

Developing an iPS Cell Therapy for Genetic Skin Disease

AMSBIO has published an interview with **Professor Marius Wernig** from **Stanford University**, **Pathology Stem Cell Institute** that discusses what could be the world's first widely applicable curative treatment for Epidermolysis Bullosa (EB).



Image caption;: culturing clinical grade iPSC's with StemFit® Basic03

This rare genetic disease causes

chronic and incredibly painful skin wounds that often lead to an aggressive form of skin cancer and eventual death.

While various cell-therapy

approaches have been attempted, Professor Wernig and collaborators identified the need for induced pluripotent stem cells (iPSCs), and how they could become used to treat EB in a more efficient, applicable, and commercially viable manner.

In the past,

the only way Professor Wernig's research group could grow iPSCs cells with a normal karyotype over longer periods of time was on mouse feeder cells with serum. This combination of mouse cell co-culture and undefined bovine serum set was not a suitable methodology as it was almost impossible to perform in compliance with FDA safety standards.

Professor Wernig describes

how **StemFit® Basic03 clinical grade stem cell culture** medium, available from AMSBIO has allowed his research group to safely expand their cells using an FDA compliant protocol. While there are still hurdles to climb before a cure for EB is fully realized, using StemFit® Basic03 has solved the challenge of reproducibly growing clinical grade iPSC's.



Mage caption EB patient derived iPS-cells that were reprogrammed from primary fibroblast cell samples and will be expanded for genetic correction



To read the interview

in full please visit <u>https://www.amsbio.com/news/ips-cell-based-therapies-for-genetic-skin-disease/</u> or contact or contact AMSBIO on +31-72-8080244 / +44-1235-828200 / +1-617-945-5033 / <u>info@amsbio.com</u>.

Completely free of animal- and human-

derived components StemFit® Basic03 provides highly stable and reproducible culture condition for Induced Pluripotent Stem and Embryonic Stem cells under feeder-free conditions during the reprogramming, expansion, and differentiation phases of stem cell culture. StemFit® Basic03 combines high colony forming efficiency with lower than standard media volume consumption to offer cost effective colony expansion when compared to leading competitors. For further information please visit https://www.amsbio.com/stemfit-stem-cell-culture/.

AMS Biotechnology (AMSBIO)

Founded in 1987, AMS **Biotechnology (AMSBIO)** is recognized today as a leading transatlantic company contributing to the acceleration of discovery through the provision of cutting-edge life science technology, products and services for research and development in the medical, nutrition, cosmetics, and energy industries. AMSBIO has in-depth expertise in extracellular matrices to provide elegant solutions for studying cell motility, migration, invasion, and proliferation. This expertise in cell culture and the ECM allows AMSBIO to partner with clients in tailoring cell systems to enhance organoid and spheroid screening outcomes using a variety of 3D culture systems, including organ-on-a-chip microfluidics. For drug discovery research, AMSBIO offers assays, recombinant proteins, and cell lines. Drawing upon a huge and comprehensive biorepository, AMSBIO is widely recognized as a leading provider of high-quality tissue specimens (including custom procurement) from both human and animal tissues. The company provides unique clinical grade products for stem cell and cell therapy applications. This includes GMP cryopreservation technology, and high-quality solutions for viral delivery (lentivirus, adenovirus, and adeno-associated virus.

Worldwide HQ

AMS Biotechnology (AMSBIO) 184 Milton Park Abingdon Oxon OX14 4SE UK

Tel: +44-1235-828200 Fax: +44-1235-820482 Email: <u>info@amsbio.com</u> Web <u>www.amsbio.com</u>