METHODS AND COMPOSITIONS FOR ENHANCING VASCULAR ACCESS

Abstract

Disclosed is an implantable material comprising a biocompatible matrix and cells which, when provided to a vascular access structure, can promote functionality generally. For example, implantable material of the present invention can enhance maturation of an arteriovenous native fistula as well as prolong the fistula in a mature, functional state suitable for dialysis. Additionally, the present invention can promote formation of a functional arteriovenous graft suitable for dialysis as well as promote formation of a functional peripheral bypass graft. Implantable material can be configured as a flexible planar form or a flowable composition with shape-retaining properties suitable for implantation at, adjacent or in the vicinity of an anastomoses or arteriovenous graft. According to the methods disclosed herein, the implantable material is provided to an exterior surface of a blood vessel. Certain embodiments of the flexible planar form define a slot. The materials and methods of the present invention comprise cells, preferably endothelial cells or cells having an endothelial-like phenotype.

(No suitable figure)