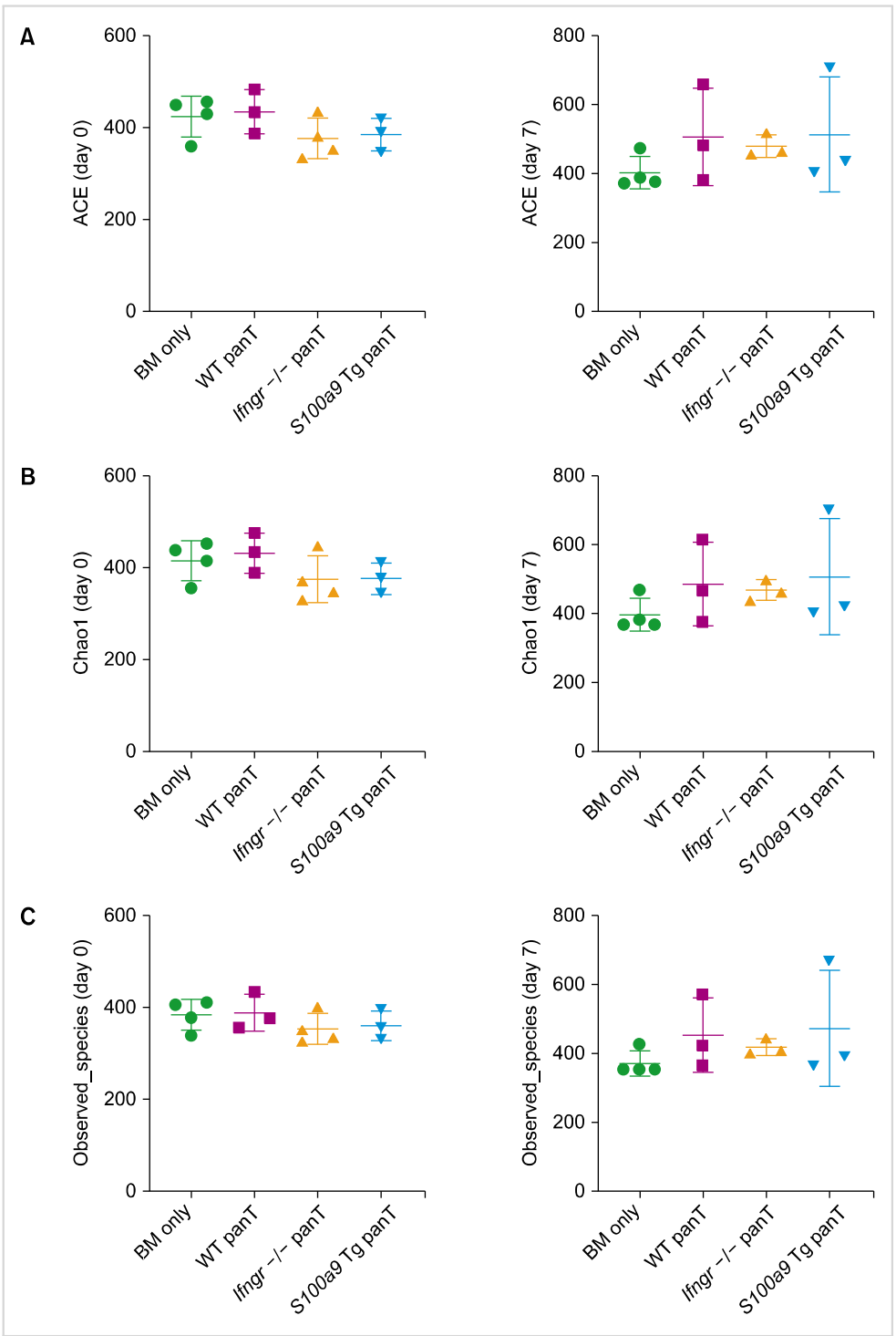
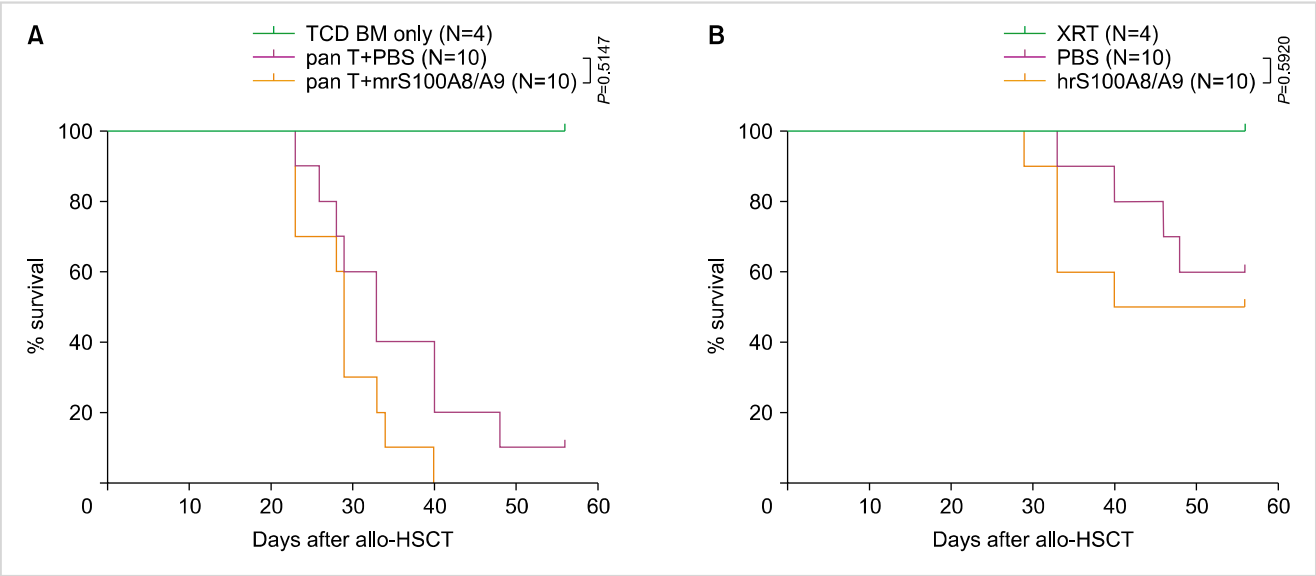


Supplementary Fig. 1. Allo-HSCT was performed as follows; 5×10^6 T cell-depleted bone marrow (TCD-BM; CD45.1+ WT) and 5×10^5 T cells (CD45.2+ WT, *Ifngr1*$^{-/-}$, *S100a9* Tg, or *S100a9* Tg; *Ifngr1*$^{-/-}$) obtained from B6 mice were transplanted on day 0 into lethally irradiated (900 cGy on day -1) Balb/c allogeneic recipient mice. TCD-BM only group serves as no GvHD control. Fecal samples were harvested on day 0 and day 7 after allo-HSCT. The alpha diversity of fecal microbiota on day 0 (left panels) and day 7 (right panels) after allo-HSCT was determined by **(A)** ACE **(B)** Chao1, and **(C)** Observed species indexes. All error bars are represented as mean±standard deviation.



Supplementary Fig 2. **(A)** Allo-HSCT was performed as follows; 5×10^6 TCD-BM (CD45.1+) and 5×10^5 T cells (CD45.2+) obtained from B6 mice were transplanted on day 0 into lethally irradiated (900 cGy on day -1) Balb/c allogeneic recipient mice. TCD-BM only group serves as no GvHD control. Recipient mice were administrated with murine S100A8/S100A9 recombinant proteins (50 μg/kg, i.p. 5 times a wk) for 4 weeks starting at day -2 before allo-HSCT. **(B)** 5×10^6 human PBMCs were transplanted on day 0 into sub-lethally irradiated (250 cGy on day -1) NSG mice. Recipient mice were administrated with human S100A8/S100A9 recombinant proteins (50 μg/kg, i.p. 5 times a wk) for 4 weeks starting at day -2 before allo-HSCT. Treatment of PBS serves as vehicle control. The mice were monitored for 60 days to examine the survival rate.