

eQcell Inc. initiates stem cell trials in equine osteoarthritis in Canada and the USA

Equine model serving as preclinical study for osteoarthritis therapy in humans

Press Release

Guelph, Ontario, Canada, August 19, 2021

eQcell Inc. announces the initiation of two blinded, randomized trials in equine osteoarthritis at the **University of Guelph's** Ontario Veterinary College Equine Sports Medicine and Reproductive Centre as well as at the **University of California, Davis** Veterinary Institute for Regenerative Cures (VIRC). The Canadian study in equine fetlock and in carpal joint osteoarthritis is authorized by Health Canada's Veterinary Drug Directorate and it is the first stem cell trial in Canada for the treatment of equine osteoarthritis. The US study in fetlock osteoarthritis is conducted under VIRC's Investigational New Animal Drug (INAD) with the FDA

The investigative drug is designed to provide safe, consistent, long-term joint pain management and, importantly, slow the degenerative structural changes within the joint, prolonging the time horses can compete or be ridden.

The extension to human drug development is consistent with One Health* principles that innovative cell therapy development for humans is advantaged by initiating clinical trials in genetically-diverse companion and sporting animals in contrast to purpose-bred, genetically-homogenic laboratory animals. eQcell's trials are structured to develop data in large animals both for rapid access to commercialization in the international veterinary markets, and to inform its longer-dated human clinical trials. eQcell's approach to the human drug indication is novel and significant since confirmation of large-animal efficacy holds the financially-important prospect of reducing late-stage failures in human trials, while generating early revenues from commercialization in rapidly-approvable veterinary applications.

The protocols for these proof-of-concept trials in osteoarthritis, a common and widespread condition for which there is no joint-tissue preserving, or disease-slowing solution for either humans or animals, were designed by a consortium of world leaders in human and veterinary stem cell biology, and in equine sports medicine:

- Dr. Frank Barry (Regenerative Medicine Institute, National University of Ireland Galway)
- Dr. Larry Galuppo (Veterinary Institute for Regenerative Cures, UC Davis School of Veterinary Medicine)
- Dr. Laurie Goodrich (Orthopaedic Research Center, Colorado State University's C. Wayne McIlwraith Translational Medicine Institute)
- Dr. Scott Hopper (Rood & Riddle Equine Hospital, Kentucky)
- Dr. Thomas Koch (Department of Biomedical Sciences, Ontario Veterinary College)
- Dr. Judith Koenig (Equine Sports Medicine & Reproduction Centre, Ontario Veterinary College)



“This is an important milestone for eQcell in its 15-years of development of cell-based products for veterinary and human patients,” states Dr. Koch founder and CEO of eQcell. “The initial target is to alleviate joint pain, slow disease progression and extend the careers of all horses from elite competition to pleasure trail horses. Additionally, the platform of eQcell’s investigative drug is intended to treat osteoarthritic conditions in humans, as well as in other sporting and companion animals.”

The protocols for the two trials are designed to produce data to inform a pivotal trial to support initial marketing application in Europe due to EMA’s rapid regulatory pathway for equine drugs. European approval is planned to be followed by marketing applications in North America and internationally, and the data from the trials are designed to subsequently inform similar studies in humans and dogs.

*US Centers for Disease Control & Prevention – <https://www.cdc.gov/onehealth/index.html>

Clinical trial information requests may be addressed to:

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