Compass Therapeutics Presents Data on Enhanced Efficacy of CTX-471 in Combination with Tovecimig in Checkpoint-Refractory Models at the American Association for Cancer Research (AACR) Annual Meeting

April 28, 2025

- CTX-471 monotherapy demonstrated efficacy in multiple murine models, including models highly resistant to immune checkpoint inhibitors.
- Combining CTX-471 with tovecimig (CTX-009) markedly increased anti-tumor efficacy in these models.
- Tovecimig in combination with CTX-471 showed evidence of enhanced innate and adaptive anti-tumor immunity ranging from increased tumor cell killing to increased antigen presentation and interferon signaling.
- The combination of tovecimig and CTX-471 has the potential to be an effective therapeutic regimen in patients where checkpoint inhibitors have failed, including anti-PD-1 and anti-PD-L1 antibodies.

BOSTON, April 28, 2025 (GLOBE NEWSWIRE) -- Compass Therapeutics, Inc. (Nasdaq: CMPX), a clinical-stage, oncology-focused biopharmaceutical company developing proprietary antibody-based therapeutics, today announced its poster presentation entitled “Enhanced Efficacy of CTX-471, A CD137 Agonist Antibody, In Models of Immune Checkpoint Failure Via Simultaneous Blockade of Neo-Angiogenesis” at the American Association for Cancer Research (AACR) Annual Meeting, from April 25–30, 2025, at the McCormick Place Convention Center in Chicago, IL.

“We are encouraged by the preclinical data shared at AACR, which demonstrated increases in the tumoral immune infiltrate in several mouse models following CTX-471 monotherapy,” said Thomas Schuetz, M.D., Ph.D., Chief Executive Officer and Scientific Founder of Compass. “Our results also suggest that combining CTX-471 with a next-generation anti-angiogenic agent such as tovecimig might not only enhance therapeutic efficacy and duration of response to CTX-471, but may also provide clinical benefit to patients in whom checkpoint inhibitors have failed. We look forward to advancing our ongoing work in these programs, with potential application across multiple solid tumor types and patient populations.”

Tovecimig in combination with CTX-471 demonstrated compelling activity in multiple murine models, including novel models highly resistant to immune checkpoint inhibitors:

- CT26B2m and MC38B2m knockout mouse tumor models, engineered to mimic HLA loss in patients (B2m: beta-2 microglobulin).
- Two novel models of immunotherapy resistance without the enhanced NK cell susceptibility bias conferred by complete or targeted MHC-I loss:
  - A murine model with CT26 cells containing an engineered deletion of the B2m gene that were passaged in tumor-experienced mice, establishing a line of CT26B2m-/- cells that escaped immune rejection (CT26 B2m knockout escapers, CT26B2m-/-E).
  - A murine model containing an H-2k1 MHC-I locus knockout in MC38 cells, resulting in targeted homozygous loss (with the expression of the other MHC-I alleles, and therefore natural resistance to NK cells).

The combination of CTX-471 with tovecimig was effective in these mouse models where conventional immune checkpoint inhibitors show reduced activity. Mechanistically, the combination appears to enhance inflammasome activation, pyroptosis, and interferon-mediated signaling, potentially providing clinical benefit to patients in whom checkpoint inhibitors have failed.

A copy of the presentation materials can be accessed on the News & Events section under “**Presentations**” of the Company’s website at **www.compasstherapeutics.com** once the presentation has concluded.

About CTX-471

CTX-471 is a fully human monoclonal antibody that binds and activates a novel epitope of the co-stimulatory receptor CD137, also known as 4-1BB, a member of the tumor necrosis factor receptor superfamily. The antibody is currently being evaluated in a Phase 1b clinical trial in patients with solid tumors that have progressed after at least three months on an approved PD-1 or PD-L1 inhibitor. Initial results reported from a monotherapy cohort of the study included partial responses in melanoma, small cell lung cancer, and mesothelioma, and CTX-471 has been generally well tolerated. In preclinical studies, CTX-471 has demonstrated potent monotherapy activity against multiple syngeneic tumor models, including the generation of long-term functional immunological memory.

About Tovecimig (CTX-009)

Tovecimig is an investigational bispecific antibody that is designed to simultaneously block Delta-like ligand 4 (DLL4) and vascular endothelial growth factor A (VEGF-A) signaling pathways, which are critical to angiogenesis and tumor vascularization. Preclinical and early clinical data of tovecimig suggest that blockade of both pathways provides robust anti-tumor activity across several solid tumors, including colorectal, gastric, cholangiocarcinoma, pancreatic and non-small cell lung cancer. Partial responses to tovecimig as a monotherapy have been observed in heavily pre-treated patients with cancer who were resistant to approved anti-VEGF therapies. COMPANION-002, a Phase 2/3 trial of tovecimig plus paclitaxel versus paclitaxel monotherapy in patients with previously treated, unresectable advanced metastatic or recurrent biliary tract cancers (BTC) is ongoing (clinical trial information: NCT05506943).

About Compass Therapeutics

Compass Therapeutics, Inc. is a clinical-stage oncology-focused biopharmaceutical company developing proprietary antibody-based therapeutics to treat multiple human diseases. Compass's scientific focus is on the relationship between angiogenesis, the immune system, and tumor growth. The Company's pipeline of novel product candidates is designed to target multiple critical biological pathways required for an effective anti-tumor response. These include modulation of the microvasculature via angiogenesis-targeted agents, induction of a potent immune response via activators on effector cells in the tumor microenvironment, and alleviation of immunosuppressive mechanisms used by tumors to evade immune surveillance. Compass plans to advance its product candidates through clinical development as both standalone therapies and in combination with proprietary pipeline antibodies based on supportive clinical and nonclinical data. The Company was founded in 2014 and is headquartered in Boston, Massachusetts. For more information, visit the Compass Therapeutics website at https://www.compasstherapeutics.com.

Forward-Looking Statements

This press release contains forward-looking statements. Statements in this press release that are not purely historical are forward-looking statements. Such forward-looking statements include, among other things, statements regarding Compass's product candidates, including the therapeutic potential of tovecimig and CTX-471. Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, Compass's ability to raise the additional funding it will need to continue to pursue its business and product development plans, the inherent uncertainties associated with developing product candidates and operating as a development stage company, Compass's ability to identify additional product candidates for development, Compass's ability to develop, complete clinical trials for, obtain approvals for and commercialize any of its product candidates, competition in the industry in which Compass operates and market conditions. These forward-looking statements are made as of the date of this press release, and Compass assumes no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements, except as required by law. Investors should consult all of the information set forth herein and should also refer to the risk factor disclosure set forth in the reports and other documents Compass files with the U.S. Securities and Exchange Commission (SEC) available at *www.sec.gov*, including without limitation Compass's latest Annual Report on Form 10-K and subsequent filings with the SEC.

Investor Contact
ir@compasstherapeutics.com

Media Contact
Anna Gifford, Senior Communications Manager
media@compasstherapeutics.com
617-500-8099