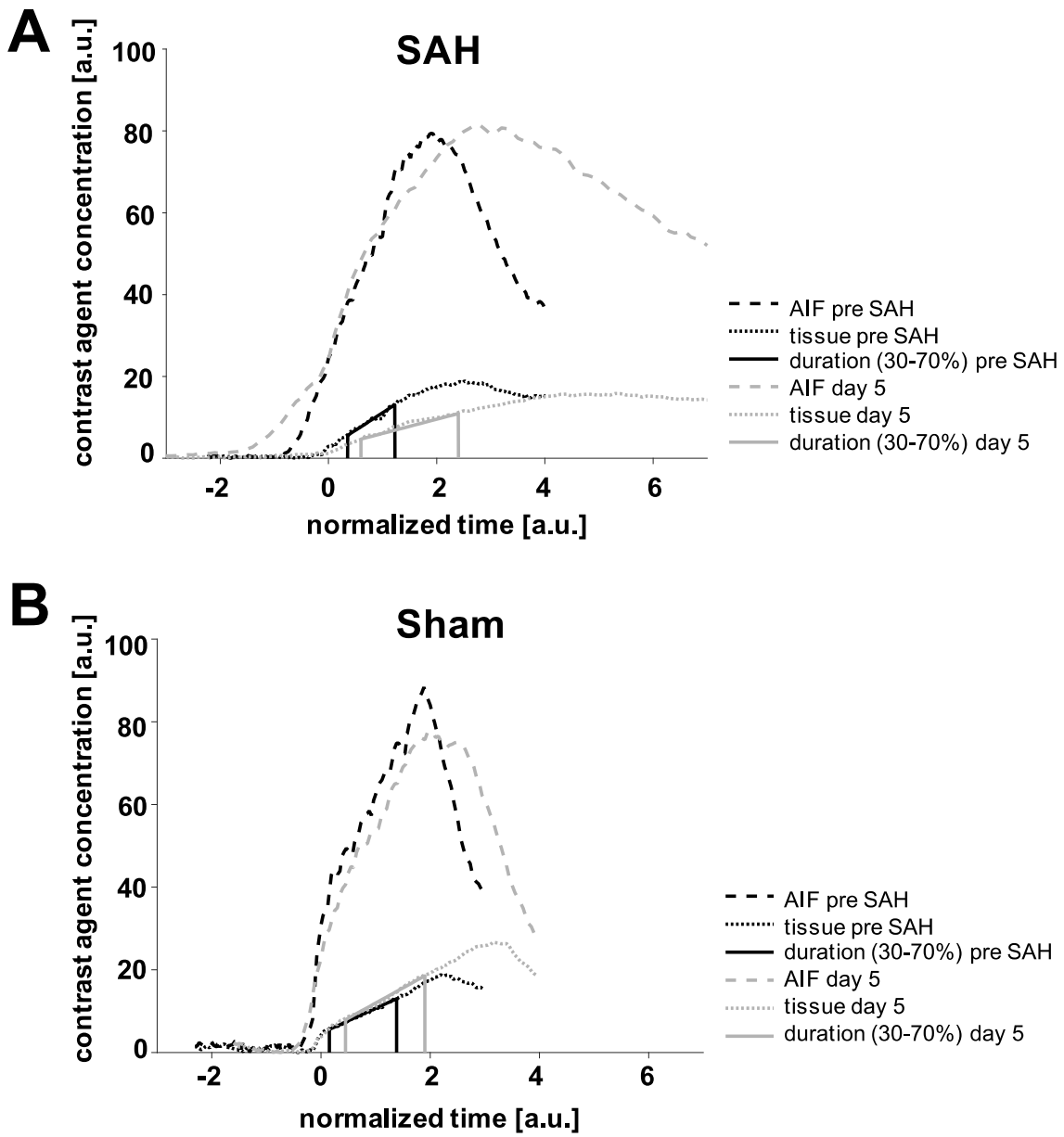
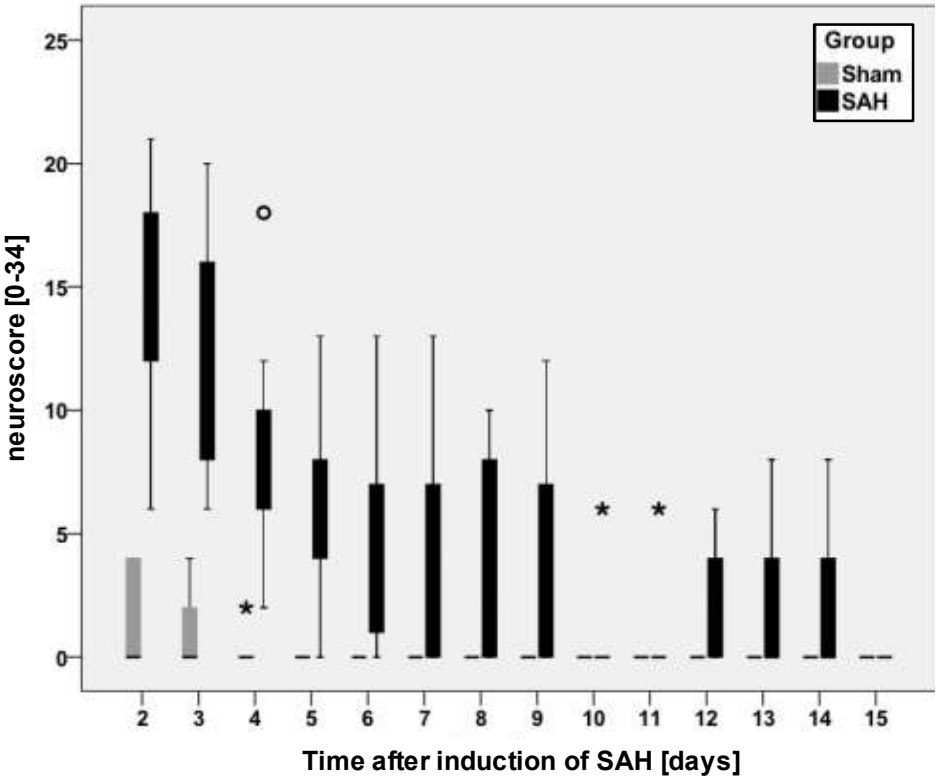
Supplemental Materials

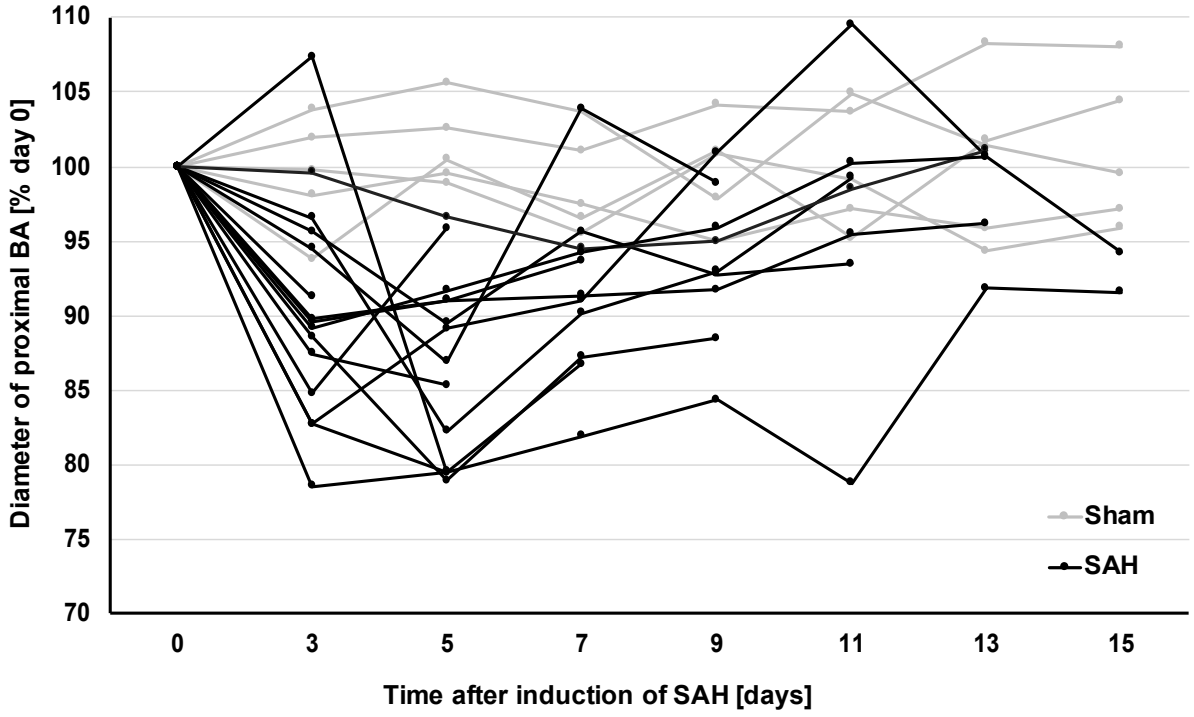
Supplemental Figure 1. Contrast agent concentration curves for sham and SAH mice. Regions of interest (ROI) were drawn in both CCA and into the cerebral tissue supplied by the MCA to determine the arterial input function (AIF). The AIF-curve of mice with SAH on day 5 shows a considerably longer course than on day 0 before induction of SAH (**A**). In contrast, the exemplary AIF curves of sham mice on days 0 and 5 are comparable with each other (**B**). Time points of 30% and 70% of the maximum concentration during the rise of the contrast agent concentration identify a prolonged and less steeply ascending curve for the tissue ROI in SAH mice (**A**), while the slope of the tissue concentration on day 0 and day 5 in sham mice is comparable (**B**).



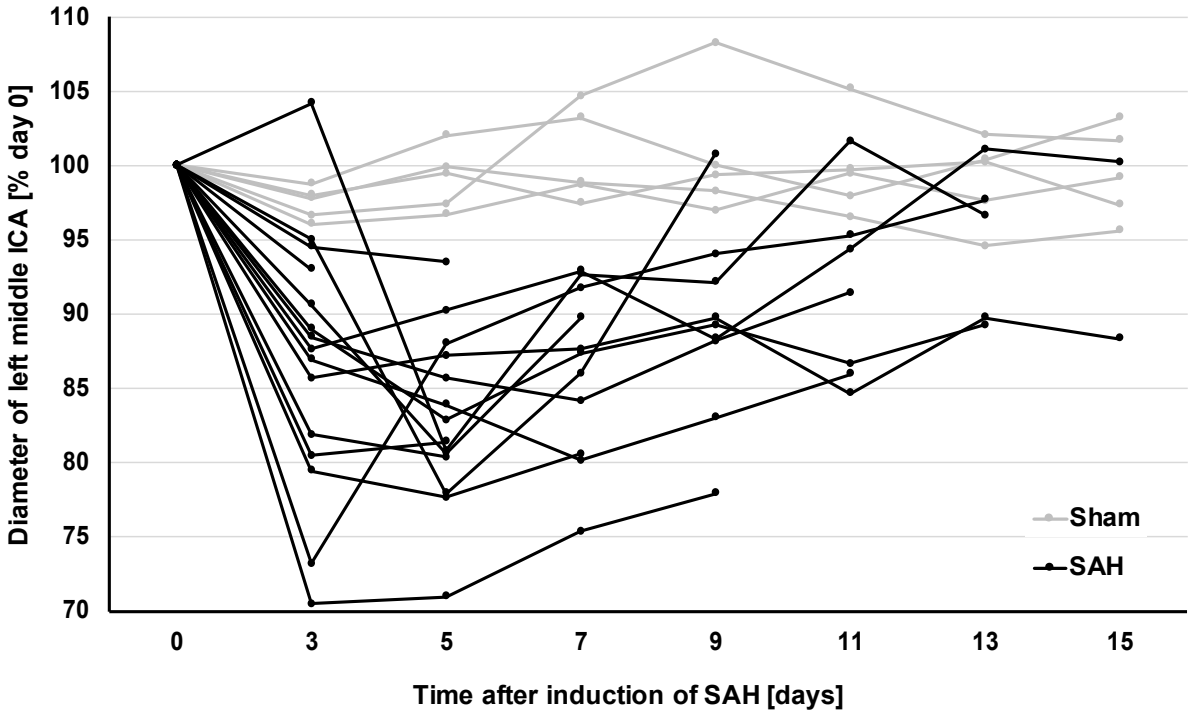
Supplemental Figure 2. Neuroscore over time of animals with SAH and sham mice. The neuroscore is significantly higher in SAH mice than in sham mice and declines over the first week of observation. The slightly elevated neuroscore on days 2 and 3 in sham animals is related to the preceding operation. Due to the death of animals on day 9, the neuroscore on days 10 and 11 is 0, besides one outlier (**asterisk**). One extreme value on day 4 is marked with a **circle**.



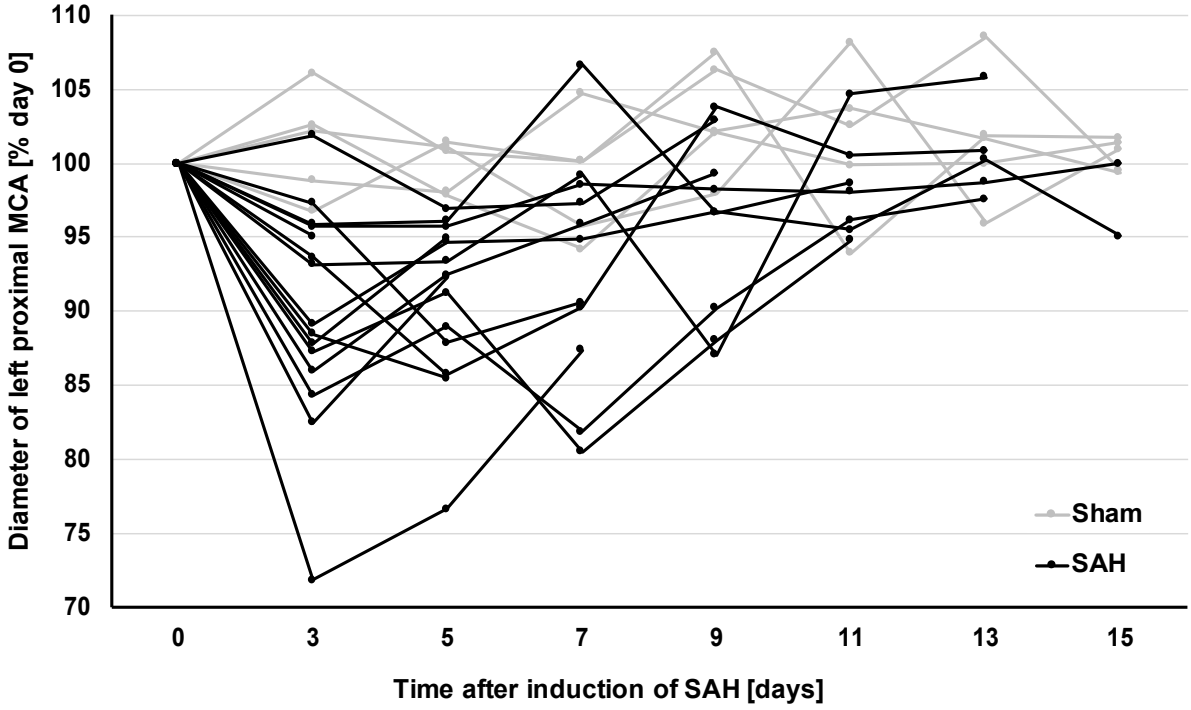
Supplemental Figure 3. Longitudinal development of basilar artery diameter in sham and SAH mice.



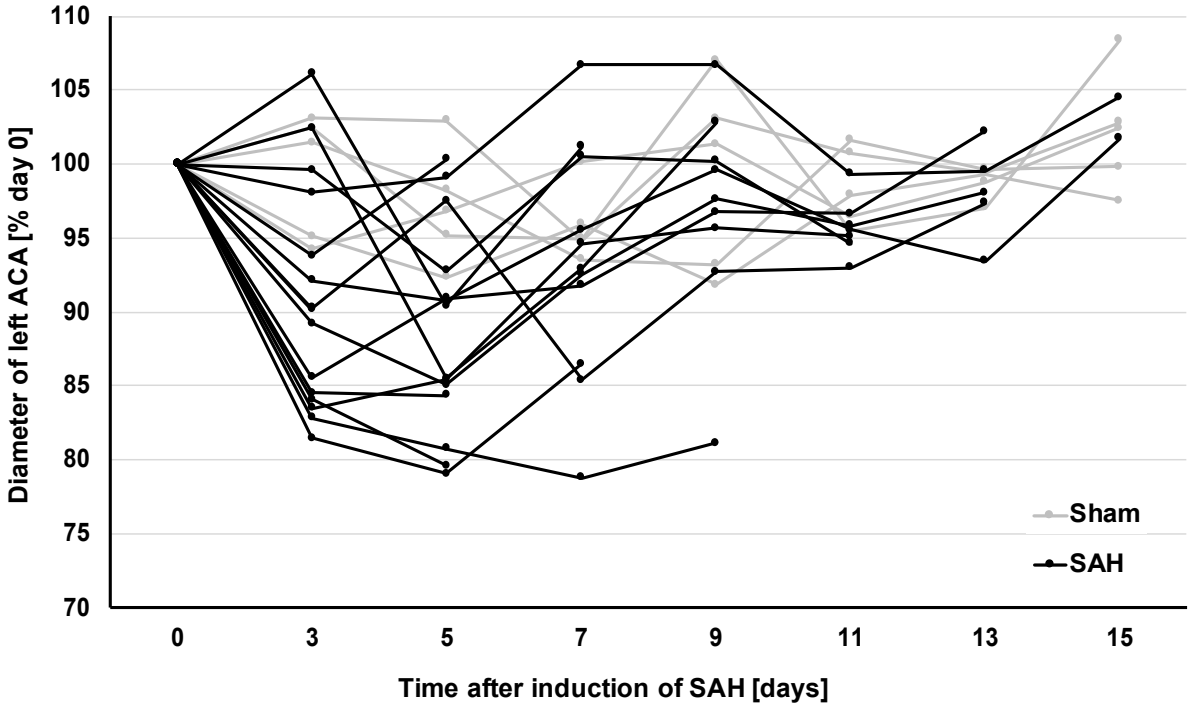
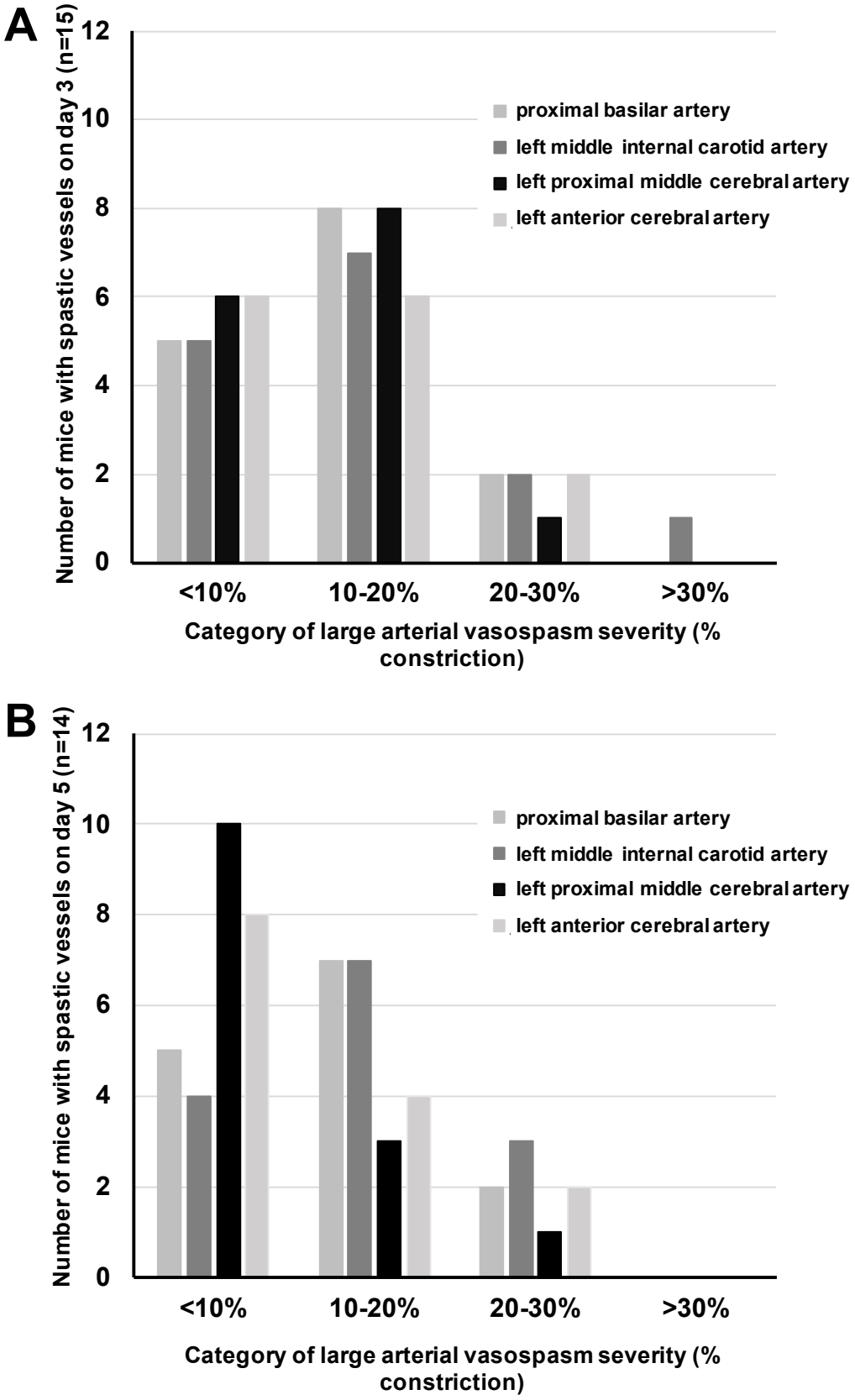
Supplemental Figure 4. Longitudinal development of internal carotid artery diameter in sham and SAH mice.



Supplemental Figure 5. Longitudinal development of middle cerebral artery diameter in sham and SAH mice.



Supplemental Figure 6. Longitudinal development of anterior cerebral artery diameter in sham and SAH mice.



Supplemental Figure 7. Distribution of the degree of large arterial vasospasm (LAV) on day 3 (**A**) and on day 5 (**B**). LAV was grouped into four categories depending on the degree of vessel constriction compared to the initial (pre SAH) status: <10%, 10%-20%, 20%-30% and >30%.