Supplementary information:

**Blood biochemical measurements: Nitric oxide**

Ten ml blood was centrifuged (10 minutes at 1000 x g), and the serum supernatant was frozen at -40ºC for later analysis. The serum NO concentration was measured by the Griess reaction: NO2 concentration measured after NO3 reduction to NO2, as currently performed in our laboratory.(14) Briefly, samples were deproteinised by the addition of sulfosalicylic acid, incubated for 30 min at 48°C, and subsequently centrifuged for 20 min at 12,000 g. After incubation of the supernatants with Escherichia coli NO3 reductase (37ºC, 30 min), 1 ml Griess reagent (0.5% naphthylenediamine dihydrochloride, 5% sulfonilamide, 25% H3PO4) was added. The reaction was performed at 22ºC for 20 min, and the absorbance at 546 nm was measured using NaNO2 solution as a standard. The measured signal was linear from 1 to 150 mM (r = 0.994, P < 0.001, n = 5), and the detection threshold was ~2 µM.

**Preparation of tissue homogenates:**

Preparation of tissue homogenates: Lung tissue was quickly dissected and frozen in dry ice. Frozen lung samples were weighed and transferred to 50-mL polypropylene tubes (Falcon; Becton Dickinson, Lincoln Park, NJ) containing lysis buffer (4ºC) at a ratio of 10 mL buffer/g wet tissue. Lysis buffer consisted of 1 mM phenylmethylsulfonyl fluoride (PMSF; Sigma Chemical Company) and 1 μg/mL pepstatin A (Sigma Chemical Company), aprotinin (Sigma Chemical Company) and leupeptin (Sigma Chemical Company) in 1x phosphate buffered saline solution, pH 7.2, (Biofluids, Rockville, Md) containing 0.05% sodium azide (Sigma Chemical Company). Samples were homogenised for 30 seconds with an electrical homogeniser (Polytron; Brinkmann Instruments, Westminster, NY) at maximum speed, and the tubes were immediately frozen in liquid nitrogen. The samples were homogenised three times for optimal processing. The homogenates were later thawed in a 37ºC water bath and centrifuged at 119,000 g (1 h at 4ºC) to separate the cellular organelles. The supernatants were frozen at – 80ºC to allow the formation of macromolecular aggregates. After thawing at 4ºC, the aggregates were pelleted at 3,000 g (4ºC), and the final homogenate volume was measured with a graduated pipette.(15)

**Modified Bradley method:**

Tissue samples were finely minced at 4ºC, homogenised in potassium phosphate buffer (pH 6.0) centrifuged at 20,000 g x 15 min, and the supernatant was discarded. The pellet was resuspended in potassium phosphate buffer with 50 mmol/L hexadecyltrimethylammonium bromide to negate the pseudoperoxidase activity and solubilise membrane-bound MPO. This suspension was homogenised for 30 sec, followed by sonication for 20 sec, and then frozen and thawed. The cycle of sonication, freezing and thawing was repeated twice. One hundred microliters of the final supernatant was mixed with 2.9 mL potassium phosphate buffer (50 mmol/L, pH 6.0) containing 0.167 mg/mL O-dianisidine dihydrochloride and 0.0005% hydrogen peroxide. Absorbance at 460 nm was determined on a Beckman spectrophotometer for 2 min. One unit of MPO activity was defined as that required to degrade 1 µmol hydrogen peroxide per minute at 25ºC.

**Western Blot:** Western blots were used to measure the levels of TNF-α, IL-1β and nitric oxide synthase (NOS) in its endothelial (eNOS), neuronal (nNOS) and inducible (iNOS) forms. Briefly, tissue samples (50-60 mg) after homogenisation with lysis buffer were boiled with gel-loading buffer (0.100 M Tris-Cl; 4% SDS; 20% glycerol; 0.1% bromophenol blue) at a 1:1 ratio, sonicated and the protein concentrations determined by the BCA assay. Total protein equivalents (25 μg) for each sample were separated by SDS-PAGE using 10% acrylamide gels and were transferred onto nitrocellulose membrane using a semi-dry transfer system. The membrane was immediately placed into blocking buffer containing 5% nonfat milk in 20 mM Tris, pH 7.5; 150 mM NaCl; and 0.01% Tween-20. The blot was allowed to block at 37 °C for 1 h. The membrane was incubated with anti-rat rabbit polyclonal TNF-α, IL-1β, eNOS and iNOS (1:1,000) antibodies for 2 h at 25 to 27 °C, followed by incubation with an anti-mouse horseradish peroxidase-conjugated IgG antibody (1:2,000). After washing with T-TBS, the membranes were incubated with ECL Plus detection reagents (Amersham Life Science Inc., Buckinghamshire, UK) and exposed to X-ray film. The films were scanned with a densitometer (BioRad GS 800) to determine the relative optical densities. Pre-stained protein markers were used for molecular weight determinations, and the bands were analysed with the Quantity ONE 1.0 Analysis Software version 4.5.2.

**Table 4 , significative p values:**

Lung edema: SEVRp30’ vs SEVPPn p=0.015 / SEVRp30’ vs SEVPRp p=0.03 / SEVRp30’ vs SEVRp10’ p=0.012

LPO: SEVPRp vs SEVPPn p=0.04

MDA: CONPRp vs CONPPn p=0.039

CONRp10’ vs CONPPn p=0.048 / CONRp10’ vs CONPRp p=0.03

CONRp30’ vs CONPPn p=0.02

SEVPRp vs SEVPPn p=0.042

SEVRp10’ vs SEVPPn p=0.04 / SEVRp10’ vs SEVPRp p=0.049

SEVRp30’ vs SEVPPn p=0.04 / SEVRp30’ vs SEVPRp p=0.046

MPO: CONRp10’ vs CONPRp p=0.048

CONRp30’ vs CONPRp p= 0.04

IL-1:CONRp10’ vs CONPPn p=0.02

CONRp30’ vs CONPPn p=0.02

SEVRp10’ vs SEVPPn p=0.01 / SEVRp10’ vs SEVPRp p=0.048

TNF-α: CONPRp vs CONPPN p=0.046

CONRp10’ vs CONPPN p=0.04 / CONRp10’ vs CONPRp p=0.049

CONRp30’ vs CONPPN p=0.03 /CONRp30’ vs CONPRp p=0.039 / CONRp30’ vs CONRp10’ p=0.047

SEVPRp vs SEVPPN p=0.048

SEVRp10’ vs SEVPPN p=0.04

SEVRp30’ vs SEVPPN p=0.037

**Table 5, significative p values:**

NO: CONPRp vs CONPPn p=0.001

CONRp10’ vs CONPPn p=0.005

CONRp30’ vs CONPPn p=0.001

eNOS: CONPRp vs CONPPn p=0.01

CONRp10’ vs CONPPn p=0.01

CONRp30’ vs CONPPn p=0.02

: SEVPRp vs SEVPPn p=0.049

SEVRp10’ vs SEVPPn p=0.046

SEVRp30’ vs SEVPPn p=0.037

nNOS: : CONPRp vs CONPPn p=0.01

CONRp10’ vs CONPPn p=0.046 /CONRp10’ vs CONPRp p=0.04

CONRp30’ vs CONPPn p=0.034

iNOS: CONRp10’ vs CONPPn p=0.03 / CONRp10’ vs CONPRp p=0.04

CONRp30’ vs CONPPn p=0.007 / CONRp30’ vs CONPRp p=0.03

SEVRp10’ vs SEVPPn p=0.032 / SEVRp10’ vs SEVPRp p=0.048

SEVRp30’ vs SEVPPn p=0.047 / SEVRp30’ vs SEVPRp p=0.049