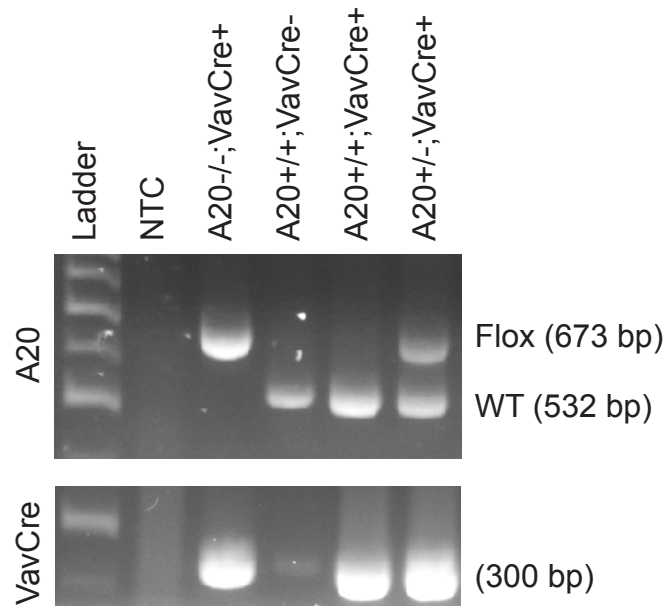
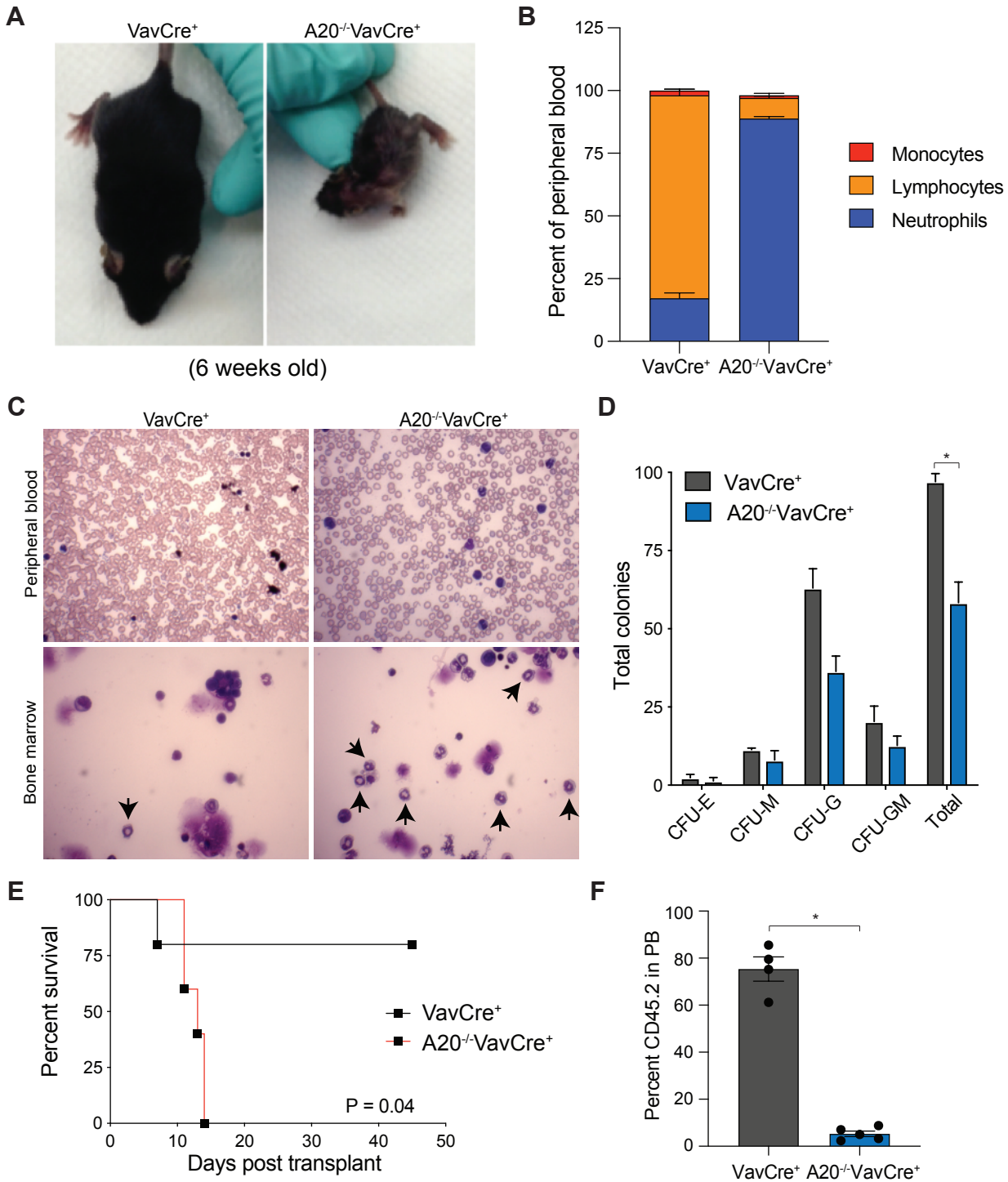


## Supplemental Figure 1



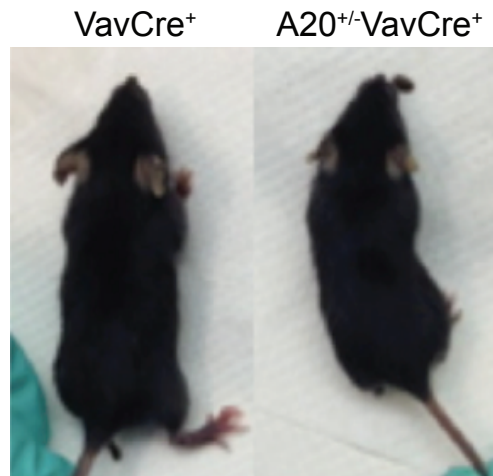
**Supplemental Figure 1. Outcome of genetic crossing of A20 floxed and VavCre mice.** Genotyping of A20 and VavCre in mouse tail DNA. NTC; no template control.

**Supplemental Figure 2**



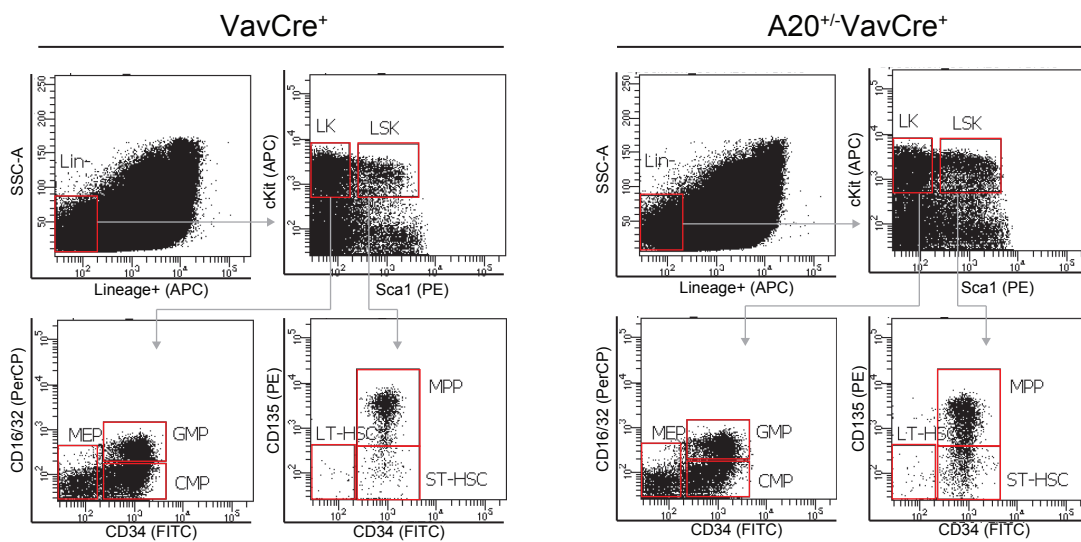
**Supplemental Figure 2. Homozygous deletion of A20 impairs normal HSC function and hematopoiesis. (A)** Representative image of 4-week old WT (VavCre<sup>+</sup>) and homozygous A20-deficient (A20<sup>-/-</sup>-VavCre<sup>+</sup>) mice. **(B)** Complete blood counts for WT (VavCre<sup>+</sup>; n = 5) and A20-deficient (A20<sup>-/-</sup>-VavCre<sup>+</sup>; n = 3) mice at ~8 weeks of age. **(C)** Representative images of Wright-Giemsa stained peripheral blood (PB) smears and BM cytopspins from VavCre<sup>+</sup> and A20<sup>-/-</sup>-VavCre<sup>+</sup> mice. **(D)** Colony formation in methylcellulose of BM mononuclear cells isolated from VavCre<sup>+</sup> and A20<sup>-/-</sup>-VavCre<sup>+</sup> mice. **(E)** Overall survival of lethally irradiated mice transplanted with BM cells from VavCre<sup>+</sup> (n = 5) and A20<sup>-/-</sup>-VavCre<sup>+</sup> (n = 5) mice. **(F)** Flow cytometric analysis of donor-derived (CD45.2<sup>+</sup>) and competitor-derived (CD45.1<sup>+</sup>) PB from recipient mice after competitive transplantation using VavCre<sup>+</sup> or A20<sup>-/-</sup>-VavCre<sup>+</sup> BM cells (CD45.2). Shown are the percent of donor-derived VavCre<sup>+</sup> or A20<sup>-/-</sup>-VavCre<sup>+</sup> cells in the PB ~12 weeks post transplantation.

### Supplemental Figure 3



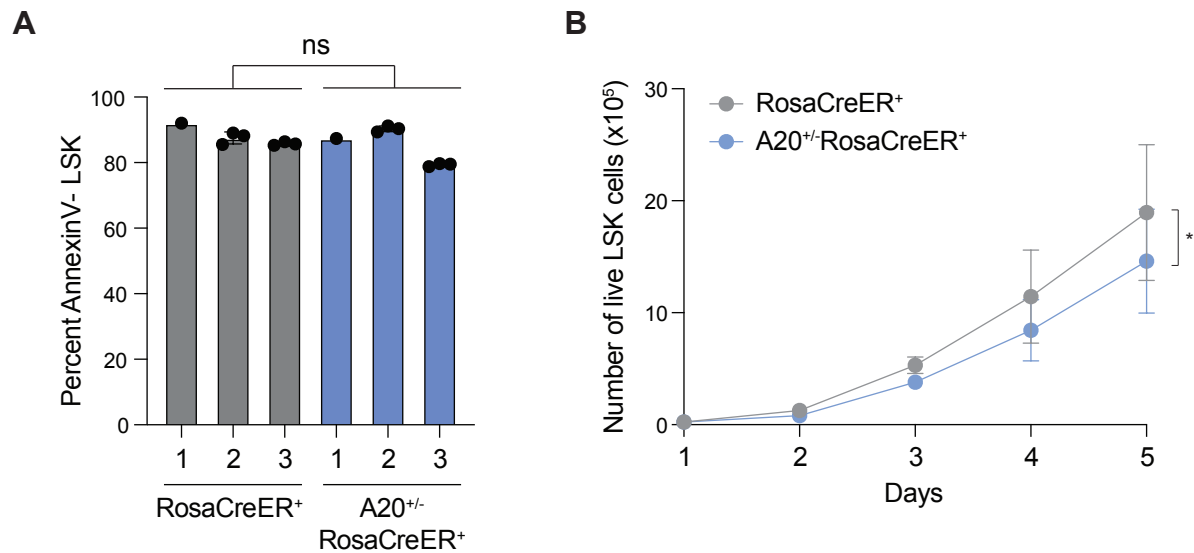
**Supplemental Figure 3. Mice with deletion of one A20 allele were indistinguishable from wildtype littermate controls.** Representative image of 4-week old WT (VavCre<sup>+</sup>) and heterozygous A20-deficient (A20<sup>+/-</sup>-VavCre<sup>+</sup>) mice.

## Supplemental Figure 4



**Supplemental Figure 4. Gating strategy of HSPCs isolated from the BM of recipient mice.** Representative image of 16-week old WT (VavCre<sup>+</sup>) or heterozygous A20-deficient mice (A20<sup>+/-</sup>VavCre<sup>+</sup>).

## Supplemental Figure 5



**Supplemental Figure 5. Apoptosis and cell proliferation analysis of A20 heterozygous-deleted HSPCs. (A)** AnnexinV staining of LSK cells isolated from the BM of the indicated mice (3 independent mice per group examined in triplicate: #1-3) after treatment with Tamoxifen. **(B)** Viable cell counts (trypan blue exclusion) of LSK cells isolated from the BM of the indicated mice (n = 3 mice per group) after treatment with Tamoxifen. \*, P < 0.05.