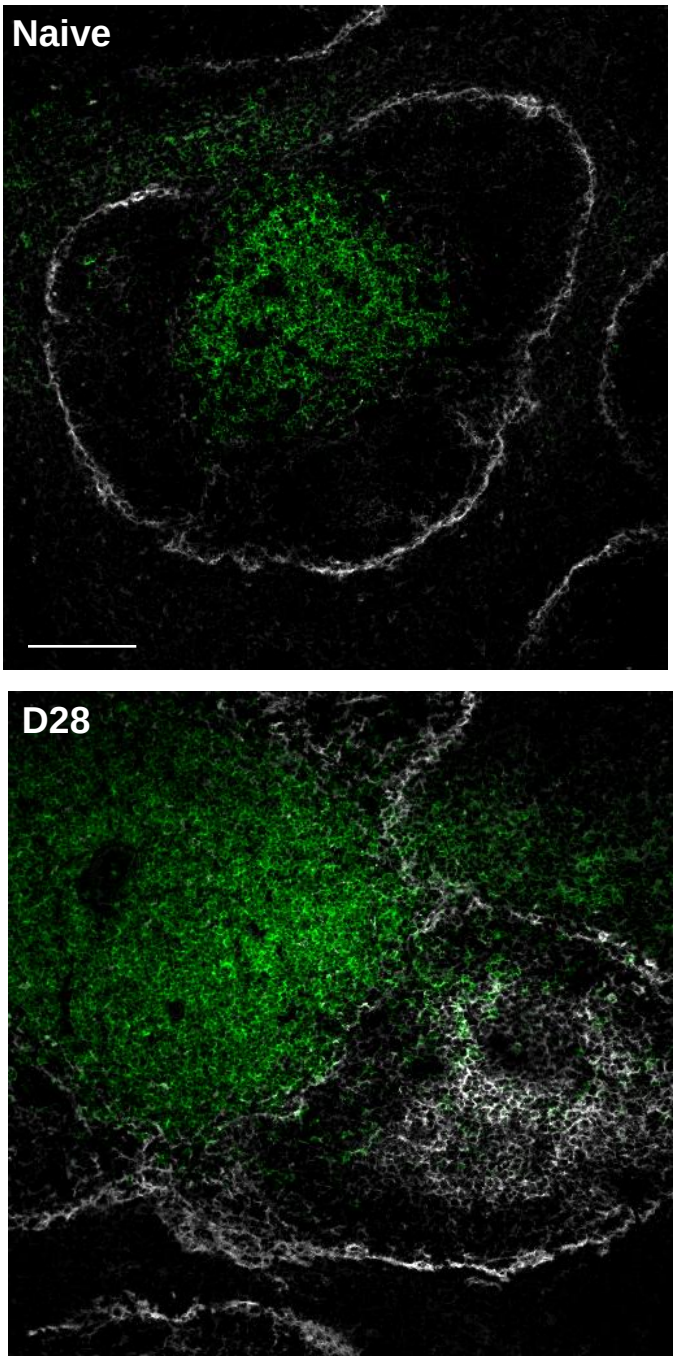
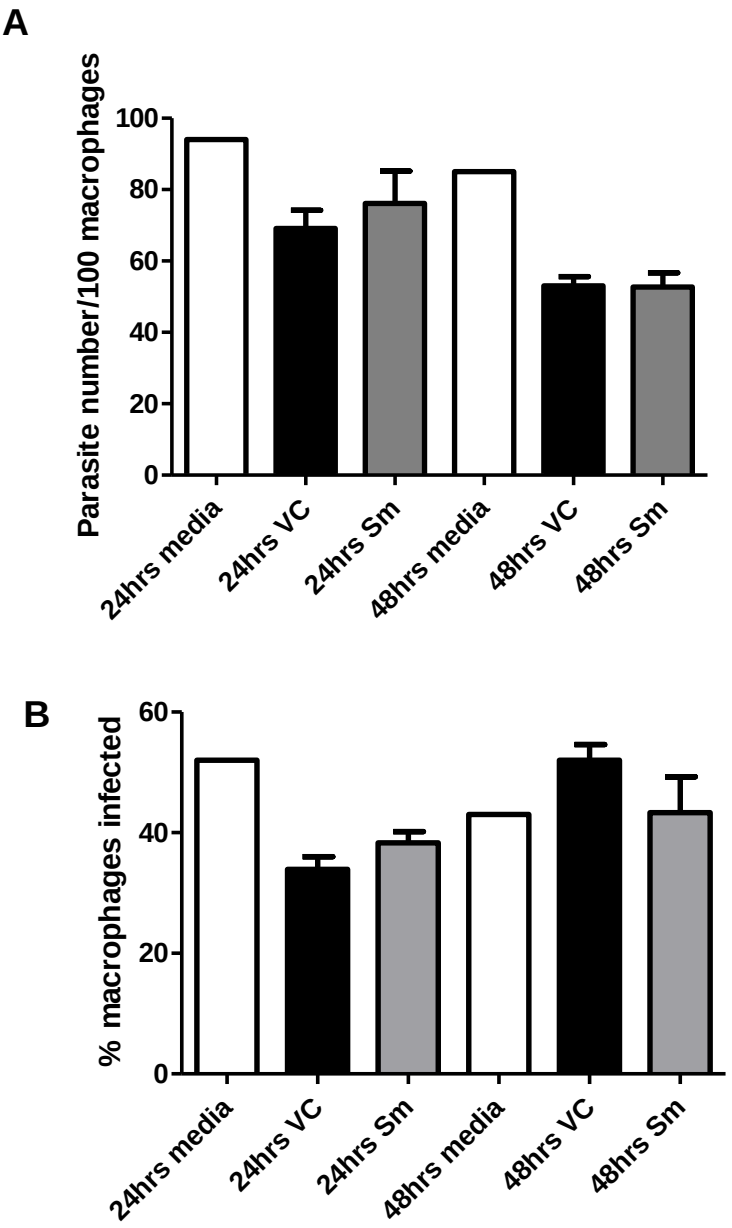


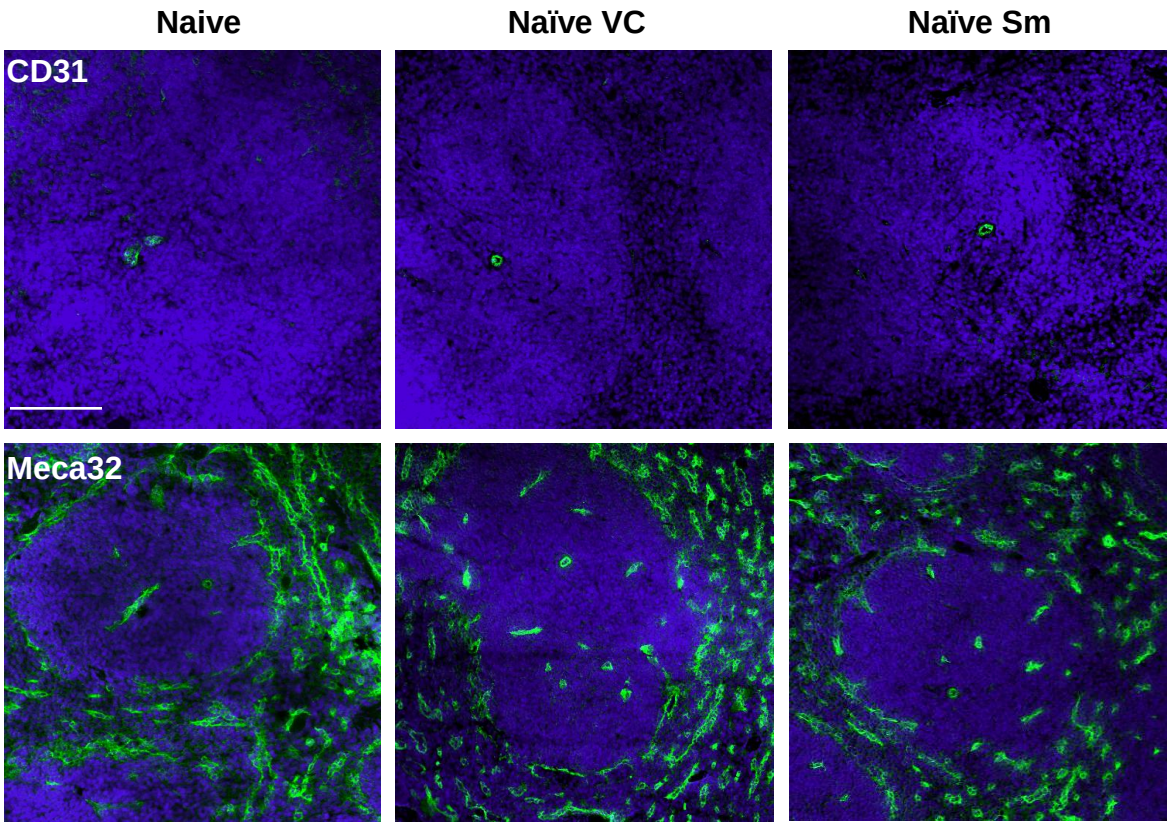

**Supplementary Figure 1. Changes in MadCam-1 expression in *L donovani*-infected spleens.**

Immunfluorescent staining of spleen sections before (top) and 28 days after (lower) *L.donovani* infection showing positioning of MadCam-1 positive cells (white) and T cells (green). Scale bar = 100µm



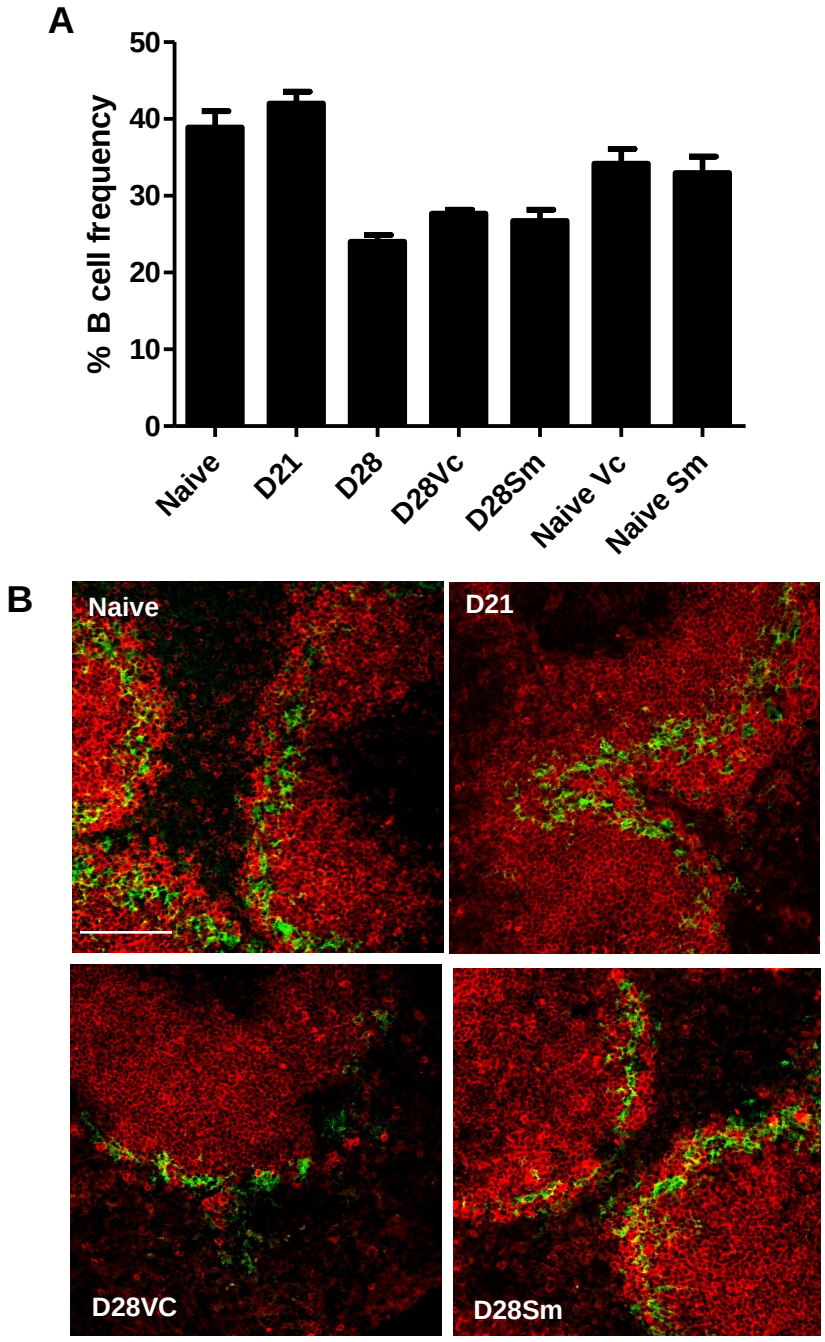

**Supplementary Figure 2. Sunitinib maleate was not directly anti-parasitic against amastigotes in macrophages *in vitro*.**

Bone-marrow derived macrophages infected at a ratio 10:1 with *L.donovan*i were analysed for infection levels per 100 macrophages and number of macrophages infected 24 and 48hrs following sunitinib maleate (Sm, 200ng/ml) or vehicle control (VC) treatment.



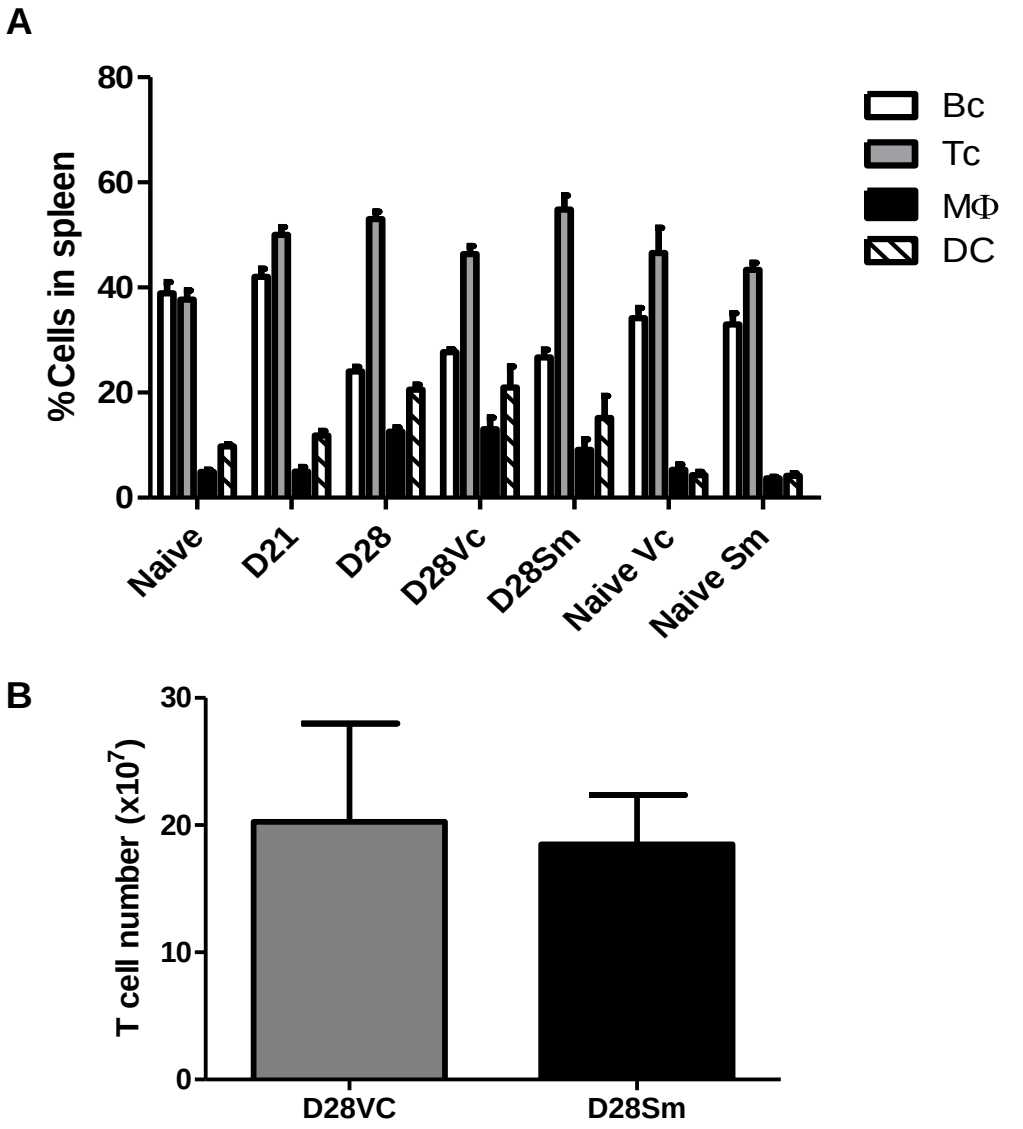

**Supplementary Figure 3**. **No changes in vasculature were detected following Sunitinib maleate treatment in absence of infection**.

The effects of 7 days of sunitinib maleate treatment in naïve mice was determined by CD31 and Meca32 (green) staining. Sections were counterstained with Dapi (blue). Scale bar = 100µm



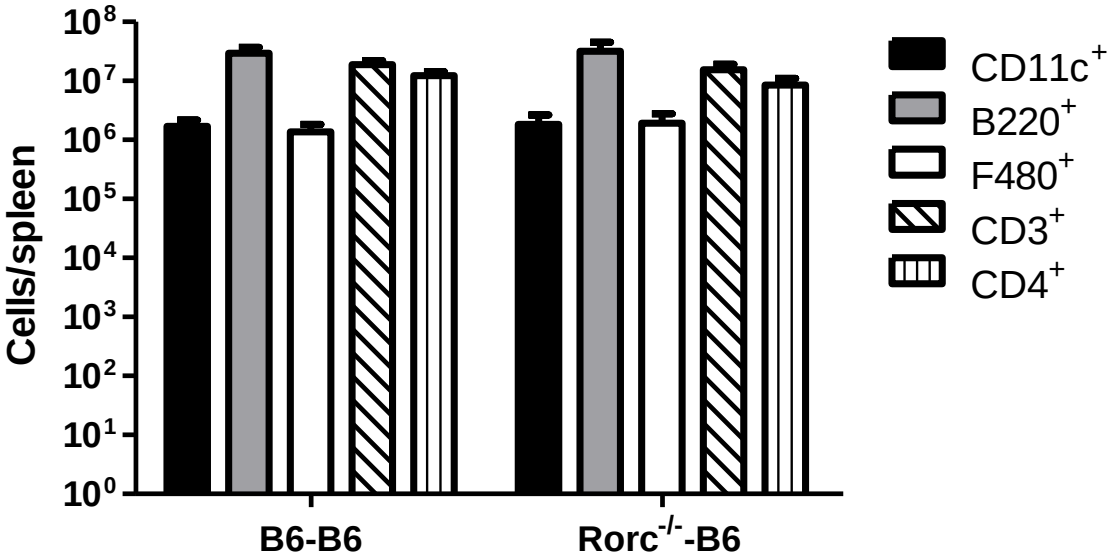

**Supplementary Figure 4**. **B cell frequency is unaffected by sunitinib maleate treatment during *L. donovani* infection but marginal zone B cell expression is restored**.

(**a**) Flow cytometric analysis of $B220^{+}$ cells in naïve spleens, infected spleens and spleens from sunitinib maleate (Sm) or vehicle control (VC) treated animals in absence (naïve) and presence of infection (D28). (**b**) Immunfluorescent staining before and after sunitinib maleate treatment during L.donovani infection showing positioning of marginal zone B cells using antibodies to IgM (red) and CD169 (green) to highlight marginal zone.



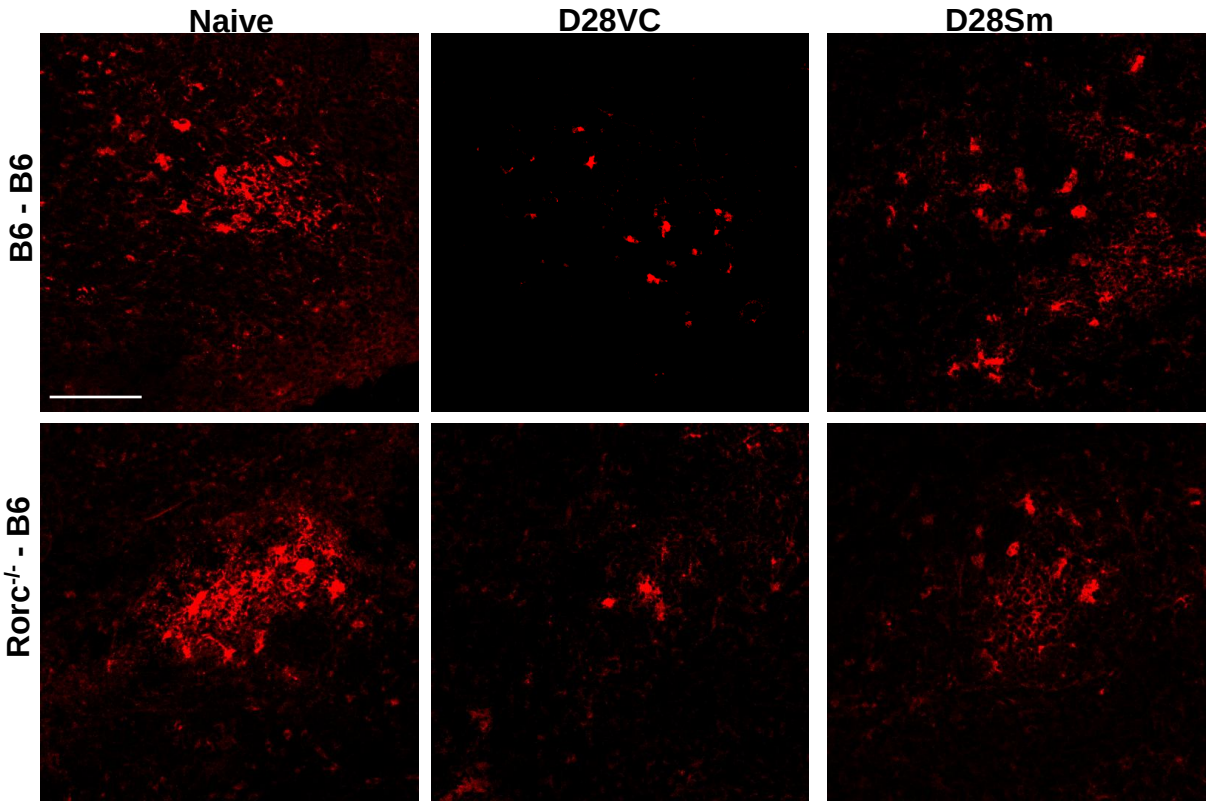

**Supplementary Figure 5**. **Changes in spleen cell frequency and T cell numbers following sunitinib maleate treatment before and during *L. donovani* infection**

(**a**) Flow cytometric analysis of B cells (Bc), T cells (Tc), Macrophages (MΦ) and dendritic cells (DC) in naïve spleens, infected spleens and spleens from sunitinib maleate (Sm) or vehicle control (VC) treated animals in absence (naïve) and presence of infection (D28). (**b**) Absolute cell numbers of splenic T cells 28 days post infection (D28) from sunitinib maleate (Sm) or vehicle control (VC) treated animals. Data is from three independent experiment with 3-5 mice per group, values are expressed as mean absolute cell numbers ± SEM.



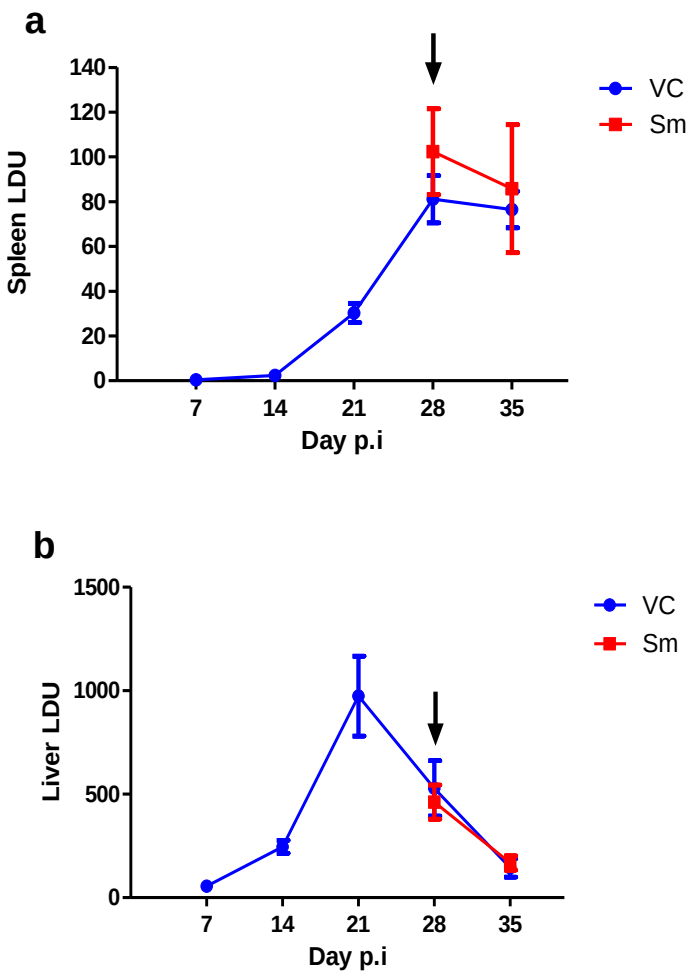

**Supplementary Figure 6**. **Total spleen cell numbers in bone marrow chimeras**.

DCs (CD11c+), B cells (B220), T cells (CD3) and T helper cells (CD4) in spleens of B6→B6 and *Rorc*$^{-/-}$ →B6 chimeras. Data is from one experiment with three mice per group, values are expressed as mean absolute cell numbers ± SEM.




**Supplementary Figure 7**. **Restoration of splenic FDC network following RTKi treatment is not dependent on LTi's**.

Immunofluorescent staining of naive and *L donovani*-infected *Rorc*-/- -B6 and B6-B6 chimera frozen spleen sections (10 microns) after treatment with Sm or VC highlighting follicular dendritic cells (FDCM1, red) expression in B cell follicles. Scale bar = 100μm.




**Supplementary Figure 8**. **Time course of *L. donovani* infection in the presence or absence of Sm**

(**a**) Splenic and (**b**) liver parasite burdens of mice infected with L. donovani and then at day 28 (arrow) treated with either vehicle control (blue) or Sm (red). Data represent the mean SEM from three independent experiments where n= 6-10 mice per time point.

**Legends to Supplemental movies**

**Movie 1: Blood vessel network in an uninfected spleen.** A 100µm spleen section stained with anti-smooth muscle actin in wholemount is shown here in 3D. The Z stack (156µm, including the blank sections at both ends) was acquired in 4 m steps. The 3D rendering done in VolocityTM software (Improvision) shows the vasculature in a
naïve spleen. The movie was exported at 10 frames per second (fps).

**Movie 2: Blood vessel network in an infected spleen.** Whole mount staining was done with anti-smooth muscle actin on a 1000µm spleen section from an infected mouse. The 3D rendering shows extensive branching of blood vessels at day 28 post infection. The 132µm Z stack was acquired in 4 m steps. The movie was exported at 10 fps.

**Movie S3: αSMA and CD31 association in spleen at 14 p.i with *L. donovani*.**

40 µm frozen spleen sections at d14 p.i. were whole mount stained with anti-αSMA (green) and CD31 (red). Z stacks was acquired in 1 µm steps and 3D rendering was performed in Volocity™ software (Improvision). The movie was exported at 10 frames per second (fps). The central arteriole (which runs obliquely from the centre of the frame to the bottom left corner) displays intimate association of $CD31^+$ and $\alpha SMA^+$ cells, which is absent from other $CD31^+$ vessels that appear within the white pulp (top left and bottom right).

**Movie S4: αSMA and CD31 association in spleen at d28 p.i with *L. donovani*.**

Whole mount staining was performed with anti-smooth muscle actin (green) and CD31 (red) as in Movie S3 and 40 µm Z stacks were acquired in 1µm steps. The movie was exported at 10 fps.. In addition to the central aretriole (bottom centre of frame), other $CD31^+$ vessels within the white pulp also now clearly make intimate association with $SMA^+$ cells.