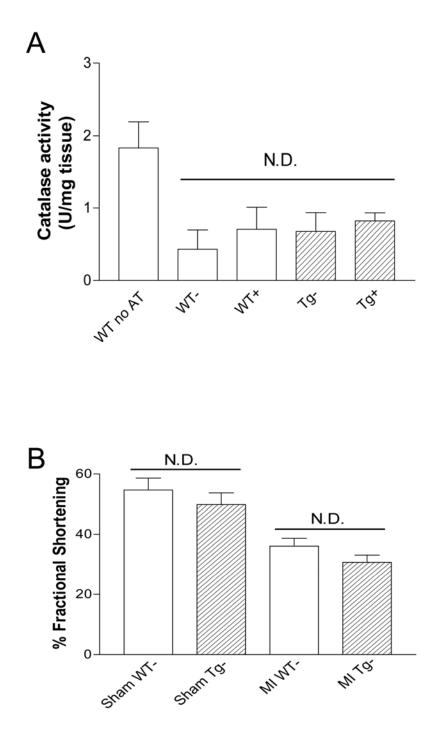
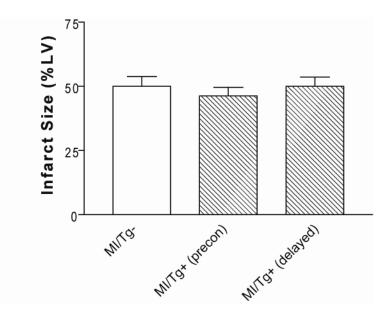
## **Supplemental Material**



Supplemental Figure 1. Specificity of Cre recombinase upregulation on catalase activity and cardiac function over time. A. Addition of 3-aminotriazole (AT) abolished increase in catalase activity in catalase overexpressing mice (Tg) treated with tamoxifen (Tg+), indicating increase was not due to another peroxidase. All groups treated with AT unless indicated. B) Expression of Cre recombinase did not alter cardiac function. Wild-type mice were not statistically different from vehicle-treated transgenic (Tg-) mice after sham or MI surgery. Statistical comparisons were made by ANOVA (A, p<0.001; B, p=0.003) followed by Tukey-Kramer post test. n = 5-9 hearts per group.



**Supplemental Figure 2. Infarct size measurements.** Infarct size was measured acutely (1 day) following infarction with magnetic resonance imaging (delayed contrast enhancement of gadolinium). There were no significant differences between the groups by ANOVA (p=0.79;  $n\geq3$ ).