



Positive Data Demonstrating AutoloGel Provides Rapid Improvement in Healing of Complex Chronic Wounds Published in *Advances in Skin and Wound Care*

Clinical response rate of 96.5% in all wounds within 2.2 weeks and 2.8 AutoloGel treatments

GAITHERSBURG, Md. (August 1, 2011) . Cytomedix, Inc. (OTC/BB: CMXI) (the Company), a leading developer of biologically active regenerative therapies for wound care, inflammation and angiogenesis, today announced that data demonstrating the Company's AutoloGel System's enhanced formulation of a near-physiological concentration of PRP gel provides rapid and consistent improvement in healing of chronic wounds was published in the August edition of the peer-reviewed journal, *Advances in Skin and Wound Care*, in an article entitled, "The Clinical Relevance of Treating Chronic Wounds with an Enhanced Near-Physiological Concentration of Platelet-Rich Plasma Gel." The article is available at http://journals.lww.com/aswcjournal/Abstract/2011/08000/The_Clinical_Relevance_of_Treating_Chronic_Wounds.6.aspx.

The multicenter registry database consisted of a general chronic wound population of 285 wounds with previous average wound duration of 48.2 weeks treated at 39 health care facilities. Wound etiologies included diabetic, pressure, or venous ulcers; dehisced, surgical, or traumatic wounds; and wounds of other etiologies. Clinical relevance was determined by analyzing outcomes in wounds that responded to treatment.

Key Study Findings

Of the 285 wounds, in a mean of 2.2 weeks (range: 0.4- 11) with an average of 2.8 PRP gel treatments (range: 1- 7):

- A positive clinical response occurred in 96.5% of wounds.
- Highly statistically significant improvements were reported in area and depth reduction.
- Deeper wounds healed at the same rate as more shallow wounds.
- Wound healing outcomes were consistent between Medicare beneficiaries and non-Medicare recipients.
- Wound healing outcomes were consistent between healthy and clinically ill patients and across different wound types.

Chronic wounds are wounds that fail to progress through the normal, orderly, and timely sequence of repair; or wounds that pass through the repair process without restoring anatomic and functional results.¹ Others suggest that a wound that does not

¹ Lazarus GS, Cooper DM, Knighton DR, et al. Definitions and guidelines for assessment of wounds and evaluation of healing. Arch Dermatol 1994;130:489-93.

completely heal after 30 days of standard medical treatment is chronic. When these wounds fail to respond to standard wound care, the longevity of care alone becomes very expensive. Additional events such as infection, hospitalization, and amputation add significantly to the cost. Unfortunately, management of vulnerable patients with wounds recalcitrant to standard care is a common clinical dilemma.

Commenting on these positive data, the lead author of the study, Jean M. de Leon, MD, Medical Director, Baylor Specialty Hospital, Dallas, Texas, concluded that, "application of an enhanced formulation of a near-physiological concentration of PRP gel provides rapid and consistent improvement in healing of chronic wounds. The study highlighted the utility of PRP gel in various healthcare settings to restart the healing process in complex non-healing wounds, even wounds recalcitrant to other treatments, and those of patients with advanced age, compromised laboratory values, and co-morbidities. These results have important clinical implications and suggest that this treatment can quickly reverse the non-healing trend in chronic wounds."

"This study and its results underscore the strong value proposition for the AutoloGel system's unique, physiological concentration of PRP gel to rapidly and consistently heal chronic wounds of varying size and etiology in healthy and clinically ill patients," noted Martin P. Rosendale, Chief Executive Officer of Cytomedix. "Compelling clinical results such as these should favorably impact the adoption of AutoloGel in a variety of wounds and wound care settings and further support our requests for reimbursement consideration."

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 platelet rich plasma (PRP) gel derived from the patient's own blood 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 (PPP) 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. Cytomedix also seeks to monetize other product candidates in its pipeline through strategic partnerships, out-licensing or sale. Most notably is its anti-inflammatory peptide (designated CT-112), which has shown promise in preclinical testing. 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 likelihood of obtaining a positive reimbursement determination on the submission, the likelihood and the extent of beneficial effect of such

determination on CMS costs and care, viability and effectiveness of the Company's sales approach and overall marketing strategies, the outcome of development or regulatory review of CT-112, 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, the Company's ability to successfully integrate the Angel[®] and activAT[®] product lines into its existing business, to assume and satisfy certain liabilities related to the Angel[®] and activAT[®] product lines. 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>.

Contacts:

Cytomedix, Inc.

David Jorden, Executive Board Member
Martin Rosendale, CEO
Andrew Maslan, CFO
(240) 499-2680

Lippert/Heilshorn & Associates

Anne Marie Fields
(afields@lhai.com)
(212) 838-3777
Bruce Voss
(bvoss@lhai.com)
(310) 691-7100