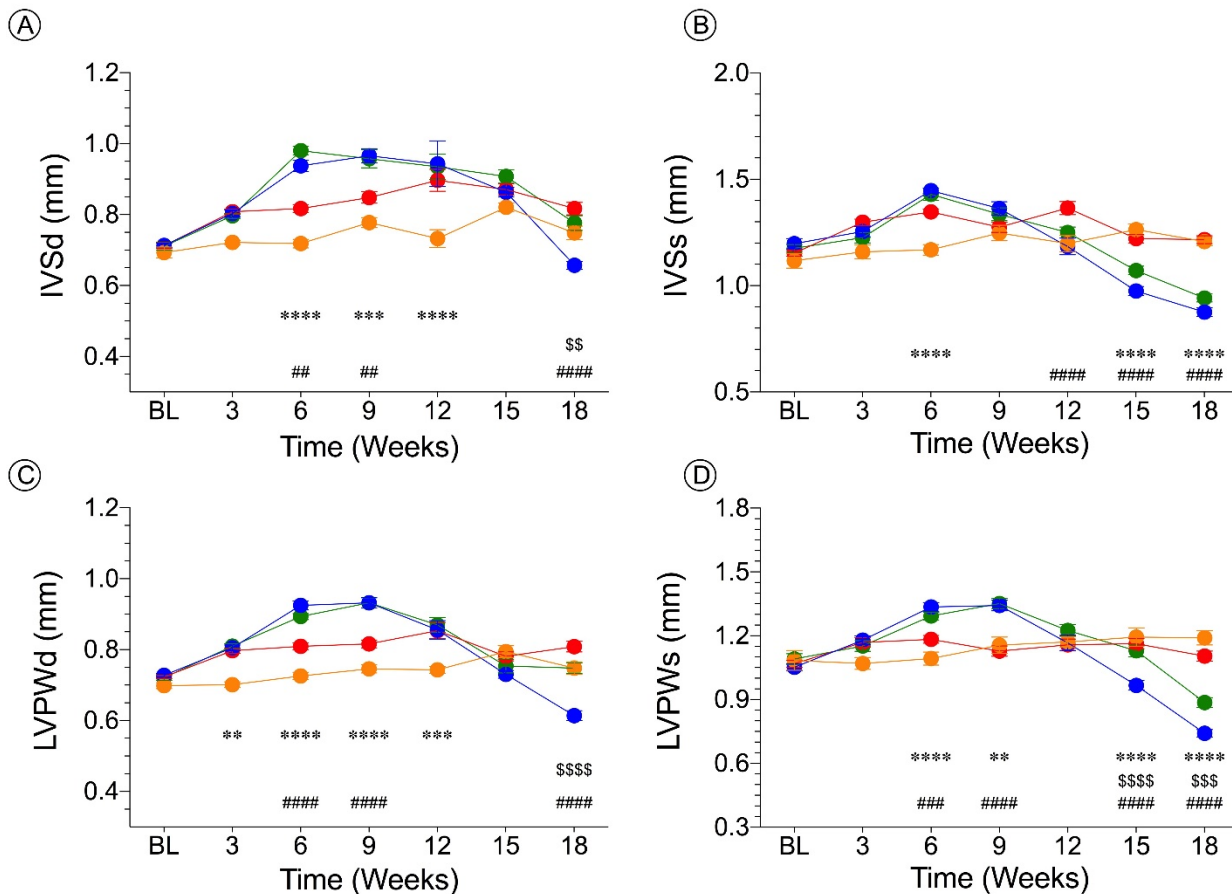


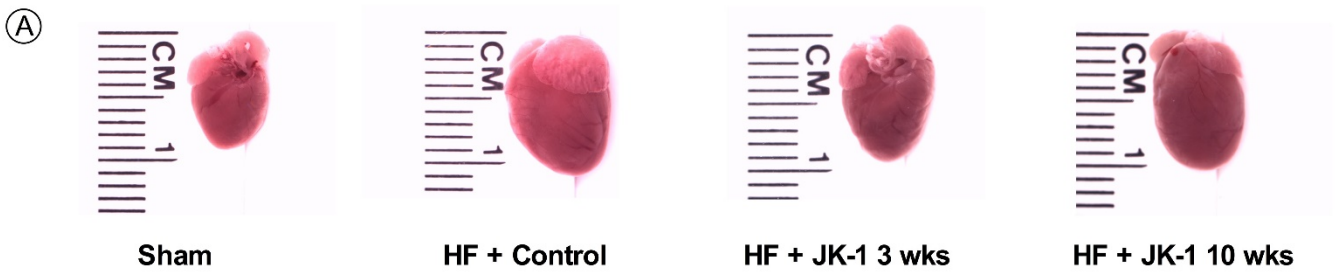
## Supplemental Figure 1

● Sham (n= 7) \*      ● HF + Control (n=18)  
 ● HF + JK-1 3 wks post TAC (n=20) #      ● HF + JK-1 10 wks post TAC (n=18) \$

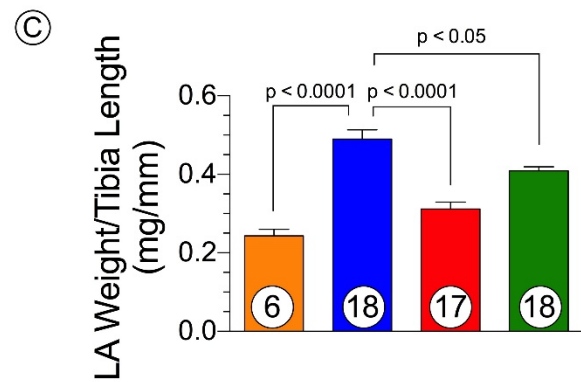
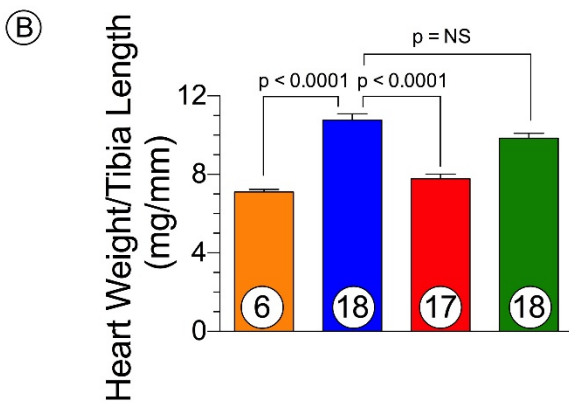


### Supplemental Figure 1. Interventricular Septal Wall and LV Posterior Wall Thickness

Interventricular wall thickness at diastole (**A**) and at systole (**B**); left ventricular posterior wall at diastole (**C**) and at systole (**D**) in mice from Sham, HF + Control, HF + JK-1 3 weeks post TAC, and HF + JK-1 10 weeks post TAC groups. \*\*:  $p < 0.01$  between Sham vs. HF + Control; \*\*\*:  $p < 0.001$  between Sham vs. HF + Control; \*\*\*\*:  $p < 0.0001$  between Sham vs. HF + Control; #:  $p < 0.01$  between HF + JK-1 3 weeks post TAC vs. HF + Control; ####:  $p < 0.001$  between HF + JK-1 3 weeks post TAC vs. HF + Control; #####:  $p < 0.0001$  between HF + JK-1 3 weeks post TAC vs. HF + Control; \$\$:  $p < 0.01$  between HF + JK-1 10 weeks post TAC; \$\$\$:  $p < 0.001$  between HF + JK-1 10 weeks post TAC; \$\$\$\$:  $p < 0.0001$  between HF + JK-1 10 weeks post TAC. All data in **Supplemental Figure 1** were analyzed with two-way-ANOVA.



■ Sham   
 ■ HF + Control   
 ■ HF + JK-1 3 wks post TAC   
 ■ HF + JK-1 10 wks post TAC

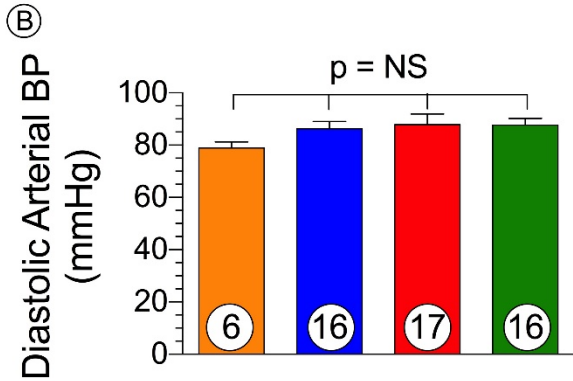
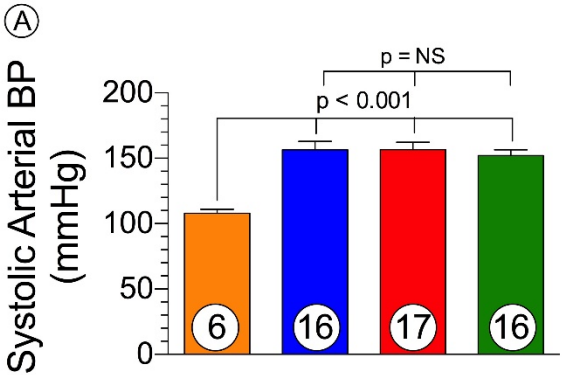


**Supplemental Figure 2. Pathological Cardiac Remodeling, Whole Heart Weight to Tibia Length Ratio, and Left Atrial Weight to Tibia Length Ratio**

(A) Representative images of the whole heart, (B) whole heart weight to tibia length ratio, and (C) left atrial weight to tibia length ratio in mice from Sham, HF + Control, HF + JK-1 3 weeks post TAC, and HF + JK-1 10 weeks post TAC groups at 18 weeks post-TAC. Circles inside bars denote the sample size.

Supplemental Figure 3

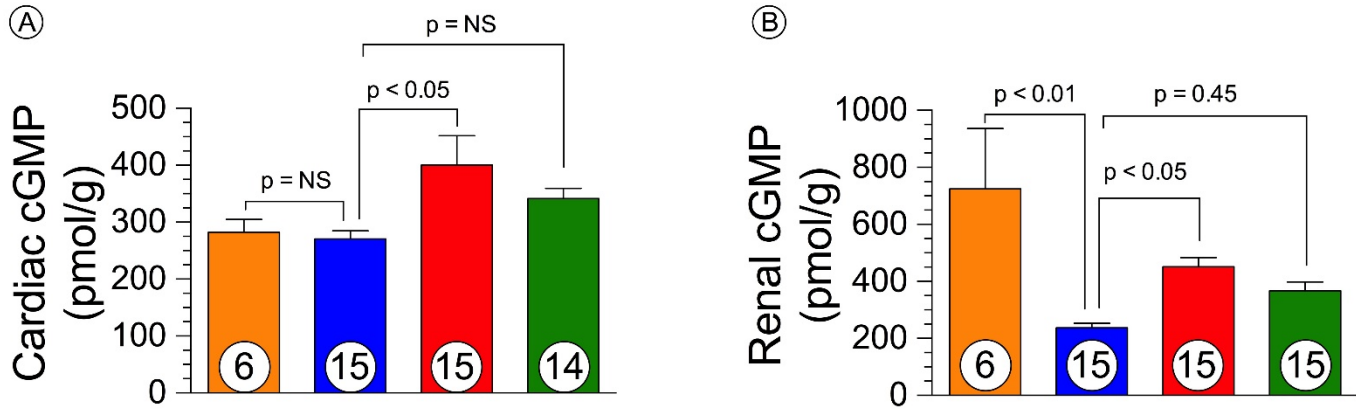
Sham HF + Control HF + JK-1 3 wks post TAC HF + JK-1 10 wks post TAC



Supplemental Figure 3. Systolic and Diastolic Arterial Blood Pressure

(A) Systolic and (B) diastolic arterial blood pressure from Sham, HF + Control, HF + JK-1 3 weeks post TAC, and HF + JK-1 10 weeks post TAC groups at 18 weeks post-TAC. Circles inside bars denote the sample size.

Sham    HF + Control    HF + JK-1 3 wks post TAC    HF + JK-1 10 wks post TAC



**Supplemental Figure 4. Cardiac and Renal cGMP levels**

Levels of cGMP in (A) cardiac and (B) renal tissues from Sham, HF + Control, HF + JK-1 3 weeks post TAC, and HF + JK-1 10 weeks post TAC groups at 18 weeks post-TAC. Circles inside bars denote the sample size.