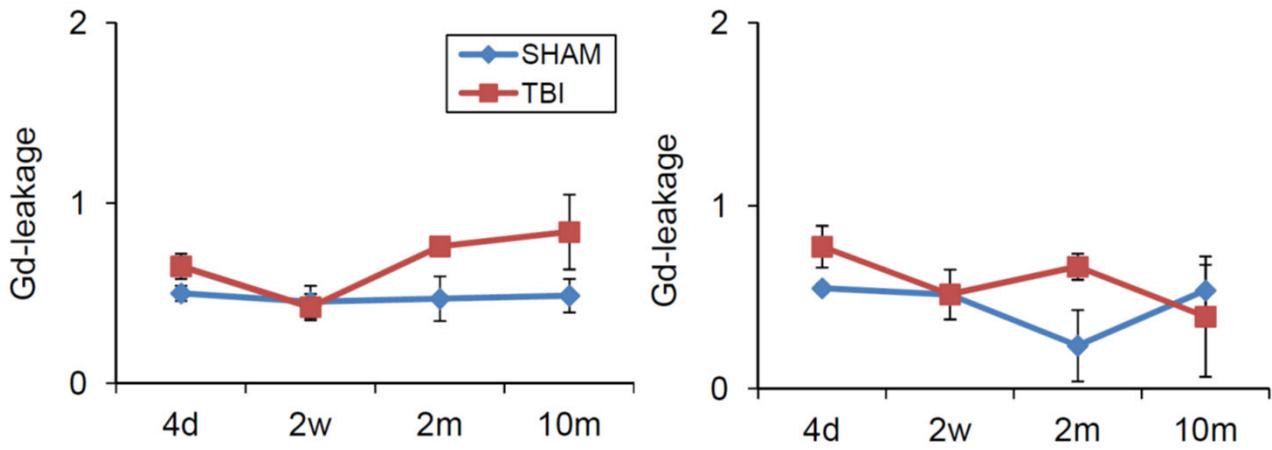


### IPSILATERAL

### CONTRALATERAL

### hippocampus



**Supplementary Figure 1. Quantification of gadobutrol (Gd)-leakage in hippocampus.** Gd-leakage was not detected in the ipsilateral or contralateral hippocampus at any timepoint after TBI or Sham-operation.

**Supplementary Figure 2. Association between vascular density and neuroinflammatory markers. (A)** A summary of correlations between RECA-1, CD68, OX42, and vimentin immunoreactivities (% of total area) in the whole TBI group, and in rats with increased (TBI-E) and normal (TBI-non-E) seizure susceptibility in the perilesional cortex, ipsilateral hippocampus and ipsilateral thalamus. Correlation plots between the perilesional cortical RECA-1 and CD68 immunoreactivities in the **(B)** whole TBI group and **(C)** separately in rats E and non-E groups.

Brain area	TBI	TBI – E	TBI – non-E
Cortex	RECA-1/CD68 $r=0.965$ , $p<0.001$	RECA-1/CD68 $r=0.829$ , $p<0.05$	RECA-1/CD68 $r=0.943$ , $p<0.01$
		RECA-1/OX42 $r=-0.943$ , $p<0.01$	RECA-1/Vimentin $r=0.943$ , $p<0.01$
Hippocampus	RECA-1/Vimentin $r=0.594$ , $p<0.05$		RECA-1/CD68 $r=1.000$ , $p<0.001$
Thalamus	RECA-1/OX42 $r=0.685$ , $p<0.05$	RECA-1/OX42 $r=0.829$ , $p<0.05$	RECA-1/OX42 $r=0.886$ , $p<0.05$

