

Cure for baldness 'on the way' as scientists use stem cells to grow hair

Scientists at the Sanford Burnham Prebys Medical Discovery Institute in La Jolla, California, said the trials were "a critical breakthrough"

By **Elaine McCahill** Deputy News Editor

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A cure for baldness could be on the way after scientists used stem cells to grow hair.

This means millions could be helped after they found a way of making "unlimited" hair.

In the future, a person's blood sample could be used to grow more locks.

The study involved the human stem cells being combined with mice cells before they were attached to a 3D biodegradable scaffold made from the same material as dissolvable stitches.

The scaffold helped control the direction of hair growth and helped the stem cells integrate into the skin.

Dr Alexey Terskikh, from the Sanford Burnham Prebys Medical Discovery Institute in La Jolla, California, said: "This is a critical breakthrough.

"Our new protocol described today overcomes key technological challenges that kept our discovery from real-world use.

"Now we have a robust, highly controlled method for generating natural-looking hair that grows through the skin using an unlimited source of human stem cell-derived dermal papilla [hair] cells."

Speaking at the International Society for Stem Cell Research in Los Angeles, his colleague Dr Richard Chaffoo added: "It could improve the lives of millions.

"Hair loss profoundly affects many people's lives. A significant part of my practice involves both men and women who are seeking solutions to their hair loss."

The scientists are now looking at applying the same process in humans, and say there is an "unlimited" supply of stem cells which can be derived from a simple blood draw.

UK hair loss expert David Fenton said: "This research is very interesting."

Male pattern baldness affects about 50% of men over the age of 50, according to the British Association of Dermatologists, with many men suffering hair loss from puberty.

Current treatments include the drugs minoxidil or finasteride, while hair transplants can cost anywhere between £1,000 and £30,000.