

Supplemental Material

Supplemental Figure 1. A. Left atrial size was increased in HFpEF rats compared to controls at baseline. Left atrial size was reduced in CDC-injected rats compared to PBS-injected rats (4.19 ± 0.66 mm in CDC vs. 4.60 ± 0.36 mm in PBS, $p < 0.05$). **B.** E' wave was decreased in HFpEF rats compared to controls at baseline. E' wave increased in CDC-injected rats compared to PBS rats but did not reach statistical significance (57.6 ± 15.4 in CDC vs. 43.4 ± 13.1 in PBS, $p = 0.15$). **C.** Number of extrastimuli to induce VA in HFpEF rats were not different between CDC and PBS rats. **D.** The intrinsicoid deflection time did not change in CDC and PBS rats. * denotes $p < 0.05$ and ** $p < 0.001$. Error line indicates mean and standard deviation. Mixed model regression was used for Supplemental Fig. 1A, B and D.

Supplemental Figure 2. A, B. Expression of Kv4.2 protein in cardiomyocytes did not change between groups. **C, D.** Expression of Kv1.4 protein were similar in PBS and CDC groups. **E, F.** Expression of KChIP2 protein were not changed after CDC or PBS treatment. Error line indicates mean and standard deviation. Mixed model regression was used for Supplemental Fig. 2B, D and F.

Supplemental Figure 3. A, B Connexin43 expressions in cardiomyocytes were not altered in PBS and CDC-injected HFpEF rats. Error line indicates mean and standard deviation. Mixed model regression was used for Supplemental Fig. 3B.