

DEVICE FOR CELLULAR TRANSPLANTATION AND USES THEREOF**Abstract**

Devices and methods for transplanting cells in a host body are described. The cell comprises a porous scaffold that allows ingrowth of vascular and connective tissues, a plug or plug system configured for placement within the porous scaffold, and a seal configured to enclose a proximal opening in the porous scaffold. The device may further comprise a cell delivery device for delivering cells into the porous scaffold. The method of cell transplantation comprises a two step process. The device is incubated in the host body to form a vascularized collagen matrix around a plug positioned within the porous scaffold. The plug is then retracted from the porous scaffold, and cells are delivered into the vascularized space created within the porous scaffold.

FIG. 2A