Turnstone Biologics Presents Preclinical Data Highlighting Potential for Selected Tumor-Infiltrating Lymphocyte (TIL) Therapy in Solid Tumors at the 2023 Society for Immunotherapy of Cancer (SITC) Annual Meeting

November 3, 2023 10:00 AM EDT

Presentations showcase Turnstone's novel Selected TIL programs which are designed to selectively expand the most potent tumor-reactive T cells for treatment of solid tumors

Data further supports the continued clinical advancement of TIDAL-01, Turnstone's lead Selected TIL therapy, currently being evaluated in two Phase 1 trials

Results also demonstrate the potential for a streamlined and rapid selection process and genetic engineering of Selected TIL to further enhance function

SAN DIEGO, Nov. 03, 2023 (GLOBE NEWSWIRE) -- Turnstone Biologics Corp. ("Turnstone" or the "Company") (Nasdaq: TSBX), a clinical-stage biotechnology company developing a differentiated approach to treat and cure patients with solid tumors by pioneering selected tumor-infiltrating lymphocyte (Selected TIL) therapy, today announced it will be presenting four posters highlighting preclinical data from its pipeline of programs, including the lead clinical candidate, TIDAL-01, at the Society for Immunotherapy of Cancer (SITC) 38th Annual Meeting being held November 1-5, 2023 in San Diego, California.

"Perhaps the greatest challenge that restricts the clinical application of current TIL therapies across a broad range of solid tumors is the low number of T cells that can recognize and attack these tumors," said Stewart Abbot, Ph.D., Turnstone's Chief Scientific Officer. "We are solving for this problem by specifically selecting and expanding the most potent tumor-reactive T cells, which we believe are crucial to the successful development of TIL-based therapies. We are pleased to share the promising results presented at SITC that further highlight our differentiated approach. Building on previous evidence, these data continue to demonstrate the potential for TIDAL-01 and our other pipeline programs to achieve objective responses in solid tumors, where limited treatment options are available."

Key findings from the four poster presentations follow, copies of which will be added to Turnstone's website and can be accessed here.

Title: Expansion and Identification of Neoantigen-Reactive Tumor-Infiltrating Lymphocytes (TIL) from Metastatic Colorectal (CRC) and GI Cancers
Date and Time: Saturday, November 4, 2023, 9:00am - 8:30pm PT
Abstract Number: 346
In collaboration with H. Lee Moffitt Cancer Center (Moffitt)

- Turnstone's lead Selected TIL clinical candidate, TIDAL-01, utilizes a novel unbiased identification and functional screening process to isolate and selectively expand the greatest breadth of the most potent tumor-reactive (neoantigen-reactive) TIL from the patient's tumor in vitro, before infusing them into the patient for more targeted tumor killing.
- This poster demonstrates that TIL from metastatic colorectal cancer and gastric cancer patient samples were successfully expanded from multiple disease sites in vitro. TIL from these samples were screened for neoantigens and enriched for neoantigen-reactive TIL, and furthermore, maintained reactivity following expansion. These results, along with previous findings for TIDAL-01 and from within the field, highlight the practicality of selecting and expanding tumor-reactive TIL as a potential treatment option for colorectal and gastric cancer patients.

Title: TBio BFX 4101: A Neoantigen Prioritization Pipeline for Selected Tumor-Infiltrating Lymphocyte Therapy
Date and Time: Saturday, November 4, 2023, 9:00am - 8:30pm PT
Abstract Number: 900

- Identifying tumor-specific neoantigens arising from somatic mutations is one of the differentiating features of Turnstone's Selected TIL process for TIDAL-01.
- In this poster, Turnstone presents TBio BFX 4101, a bioinformatics pipeline, which provides a comprehensive and efficient approach to identifying and ranking these neoantigens, with encouraging results from a variety of solid tumor samples, including melanoma, colon, and breast cancers.

Title: Tumor Neoantigen Prioritization from Liquid Biopsy Whole Exome Sequencing for Selected Tumor-Infiltrating Lymphocyte Therapy
Date and Time: Saturday, November 4, 2023, 9:00am - 8:30pm PT

Abstract Number: 178
In collaboration with Illumina, Inc.

- Whole exome DNA and RNA sequencing were applied to patient liquid biopsy samples to assess the sensitivity of tumor variant detection and prioritization of neoantigen peptides in comparison with tissue data.
- This presentation highlights that minimally invasive liquid biopsy is viable for the detection of somatic variants in preclinical studies, and this approach to identifying neoantigens may increase the breadth and number of tumor-reactive T cells.

Title: Enhancing Directly Selected Tumor-Reactive TIL Function Through Genetic Modification
Date and Time: Saturday, November 4, 2023, 9:00am - 8:30pm PT
Abstract Number: 350

- Distinct from, yet complementary to TIDAL-01, Turnstone is developing a preclinical program associated with a next-generation direct selection process. Direct selection utilizes a proprietary combination of markers designed to rapidly select for the greatest breadth of tumor-reactive T cells without the requirement for sequencing or peptide generation.
- Turnstone scientists are presenting preclinical data highlighting that directly selected tumor-reactive TIL can be genetically engineered using CRISPR-Cas and demonstrate that knocking out genes of interest can potentially enhance directly selected TIL quality and function.

About Turnstone

Turnstone Biologics is a clinical-stage biotechnology company developing a differentiated approach to treat and cure patients with solid tumors by pioneering selected tumor-infiltrating lymphocyte (Selected TIL) therapy. Turnstone's novel TIL therapy is based upon the identification, selection, and expansion of the most potent tumor-reactive T cells, known as Selected TIL, and is designed to overcome the limitations of first-generation bulk TIL that have demonstrated objective responses only in limited tumor types. Turnstone's most advanced program, TIDAL-01, is currently being evaluated in two Phase 1 studies in patients with melanoma, breast cancer, and colorectal cancer, and the Company is also actively advancing its preclinical pipeline programs including TIDAL-02, its next Selected TIL program, and its TIDAL-01 and viral immunotherapy combination program. For additional information about Turnstone, please visit www.turnstonebio.com, and follow us on LinkedIn.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements expressed or implied in this press release include, but are not limited to, statements regarding: the potential for TIDAL-01 and other pipeline programs to achieve objective responses in solid tumors; the potential for Turnstone's Selected TILs to efficiently select and expand tumor-reactive TIL to further enhance function; the viability of minimally invasive liquid biopsy to detect somatic variants; the ability of its bioinformatics pipeline to efficiently identify and rank neoantigens. All statements, other than statements of historical fact, contained in this press release, including statements regarding future events, future financial performance, business strategy and plans, and objectives for future operations, are forward-looking statements and can be identified by terminology such as "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will" or "would," or the negative of these terms or other comparable terminology. These statements are based on the current plans, objectives, estimates, expectations and intentions, beliefs and assumptions of our management team, and on information currently available to such management team and are not guarantees of future performance and inherently involve numerous risks and uncertainties, many of which are beyond Turnstone's control. We undertake no obligation to update or revise publicly any of the forward-looking statements after the date hereof to conform the statements to actual results or changed expectations except as required by law. The reader is cautioned not to place undue reliance on forward-looking statements. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, but are not limited to, risks and uncertainties related to: macroeconomic conditions and the lingering effects of the COVID-19 pandemic; Turnstone's ability to initiate and execute clinical trials on the anticipated timelines, if at all; the potential for results from clinical trials to differ from preclinical, early clinical, preliminary or expected results; the significant uncertainty associated with Turnstone's product candidates ever receiving any regulatory approvals; Turnstone's ability to obtain, maintain or protect intellectual property rights related to its product candidates; the sufficiency of Turnstone's capital resources and need for additional capital to achieve its goals; and other risks, including those described under the heading "Risk Factors" in Turnstone's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, filed with the SEC on September 1, 2023 and other documents Turnstone has filed, or will file, with the SEC. This press release discusses product candidates that are under clinical study and which have not yet been approved for marketing by the U.S. Food and Drug Administration. No representation is made as to the safety or effectiveness of these product candidates for the uses for which they are being studied.

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