



FOR IMMEDIATE RELEASE

**CYTOMEDIX ANNOUNCES RECEIPT OF USPTO ALLOWANCE FOR
PATENT COVERING USE OF ALDH BRIGHT CELLS IN STROKE**

Represents First Allowed IP Claims in Stroke Indication

GAITHERSBURG, Maryland – April 3, 2014 – Cytomedix, Inc. (OTCQX: CMXI), a leading developer of biologically active regenerative therapies, and its wholly owned subsidiary, Aldagen, Inc., announced today the receipt of a notice of allowance for U.S. divisional patent application 12/966,401 with claims covering methods of use of ALDH bright cells in the treatment of neurological damage arising from an ischemic stroke.

The divisional application under the title *Stem Cell Populations and Methods of Use* was filed in December 2010. When issued upon the payment of applicable fees, the patent covering such methods will be an Aldagen and bright cell related patent that specifically covers an ischemic stroke indication. More specifically, the claims set covers methods of using a cell population of ALDH bright cells to ameliorate neural damage or degeneration while promoting neural cell regrowth. In addition to this allowed patent, Cytomedix's wholly owned subsidiary, Aldagen, presently owns or has licenses to six issued U.S. patents and six issued and one allowed patent in international jurisdictions covering methods of isolating bright cells, chemical composition of the reagent used in isolating bright cells and the composition of the bright cell population.

Martin Rosendale, Chief Executive Officer of Cytomedix, commented, "The USPTO allowance for this patent in a stroke indication is a positive development as we await top line data from the RECOVER Stroke study expected next month. We anticipate initial safety and efficacy data will be available in May and the monitoring and final data collection activities are proceeding as expected. Strong intellectual property protection is a critical component in all clinical development efforts and we believe the Aldagen IP estate is a valuable asset that can be exploited if the biological and therapeutic potential of the bright cell technology demonstrates clinically meaningful benefits."

About ALDH Bright Cells

ALDH Bright Cells are a population of autologous stem cells isolated from the patient's bone marrow using Cytomedix' proprietary Bright Cell technology. These adult stem cells express high levels of the intracellular enzyme aldehyde dehydrogenase (ALDH), an indicator of biological activity in heterogeneous early stage stem cells. Preclinical research suggests that ALDH Bright Cells may promote the repair of ischemic tissue damage by producing signaling molecules that are involved in cell homing, angiogenesis and neurogenesis. ALD-401 has shown improvements in motor function, in mitigation of

the decrease in brain volume, the reversal of decline in stroke-induced cell viability, and improved blood flow in the brain in ischemic stroke animal models.

The RECOVER Stroke Trial is a double-blind, multi-center, placebo-controlled trial designed to assess the safety and efficacy of ALD-401 to improve clinical outcomes in patients with unilateral, cerebral ischemic stroke with an NIH (National Institute of Health) stroke scale score of less than 22 when administered between 13 and 19 days post the ischemic event. The primary endpoint of the study is safety and the primary efficacy endpoint is neural function based on the modified Rankin Scale assessed at three months following treatment. Strokes remain one of the leading causes of long-term disability. With the majority of strokes occurring in patients 65 years and older, it is also a major financial burden for our healthcare system.

About Cytomedix

Cytomedix, Inc. is an autologous regenerative therapies company commercializing innovative platelet technologies for wound care. The Company markets the AutoloGel™ System, a device for the production of autologous platelet rich plasma ("PRP") gel for use on a variety of exuding wounds. For additional information please visit cytomedix.com.

Forward Looking Statements - Safe Harbor Disclaimer – Statements contained in this press release 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' actual results may differ materially due to a number of factors, many of which are beyond Cytomedix' ability to predict or control, including among many others, risks and uncertainties related to the outcome of the trial when clinical results become available in May 2014, the Company's ability to obtain such results within the anticipated timeframe, the Company's continuous ability to commercialize on any such technology going forward, the Company's ability to successfully execute its Angel and AutoloGel sales strategies, to achieve AutoloGel expected reimbursement rates in 2014, and thereafter, to successfully negotiate with physician offices as anticipated and to realize the anticipated sales growth from such treatments, the likelihood of a favorable CMS determination relating to the reimbursement rates for AutoloGel™, to meet its stroke trial enrollment rates, to successfully realize sales of the Angel Technology resulting in the royalty stream to the Company, the Company's ability to successfully integrate the Aidagen acquisition, the Company's ability to expand patient populations as contemplated, its ability to provide Medicare patients with access as expected, the Company's expectations of favorable future dialogue with potential strategic partners, and its ability to successfully manage contemplated clinical trials, to manage and address the capital needs, human resource, management, compliance and other challenges of a larger, more complex and integrated business enterprise, viability and effectiveness of the Company's sales approach and overall marketing strategies, commercial success or acceptance by the medical community, competitive responses, the Company's ability to raise additional capital and to continue as a going concern, and Cytomedix's ability to execute on its strategy to market the AutoloGel™ System as contemplated. 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, such that the language relating to, among others, the Company's expectations relating to the timing of the anticipated patent issuance, the effect such issuance may have on the Company and its operations, expectations relating to the timing of the RECOVER Stroke data study results, are deemed forward-looking statements. 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, 2012, as amended to date, and other subsequent filings. These filings are available at www.sec.gov.

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