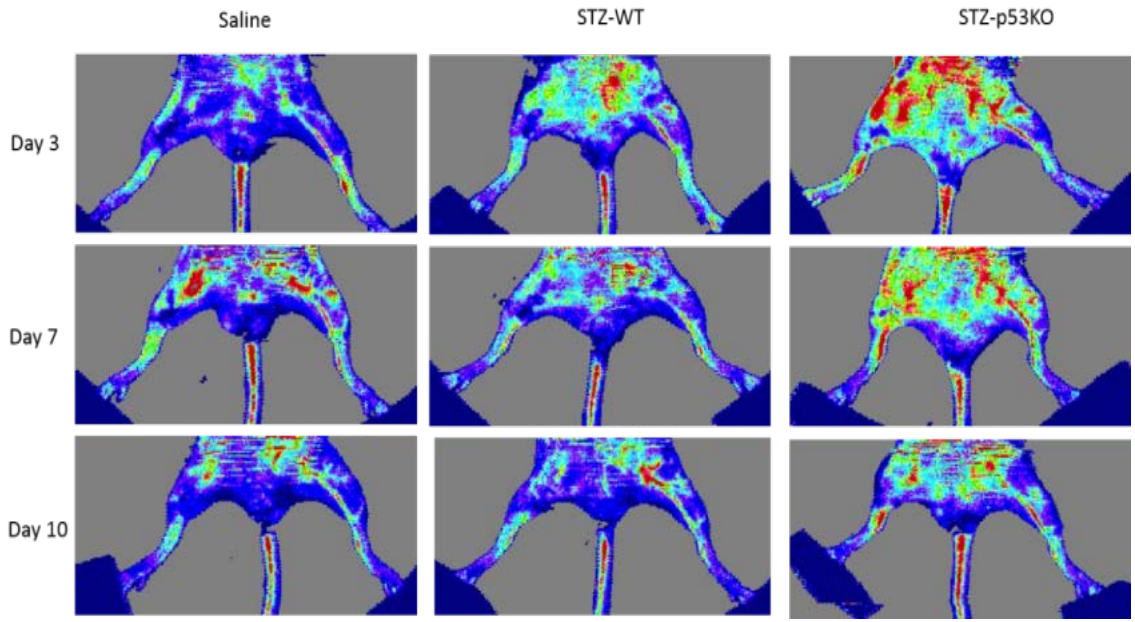


Supplemental figure 1: Images of enhanced vascularization in hind limb of STZ induced type I diabetic mouse model (C57BL/6J), post-transplantation of p53KO and p21KO EPCs. Serial laser Doppler images showing improved circulation at day 10 in the right leg, particularly in the group that received p53 KO EPCs.

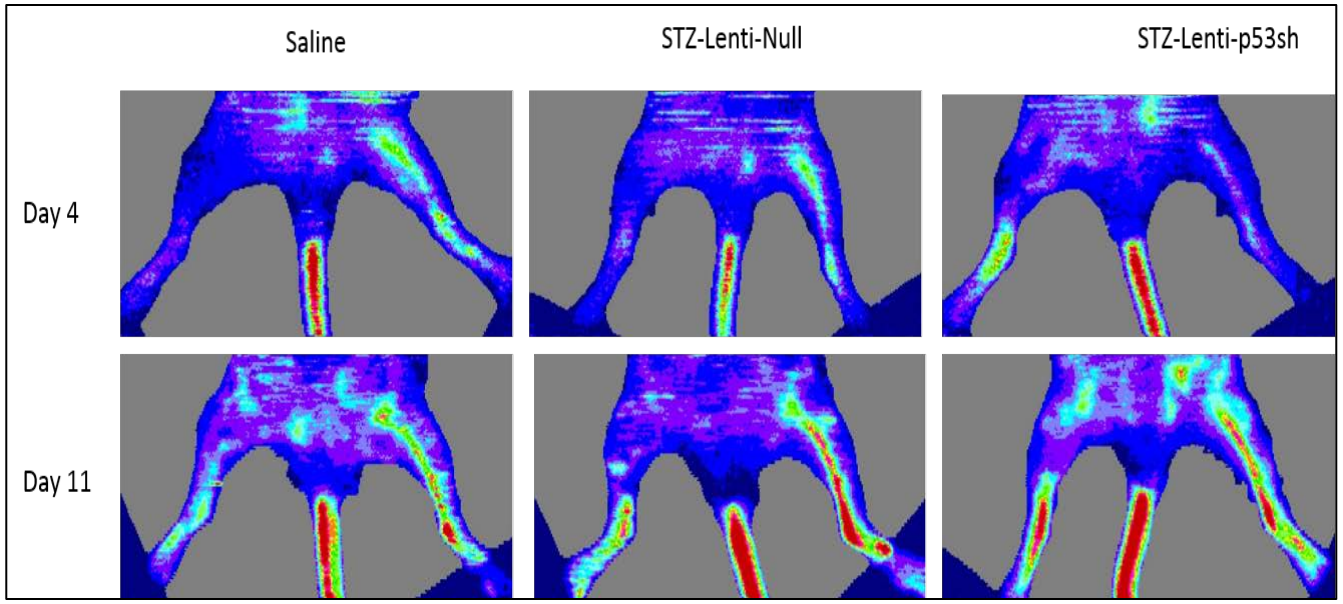
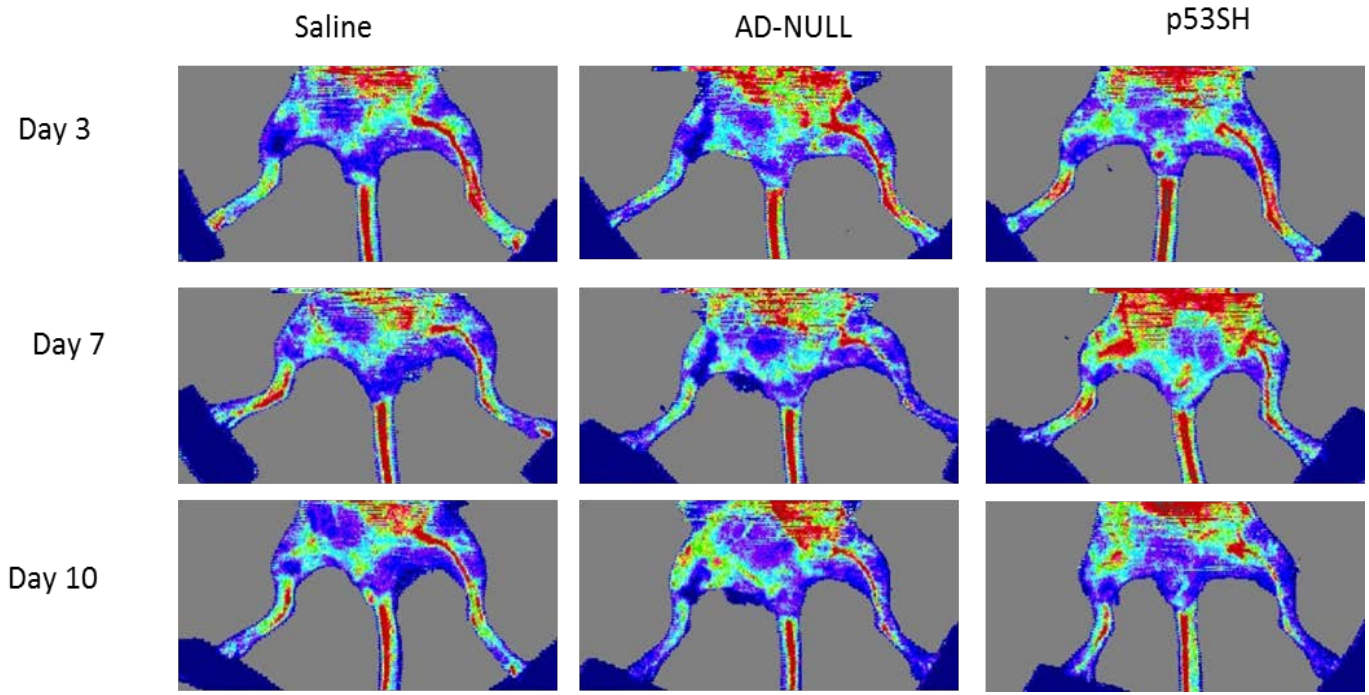
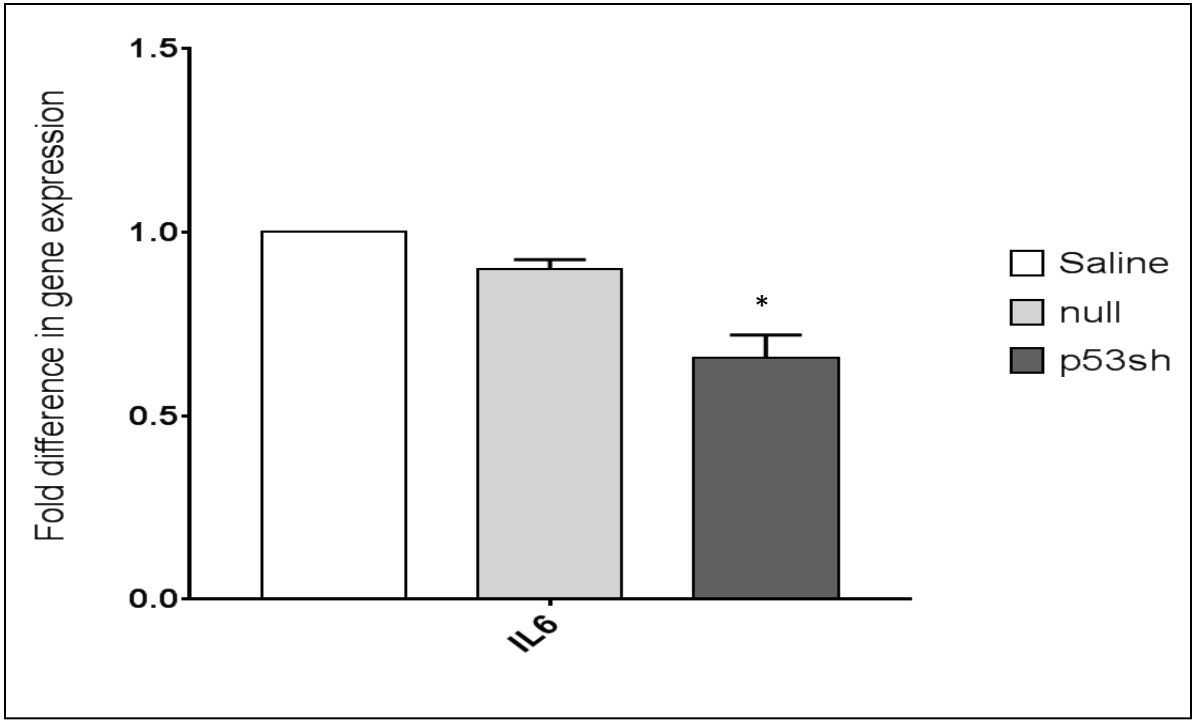


Figure 2: Images of enhanced vascularization in hind limb of STZ induced diabetic mouse model, following transplantation of p53silenced (by Lentivirus) mouse EPCs. Serial laser Doppler images showing improved circulation at day 11 in right leg particularly in the group that received p53 silenced EPCs. Lentivirus was used to silence mouse p53 and the results were compared to mouse that received Lenti-Null transduced EPCs or saline.



Supplemental figure 3: Enhanced vascularization in hind limb of STZ induced diabetic mouse model (NOD-SCID Type 1 Diabetes mice), post-transplantation of p53sh and p21sh human EPCs (silenced by adenoviral construct): Serial laser Doppler images showing improved circulation at day 10 in right leg, particularly in the group that received p53sh EPCs.



Supplemental figure 4: Reduced inflammation in hind limb of STZ induced diabetic mouse model (NOD-SCID T1D mice), post-transplantation of p53sh human EPCs (silenced by adenovirus) . Type 1 diabetes was induced in NOD.CB17-Prkdcscid/J mouse (NOD-SCID) by streptozotocin (STZ). Human CD34 + ve cells were transduced with Adenovirus constructs to silence p53 and p21. Then, p53sh and p21sh human CD34+ ve cells were transplanted to mouse right hind limb muscle post occlusion of femoral artery. Gene expression analysis was performed in quadriceps muscle after mice were sacrificed at day 28 post surgery. In this figure we demonstrate mRNA expression of IL6 (an inflammatory marker) gene analysis of the quadriceps muscle that received Saline, Ad-Null transduced CD34+ve cells or Adp53-sh transduced CD34+ve cells. The quadriceps muscle that received p53 sh CD34+ve cells should the least IL6 expression indicating inflammation reduction property of p53sh transplanted cells (Statistical analysis was performed by using saline receiving muscle and and null receiving muscle as control, * indicates p-value <0.05).