HCW Biologics Presents Preclinical Data for TRBC-Based T-Cell Engager Program at the Society for Immunotherapy of Cancer's (SITC) 40th Annual Meeting

November 7, 2025

Tetra-valent T-cell engager designed to address shortfalls of bi-specific T-cell engagers (BiTE) related to manufacturability, safety profile, and ability to treat a wide spectrum of solid tumors

MIRAMAR, Fla., Nov. 07, 2025 (GLOBE NEWSWIRE) -- HCW Biologics Inc. (the "Company" or "HCW Biologics"), (NASDAQ: HCWB), a U.S.-based clinical-stage biopharmaceutical company focused on discovering and developing novel immunotherapies to lengthen healthspan by disrupting the link between inflammation and diseases, announced today the data presented for their tetra-valent, second-generation T-Cell Engager ("TCE") Program based on their novel TRBC platform technology, at the SITC 40th Annual Meeting, taking place from November 5 to 9, 2025 in National Harbor, Maryland.

HCW Biologics debuted the results from its preclinical study of HCW11-018b, the Company's lead T-cell engager product candidate, that highlights the uniqueness and advantages of its second-generation TCE program compared with the first-generation TCE products. Its unique features include:

- Broad coverage for human solid tumor indications by targeting tissue factor, with high potency and precision, shown in xenograft models including the Patient-Derived Xenograft (PDX) tumor model.
- Tetra-valent construct to address immunosuppressive tumor microenvironment.
- Activates tumor-infiltrated exhausted T cells.
- Favorable tolerability profile in non-human primates at dosing levels significantly higher than the efficacious level.
- Long serum half-life and favorable pharmacokinetics shown in non-human primate studies, without using the Fc fusion technology commonly found in bi-specific or tri-specific fusion molecules.
- Streamlined GMP manufacturing process similar to the process used for therapeutic monoclonal antibodies.
- Subcutaneous administration to improve safety and quality-of-life for patients.

Dr. Hing C. Wong, the Company's Founder and Chief Executive Officer, stated, "Remarkably, our preclinical studies showed that HCW11-018b, our lead second-generation TCE product candidate, could shrink the well-established tumors in xenograft animal models including the PDX model. There was 100% survival among tumor-bearing mice treated with HCW11-018b, whereas none of the untreated mice survived. In addition to enhancing the healthspan for patients suffering from a wide spectrum of solid tumors, especially pancreatic cancer and glioblastoma, we believe our approach could expand the number of indications that could possibly be treated with our tetra-valent, second-generation TCEs, such as autoimmune diseases and quality-of-life conditions."

A poster, titled, "A novel multi-functional bispecific T-cell engager molecule for cancer therapy," will be presented by Dr. Xiaoyun Zhu, the Company's Senior Scientist, and Dr. Wong today at 12:15-1:45 pm, 5:35–7:00 pm ET, at Prince George ABC Exhibit Halls, Gaylord National Resort and Convention Center.

The ePoster will be available on the Company's website in the Events and Presentations section after 9:00 am ET on November 7, 2025.

About HCW Biologics:

HCW Biologics Inc. (NASDAQ: HCWB) is a clinical-stage biopharmaceutical company developing proprietary immunotherapies to treat diseases promoted by chronic inflammation, especially age-related and senescence-associated diseases. The Company's immunotherapeutics represent a new class of drugs that it believes have the potential to fundamentally change the treatment of cancer and many other diseases and conditions that are promoted by chronic inflammation — and in doing so, improve patients' quality of life and potentially extend longevity. Chronic inflammation, including inflammaging, is believed to be a significant contributing factor to senescence-associated diseases and conditions that diminish healthspan, including many types of cancer, autoimmune diseases, and neurodegenerative diseases, as well as many indications that impact quality-of-life that are not life-threatening. The Company's lead product candidate, HCW9302, was developed using the Company's legacy TOBI™ (Tissue factOr-Based fusIon) platform. The Company has created another drug discovery technology, the TRBC platform, which is not based on Tissue Factor. The TRBC platform has the capability to construct immunotherapeutics that not only activate and target immune responses but are also equipped with receptors that specifically target cancerous or infected cells. This platform is a versatile scaffold that enables the creation of multiple classes of immunotherapeutic compounds: Class I: Multi-Functional Immune Cell Stimulators; Class II: Second-Generation Immune Checkpoint Inhibitors; Class

III: Multi-Specific Targeting Fusions and Enhanced Immune Cell Engagers. These novel immunotherapeutics are being developed for treatment of a wide range of disease indications, including oncology, autoimmune diseases, and improving quality of life conditions. The Company has constructed over 50 molecules using the TRBC platform. Further preclinical evaluation studies are currently being conducted for these molecules the Company has selected based on promising preclinical data. The Company has two licensing programs in which it has licensed exclusive rights for some of its proprietary molecules.

Forward Looking Statements:

Statements in this press release contain "forward-looking statements" that are subject to substantial risks and uncertainties. These statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements contained in this press release may be identified by the use of words such as "anticipate," "expect," "believe," "will," "may," "should," "estimate," "project," "outlook," "forecast" or other similar words and include, the actual success and potency of the Company's TCE-based TRBC fusion molecules; the ability of the Company's TCE's to target cancer antigens, activate effector T cells, and reduce immunosuppression in the tumor microenvironment; the ability of the Company's TCEs to exhibit potent and antigen-specific anti-pancreatic cancer activities both *in vitro* and in humanized mouse models; effectiveness of the Company's TCEs in treatment of solid tumors and pancreatic cancers. Further, certain forward-looking statements are based on assumptions as to future events that may not prove to be accurate. Factors that could cause actual results to differ include, but are not limited to, the risks and uncertainties that are described in the section titled "Risk Factors" in the annual report on Form 10-K filed with the United States Securities and Exchange Commission (the "SEC") on March 28, 2025, the latest Form 10-Q filed with the SEC on August 18, 2025 and in other filings filed from time to time with the SEC.

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