



Keros Therapeutics Presents Results from Preclinical Studies Investigating KER-012 at the American Society for Bone and Mineral Research 2020 Annual Meeting

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LEXINGTON, Mass., Sept. 11, 2020 (GLOBE NEWSWIRE) -- Keros Therapeutics, Inc. ("Keros" or the "Company") (Nasdaq: KROS), a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of novel treatments for patients suffering from hematological and musculoskeletal disorders with high unmet medical need, today announced results from preclinical studies of KER-012 at the American Society for Bone and Mineral Research (ASBMR) 2020 Annual Meeting Virtual Event held September 11-15, 2020.

In Preclinical Studies, KER-012 Increased Trabecular Bone by Reducing Bone Catabolism and Enhancing Anabolism

- ***KER-012, A Novel Activin Receptor Type II Ligand Trap, Increases Bone in Mice Via a Unique Mechanism of Action - Presentation Number: P-656***

TGF- β superfamily ligands, including activin A and B, are negative regulators of bone remodeling, suppressing bone growth. KER-012 is a modified activin receptor type II ligand trap designed to bind to and inhibit activins and SMAD 2/3 signaling. In adult male mice, administration of KER-012 (20 mg/kg twice weekly for 5 weeks) resulted in the following statistically significant changes relative to vehicle treatment:

- Increased trabecular bone volume (82.0%; $p < 0.001$), higher trabecular bone volume fraction (78.3%; < 0.001) and increased trabecular number (33.5%; $p < 0.01$).
- Increased trabecular thickness (28.8%; $p < 0.01$) and reduced trabecular separation (-27.2%; $p < 0.001$).

Enhanced bone anabolism was demonstrated through:

- Increased (i) trabecular mineralizing surface (+63.4%; $p < 0.01$), (ii) trabecular mineral apposition rate (+29.9%; $p < 0.05$) and (iii) trabecular bone formation rate (+107.7%; $p < 0.01$), as well as a trend towards increased osteoblast number (+29.0%; NS).

Reductions in bone catabolism were evidenced by:

- Reduced (i) trabecular eroded surface (-42.2%; $p < 0.001$) and (ii) trabecular osteoclast number (-45.8%; $p < 0.01$).

The observed increase in osteoblast/osteoclast ratio (+125.0%; $p < 0.01$) is potentially indicative of the dual mechanism of increased anabolism and decreased catabolism.

"Taken together, we believe the results from these preclinical studies provide further support of our hypothesis that KER-012 acts through a differentiated mechanism to increase trabecular bone by reducing bone resorption and enhancing formation," said Jasbir S. Seehra, Ph.D., President and Chief Executive Officer of Keros. "We believe that the mechanism of action of KER-012 represents a unique opportunity to potentially treat a number of conditions where bone loss is an issue, such as osteoporosis and cancer-induced bone loss."

About KER-012

KER-012 is designed to bind to and inhibit the signaling of transforming growth factor-beta ligands, including activin A and activin B, which are key regulators of bone remodeling that act to suppress bone growth. KER-012 is being developed for the treatment of disorders associated with bone loss, such as osteogenesis imperfecta and osteoporosis, and for the treatment of pulmonary arterial hypertension.

About Keros Therapeutics, Inc.

Keros is a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of novel treatments for patients suffering from hematologic and musculoskeletal disorders with high unmet medical need. Keros is a leader in understanding the role of the Transforming Growth Factor-Beta family of proteins, which are master regulators of red blood cell and platelet production as well as of the growth, repair and maintenance of muscle and bone. Keros' lead protein therapeutic product candidate, KER-050, is being developed for the treatment of low blood cell counts, or cytopenias, including anemia and thrombocytopenia, in patients with myelodysplastic syndromes and in patients with myelofibrosis. Keros' lead small molecule product candidate, KER-047, is being developed for the treatment of anemia resulting from elevated levels of hepcidin, the key regulator of iron absorption and recycling, as well as for the treatment of fibrodysplasia ossificans progressiva. Keros' third product candidate, KER-012, is being developed for the treatment of disorders associated with bone loss, such as osteoporosis and osteogenesis imperfecta, and for the treatment of pulmonary arterial hypertension.

Cautionary Note Regarding Forward-Looking Statements

Statements contained in this press release regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Words such as "anticipates," "believes," "expects," "intends," "plans," "potential," "projects," "would" and "future" or similar expressions are intended to identify forward-looking statements. Examples of these forward-looking statements include statements concerning: the potential of KER-012 to act through a differentiated mechanism and the potential of KER-012 to treat bone loss conditions, such as osteogenesis imperfect, osteoporosis and cancer-induced bone loss. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. These risks and uncertainties include, among others: Keros' limited operating history and historical losses; Keros' ability to raise additional funding to complete the development and any commercialization of its product candidates; that Keros may be delayed in initiating, enrolling or completing any clinical trials; competition from third parties that are developing products for similar uses; Keros' ability to obtain, maintain and protect its intellectual property; Keros' dependence on third parties in connection with manufacturing, clinical trials and pre-clinical studies; and risks relating to the impact on Keros' business of the COVID-19 pandemic or similar public health crises.

These and other risks are described more fully in Keros' filings with the Securities and Exchange Commission ("SEC"), including the "Risk Factors" section of the Company's Quarterly Report on Form 10-Q, filed with the SEC on August 13, 2020, and its other documents subsequently filed with or furnished to the SEC. All forward-looking statements contained in this press release speak only as of the date on which they were made. Except to the extent required by law, Keros undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

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