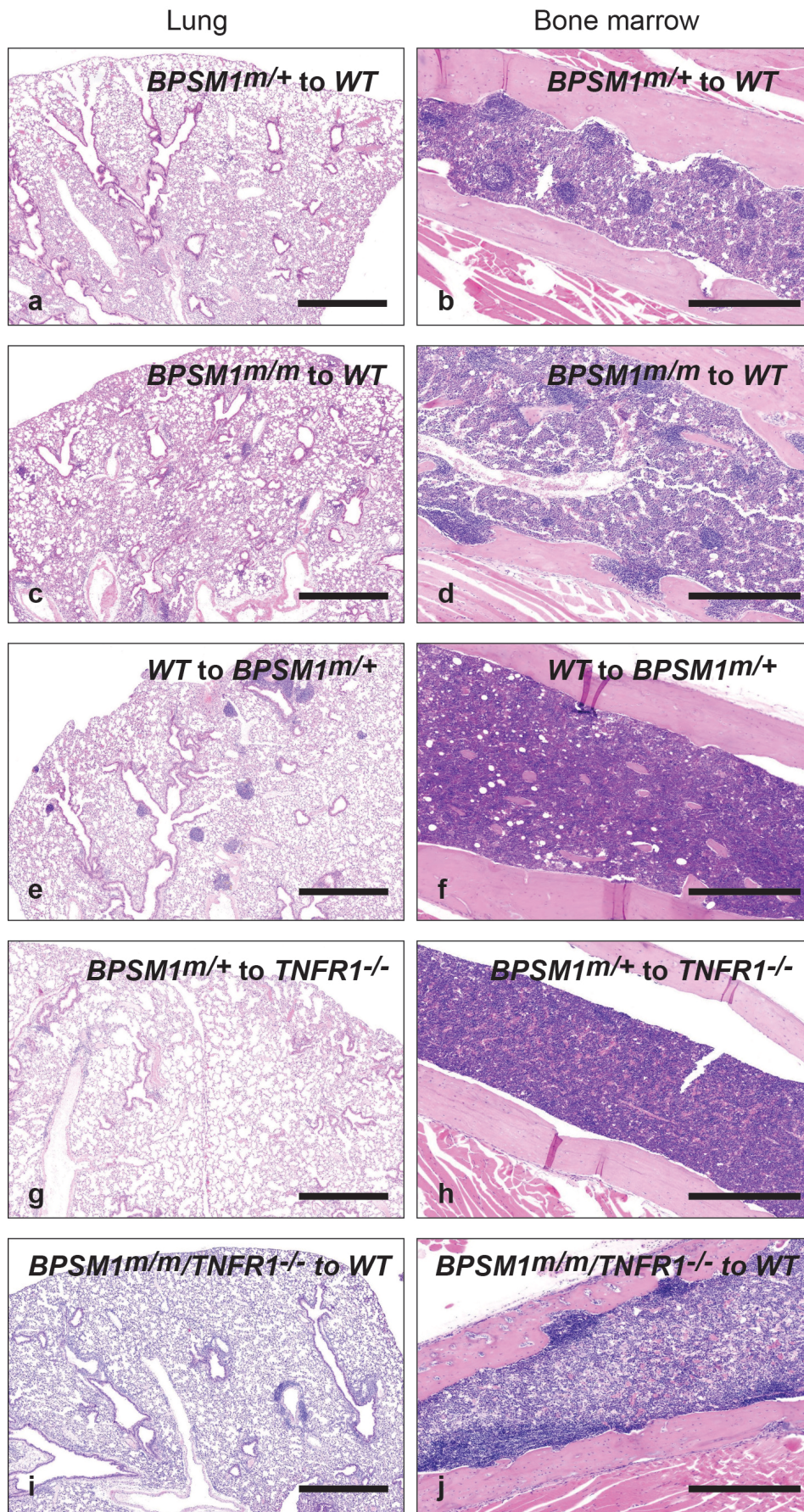
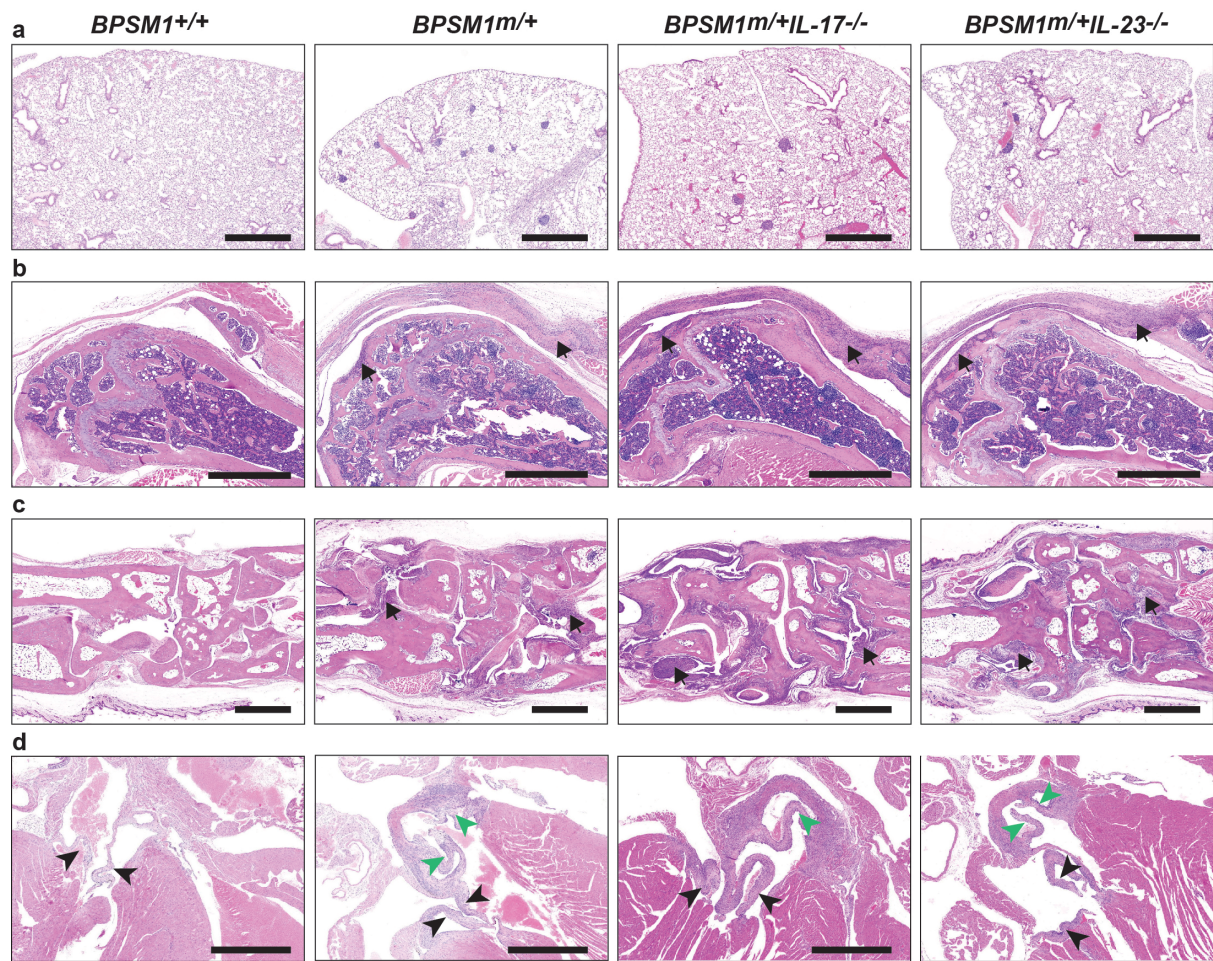


Supplementary figure 1



Supplementary figure 2



Supplementary figure 3

Legends to Supplementary figures

Supplementary Figure 1. *iBALT* and bone marrow NLH in the absence of *CCR7*, *Myd88* or *GM-CSF*, or *TNFR1*. Representative H&E-stained lung (left panels) and bone marrow (right panels) sections from *CCR7*^{-/-} (a), *BPSM1*^{m/+}*Myd88*^{Ki/Ki} (b), *BPSM1*^{m/+}*GMCSF*^{-/-} (c) and *BPSM1*^{m/m}*TNFR1*^{-/-} mice (d). Arrowheads indicate bone marrow lymphocyte follicles. Scale bars, 1 mm (lung) or 0.5 mm (bone marrow).

Supplementary Figure 2. *Bone marrow transplant experiments.* H&E-stained lung tissue (a, c, e, g, i) and femoral bone marrow (b, d, f, h, j) from lethally-irradiated recipient mice transplanted with donor bone marrow. Genotypes of donors and recipients are indicated in each

panel. Scale bar, 1mm (**a, c, e, g, i**); scale bar, 0.5 mm (**b, d, f, h, j**). Results are described in text and summarised in Table 1.

Supplementary Figure 3. Loss of *IL-17* or *IL-23* has no impact on NLH, arthritis or heart valve disease. **a)** Representative H&E-stained lung tissue showing the presence of iBALT in *BPSM1^{m/+}IL-17^{-/-}* and *BPSM1^{m/+}IL-23^{-/-}* mice. **b)** Presence of NLH in the bone marrow of *BPSM1^{m/+}IL-17^{-/-}* and *BPSM1^{m/+}IL-23^{-/-}* mice. Note the extensive bone erosion and synovium hyperplasia in *BPSM1^{m/+}IL-17^{-/-}* and *BPSM1^{m/+}IL-23^{-/-}* animals (black arrows). **c)** The ankles of *BPSM1^{m/+}IL-17^{-/-}* and *BPSM1^{m/+}IL-23^{-/-}* mice show the typical bone erosion associated with severe arthritis (black arrows). **d)** Thickening of the mitral valves (black arrowheads) and inflammatory infiltration (green arrowheads) in the heart of *BPSM1^{m/+}IL-17^{-/-}* and *BPSM1^{m/+}IL-23^{-/-}*. Scale bars, 1mm (**a, b, c, d**).