

World's first stem cell bandage in human clinical trials

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The company behind a pioneering stem cell bandage, believed to be the world's first adult and autologous (patient's own) stem cell treatment designed to heal torn meniscal cartilage, can now take the technology to human clinical trials thanks to an investment from one of the UK's most successful entrepreneurs.

Mr Hugh Osmond, a partner of Sun Capital — who helped build Pizza Express into the UK's largest sit-down restaurant chain and founded one of the country's largest pub companies, the Punch Group — has completed a £0.65 million funding round for Azellon Cell Therapeutics Ltd, the University of Bristol spin-out company behind the therapy that has to date raised £2.25 million.

The company, which has received approval from the Medicines and Healthcare products Regulatory Agency (MHRA) for the world's first clinical trial using its Cell Bandage product, is funded by existing investors IP Group plc, the developer of intellectual property based businesses — and Oxford Technology Management as well as new investors including lead funder, Mr Osmond.

Azellon's Cell Bandage has been designed as an alternative to the current treatment of surgical removal of the meniscus (meniscectomy), a procedure that more than 1.7 million people around the world per year are estimated to undergo. This common orthopaedic procedure often results in the early onset of osteoarthritis, leading to further joint surgery including total knee replacement.

The Cell Bandage, which in vitro (tissue culture) has shown great promise for the healing of meniscal tears, is grown from the patient's own [stem cells](#) and will be transplanted in the patient's knee joint within two weeks of extracting the stem cells from bone marrow.

The MHRA approved Phase I/IIa trial will treat ten meniscal tear patients with a cell bandage product, seeded with the patient's own stem cells. The trial will be undertaken at Southmead Hospital in Bristol and is scheduled to begin in May 2012 with interim data available within 18 months.

Azellon is co-founded by Professor Anthony Hollander at the University of Bristol, who came to national prominence as part of the academic team that saved the life of Claudia Castillio, after developing the first tissue-engineered trachea (windpipe) using the patient's own stem cells. This fully functioning airway was transplanted into the patient and saved her life.

Professor Anthony Hollander, Chief Scientific Officer of Azellon Cell Therapeutics Ltd and Head of the School of Cellular and Molecular Medicine at the University of Bristol, said: "With permission for a trial from MHRA and completion of this funding round, we are now ready to get going on our safety trial; it's an important moment for Azellon and for stem cell research."

Alan Aubrey, CEO of IP Group plc, said: "Azellon's stem cell bandage is targeted at a very large and growing market with a clear medical need and we are pleased to support the company as it moves into its Phase I/IIa trial."

Hugh Osmond, who has a medical degree from Oxford University, said: "As a keen sportsman who has had multiple knee operations myself, I believe that this procedure has the potential to be a major breakthrough

in treating knee and eventually other joint injuries. For many of the 1.7 million people a year who have operations to repair torn knee [cartilage](#), it could be the difference between an active old age or spending their pension years in a wheel chair. I am very excited."

Provided by University of Bristol

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