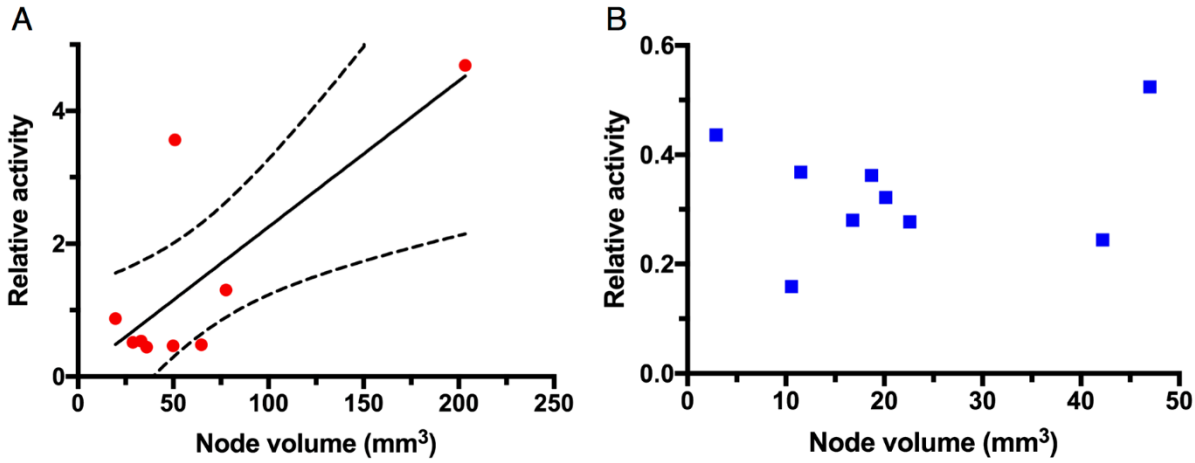
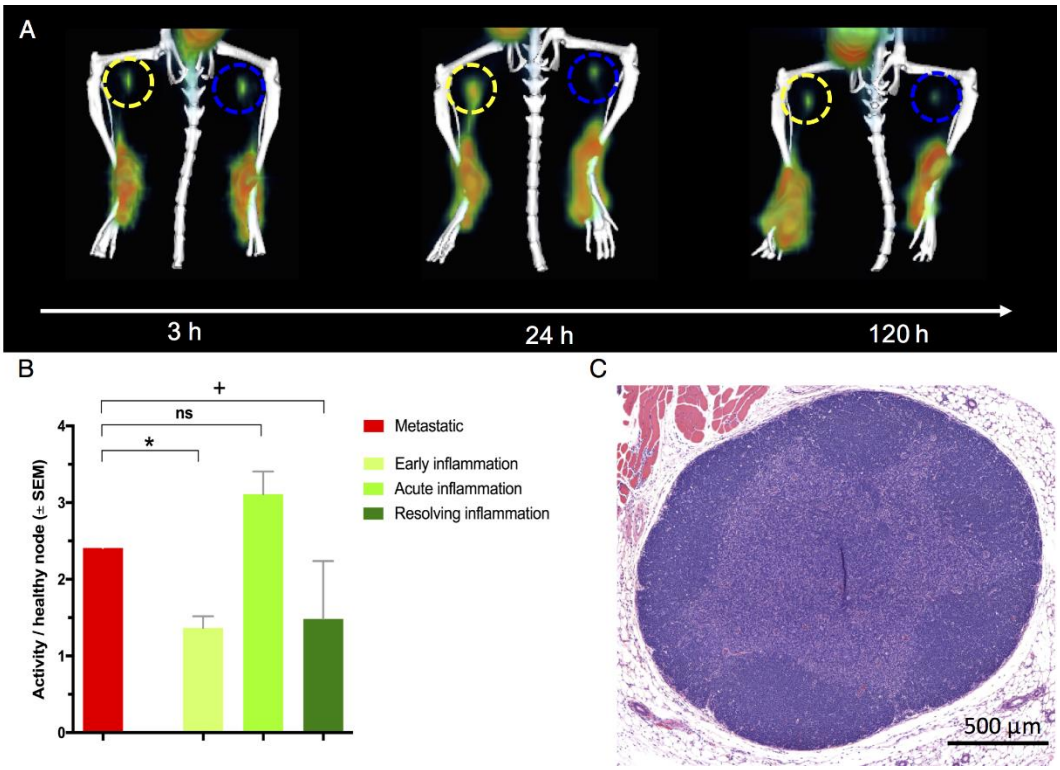
Supplemental Figure 1



A. Retained relative activity values normalized per gram tissue significantly correlate to the lymph node volume at 20 minutes post individual peak uptake in metastatic lymph nodes (linear regression line ± 95% confidence intervals in dashed lines; $p < 0.05$; linear regression coefficient $r^2 = 0.61$; $n = 9$), B. whereas there is no such correlation found to node volume in healthy control nodes ($p > 0.1$; $n = 9$).

Supplemental Figure 2



A. Coronal fused PET/CT maximum intensity projection images after ^{18}F-FDG-lymphography in early (3h), acute (24h) and resolving (120h) inflammation in a mouse. Marked activity retention is especially seen in acute inflammation (yellow dashed circle), when compared to the healthy intraindividual control node (blue dashed circle). Static images displayed shown are reconstructed from PET dynamics 20-30min after injection. Inflammation on the right hind paw was induced by subcutaneous injection of ConA/PBS mixture. B. Comparing activity ratios of disease bearing/ healthy contralateral nodes between metastatic and inflammatory lymphadenopathy mice 20 minutes post peak uptake, no significant differences between activity ratios can been seen when looking at acute inflammation ($p > 0.05$). Thus, retention of ^{18}F-FDG is just as high in acute inflammatory lymph nodes and image based differentiation to metastatic nodes is not possible on basis of the proposed approach. However, in early inflammation, activity ratios are significantly lower when compared to the metastatic model ($p < 0.05$), whereas in resolving inflammation only a statistical trend towards lower ratios is seen ($p < 0.07$). C. H&E staining of an inflammatory lymph node is displayed.