

FOR IMMEDIATE RELEASE

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Genetronics Reports 2004 Financial Results

SAN DIEGO, CA – March 15, 2005 – Genetronics Biomedical Corporation (AMEX: GEB) today reported financial results for the quarter and year ended December 31, 2004.

Total revenue for the quarter and year ended December 31, 2004, was \$542,738 and \$1,167,099, respectively, compared to \$38,077 and \$80,529 for the same periods in 2003. Revenue consisted of license fees, milestone payments, and amounts received from collaborative research and development arrangements and grants.

Total expenses for the quarter and year ended December 31, 2004, were \$4,337,154 and \$12,430,239, respectively, compared to \$1,803,481 and \$6,668,774 for the same periods in 2003.

The net loss attributable to common stockholders for the quarter and year ended December 31, 2004, was \$4,012,846, or \$0.22 per share, and \$11,705,336, or \$0.66 per share, respectively, compared with a net loss attributable to common stockholders of \$13,727,673, or \$0.91 per share, and \$22,875,437, or \$1.72 per share, for the same periods in 2003.

“2004 was a year of transformation for Genetronics. We initiated two Phase III and two pre-marketing clinical studies in oncology; appointed additional highly experienced executives to the board of directors and management team; completed a \$10.9 million funding; and established license agreements with Merck and Vical,” stated Avtar Dhillon, MD, president and CEO. “With momentum in both our cancer and DNA delivery programs we look forward to a dynamic 2005 that will include the initiation of additional clinical studies, release of new data, and important steps toward commercialization and partnering of our technology.”

Revenue

License fees and milestone payment revenue for the quarter and year ended December 31, 2004, was \$88,971 and \$214,351, respectively, compared to \$1,469 and \$5,882 for the same periods in 2003. The increase in license fees for the quarter and year ended December 31, 2004, as compared to the same periods in 2003, was mainly due to license revenue recognized from the collaboration and licensing agreement with Merck signed in May 2004 to develop and commercialize our MedPulser DNA Delivery System, which is being developed for use with certain of Merck’s DNA vaccine programs. Under this agreement, we will receive payments if certain product development milestones are achieved. The upfront payment received from Merck in 2004 and prospective future milestone payments will be amortized over the term of the agreement. Royalties are payable on sales utilizing the device developed under this agreement.

Revenue recorded under collaborative research and development arrangements for the quarter and year ended December 31, 2004, was \$446,610 and \$945,591, respectively, compared to \$36,608 and \$74,647 for the same periods in 2003. The increase in revenue from collaborative research and development arrangements during the quarter and year ended December 31, 2004, as compared to the same periods in 2003, was primarily due to revenue recognized from the collaboration and licensing agreements with Merck signed in May 2004.

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During 2004, we were awarded a grant by the National Institutes of Health to conduct research in the field of vascular gene therapy. The \$100,000 Phase I grant, entitled "Ex vivo venous gene delivery by pulsed electric fields," was awarded through the Small Business Innovative Research (SBIR) program and may be followed, upon evaluation, by a Phase II award of up to \$1.0 million.

Expenses

Research and development expenses for the quarter and year ended December 31, 2004 was \$2,586,005 and \$6,548,599, respectively, compared to \$598,508 and \$2,146,909 for the same periods in 2003. The increase in research and development expenses for the quarter and year ended December 31, 2004, as compared to the same periods in 2003, was primarily due to an increase in clinical trial expenses. These clinical trial expenses include the use of a clinical research organization hired in association with our clinical trials and costs associated with the use of outside clinical and regulatory consultants. The remainder of the increase was mainly due to increased personnel expenses to support internal efforts related to product development and clinical trials, increased external research expenses, and additional travel and other consulting expenses associated with our clinical trials.

We initiated two Phase III head and neck clinical trials during 2004 in the United States and Europe. These trials compare our electroporation therapy to surgery using a primary endpoint of function preservation and secondary endpoints of local tumor control, disease free survival, and overall survival. In addition, we initiated two European pre-marketing trials for skin cancer and head and neck cancer to gather additional clinical and pharmacoeconomic data. Due to the initiation of the clinical trials, we anticipate research and development expenses from clinical and regulatory activities to increase in fiscal 2005.

General and administrative expenses, which include business development expenses, for the quarter and year ended December 31, 2004, was \$1,843,607 and \$6,129,195, respectively, compared to \$1,247,538 and \$4,566,882 for the same periods in 2003. The increase in general and administrative expenses for the quarter and year ended December 31, 2004, as compared to the same periods in 2003, was mainly due to increased consulting and legal expenses, increased stock option expenses pursuant to the issuance of stock options for non-employee consultants, and increased personnel costs. There were also significant external consulting and accounting-related expenses in 2004 related to the implementation of internal control over financial reporting requirements under Section 404 of the Sarbanes-Oxley Act of 2002.

Net Loss Attributable to Common Stockholders

The decrease in the net loss for the quarter and year ended December 31, 2004, as compared to the same period in 2003, resulted from higher revenue from license fees, milestone payments, and collaborative research and development arrangements. In addition, during the year ended December 31, 2003, in connection with the sale of our Series A and B preferred stock, we recorded imputed dividend charges of \$6,045,799 and \$11,807,144, respectively, related to the beneficial conversion feature of this preferred stock.

Capital Resources

We ended 2004 with cash and cash equivalents of \$17,889,797 and working capital of \$13,036,685. As of December 31, 2003, we had cash and cash equivalents of \$13,460,446 and working capital of \$12,593,153.

Outlook

Going forward, we have the following business objectives:

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1. Conclude patient enrollment in phase III recurrent and second primary head and neck cancer studies in the U.S. and the European Union (EU);
2. Conclude the European pre-marketing clinical study in new and recurrent primary squamous cell carcinoma of the head and neck (SCCHN) to support the commercialization of our MedPulser® Electroporation Therapy System in the EU;
3. Conclude the European pre-marketing clinical study for new and recurrent primary skin cancers to support commercialization of the MedPulser Electroporation Therapy System;
4. Initiate clinical studies for additional indications such as breast and pancreas cancers (a Phase I pancreatic cancer study was announced on March 1, 2005);
5. Obtain reimbursement codes for the MedPulser Electroporation Therapy System for the treatment of head and neck or cutaneous cancers in the EU;
6. Enter into additional industry relationships for the use of our electroporation technology in the delivery of specific genes;
7. Initiate additional Phase I human clinical studies involving the use of electroporation with DNA, most likely in the areas of infectious diseases and cancer; and
8. Conclude a strategic license with a partner in the U.S. and/or EU for marketing rights to the MedPulser Electroporation Therapy System in oncology.

About Genetronics Biomedical Corporation

Genetronics Biomedical Corporation is a late stage biomedical company focused on building an oncology franchise based on its proprietary electroporation therapy. The therapy targets a significant unmet clinical need: the selective killing of cancer cells and local ablation of solid tumors while preserving healthy tissue. The company is moving its lead product, the MedPulser® Electroporation Therapy System, through pre-sales studies for head and neck as well as skin cancers in Europe, where it has CE Mark accreditation, and a U.S. Phase III pivotal study for recurrent head and neck cancer. Merck, Vical, Chiron, the U.S. Navy and other partners are also employing Genetronics' electroporation technology, which facilitates local delivery of drugs and nucleic acids, in their development of novel DNA vaccines and gene therapies. Genetronics is a leader in the application of electroporation for human therapies, with over 240 patents worldwide that are issued, allowed or pending. More information can be obtained at www.genetronics.com.

This press release contains certain forward-looking statements relating to Genetronics' plans to develop its electroporation drug and gene delivery technology and to maximize shareholder value. Actual events or results may differ from Genetronics' expectations as a result of a number of factors, including the uncertainties inherent in clinical trials and product development programs, evaluation of potential opportunities, the level of corporate expenditures, the assessment of Genetronics' technology by potential corporate partners, capital market conditions, and other factors set forth in the Genetronics' Annual Report on Form 10-K for the 12-month period ended December 31, 2004, and other regulatory filings. There can be no assurance that any product in the Genetronics product pipeline will be successfully developed or manufactured, or that final results of clinical studies will be supportive of regulatory approvals required to market licensed products.

GENETRONICS BIOMEDICAL CORPORATION
CONSOLIDATED BALANCE SHEETS

	December 31, 2004	December 31, 2003
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 17,889,797	\$ 13,460,446
Accounts receivable	424,157	175,000
Prepaid expenses and other	124,723	116,526
Total current assets	18,438,677	13,751,972
Fixed assets, net	155,253	175,902
Patents and other assets, net	2,357,572	2,301,116
Total assets	\$ 20,951,502	\$ 16,228,990
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	\$ 2,155,592	\$ 787,087
Accrued clinical trial expenses	2,195,816	40,568
Deferred revenue	1,050,584	331,164
Total current liabilities	5,401,992	1,158,819
Deferred rent	-	22,536
Total liabilities	5,401,992	1,181,355
Stockholders' equity:		
Preferred stock	2	1
Common stock	18,420	15,920
Additional paid-in capital	103,438,408	91,233,698
Accumulated deficit	(87,907,320)	(76,201,984)
Total stockholders' equity	15,549,510	15,047,635
Total liabilities and stockholders' equity	\$ 20,951,502	\$ 16,228,990

All applicable share and per share amounts have been adjusted to give effect to the one-for-four reverse stock split of our common stock on September 13, 2004.

GENETRONICS BIOMEDICAL CORPORATION
**CONSOLIDATED STATEMENTS OF
OPERATIONS**

	<u>Three Months Ended December 31,</u>		<u>Year Ended December 31,</u>	
	<u>2004</u>	<u>2003</u>	<u>2004</u>	<u>2003</u>
	(unaudited)			
Revenue:				
License fee and milestone payments	\$ 88,971	\$ 1,469	\$ 214,351	\$ 5,882
Revenue under collaborative research and development arrangements	446,610	36,608	945,591	74,647
Grants	7,157	-	7,157	-
Total revenue	<u>542,738</u>	<u>38,077</u>	<u>1,167,099</u>	<u>80,529</u>
Expenses:				
Research and development	2,586,005	598,508	6,548,599	2,146,909
General and administrative	1,843,607	1,247,538	6,129,195	4,566,882
Interest income, net	(92,458)	(42,565)	(247,555)	(45,017)
Total expenses	<u>4,337,154</u>	<u>1,803,481</u>	<u>12,430,239</u>	<u>6,668,774</u>
Loss from continuing operations	<u>(3,794,416)</u>	<u>(1,765,404)</u>	<u>(11,263,140)</u>	<u>(6,588,245)</u>
Discontinued operations:				
Gain on disposal and other, net	-	-	290,209	2,034,078
Loss from operations	-	-	-	(110,740)
Net loss	<u>(3,794,416)</u>	<u>(1,765,404)</u>	<u>(10,972,931)</u>	<u>(4,664,907)</u>
Imputed and declared dividends on preferred stock	<u>(218,430)</u>	<u>(11,962,269)</u>	<u>(732,405)</u>	<u>(18,210,530)</u>
Net loss attributable to common stockholders	<u>\$ (4,012,846)</u>	<u>\$ (13,727,673)</u>	<u>\$ (11,705,336)</u>	<u>\$ (22,875,437)</u>
Amounts per common share – basic and diluted:				
Loss from continuing operations	\$ (0.21)	\$ (0.12)	\$ (0.64)	\$ (0.49)
Income from discontinued operations, net	-	-	0.02	0.14
Imputed and declared dividends on preferred stock	(0.01)	(0.79)	(0.04)	(1.37)
Net loss attributable to common stockholders	<u>\$ (0.22)</u>	<u>\$ (0.91)</u>	<u>\$ (0.66)</u>	<u>\$ (1.72)</u>
Weighted average number of common shares - basic and diluted	<u>18,341,032</u>	<u>15,122,008</u>	<u>17,623,559</u>	<u>13,316,624</u>

All applicable share and per share amounts have been adjusted to give effect to the one-for-four reverse stock split of our common stock on September 13, 2004.