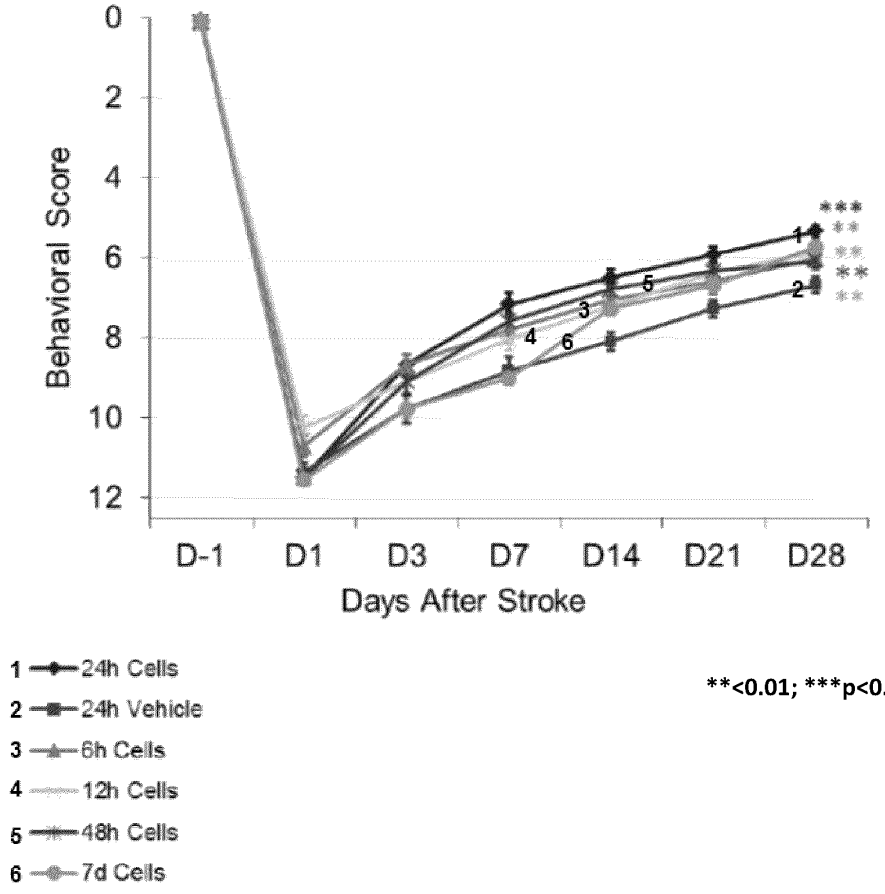

Behavioral Score
0
2
4
6
8
10
12
D-1
D1
D3
D7
D14
D21
D28
Days After Stroke
1
2
3
4
5
6
***
**
**
**
**
1 24h Cells
2 24h Vehicle
3 6h Cells
4 12h Cells
5 48h Cells
6 7d Cells
**<0.01; ***p<0.001

FIGURE 1

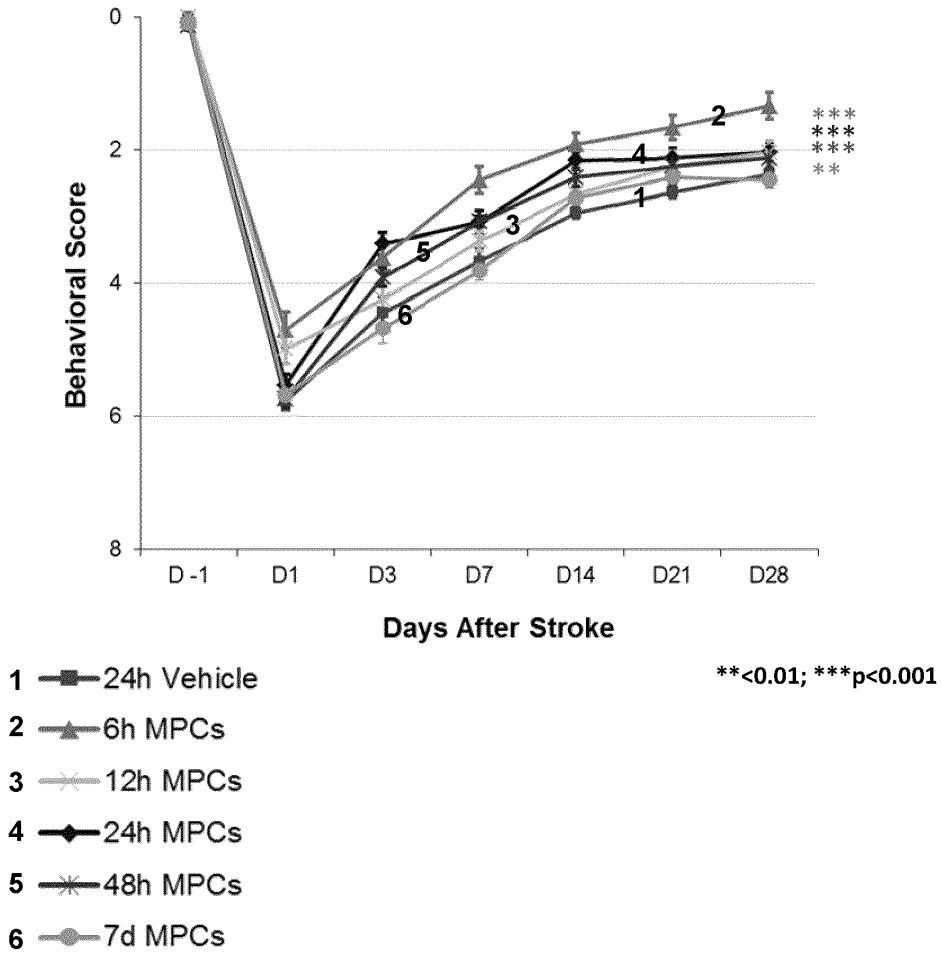

0
2
4
6
8
Behavioral Score
D -1
D1
D3
D7
D14
D21
D28
Days After Stroke
1
2
3
4
5
6
***
***
***
**
1 24h Vehicle
2 6h MPCs
3 12h MPCs
4 24h MPCs
5 48h MPCs
6 7d MPCs
**<0.01; ***p<0.001

FIGURE 2

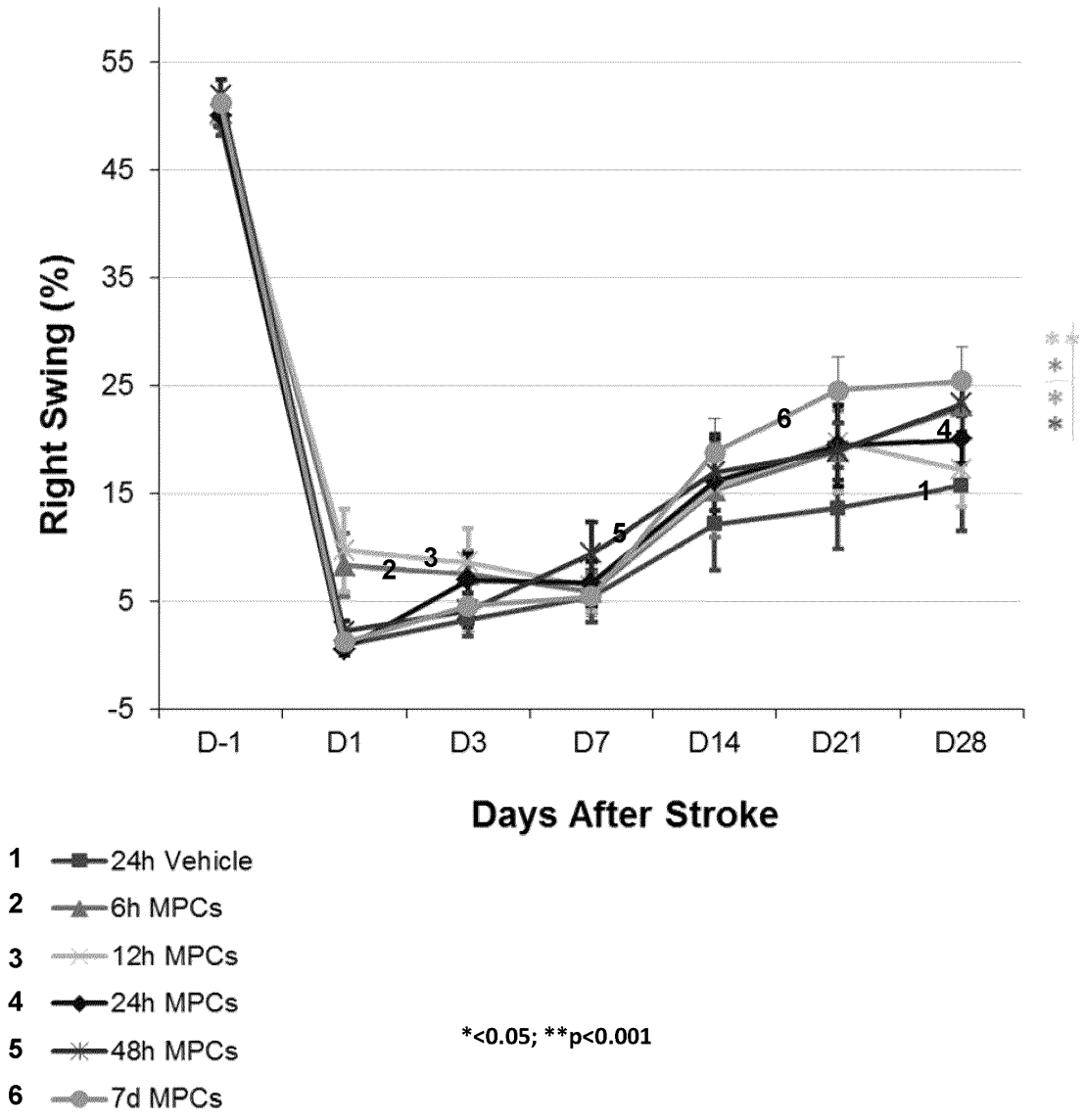

55
45
35
25
15
5
-5
Right Swing (%)
D-1
D1
D3
D7
D14
D21
D28
Days After Stroke
1
2
3
4
5
6
1 24h Vehicle
2 6h MPCs
3 12h MPCs
4 24h MPCs
5 48h MPCs
6 7d MPCs
*<0.05; **p<0.001

FIGURE 3

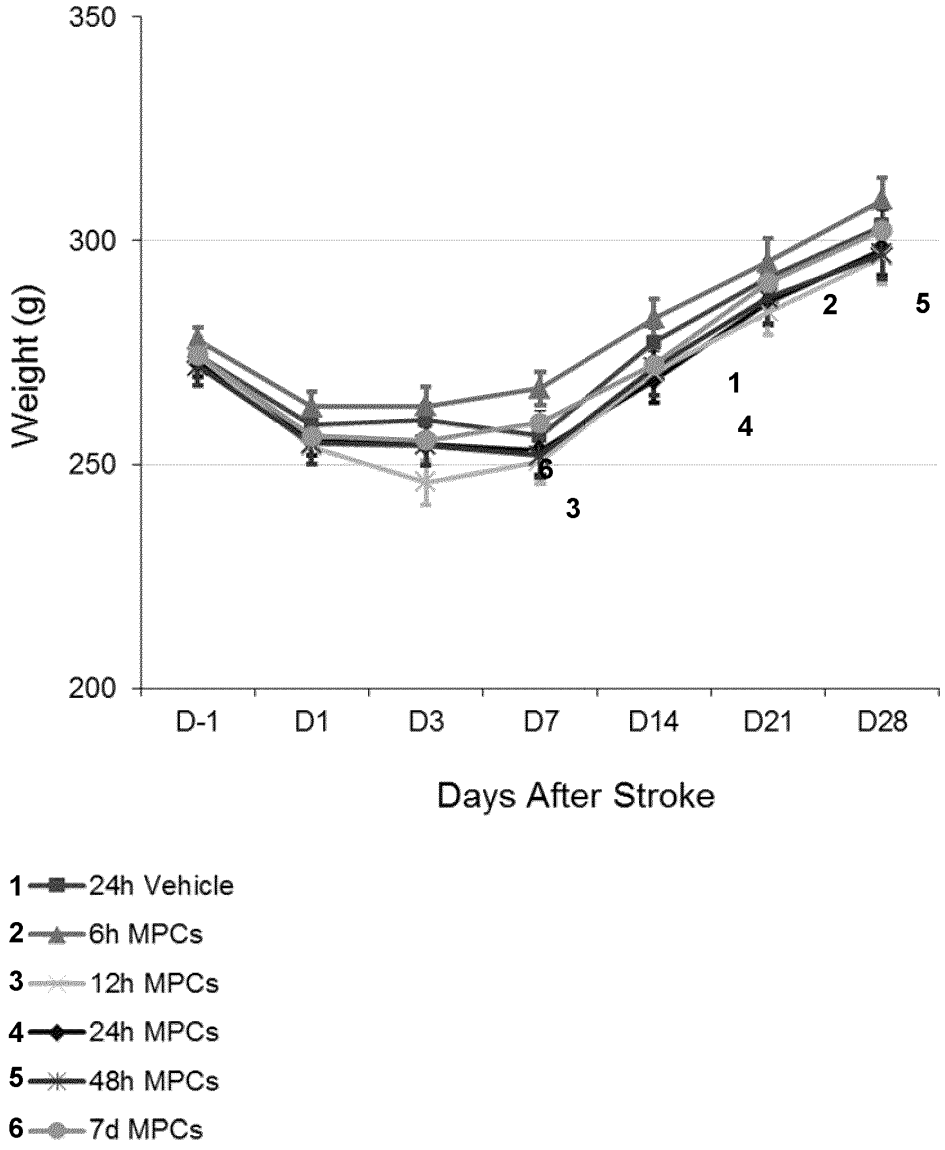

350
300
250
200
Weight (g)
D-1
D1
D3
D7
D14
D21
D28
Days After Stroke
1
2
3
4
5
6
1 24h Vehicle
2 6h MPCs
3 12h MPCs
4 24h MPCs
5 48h MPCs
6 7d MPCs

FIGURE 4

1 M MPC IV following pMCAO (N=8/group)

(human MPCs; single IV injection in Nude Rat)

1. Vehicle – 24 hr post MCAO
2. MPC – 24 hr post MCAO
    1. Behavioral: days 1, 3, and 7
    2. MRI imaging: day 8
        1. - T2 weighted MRI anatomy scan of whole brain
        2. - functional MRI following stimulus of forepaw or hindpaw

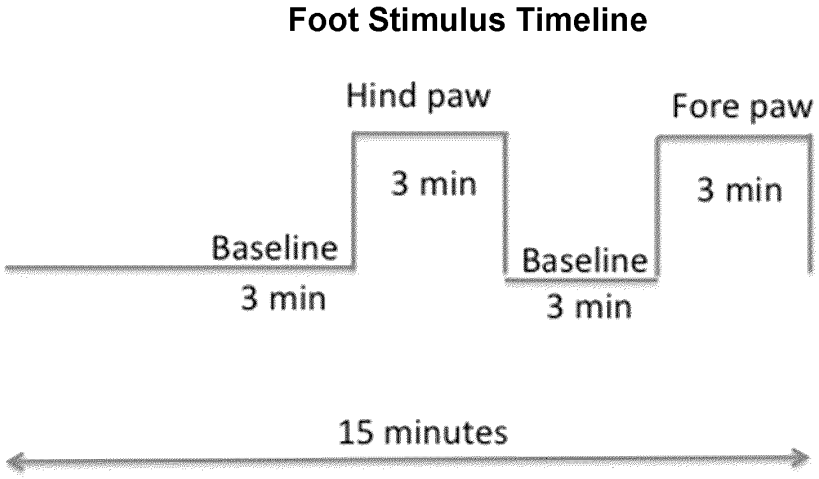


FIGURE 5

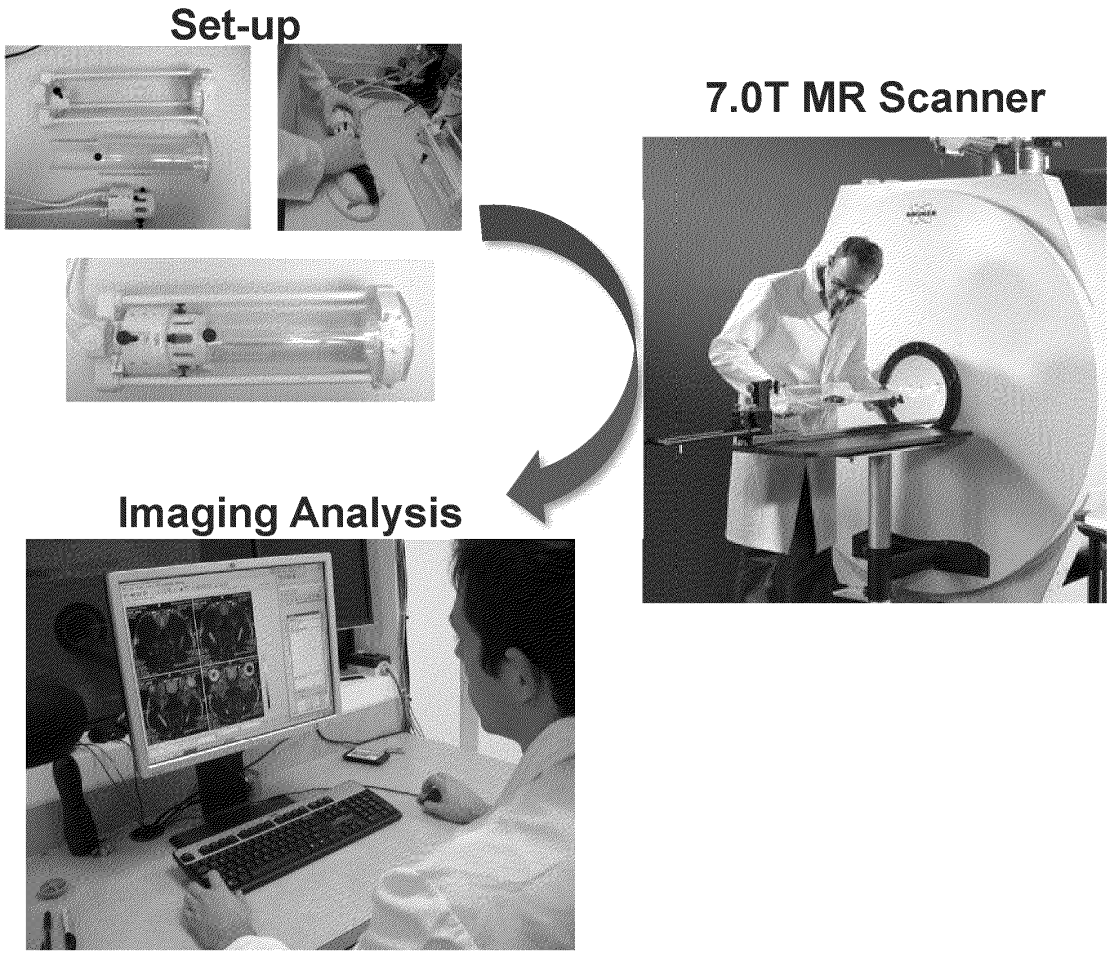


FIGURE 6

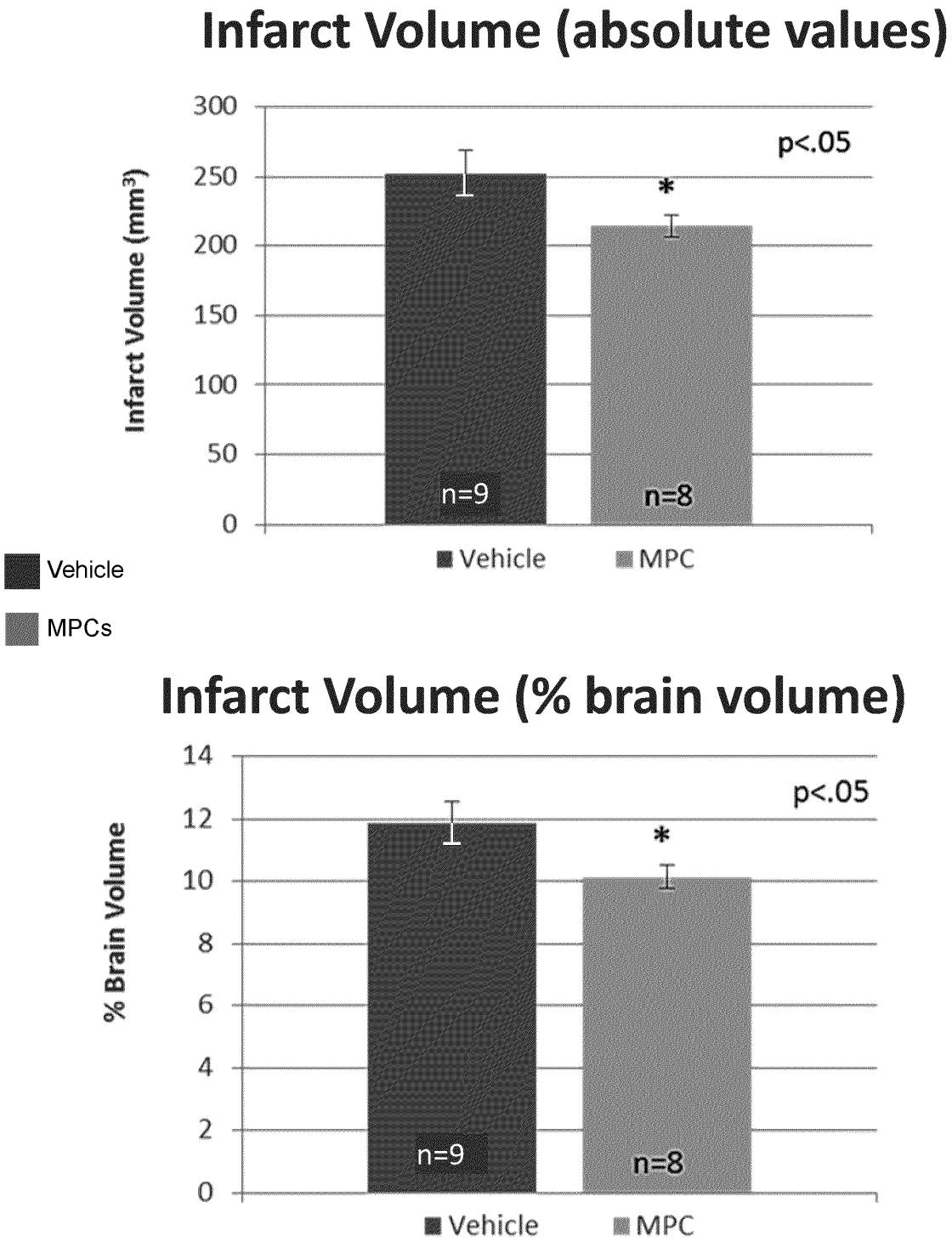
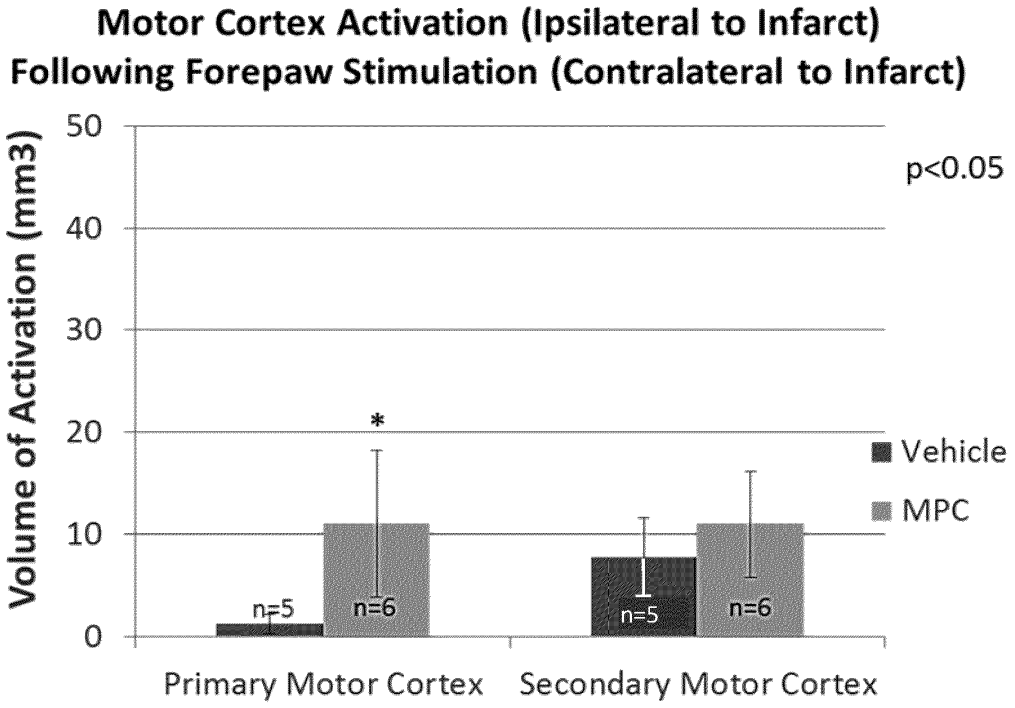

Infarct Volume (absolute values)
Infarct Volume (mm³)
300
250
200
150
100
50
0
p<.05
*
n=9
n=8
Vehicle
MPC
Vehicle
MPCs
Infarct Volume (% brain volume)
% Brain Volume
14
12
10
8
6
4
2
0
p<.05
*
n=9
n=8
Vehicle
MPC

FIGURE 7


Motor Cortex Activation (Ipsilateral to Infarct)
Following Forepaw Stimulation (Contralateral to Infarct)
Volume of Activation (mm3)
50
40
30
20
10
0
p<0.05
*
Vehicle
MPC
n=5
n=6
n=5
n=6
Primary Motor Cortex
Secondary Motor Cortex

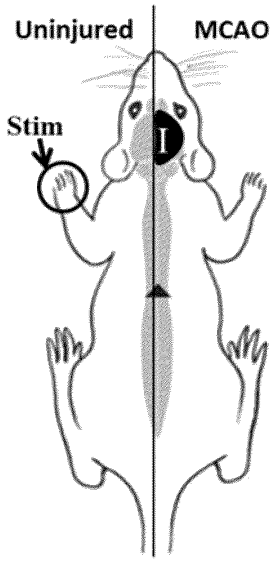

Uninjured
MCAO
Stim
I

FIGURE 8

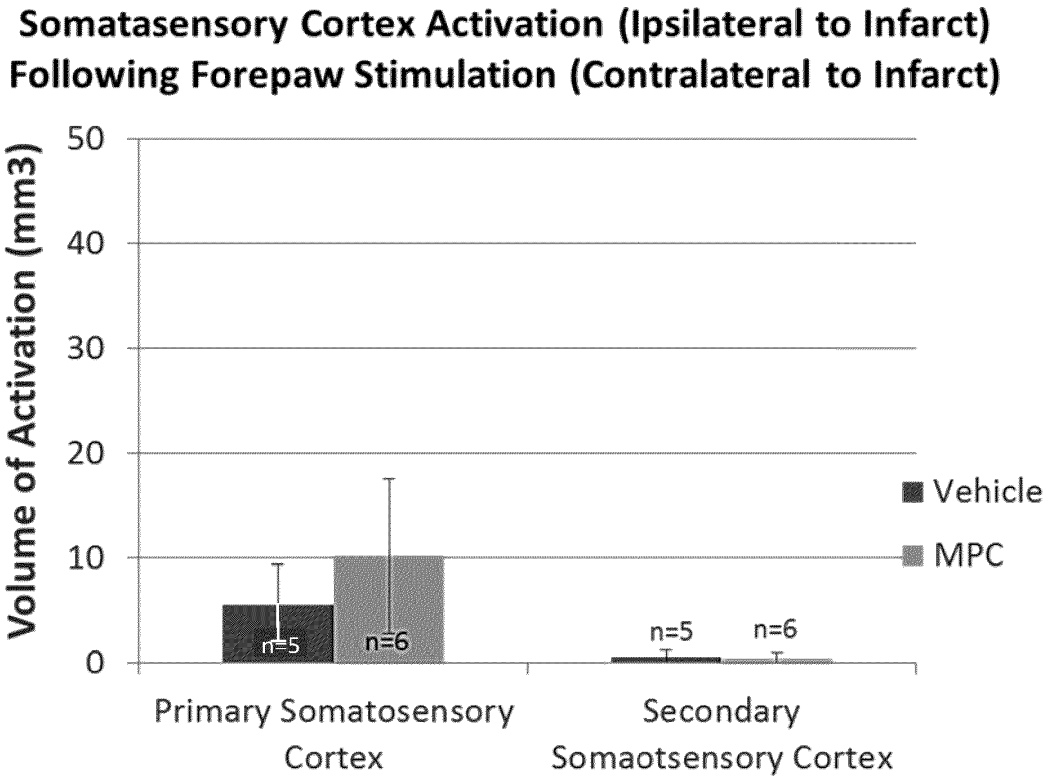
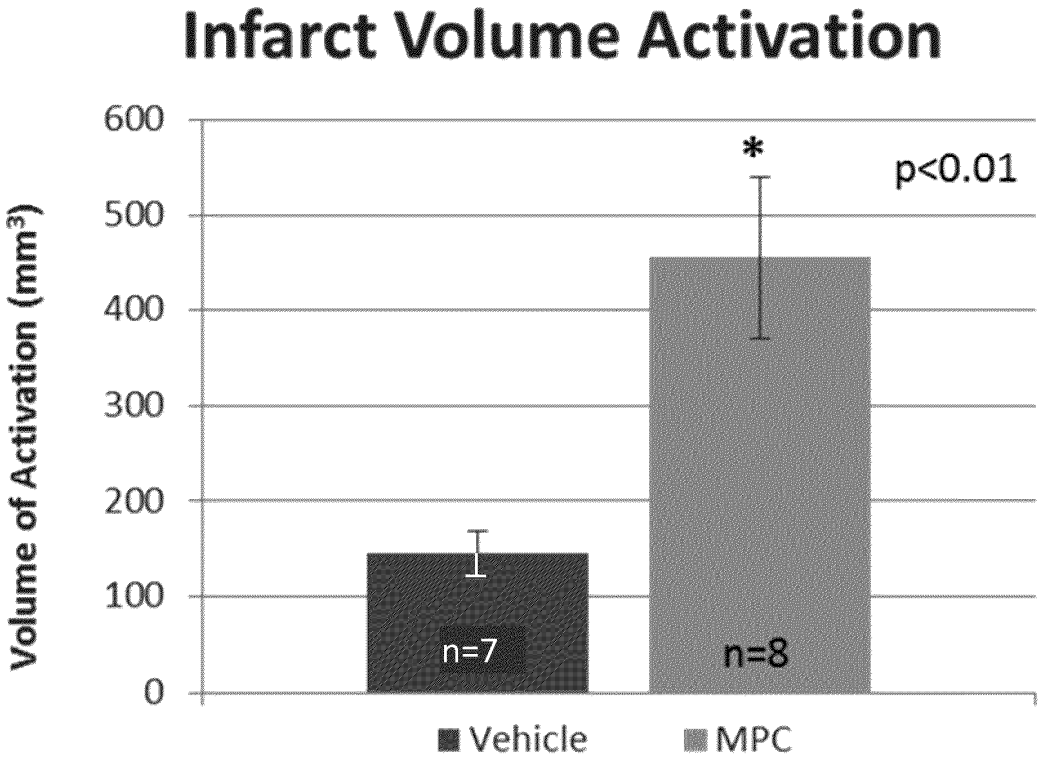


FIGURE 8 (continued)


Infarct Volume Activation
Volume of Activation (mm³)
600
500
400
300
200
100
0
*
p<0.01
n=7
n=8
Vehicle
MPC

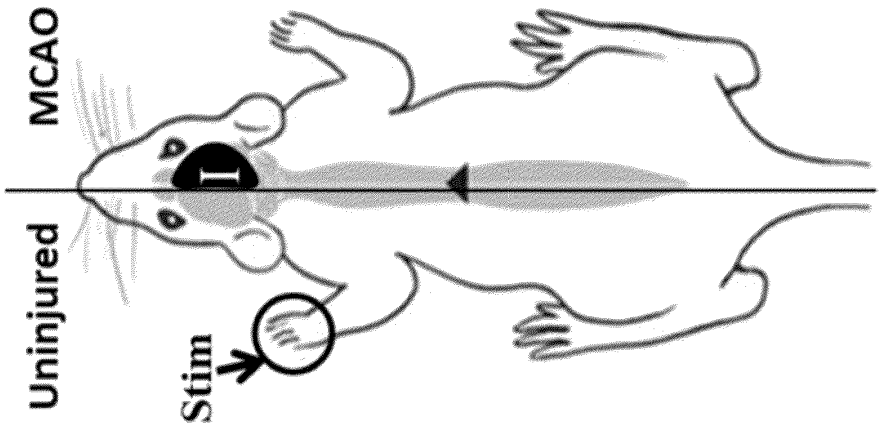

MCAO
Uninjured
Stim

FIGURE 9