



Joint Press Release

Poietis and Prometheus, division of skeletal tissue engineering of KU Leuven, enter into a Collaborative Research Agreement focused on 3D Bioprinting for skeletal ATMPs.

Leuven, Belgium and Pessac, France - June 19th, 2018 – **Poietis**, leading bioprinting company and Prometheus, Division of Skeletal Tissue Engineering at KU Leuven, entered into a 2-years Collaborative Research Agreement focused on high-precision 3D Bioprinting of tissue engineered Advanced Therapeutic Medicinal Products (ATMPs) for skeletal regeneration.

Prometheus focuses on the bench-to-bedside clinical translation of increasingly sophisticated, tissue-engineered, ATMPs to patients in areas of high-unmet medical need with a focus in skeletal regeneration.

Poietis has a specific background, expertise and interest in the use of 3D bioprinting of single cell suspensions into large, patterned tissue structures; and especially the application of laser-assisted bioprinting of multicellular micro-aggregates embedded in “bioinks” for the formation of layered cellular structures.

The complementarity of both parties’ expertise will be a key point to address the challenges of tissue and organ manufacturing, and to translate tissue engineering research into accessible, affordable and reproducible tissue products. Based on previous successful common Proof-Of-Concept experiments the goal is to conduct pioneer pre-clinical work through a Collaborative Research Agreement on automated 3D bioprinting for skeletal ATMPs, with the aim to bringing designed living implants closer to the clinic.

In 2017, the global tissue engineering market was estimated to grow from \$4.7 billion in 2014 to \$11.5 billion in 2022, the largest part thereof in orthopaedics, musculoskeletal and spine-related applications. Cost-effectiveness however is still a major bottleneck for successful commercialization of tissue engineered products.

“ Regenerative Medicine holds great promise to provide effective therapies for non-healing large cartilage and bone defects, which remain unmet medical needs. When the environment is compromised, such as in long standing non-union fractures, in the presence of other comorbidities, such as diabetes and in the aging patient, the endogenous repair potential is insufficient and tissue engineering strategies need to be developed such as in vitro manufactured living provisional tissues. We envision combining Prometheus’ cell-based technologies together with the Poietis’Bioprinting technology to treat these defects effectively”, stated **Prof. Frank Luyten**, Chairman of the Division of Rheumatology at the University Hospitals Leuven and Director of Prometheus, the Skeletal Engineering Division at the KU Leuven in Belgium.

"The field of bioprinting has been growing fast in the last 3 years. This collaboration materializes a turning point for Poietis, as it will expand our applications portfolio and advance our technology forward to respond to clinical challenges of tissue engineering", added **Dr. Fabien Guillemot**, Poietis' President and CSO.

"Being able to design and build tissues niche-by-niche opens up unprecedented possibilities for controlling quality features in engineered living implants for skeletal defect regeneration. The automation capacity of Poietis' technology can be also seen as the end-stage unit operation in the production pipeline of GMP compliant tissue products", commented **Dr. Ioannis Papantoniou**, ATMP Bioprocessing Coordinator - KU Leuven.

"This is the right timing for us to enter into such a collaboration with a worldwide renowned Center in Tissue Development and Engineering as the Division led by Professor Luyten. The economical perspectives are tremendous for setting up a tissue manufacturing platform based on bioprinting and allowing the production of engineered implants/tissues for therapeutic uses", said **Bruno Brisson**, Poietis co-founder and VP Business Development.

About Poietis :

Poietis is a biotechnology company specialized in the manufacturing of bioprinted living tissues. Since its creation in 2014, the company has been developing physiological models, particularly in partnerships with the main pharmaceutical and cosmetic groups. Poietis markets Poieskin®, the first commercialized tissue produced by bioprinting. The bioprinting technology of Poietis, whose company holds the exclusive and worldwide license, is the result of innovative research conducted for ten years by Inserm and the University of Bordeaux. Poietis was the winner of the iLab Challenge 2014 and the Worldwide Innovation Challenge Phase I in 2016 and Phase II in 2017. The company employs 32 people today. More information at: www.poietis.com

About Prometheus:

Prometheus at KU Leuven is a multi-disciplinary platform focusing on the bench-to-bedside clinical translation of fundamental research on stem cells and their mechanism(s) of action. The goal is to deliver a portfolio of increasingly sophisticated, tissue-engineered ATMPs to patients in areas of high-unmet medical need. These include the treatment of non-union (long bone) fractures, bone repair after prosthetic surgery, and osteochondral damage due to osteoarthritis. To achieve this goal, Prometheus is also dedicated to the concomitant development and up-scaling of automated, GLP and GMP compliant manufacturing processes and supporting technologies for producing functional tissue implants. Currently the Prometheus team consists of about 60 personnel , including PhD and post-doctoral students, senior academics, orthopaedic surgeons and a broad range of technical staff, coordinated by a central management team.

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