

Splenectomy modulates early immuno-inflammatory responses to trauma-hemorrhage and protects mice against secondary sepsis

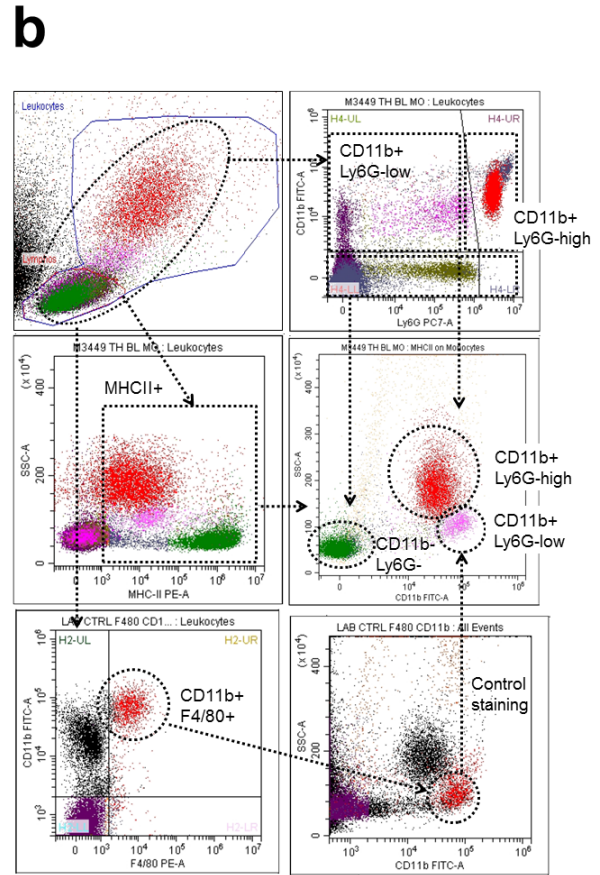
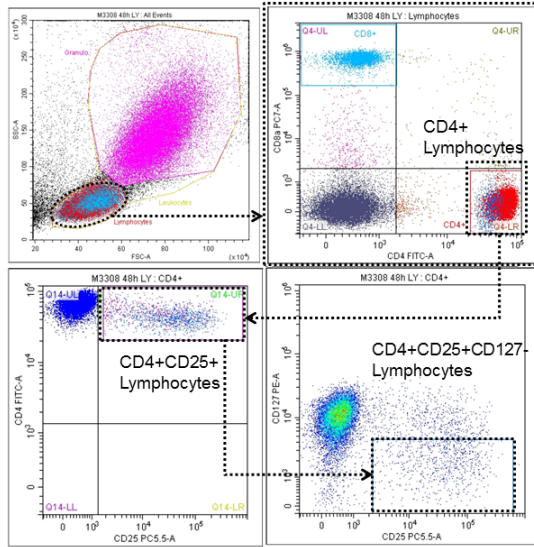
S. Drechsler¹, P. Rademann^{1,2}, J. Zipperle¹, M. Jafarmadar¹, A. Klotz¹, S. Bahrami¹, M.F. Osuchowski¹

¹Ludwig Boltzmann Institute for Experimental and Clinical Traumatology in the AUVA Research Center , Vienna, Austria

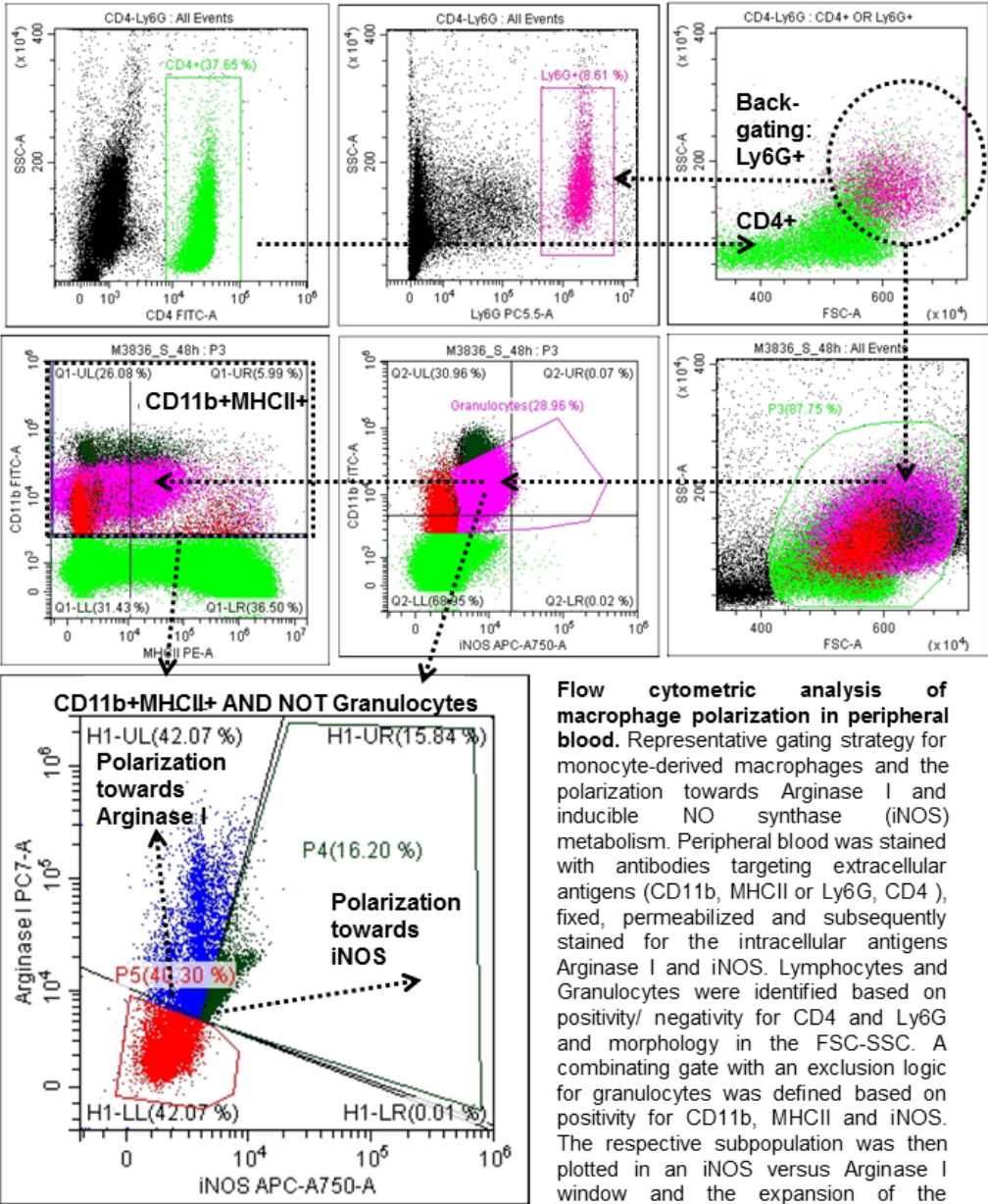
²Current Address: Center for Experimental Medicine, Medical Faculty, University of Cologne, Cologne, Germany

Supplementary Figure 1

a **Gating strategy for flow cytometric analysis of peripheral leukocytes.** Representative gating strategy for leukocyte subsets with an emphasis on (a) Lymphocytes and (b) Monocytes. Diluted peripheral whole blood was subjected to RBC lysis and divided into a Lymphocyte and Monocyte panel. Lymphocytes (a): A CD4+CD8a- population was gated from all captured events and further assessed for the positivity for CD25. Using fluorescence-minus-one (FMO) stainings, the respective population was then plotted against CD127 to identify a CD4+CD25+CD127- subset. Monocytes (b) All captured events were analyzed for the presence of CD11b and Ly6G and were divided into CD11b+Ly6Ghigh, CD11b+Ly6Glow and CD11b-Ly6G-. The defined populations were then regated in dot blots with fluorescence channels for MHCII and CD11b versus side scatter (SSC). In addition, simultaneous stainings with CD11b and F4/80 were carried out to confirm gating based on CD11b signal versus SSC. Fluorescence from a specific antigen is given as mean fluorescence intensity (MFI) from the respective conjugate. Absolute counts of identified events were calculated per volume and given as events/ μ L.



Supplementary Figure 2



Flow cytometric analysis of macrophage polarization in peripheral blood. Representative gating strategy for monocyte-derived macrophages and the polarization towards Arginase I and inducible NO synthase (iNOS) metabolism. Peripheral blood was stained with antibodies targeting extracellular antigens (CD11b, MHCII or Ly6G, CD4), fixed, permeabilized and subsequently stained for the intracellular antigens Arginase I and iNOS. Lymphocytes and Granulocytes were identified based on positivity/ negativity for CD4 and Ly6G and morphology in the FSC-SSC. A combining gate with an exclusion logic for granulocytes was defined based on positivity for CD11b, MHCII and iNOS. The respective subpopulation was then plotted in an iNOS versus Arginase I window and the expansion of the population towards increased Arginase I or iNOS expression was defined as polarized activation.