SUPPLEMENTAL DATA

Factor XII plays a pathogenic role in organ failure and death in baboons challenged with *Staphylococcus aureus*

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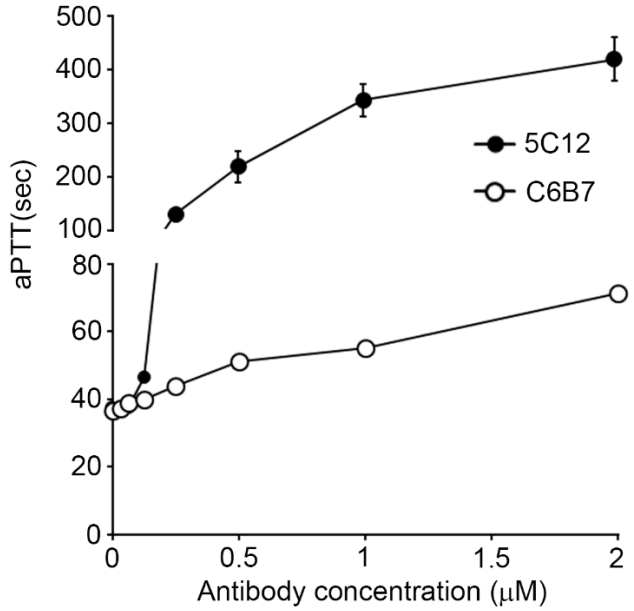
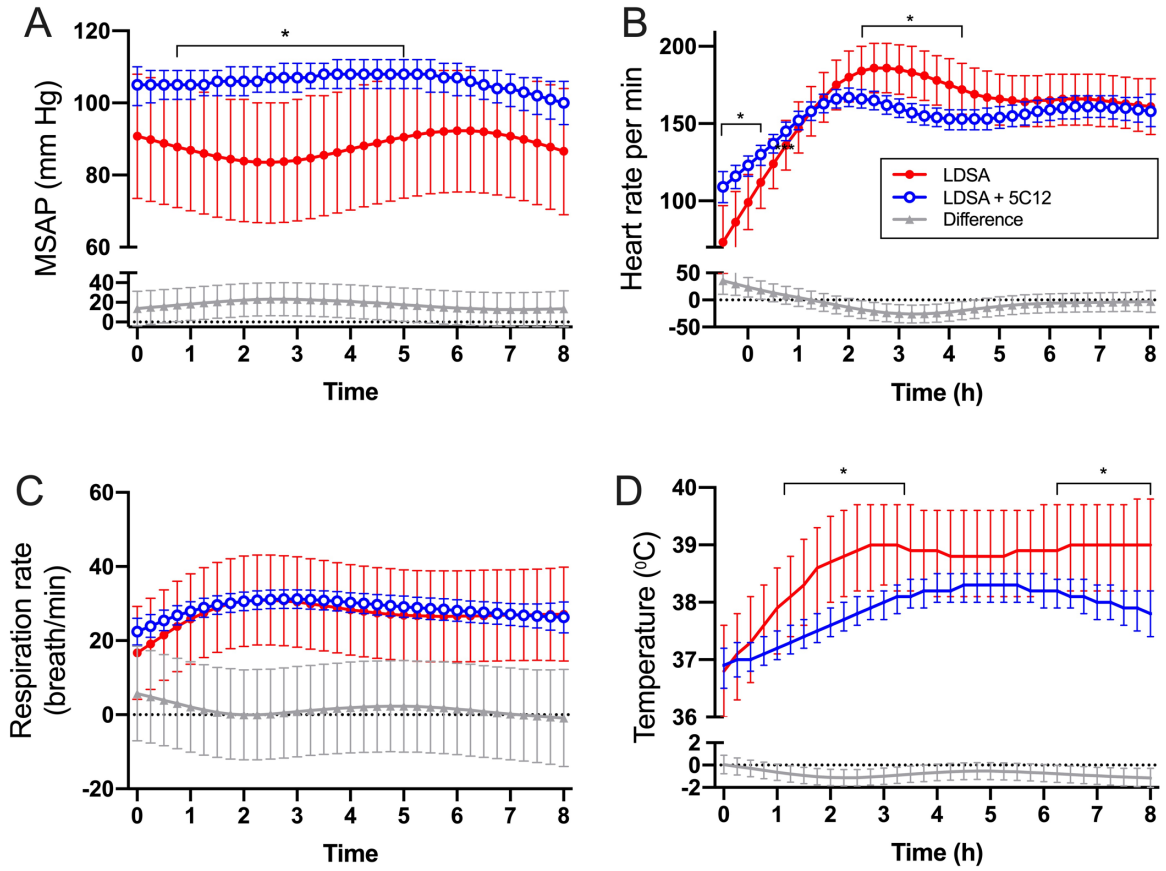
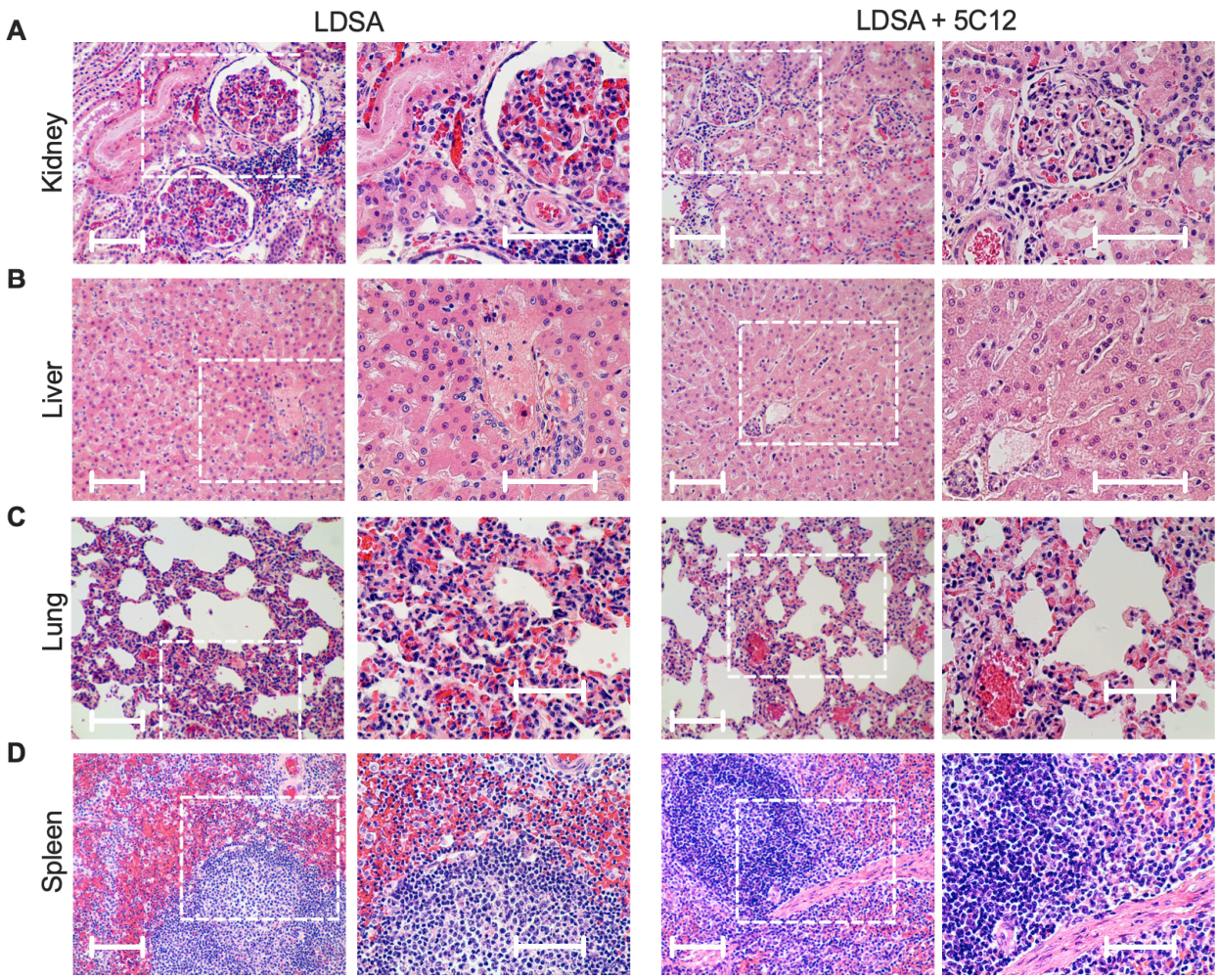
Supplemental Figures



Supplemental Figure 1. Effects of anti-FXII monoclonal antibodies on aPTT.
The anti-FXII antibody C6B7 was commercially sourced from GeneTex and the antibody 5C12 was prepared as described under methods. Human platelet-poor plasma (PPP) was prepared and clotting time was measured as described in the methods. The anti-FXII antibodies 5C12 or C6B7 (0-2 μM) were incubated with PPP for 10 min. Plasma (33% final) was incubated for 3 min with aPTT reagent and subsequently with $CaCl_2$ (8.3 mM final). the time to clot formation was measured with a KC4 Coagulation Analyzer (Trinity Biotech, Ireland). The data show that 5C12 saturates the inhibition of contact activation at lower concentrations than C6B7, which suggests that C6B7 is a relatively poor anticoagulant in this aPTT assay.



Supplemental Figure 2. Effects of 5C12 anti-FXII antibody treatment on vital signs dynamics following a lethal dose of heat inactivated *S. aureus*.
Mean systemic arterial pressure [MSAP] (A), heart rate (B), respiratory rate (C), and body temperature (D). For all graphs, asterisks indicate a statistically significant ($p < 0.05$) difference between LDSA and LDSA+5C12 for each time point under the bracket, as calculated with the GAM function of the R package, mgcv. The gray trace on each graph depicts the difference between LDSA and LDSA+5C12. The difference is statistically significant when the confidence interval (gray bar) does not cross the zero line.



Supplemental Figure 3. Histopathology of vital organs of baboons at the time of euthanasia following challenge with a lethal dose of heat-inactivated *S. aureus* (LDSA), with or without treatment with the anti-FXII antibody 5C12.

Kidney (A), liver (B), lung (C) and spleen (D) were harvested at the time of euthanasia, processed and embedded in paraffin, and sectioned and stained with hematoxylin and eosin. Images were captured using a Nikon Eclipse E800M microscope equipped with an Omax digital camera. The Omax ToupView software was used for image acquisition. Low and high magnification inserts are provided for each organ and experimental condition. LDSA: control animals; LDSA+5C12: baboons challenged with lethal dose and treated with 5C12. Scale bars: 100 µm.