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Heat Biologics, Inc. Presents Preclinical Data From Comparative Combination Cancer Immunotherapy Research Study at Keystone Symposia on Immune Evolution in Cancer

First Head-to-Head Comparison of Heat's ImPACT-Based Immunotherapy With Vaccines and T Cell Costimulators

CHAPEL HILL, NC -- (Marketwired) -- 03/10/14 -- [Heat Biologics, Inc.](#) (NASDAQ: HTBX), a clinical stage biopharmaceutical company focused on the development of novel cancer immunotherapies, announced today that the Company will present the results of its preclinical research study entitled "Comparative Combination Cancer Immunotherapy with Vaccination and TNFRSF Stimulation" at the [Keystone Symposia on Molecular and Cellular Biology: Immune Evolution in Cancer \(X2\)](#) being held March 9-14, 2014 in Whistler, British Columbia.

Taylor H. Schreiber, Ph.D., Vice President of Research and Development at Heat Biologics, will present the comparative combination study which highlights the complementary activity of vaccination and direct T cell costimulation and suggests that combination immunotherapy may be an effective treatment strategy for anti-tumor immunity. The studies conducted by Dr. Schreiber, Neal Schilling, Ph.D., Vadim V. Deyev, M.D., Ph.D., and Eckhard R. Podack, M.D., Ph.D., provide the first systematic comparison of anti-tumor vaccination with Heat's [ImPACT therapy](#)-based heat shock protein gp96-Ig platform given alone or in combination with direct T cell costimulation via OX40, 4-1BB, GITR and TNFRSF25. The data from this study demonstrate that Heat's ImPACT platform immunotherapy in combination with certain T cell costimulators provides synergistic CD8+ T cell activation, reduces tumor burden and increases overall survival as compared to either intervention as single agents.

"These types of head-to-head comparisons are necessary to gauge the relative effectiveness of specific combination therapeutics because single-agent, single-investigator studies in disparate preclinical tumor models cannot be evaluated in relative terms. These data clearly show the potential synergies between ImPACT based vaccines and T cell costimulatory antibodies," Dr. Schreiber commented. "Heat's research and development team intends to continue to expand on these data and collaborate with leading oncology clinicians to rationally combine Heat's ImPACT based immunotherapy with checkpoint inhibitors and other therapies to bring much needed breakthrough treatment options to cancer patients."

Jeff Wolf, Heat's Chief Executive Officer, commented, "We look forward to applying these

findings for design enhancements to our future clinical trials. The Company plans to explore potential collaborations with biopharmaceutical companies with advanced checkpoint inhibitors and T cell costimulatory molecules. We are excited to be part of the next wave of innovative cancer treatments and to the future possibility of utilizing Heat's powerful ImPACT-based immunotherapy to extend the utility of checkpoint inhibitors to a wide range of cancers and settings."

Heat's proprietary Immune Pan Antigen Cytotoxic Therapy ("ImPACT") reprograms live cancer cells from a single tumor source to continually secrete gp96, a chaperone protein found in all human cells. In turn, gp96 chaperones tumor antigens to T-cells and is designed to activate a robust, pan-antigen T-cell immune response and direct killer T-cells to attack the patient's cancer. Heat's ImPACT technology holds promise for treating a wide variety of different cancers.

About Heat Biologics, Inc.

Heat Biologics, Inc. is a clinical-stage biopharmaceutical company focused on developing its novel, "off-the-shelf" ImPACT therapeutic vaccines to combat a wide range of cancers. Our ImPACT Therapy is designed to deliver live, genetically-modified, irradiated human cells which are reprogrammed to "pump out" a broad spectrum of cancer-associated antigens together with a potent immune adjuvant called "gp96" to educate and activate a cancer patient's immune system to recognize and kill cancerous cells. Heat's HS-110 will be entering Phase 2 trials against non-small cell lung cancer and its HS-410 has entered Phase 1/2 clinical trials against bladder cancer. For more information, please visit www.heatbio.com.

Forward Looking Statements

This press release includes forward-looking statements on our current expectations and projections about future events. In some cases forward-looking statements can be identified by terminology such as "may," "should," "potential," "continue," "expects," "anticipates," "intends," "plans," "believes," "estimates," and similar expressions. These statements are based upon current beliefs, expectations and assumptions and include statements regarding the potential for Heat's ImPACT Therapy, continued expansion of the data, potential future collaborations, the timing and success of the clinical trials. These statements are subject to a number of risks and uncertainties, many of which are difficult to predict, including the ability for Heat's ImPACT Therapy to perform as designed, the results of future clinical trials and the efforts to develop collaborative projects with leading oncology clinicians and biopharmaceutical companies. The information in this release is provided only as of the date of this release, and we undertake no obligation to update any forward-looking statements contained in this release based on new information, future events, or otherwise, except as required by law.

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