SUPPLEMENTAL DATA

***Figure 1*.** In control normoxic calves, distal PA (dPA) media does not contain cKit-positive (**A**) or S100A4-positive (**B**) cells, whereas the dPA media of hypertensive animals does contain some cKit+ (**C**) and S100A4+ (**D**) cells (large arrows in C and D). The dPA adventitia and/or lung parenchyma of control calves, however, does contain occasional cKit+ (**A**, small arrows) and S100A4+ (**B**, small double arrows) cells.

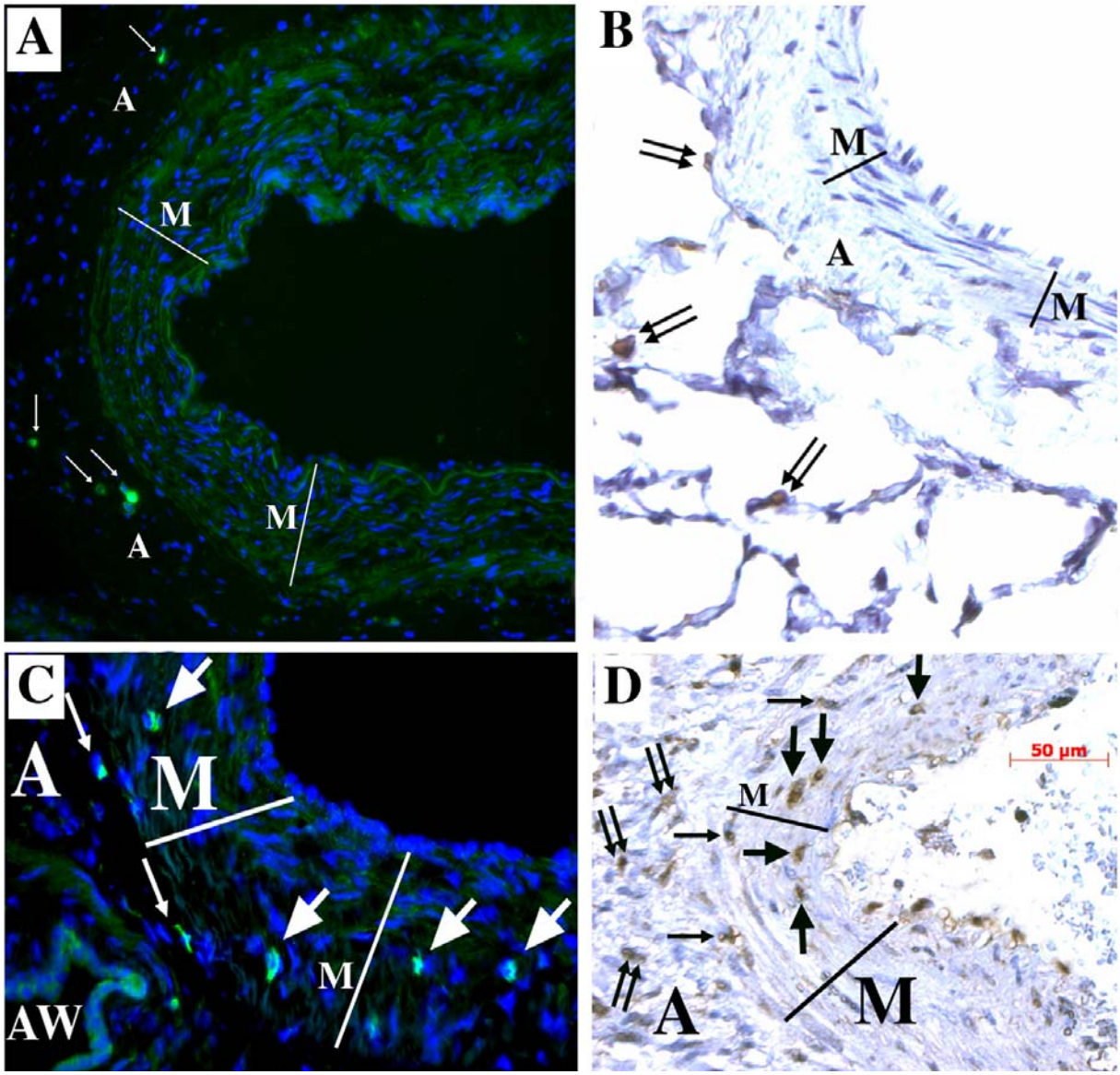

***Figure 2*.** **Cell size analysis demonstrates that d"S"-SMCs isolated from hypertensive calves are much larger in size than those isolated from the normoxic controls.**
Cell size analysis, performed by forward scatter and expressed as channel number, was done in both the log phase of growth (in 10%CS) and under growth-arrest (72 hrs in 0.1%CS). Double-headed arrows point to the difference in cell size between control and hypertensive SMCs.

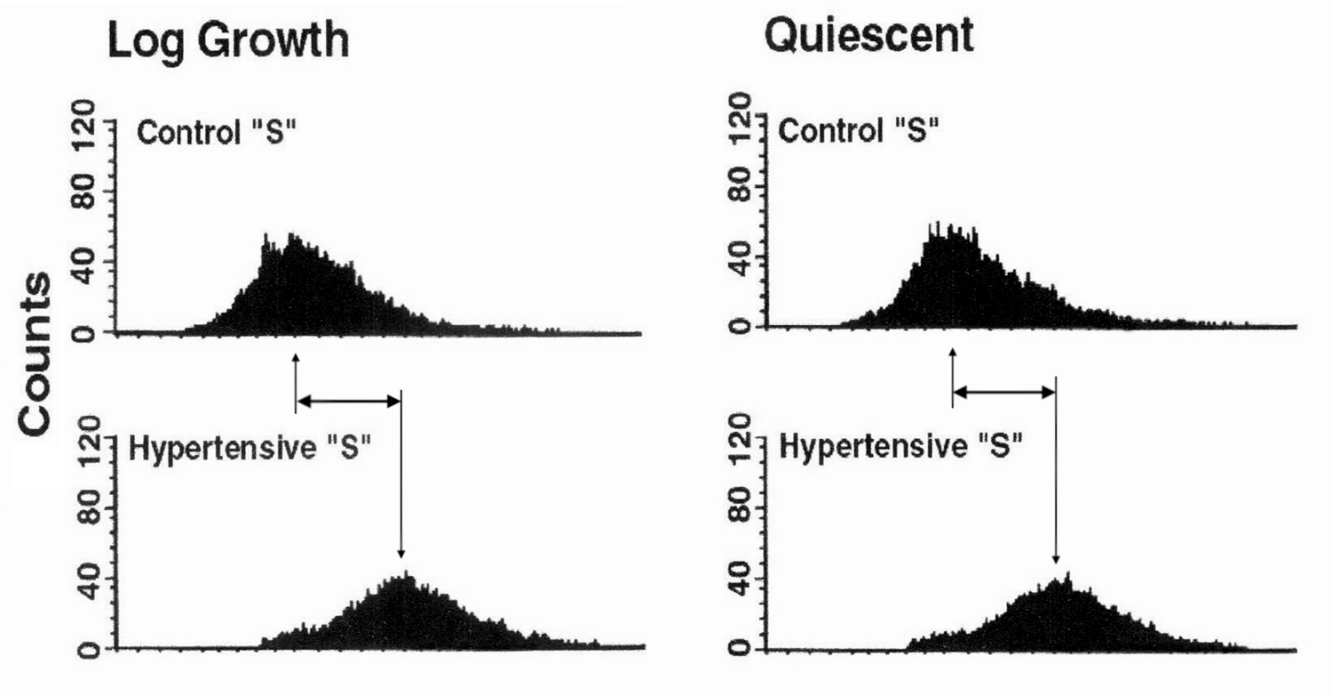

***Figure 3*. d"R"-cell phenotype differs from that of pulmonary artery endothelial cells (EC).** d"R"-cells express markedly lower mRNA levels of endothelial-associated markers (VE-Cadherin, PECAM-1/CD31, Tie-2) than EC isolated from main pulmonary artery (MPA-EC) or from dPA of approx. 1000 μm in diameter (dPA-EC) of control calves. The exception is Flt-1/VEGFR2, which is expressed by d"R"-cells and adventitial fibroblasts (Fibs) at levels comparable to those of dPA-EC, yet lower than those of MPA-EC.