

**Supplemental Figure 1: Mast cell-deficient C57BL/6-***Cpa3-Cre;Mcl-1*<sup>fl/fl</sup> mice have **exacerbated GVHD.** Recipient mice, which were either C57BL/6 (H-2<sup>b</sup>) wild-type or mast cell-deficient C57BL/6-*Cpa3-Cre; Mcl-1*<sup>fl/fl</sup> mice, were lethally irradiated and transplanted with 5.0x10<sup>6</sup> TCD-BM, followed by 2.0x10<sup>6</sup> Tcon on day 4 (to induce GVHD) from FVB/N donors (H-2<sup>q</sup>). Data were pooled from 2 independent experiments performed, each of which gave similar results (n=9 for C57BL/6-*Cpa3-Cre; Mcl-1*<sup>fl/fl</sup> recipients, n=15 for all other groups). Significantly better survival was observed in the control mice containing mast cells than in the mast cell-deficient C57BL/6-*Cpa3-Cre;Mcl-1*<sup>fl/fl</sup> mice (p<0.0001).