IMPAIRED MENINGEAL LYMPHATIC VESSEL DEVELOPMENT WORSENS STROKE OUTCOME

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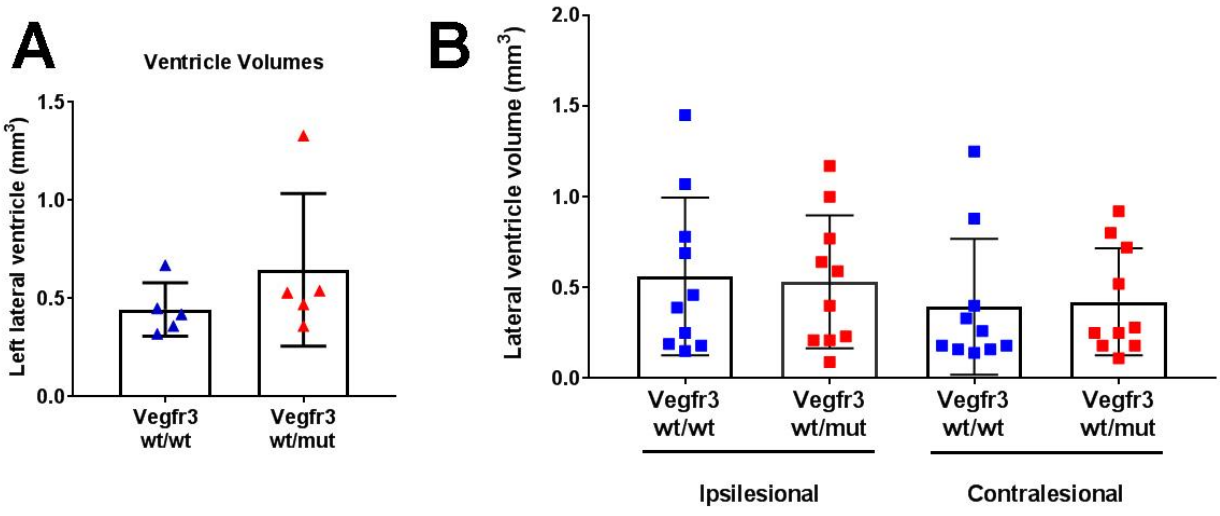
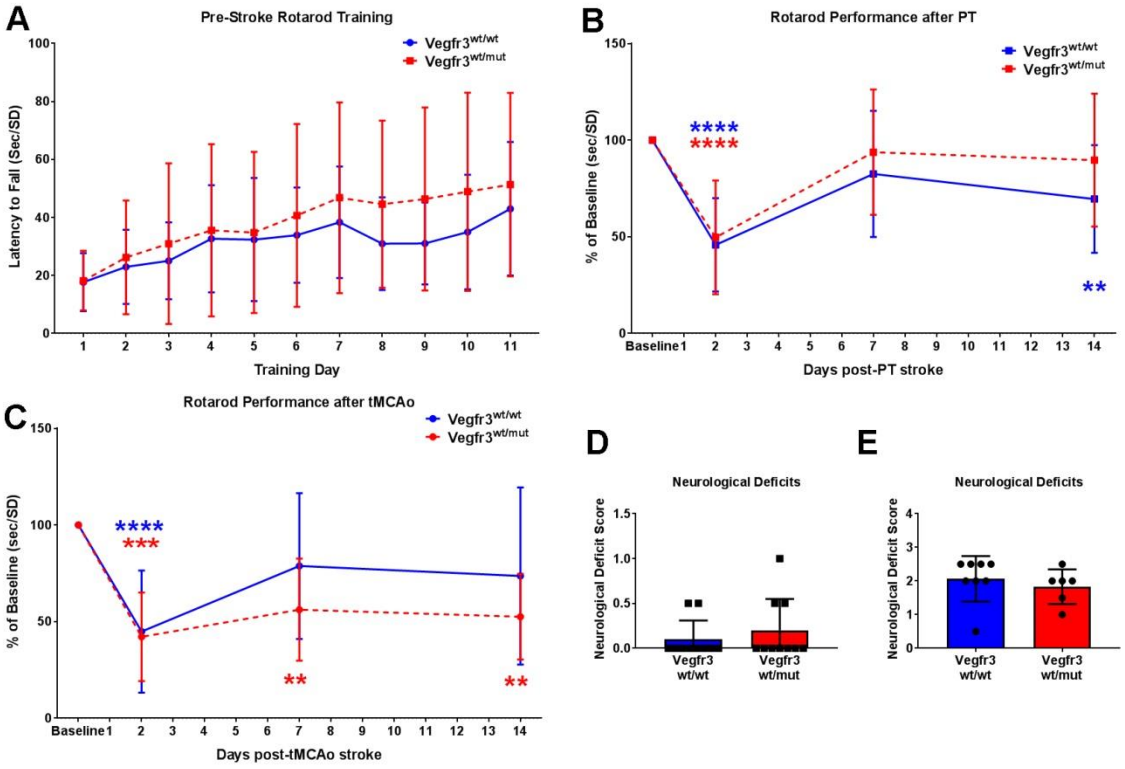
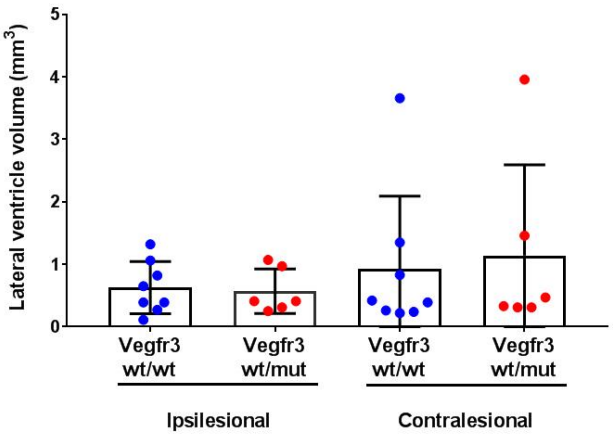
Supplementary Figures



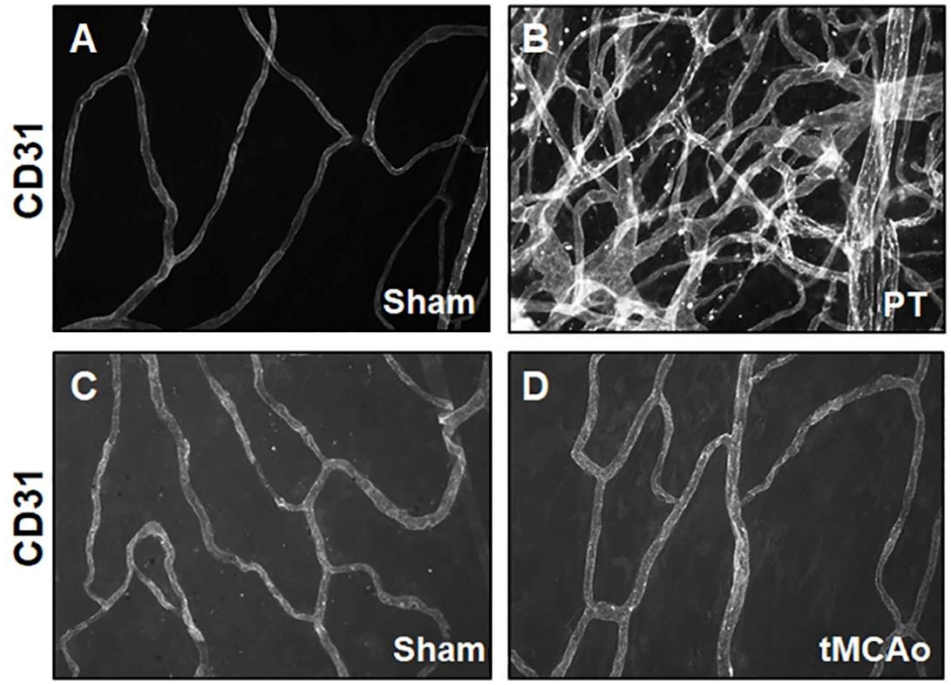
Supplementary Figure 1. PT-induced stroke does not affect lateral ventricle volume. (A) Quantification of left lateral ventricle volumes in *Vegfr3*$^{wt/wt}$ (n=5; blue triangles) and *Vegfr3*$^{wt/mut}$ (n=5; red triangles) mice without injury was analyzed using a Mann-Whitney test (p=0.25). (B) Lateral ventricle volumes for *Vegfr3*$^{wt/wt}$ (n=10; blue squares) and *Vegfr3*$^{wt/mut}$ (n=10; red squares) mice analyzed by two-way ANOVA. Values shown are mean ± SD.



Supplementary Figure 2. No effect of lymphatic hypoplasia on motor recovery after stroke. (A) Strain differences in acquisition of the Rotarod task during training were analyzed using a 2-way repeated measures ANOVA ($F_{(10,360)}$=1.23; p=0.27). Multiple comparisons between *Vegfr3*$^{wt/wt}$ (blue, solid line) and *Vegfr3*$^{wt/mut}$ (red, dashed lines) mice were performed for each day of training. (B) A repeated measures 2-way ANOVA was performed ($F_{(3,54)}$=0.91;p=0.44) in which multiple comparisons between strain were performed at day 2 (p=0.74), day 7 (p=0.34), and day 14 (p=0.09) and multiple comparisons were performed between baseline and day 2, 7, and 14 for each strain following PT (n=10/group). (C) Motor recovery after tMCAo (days post-stroke, x axis) was analyzed with a repeated measures 2-way ANOVA was performed ($F_{(3,48)}$=1.21;p=0.32) in which multiple comparisons between strain were performed at day 2 (p=0.78), day 7 (p=0.27), and day 14 (p=0.16) and multiple comparisons were performed between baseline and day 2, 7, and 14 for *Vegfr3*$^{wt/wt}$ (n=8) and *Vegfr3*$^{wt/mut}$ (n=6) strains. Neurological deficit s scores for (D) PT cohorts and (E) tMCAo cohorts show no effect of genotype (p=0.72 and p=0.30, respectively). **p<0.01, ***p<0.001, ****p<0.0001 vs. baseline pre-stroke values.



Supplementary Figure 3. Ventricle volumes after tMCAo. Lateral ventricle volumes for *Vegfr3*$^{wt/wt}$ (blue circles; n=8) and *Vegfr3*$^{wt/mut}$ (red circles; n=6) mice of mice analyzed by two-way ANOVA show no effect by genotype. Values are mean ± SD.



Supplemental Figure 4. PT, but not tMCAo, induces meningeal angiogenesis. Representative images of meninges stained with an anti-CD31 antibody. Meninges were collected and stained from animals two-weeks after PT or tMCAo. (A,B) PT mice (n = 6) had more meningeal blood vessels than sham mice (n = 5). (C,D) The density of meningeal blood vessels was not different between sham (n = 5) and tMCAo (n = 4) mice.