Kuros reports publication of MagnetOs data demonstrating equivalence to autologous bone in spinal fusion

- **Study with sheep should further enhance competitive positioning of MagnetOs**
- **Sheep animal model is one of the most relevant preclinical model and believed to be predictive of outcomes in humans**
- **12-week fusion rate with MagnetOs granules & putty 92% & 83% versus autograft 75%**

Schlieren (Zurich), Switzerland, December 6, 2018 – Kuros Biosciences (SIX: KURN) today announced the publication of data from a clinically-relevant preclinical model comparing MagnetOs with autologous bone in instrumented posterolateral spinal fusion in sheep. Utilizing multiple assessments for fusion, the study concluded that MagnetOs is a suitable alternative to autograft when used as a standalone graft.

The publication, which is entitled "Biphasic calcium phosphate with submicron surface topography in an Ovine model of instrumented posterolateral spinal fusion" was included in the December issue *JOR Spine*, an open-access Orthopaedic Research Society (ORS) journal.

Joost de Bruijn, Chief Executive Officer of Kuros, said: "This latest study demonstrates early bone healing and physiologically-appropriate graft resorption for MagnetOs in this clinically-relevant model of posterolateral spinal fusion and adds to the growing body of evidence proving that MagnetOs is a reliable alternative to autologous bone graft."

Professor Bill Walsh, University of New South Wales, Australia, who was principal investigator of the study said: "I've investigated many of the leading synthetic bone grafts in this model and, in my experience, MagnetOs leads to the most compelling fusion outcomes of all the grafts I've tested."

About the study

MagnetOs Granules and MagnetOs Putty were implanted standalone and compared to autograft bone. Twenty-five adult, female Merino sheep underwent posterolateral spinal fusion at L2-3 and L4-5 levels with instrumentation. After 6, 12, and 26 weeks, outcomes were evaluated by manual palpation, range of motion testing, micro-computed tomography, histology and histomorphometry. Fusion assessment by manual palpation 12 weeks after implantation revealed 100% fusion rates in all treatment groups. Similarly, the three treatment groups showed a statistically significant decrease in lateral bending at the fusion levels at 12 weeks and 26 weeks compared to the 6-week time-point, which further confirmed spinal fusion. No significant differences in range of motion were observed between the treatment groups at any of the time-points investigated. Histological assessment at 12 weeks showed fusion rates of 75%, 92%, and 83% for autograft, MagnetOs Granules and MagnetOs Putty, respectively. The fusion rates were further increased 26 weeks post-implantation. Similar trends of bone growth were observed by histomorphometry.

Citation

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About MagnetOs

MagnetOs promotes local bone formation equivalent to current gold standard, autograft. A substantial number of clinically relevant and predictive studies have demonstrated its equivalence to the current gold standard (patient's own bone, which may not be available in sufficient quantities and/or involves morbidity, costs and pain associated with its harvesting from another healthy site of the patient's body). MagnetOs is a bone graft comprising biphasic calcium phosphate with an advanced submicron surface topography that directs bone formation after implantation. With its unique submicron surface topography, MagnetOs preferentially directs early wound healing toward the bone-forming pathway, resulting in an osteoinductive claim in Europe. MagnetOs is available as granules and as a putty formulation.

US indications statement

MagnetOs is an implant intended to fill bony voids or gaps of the skeletal system, i.e., posterolateral spine. MagnetOs must be used with autograft as a bone graft extender in the posterolateral spine. These osseous defects may be surgically created or the result of traumatic injury to the bone and are not intrinsic to the stability of the bony structure.

EU indications statement

MagnetOs is intended for use as bone void filler for voids and gaps that are not intrinsic to the stability of the bony structure. MagnetOs is indicated for use in the treatment of surgically created osseous defects or osseous defects resulting from traumatic injury to the bone. MagnetOs is intended to be packed into bony voids or gaps of the skeletal system (i.e. extremities, spine, cranial, mandible, maxilla and pelvis) and may be combined with autogenous bone. MagnetOs should not be used to treat large defects that in the surgeon's opinion would fail to heal spontaneously. In load bearing situations, MagnetOs is to be used in conjunction with internal or external fixation devices.

About Kuros Biosciences AG

Kuros Biosciences (SIX:KURN) is focused on the development of innovative products for bone regeneration and is located in Schlieren (Zurich), Switzerland and Bilthoven, The Netherlands. Visit www.kurosbio.com for additional information on Kuros, its people, science and product pipeline.

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.