
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

Form 8-K

Current Report

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **March 31, 2005**

MACROPORE BIOSURGERY, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of
Incorporation)

000-32501
(Commission File Number)

33-0827593
(I.R.S. Employer Identification
Number)

6740 Top Gun Street, San Diego, California 92121
(Address of principal executive offices, with zip code)

(858) 458-0900
(Registrant's telephone number, including area code)

n/a
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 2.02. Results of Operations and Financial Conditions

Press release issued by MacroPore Biosurgery, Inc. on March 31, 2005, reporting financial results for the year ended December 31, 2004. A copy of the press release is attached hereto as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits

(c) Exhibits

Exhibit 99.1 Press release issued by MacroPore Biosurgery, Inc. on March 31, 2005, reported financial results for the year ended December 31, 2004.

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 hereunto duly authorized.

Date: March 31, 2005

By: /s/ CHRISTOPHER J. CALHOUN

Christopher J. Calhoun
Chief Executive Officer

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EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description of Document</u>
99.1	Press release issued by MacroPore Biosurgery, Inc. on March 31, 2005, reported financial results for the year ended December 31, 2004.

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Contacts:

Tom Baker
Media/U.S. Investors
Tel. +1-858-458-0900
tbaker@macropore.com

Stefanie Bacher
International Investors
Tel. +1-858-362-0365
sbacher@macropore.com

**MacroPore Biosurgery Announces Fourth Quarter and Year End 2004 Financial Results;
Reports on Progress of Regenerative Cell Technology Program**

San Diego, CA, March 31, 2005 — MacroPore Biosurgery, Inc. (Frankfurt: XMP), today announced financial results for the three months and year ended December 31, 2004.

During 2004, MacroPore Biosurgery continued to shift its focus toward the research and development of therapies using stem and regenerative cells from adipose tissue. This tissue is the richest and most accessible known source for regenerative cells, a population of cells that includes adult stem cells, angiogenic cells (blood vessel forming) and other regeneration-promoting cells. This shift is reflected by the following achievements:

- The receipt of a 510(k) clearance from the U.S. Food and Drug Administration (FDA) for a point-of-care adipose tissue extraction system;
- The release of positive data from preclinical research demonstrating that adipose tissue-derived stem and regenerative cells improved heart function following myocardial infarction;
- An award of \$950,000 in National Institutes of Health (NIH) Small Business Innovation Research (SBIR) grant funding to study applications of the Company's technology for cardiovascular disease;
- The issuance of a U.S. patent to the University of California related to adult stem cells isolated from adipose tissue for which MacroPore Biosurgery is the exclusive, worldwide licensee; and
- The initiation of multiple preclinical studies with university collaborators to discover treatments for cardiovascular disease, spine and orthopedic conditions, and novel approaches for aesthetic and reconstructive surgery.

MacroPore Biosurgery's investment in its regenerative cell technology program has been supported by recent product line divestitures and licensing agreements along with available profits from HYDROSORB™ and Thin Film sales. In 2004, the Company received \$16,250,000 through licensing agreements and product line divestitures consisting of the following payments:

- \$7,000,000 from an initial payment related to the sale of a significant portion of its Thin Film business in the second quarter to MAST Biosurgery AG (MAST), a privately held medical device company;
- \$1,500,000 from an initial payment related to the licensing of retained rights to market Thin Film products in Japan in the third quarter to Senko Medical Trading Co. (Senko);
- \$1,250,000 from a milestone payment related to a Japanese regulatory submission in the fourth quarter as part of the Senko licensing agreement; and
- \$6,500,000 from two milestone payments during the first and third quarters related to the sale of its craniomaxillofacial (CMF) product line to Medtronic in 2002.

"During 2004, we made substantial progress in our regenerative cell technology program as we expanded our preclinical research, strengthened and expanded our intellectual property portfolio, and initiated the regulatory process for the cell processing system," said Christopher J. Calhoun, Chief Executive Officer for MacroPore Biosurgery. "A major goal for the company in 2005 is to create strategic regenerative cell technology partnerships to accelerate and broaden these efforts and support development funding. In addition, we expect the rebound from our bioresorbable technology sales and anticipated milestone payments in 2005 and early 2006 to further contribute to these development efforts."

Financial Results

Total revenues for the three months ended December 31, 2004 were \$1,152,000 compared to \$4,761,000 for the same period in 2003, a decrease of 75.8%. Of the total revenue in the fourth quarter of 2004, \$972,000 is attributable to sales of HYDROSORB™ to Medtronic. Total revenues for the year ended December 31, 2004 were \$6,818,000 compared to \$14,088,000 for 2003, a decrease of 51.6%. Of the total revenue in 2004, \$3,803,000 is attributable to sales of HYDROSORB™ to Medtronic. The decline in HYDROSORB™ revenues for the fourth quarter and full year 2004 is primarily attributable to initial stocking orders from Medtronic for these products during the second half of 2003. These orders provided Medtronic with sufficient inventory for 2004.

Net loss for the three months and year ended December 31, 2004 was \$4,316,000 and \$2,090,000, respectively. This compares to a net loss of \$1,145,000 and \$9,283,000, respectively, for the same periods in 2003. The 2004 full year results benefited from the following items:

- The recognition of \$7,383,000 in the third quarter of 2004 associated with the completion of all obligations related to the September 2002 sale of the CMF product line to Medtronic, which was previously reported as deferred gain on sale of assets, related party on the balance sheet;
- The receipt and recognition of a \$1,500,000 payment in the third quarter for completing the final milestone related to the CMF product line sale; and
- A \$5,000,000 milestone payment related to the CMF product line sale received in the second quarter of 2004 as a result of completion of the clinical research regarding Faster Resorbing Polymers.

Total operating expenses for the quarter ended December 31, 2004 were \$4,762,000, compared to \$4,586,000 for the same period in 2003. Total operating expenses for the year ended December 31, 2004 were \$19,497,000, compared to \$19,505,000 for 2003. During 2004, research and development expenses increased significantly over 2003 as a result of the Company's increased investment in the regenerative cell technology program. This was partially offset by a significant decrease in sales and marketing expenses as a result of transferring marketing efforts in support of the Thin Film product line to MAST.

MacroPore Biosurgery ended 2004 with \$13,419,000 in cash, cash equivalents and short term investments, compared to \$14,268,000 at the end of 2003.

2005 Financial Projections

In 2005, MacroPore Biosurgery expects bioresorbable technology-related revenues to be \$6,000,000 to \$9,000,000. This is due in part to ongoing market demand for the HYDROSORB™ product family and from anticipated stocking orders for the radiographically identifiable Spine System products, which received FDA clearance in August 2004. Research and development expenses for 2005 will be \$11,000,000 to \$13,000,000, the majority of which will be invested into the regenerative cell technology program.

MacroPore Biosurgery expects to receive a \$2,000,000 payment, or 19% equity in MAST and other considerations, during 2005. Additionally, the Company expects to receive \$622,000 in remaining Phase II NIH SBIR funding in 2005 and 2006 plus \$250,000 from Senko following Thin Film regulatory clearance by the Japanese Ministry of Health, Labour and Welfare in 2005 or early 2006.

Commercialization of the Thin Film products in Japan may result in revenues related to stocking orders and royalty payments from Senko. This is provided MAST does not exercise its Japanese commercialization rights option. If the option is exercised, MacroPore Biosurgery is entitled to at least \$3,000,000 from MAST and will equally share gross profits and royalties from Senko for a three-year period following initiation of commercialization of the products in Japan.

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Conference call information

The management of MacroPore Biosurgery will host a conference call today at 10:00 a.m. EST or 5:00 p.m. CEST. The conference call will be webcast live and may be accessed on the Investor Relations section of the Company's website at <http://www.macropore.com>. An archived version of the webcast will be available on the same website 60 minutes after the call. A telephone replay will be available for 24 hours. To access the replay, please call +49 / 69 / 58 99 90 568 (PIN: 133016#) or (303) 590-3000 (PIN: 11025954#).

About MacroPore Biosurgery, Inc.

MacroPore Biosurgery specializes in the discovery and development of regenerative medicine therapies. The Company has two principal technology platforms, adipose-derived regenerative cells and bioresorbable implants. The regenerative cell technology program is developing treatments for cardiovascular disease, spine and orthopedic conditions, gastrointestinal disorders and new approaches for aesthetic and reconstructive surgery using regenerative cells from adipose tissue. This tissue is the richest and most accessible known source for regenerative cells. To facilitate the processing and delivery of adipose-derived regenerative cells, the Company is designing a proprietary point-of-care system, Celution™, to isolate and concentrate a patient's own regenerative cells in real-time. Additionally, MacroPore Biosurgery manufactures the HYDROSORB™ family of FDA-cleared bioresorbable spine and orthopedic implants, which are distributed exclusively through Medtronic, Inc. For more information, please visit <http://www.macropore.com>.

Cautionary Statement Regarding Forward-Looking Statements

This press release includes forward-looking statements regarding events and trends which may affect MacroPore Biosurgery's future operating results and financial position. Such statements are subject to risks and uncertainties that could cause the Company's actual results and financial position to differ materially. Some of these risks and uncertainties are described (under the heading "Risk Factors") in MacroPore Biosurgery's 2004 Form 10-K annual report for the year ended December 31, 2004, which is available on the Company's web site. The uncertainty of MacroPore Biosurgery's visibility into whether and when HYDROSORB™ sales to Medtronic will recover, and if so by how much, is an additional risk factor. MacroPore Biosurgery assumes no responsibility to update any revision of forward-looking statements to reflect events, trends or circumstances after the date they are made.

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Consolidated Balance Sheets

	<u>As of December 31,</u>	
	<u>2004</u>	<u>2003</u>
Assets		
Current assets:		
Cash and cash equivalents	\$ 2,840,000	\$ 2,820,000
Short-term investments, available-for-sale	10,579,000	11,448,000
Accounts receivable, net of allowance for doubtful accounts of \$8,000 and \$62,000 in 2004 and 2003, respectively	863,000	1,291,000
Inventories	379,000	831,000
Other current assets	984,000	526,000
Total current assets	15,645,000	16,916,000

Property and equipment, net	3,080,000	3,822,000
Other assets	236,000	332,000
Intangibles, net	2,122,000	2,392,000
Goodwill	4,387,000	4,627,000
Total assets	\$ 25,470,000	\$ 28,089,000
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	\$ 2,329,000	\$ 3,767,000
Current portion of long-term obligations	938,000	717,000
Total current liabilities	3,267,000	4,484,000
Deferred gain on sale of assets, related party	—	7,539,000
Deferred gain on sale of assets	5,650,000	—
Deferred license fee revenue	1,500,000	—
Deferred development revenue	1,092,000	—
Long-term obligations, less current portion	1,128,000	1,157,000
Total liabilities	12,637,000	13,180,000
Stockholders' equity:		
Preferred stock, \$0.001 par value; 5,000,000 shares authorized; -0- shares issued and outstanding in 2004 and 2003	—	—
Common stock, \$0.001 par value; 95,000,000 shares authorized; 16,820,018 and 16,777,644 shares issued and 13,947,184 and 14,195,062 shares outstanding in 2004 and 2003, respectively	17,000	17,000
Additional paid-in capital	74,737,000	74,698,000
Unearned compensation	—	(109,000)
Accumulated deficit	(51,475,000)	(49,385,000)
Treasury stock, at cost	(10,414,000)	(9,362,000)
Treasury stock receivable	—	(976,000)
Accumulated other comprehensive (loss) income	(32,000)	26,000
Total stockholders' equity	12,833,000	14,909,000
Total liabilities and stockholders' equity	\$ 25,470,000	\$ 28,089,000

Consolidated Statements of Operations and Comprehensive Loss

	For the Year Ended December 31		For the Quarter Ended December 31	
	2004	2003	2004	2003
Revenues:				
Sales to related party	\$ 4,085,000	\$ 12,893,000	\$ 972,000	\$ 4,472,000
Sales to third parties	2,247,000	1,195,000	81,000	289,000
Research grant	328,000	—	99,000	—
Development	158,000	—	—	—
	<u>6,818,000</u>	<u>14,088,000</u>	<u>1,152,000</u>	<u>4,761,000</u>
Cost of revenues:				
Cost of revenues (including stock based compensation expense)	3,142,000	4,244,000	767,000	1,380,000
Inventory provision	242,000	—	—	—
	<u>3,434,000</u>	<u>9,844,000</u>	<u>385,000</u>	<u>3,381,000</u>
Gross profit				
	<u>3,434,000</u>	<u>9,844,000</u>	<u>385,000</u>	<u>3,381,000</u>
Operating expenses:				
Research and development, excluding stock based compensation	11,007,000	9,071,000	2,873,000	2,261,000
Sales and marketing, excluding stock based compensation	2,391,000	4,417,000	325,000	1,063,000
General and administrative, excluding stock based compensation	5,825,000	4,581,000	1,522,000	1,156,000
Stock based compensation (excluding cost of revenues stock based compensation)	125,000	985,000	—	113,000
Restructuring charge	107,000	451,000	—	(7,000)
Equipment impairment charge	42,000	—	42,000	—
Total operating expenses	<u>19,497,000</u>	<u>19,505,000</u>	<u>4,762,000</u>	<u>4,586,000</u>

Total operating loss	(16,063,000)	(9,661,000)	(4,377,000)	(1,205,000)
Other income (expense):				
Gain on the sale of assets, related party	13,883,000	—	—	—
Interest income	252,000	417,000	72,000	82,000
Interest expense	(177,000)	(126,000)	(46,000)	(38,000)
Other income (expense)	15,000	87,000	35,000	16,000
Total other income (expense)	13,973,000	378,000	61,000	60,000
Net loss	(2,090,000)	(9,283,000)	(4,316,000)	(1,145,000)
Other comprehensive loss: unrealized holding loss	(58,000)	(133,000)	(17,000)	(37,000)
Comprehensive loss	<u>\$ (2,148,000)</u>	<u>\$ (9,416,000)</u>	<u>\$ (4,333,000)</u>	<u>\$ (1,182,000)</u>
Basic and diluted net loss per common share	<u>\$ (0.15)</u>	<u>\$ (0.64)</u>	<u>\$ (0.31)</u>	<u>\$ (0.08)</u>
Weighted average shares used in calculating basic and diluted net loss per common share	<u>13,932,390</u>	<u>14,555,047</u>	<u>13,939,575</u>	<u>14,565,839</u>

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Consolidated Statement of Cash Flows

	For the Years Ended December 31,	
	2004	2003
Cash flows from operating activities:		
Net loss	\$ (2,090,000)	\$ (9,283,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,752,000	1,657,000
Inventory provision	242,000	—
Reduction in allowance for doubtful accounts	(44,000)	—
Loss on disposal of assets	3,000	14,000
Equipment impairment charge	42,000	—
Warranty provision	—	267,000
Restructuring charge	—	153,000
Amortization of gain on sale of assets, related party	(156,000)	(2,046,000)
Amortization of gain on sale of assets	(772,000)	—
Gain on sale of assets, related party	(13,883,000)	—
Stock based compensation	119,000	997,000
Increases (decreases) in cash caused by changes in operating assets and liabilities, excluding the effects of acquisition:		
Accounts receivable	472,000	(53,000)
Inventories	33,000	319,000
Other current assets	(458,000)	317,000
Other assets	8,000	76,000
Accounts payable and accrued expenses	(434,000)	337,000
Deferred license fee revenue	1,500,000	—
Deferred development revenue	1,092,000	—
Net cash used in operating activities	<u>(12,574,000)</u>	<u>(7,245,000)</u>
Cash flows from investing activities:		
Proceeds from the sale and maturity of short-term investments	51,132,000	49,561,000
Purchases of short-term investments	(50,321,000)	(41,267,000)
Proceeds from sale of assets, related party	6,500,000	—
Cost of sale of assets, related party	—	(38,000)
Proceeds from the sale of assets, net	6,931,000	—
Purchases of property and equipment	(789,000)	(1,743,000)
Acquisition costs, net of cash acquired	(28,000)	(654,000)
Proceeds from the sale of impaired assets	—	95,000
Net cash provided by investing activities	<u>13,425,000</u>	<u>5,954,000</u>
Cash flows from financing activities:		
Principal payments on capital leases	—	—
Principal payments on long-term obligations	(847,000)	(426,000)
Proceeds from long-term obligations	1,039,000	1,120,000
Proceeds from the exercise of employee stock options	29,000	33,000
Purchase of treasury stock	(1,052,000)	(2,266,000)
Proceeds from sale of treasury stock	—	542,000
Net cash used in financing activities	<u>(831,000)</u>	<u>(997,000)</u>

Net increase (decrease) in cash	20,000	(2,288,000)
Cash and cash equivalents at beginning of year	<u>2,820,000</u>	<u>5,108,000</u>
Cash and cash equivalents at end of year	<u>\$ 2,840,000</u>	<u>\$ 2,820,000</u>