Three weeks of N-acetylcysteine treatment does not affect either the systemic vasculature or oxidative or nitrosative stress in the lungs of healthy mice.

A. Equivalent sized arterioles in PAS-hematoxylin stained sections of kidneys obtained from animals treated in normoxia (N), with N-acetylcysteine (NAC) or with S-nitroso-NAC (SNOAC) for three weeks were examined. No differences were observed by a blinded investigator with extensive experience in studying renal histology (MSF) between the normoxia-, NAC- and SNOAC-treated animals.

B. Sections of liver from control, NAC, and SNOAC-treated animals, stained with picrosirius red and hematoxylin. No structural differences among these three categories were identified.

C. Lung sections from normoxic mice in the absence (N) or presence of NAC (three weeks) were studied by immunoblot using an antibody directed against 3-nitrotyrosine. For a positive control, a normoxia + NAC lung section was incubated with 5mM 3-morpholinosydnonimine (SIN-1) for 5hr prior to staining with 3 nitrotyrosine. A blinded investigator with extensive experience in studying lung histology (LAP) was not able to identify a difference in 3 nitrotyrosine staining between N and NAC treatment.