

Figure S1. Increased peripheral pulmonary pathology associated cGVHD. Representative image of three independent experiments, hematoxylin and eosin stained lung tissue from cGVHD group taken day 60 post transplant. * denotes protein exudation, closed arrow denotes macrophage infiltration. Image was captured at 200x magnification. Representative image from 3 experiments.



Figure S2. Increased cGVHD pathology is seen as early as Day 28. 6um sections of frozen lung and liver tissues harvested at day 28 after transplantation and stained with Hematoxylin and Eosin to determine pathology. Inflammation, immune infiltration and parenchymal changes were scored, using a cumulative scoring system used previously²⁶, n=4 per group. *P<0.05, *** P<0.005.



Figure S3. Deposition of IgG2c in the lung of mice with cGVHD compared to BM only controls. 6um sections of frozen lung tissues harvested at day 60 after transplantation were analyzed by immunofluorescence. Tissues were incubated with either goat anti-mouse IgM, IgG1, IgG2b, IgG2c or IgG3 and followed by donkey anti-goat Ig-FITC. White arrow denotes area of Ig deposition. Representative images for lung from two individual experiments are displayed.



Figure S4. Decreased \mu MT pathological scores. 6um sections of frozen lung and liver tissues harvested at day 60 after transplantation and stained with Hematoxylin and Eosin to determine pathology. Inflammation, immune infiltration and parenchymal changes were scored, using a cumulative scoring system used previously²⁶. Representative scores n=5 per group. **P*<0.05; p=0.3228 for lung BM (μ MT) versus BM (μ MT)+T cells; p=0.2893 for liver BM (μ MT) versus BM (μ MT)+T cells.



Figure S5. Tregs from (m⁺s)IgMxJhD Balb/c mice are able to suppress CD4⁺ T cells at the same level as WT Balb/c Tregs. T cells from Thy1.1 Balb/c mice were labeled with CFSE and mixed with different proportions of CD4⁺ CD25⁺ T cells from either WT Balb/c (WT) or (m⁺s)IgMxJhD (m⁺s) with 0.25 mg/mL of anti-CD3 in complete DMEM. After 4 days, division of CD4⁺ Thy1.1⁺ cells was analyzed by dilution of CFSE on the BD LSRFortessa.



Figure S6. Pathological scores of mice transplanted with (m⁺s)IgMxJhD BM have elevated pathology scores compared to BM only. 6um sections of frozen lung and liver tissues harvested at day 60 after transplantation and stained with Hematoxylin and Eosin to determine pathology. Inflammation, immune infiltration and parenchymal changes were scored, using a cumulative scoring system used previously²⁶. Representative scores n=4 per group. * P < 0.05; p=0.4881 for lung (m⁺s)IgMxJhD BM only versus (m⁺s)IgMxJhD BM+spleen; p=0.6704 for liver (m⁺s)IgMxJhD BM only versus (m⁺s)IgMxJhD BM+spleen.



Figure S7. Pathological scores of mice treated with LTbR-Ig demonstrate infiltration in treated mice. 6um sections of frozen lung and liver tissues harvested at day 60 after transplantation and stained with Hematoxylin and Eosin to determine pathology. Inflammation, immune infiltration and parenchymal changes were scored, using a cumulative scoring system used previously²⁶. Representative scores n=4 per group. *P<0.05; p=0.2029 for lung BM+spleen MOPC21 versus BM+spleen LTbR-Ig; p=0.5543 for liver BM+spleen MOPC21 versus BM+spleen LTbR-Ig.



Figure S8. Increased germinal center size and frequency on Day 28 post transplantation. 6um sections of frozen lung and liver tissues harvested on day 28 after transplantation and stained with Biotin-PNA and FITC-IgM followed by SA-PE. The size of the GC was quantified by measuring the area of PNA staining in Photoshop C3. Frequency of the GC was quantified by counting the number of GCs in 1 mm² of spleen section, representative experiment n=4. * P < 0.05, *** P < 0.005