

Table A: The modified Bederson's neurological deficit scale (mNDS)

score	signs
0	Normal
1	Mild circling behavior with or without inconsistent rotation when picked up by the tail, <50% attempts to rotate to the contralateral side
2	Mild consistent circling, >50% attempts to rotate to the contralateral side
3	Consistent strong and immediate circling, the mouse holds a rotation position for more than 1-2 sec, with its nose almost reaching its tail
4	Severe rotation progressing into barreling, loss of walking or righting reflex
5	Comatose or moribund

Table B: The renewed combined behavioral scale (rCBS)

Behavioral changes	Score
<b>1. Motor tests (hemiplegia)</b>	
<b>1.1. Raising rat by the tail</b>	
Flexion of forelimb	1
Flexion of hindlimb	1
Head moved >10° to vertical axis within 30 s	1
<b>1.2. Placing rat on the floor</b>	
Normal walk	0
Inability to walk straight	1
Circling toward the paretic side	2
Fall down to the paretic side	3
<b>2. Sensory tests</b>	
Pain	1
Proprioceptive test	1
<b>3. Beam balance tests (normal=0; maximum=6)</b>	
Balances with steady posture	0
Grasps side of beam	1
Hugs the beam and one limb falls down from the beam	2
Hugs the beam and two limbs fall down from the beam, or spins on beam (>30s)	3
Attempts to balance on the beam but falls off (>20s)	4
Attempts to balance on the beam but falls off (>10s)	5
Falls off: No attempt to balance or hang on to the beam (<10s)	6
<b>4. Reflexes absent and abnormal movements</b>	
Pinna reflex (head shake when touching the auditory meatus)	1
Righting reflex	1
Startle reflex (motor response to a brief noise from snapping a clipboard paper)	1
Seizures, myoclonus, or myodystony	1
<b>Maximum points</b>	<b>18</b>

Figure A: Representative samples for the macroscopic grading of secondary hemorrhage.

Basing on the brain sections on day 3 post-ischemia, secondary hemorrhage was graded under the help of Image J by two independent inspectors. The grades are: 0, no hemorrhage; 1, single petechial hemorrhage; 2, multiple petechial hemorrhages; 3, single space-occupying parenchymal hemorrhage encompassing <30% of infarct area; 4, single space-occupying parenchymal hemorrhage  $\geq$ 30% of infarct area, or multiple space-occupying parenchymal hemorrhages. The space-occupying ventricular hemorrhage was scored 4 while it was 2 for the non-occupying ventricular hemorrhage.

