

December 8, 2023



Intensity Therapeutics Presents Positive INT230-6 Data in Patients with Early-Stage Breast Cancer in a Podium Poster Spotlight Discussion at the 2023 SABCS

INT230-6 demonstrated a systemic increase in the median diversity of T-cell repertoire in patients' blood compared to baseline that was also much larger than a control saline injection

A single injection of INT230-6 can induce up to >95% necrosis of a tumor

INT230-6 demonstrated an increase in CD4 T-cells and NK cells within tumors

Gene expression profiling revealed treatment effect of up-regulation of immune pathways expressed by T-cell activation, lymphocyte activation and inflammatory responses

INT230-6 demonstrated a favorable safety profile and was well tolerated

Patient interest in the new treatment was high

SHELTON, Conn., Dec. 8, 2023 /PRNewswire/ -- [Intensity Therapeutics, Inc.](https://www.intensitytherapeutics.com) (Nasdaq: INTS), a clinical-stage biotechnology company focused on the discovery and development of proprietary, novel immune-based intratumoral cancer therapies designed to kill tumors and increase immune system recognition of cancers, today announced that safety, tolerability, efficacy and immune activation data from the company's Phase 2 INVINCIBLE trial of INT230-6 in patients with early-stage breast cancer without chemotherapy was presented at a Podium Poster Spotlight discussion session today during the 2023 San Antonio Breast Cancer Symposium (SABCS). Information on the presentation is below.



Concurrent Poster Spotlight Session Block #6

PS16 Enhancing Immunotherapy for Triple Negative Breast Cancer: Novel Therapies and Biomarkers

Moderator: Hope S. Rugo, MD, FASCO, University of California San Francisco Helen Diller Family Comprehensive Cancer Center, San Francisco, California

Title: Intra-tumoral dosing of INT230-6 in early-stage breast cancer patients induces tumor cell necrosis and immunomodulatory effects: A phase II randomized window-of-opportunity

study – the INVINCIBLE trial

Presentation #: PS16-03

Date and Time: Friday, December 8, 7:00 – 8:00 a.m. CT

Location: Stars at Night Ballroom 3 & 4

Presenter: Angel Arnaout, M.D., MSc, Ottawa Hospital Research Institute, Ontario Institute for Cancer Research

Discussant: Sangeetha Reddy, M.D., M.S.C.I., UT Southwestern Medical Center, Dallas, Texas

Copies of the presentation materials are available on Intensity's [website](#) on the publications, papers and posters page.

"A large unmet need in the treatment of breast cancer is that the majority of breast cancers are immune quiescent; resulting in minimal response to immunotherapies. INT230-6 has the potential to fill this unmet need for multiple subtypes, including triple negative breast cancer, through its unique multiple anti-cancer mechanisms of action that cause tumor cell necrosis, ignition of an anti-cancer immune-based activation, increasing the diversity of the T-cell repertoire systemically that can enter into the tumor and its microenvironment," said [Angel Arnaout](#), M.D., MSc., Breast Surgical Oncologist at the Ottawa Hospital, Scientist at the Ottawa Hospital Research Institute, Professor of Surgery at the University of Ottawa and Co-Lead of the Ontario Institute for Cancer Research's Window-of-Opportunity Network. "The ability for INT230-6 to induce necrosis and noted immune effects prior to a patient's surgery, while maintaining a favorable safety profile, would be a major move forward for the treatment paradigm of breast cancer and potentially many other cancers."

"I am encouraged by the immune-related data being reported and the potential of INT230-6 as a presurgical treatment for women suffering from early-stage breast cancer," said [Melanie Spears](#), Ph.D., Co-Director of Diagnostic Development and Co-Lead of the Window-of-Opportunity Network at the Ontario Institute for Cancer Research. "The localized effect of increased CD4 T-cells and NK cells within injected tumors and systemically increased T-cell diversity from baseline in these patients is quite interesting and remarkable for a locally-delivered therapy."

The INVINCIBLE Trial is a Phase 2, randomized study that enrolled women with newly diagnosed, operable early-stage intermediate or high-grade T1-T2 invasive breast cancers 2 to 5 weeks prior to surgery (lumpectomy or mastectomy). Drug dose was set by the diameter of the tumor. Subjects were randomly allocated (2:1) prior to resection to 1-3 IT injections of INT230-6 versus either no treatment (part 1 N=29) or saline sham injection (part 2 N=58). Several markers normally associated with systemic treatment were evaluated.

Efficacy Data:

The INVINCIBLE Phase 2 trial of INT230-6 demonstrated a high order of necrosis in presurgical breast cancer tumors in the period from diagnosis to surgery, with some patients in the Phase 2 study experiencing greater than 95% necrosis of the tumor. A functional pathway enrichment analysis was conducted and confirmed positive changes in T-cell activation, lymphocyte activation and inflammatory response. Further, INT230-6 treated patients experienced differential gene expression with an increase in median clonal diversity compared to baseline as well as significant changes in the immune cell composition, including CD4 T-cell and NK cells.

Safety Data:

Data show that INT230-6 has a favorable safety profile and is well tolerated. Over 95% of treatment-emergent adverse events (TEAEs) were low grade 1 or 2 primarily localized pain, fatigue, and nausea.

"We continue to be impressed with the safety and efficacy of INT230-6. Today's news about the increase in mean systemic T-cell clonal diversity is truly exciting because it is a signal of the strength of adaptive immune response systemically. We believe that the ability to cause large levels of necrosis on a single dose of our locally-delivered drug with immune effects in a relatively cold cancer type such as breast cancer prior to surgery shortly after diagnosis is truly a new weapon in the war on cancer," said [Lewis H. Bender](#), President and Chief Executive Officer of Intensity. "In addition to our anticipated Phase 3 program in metastatic sarcoma using INT230-6 as a monotherapy, we are underway in our preparations for a Phase 2/3 clinical program to test INT230-6 in combination with standard of care neoadjuvant therapy. We see the potential opportunity for our technology and drug products in both the metastatic and presurgical settings for many types of cancers."

About T-Cell Repertoire

The adaptive immune system is one of the body's most powerful defenses. By being able to adapt, the body's immune cells can be trained to attack undesirable cells or viruses anywhere in the body. T-cells are an important systemic component of the adaptive immune system that aid in the destruction of invaders. Immune repertoire refers to all the unique T-cell receptor (TCR) and B-cell receptor (BCR) genetic rearrangements. Only lymphocytes that encounter an antigen with the right receptor to bind to it will be activated and proliferate during an immune response, forming a clone of cells with identical antigen receptors for attack. A greater diversity of T-cell repertoire means there is higher likelihood for a T-cell to bind to the foreign entity (e.g. cancer cells) and increase the specific T-cell clonal population to destroy the invader.

About INT230-6

INT230-6, Intensity's lead proprietary investigational product candidate, is designed for direct intratumoral injection. INT230-6 was discovered using Intensity's proprietary DfuseRxSM technology platform. The drug is composed of two proven, potent anti-cancer agents, cisplatin and vinblastine, and a penetration enhancer molecule (SHAO) that helps disperse potent cytotoxic drugs throughout tumors for diffusion into cancer cells. These agents remain in the tumor resulting in a favorable safety profile. In addition to local disease control, direct killing of the tumor by INT230-6 releases a bolus of neoantigens specific to the patient's malignancy, leading to engagement of the immune system and systemic anti-tumor effects. Importantly, these effects are mediated without immunosuppression that so often occurs with systemic chemotherapy.

About Intensity Therapeutics' Clinical Studies

INT230-6 has completed enrollment of over 200 patients in two phase 2 and phase 1 dose escalation clinical trials ([NCT03058289](#) and [NCT04781725](#)) with various advanced solid tumors; IT-01 in metastatic disease, and IT-02 the INVINCIBLE study, in presurgical breast cancer. The Company has a clinical collaboration agreement with Merck Sharpe & Dohme (Merck) to evaluate the combination of INT230-6, Intensity's lead product candidate, and KEYTRUDA® (pembrolizumab), Merck's anti-PD-1 (programmed death receptor-1) therapy, in patients with advanced pancreatic, colon, squamous cell and bile duct malignancies. The

Company also has a clinical collaboration agreement with Bristol-Myers Squibb to evaluate the combination of INT230-6 with Bristol-Myers Squibb's anti-CTLA-4 antibody, ipilimumab, in patients with advanced liver, breast and sarcoma cancers. Intensity managed the individual combination arms separately with each respective partner via a joint development committee. The Company also executed agreements with the Ottawa Hospital Research Institute (OHRI) and the Ontario Institute of Cancer Research (OICR) to study INT230-6 in the INVINCIBLE study, a randomized controlled neoadjuvant phase 2 study in women with early-stage breast cancer. Near-term, Intensity expects to file an Investigational New Drug (IND) application for a Phase 3 study of INT230-6 in soft tissue sarcoma as well as finalizing the study design and protocol for a Phase 2/3 program in presurgical breast cancer.

About Intensity Therapeutics

Intensity Therapeutics is a late-stage biotechnology company that applies novel engineered chemistry to turn "cold" tumors "hot" by enabling its aqueous cytotoxic-containing drug product, INT230-6, to mix and saturate the dense, high-fat pressurized environment of the tumor. As a result of the saturation, Intensity's clinical trials have demonstrated the ability of INT230-6 to kill tumors and elicit an adaptive immune response within days of injection, representing a truly novel approach to cancer cell death that holds the potential to shift the treatment paradigm and turn many deadly cancers into chronic diseases. For more information about the Company, including publications, papers and posters about its novel approach to cancer therapeutics, visit www.intensitytherapeutics.com.

Forward-Looking Statements


Certain statements in this press release may constitute "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995, as amended to date. These statements include, but are not limited to, statements relating to the expected future plans, development activities, projected milestones, business activities or results. We have based these forward-looking statements on our current expectations and projections about future events, nevertheless, actual results or events could differ materially from the plans, intentions and expectations disclosed in, or implied by, the forward-looking statements we make. These risks and uncertainties, many of which are beyond our control, include: the risk that the anticipated milestones may be delayed or not occur or be changed, as well as other risks described in the section entitled "Risk Factors" in the Company's SEC filings, which can be obtained on the SEC website at www.sec.gov. Readers are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date on which they are made and reflect management's current estimates, projections, expectations and beliefs. The Company does not plan to update any such forward-looking statements and expressly disclaims any duty to update the information contained in this press release except as required by law.

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