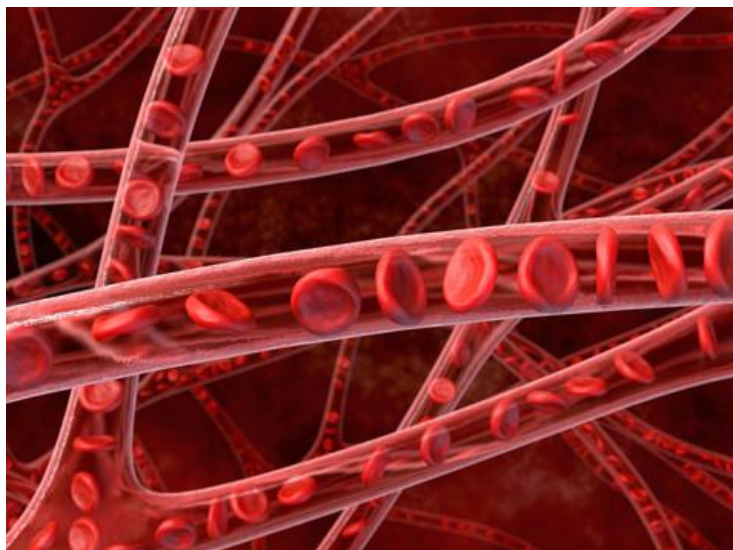


Scientists develop technology for studying blood vessel formation

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The technology recreates a human blood vessel and shows how new capillaries grow from a single vessel.



A team of researchers at the Institute of Industrial Science (IIS), the University of Tokyo, CNRS and INSERM, has report a new organ-on-a-chip technology for the study of blood vessel formation and the drugs targeting this mechanism.

The technology recreates a human blood vessel and shows how new capillaries grow from a single vessel or parent vessel in response to proper biochemical signaling cues. The technology can further be used to develop drugs targeting this growth as a therapeutic approach to treat cancer and blood-vessel-related diseases.

The new technology provides a simple setting to study angiogenesis and other effects such as the dynamics of blood vessel permeability.

Since many diseases like cancer and diabetic retinopathy induce new vessels for their progression, the team noted that the chips could be used for even more advanced studies for drug effects on angiogenesis and cancer or diabetes.