



CYTOMEDIX ANNOUNCES OPTION EXTENSION WITH TOP 20 GLOBAL PHARMACEUTICAL COMPANY AND INTENT TO PROCEED TO LICENSE AGREEMENT FOR THE AUTOLOGEL SYSTEM

Cytomedix to Receive Additional \$2.5 Million Non-Refundable Payment

GAITHERSBURG, Md. (February 2, 2012) . Cytomedix, Inc. (OTC/BB: CMXI) (the Company), a leading developer of biologically active regenerative therapies for wound care, inflammation and angiogenesis, announced today the official extension of the exclusive option period under the previously announced letter agreement first disclosed on October 14, 2011 and subsequently updated in an announcement on January 3, 2012. In conjunction with the official option extension to June 30, 2012 announced today, Cytomedix will receive an additional \$2.5 million non-refundable payment, which is expected to be received on or before February 15, 2012.

The parties now intend to proceed to a formal negotiation of an exclusive license and supply agreement whereby the AutoloGel[®] System would be distributed through a dedicated, hospital-based sales force. The option holder has continued to request anonymity until such time as a definitive license and supply agreement is finalized and executed. The expectation remains that any agreement will incorporate a modest incremental upfront license payment, an attractive product development milestone payment related to the second-generation AutoloGel separation device, and a profit-sharing arrangement on future U.S.-based sales of the AutoloGel System in the chronic wound care market.

The Company will engage in additional knowledge transfer of clinical and marketing subject matter to the partner while continuing product development of the next generation AutoloGel separation device with a view towards submitting this proprietary separation enhancement for 501(k) approval to the FDA in the second quarter of 2012. During the interim license negotiation period, the potential partner expects to further shape its tactical product launch plans.

“We are especially pleased to extend the option period as it signifies that diligence on the part of our potential partner is complete and that all necessary corporate approvals to proceed are in place. We believe the potential product synergies within this specific hospital-based and technically-oriented sales force can meaningfully accelerate adoption of the AutoloGel System,” said Martin P. Rosendale, Chief Executive Officer of Cytomedix. “We have worked closely to jointly evaluate the significant market opportunity and look forward to the successful and timely conclusion of negotiations to a final agreement.”

About Cytomedix, Inc.

Cytomedix develops, sells and licenses regenerative biological therapies primarily for wound care, inflammation and angiogenesis. The Company markets the AutoloGel[®] System, a device for the production of autologous platelet rich plasma (aPRP) gel for use on a variety of exuding wounds; the Angel[®] Whole Blood Separation System, a blood processing device and disposable products used for the separation of whole blood into red cells, platelet poor plasma (aPPP) and PRP in surgical settings; and the activAT[®] Autologous Thrombin Processing Kit,

which produces autologous thrombin serum from PPP. The activAT® kit is sold exclusively in Europe and Canada, where it provides a completely autologous, safe alternative to bovine-derived products. The Company is pursuing a multi-faceted strategy to penetrate the chronic wound market with its products, as well as opportunities for the application of AutoloGel[®] and PRP technology into other markets such as hair transplantation and orthopedics while actively seeking complementary products for the wound care market. Additional information regarding Cytomedix is available at www.cytomedix.com.

Safe Harbor Statement

Statements contained in this communication not relating to historical facts are forward-looking statements that are intended to fall within the safe harbor rule for such statements under the Private Securities Litigation Reform Act of 1995. The information contained in the forward-looking statements is inherently uncertain, and Cytomedix's actual results may differ materially due to a number of factors, many of which are beyond Cytomedix's ability to predict or control, including among others, the successful negotiation and execution of the exclusive license and supply agreement during the exclusivity period. To the extent that any statements made here are not historical, these statements are essentially forward-looking. The Company uses words and phrases such as "believes", "forecasted," "projects," "is expected," "remain confident," "will" and/or similar expressions to identify forward-looking statements in this press release. Undue reliance should not be placed on forward-looking information. These forward-looking statements are subject to known and unknown risks and uncertainties that could cause actual events to differ from the forward-looking statements. More information about some of these risks and uncertainties may be found in the reports filed with the Securities and Exchange Commission by Cytomedix, Inc. Cytomedix operates in a highly competitive and rapidly changing business and regulatory environment, thus new or unforeseen risks may arise. Accordingly, investors should not place any reliance on forward-looking statements as a prediction of actual results. Except as is expressly required by the federal securities laws, Cytomedix undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, changed circumstances or future events or for any other reason. Additional risks that could affect our future operating results are more fully described in our U.S. Securities and Exchange Commission filings, including our Annual Report for the year ended December 31, 2010, filed with the SEC and other subsequent filings. These filings are available at <http://www.sec.gov>.

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