April 5, 2017

Heat Biologics Presents New Preclinical Data from OncoSec Collaboration at the American Association for Cancer Research (AACR) Annual Meeting

Combining ComPACT DNA electroporation and cellular vaccination led to increased tumor antigen-specific CD8+ T cells, delayed tumor progression and improved overall survival in preclinical models

Demonstrates possible synergistic benefits of vaccination plus intratumoral injection

DURHAM, N.C., April 05, 2017 (GLOBE NEWSWIRE) --Heat Biologics, Inc. (Nasdaq:HTBX), a leader in the development of immunotherapies designed to activate a patient's immune system against cancer, announced that it presented new preclinical data from its collaboration with OncoSec Medical Incorporated (Nasdaq:ONCS), focused on evaluating the combination of Heat's immunotherapy platforms with intratumoral electroporation (EP), at the AACR Annual Meeting. In the poster entitled "Combined Intratumoral Electroporation and Allogenic Vaccination of Gp96-Ig/Fc-OX40L Stimulates CD8+ T cell Cross Priming to Tumor-Specific Neoantigens and Enhances Anti-Tumor Response," (abstract #5617) researchers combined EP of *ComPACT* DNA (expressing Gp96-Ig and FC-OX40L) directly into a tumor, with cell-based *ComPACT* vaccination, to explore the effects of an intratumoral plus vaccination approach in a preclinical mouse model of melanoma. Results confirmed that this combination approach led to increased antigen-specific CD8+ T cells, enhanced anti-tumor response and improved overall survival compared to individual treatments.

"This proof-of-principal study shows there may be benefit in combining our vaccines with an intratumoral approach to deliver the vaccine directly into the tumor to increase the coverage of tumor-specific shared- and neo-antigen presentation," said Jeff Hutchins, Ph.D., Heat's Chief Scientific Officer and Senior Vice President of Preclinical Development. "It opens up the possibility of pairing our *ImPACT* and *ComPACT* platform technologies with intratumoral approaches, which aligns with our strategy to advance new, synergistic immuno-oncology combinations to improve patient outcomes."

A copy of the abstract is available and can be viewed online through the AACR website at www.aacr.org. The poster will be made available in thePublications section of Heat's corporate website

About Heat Biologics, Inc.
Heat Biologics, Inc. (Nasdaq:HTBX) is an immuno-oncology company developing novel therapies that are designed to activate a patient's immune system against cancer utilizing an

engineered form of gp96, a protein that robustly activates the immune system. Heat's highly specific T cell-stimulating therapeutic vaccine platform technologies, *ImPACT* and *ComPACT*, in combination with other therapies, such as checkpoint inhibitors, are designed to address three distinct but synergistic mechanisms of action: robust activation of CD8+ "killer" T cells (one of the human immune system's most potent weapons against cancer); reversal of tumor-induced immune suppression; and T cell co-stimulation to further enhance patients' immune response. Currently, Heat is conducting a Phase 2 trial with HS-110 (viagenpumatucel-L) in combination with an anti-PD-1 checkpoint inhibitor to treat patients with non-small cell lung cancer (NSCLC) and a Phase 2 trial with HS-410 (vesigenurtacel-L) in patients with non-muscle invasive bladder cancer (NMIBC).

Heat's wholly-owned subsidiary, Zolovax, Inc., is developing therapeutic and preventative vaccines to treat infectious diseases based on Heat's gp96 vaccine technology, with a current focus on the development of a Zika vaccine in conjunction with the University of Miami.

For more information, please visit www.heatbio.com.

About OncoSec Medical Incorporated

OncoSec is a biotechnology company developing DNA-based intratumoral immunotherapies with an investigational technology, ImmunoPulse®, for the treatment of cancer. ImmunoPulse® is designed to enhance the local delivery and uptake of DNA-based immune-targeting agents, such as IL-12. In Phase I and II clinical trials, ImmunoPulse® IL-12 has demonstrated a favorable safety profile and evidence of anti-tumor activity in the treatment of various solid tumors as well as a systemic immune response. OncoSec's lead program, ImmunoPulse® IL-12, is currently in clinical development for metastatic melanoma and triple-negative breast cancer. The program's current focus is on the significant unmet medical need in patients with melanoma who are refractory or non-responsive to anti-PD-1/PD-L1 therapies. In addition to ImmunoPulse® IL-12, the Company is also identifying and developing new immune-targeting agents for use with the ImmunoPulse® platform.

For more information, please visit www.oncosec.com.

Forward Looking Statements

This press release includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 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 proof-of-principal study showing there may be benefit in combining Heat's vaccines with an intratumoral approach to deliver the vaccine directly into the tumor to increase the coverage of tumor-specific shared- and neo-antigen presentation, the possibility of pairing Heat's *ImPACT* and *ComPACT* platform technologies with intratumoral approaches and the potential of Heat's *ImPACT* and *ComPACT* therapies. These statements are based on management's expectations and assumptions as of the date of this press release and are subject to a number of risks and uncertainties, many of which are difficult to predict that could cause actual results to differ materially from current expectations and assumptions from those set forth or implied by any forward-looking statements, including the combination

of Heat's vaccines with an intratumoral approach to demonstrate benefits in clinical trials, the ability of Heat's *ImPACT* and *ComPACT* therapies to perform as designed, to demonstrate safety and efficacy, as well as results that are consistent with prior results, the ability to enroll patients and complete the clinical trials on time and achieve desired results and benefits, the company's ability to obtain regulatory approvals for commercialization of product candidates or to comply with ongoing regulatory requirements, regulatory limitations relating to the company's ability to promote or commercialize its product candidates for specific indications, acceptance of its product candidates in the marketplace and the successful development, marketing or sale of products, the company's ability to maintain its license agreements, the continued maintenance and growth of its patent estate, its ability to establish and maintain collaborations, its ability to obtain or maintain the capital or grants necessary to fund its research and development activities, and its ability to retain its key scientists or management personnel and the other factors described in the company's annual report on Form 10-K for the year ended December 31, 2016 and other filings with the SEC. The information in this release is provided only as of the date of this release and the company undertakes 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.

Contact:
Jennifer Almond
Investor and Media Relations
919-240-7133
Investorrelations@heatbio.com

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