## **Supplementary Figures**

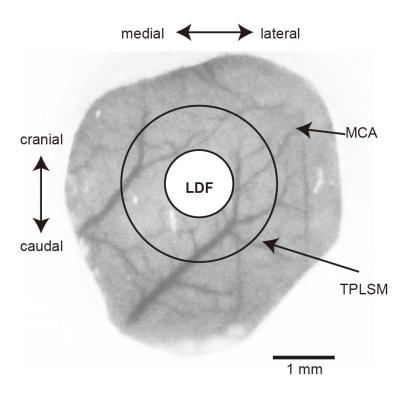


Figure S1

Typical closed cranial window on the right parietal lobe in a mouse. The open circle indicates the area of the TPLSM experiments. The white circle indicates the location of the guide tube for the LDF experiments. MCA, middle cerebral artery; LDF, laser-Doppler flowmetry; TPLSM, two-photon laser scanning microscopy

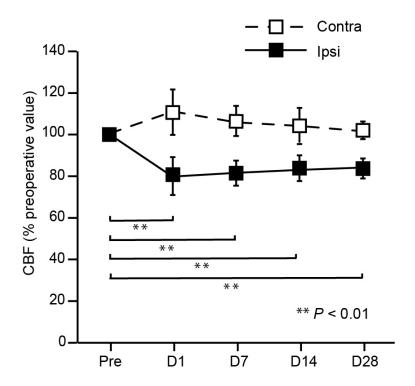


Figure S2

Baseline cerebral blood flow (CBF) during chronic hypoperfusion in the bilateral cerebral hemisphere. The data are presented as percentages relative to the preoperative values. After unilateral common carotid artery occlusion (UCCAO), baseline CBF remains lower than that observed before UCCAO in the cerebral hemisphere ipsilateral to UCCAO.

Ipsilateral hemisphere (black); contralateral hemisphere (white)

The error bars indicate standard deviation.

<sup>\*\*</sup>*P* < 0.01

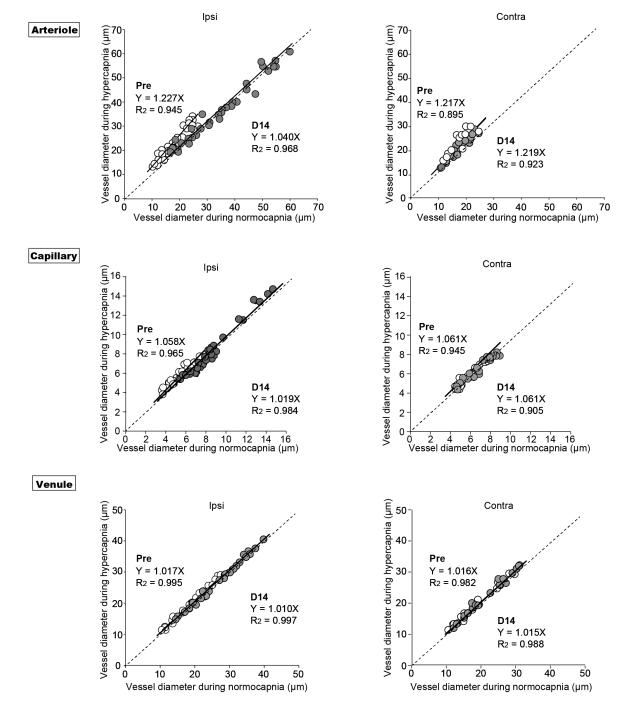


Figure S3

Correlations between the diameter in each microvessel during normocapnia and that during hypercapnia in the bilateral hemisphere before and at 14 days after unilateral common carotid artery occlusion (UCCAO). White and gray circles

indicate before and at 14 days, respectively. Autoregulatory vasodilation was observed in all three components in the hemisphere ipsilateral to UCCAO.