

**S4 Figure**. Labeling of host cells by intravenous furamidine. **A,B**. Two-photon imaging through the thinned skull. **A**. Blue fluorescence from the nuclei of dural cells and of endothelial cells of pial vessels. **B**. A Z-projection 100 µm deep extending from large horizontal pial vessels into the parenchyma with its vertical vessels (arrow) and sinuous capillaries. Nuclei of vascular endothelial cells are labeled. **C-D**. A blood smear from a reporter mouse expressing DsRed in CD2+T lymphocytes. **C**. DsRed. **D**. Furamidine. **E**. Merged image showing that unidentified leukocytes that are not T lymphocytes are labeled by furamidine.