



**Figure S1. Clinical and histopathological characterization of *Babesia rossi* infections.** (A). Capillary blood smears (Diff-Quick stain, 100×) of a dog with *Babesia rossi* infection. The typical large, paired merozoites are seen within red cells. (B). A urinary catheter collection bag demonstrating severe hemoglobinuria as a result of *Babesia rossi*-induced intravascular

hemolysis. (C). Brain of a dog demonstrating multifocal cerebral cortical hemorrhages typically associated with cerebral babesiosis caused by *Babesia rossi*. (D). H&E stained photomicrograph of a brain tissue section. Note the fibrinoid necrosis of small blood vessel walls and the ring hemorrhages around these vessels (E). The trachea of a *Babesia rossi* infected dog demonstrating severe foam accumulation as a result of pulmonary edema (F). H&E-stained photomicrograph of a lung tissue section. Severe accumulation of an alveolar high protein exudate typical of acute respiratory distress syndrome (400× magnification). (G). Splenomegaly as a result of *Babesia rossi* infection in a dog. (H). H&E-stained photomicrograph of a spleen tissue section. No clear demarcation between splenic white and red pulp. Poorly delineated areas of white pulp are indicated by the presence of central arterioles (encircled).