

**Supplementary Table 1.** Houkin's MRA scoring for patients with moyamoya disease

| Main Artery  | Findings  | Score       |
|--------------|---|-------------|
| ICA          | Normal  | 0           |
|              | Stenosis of C <sub>1</sub>                            | 1           |
|              | Discontinuity of C <sub>1</sub> signal                | 2           |
|              | Invisible   | 3           |
| MCA          | Normal  | 0           |
|              | Stenosis of M <sub>1</sub>                            | 1           |
|              | Discontinuity of M <sub>1</sub> signal                | 2           |
|              | Invisible   | 3           |
| ACA          | Normal A <sub>2</sub> and its distal signal           | 0           |
|              | A <sub>2</sub> and its distal signal decrease or loss | 1           |
|              | Invisible   | 2           |
| PCA          | Normal P <sub>2</sub> and distal signal               | 0           |
|              | P <sub>2</sub> and its distal signal decrease or loss | 1           |
|              | Invisible   | 2           |
| <b>Total</b> |   | <b>0-10</b> |

MRA: magnetic resonance angiography, C<sub>1</sub>: knee segment of the ICA, M<sub>1</sub>: horizontal segment of the MCA, A<sub>2</sub>: infracallosal segment of the ACA, P<sub>2</sub>: ambient segment of the PCA.