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Mena Expression is Associated with Paclitaxel-mediated Increase in Cancer Cell Dissemination

BOSTON--(BUSINESS WIRE)-- MetaStat, Inc. (OTCQB:MTST), a precommercial biotechnology company, developing diagnostics for risk of cancer metastasis and anti-metastatic therapies, today announced the presentation of supportive data for the role of Mena protein isoforms in tumor dissemination at the 2017 American Association of Cancer Research Annual meeting in Washington D.C. The poster was presented on April 4, 2017 by the company's collaboration partner, Albert Einstein College of Medicine.

In the current study of tumor-bearing mice, paclitaxel treatment was shown to increase the number of MetaSites (TMEM), circulating tumor cells and lung metastasis. Expression of Mena^{INV} protein and mRNA also increased following paclitaxel treatment.

"Significantly, in this study, the effect of paclitaxel-induced tumor cell dissemination or metastasis is reversed when Mena^{INV} expression is blocked, as represented in the Mena-null mouse model," stated Douglas A. Hamilton, President and CEO of MetaStat, Inc.

In addition, previously published work from the company's collaboration partner at MIT, demonstrated Mena confers resistance to paclitaxel treatment, and that Mena and Mena^{INV} protein levels increased in response to paclitaxel therapy (Oudin *et al.*, Mol Cancer Ther. 2017 Jan; 16(1):143-155).

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Session Title: Tumor Microenvironment 5
Abstract Title: "Neoadjuvant chemotherapy promotes prometastatic changes in the primary breast tumor microenvironment in mice and humans."
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About MetaSite *Breast*™

The MetaSite *Breast*™ test is intended for use in patients with early stage (stage 1-3), invasive breast cancer who have node-negative or node positive, Hormone Receptor

(HR)-positive, HER2-negative disease. Clinical studies have demonstrated the MetaSite score (MS) is significantly associated with increased risk of cancer metastasis. MetaSite *Breast*™ is an analytically validated, fully automated digital pathology/image analysis assay that identifies Mena expressing tumor cells in direct contact with CD68+ perivascular macrophages and CD31+ endothelial cells ("MetaSites"). MetaSites have been shown to be the portal of entry for cancer cells into the blood stream contributing to the development of cancer metastasis. The MetaSite *Breast*™ assay is performed on standard formalin-fixed paraffin-embedded (FFPE) tissue, analytically validated under CLIA and clinically available through MetaStat's CLIA-certified commercial laboratory.

About MetaStat, Inc.

MetaStat is a precommercial biotechnology company focused on the development and commercialization of diagnostics tests prognostic for risk of cancer metastasis, companion diagnostics to predict drug response and anti-metastatic drugs. MetaStat's driver-based diagnostic and therapeutic platform technology is based on the pivotal role of the Mena protein and its isoforms, a common pathway for the development of metastatic disease in all epithelial-based solid tumors. The company's development strategy is based on identifying patients at risk from aggressive cancer and targeting the underlying mechanisms that drive the metastatic cascade. MetaStat is based in Boston, MA.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and such forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. You are cautioned that such statements are subject to a multitude of risks and uncertainties that could cause future circumstances, events or results to differ materially from those projected in the forward-looking statements as a result of various factors and other risks, including those set forth in the company's Form 10-K filed with the Securities and Exchange Commission. You should consider these factors in evaluating the forward-looking statements included herein, and not place undue reliance on such statements. The forward-looking statements in this release are made as of the date hereof and the company undertakes no obligation to update such statements.

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