# Asymmetrex® Presents the Impact of Differential Stem Cell Counting for Cultured Meat Production

*Last week, in The GFI's cultured meat industry monthly forum, Asymmetrex® discussed how its differential stem cell counting technology can accelerate progress.*

The Asymmetrex® Specialty

BOSTON, MA, UNITED STATES, October 29, 2024 /EINPresswire.com/ -- Stem cell biotechnology company Asymmetrex®'s President and CEO, James L. Sherley, M.D., Ph.D., says "Whether you are trying to produce natural human cells for cell therapies or natural animal cells for eating, the critical factor for success is the tissue stem cells."

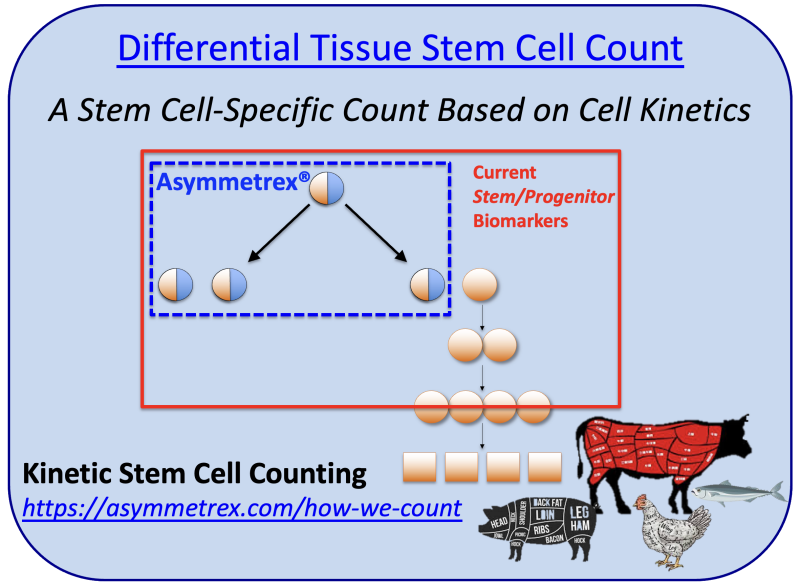
> Whether you are trying to produce natural human cells for cell therapies or natural animal cells for eating, the critical factor for success is the tissue stem cells."
>
> *James L. Sherley, M.D., Ph.D., Asymmetrex® President & CEO*

On October 24, Sherley shared this founding perspective of his company with the audience of the monthly industry webinar forum of The Good Food Institute. The GFI is a non-profit, international agency dedicated to building a sustainable, secure, and just food system with alternative proteins like plant-based and cultivated meat.

Asymmetrex®'s long time focus has been in the parallel universe of cell therapy and regenerative medicine. The company developed its lead technology, differential tissue stem cell counting, as a solution for the problem of inaccurate dosing in approved stem cell transplantation medicine and in experimental stem cell-targeted gene therapies.

Previous methods, like the "CD34 count" for estimating the dosage of therapeutic blood stem cells, greatly over-estimate the number of stem cells in treatments, resulting in treatment failures and increased morbidity for stem cell donors. Asymmetrex®'s differential stem cell counting delineates stem cells from other cell types present in treatment preparations to provide routine accurate stem cell counting for the first time.

Because tissue stem cells are the only natural cells that can divide indefinitely outside the body, their numbers are also critical for continuous production of natural animal cells in cultured meat bioreactors. Among the present challenges that the cultured meat industry faces is preventing the exhaustion of production cultures due to naturally declining numbers of stem cells. Sherley described how differential stem cell counting can be deployed now to solve this problem.



Asymmetrex®'s differential stem cell counting impacts the cultured meat industry

Asymmetrex® currently provides free access to online differential stem cell counting calculators for important human stem cells used in medicine and tissue cell research. With the company's new connections in the cultured meat industry, it plans to offer similar calculators for farm animal tissue stem cells in the new future. With funding from the National Heart, Lung, and Blood Institute, Asymmetrex® is also now developing the first automated differential stem cell counter – planned for introduction in late 2026 – to make routine tissue stem cell quantification even easier.

About Asymmetrex®

Asymmetrex®, LLC is a U.S. life sciences company with a focus on developing technologies to advance stem cell medicine. The company's U.S. and U.K. patent portfolio contains biotechnologies that solve the two main technical problems – differential tissue stem cell quantification and tissue stem cell production – that have stood in the way of more-effective use of human adult tissue stem cells for regenerative medicine and drug development; and now cultured meat production. Asymmetrex® developed kinetic stem cell (KSC) counting, the first technology for accurate determination of the differential stem cell count of preparations for use in stem cell transplantation medicine and pre-clinical drug evaluations. Asymmetrex® is a member company of the Advanced Regenerative Manufacturing Institute (ARMI)|BioFabUSA. The company's development of rapid differential stem cell counting technologies was funded previously by R&D grants from the National Heart, Lung And Blood Institute and ARMI|BioFabUSA; and support from the University of Massachusetts Voucher Program.

James L. Sherley, M.D., Ph.D.
Asymmetrex® LLC
+1 617-990-6819
email us here
Visit us on social media:

Facebook
X
LinkedIn
Instagram

---