Compass Therapeutics Presents Data Demonstrating Elimination of MHC Class I Negative Tumors in In Vivo Models at the 2024 American Association for Cancer Research (AACR) Annual Meeting

April 9, 2024

- Major Histocompatibility Complex Class I (MHC-I) negative tumors are refractory to immune-oncology therapies, including resistance to checkpoint blockers, due to the loss of the fundamental recognition of the tumor by CD8+ T-Cells, which drive the adaptive immune attack on the tumor.
- Immune responses were generated toward the MHC-I negative tumors by combining CTX-009 with CTX-471. This combination was surprisingly synergistic. The proposed mechanism for this effect suggests the involvement of NK-cells, which can generate potent cell killing independent of MHC-I.
- By blocking DLL4 and VEGF, CTX-009 may increase the trafficking and penetration of NK Cells into the tumor microenvironment where CTX-471 may augment the activity of these cells. This activity against the tumor does not require MHC-I integrity.
- The combination of CTX-009 and CTX-471 has the potential to be an effective therapeutic regimen in patients who have previously progressed on checkpoint blockers, such as anti-PD-1 and anti-PD-L1 antibodies.

BOSTON, April 09, 2024 (GLOBE NEWSWIRE) -- Compass Therapeutics, Inc. (Nasdaq: CMPX), a clinical-stage, oncology-focused biopharmaceutical company developing proprietary antibody-based therapeutics to treat multiple human diseases, today presents a poster on the combination of its bispecific antibody, CTX-009, and its agonistic anti-CD137 antibody, CTX-471, on anti-tumor activity in preclinical models at the 2024 American Association for Cancer Research (AACR) Annual Meeting taking place at the San Diego Convention Center in San Diego, California on April 9.

“We are very excited to see the anti-tumor activity of our bispecific DLL4/VEGF-A antibody, CTX-009, in multiple preclinical tumor models,” said Thomas Schuetz, MD, PhD, Co-Founder and President of Research & Development at Compass. “The post-Checkpoint Inhibitor (CPIs, either PD-1 or PD-L1) patient population is one of the most significant unmet medical needs in medical oncology today. When a tumor is MHC-I negative, it is effectively invisible to the immune system; however, importantly, in these models the combination of CTX-009 and CTX-471 eliminated tumors, suggesting that the combination of CTX-009 and CTX-471 could be considered as a viable alternative where previous immunotherapy has failed.”

Data highlights from the poster presentation include:

- The combination of mCTX-009 and mCTX-471 demonstrated superior efficacy in both Checkpoint Inhibitor (CPI)-sensitive and CPI-refractory models with markedly enhanced anti-tumor activity compared with either monotherapy.
- Following mCTX-009 and mCTX-471 combination treatment, superior efficacy was observed in MHC Class I negative tumors. Deletion of B2m produced MHC-I null phenotypes in two colorectal cancer cell lines. Tumor elimination was in part mediated by NK cells.
- These preclinical data suggest that the combination of CTX-009 and CTX-471 could re-establish anti-tumor immunity in patients whose tumors have either downregulated or lost MHC-I expression by way of NK-cell mediated tumor cell killing.

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-009
CTX-009 is a bispecific antibody that simultaneously blocks Delta-like ligand 4/Notch (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 CTX-009 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 CTX-009 as a monotherapy have been observed in heavily pre-treated patients with cancer who were resistant to currently approved anti-VEGF therapies. Compass holds the global rights to CTX-009 (also known as ABL001) with the exception of rights in Korea, held by Handok, Inc. (**https://www.handok.co.kr/eng/**) and rights in China, which were out-licensed to Elpiscience Biopharma, Ltd. (**https://www.elpiscience.com/**).

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 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 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, references to Compass's financial position to continue advancing its product candidates, expectations about cash runway, business and development plans, and statements regarding Compass's product candidates, including their development and clinical trial milestones such as the expected trial design, timing of enrollment, patient dosing and data readouts, regulatory plans with respect to Compass's product candidates and the therapeutic potential thereof. 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, Quarterly Report on Form 10-Q and subsequent filings with the SEC.*

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