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**Figure-4:** Citrulline assay showing that the conversion of ADMA to L-citrulline by DDAH1 is proportional to time, temperature and enzyme concentration. Data is averaged from at least duplicate experiments.

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**Figure-5:** Curve fit data showing inhibition of human DDAH-1 activity by selected small molecules using the CPM assay: **A)** ChemDiv Compound 2548-0707 **B)** ChemDiv Compound 2548-0703 **C)** 4-MMP and **D)** SCH-202676. The inhibitory concentration at 50% ( $IC_{50}$ ) was calculated using Assay Explorer software.

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**Figure-6:** Time-dependent inhibition study of two small molecules, phenylmercuric acetate and 4-chloromercuribenzoic acid (each at 50  $\mu$ M final concentration), using the fluorometric CPM assay (30 nM final enzyme concentration). Values are mean  $\pm$  SEM. Experiments were performed in triplicates.

#### 28 29 **Supplemental Figures:**

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**Supplemental Figure S1:** Measurement of L-citrulline from primary human endothelial cell lysate. Cells were treated with L-Arginine or Vehicle for 24 h and assayed for L-Citrulline levels. Values are mean  $\pm$  SEM. Experiments were performed in triplicates. \*p <0.05.

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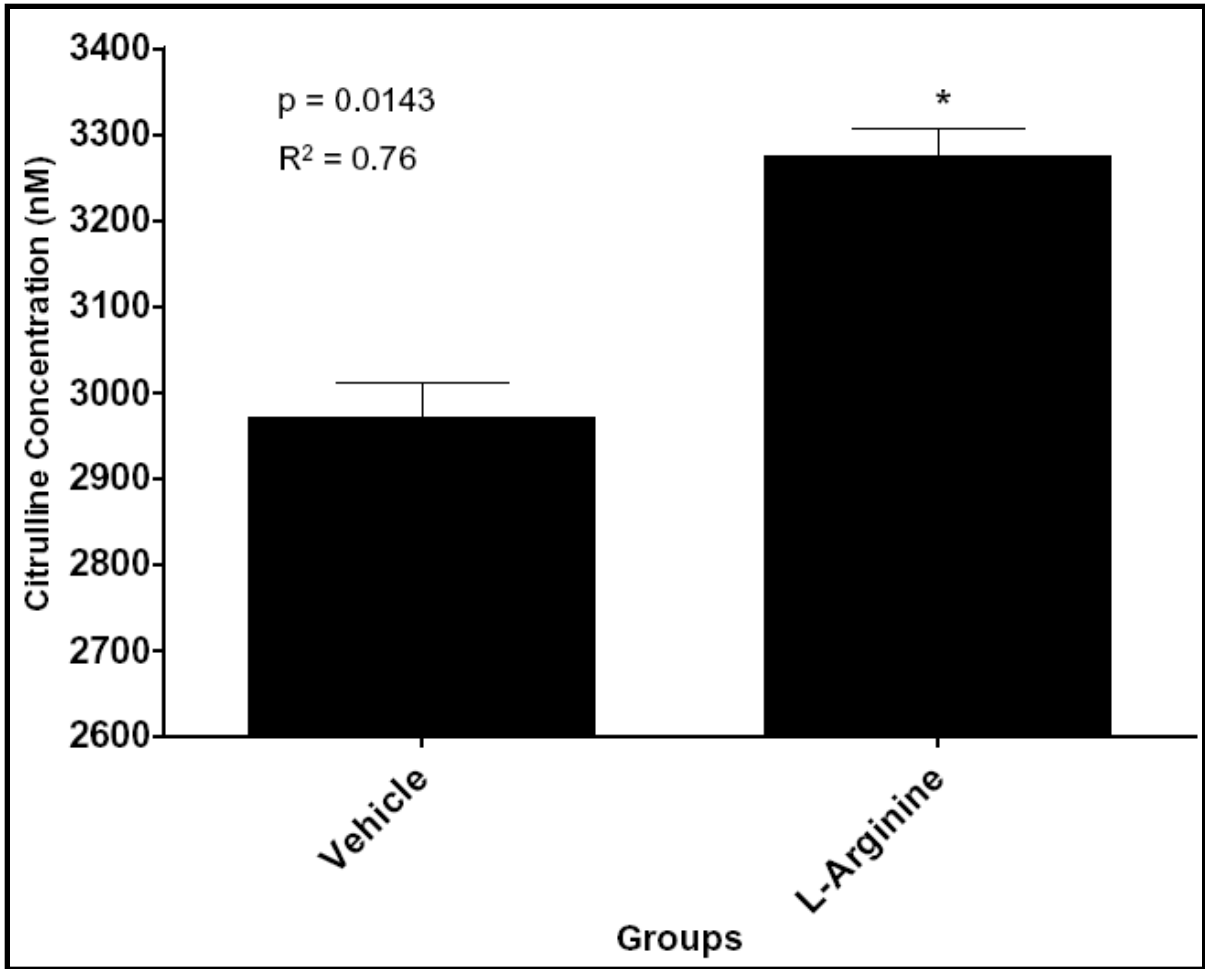


Figure: S1