

ANGIOGENESIS: Induced

VEGF and
Hif-1 induced
eNOS and eNO
dysfunction



PROANGIOGENIC (Vascular Paradox)

PROINFLAMMATORY

Monocyte → Macrophage
MCP-1 (RS) NFκB



ATHEROSCLEROPATHY

MS, PD, T2DM
ADIPOCYTE: OBESITY
IL-1, IL-6, TNF alpha,
hs CRP, PAI-1



ARTERIOGENESIS: Impaired

Increased PAI-1
Impaired monocyte migration
Dysfunction of eNOS and eNO

PRO OX-REDOX STRESS

ROS: a driving force



PROFIBROTIC

Remodeling:
Redox sensitive (RS): MMPs
vSMC



PROTHROMBOTIC

Hyperactive platelet
^ Tissue Factor
^ PAI-1

