



Kuros Biosciences Announces Publication of Supportive Osteoimmunology Data for MagnetOs Bone Graft

February 21, 2023

- Publications in peer reviewed **Journal of Immunology and Regenerative Medicine and Clinical Oral Implants Research**
- Adds to body of evidence for MagnetOs, using data from human and animal models

Schlieren (Zurich), Switzerland, 21 February, 2023 – Kuros Biosciences (“Kuros” or the “Company”), a leader in next generation bone graft technologies, today announced the publication of key scientific data on the efficacy of MagnetOs bone graft in two prestigious, peer-reviewed scientific journals.

Joost de Bruijn, Chief Executive Officer of Kuros, said: “We are proud to publish these important scientific data, which substantiate the unique mechanism of action of our MagnetOs bone graft. It adds to the substantial body of evidence we are building up for MagnetOs, using data from human-derived cells and in long-term clinically relevant animal models, which other manufacturers do not typically complete for their bone grafts because these are not needed for regulatory clearance. These studies underline Kuros’s commitment to a translational research approach through which we convert our ground-breaking research into clinical evidence of efficacy in humans, for the benefit of patients, surgeons, and our wider society.”

Data published in the ***Journal of Immunology and Regenerative Medicine*** outlined an in vitro study, which found an overall stronger macrophage activation and shift towards an M2-like macrophage phenotype on MagnetOs, compared to calcium phosphate without its NeedleGrip submicron surface topography. The enhanced pro-regenerative paracrine signaling to stem cells by macrophages on MagnetOs was determined in angiogenic and osteogenic assays.

These findings, in line with findings from other studies, confirm that M2 macrophage upregulation plays a role in enhanced bone regeneration by MagnetOs. The study was based on human-derived monocytes and stem cells from donated blood and tissues, rather than the engineered cells lines typically used by other manufacturers in their in vitro experiments.

The article in ***Clinical Oral Implants Research*** reviewed translational research which demonstrated successful maxillary sinus floor augmentation with MagnetOs in a preclinical sheep model and in a prospective clinical trial at the University Medical Center of Utrecht. In both studies, use of MagnetOs led to an equivalent amount of bone formation and overall comparable performance to the “gold standard” of autologous bone graft.

These findings confirm that morphology of submicron surface features on calcium phosphates dictates their in-situ bone-forming potential. MagnetOs promoted the formation of mature bone in direct contact with its surface, facilitating osseointegration and stability of dental implants after one year of placement while avoiding the disadvantages of autograft, such as the requirement for a second surgical site and graft resorption.

For further information, please contact:

Kuros Biosciences AG	LifeSci Advisors
Daniel Geiger	Sandya von der Weid
Chief Financial Officer	Investors
t: +41 79 673 43 69	t: +41 78 680 0538
e: Daniel.geiger@kurosbio.com	e: svonderweid@lifesciadvisors.com

About MagnetOs

*MagnetOs isn't like other bone grafts. It grows bone even in soft tissue thanks to its unique NeedleGrip surface technology which provides traction for our body's vitally important 'pro-healing' immune cells (M2 macrophages). This in turn, unlocks previously untapped potential to stimulate stem cells – and form new bone throughout the graft. The growing body of science behind NeedleGrip is called osteoimmunology. But for surgeons and their patients it means one thing: a more efficient and predictable fusion. *†1-3*

Indications statement

Please refer to the instructions for use for your local region for a full list of indications, contraindications, warnings, and precautions.

About Project Fusion

Today, nearly 1 in 5 spinal fusions fail. So, what can we do to change this situation – for the benefit of patients, surgeons and our wider society? This is the question that drives us at Kuros Biosciences. Every day our team works across three continents to unlock the hidden secrets of bone healing through our research, development & technology program: Project Fusion. To deliver

the ideal bone graft, we believe you need the highest quality & quantity of scientific evidence behind it. Which is why Project Fusion brings together an unprecedented blend of scientific, preclinical and clinical studies – all aimed at making the unpredictable...predictable. For more information on Project Fusion, visit kurosbio.com/project-fusion.

About Kuros Biosciences

Kuros Biosciences is a fast-growing leader in the development of spinal fusion biologics that ease the burden of back pain. With locations in the United States, Switzerland and the Netherlands, the company is listed on the SIX Swiss Exchange. The company's first commercial product, MagnetOs, is a unique synthetic bone graft that has already been used successfully across three continents and in over 10,000 spinal fusion surgeries. The next candidate in the Kuros pipeline is Fibrin-PTH – the first drug-biologic combination for interbody spinal fusions, currently undergoing a Phase 2 clinical trial in the U.S. For more information on the company, its products and pipeline, visit kurosbio.com.

Forward Looking Statements

This media release contains certain forward-looking statements that involve risks and uncertainties that could cause actual results to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. You are urged to consider statements that include the words “will” or “expect” or the negative of those words or other similar words to be uncertain and forward-looking. Factors that may cause actual results to differ materially from any future results expressed or implied by any forward-looking statements include scientific, business, economic and financial factors. Against the background of these uncertainties, readers should not rely on forward-looking statements. The Company assumes no responsibility for updating forward-looking statements or adapting them to future events or developments.

1. Van Dijk, et al. eCM. 2021;41:756-73
2. Duan, et al. eCM. 2019;37:60-73.
3. Van Dijk, et al. Clin Spine Surg. 2020;33(6):E276-E287.

**Results from in vivo laboratory testing may not be predictive of clinical experience in humans. For important safety and intended use information please visit kurosbio.com.*

†MagnetOs is not cleared by the FDA or TGA as an osteoinductive bone graft.

‡MagnetOs has been proven to generate more predictable fusions than two commercially available alternatives in an ovine model of posterolateral fusion.