Turnstone Biologics Corp. Reports Positive Initial Data from Phase 1 Trial of TIDAL-01 in Metastatic Colorectal Cancer

August 14, 2024

- *Overall response rate (“ORR”) of 25% and 50% disease control rate ("DCR") observed in first four evaluable patients treated with TIDAL-01 with advanced CRC*
- *Complete response achieved in heavily pre-treated late line patient with progression free survival extending beyond one year*
- *Favorable tolerability profile and demonstrated manufacturing success*
- *Product characterization and translational data support biological hypothesis for Selected TILs*

SAN DIEGO, Aug. 14, 2024 (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 reported positive initial data from its Phase 1 STARLING trial of TIDAL-01 in metastatic microsatellite stable colorectal cancer (“MSS mCRC”).

Turnstone’s Phase 1 STARLING trial is an ongoing muti-site, first-in-human, non-randomized, open label, single-dose study, and is evaluating the safety, tolerability, and clinical activity of TIDAL-01. The trial is currently enrolling patients with colorectal cancer, head and neck squamous cell carcinoma, and uveal melanoma. As of the cutoff date of July 15, 2024, key takeaways from the initial data include the following:

- **Clinical Responses:** Among the four evaluable MSS mCRC patients included in the study, Turnstone observed a 25% overall response rate ("ORR") and 50% disease control rate ("DCR"). One patient demonstrated a deep and durable ongoing complete response (CR).
- **Durability of Response:** 50% of patients showed sustained clinical benefit, with notable progression free survival of over one year in the patient with ongoing complete response and 6 months for a patient with stable disease.
- **Translational Profile:** The TIDAL-01 process demonstrated the ability to generate high titer, polyclonal and multi-epitope tumor neoantigen-reactive T cells that expanded in the patient, persisted in the blood and correlated with an increase in CD8 T cell tumor infiltration.
- **Tolerability Profile:** TIDAL-01 was generally well-tolerated and safety events observed were consistent with known AEs associated with the lymphodepletion regimen, and IL-2 and pembrolizumab administration.
- **Manufacturing Rates:** The manufacturing success rate for TIDAL-01 in CRC for patients with sufficient starting material was 80%, which is consistent with other early clinical-stage cell therapy processes. The target dose of at least $1x10^9$ total T cells was exceeded in all manufactured CRC products.

“The encouraging initial clinical data from the Phase 1 STARLING trial supports the potential of TIDAL-01 to transform the treatment paradigm for patients with metastatic CRC and other solid tumors,” said Sammy Farah, M.B.A., Ph.D., Turnstone’s President and Chief Executive Officer. “The 25% ORR with a deep and durable response and 50% DCR that we have been able to achieve with TIDAL-01 compare favorably to the standard of care for this patient population, where current therapies report a 1-6% ORR and median progression free survival (mPFS) of 2.0-5.6 months. Further bolstered by a well-tolerated profile and demonstrated manufacturing consistency, these data provide a strong foundation for our continued development of TIDAL-01 in this high unmet need patient population. Overall, we are extremely pleased by this positive start to our clinical study.”

“CRC is a leading cause of cancer related deaths in the United States,” said Mike Burgess, MBChB, Ph.D., Turnstone’s Interim Chief Medical Officer. “The early evidence of clinical benefit highlights TIDAL-01 as a potential therapeutically viable option in metastatic CRC, and we are delighted to report that the patient who experienced a complete response remains in remission and is well more than one year post treatment. Through our STARLING study we will continue to evaluate the benefits of TIDAL-01 in CRC and in other tumor types where there are limited or no treatment including uveal melanoma and head and neck cancer. We look forward to bringing forward pioneering innovative treatment options that drive clinical efficacy and address the most critical needs in oncology.”

Additional information related to the interim data set can be found in Turnstone’s Corporate Presentation on the Company’s website here.

About TIDAL-01

TIDAL-01, Turnstone’s lead Selected TIL therapy candidate, utilizes an unbiased identification and functional screening process to isolate and selectively expand the most comprehensive set of tumor-reactive TILs from the patient’s tumor. For more effective tumor killing, the TIDAL-01 production process targets a product with a significantly higher proportion of functional and potent tumor-reactive T cells compared to bulk TIL and is also designed to deliver at least 10^9 cells. TIDAL-01 is currently advancing in ongoing multi-site, first-in-human, non-randomized, open-label, single-dose study Phase 1 trials, which include the Company sponsored STARLING trials and the investigator sponsored trials with Moffitt Cancer Center. The Phase 1 studies are evaluating safety, biology, initial efficacy, and manufacturing feasibility of TIDAL-01 in patients with solid tumors where standard bulk TILs have historically not shown objective and/or durable responses in clinical trials.

About CRC

CRC is the third most commonly diagnosed cancer and ranks second in terms of mortality in the United States. In 2024 in the United States, it is estimated that there will be approximately 153,000 new CRC cases, and 53,000 deaths. Of these cases, approximately 85% of patients are characterized as microsatellite stable, or MSS, as opposed to the approximately 15% which are microsatellite instable, or MSI. Whereas the microsatellite instability-high, or MSI-H, phenotype confers good prognosis and greater response to immunotherapy in CRC, MSS tumors are generally considered 'cold' tumors and are less responsive to immunotherapies, with anti-PD-(L)1 therapy demonstrating nearly no effect. The five-year survival rate for all colorectal cancer in the United States is approximately 65% and drops below 20% if the cancer has metastasized. Treatment options for CRC include surgery, radiation therapy, chemotherapy, targeted therapy, and immunotherapy. Advanced MSS mCRC is typically treated with chemotherapy +/- combination with bevacizumab or anti-EGFR, but resistance to chemotherapy is inevitable. Targeted therapies are available, however, most MSS mCRC patients do not have actionable mutations. For patients lacking actionable mutations, or that fail targeted therapies, treatment efficacy outcomes after exhausting chemotherapy are poor (ORR = 1-6%; mPFS 2.0-5.6 months; mOS 6.4-10.8 months).

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 next-generation TIL therapy is based upon the identification, selection and expansion of the most potent tumor-reactive T cells, known as Selected TILs, 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 multiple Phase 1 studies in patients with colorectal cancer, head and neck cancer, and uveal melanoma. 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 therapeutic potential for TIDAL-01; the market size of the indications we intend to pursue; the potential for Turnstone's Selected TILs to efficiently select and expand tumor-reactive TILs; the potential of TIDAL-01 as a treatment option for patients with colorectal cancer, head and neck cancer and uveal melanoma; the potential for TIDAL-01 to be superior to current standard of care, if approved; and Turnstone's strategies and objectives. 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 identifies 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 effects of global health concerns, such as global pandemics; 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, initial, 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 Annual Report on Form 10-K or Quarterly Reports on Form 10-Q filed with the SEC and other documents Turnstone has filed, or will file, with the SEC, including the Annual Report on Form 10-K for the year ended December 31, 2023. 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.

Contact:

Ahmed Aneizi
Investor Relations
Turnstone Biologics
(347) 897-5988
ahmed.aneizi@turnstonebio.com