Imaging lymphoid cell death in vivo during polymicrobial sepsis

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Supplement materials

Supplement Fig. 1: Heart and blood were imaged ex vivo for Annexin V fluorescence. After in vivo imaging acquisition, hearts and blood were harvested and imaged on IVIS Spectrum. A. Representative Annexin V fluorescence in the intact heart and blood ex vivo. Background fluorescence was seen diffusely in the sham, mild and severe sepsis hearts (top panel). Blood was collected by cardiac puncture and placed in Eppendorf tubes for imaging. An ROI (red circle, bottom panel) was placed over the center of each tube containing blood. Note the lack of detectable Annexin V fluorescence in the blood in sham, mild and severe animals. B-C. Annexin V fluorescence signal ex vivo is quantified as ratio over sham. Annexin V fluorescence in both the heart and blood was similar among the sham group (n=4), mild-CLP group (n=5), and the severe-CLP group (n=5). FL=fluorescence; ns= no significant difference, P>0.05, One way ANOVA. D. Euthanized septic mouse chest was opened immediately after in vivo image acquisition. Annexin V fluorescent and white light images were collected, respectively. Annexin V fluorescence was fused with white light images for anatomical context, which heart, lung and thymus are discernible in addition to the muscle and fat layer. Robust localized fluorescent signal in the thymus and nowhere in the chest cavity was shown.