Compass Therapeutics Announces Publication of Data Demonstrating the Preclinical Efficacy and Safety of CTX-471, a Unique Fully Human Agonist of CD137

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Data Published in JCI Insight*Demonstrate Strong Monotherapy Activity in High Tumor Burden Models*

CTX-471 Now Being Evaluated in Phase 1 Clinical Trial in Patients with Solid Tumors

CAMBRIDGE, Mass., March 30, 2020 —Compass Therapeutics, a clinical-stage biotechnology company focused on drugging the human immune synapse, today announced the publication of extensive data demonstrating the preclinical efficacy and safety of the company's lead investigational therapy, CTX-471, which is currently being evaluated in a Phase 1 clinical trial. The paper, "Differentiated Agonist Antibody Targeting CD137 Eradicates Large Tumors without Hepatotoxicity," was published in the peer-reviewed journal *JCI Insight*. It describes the discovery and preclinical characterization of CTX-471, a fully human antibody that binds and activates a unique epitope of the CD137 receptor and has demonstrated a favorable and differentiated efficacy and safety profile, including monotherapy activity against multiple syngeneic tumor models and excellent tolerability in animals.

The CTX-471 Phase 1 clinical trial is ongoing in patients with selected metastatic or locally advanced solid cancers who have received at least one prior line of therapy. The dose escalation portion of the study is projected to complete in mid-2020, and a dose expansion phase will follow.

"CTX-471 binds a unique epitope on the CD137 receptor, not targeted by other CD137 agonists, and as a monotherapy, it has demonstrated eradication of large, fast-growing tumors in mice where other immuno-oncology therapies have had minimal effect in these models. Interestingly, our antibody appears to generate long-term, functional immunological memory leading to complete rejection of newly inoculated tumors in those treated animals," said Thomas Schuetz, M.D., Ph.D., co-founder and chief executive officer at Compass Therapeutics. "We know that many patients do not respond to PD-1 or PD-L1 blockers as monotherapies, leaving them with limited alternative therapeutic options. We hope CTX-471 can address those needs and improve the lives of those patients."

Highlights from the publication include:

- CTX-471 as monotherapy achieved high rates of complete tumor regression in multiple syngeneic mouse models.
- CTX-471 selectively and profoundly reprogrammed the tumor microenvironment, increasing CD8+ T cell infiltration and penetration while reducing T cell exhaustion and regulatory T cell infiltration.
- The anti-tumor activity of CTX-471 was driven by immunoglobulin FC receptor (FcyR)-engagement and required the coordinated involvement of both T cells and NK cells.
- CTX-471 is believed to work by stabilizing the receptor trimer while allowing the natural ligand to bind to the receptor.

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 1 clinical trial in patients with solid tumors that have progressed despite at least three months on an approved PD-1 or PD-L1 inhibitor. In preclinical studies, CTX-471 has demonstrated potent monotherapy activity against multiple syngeneic tumor models, including the generation of long-term functional immunological memory. Most notably, CTX-471 shows a unique ability to completely eradicate large, established tumors where other preclinical CD137 antibodies and antibodies against PD-1, PD-L1, CTLA-4 and OX40 have minimal effects in these models. In contrast to other CD137 antibodies, CTX-471 shows no evidence of hepatic toxicity in either mice or non-human primates, supporting the potential for a wide therapeutic window in patients.

About Compass Therapeutics

Compass Therapeutics is a clinical-stage biotechnology company targeting the human immune synapse with a new generation of monoclonal and multispecific antibody therapeutics. Compass is leveraging its proprietary StitchMabs^{TM} and common light-chain based multispecific platforms to empirically identify multispecifics and combinations of antibody therapeutics that synergistically modulate key nodes in the immune system. The company's lead product candidate, CTX-471, is a fully human agonistic antibody of CD137, which is in a Phase 1 study in patients with inadequate responses to PD-1/PD-L1 checkpoint inhibitors. Compass is also progressing several preclinical assets including a novel class of NK cell engaging bispecifics targeting NKp30 and multiple bispecific checkpoint programs. The company's offices and labs are based in Kendall Square in Cambridge, Mass.

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