image enhancements.

### Investor Relations

We expend a great deal of effort to keep our shareholders informed, and to bring the Company to the attention of new shareholders, institutional investors, and potential strategic partners. Additionally, our efforts at widespread press exposure have helped elevate the issue of MRI safety to national prominence, and have helped increase the awareness of Biophan as an innovative small public company. The over-the-counter market is generally not supported by the nation's broker-dealer network, and it is essential for us to be visible so that prospective shareholders can hear about us and review our public filings, website, and company investor materials.

19

Additionally, because we provide technical solutions to several complex limitations of medical devices, we find that attending conferences and issuing press releases produces over time a wealth of information that we can then point to, when a shareholder has a question, and stay in full compliance with the full disclosure requirements of the SEC's regulations. Our high visibility and healthy trading volume have brought several institutional investors into the Company, a trend we expect to continue as we move forward with our plans to list on a major U.S. stock exchange. We intend to file our application with the exchange shortly after the receipt of funds from Boston Scientific.

### Financing Activities

On June 30, 2005, we executed a definitive equity investment agreement and a technology license with Boston Scientific. The equity transaction consists of the purchase of Biophan common stock totaling \$5 million, priced at a 10% premium over the average of the closing price for the 30 calendar-day period prior to the closing. The technology license includes an upfront payment of \$750,000 and annual maintenance fees, in addition to royalties and milestone payments. At the request of Boston Scientific, the balance of the details are being kept confidential. Funding under both agreements is to occur by August 15, 2005. The combined cash from this transaction is anticipated to be more than adequate to enable us to list on a major stock exchange within the current



## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

fiscal year.

To ensure that the Company has adequate cash on hand for operations, Biomed Solutions LLC, an affiliate of Biophan managed by Biophan CEO Michael Weiner, agreed to provide Biophan with a line of credit facility of up to \$2 million. Borrowings under the line bear interest at 8% per annum and are convertible at 90% of the average closing price for the 20 trading days preceding the date of the borrowing. Currently the full \$2 million has been provided and Biomed received warrant coverage of 500,000 shares priced at 110% of the average closing price for the 20 trading days preceding the date of execution of the credit agreement. Ross Kenzie, a director of Biophan, is also a director of Biomed Solutions, LLC. The independent board of Biophan negotiated and approved this credit facility. The terms of this credit facility are considered to be better than are available from commercial lending sources.

Biomed Solutions is a Company which invests in early stage companies and projects with promising intellectual property advantage. Biomed Solutions was the owner of HIV Antisense LLC, which merged with Biophan (then known as GreatBio), and Biomed Solutions was the source of the acquisition of the MRI Safety technology acquired by Biophan in 2000 and the 51% interest in TE-Bio, the developer of the Biothermal battery technology acquired by Biophan in 2004.

On May 27, 2005, we cancelled a previous financing agreement and entered into a new agreement executed with SBI Brightline XI, LLC providing a \$30 million fixed price financing for 10,000,000 shares at an average price of \$3 per share, if we take the full facility, and with a range from \$2 a share to \$4 a share, which must be taken in sequential tranches of 1 million shares each. There are no warrants or fees associated with this agreement. The financing requires the shares to be registered for sale. We believe that this credit facility, the revised SBI stock purchase agreement, and the pending transaction with Boston Scientific, provide the Company with more than adequate capital resources for the upcoming 12 month timeframe; including the ability to fund, as needed, potential additional acquisition and expansion of operations.

Our estimate of our cash requirements for the next twelve months is as follows:

Research and product development expenses, including \$500,000 to fund Biophan Europe research and development	\$3,327,000
General and administrative expenses, including administrative salaries and benefits, office expenses, rent expense, legal and accounting, publicity, and investor relations	3,463,000 -----
Total estimated cash requirements for next twelve months	\$6,790,000 =====

Our current strategic plan does not indicate a need for material capital expenditures in the conduct of research and development activities, nor does the plan contemplate any significant change in the number of employees. We currently employ twelve full-time individuals.

### ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

(a) Derivative Financial Instruments, Other Financial Instruments, and

## Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

### Derivative Commodity Instruments.

As of May 31, 2005, the Company did not participate in any derivative financial instruments, or other financial and commodity instruments for which fair value disclosure would be required under SFAS No. 107. All of the Company's investments are considered cash equivalents and consist of money market accounts. Accordingly, the Company has no quantitative information concerning the market risk of participating in such investments.

### (b) Primary Market Risk Exposures

The Company's primary market risk exposures are in the areas of interest rate risk and foreign currency exchange rate risk. The Company's investment portfolio of cash equivalents is subject to interest rate fluctuations, but the Company believes this risk is immaterial due to the short-term nature of these investments. For the three months ended May 31, 2005, foreign currency translation gains were approximately \$7,000 as a result of consolidating the Company's foreign subsidiaries. During the period, the Company did not engage in any foreign currency hedging activities.

### ITEM 4. CONTROLS AND PROCEDURES

Based on their evaluation as of the end of the period covered by this quarterly report on Form 10-QSB, our principal executive officer and principal financial officer, with the participation and assistance of our management, concluded that our disclosure controls and procedures, as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, were effective in design and operation. There have been no changes in our system of internal control over financial reporting in connection with the evaluation by our principal executive officer and principal financial officer during our fiscal quarter ended May 31, 2005 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## PART II. OTHER INFORMATION

### Item 1. Legal Proceedings

We are not a party to any material legal proceedings and there are no material legal proceedings pending with respect to our property. We are not aware of any legal proceedings contemplated by any governmental authorities involving either us or our property. None of our directors, officers or affiliates is an adverse party in any legal proceedings involving us or our subsidiaries, or has an interest in any proceeding which is adverse to us or our subsidiaries.

### Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

On May 27, 2005, we entered into a line of credit agreement with Biomed Solutions, LLC, an affiliated company for borrowings of up to \$2 million with interest at 8% per annum. The agreement provides for the issuance of up to 500,000 warrants based on actual borrowings and convertibility at the lender's election into shares of our common stock. The warrants and any shares issued upon exercise of warrants or any election to convert outstanding debt will be exempt from registration pursuant to Sections 3(a) 9 and 4(2) of the Securities Act.

### Item 3. Defaults Upon Senior Securities

Not applicable.

### Item 4. Submission of Matters to a Vote of Security Holders

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

Exhibit No. -----	Exhibit Description -----	Loca -----
4.1	Termination of Stock Purchase Agreement between Biophan and SBI Brightline Consulting, LLC	Incorporated by reference 4.20 to our Annual report 10-KSB for the year 2005
4.2	Stock Purchase Agreement dated May 27, 2005 between Biophan and SBI Brightline XI, LLC	Incorporated by reference 4.21 to our Annual report 10-KSB for the year 2005
4.3	Convertible Promissory Note of Biophan payable to the order of Biomed Solutions, LLC dated May 27, 2005	Incorporated by reference 4.22 to our Annual report 10-KSB for the year 2005
4.4	Stock Purchase Warrant issued to Biomed Solutions, LLC dated May 27, 2005	Incorporated by reference 4.23 to our Annual report 10-KSB for the year 2005
10.1	Line of Credit Agreement dated May 27, 2005 between Biophan and Biomed Solutions, LLC	Incorporated by reference 10.50 to our Annual report 10-KSB for the year 2005
31.1	Certification of C.E.O. pursuant to Rule 13a-14(a)	Filed herewith
31.2	Certification of C.F.O. pursuant to Rule 13a-14(a)	Filed herewith
32.1	Certification of C.E.O. pursuant to Rule 13a-14(b) and 18 U.S.C. Section 1350	Filed herewith
32.2	Certification of C.F.O. pursuant to Rule 13a-14(b) and 18 U.S.C. Section 1350	Filed herewith

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.

BIOPHAN TECHNOLOGIES, INC.

(Registrant)

By: /s/ Michael L. Weiner

-----

Edgar Filing: BIOPHAN TECHNOLOGIES INC - Form 10-Q

Name: Michael L. Weiner,  
Title: Chief Executive Officer

By: /s/ Robert J. Wood

-----  
Name: Robert J. Wood  
Title: Chief Financial Officer,  
Treasurer and Secretary  
(Principal Financial Officer and  
Principal Accounting Officer)

Date: July 15, 2005