 DOI: 10.1086/677359

Appendix from Francis et al., "Effects of tetrahydrobiopterin oral treatment in hypoxia-induced pulmonary hypertension in rat" (PC, vol. 4, no. 3, p. 462)

Supplemental material

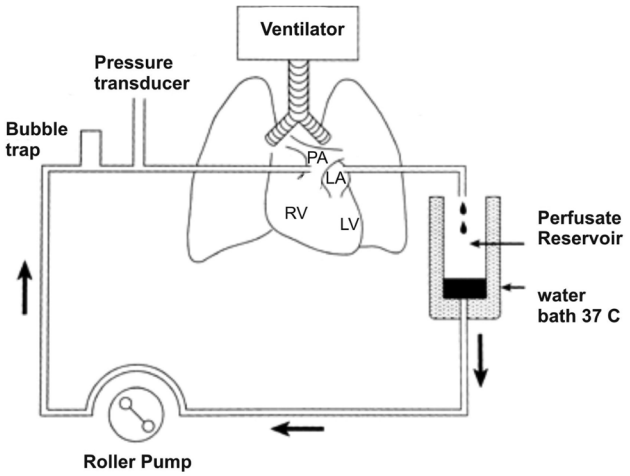

Figure S1. Schematic illustration of the basic components of perfused lung system used in acute pharmacological studies in rats. LA: left atrium; PA: pulmonary artery; RV: right ventricle; LV: left ventricle.

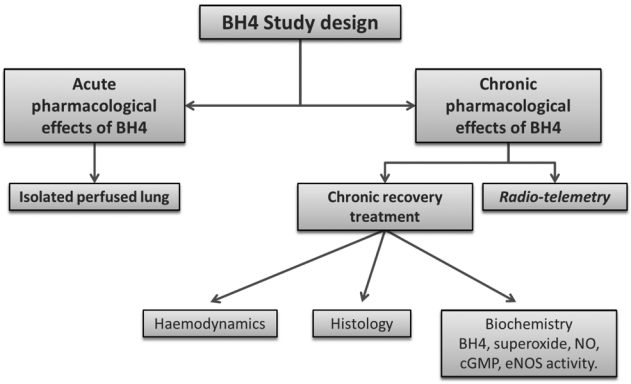

Figure S2. A general diagram showing the overall study design. BH4: tetrahydrobiopterin; cGMP: cyclic guanosine monophosphate; eNOS: endothelial nitric oxide synthase; NO: nitric oxide.

Table S1. Measurements of lung tissue tetrahydrobiopterin (BH_4), dihydrobiopterin (BH_2), and total biopterin performed by high-performance liquid chromatography followed by serial electrochemical and fluorescent detection

Variable	BH_4 (pmol/mg protein)	BH4 : BH2 ratio	Total biopterin (pmol/mg protein)
Control ($n = 10$)	18.3 ± 7.6	5.1 ± 2.4	22.2 ± 7.8
Two weeks hypoxia ($n = 5$)	28.5 ± 12.2	7.3 ± 2.9	33.2 ± 12.8
Four weeks hypoxia placebo ($n = 10$)	33.3 ± 17.3	4.8 ± 1.7	41.1 ± 21.8
Four weeks hypoxia BH_4 10 mg/kg ($n = 5$)	35.7 ± 19.8	3.4 ± 1.6	45.9 ± 20.9
Four weeks hypoxia BH_4 100 mg/kg ($n = 6$)	20.9 ± 17.5	3.1 ± 2.0	27.4 ± 16.8

Note: Total biopterins were quantified by summing BH_4, BH_2, and biopterin. Biopterin levels were expressed as picomoles per gram tissue.