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NEWS RELEASE
TSX Venture Exchange: NVC

NEOVASC INC. REPORTS FINANCIAL RESULTS FOR 2010 YEAR-END

--Grew Annual Revenues 45% Year-Over-Year to $4.36 Million--

--Reduced Year-Over-Year Annual Operating Expenses by 30% and Net Loss by Over 40%--

April 27, 2011 - Vancouver, BC, Canada - Neovasc Inc. (TSXV: NVC), today announced financial results for the year ended December 31, 2010.

"2010 was a very successful year for Neovasc, marked by robust revenue growth and major progress in advancing our Neovasc Reducer™ product," commented Alexei Marko, CEO of Neovasc. "We grew our biocompatible tissue products and services business by 45% during the year and positioned it for continued growth as new products incorporating our materials, such as transcatheter heart valves, are launched into the marketplace. We achieved substantial progress in advancing our Neovasc Reducer product for refractory angina, launching our COSIRA trial to support a CE mark application in Europe, presenting a 'live case' at TCT 2010 and reporting positive three-year follow-up results from the initial clinical trial of the Reducer at the American College of Cardiology meeting early in the year. The Company's tight strategic and operational focus also enabled us to significantly reduce operating expenses while still effectively advancing our core programs and building shareholder value."

Mr. Marko continued, "Our progress has not gone unnoticed. Neovasc was recently named a 2011 top 50 company by the Toronto Venture Exchange, getting us off to a good start in the current year. We are targeting continued strong growth in our tissue business in 2011 and anticipate growing demand as our customers obtain approval to launch their products in major markets. We expect to finish the COSIRA trial this year and plan to file a CE mark application for the Neovasc Reducer in early 2012. In addition, we are now actively exploring opportunities for new pipeline products. We also began to raise our profile by presenting at selected investor and industry events during 2010, and we intend to increase those efforts going forward."

"With our tissue business now operating as cash-flow positive and a declining burn rate, we believe that Neovasc is in a strong position to build for the future'" commented Chris Clark, CFO of Neovasc. "We may contemplate a small financing in 2011, but only if we have identified a promising new pipeline project that warrants an increase in development investment."

2010 Highlights
In September, the Neovasc Reducer product was featured in a "live case" broadcast to the main arena of the 22nd Annual Transcatheter Cardiovascular Therapeutics scientific symposium (TCT 2010). In the broadcast, the principal investigator in Neovasc's COSIRA (Coronary Sinus Reducer for Treatment of Refractory Angina) trial successfully implanted a Neovasc Reducer product in the coronary sinus of a patient suffering from refractory angina. The live case was witnessed by a panel of distinguished interventional cardiologists who voiced positive comments about the potential of the Reducer to become a promising new treatment option for patients with refractory angina.

Earlier in September, Neovasc announced that the first patients had been enrolled in its COSIRA trial designed to assess the clinical efficacy of the Neovasc Reducer product for the treatment of refractory angina. The COSIRA trial is a multicenter, sham-controlled, randomized, double-blinded study that is expected to enroll up to 124

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patients. The primary endpoint is efficacy in reducing angina symptoms after six months. The trial includes sites in Europe and Canada. If successful, the COSIRA trial is expected to provide the data needed to seek CE mark designation for the Neovasc Reducer in Europe and also to support marketing efforts when the product is launched. The study will also serve as a pilot trial providing useful information for the design of the US-IDE trial that will be required to obtain FDA approval for the Reducer product.

At the American College of Cardiology 2010 annual meeting in March, Neovasc researchers presented results from the follow-up phase of the initial clinical trial of its Neovasc Reducer product. The data showed that three years after implantation of the Reducer, the majority of patients continued to show measurable improvement in angina symptoms. The results also confirmed that the objective and subjective improvements in angina scores and in ischemia parameters that were seen six months after implantation were maintained and continued to improve for the entire three-year follow-up period. The study showed that implantation of the Reducer in the hearts of refractory angina patients is feasible and safe, with no reported deaths or other adverse events attributed to the Reducer.

In February, Neovasc announced that it had received Canadian Food Inspection Agency (CFIA) approval to export its processed pericardial tissue products to Europe as an "intermediate product." This approval allows European customers to import Neovasc's porcine and bovine pericardial tissue materials for use in the manufacture of their own medical devices. Neovasc is the only supplier to have CFIA intermediate product approval for implantable pericardial tissue. The approval is expected to facilitate the commercialization of new products that incorporate Neovasc's proprietary tissue, such as minimally invasive heart valves.

Results of Operations

Results for the year ended December 31, 2010 and 2009 follow:

Net Losses
The consolidated net loss for the year ended December 31, 2010 was $2,630,885 or $0.07 basic loss per share, as compared with a net loss of $4,476,284 or $0.18 basic loss per share for the comparable period in 2009.

Revenues
Revenues increased 45% year-over-year to $4,358,825 for the year ended December 31, 2010 from $3,000,047 for the same period in 2009.

Product sales for the year ended December 31, 2010 were $2,149,691, compared to $1,819,722 in the same period of 2009, representing an increase of 18% as sales of Neovasc's Peripatch tissue products continued to grow at a steady rate.

Contract manufacturing revenues increased from $302,011 in 2009 to $850,613 in 2010, an increase of 182%. This strong growth is the result of increased activity as our customers developing products move further down the regulatory path. We anticipate that this revenue stream may increase further in the future as our customers' products are commercialized.

Revenues from consulting services for the year ended December 31, 2010 were $1,358,521, compared to $878,314 in the same period in 2009, representing an increase of 55%. Because consulting service revenues are contract-driven, they can fluctuate from quarter to quarter as current projects are completed and new projects start. The Company believes that the underlying trend is for moderate year-over-year growth in its consulting service business.

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Cost of Sales
The cost of sales for the year ended December 31, 2010 was $2,614,919, as compared to $1,404,507 in the comparable period in 2009. The overall gross margin for 2010 was 40%, compared to the 53% gross margin reported in 2009.

The decline in gross margin during 2010 reflects the impact of exchange rates and a shift in product mix. In the year ended December 31, 2010, 96% of the Company's sales were denominated in U.S. and European Union currency. A strengthening Canadian dollar has impacted the revenues and margins generated from these foreign currency-denominated sales. In addition, in the current year there has been a shift in the product mix towards the Company's lower margin products. Neovasc is exploring a number of initiatives aimed at strengthening margins going forward, including implementing further manufacturing efficiencies, reviewing pricing strategies for certain products and focusing on expanding sales of such higher margin product lines as custom tissue for transcatheter heart valves and related manufacturing services.

Expenses
Total expenses for the year ended December 31, 2010 were $4,176,501, as compared to $5,848,916 for the year in 2009, representing a decrease of $1,672,415 or 29%.

Sales and marketing expenses declined 71% to $190,743 for the year ended December 31, 2010, from $666,323 for the same period in 2009. The Company continues to minimize sales and marketing costs while it focuses on growing its business-to-business revenue streams.

General and administrative expenses were $2,165,070 for the year ended December 31, 2010 as compared to $2,494,661 for the same period of 2009, representing a decrease of 13%. These decreases reflect the Company's tighter business focus and ongoing implementation of rigorous cost-cutting measures.

Product development and clinical trial expenses were $1,820,688 for the year ended December 31, 2010 as compared to $2,687,932 for the same period of 2009, representing a decrease of 32%. The principal development project ongoing in 2010 was the Neovasc Reducer COSIRA clinical trial. There were also a number of new internal projects started late in 2010. These new projects are currently at the proof-of-concept stage.

Amortization and Other Expenses
Amortization and other expenses for the year ended December 31, 2010 were $198,290 as compared to amortization and other expenses of $222,908 for the same period in 2009. The main variance was a decrease of $78,481 in amortization expense as all the remaining assets in Neovasc's Israeli operations were amortized to zero in 2009.

Liquidity and Capital Resources
The Company finances its operations and capital expenditures with cash generated from operations, lines of credit, long-term debt and equity financings. At December 31, 2010, the Company had cash and cash equivalents of $1,275,747, as compared to cash and cash equivalents of $111,368 at December 31, 2009. In addition, at December 31, 2010 the Company had restricted cash related to a security on long-term debt of $50,000 (December 31, 2009: $50,000) included in long-term assets.

At December 31, 2010 the Company had working capital of $1,752,712 as compared to a negative working capital of $28,502 at December 31, 2009. The increase in working capital during 2010 was predominantly due to the net impact of an increase in cash due to the exercise of warrants in the fourth quarter; an increase in accounts receivable due to increased revenues in the fourth quarter and a decrease in accounts payable as residual outstanding long term debts were settled over the course of the year.

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Cash used in operations was $2,605,240 for the year ended December 31, 2010, as compared to $4,275,925 for the same period in 2009. The decrease in cash usage for the year ended December 31, 2010 as compared to the same period of 2009 is primarily the result of the Company's increased sales and decreased operating expenses.

Net cash invested in capital assets was $108,185 for the year ended December 31, 2010 compared to $51,281 in 2009. Neovasc used most of the capital investment funds in 2010 to expand its clean room and manufacturing facilities.

Net cash provided by financing activities was $3,877,804 for the year ended December 31, 2010, compared to cash provided of $1,940,135 in the same period of 2009.

On February 19, 2010, the Company completed a non-brokered private placement of 5,691,658 units at the price of $0.27 per unit for aggregate gross proceeds of $1,536,748. Each unit consists of one common share of Neovasc stock and one-half of one common share purchase warrant of Neovasc stock. Each whole warrant will entitle the holder thereof to purchase one common share of Neovasc stock at the exercise price of $0.40 per share for a period of one-year after the closing date of the offering. Share issue costs were $25,607.

On April 23, 2010, the Company issued 4,635,114 common shares upon the exercise of warrants issued as part of the Company's April 2009 financing. Proceeds from the exercise of the 4,635,114 warrants amounted to $1,390,534. The remaining 126,788 warrants expired on April 23, 2010.

On November 8, 2010, the Company issued 2,519,538 common shares upon the exercise of warrants issued as part of the Company's February 2010 financing. Proceeds from the exercise of the 2,519,538 warrants amounted to $1,007,815. The remaining 326,293 warrants were exercised on January 17, 2011 and February 15, 2011.

Subsequent events

On January 17, 2011 and on February 15, 2011 respectively, 197,922 and 128,371 warrants were exercised for an equivalent number of common shares of the Company, generating proceeds of $79,169 and $51,348.

On January 26, 2011 the Company issued 1,293,000 options to its board of directors and management. The options have an exercise price of $1.00 and expire five years after the grant date. Of these options 415,000 vested immediately and 878,000 will vest on December 31, 2011, upon management achieving certain performance milestones established by the board of directors.

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Neovasc Inc.
Consolidated Balance Sheets
As at December 31

		2010		2009
ASSETS				
CURRENT				
Cash	**$**	**1,275,747**	$	111,368
Accounts receivable		**661,999**		442,540
Inventory		**469,744**		404,309
Prepaid expenses		**33,729**		15,771
		2,441,219		973,988
RESTRICTED CASH EQUIVALENTS		**50,000**		50,000
PROPERTY AND EQUIPMENT		**1,224,481**		1,249,326
	$	**3,715,700**	$	2,273,314
LIABILITIES				
CURRENT				
Accounts payable and accrued liabilities	**$**	**647,877**	$	962,512
Current portion of long-term debt		**40,630**		39,978
		688,507		1,002,490
LONG-TERM DEBT		**318,872**		357,097
		1,007,379		1,359,587
SHAREHOLDERS' EQUITY				
Share capital		**64,841,468**		60,648,625
Contributed surplus		**4,863,985**		4,631,349
Deficit		**(66,997,132)**		(64,366,247)
		2,708,321		913,727
	$	**3,715,700**	$	2,273,314

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Neovasc Inc.

Consolidated Statements of Operations, Comprehensive Loss and Deficit

For the years ended

		2010		2009
SALES				
Product sales	**$**	**2,149,691**	$	1,819,722
Contract manufacturing		**850,613**		302,011
Consulting services		**1,358,521**		878,314
		4,358,825		3,000,047
COST OF SALES		**2,614,919**		1,404,507
GROSS PROFIT		**1,743,906**		1,595,540
EXPENSES				
Selling		**190,743**		666,323
General and administration		**2,165,070**		2,494,661
Product development and clinical trials		**1,820,688**		2,687,932
Amortization		**123,118**		201,599
		4,299,619		6,050,515
LOSS BEFORE OTHER INCOME (EXPENSES)		**(2,555,713)**		(4,454,975)
OTHER INCOME (EXPENSES)				
Interest income		**466**		12,214
Interest on long-term debt		**(11,567)**		(10,245)
Loss on disposal of property and equipment		**(9,912)**		-
Loss on foreign exchange		**(54,159)**		(23,278)
		(75,172)		(21,309)
NET LOSS AND COMPREHENSIVE LOSS FOR THE YEAR		**(2,630,885)**		(4,476,284))
DEFICIT, BEGINNING OF THE YEAR		**(64,366,247)**		(59,889,963)
DEFICIT, END OF THE YEAR	**$**	**(66,997,132)**	$	(64,366,247)
BASIC AND DILUTED LOSS PER SHARE	**$**	**(0.07)**	$	(0.18)
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING		**35,963,785**		24,978,476

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Neovasc Inc.
Consolidated Statements of Cash Flows
For the years ended

		2010		2009
OPERATING ACTIVITIES				
Net loss for the period	**$**	**(2,630,885)**	$	(4,476,284)
Items not affecting cash				
Amortization		**123,815**		201,599
Stock-based compensation		**510,102**		253,797
Loss on disposal of property and equipment		**9,912**		-
		(1,987,753)		(4,020,888)
Change in non-cash operating assets and liabilities				
Accounts receivable		**(219,459)**		27,660
Inventory		**(65,435)**		(62,745)
Prepaid expenses and other assets		**(17,958)**		36,858
Retirement assets		**-**		8,320
Accounts payable and accrued liabilities		**(314,635)**		(255,893)
Retirement liabilities		**-**		(8,964)
		(2,049,973)		(4,275,925)
INVESTING ACTIVITIES				
Proceeds from disposal of property and equipment		**5,790**		-
Purchase of property and equipment		**(113,975)**		(51,281)
		(108,185)		(51,281)
FINANCING ACTIVITIES				
Repayment of long-term debt		**(37,573)**		(42,172)
Proceeds from share issue, net of costs of $25,607		**1,511,141**		1,979,686
Proceeds from exercise of common share purchase warrants		**2,398,349**		-
Proceeds from exercise of stock options		**5,887**		2,621
		3,877,804		1,940,135
INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		**1,164,379**		(2,387,071)
CASH AND CASH EQUIVALENTS, BEGINNING OF THE YEAR		**111,368**		2,498,439
CASH AND CASH EQUIVALENTS, END OF THE YEAR	**$**	**1,275,747**	$	111,368
REPRESENTED BY:				
Cash		**1,273,555**		109,642
Cash equivalents		**2,192**		1,726
Cash and cash equivalents	**$**	**1,275,747**	$	111,368
SUPPLEMENTAL CASH FLOW INFORMATION				
Interest paid	**$**	**11,567**	$	10,245

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About Neovasc Inc.
Neovasc Inc. is a specialty vascular device company that develops, manufactures and markets medical devices for the rapidly growing vascular and surgical marketplace. The Company's current products include the Neovasc Reducer™, a novel product in development to treat refractory angina, as well as a line of advanced biological tissue technologies that are used to enhance surgical outcomes and as key components in a variety of third-party medical products such as percutaneous heart valves. For more information, visit: www.neovasc.com.

Statements contained herein that are not based on historical or current fact, including without limitation statements containing the words "anticipates," "believes," "may," "continues," "estimates," "expects," and "will" and words of similar import, constitute "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such factors include, among others, the following: general economic and business conditions, both nationally and in the regions in which the Company operates; history of losses and lack of and uncertainty of revenues, ability to obtain required financing, receipt of regulatory approval of product candidates, ability to properly integrate newly acquired businesses, technology changes; competition; changes in business strategy or development plans; the ability to attract and retain qualified personnel; existing governmental regulations and changes in, or the failure to comply with, governmental regulations; liability and other claims asserted against the Company; and other factors referenced in the Company's filings with Canadian securities regulators. Although the Company believes that expectations conveyed by the forward-looking statements are reasonable based on the information available to it on the date such statements were made, no assurances can be given as to the future results, approvals or achievements. Given these uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. The Company does not assume the obligation to update any forward-looking statements except as otherwise required by applicable law.

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