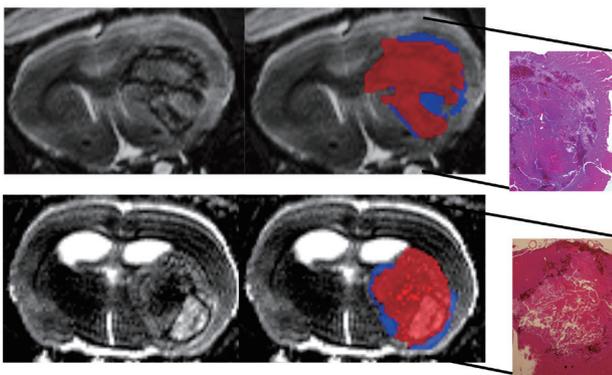


Supplementary Figure 3. Histopathological analysis using a semiquantitative histoscore. Ordinal histoscores were calculated using a semi-quantitative assessment for edema formation (hematoxylin eosin [HE] staining, brain edema reflected by vacuolated tissue around the hemorrhage compatible with vasogenic brain edema: 0=isolated hemorrhage without vacuolated tissue, reflecting brain edema; 1=edema minimal, means partial vacuolated tissue around hemorrhage, no consecutive midline shift; 2=edema minimal to medium with vacuolated tissue involving cortex, no consecutive midline shift; 3=edema medium to strong with consecutive midline shift; 4=strong edema bilateral, midline shift) and blood brain barrier dysfunction (immunoglobulin G [IgG] staining, intraparenchymatous deposits of IgG as indirect marker of blood brain barrier dysfunction: 0=isolated hemorrhage, extravasation absent; 1=extravasation and blood-brain-barrier breakdown minimal; 2=extravasation minimal to medium; 3=extravasation medium to strong; 4=extravasation strong and bilateral). Six slides per brain prepared from needle entry site ± 1 mm were analyzed. The slides were evaluated in blinded random order with a standard light microscopy. (A) No differences in edema formation at 24 hours ($P=0.99$, $n=5$) and 72 hours ($P=0.99$, $n=5$). (B) Concerning the extent of blood-brain barrier disruption the size of the areas showing positive IgG staining did not differ between groups at 24 hours ($P=0.99$, $n=5$) and 72 hours ($P=0.68$, $n=5$). Median scores and scatter dot plot are presented.



Supplementary Figure 4. Explorative magnetic resonance imaging (MRI)-based edema quantification 24 hours after intracerebral hemorrhage (ICH) induction. Representative magnetic resonance image (T2) of two fixed rat heads 24 hours after ICH induction with comparable hematoma volume around 90 μL . (A) Control group without blood pressure lowering and (B) with intensive blood pressure lowering (nifedipine-treated). The calculated edema volume in both MRIs was around 20 μL (blue area). Afterwards histopathological analysis (hematoxylin eosin [HE] staining) from the same brains confirmed imaging results.