Supplemental Table 1

Primer sequences used for RT-qPCR.

Gene Name	Reference Sequence	Sequence
Mouse CCR2	NM_009915	Forward 5'-TTA CAC CTG TGG CCC TTA TTT-3' Reverse 5'-CTG AGT AGC AGA TGA CCA TGA C-3'
Human CCR2	NM_001123041	Forward 5'-GGA TTG AAC AAG GAC GCA TTT C-3' Reverse 5'-CAC CGC TCT CGT TGG TAT TT-3'
Mouse TPT1	NM_009429	Forward 5'-ATC ATC TAC CGG GAC CTC ATC-3' Reverse 5'-CCC TCT GTT CTA CTG ACC ATC T-3'
Human TPT1	NM_001286272	Forward 5'-GGG CTG CAG AAC AAA TCA AG-3' Reverse 5'-CAT CCT CAC GGT AGT CCA ATA G-3'
Mouse VCAM-1	NM_011693	Forward 5'-GCA CTC TAC TGC GCA TCT T-3' Reverse 5'-CAC CAG ACT GTA CGA TCC TTT C-3'

Supplemental Figure Legends:

Supplemental Fig. 1: Low dose metoprolol infusion prevents catecholamine-induced cardiac contractility. (A) Mice that received a low dose of metoprolol (Met low, 1mg/kg/d) versus Veh for 2 weeks underwent M-mode echocardiography to assess fractional shortening (%) at baseline and following i.p. injection with isoproterenol (ISO, 0.1mg/kg). n=3 each for Veh and Met. Two-way repeated measures ANOVA, ‡ $p < 0.001$ vs Veh. (B) Representative example of immunohistochemical detection of monocyte/macrophage-lineage cells within a spleen section stained with anti-CD68 antibody. Indicated zones are the white pulp (WP), marginal zone (MZ, separated from the pulp zones via dashed black lines) and red pulp (RP), where the brown $CD68^+$ staining is located. Image was captured at 20X magnification.

Supplemental Fig. 2: ICI 118,551 infusion enhances splenic leukocyte accumulation in a temporally-dependent manner. (A) Representative CD68, tryptase and MPO staining (black arrowheads) within the splenic red pulp of mice that were administered Veh or ICI for 1 or 4 wk. Scale bar = 200 µm. Quantification of $CD68^+$ (B), $tryptase^+$ (C) and MPO^+ (D) cells within the splenic red and white pulp from (A). Overall Kruskal-Wallis test p values: (B) p=0.0088, (C) p=0.0002, (D) p=0.0012. n=7 for Veh, n=9 for ICI 1 wk, n=8 for ICI 4 wk. Results of Exact Wilcoxon rank-sum tests with multiple comparison adjustment (2 comparisons, timepoints vs Veh) are indicated in scatter dot plots, * $p<0.05$, † $p<0.01$, ‡ $p<0.001$ vs Veh. (E-G) Quantification of CD68, tryptase and MPO staining in the splenic white pulp of mice infused with Veh, ICI, Carv, Met Low or Met High for 2 weeks via osmotic minipump. n=13 for Veh, n=8 ICI, n=9 for Carv, n=7 for Met Low, n=7 for Met High.

Supplemental Fig. 3: Recovery of splenic parameters following cessation of non-selective β-blocker infusion. (A) Serial echocardiography was performed weekly on mice that had received a 2 week infusion of Veh, ICI, Carv, Met Low or Met High prior to Sham or MI surgery to determine percent ejection fraction (EF, %). Overall Kruskal-Wallis test p values: (Sham t=0) p=0.3883, (MI t=0) p=0.0781, (Sham t=7) p=0.2330, (MI t=7) p=0.4144, (Sham t=14) p=0.3232, (MI t=14) p=0.2783, (Sham t=21) p=0.3711, (MI t=21) p=0.1915. n=7 for Veh, n=9 for ICI 1 wk, n=8 for ICI 4 wk. n=3 for all Sham groups at all timepoints; for Veh MI: n=12 (t=0), n=9 (t=7-21); for ICI MI: n=10 (t=0), n=2 (t=7-21); for Carv: n=12 (t=0), n=6 (t=7-21); for Met Low: n=13 (t=0), n=10 (t=7),

n=9 (t=14-21); for Met High: n=12 (t=0), n=7 (t=7-21). (B) RT-pPCR was used to quantify splenic VCAM-1 expression from sham and 4 day post-MI mice that were administered Veh, ICI, Carv, Met Low or Met High for 2 weeks prior to surgery. Overall Kruskal-Wallis test p value: p=0.0189. n=8 for Veh Sham, n=11 for Veh MI, n=7 for ICI Sham, n=7 for ICI MI, n=4 for Carv Sham, n=6 for Carv MI, n=4 for Met Low Sham, n=5 for Met Low MI, n=3 for Met High Sham, n=4 for Met high MI. (C) Measurements of spleen weight/tibia length ratios from WT mice that received 2 weeks of Veh, ICI, Carv, Met Low or Met High infusion prior to sham or MI surgery for 4 days. n=8 for Veh Sham, n=11 for Veh MI, n=7 for ICI Sham, n=7 for ICI MI, n=4 for Carv Sham, n=6 for Carv MI, n=4 for Met Low Sham, n=5 for Met Low MI, n=3 for Met High Sham, n=4 for Met high MI.

Supplemental Fig. 4: β-blocker infusion does not alter leukocyte accumulation in sham hearts or the remote zone of infarcted hearts. (A) Representative CD68, tryptase and MPO staining of sham hearts or the remote zone of infarcted hearts, 4 days post-surgery, from mice treated for 2 weeks with Veh (n=8 sham, 11 infarct), ICI (n=7 sham, 7 infarct), Carv (n=4, 6 infarct), Met low (n=4 sham, 5 infarct) or Met high (n=3 sham, 4 infarct) prior to surgery. Scale bar = 200 µm. Quantification of sham $CD68^+$ (B), $tryptase^+$ (C) and MPO^+ (D) and remote zone $CD68^+$ (E), $tryptase^+$ (F) and MPO^+ (G) staining from (A).

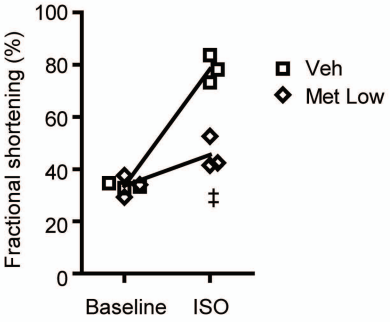
Supplemental Fig. 5: Flow cytometry analysis of cardiac leukocyte accumulation following MI. Via flow cytometry, $CD45^+/CD68^+$ (A, B), $CD45^+/CD117^+$ (C, D) and $CD45^+/Ly6G^+$ (E, F) leukocytes were quantified 4 days post-MI from the hearts of mice having received prior infusion for 2 weeks with Veh or ICI (unstained controls in left panels, isotype control antibody staining is shown in Supplemental Figure 7). n=5 Veh and n=4 ICI, * $p<0.05$, Exact Wilcoxon rank-sum test.

Supplemental Figure 6: Control staining for immunohistochemistry. (A) Secondary antibody-only detection in the heart and spleen to assess background for CD68, tryptase and MPO staining. (B) Splenic CD68, lung tissue tryptase and infarcted myocardium MPO control staining. Scale bars = 50µm.

Supplemental Figure 7: Isotype control antibody staining for flow cytometry. No antibody control staining (left panels), isotype antibody control staining (middle panels) and anti-mouse primary antibody staining (right panels) are shown for each primary antibody used for flow cytometry analysis in the study. Cells were attained from splenic isolations.

Supplemental Figure 1

A



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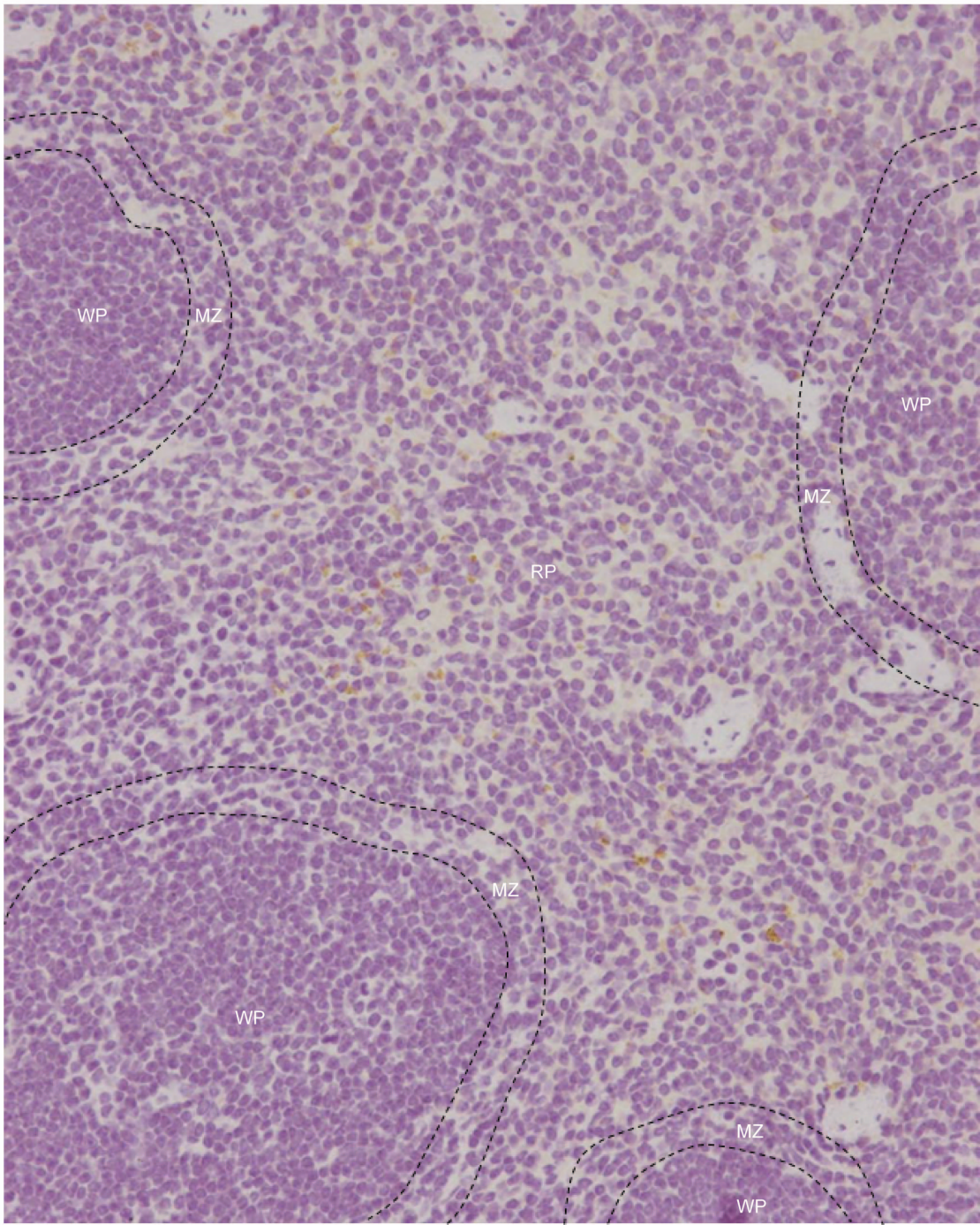
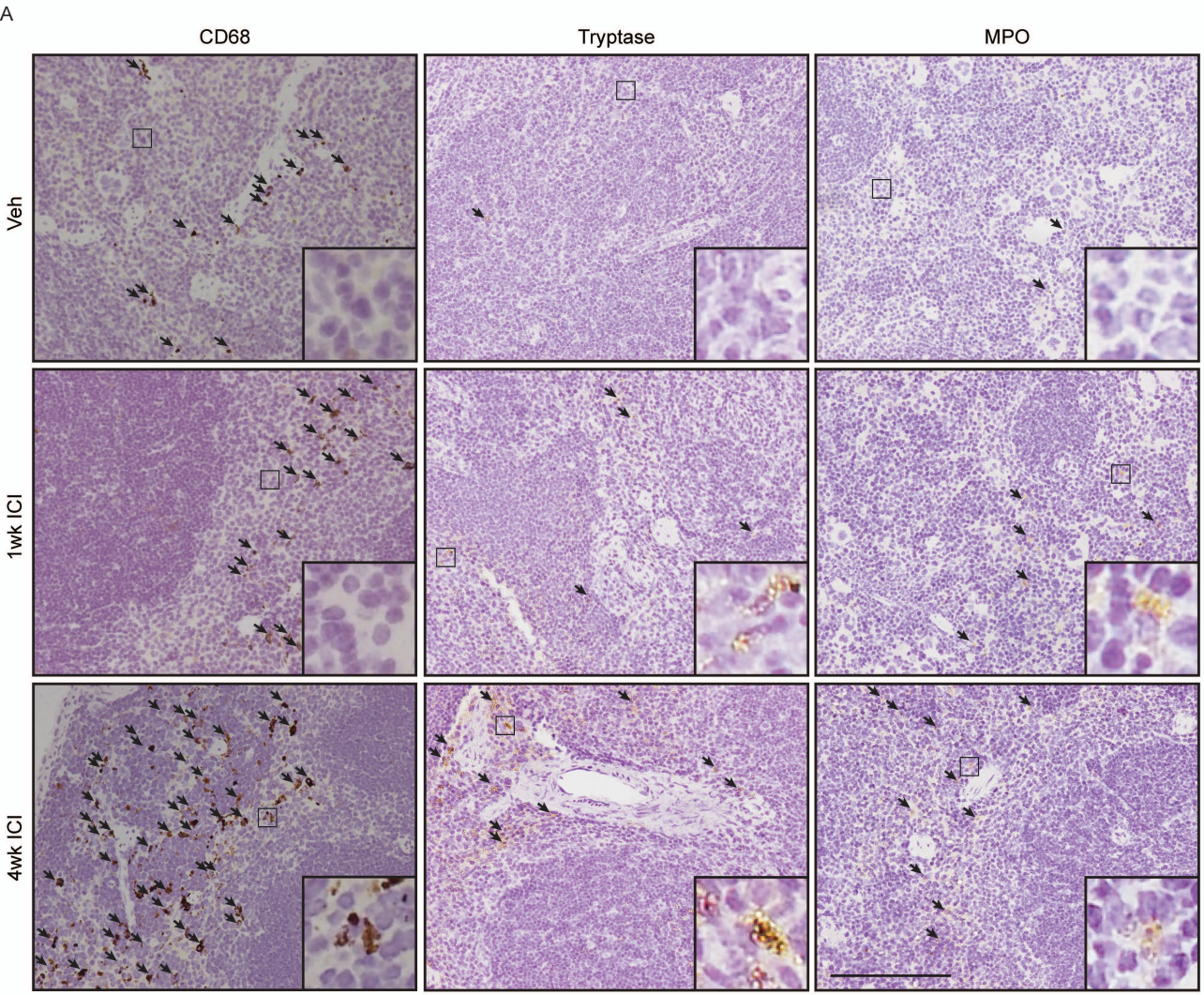
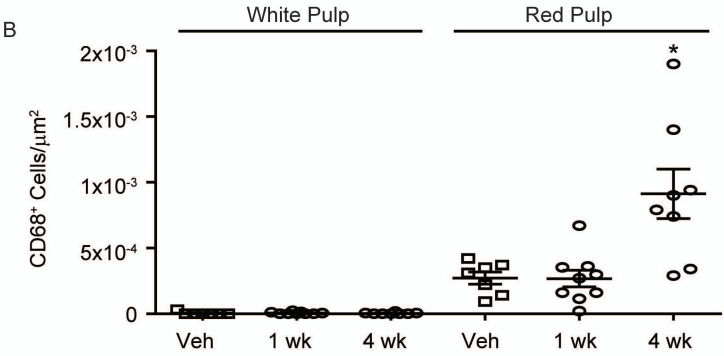
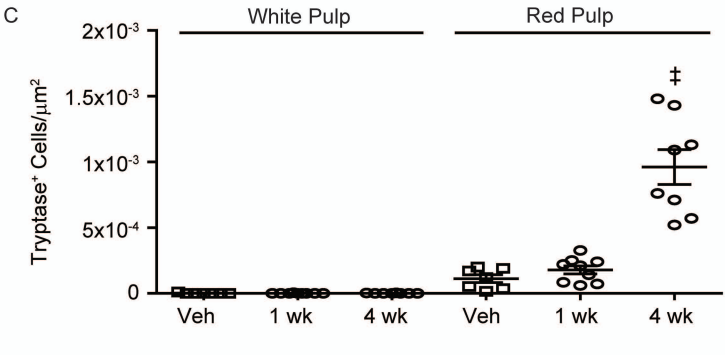
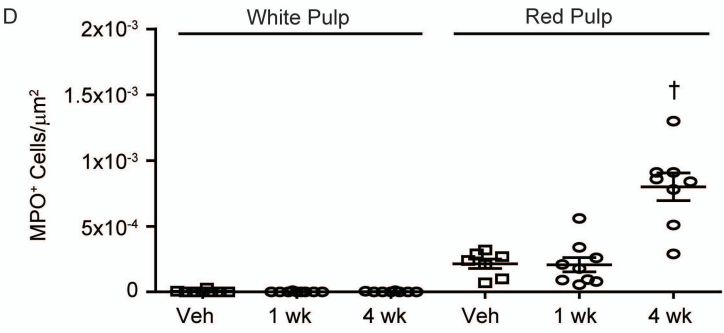


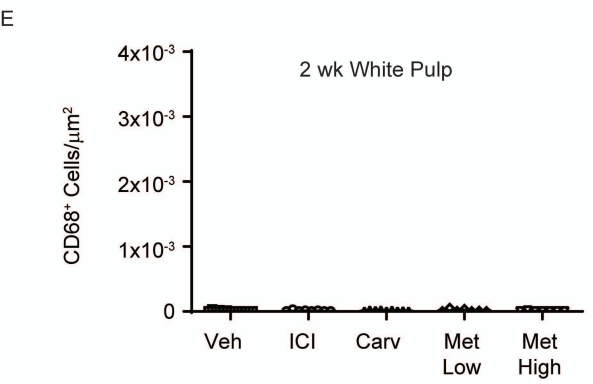
Supplemental Figure 2

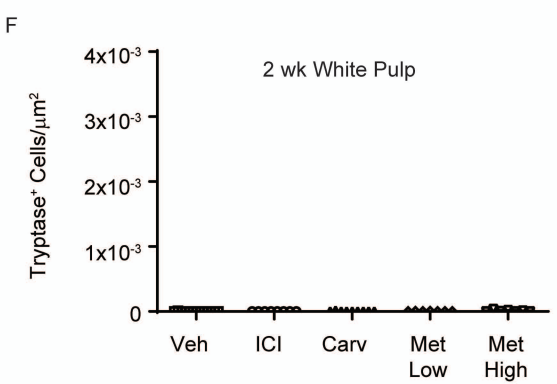


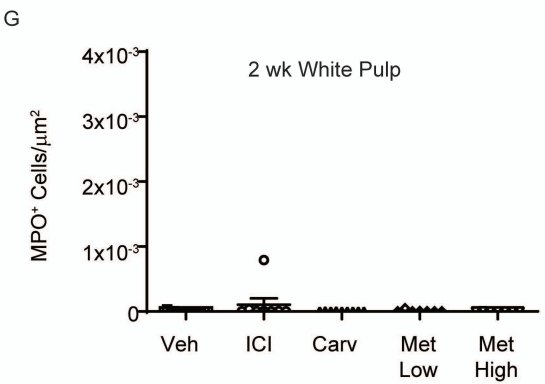




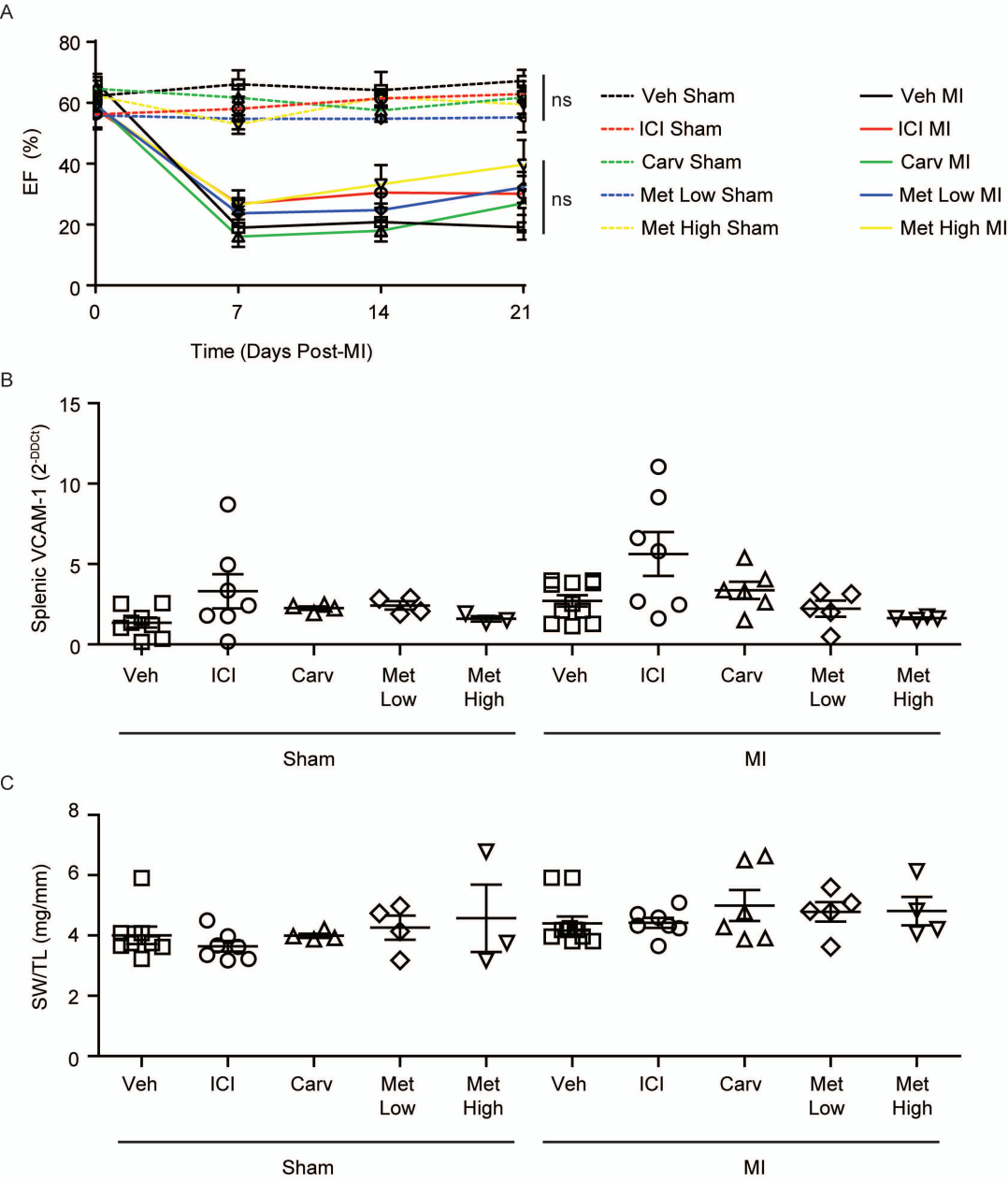




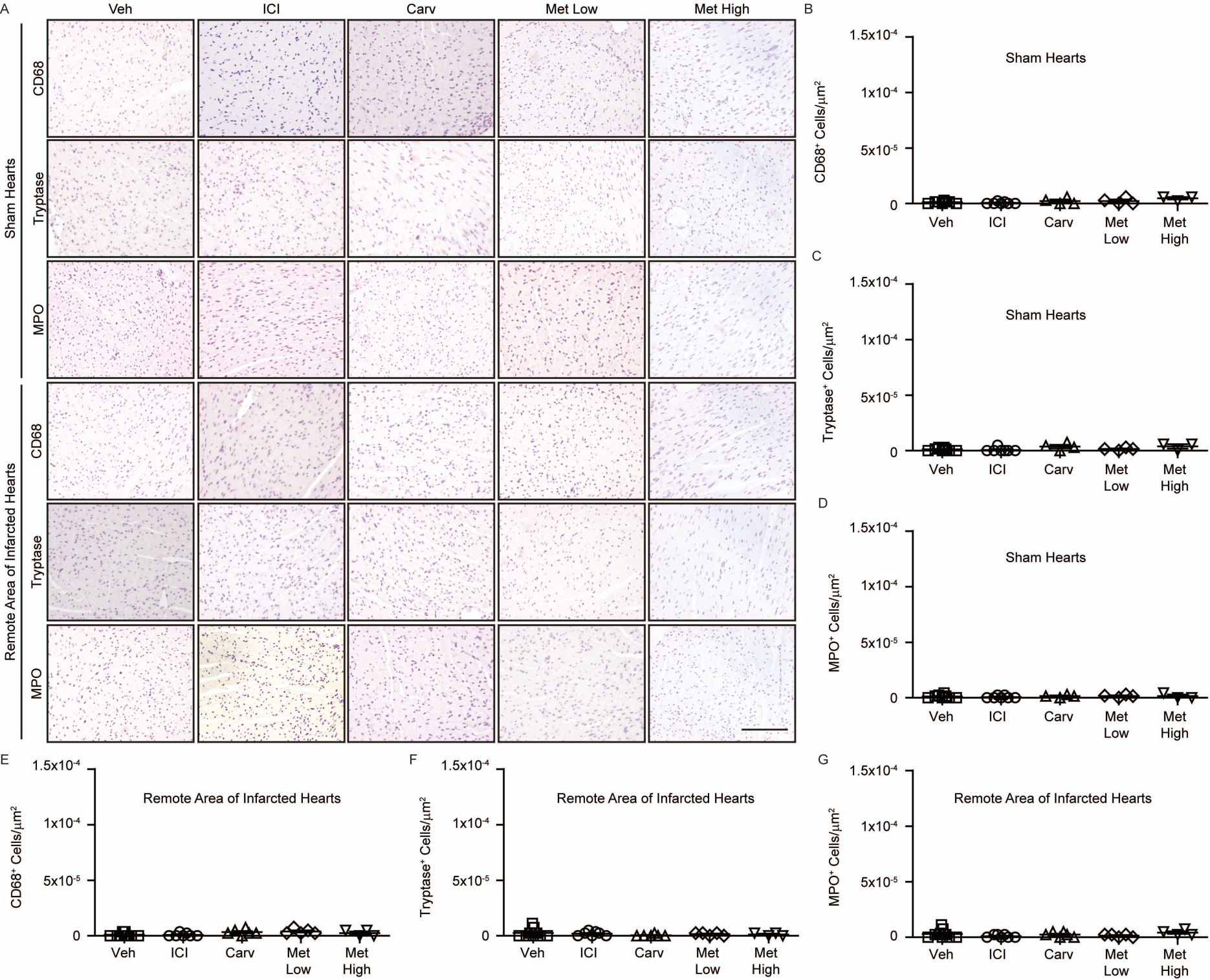




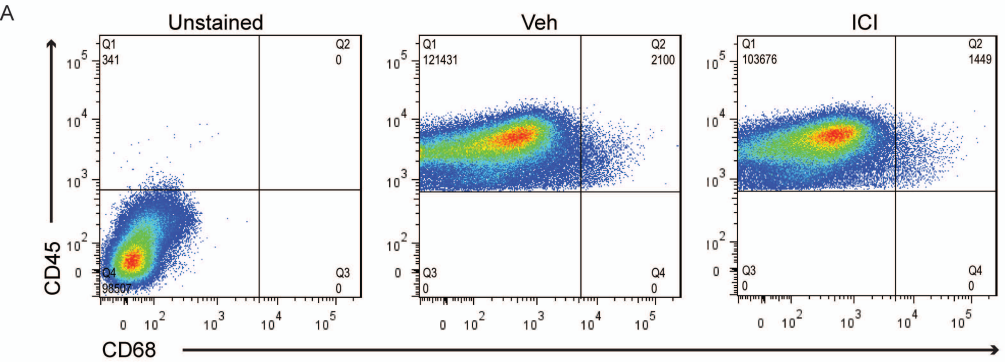
Supplemental Figure 3

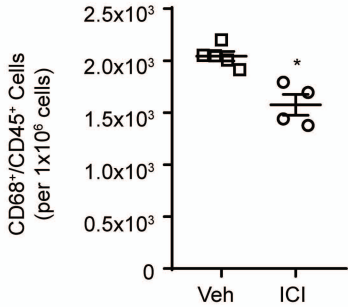


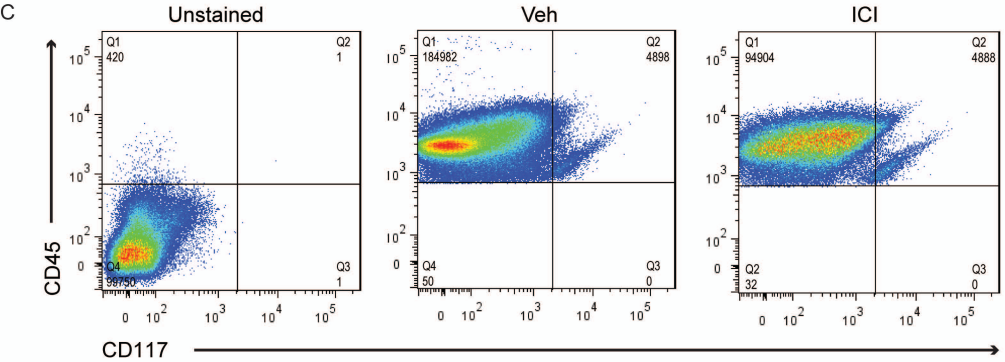
Supplemental Figure 4

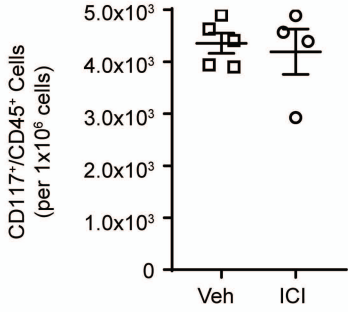


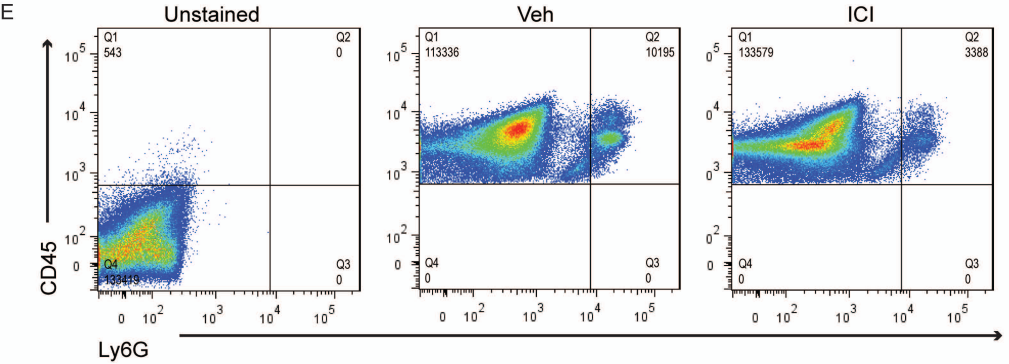
Supplemental Figure 5

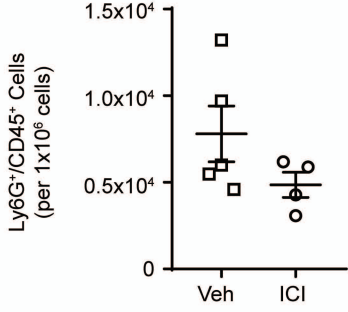




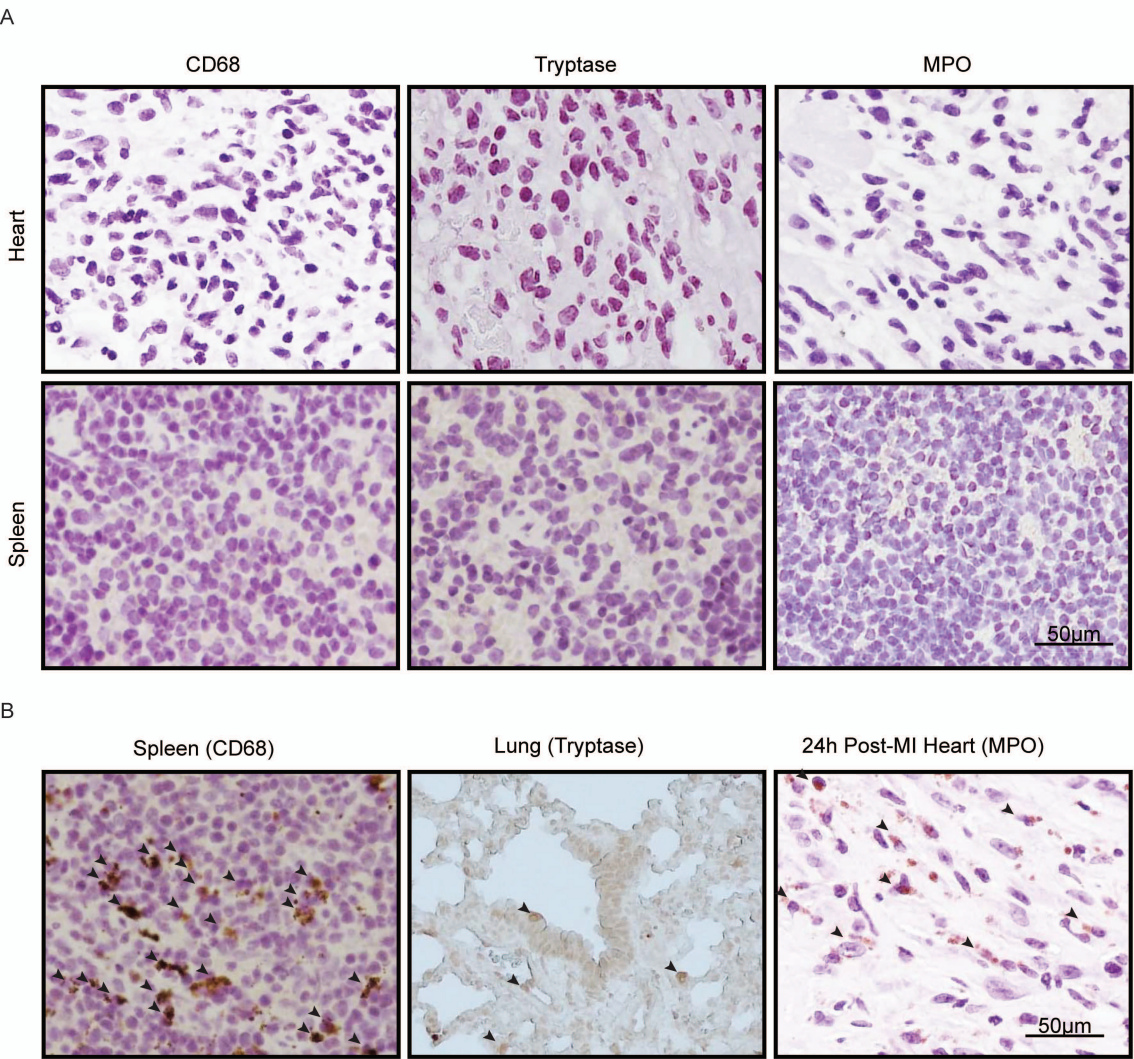








Supplemental Figure 6



Supplemental Figure 7