



Figure S1

Figure S1 Effect of chloral hydrate (CH, 5 mM, filled symbols) on the GTN concentration-response of aortic rings from untreated WT (squares), nitrate-tolerant WT (triangles), ascorbate-supplemented (circles), ascorbate-deficient (diamonds) and bortezomib-treated ascorbate-deficient (right-angled triangles) *Gulo*^(-/-) mice (A). For clarity the high affinity pathway of the GTN response in the absence or presence of CH for each experimental group is illustrated separately in panels B-F (up to 1 μ M GTN). Aortic rings were incubated for 45 min with CH before the addition of GTN. Data are mean values \pm SEM of 9 (untreated WT, ascorbate-supplemented, ascorbate-deficient) or 5 (WT, nitrate-tolerant, bortezomib-treated ascorbate-deficient) animals. Concentration-response curves of different ring segments from a single animal were averaged and counted as individual experiment. *P < 0.05. NS, non-significant

Table S1 Aortic mRNA expression of NOX2, NOX4, and XO in wildtype (WT), ascorbate-supplemented (asc-suppl.) and ascorbate-deficient (asc-def.) Gulo^(-/-) mice.

Genotype	NOX2	NOX4	XO
	$2^{-\Delta\Delta Ct}$		
WT	1.00±0.02	1.00±0.08	1.00±0.02
Gulo ^(-/-) , asc-suppl.	1.17±0.17	1.02±0.17	0.98±0.10
Gulo ^(-/-) , asc-def.	1.35±0.22	0.85±0.23	0.92±0.30

Aortic mRNA expression was quantified by qPCR using TaqMan[®] Gene Expression Assays. Results were calculated according to the $2^{-\Delta\Delta Ct}$ method and represent mean values ± SEM of 6 individual experiments performed in triplicate.