Preclinical Data Demonstrate Anti-Siglec-15 Treatment Improves Bone Microarchitecture and Reduces Fracture Incidence in Mice with Moderate-to-Severe Osteogenesis Imperfecta

July 24, 2025 at 4:05 PM EDT

BELTSVILLE, Md., July 24, 2025 (GLOBE NEWSWIRE) -- NextCure, Inc. (Nasdaq: NXTC), a clinical-stage biopharmaceutical company committed to discovering and developing novel, first-in-class and best-in-class therapies to treat cancer, today announced the presentation of new preclinical data in a well-established model of osteogenesis imperfecta (OI) demonstrating that treatment with NC605, a novel anti-Siglec-15 antibody, achieved improved bone microarchitecture and reduced fracture incidence compared to anti-sclerostin treatment. The data were presented at the Brittle Bone Society Meeting on July 24th, 2025. These results demonstrate that NC605 could be a highly effective treatment for OI, also known as brittle bone disease.

OI is a rare disorder that results in high bone turnover, abnormal bone formation, bone fragility and recurrent fractures. There is no cure for OI. Current anti-resorptive treatments inhibit both bone loss and bone formation leading to an increase in bone density, but overall poor bone quality. In contrast, NC605 has been shown to inhibit bone loss and to produce new bone, with increased quality and density.

Fracture incidence and bone architecture were assessed in male and female OI mice treated with weekly 20 mg/kg of surrogate antibody NP159 (murine mAb parent to NC605) and compared to control groups treated with twice weekly 50 mg/kg anti-sclerostin or saline. NP159 increased cortical and trabecular bone mineral density, tissue mineral density, cortical thickness and decreased trabecular separation compared to saline-treated mice.

“In a mouse model of moderate-to-severe OI, NP159, a surrogate murine antibody for NC605, improved trabecular and cortical bone density and reduced fracture incidence comparable to anti-sclerostin,” said Priyanka Kothari, Ph.D., NextCure’s Director, Translational Research. “There is currently no standard of care approved by the FDA for patients with OI and NC605 has the potential to provide significant therapeutic benefit for patients.”

The data were generated in collaboration with Dr. Cathleen Raggio, Hospital for Special Surgery, New York.

NextCure is seeking financial support from partners or third parties to advance NC605 to a possible Investigational New Drug submission within 12 to 18 months.

About NextCure, Inc.

NextCure is a clinical-stage biopharmaceutical company that is focused on advancing innovative medicines that treat cancer patients that do not respond to, or have disease progression on, current therapies, through the use of differentiated mechanisms of actions including antibody-drug conjugates, antibodies and proteins. We focus on advancing therapies that leverage our core strengths in understanding biological pathways and biomarkers, the interactions of cells, including in the tumor microenvironment, and the role each interaction plays in a biologic response. http://www.nextcure.com

Cautionary Statement Regarding Forward-Looking Statements

Statements made in this press release that are not historical facts are forward-looking statements. Words such as “expects,” “believes,” “intends,” “hope,” “forward” and similar expressions are intended to identify forward-looking statements. Forward-looking statements involve substantial risks and uncertainties that could cause actual results to differ materially from those projected in any forward-looking statement. Such risks and uncertainties include, among others: our limited operating history and no products approved for commercial sale; our history of significant losses; our need to obtain additional financing; risks related to clinical development, including that early clinical data may not be confirmed by later clinical results; risks that pre-clinical research may not be confirmed in clinical trials; risks related to marketing approval and commercialization; and NextCure’s dependence on key personnel. More detailed information on these and additional factors that could affect NextCure’s actual results are described in NextCure’s filings with the Securities and Exchange Commission (the “SEC”), including NextCure’s most recent Form 10-K and subsequent Form 10-Q. You should not place undue reliance on any forward-looking statements. NextCure assumes no obligation to update any forward-looking statements, even if expectations change.

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