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Felix™ System equine application on track for sales within 12 months following positive initial study results

Key Highlights

- **Study confirms Felix™ System successfully isolates viable, low-ROS-producing frozen-thawed stallion spermatozoa, significantly improving sperm quality.**
- **Felix™ System offers faster processing times (6 minutes) compared to other methods, enhancing efficiency for commercial equine breeding operations.**
- **Larger three-year equine fertility study now underway to position Felix™ System as the leading sperm isolation technology in the global equine Artificial Insemination (AI) market, valued at an estimated USD $681 million per annum[1].**
- **Commercial equine outcomes anticipated within 12 months, with significant market opportunities in non-thoroughbred equine breeding.**

Australian bioseperation biotechnology company Memphasys Limited (ASX: MEM) is pleased to announce positive results from an initial study validating the commercial potential of its Felix™ System in improving the quality of frozen-thawed stallion spermatozoa. Conducted by the University of Newcastle's Infertility and Reproduction Research Program, the study confirms the Felix™ System is an effective solution for equine breeders, providing faster and higher-quality sperm isolation and was the precursor to a much larger study now underway.

Study Overview

The study was designed to explore the capability of the Felix™ System in isolating high-quality spermatozoa from frozen-thawed stallion ejaculates. The study also examined the Felix™ Systems' efficacy with stallions exhibiting low tolerance to freezing. Results demonstrated the system's ability to produce sperm with higher motility, less DNA fragmentation, and reduced oxidative stress—critical factors for successful equine assisted reproductive technology (ART), including in vitro fertilisation (IVF) and intracytoplasmic sperm injection (ICSI).

Why This Is Important for Breeders

For equine breeders, the success of ART depends on using the healthiest sperm. The Felix™ System isolates the most viable sperm more effectively and efficiently than traditional methods, which directly improves fertility outcomes. Additionally, the Felix™ System processes sperm samples in just 6 minutes, compared to 20 minutes for most other techniques currently used by industry. This speed and efficiency are vital for commercial breeders handling large volumes of high-value genetic material.

Scaling Up: Three-Year Study for Commercialisation

Building on these encouraging results, Memphasys has commenced a larger, three-year equine fertility study. This strategic study, in collaboration with the University of Newcastle and EquiBreedUK Ltd, aims to further validate the Felix™ System for the global equine market.

Initial commercial outcomes from this study are expected within 12 months, with the potential to access over 4,000 breeders globally. The Felix™ Systems' ability to improve breeding success rates, while reducing processing times offers a compelling value proposition for breeders looking to optimise their operations.

[1] Global Market Insights Inc., Equine Artificial Insemination Market Share
https://www.gminsights.com/industry-analysis/equine-artificial-insemination-market

Market and Commercial Potential

The global equine Artificial Insemination (AI) market was valued at an estimated USD $681 million per annum in 2023 and is expected to grow at a compound annual growth rate (CAGR) of 5.7% from 2024 to 2032[1]. With approximately 3,950 equine semen collection and processing facilities worldwide, Felix™ is poised to capture a significant portion of this market. Importantly, the Felix™ System requires no major modifications for entry into the non-thoroughbred equine breeding sector, enabling rapid commercialisation. The technology may also have broader applications in bovine and other animal fertility markets, leveraging insights from this equine study.

Dr David Ali, Managing Director and CEO of Memphasys, commented:

"The positive results from this study validate the Felix™ System as a powerful tool for the equine breeding industry. We are now scaling up our efforts with a larger three-year study to further solidify the Felix™ Systems' commercial readiness. With demand for assisted reproductive technology continuing to grow globally, the Felix™ System offers breeders an efficient and effective way to improve fertility outcomes. We anticipate launching the Felix™ System commercially for non-thoroughbred breeders within the next 12 months."

Next Steps and Market Readiness

With the successful completion of the initial study, Memphasys is actively pursuing partnerships with global distributors to bring the Felix™ System to market. The ongoing three-year study will generate the data necessary for market entry, with results expected to be published within 12 months. Memphasys is poised for rapid expansion into the equine breeding market, and the Felix™ System is expected to play a key role in advancing global breeding practices.

This announcement has been approved for release by the board of Memphasys Limited.

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About Memphasys

Memphasys Limited (ASX: MEM) specialises in reproductive biotechnology for high value commercial applications. Reproductive biotechnology products in development include medical devices, in vitro diagnostics, and new proprietary media. The Company's patented bio-separation technology, utilised by the Company's most advanced product, the Felix™ System, combines electrophoresis with proprietary size exclusion membranes to separate the most viable sperm cells for human artificial reproduction.

Website: www.memphasys.com