Genetic variant of BDNF (Val66Met) polymorphism attenuates stroke-induced angiogenic responses by enhancing anti-angiogenic mediator CD36 expression

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Supplementary Figures

Figure 1S

Figure 1S. BDNF protein levels in the post-ischemic brain. Total BDNF levels were determined in the C57BL/6 brain at several post-ischemic time points. Note that stroke increases BDNF levels at 3 and 7 days. n=5-6/group *p<0.05 versus contralateral. Contl, contralateral; Ipsl, ipsilateral.
Figure 2S. Temporal profiles of gait changes were assessed by computer assisted Catwalk gait analysis system in BDNF**/+** mice.

Temporal changes of mean intensity (A), stride length (B), BOS (C), stand (D), swing speed (E) and regularity index (F) in BDNF**/+** mice prior to ischemia (pre) and 1, 4, 7 days, 2 weeks and 1 month.
month after ischemia. Mean intensity (A), a measure of pressure exerted on the glass plate; stride length (B), the distance between consecutive steps with the same paw; BOS (C), distance between the mass-midpoints of the prints at max contact; stand (D), a duration in seconds of contact of a paw with the glass plate; swing speed (E), the speed (distance unit/second) of the paw during swing (the paw that does not contact the glass plate); regularity index (F), a percent index for the degree of interlimb coordination during gait, as measured by the number of normal step sequence patterns, multiplied by the number of paws and divided by the number of paw placement. n=6-10/group. *p<0.05 versus BDNF+/+ mice pre-ischemia. Abbreviations: LF, left front paw; LH, left hind paw; RF, right front paw; RH, right hind paw.
Figure 3S. Vessel densities in BDNF$^{+/+}$ and BDNF$^{Met/Met}$ mice. There is no difference in vessel density in the contralateral side of BDNF$^{+/+}$ and BDNF$^{Met/Met}$ mice 7 days after ischemia. Scale Bar=300 μm.
Figure 4S. Vessel densities in BDNF<sup>Met/Met</sup> and Dwt (BDNF<sup>Met/Met</sup> /CD36 WT) mice. These mice have the same genotype with slightly different genetic background (10x versus 8x backcrossed with C57BL/6). (A) Photomicrographs showed the blood vessel in the contralateral side of BDNF<sup>Met/Met</sup> and Dwt (BDNF<sup>Met/Met</sup> /CD36WT) mice 7 days after ischemia. Scale Bar=300 μm. (B) Quantification of vessel density (BDNF<sup>Met/Met</sup> versus BDNF<sup>Met/Met</sup> /CD36WT, 46.1 ± 0.8, 51.4 ± 0.8/0.1mm<sup>2</sup>). Error bars indicate mean ± SEM, n=4-5/group, **p<0.01 compared with BDNF<sup>Met/Met</sup> mice, t-test was used.