

FIG. 1A

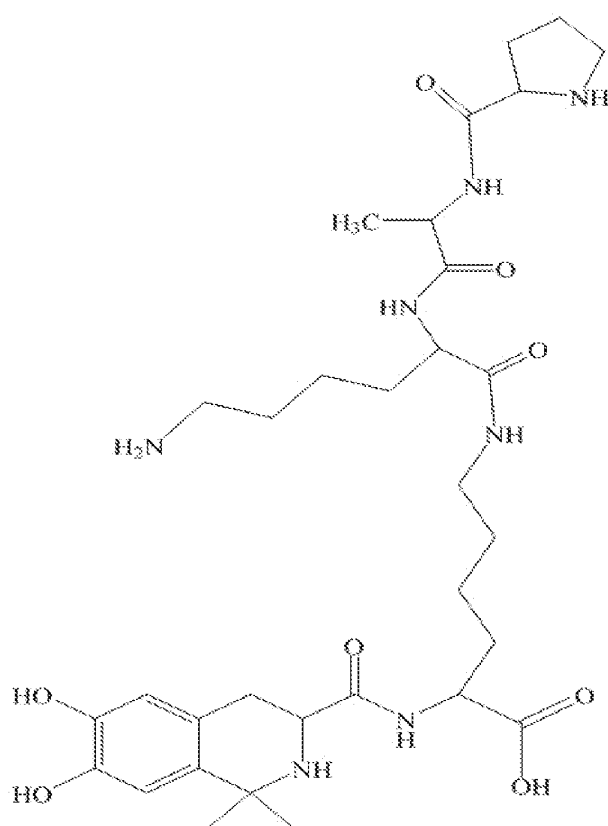


FIG. 1B

Motor tests

Raising rat by tail	3	
Flexion of forelimb	1	
Flexion of hindlimb	1	
Head moved >10° to vertical axis within 30sec	1	
Placing rat on floor (normal =0; maximum =3)	3	
Normal walk	0	
Inability to walk straight	1	
Circling toward paretic side	2	
Falls down to paretic side	3	
Sensory tests	2	
Placing test (visual and tactile test)	1	
Proprioceptive test (deep sensation, pushing paw against table edge to stimulate limb muscles)	1	
Beam balance tests (normal =0; maximum =6)	6	
Balances with steady posture	0	
Grasps side of beam	1	
Hugs beam and one limb falls down from beam	2	
Hugs beam and two limbs fall down from beam, or spins on beam (>60sec)	3	
Attempts to balance on beam but falls off (>40sec)	4	
Attempts to balance on beam but falls off (>20sec)	5	
Falls off; no attempt to balance or hang on to beam (<20sec)	6	
Reflex absence and abnormal movements	4	
Pinna reflex (head shake when auditory meatus is touched)	1	
Corneal reflex (eye blink when cornea is lightly touched with cotton)	1	
Startle reflex (motor response to a brief noise from snapping a clipboard paper)	1	
Seizures, myoclonus, myodystony	1	
Maximum points	18	

>7 points can
be enrolled into
the treatment
group

FIG. 2

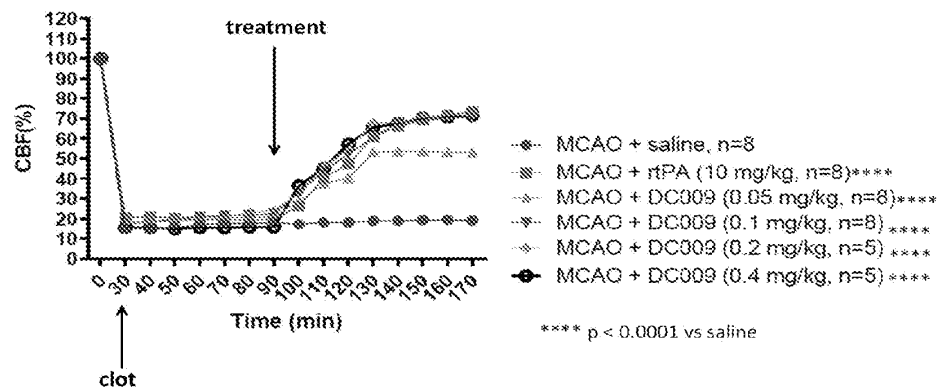
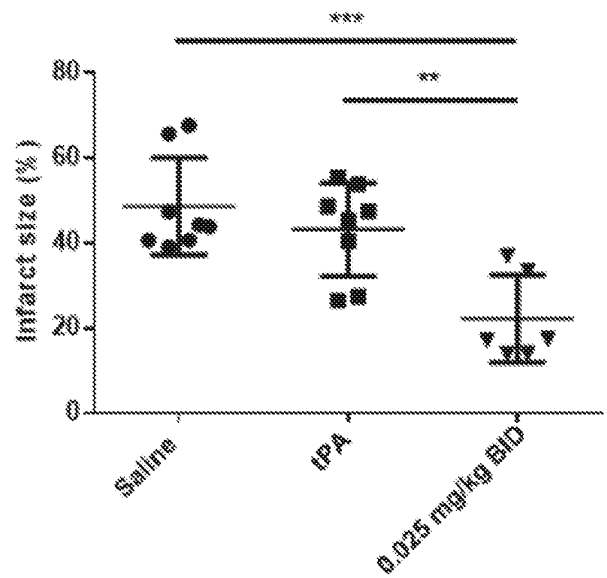


FIG. 3



** P<0.01, DC009 versus tPA; ***P<0.001, DC009 versus saline

FIG. 4

Example	Animal model	Content	Rat dose
1	Rat model 1	Embolic stroke model	N/A
2	Rat model 2	MCAO model	N/A
3	Rat model 3	PIT stroke model	N/A
4	Embolic stroke model	single dose, 3 hr post-AIS	0.007 *mg/kg/dose
5	Embolic stroke model	single dose, 6 hr post-AIS	0.007* mg/kg/dose
6	Embolic stroke model	6 days (one dose /day), 24 hr post-AIS	0.0007, 0.007*, 0.07* mg/kg/dose
7	MCAO model	single dose, 3 hr post-AIS	0.005*, 0.05*** mg/kg/dose
8	MCAO model	single dose, 1 hr post-AIS	0.05****, 0.1****, 0.2****, 0.4**** mg/kg/dose
9	MCAO model	2 dose/day, 3 hr and 6 hr post-AIS	0.025*** mg/kg/dose
10	PIT stroke model	single dose, 1 hr / 3 hr post-AIS	0.007** mg/kg/dose

* indicates p value < 0.05, ** indicates p value < 0.01, *** indicates p value < 0.001, **** indicates p value < 0.0001, all vs. saline

FIG. 5

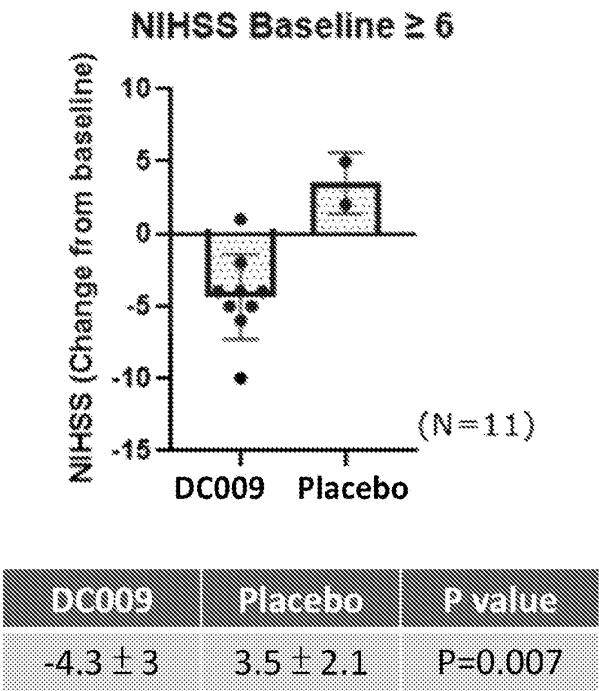


FIG. 6

Example	Human trial	Administration	Dose	C _{max}	Efficacy
11	Phase I -101	single dose	0.025, 0.05 mg/kg/dose	59.9 ± 47, 90.9 ±17.9ng/mL	N/A
12	Phase I-103	3 days (2 dose/day)	0.025, 0.05 mg/kg/dose	56.8±14.5, 57.3±11.0 ng/mL (5th dose)	N/A
13	Phase I- 105	3 days (3 dose/day)	0.025 mg/kg/dose	48.86 ±17.06 ng/mL (Day 3)	N/A
14	Phase II- 201	single dose, within 24 hr post-AIS	0.025 mg/kg/dose		p= 0.007 vs placebo
15	Phase II-202	3 days (2 dose/day)	0.025, 0.05 mg/kg/dose		
16	Phase II- 203	3 days (2 dose/day)	0.025 mg/kg/dose		
17	Phase II- 205	3 days (2 dose/day)	0.05 mg/kg/dose		

FIG. 7