

NEWS RELEASE



Weill Cornell Medicine Creates a Renewable Supply of Blood Stem Cells That Hold the Promise of Treatment and Potential Cures for Multiple Disorders

Technology Offers New Approach to Regenerating the Blood and Immune System

May 17, 2017 08:17 AM Western Daylight Time

SAN DIEGO, CA –A team of researchers at Weill Cornell Medicine have discovered an innovative method to make an unlimited supply of healthy blood and immune cells from the readily available cells that line blood vessels. The work published in *Nature* today is the culmination of efforts by a team of researchers led by **Professor Shahin Rafii MD**, director of the Ansary Stem Cell Institute, chief of the Division of Regenerative Medicine and the scientific founder of Angiocrine Bioscience.

Stem cells that produce cells that comprise the blood and immune system (hematopoietic stem cells) are not only critical to human vitality and health but also can be used therapeutically to treat and even cure various diseases from cancer to devastating genetic diseases, such as sickle cell anemia and primary immune deficiency (a.k.a. bubble baby syndrome). Ample, high-quality generation of hematopoietic stem cells has been a ‘holy grail’ of modern medical science.

As described in the publication, the team at Weill Cornell Medicine have discovered a novel system for reprogramming endothelial cells into hematopoietic stem cells that can regenerate the blood cells and the immune system. Endothelial cells line the blood vessels throughout the body and are easily obtainable. Two distinct methodologies are used to accomplish this feat: a) reprogramming of endothelial cells with four genes that encode proteins into hematopoietic stem cells; and, b) utilizing another specialized type of endothelial cell (E-CEL™) that enables clinical and commercial scale production of blood and immune system forming stem cells. Both technologies were invented by Professor Rafii and his team, and exclusively licensed by Angiocrine Bioscience, Inc.

“The potential clinical applications of this new powerful technology is vast,” commented Paul Finnegan MD, Chief Executive Officer of Angiocrine Bioscience. “Just imagine the possibilities generated by a process that can produce your own stem cells, for example skin, so you can treat or even cure yourself. We applaud the groundbreaking work that Professor Rafii and his team continues to produce at Weill Cornell Medical, to bring the future of regenerative medicine within our reach, near-term.”

About Angiocrine Bioscience, Inc.

Angiocrine Bioscience is a privately held San Diego based biopharmaceutical company and a world-leader in regenerative engineered endothelial cells. Angiocrine’s proprietary E-CEL™ cells simulate the vascular stem cell niche, special locations within vital organs where certain endothelial cells work with the organ’s stem cells to start the regenerative and repair process in our body. The Ψ Psi-CEL™ technology enables the production of blood and immune system forming (hematopoietic) stem cells from endothelial cells. Together, they represent a potentially transformative new approach to treatment and cure of various diseases. Angiocrine’s approach is unique and based on over twenty years of research in vascular and regenerative biology by its scientific founder, Professor Shahin Rafii MD of Weill Cornell Medical.

For additional information, please contact:

Angiocrine Bioscience, Inc.
John R. Jaskowiak
(408) 646-2265
jjaskowiak@angiocrinebio.com