

Wavy Multi-Component Vascular Grafts With Biomimetic Mechanical Properties, Antithrombogenicity, And Endothelial Cell Affinity

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Inventors: Lih-Sheng Turng, Haoyang Mi

The Invention

Disclosed herein are novel wavy, multi-component vascular grafts (WMVGs) with a wavy inner layer of rigid biopolymer fibers and an outer layer of elastic biopolymer fibers and a method for preparing WMVGs via electrospinning using a special assembled collector. The fabricated WMVGs closely mimic the non-linear tensile stress-strain relationship of native blood vessels and showed sufficient mechanical strength needed for implantation.

Tech Fields

- Materials & Chemicals : Polymers
- Medical Devices: Medical tools

For current licensing status, please contact Michael Carey at mcarey@warf.org or 608-960-9867