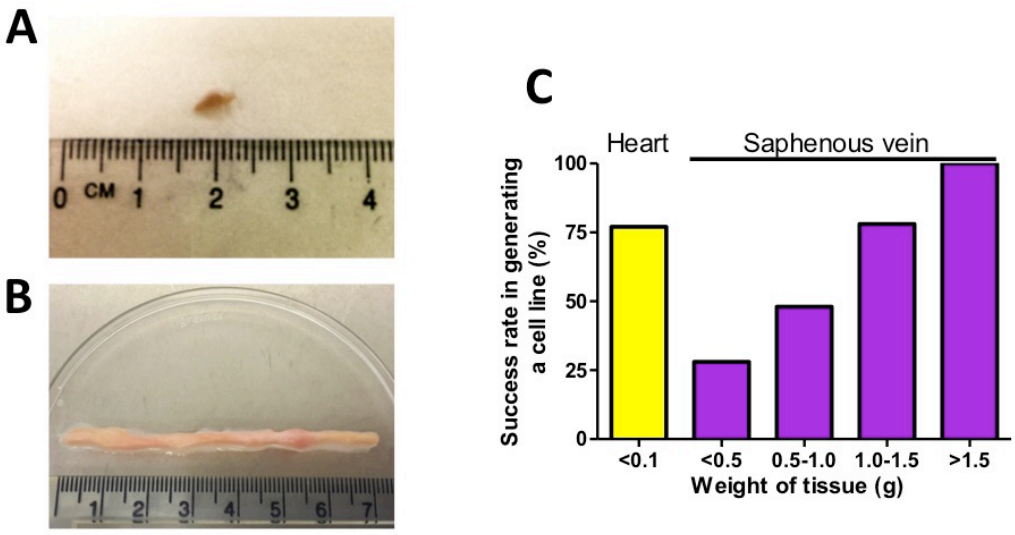
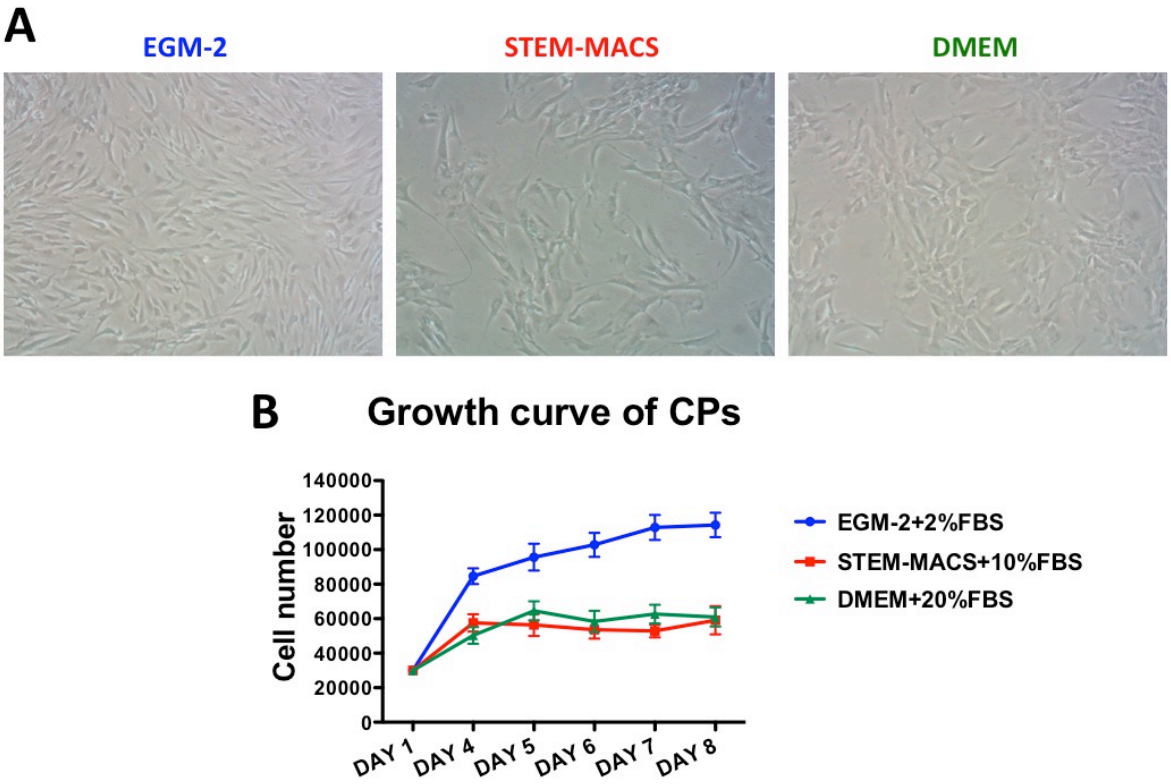
SUPPLEMENTARY MATERIAL

ONLINE FIGURE I



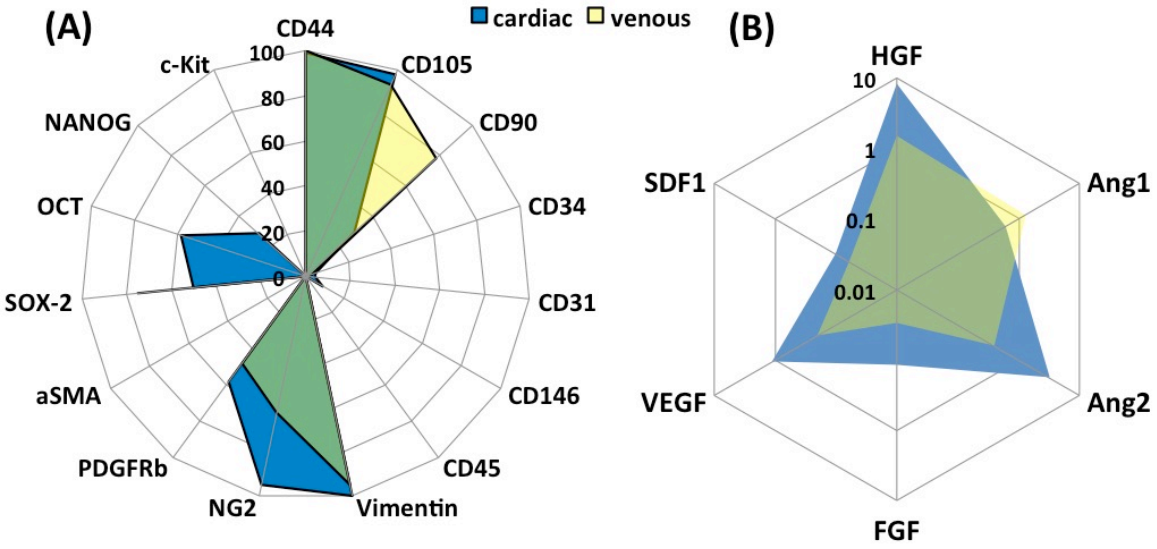
Online Figure I: Comparison of CPs and saphenous vein-derived pericytes scalability in relation to the size and weight of source tissue. Representative photographs demonstrating size of discarded cardiac (**A**) and saphenous vein tissue (**B**), and correlation between weight of source tissue and success of cell expansion (**C**). The bar graph demonstrates the success rate of a standard operating procedure to generate a pericyte line from tissue leftovers obtained at the occasion of palliative surgery for correction of congenital heart defects (n=13) or coronary artery bypass graft with saphenous veins (n=35).

ONLINE FIGURE II



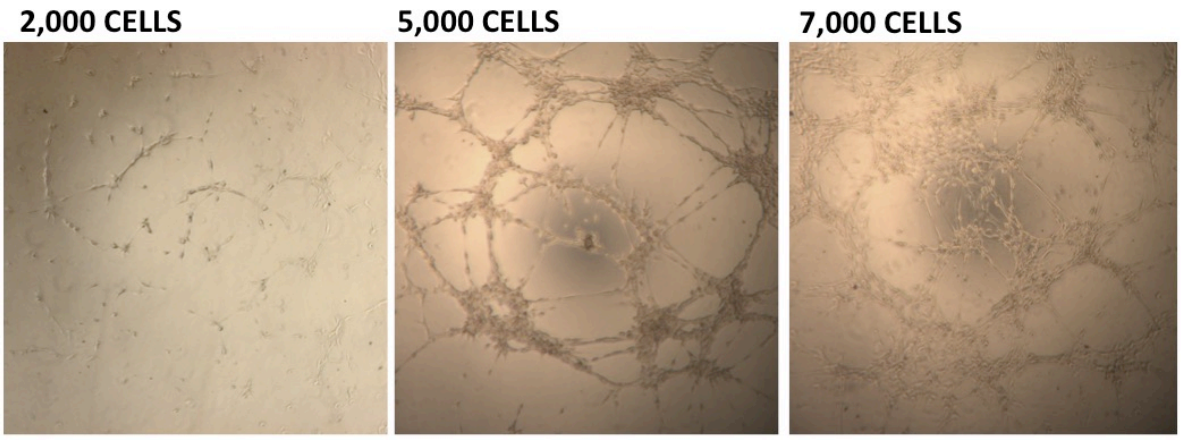
Online Figure II: Comparison of growth rate of CPs in 3 different culture media. (**A**) Images of CPs growing in EGM-2 + 2%FBS (Lonza), STEM-MACS + 10%FBS (Miltenyi Biotec) and DMEM + 20%FBS (Life Technologies). Magnification 25X. (**B**) Graph showing the growth rate of 3 lines of CPs cultured with the 3 media. 30,000 cells were seeded in each well of a 6MW-plate at day 1, and cells were detached and counted at day 4, 5, 6, 7 and 8 of culture. Values are plotted as MEAN+SEM.

ONLINE FIGURE III



Online Figure III: Comparison of pericytes from cardiac and venous tissue with regard to antigenic and paracrine features. Radar graphs showing the pericyte antigenic phenotype (**A**) and growth factors and cytokines in conditioned media (**B**). Flow cytometry and immunocytochemistry were used to determine the antigenic profile (n= 8 CP lines and 35 saphenous vein-derived pericyte lines) and ELISA to measure secreted factors (ng/h/10^6 cells) (n=4 and 3, respectively). Data are averages obtained from cells at P5.

ONLINE FIGURE IV



Online Figure IV: In vitro angiogenic assay with CPs. Different numbers of CPs (2,000, 5,000 and 7,000) were seeded in each well of a 96-well plate on Matrigel, in order to investigate the capability of CPs to organize in tubular networks and to determine the best CP number to be used for this experiment. The formation of networks was assessed after 6 hours (n=4 CPs). Magnification: 50X.