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)

November 3, 2003

MACROPORE BIOSURGERY, INC.

(Exact name of registrant as specified in Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

000-32501

(Commission File Number)

33-0827593

(IRS Employer Identification No.)

6740 Top Gun Street, San Diego, California

(Address of Principal Executive Offices)

92121 (Zip Code)

Registrant's telephone number, including area code:

(858) 458-0900

Item 7: Financial Statements and Exhibits.

(c) Exhibits

99.1 Press Release of MacroPore Biosurgery, Inc. dated November 3, 2003

Item 12: Results of Operations and Financial Conditions.

On November 3, 2003, MacroPore Biosurgery, Inc. issued a press release with respect to their financial results for the third quarter of 2003. This press release is attached as exhibit 99.1 and is incorporated herein by reference.

SIGNATURE

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.

MACROPORE BIOSURGERY, INC.

Dated: November 3, 2003 By: /s/ Christopher J. Calhoun

Christopher J. Calhoun

President and Chief Executive Officer

Contact:

Tom Baker MacroPore Biosurgery Media/U.S. Investors Tel. +1-858-587-5673 tbaker@macropore.com Stefanie Bacher MacroPore Biosurgery European Investors Tel. +1-858-362-0365 sbacher@macropore.com

MacroPore Biosurgery Reports Record Revenues for Third Quarter; Revenues Increase 36% Year Over Year

San Diego, CA, November 3, 2003 - MacroPore Biosurgery, Inc. (Frankfurt Stock Exchange: XMP) today reported financial results for the quarter and nine months ended September 30, 2003.

Revenues for the third quarter of 2003 increased 36% over the same period in 2002 to a record \$4.50 million. The orthopedic and spinal products accounted for \$3.48 million in revenues for the third quarter 2003, the thin film (SurgiWrapTM) products accounted for \$0.26 million in revenues and craniomaxillofacial and other products accounted for \$0.76 million. For the third quarter of 2003, MacroPore Biosurgery reported a net loss of \$2.80 million or \$0.19 per basic and diluted share, compared to a net loss of \$2.97 million or \$0.21 per basic and diluted share for the third quarter of 2002. MacroPore ended the third quarter with \$16.89 million in cash and cash equivalents and short term investments.

Revenues for the nine months ended September 30, 2003 increased 31% over the same period in 2002 to \$9.33 million. For the nine months ended September 30, 2003, the Company reported a net loss of \$8.14 million, or \$0.56 per basic and diluted share, compared to a net loss of \$7.50 million, or \$0.53 per basic and diluted share for the nine months ended 2002.

"Based on record revenues for the third quarter, we recently raised revenue guidance and now anticipate a second consecutive year with approximately 60% revenue growth," said Christopher J. Calhoun, President and Chief Executive Officer of MacroPore Biosurgery. "Based on our projections, we intend to achieve our first full year of profitability in 2003 and expect to maintain a strong and stable cash position through 2004. Finally, both our biomaterials and cell therapeutics programs achieved several research and clinical milestones, which provide an optimistic outlook for near-term and medium-term revenue growth respectively."

Growth in the orthopedic and spinal implant products will be driven principally by three factors over the next year. These factors are:

- Continued rapid adoption among surgeons looking for an alternative to metal implants;
- Potential use as a combination product with Medtronic's INFUSE™ bone graft protein; and
- Introduction of the BoomerangTM implants as product line enhancements in the fourth quarter of 2003 indicated for maintaining the position of weak bony tissue.

In addition, revenue growth for the thin film products will be achieved from expanded FDA approvals for marketing claims, including the two received in the third quarter of 2003, expanded claims the company anticipates for 2004 and shifting toward an independent distributor model.

Third quarter 2003 highlights include:

- FDA clearance of expanded marketing claims for SurgiWrap for the minimization of soft tissue attachment to SurgiWrap in case of contact with the surrounding viscera (all internal organs);
- FDA marketing clearance for CardioWrapTM pericardial film, a bioresorbable film indicated for the repair of the pericardium;
- Completion of a six month assessment evaluating the performance of the new 'Faster Resorbing Polymer' bioresorbable implant system, as part of a 12 month clinical evaluation that may result in a \$5 million milestone payment from Medtronic;
- Initiated a multi-center preclinical study to evaluate our cell therapy system as a treatment for myocardial infarction;
- Initiated data compilation for an early 2004 510K application for our cell therapy system; and
- Expansion of the company's intellectual property for both the biomaterials and cell therapeutics programs.

Guidance

Revenue guidance was recently raised from \$12.0-\$14.0 million to \$14.0-\$14.5 million for the full year 2003. This was principally the result of revenue growth from the orthopedic and spinal implant products.

For 2004, MacroPore Biosurgery is projecting total revenues between \$19 and \$22 million. Specifically, \$15 to \$16 million is projected to be derived from orthopedic and spinal implant products, \$3 to \$5 million derived from thin films, and up to \$1 million derived from other sources.

This guidance is based on internal growth projections, discussions with our partner Medtronic Sofamor-Danek and current clinical development timelines.

Conference call information

MacroPore Biosurgery will host a conference call today at 4:30 pm CET or 7:30 am PDT (California time), to discuss the results. This conference call may be accessed from the investor relations section of the Company's website, www.macropore.com. The audio replay will be archived for 24 hours following the call and may be accessed by dialing +49 (0) 69 58 99 90 568 (PIN: 132191#). The third quarter final report will be filed on November 14, 2003.

About MacroPore Biosurgery, Inc.

MacroPore Biosurgery, Inc. is a leader in the design, development, and production of bioresorbable polymer implants for use in a variety of surgical applications and is pioneering advancement of regenerative medicine for surgical therapies using adult stem cells derived from a patient's own adipose (fat) tissue. Some products designed for use in spine, neurosurgical, and musculoskeletal surgeries are distributed by Medtronic, while other products designed for use with soft tissue are distributed through our direct US sales force and an international distribution network. MacroPore Biosurgery is traded on the Frankfurt Stock Exchange in Germany under the symbol 'XMP'. For further information please visit the web site www.macropore.com.

Cautionary Statement Regarding Forward-Looking Statements

This press release contains certain 'forward-looking statements.' All statements, other than statements of historical fact, that address activities, events or developments that we intend, expect, project, believe or anticipate will or may occur in the future are forward-looking statements. Such statements are based upon certain assumptions and assessments made by our management in light of their experience and their perception of historical trends, current conditions, expected future developments and other factors they believe to be appropriate. The forward-looking statements included in this press release are also subject to a number of material risks and uncertainties, including but not limited to the risks described under "Risk Factors" in the Management's Discussion and Analysis of Financial Conditions and Results of Operations in our annual report filed with the United States Securities and Exchange Commission on Form 10-K in March 2003. These risks include, but are not limited to, our status as an emerging company, our history of losses, our reliance on Medtronic to distribute our products, our recent strategic decisions which change our risk profile, and difficulties maintaining trade secrets and obtaining patent protection for our products. We encourage you to read those descriptions carefully. We caution investors not to place undue reliance on the forward-looking statements contained in this press release. These statements, like all statements in this press release, speak only as of the date of this release (unless another date is indicated) and we undertake no obligation to update or revise the statements except as required by law. Such forward-looking statements are not guarantees of future performance and actual results will likely differ, perhaps materially, from those suggested by such forward-looking statements.

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MACROPORE BIOSURGERY, INC.

CONSOLIDATED CONDENSED BALANCE SHI	EETS			
	September 30, 2003 (Unaudited)		December 31, 2002	
Assets		(character)		
Current assets:				
Cash and cash equivalents	\$	2,349,000	\$	5,108,000
Short-term investments, available-for-sale		14,540,000		19,875,000
Accounts receivable, net of allowance for doubtful accounts of \$62,000 and \$50,000 in 2003 and				
2002, respectively		2,823,000		1,238,000
Inventories		987,000		1,150,000
Other current assets		654,000		843,000
Total current assets		21,353,000		28,214,000
Property and equipment, net		3,680,000		3,626,000
Other assets		133,000		562,000
Goodwill and intangibles, net		7,086,000		6,917,000
Goodwin and mangioles, net		7,000,000		0,917,000
Total assets	\$	32,252,000	\$	39,319,000
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable and accrued expenses	\$	3,645,000	\$	2,521,000
Current portion of long-term obligations		566,000		410,000
Total current liabilities		4,211,000		2,931,000
Total Cartest Adomaco		.,=11,000		2,551,555
Deferred gain on sale of assets, related party		8,243,000		9,623,000
Long-term obligations, less current portion		829,000		770,000
Total liabilities		13,283,000		13,324,000
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Stockholders' equity: Preferred stock, \$0.001 par value; 5,000,000 shares authorized; -0- shares issued and outstanding in 2003 and 2002		_		_
Common stock, \$0.001 par value; 95,000,000 shares authorized; 16,777,581 and 16,646,664				
shares issued and 14,745,599 and 14,527,681 shares outstanding in 2003 and 2002, respectively		17,000		17,000

Additional paid-in capital	74,793,000	74,730,000
Unearned compensation	(216,000)	(1,057,000)
Accumulated deficit	(48,240,000)	(40,102,000)
Treasury stock, at cost	(7,448,000)	(7,752,000)
Accumulated other comprehensive income	63,000	159,000
Total stockholders' equity	18,969,000	25,995,000
Total liabilities and stockholders' equity	\$ 32,252,000 \$	39,319,000

MACROPORE BIOSURGERY, INC. CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS) (UNAUDITED)

	For the Three Months En	nded September 30, 2002	For the Nine Months En	ded September 30, 2002
Revenues:				
Sales to related party	\$4,230,000	\$3,073,000	\$8,421,000	\$6,870,000
Sales to third parties	265,000	229,000	906,000	249,000
	4,495,000	3,302,000	9,327,000	7,119,000
Cost of revenues:				
Cost of revenues (including stock based compensation expense of \$3,000 and \$4,000 for the three months ended September 30, 2003				
and 2002, respectively; \$9,000 and \$11,000 for the nine months				
ended September 30, 2003 and 2002, respectively)	1,438,000	951,000	2,864,000	2,482,000
Inventory provision	1,430,000	1,395,000	2,004,000	1,395,000
inventory provision		1,555,000		1,555,000
Gross profit	3,057,000	956,000	6,463,000	3,242,000
Gross profit	3,037,000	330,000	0,405,000	3,242,000
Operating expenses:				
Research and development, excluding stock based compensation				
expense of \$19,000 and \$25,000 for the three months ended				
September 30, 2003 and 2002, respectively; \$58,000 and \$185,000				
for the nine months ended September 30, 2003 and 2002,				
respectively	2,552,000	1,271,000	6,810,000	4,144,000
Sales and marketing, excluding stock based compensation expense of				
\$17,000 and \$33,000 for the three months ended September 30,				
2003 and 2002, respectively; \$53,000 and \$100,000 for the nine				
months ended September 30, 2003 and 2002, respectively	1,055,000	1,082,000	3,354,000	2,779,000
General and administrative, excluding stock based compensation				
expense of \$411,000 and \$215,000 for the three months ended				
September 30, 2003 and 2002, respectively; \$761,000 and \$732,000 for the pine months ended September 20, 2003 and 2002				
for the nine months ended September 30, 2003 and 2002, respectively	1,426,000	899,000	3,425,000	2,867,000
Stock based compensation (excluding cost of revenues stock based	1,420,000	055,000	3,423,000	2,007,000
compensation)	447,000	273,000	872,000	1,017,000
Restructuring charge	458,000		458,000	
Equipment impairment charge	_	370,000	_	370,000
		<u> </u>		<u> </u>
Total operating expenses	5,938,000	3,895,000	14,919,000	11,177,000
Other income (expense):				
Interest income	88,000	207,000	335,000	844,000
Interest and other (expenses) income, net	(6,000)	(158,000)	(17,000)	(223,000)
Equity loss in investment		(76,000)		(189,000)
Net loss	(2,799,000)	(2,966,000)	(8,138,000)	(7,503,000)
Other comprehensive income (loss)-unrealized holding (loss) gain	(44,000)	8,000	(96,000)	(164,000)
Comprehensive loss	\$(2,843,000)	\$(2,958,000)	\$(8,234,000)	\$(7,667,000)
Basic and diluted net loss per share	\$(0.19)	\$(0.21)	\$(0.56)	\$(0.53)
Shares used in calculating basic and diluted net loss per share	14,605,273	13,808,269	14,557,167	14,244,491
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