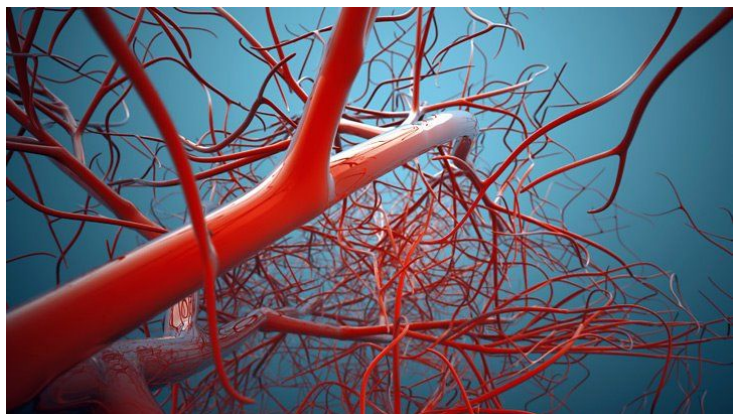


Scientists in Australia manufacture 'living blood vessel' for future of surgery

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Mimics the complex structure of naturally occurring blood vessels



An international consortium of researchers led by the University of Sydney in Australia, has developed technology to enable the manufacturing of materials that mimic the structure of living blood vessels, with significant implications for the future of surgery.

Preclinical testing found that following transplantation of the manufactured blood vessel into mice, the body accepted the material, with new cells and tissue growing in the right places, in essence transforming it into a 'living blood vessel'.

While others have tried to build blood vessels with various degrees of success before, this is the first time scientists have seen the vessels develop with such a high degree of similarity to the complex structure of naturally occurring blood vessels.

Unlike current manufacturing processes for synthetic materials used for surgery, which can be lengthy, complex and expensive, this new manufacturing process is swift and well-defined.

"Currently when kids suffer from an abnormal vessel, surgeons have no choice but to use synthetic vessels that function well for a short time but inevitably children need additional surgeries as they grow. This new technology provides the exciting foundation for the manufactured blood vessels that to continue to grow and develop over time", said the researchers.