Compass Therapeutics Presents Data on CTX-8371, a Bispecific Antibody Targeting PD-1 and PD-L1, at the 2022 AACR Annual Meeting

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BOSTON, April 08, 2022 (GLOBE NEWSWIRE) -- Compass Therapeutics, Inc. (Nasdaq: CMPX), a clinical-stage oncology focused biotechnology company developing proprietary antibody-based therapeutics to treat multiple human diseases, today reported new preclinical data on CTX-8371, a next generation bispecific checkpoint inhibitor that simultaneously targets PD-1 and PD-L1 and exhibits a unique MOA that involves cleavage of cell surface PD-1, at the American Association for Cancer Research (AACR) Annual Meeting, which is being held April 8-13, 2022, at the Ernest N. Morial Convention Center in New Orleans, Louisiana (Abstract Number: 5027; Session Title: Combination Immunotherapies / Therapeutic Antibodies).

Key data presented includes the following:

- Treatment with CTX-8371 leads to PD-1 loss from the surface of intra-tumoral T cells in tumor-bearing transgenic hPD-1/h-PD-L1 mice, and on peripheral blood T cells in cynomolgus macaques. This unique mechanism of action (MOA) differentiates CTX-8371 from marketed inhibitors targeting either PD-1 or PD-L1.

- Clearance and half-life of CTX-8371 are within the expected ranges for a human IgG1 antibody in non-human primates (NHP) with a linear PK.

- Treatment with CTX-8371 in the aggressive MC38-hPD-L1 colorectal mouse model led to a dose-proportional reduction in tumor volume and a complete eradication of tumors at the highest dose.

- Taken together, the murine and cynomolgus monkey PK data, receptor occupancy data, and *in vivo* efficacy data in murine models will be used to calculate the predicted human efficacious dose range for CTX-8371.

“These findings further provide *in vivo* evidence for the differentiated mechanism of action of CTX-8371 and inform its clinical development, which is projected to begin in the first half of 2023,” said Thomas Schuetz, MD, PhD, CEO and Scientific Founder of Compass Therapeutics.

About CTX-8371

CTX-8371 is a bispecific antibody that simultaneously targets the programmed death receptor (PD-1) and the programmed death receptor ligand (PD-L1) that are expressed on immune cells and cancer cells, respectively. CTX-8371 is currently undergoing IND-enabling preclinical

development. In pre-clinical studies, CTX-8371 demonstrated enhanced anti-tumor activity compared to multiple commercially available monoclonal antibodies targeting either PD-1 or PD-L1 across several solid tumor animal models, including large syngeneic tumors as well as immunologically resistant melanoma metastasis models. Investigation into the MOA of CTX-8371 showed that simultaneous binding of CTX-8371 to PD-1 and PD-L1 resulted in both cell-to-cell bridging and sustainable shedding of the extra-cellular domain of PD-1 from the surface of effector cells. This unique MOA indicates that CTX-8371 has the potential to eliminate PD-1 from the surface of effector cells rather than transiently reducing the ability of PD-1 to bind to its ligands, thus providing sustainable relief of immune suppression, which may explain the observed enhanced activity of CTX-8371 over commercially available anti-PD-1 and anti-PD-L1 monoclonal antibodies. Effectively, it appears that CTX-8371 converts PD-1-positive cells into PD-1-negative cells.

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’ 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.

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 the Company's product candidate, CTX-8371, and the development and therapeutic potential thereof. Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, the Company’s ability to raise the additional funding it will need to continue to pursue our business and product development plans, the inherent uncertainties associated with developing product candidates and operating as a development stage company, the Company's ability to identify additional product candidates for development, our ability to develop, complete clinical trials for, obtain approvals for and commercialize any of its product candidates, competition in the industry in which the Company 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 the information set forth herein and should also refer to the risk factor disclosure set forth in the reports and other documents we file with the SEC available at www.sec.gov.

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