Cell Therapy Compliant Xeno-Free Culture System for Human Endothelial Cells

Materials and Methods

**Cells**

HREC and HREC-TVs were obtained as described above. HREC from cord blood can be efficiently isolated and expanded using EndoGo™ XF + hPL. HREC were cultured in EndoGo™ XF medium or commercial FBS containing medium. Microvascular human EC from various tissue sources were efficiently expanded using EndoGo™ XF + hPL or 2% OTC HS medium. Expanded cells maintain a classical profile of EC markers (CD31 (PECAM) or CD144 (VE-CAD) (red), Von-Willebrand factor (vWF) (green), and CD45- (blue) with a percentage of EC markers >96% (A). HREC expanded in EndoGo™ XF preserved angiogenic potential to form capillary-like tube structures. Representative images (×100).

**Culture system**

HREC and HREC-TVs were expanded for 10-12 passages in EndoGo™ XF medium or commercial FBS containing medium. Human umbilical cord blood (CB) was collected according to an approved protocol. CB Mononuclear cells (MNCs) were obtained by layering CB over Histopaque 1119 (Sigma-Aldrich). Mononuclear cells were isolated by centrifugation. Cells were placed into approved protocol. CB Mononuclear cells (MNCs) were obtained by layering CB over Histopaque 1119 (Sigma-Aldrich). Mononuclear cells were isolated by centrifugation. Cells were placed into approved protocol. CB Mononuclear cells (MNCs) were obtained by layering CB over Histopaque 1119 (Sigma-Aldrich). Mononuclear cells were isolated by centrifugation. Cells were placed into approved protocol. CB Mononuclear cells (MNCs) were obtained by layering CB over Histopaque 1119 (Sigma-Aldrich). Mononuclear cells were isolated by centrifugation. Cells were placed into.