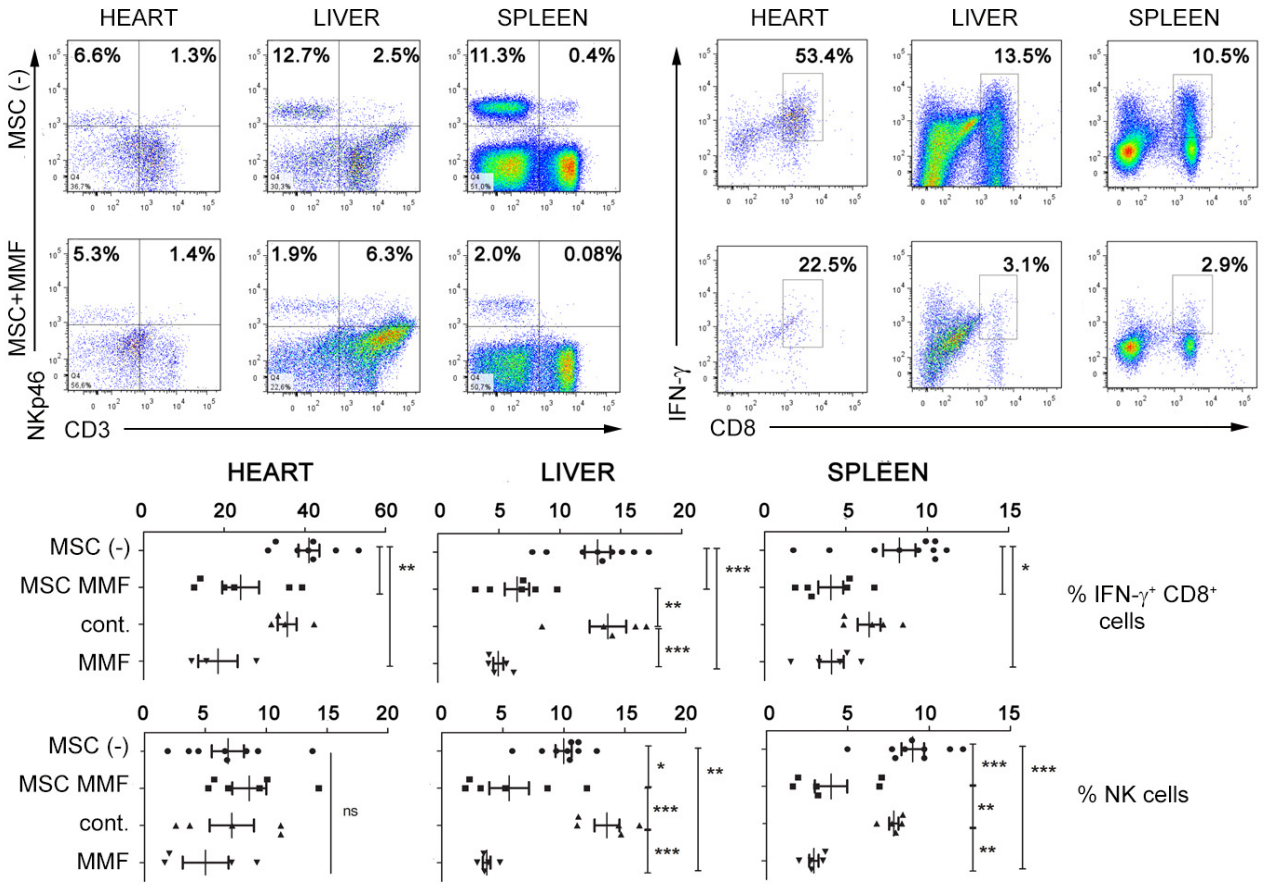
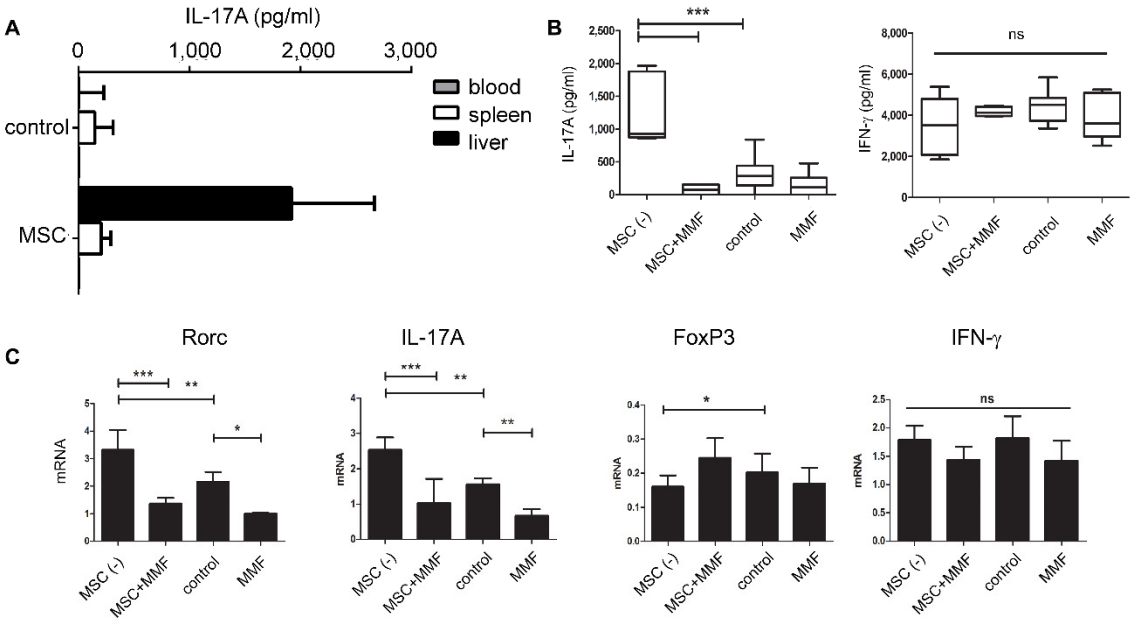
Supplemental Figure 1



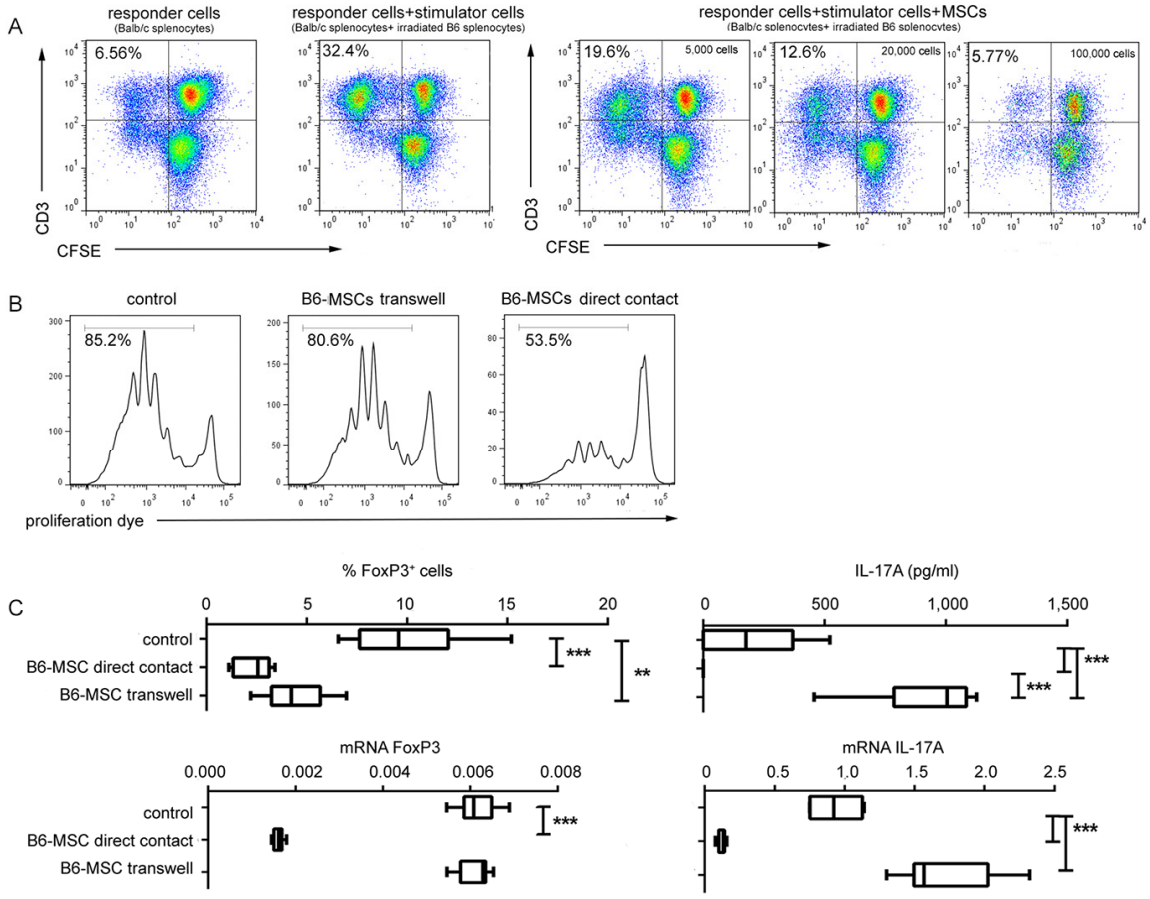
Supplemental Figure 1: Prolonged heart allograft survival is associated with lower percentage of effector cells. Representative staining (*top panel*) and statistical analysis (*bottom panel*) of NK cells ($NKp46^{+}CD3^{neg}$) and cytotoxic lymphocytes ($CD8^{+}IFN\text{-}\gamma^{+}$), isolated from heart graft, liver and spleen from control mice (n=8) and mice receiving MMF alone (n=5), MSC i.v.+MMF (n=5) or MSC i.v. alone (n=6). The graphs present aggregate data from n mice, expressed as means ± SD from 5 independent experiments (set in duplicates). * P<0.05; ** P<0.01; *** P<0.001.

Supplemental Figure 2



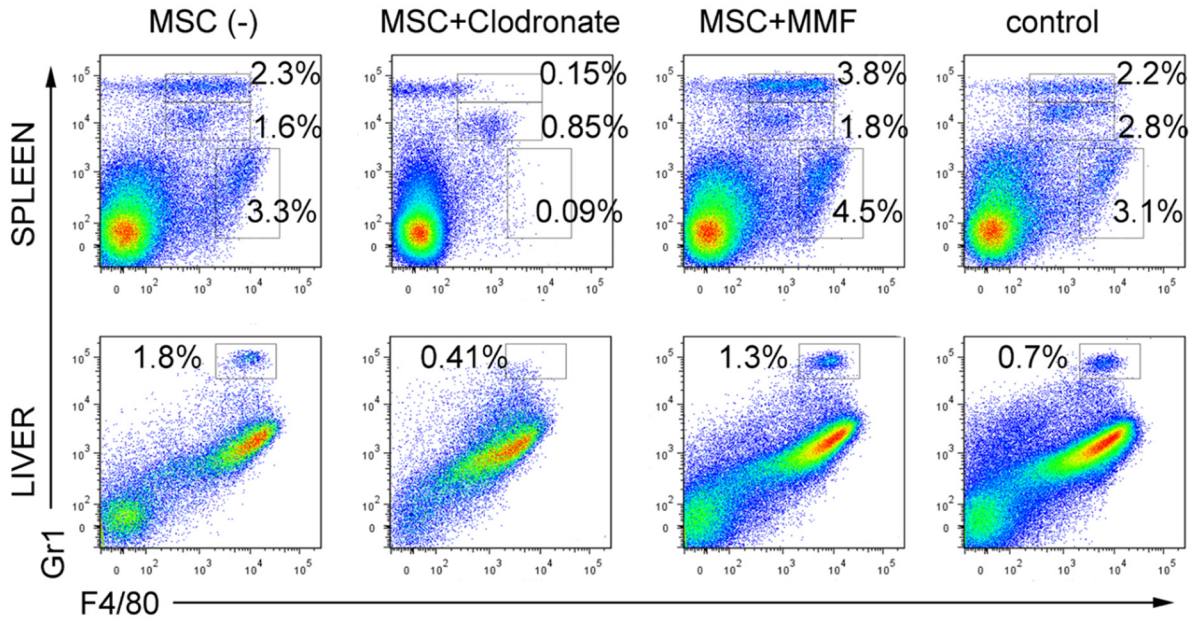
Supplemental Figure 2: Strong induction of IL-17A production in the liver after i.v. administration of MSCs. (**A**) Production of IL-17A in blood, spleen, and liver cells from MSC i.v. treated mice (n=6). (**B**) Production of IL-17A (left) and IFN-γ (right) in liver cells from control mice (n=6) and mice receiving MMF alone (n=5), MSC i.v.+ MMF (n=3) or MSC i.v. (n=6). (**C**) Expression of RORγ, IL-17A, FoxP3 and IFN-γ in liver cells from control mice (n=6) and mice receiving MMF alone (n=5), MSC i.v.+ MMF (n=3) or MSC i.v. (n=6). The graphs in panels B-C present aggregate data from n mice, expressed as means ± SD from 3 independent experiments (set in triplicate cultures for ELISA and duplicates for rtPCR). ns: $P>0.05$; * $P<0.05$; ** $P<0.01$; *** $P<0.001$.

Supplemental Figure 3



Supplemental Figure 3: Diverse immunomodulatory effects of MSCs set up in a transwell setting compared to a direct contact. (**A**) Balb/c CD3$^+$ (responder cells) T cell proliferation in an allogeneic setting with irradiated B6 splenocytes (stimulator cells) in the absence or presence of different number of B6 MSCs (modulator cells). The results were confirmed in 3 independent experiments. (**B**) Proliferation of Balb/c lymphocytes stimulated with anti-CD3/CD28 antibodies in the absence or presence of B6 MSCs either in a direct contact or in a transwell setting. The results were confirmed in 3 independent experiments. (**C**) Expression of FoxP3 (percentage of FoxP3$^+$ cells (*top left panel*) and rtPCR data (*bottom left panel*)) and IL-17A production levels (*top right panel*) and expression (*bottom right*) of IL-17A (aggregate data of 5 independent experiments in triplicates; mean ± SD) in lymphocytes stimulated with anti-CD3/CD28 antibodies in the absence or presence of MSCs in a transwell setting or in a direct contact. ns: P>0.05; ** P<0.01; *** P<0.001.

Supplemental Figure 4



Supplemental Figure 4: Depletion of Gr1^{+}F4/80^{+} cells after clodronate administration. Flow cytometric analysis plots (F4/80 vs. Gr1) of cells isolated from spleen and liver of mice receiving MSCs alone, MSCs in combination with myeloid cell depletion with clodronate-filled liposomes (2 days prior to MSCs administration), MSCs with MMF or control mice receiving PBS. The F4/80 positive subpopulations in spleen can be divided into Gr1^{hi}, Gr1^{int} and Gr1$^{lo/-}$ The subpopulations were further analyzed for expression of CD11b and were all predominantly CD11b positive. The results were confirmed in 3 independent experiments.