FIGURE 1

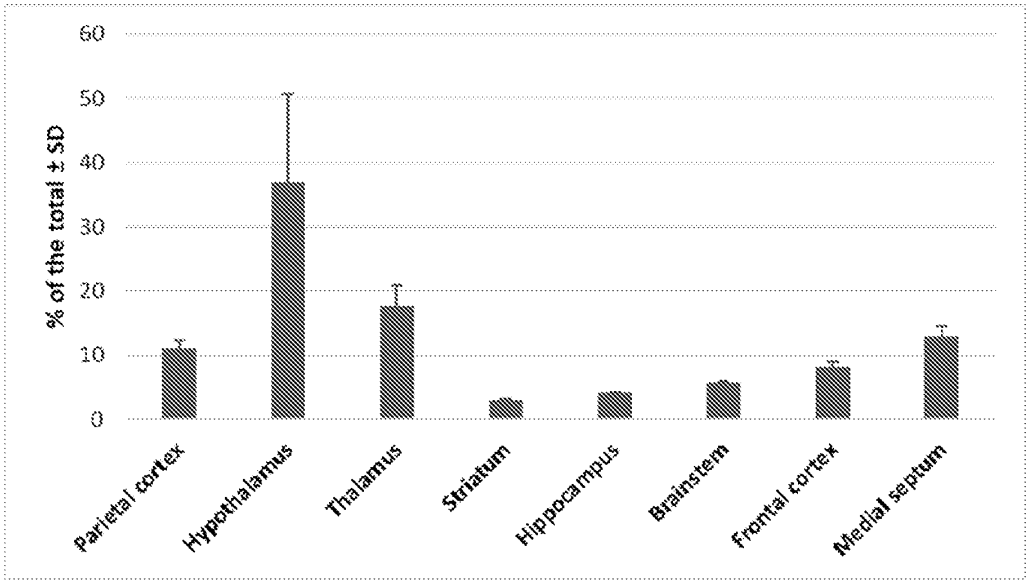

60
50
40
30
20
10
0
% of the total ± SD
Parietal cortex
Hypothalamus
Thalamus
Striatum
Hippocampus
Brainstem
Frontal cortex
Medial septum

FIGURE 2

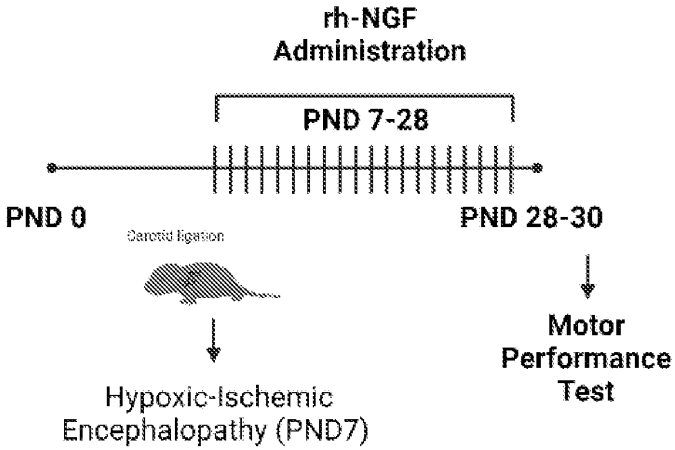

rh-NGF
Administration
PND 7-28
PND 0
PND 28-30
Carotid ligation
Motor
Performance
Test
Hypoxic-Ischemic
Encephalopathy (PND7)

FIGURE 3

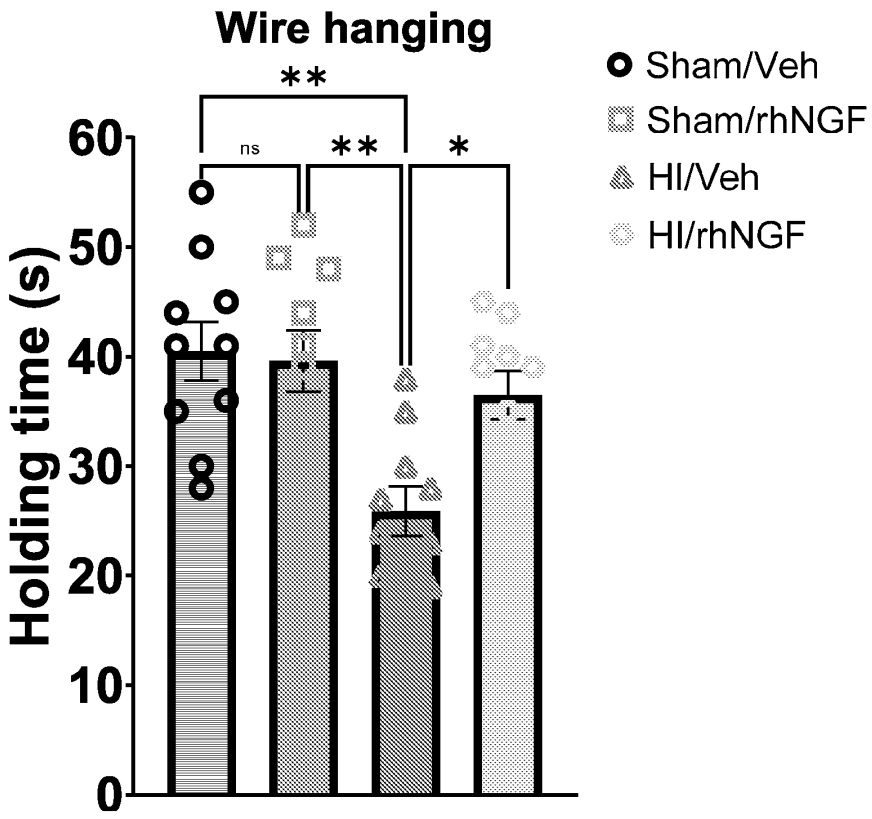

Wire hanging
**
ns
**
*
Holding time (s)
60
50
40
30
20
10
0
Sham/Veh
Sham/rhNGF
HI/Veh
HI/rhNGF

FIGURE 4

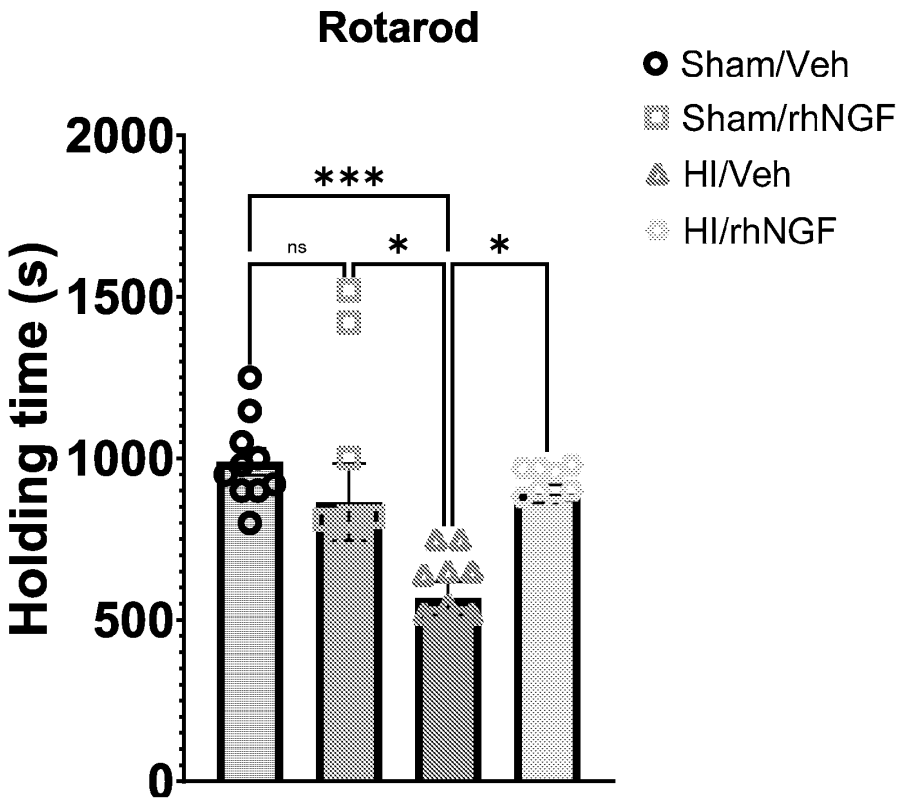

Rotarod
Sham/Veh
Sham/rhNGF
HI/Veh
HI/rhNGF
Holding time (s)
2000
1500
1000
500
0
***
ns
*
*

FIGURE 5

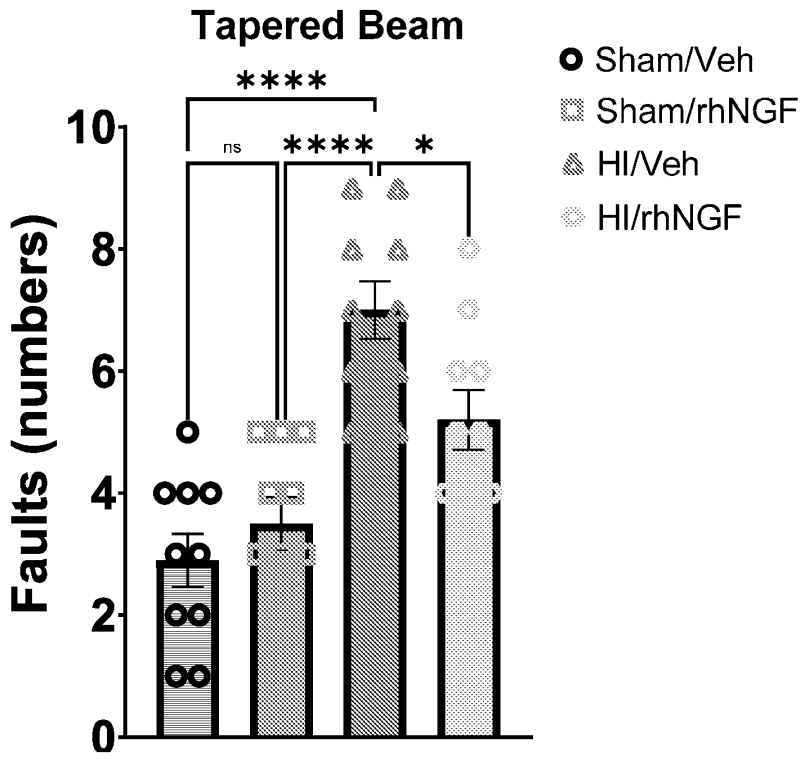

Tapered Beam
Faults (numbers)
0
2
4
6
8
10
****
ns
****
*
Sham/Veh
Sham/rhNGF
HI/Veh
HI/rhNGF

FIGURE 6

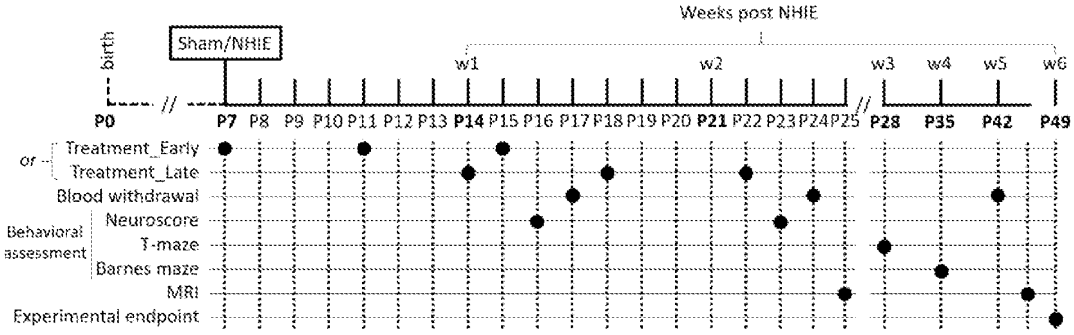

Weeks post NHIE
birth
Sham/NHIE
w1
w2
w3
w4
w5
w6
P0
P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20 P21 P22 P23 P24 P25
P28
P35
P42
P49
or
Treatment_Early
Treatment_Late
Blood withdrawal
Behavioral assessment
Neuroscore
T-maze
Barnes maze
MRI
Experimental endpoint

FIGURE 7

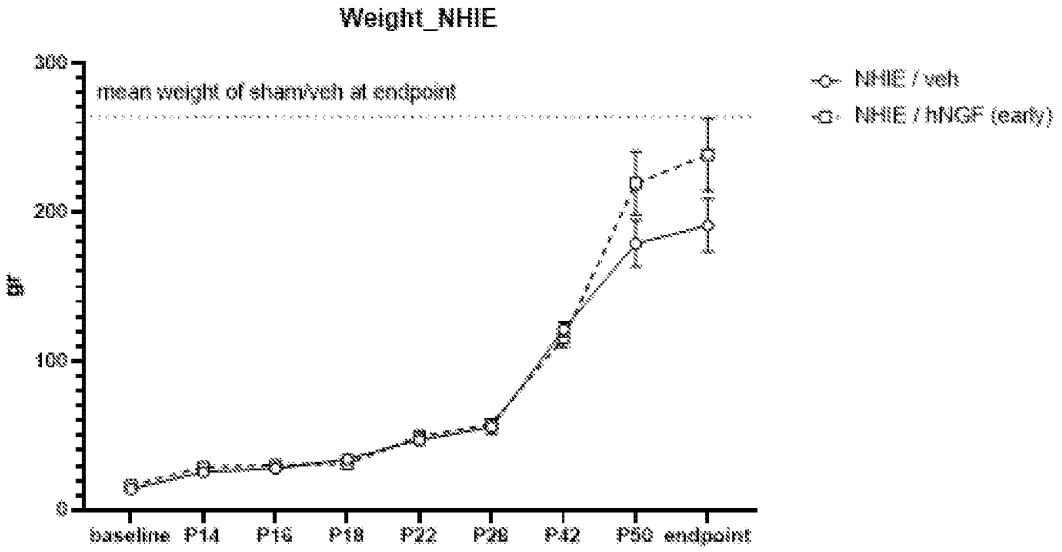

Weight_NHIE
mean weight of sham/veh at endpoint
NHIE / veh
NHIE / hNGF (early)
300
200
100
0
baseline
P14
P16
P18
P22
P28
P42
P50
endpoint

FIGURE 8

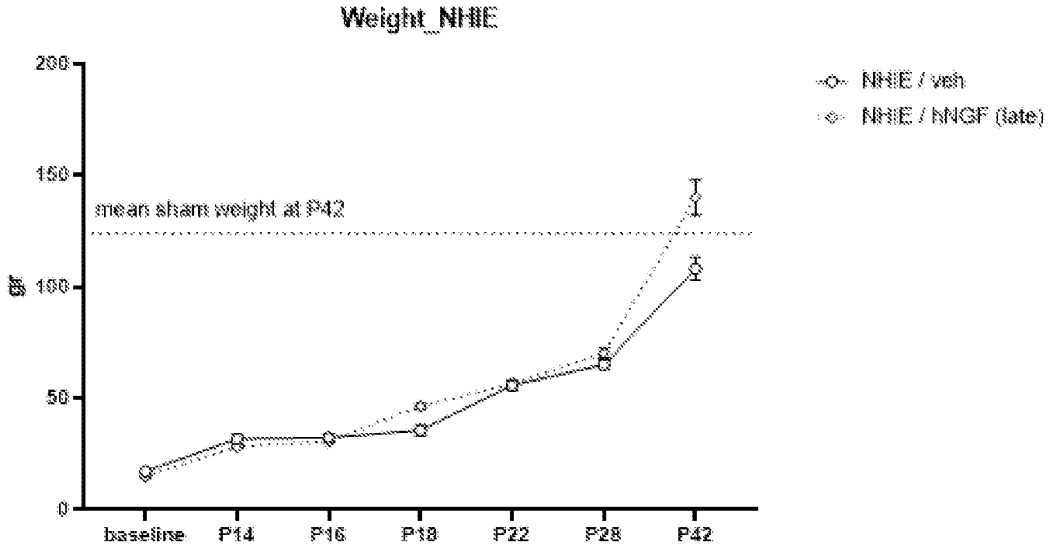

Weight_NHIE
200
150
100
50
0
g
mean sham weight at P42
baseline
P14
P16
P18
P22
P28
P42
NHIE / veh
NHIE / NNGF (late)

FIGURE 9

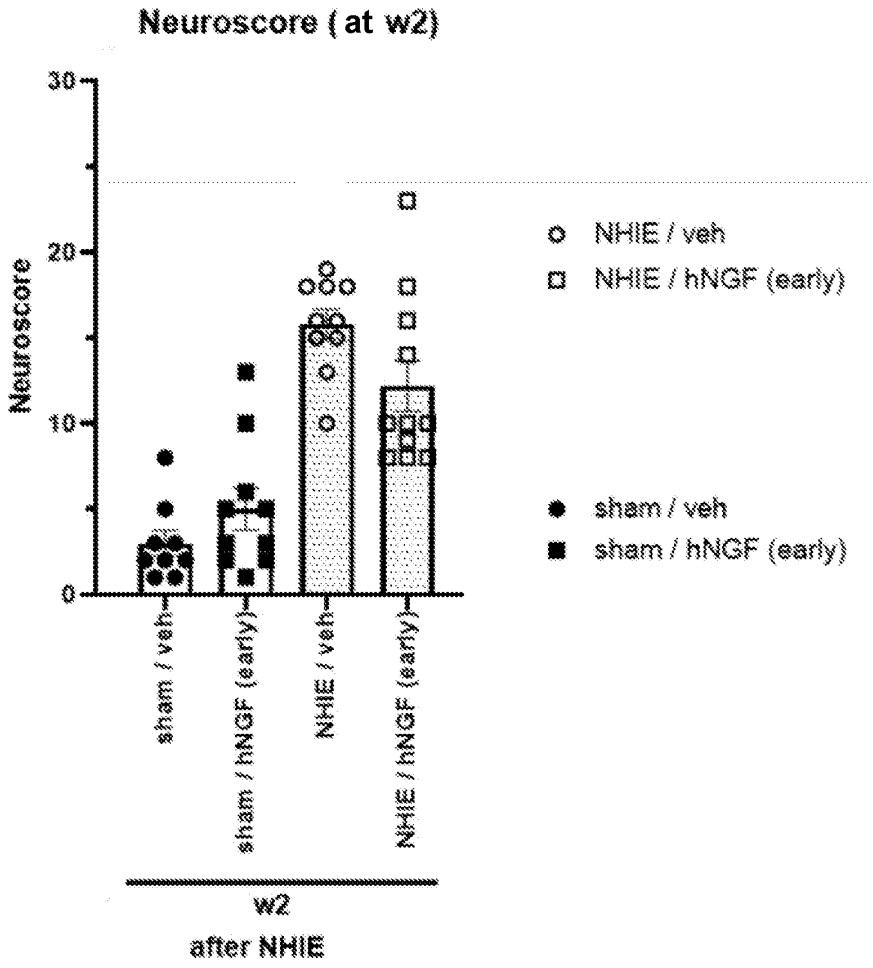

Neuroscore (at w2)
Neuroscore
30
20
10
0
sham / veh
sham / hNGF (early)
NHIE / veh
NHIE / hNGF (early)
w2
after NHIE
NHIE / veh
NHIE / hNGF (early)
sham / veh
sham / hNGF (early)

FIGURE 10

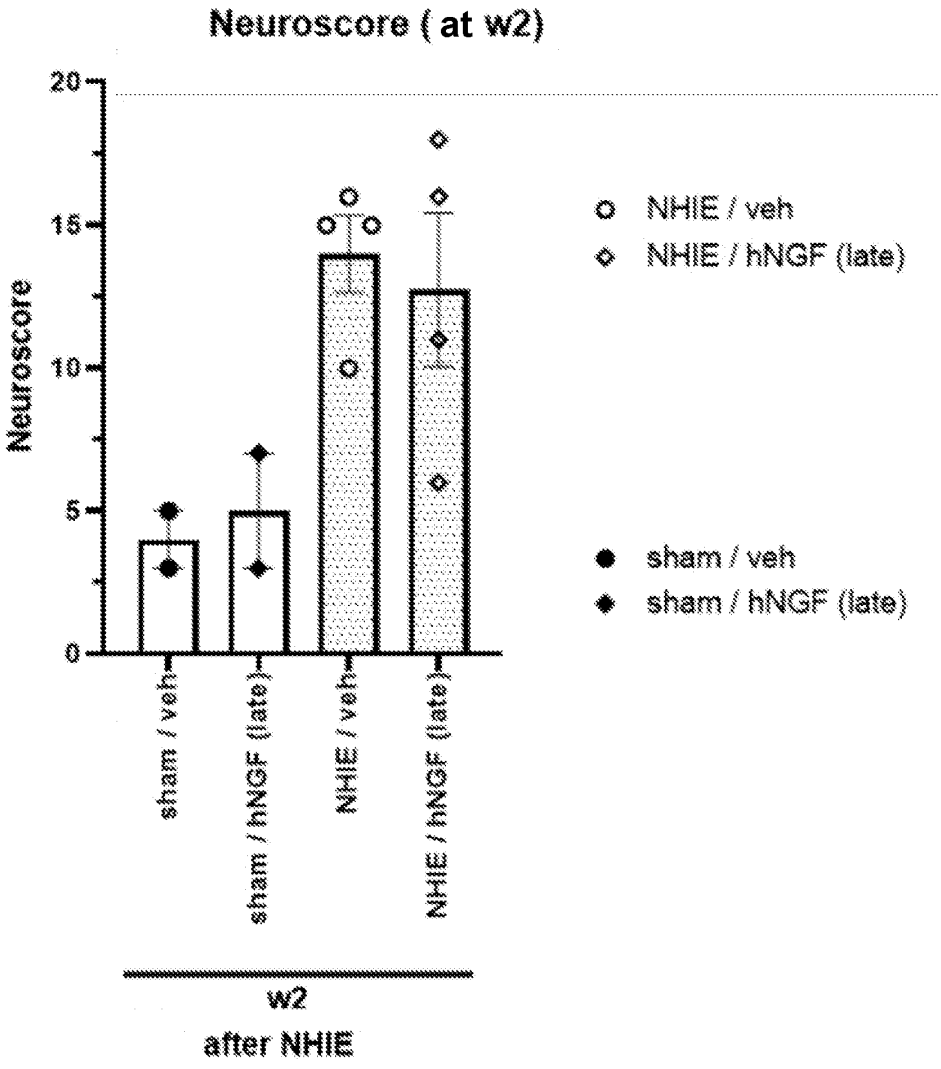

Neuroscore (at w2)
Neuroscore
20
15
10
5
0
sham / veh
sham / hNGF (late)
NHIE / veh
NHIE / hNGF (late)
w2
after NHIE
NHIE / veh
NHIE / hNGF (late)
sham / veh
sham / hNGF (late)

FIGURE 11

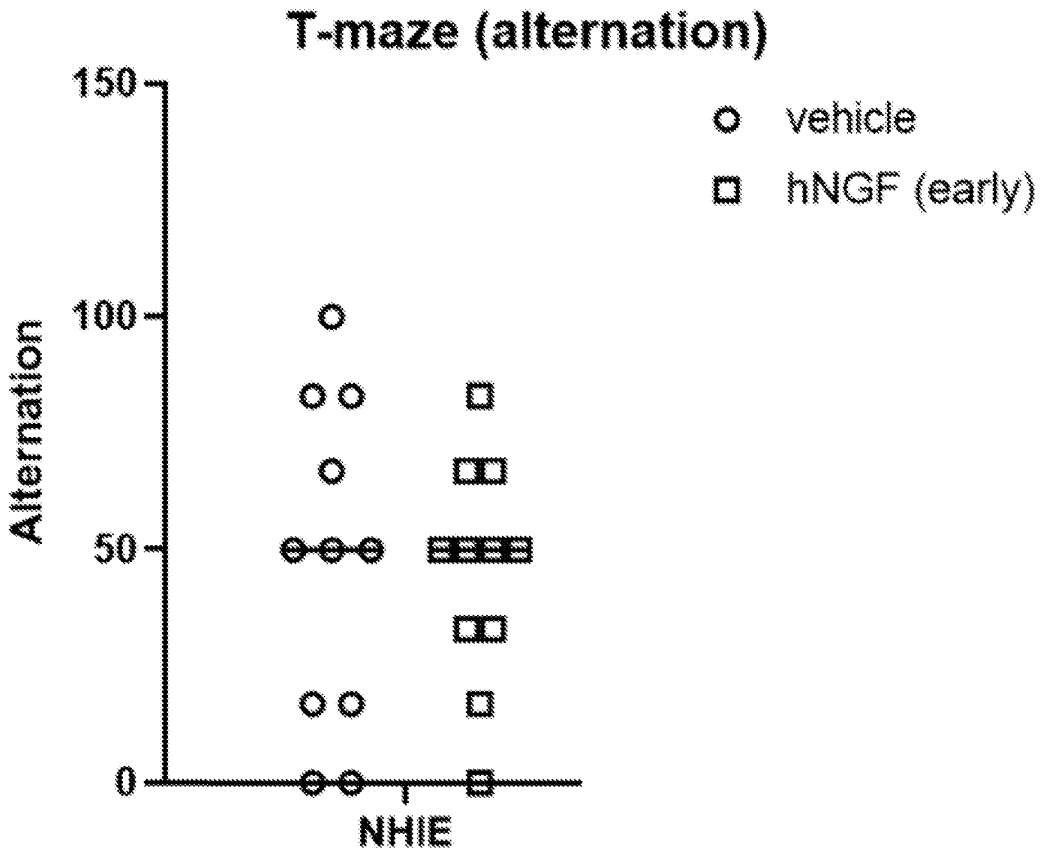

T-maze (alternation)
vehicle
hNGF (early)
Alternation
150
100
50
0
NHIE

FIGURE 12

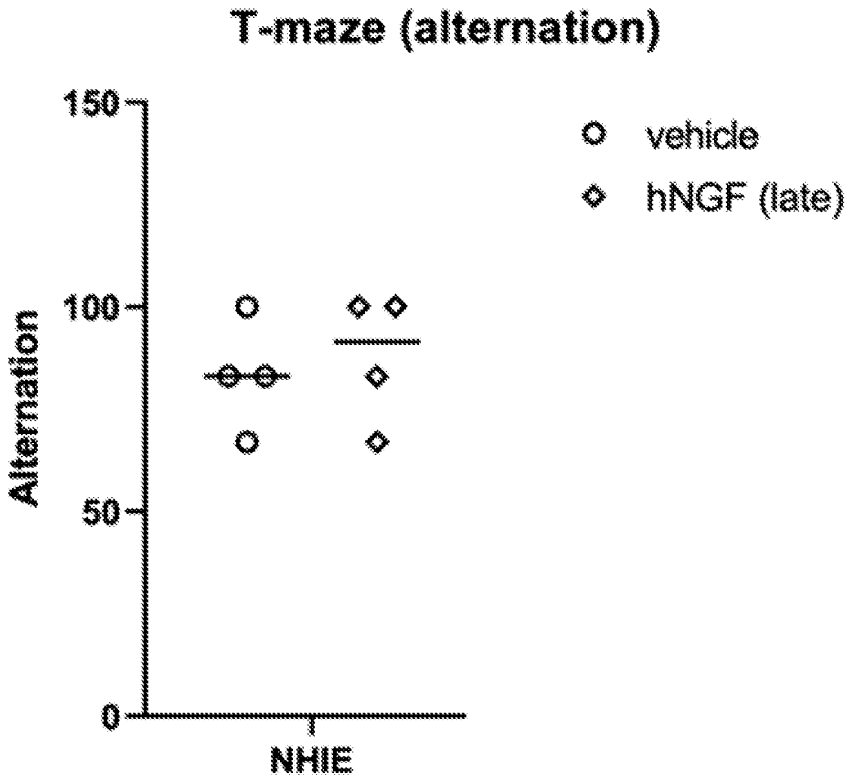

T-maze (alternation)
150
100
50
0
Alternation
NHIE
vehicle
hNGF (late)

FIGURE 13

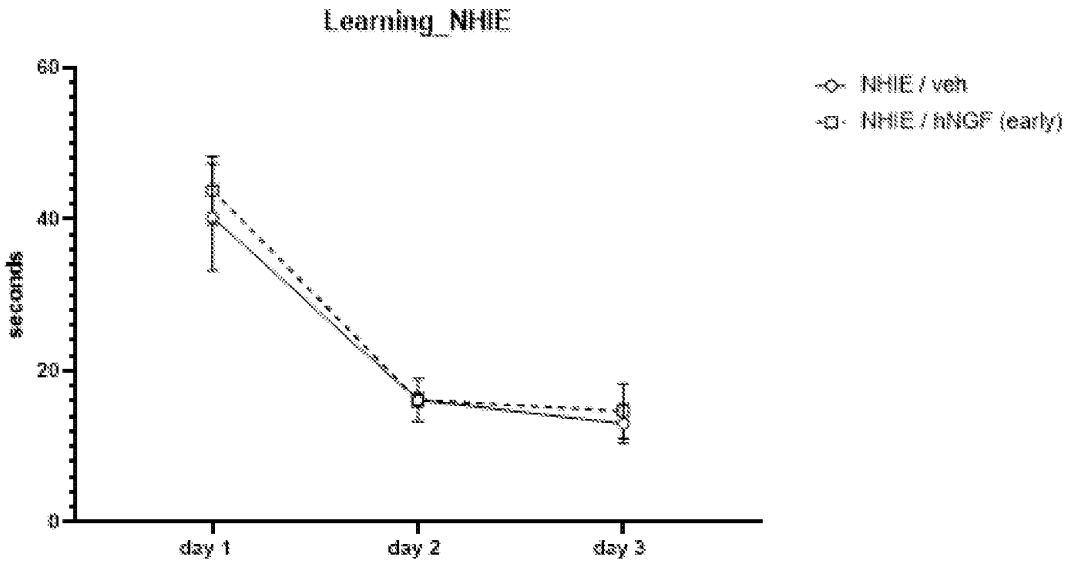
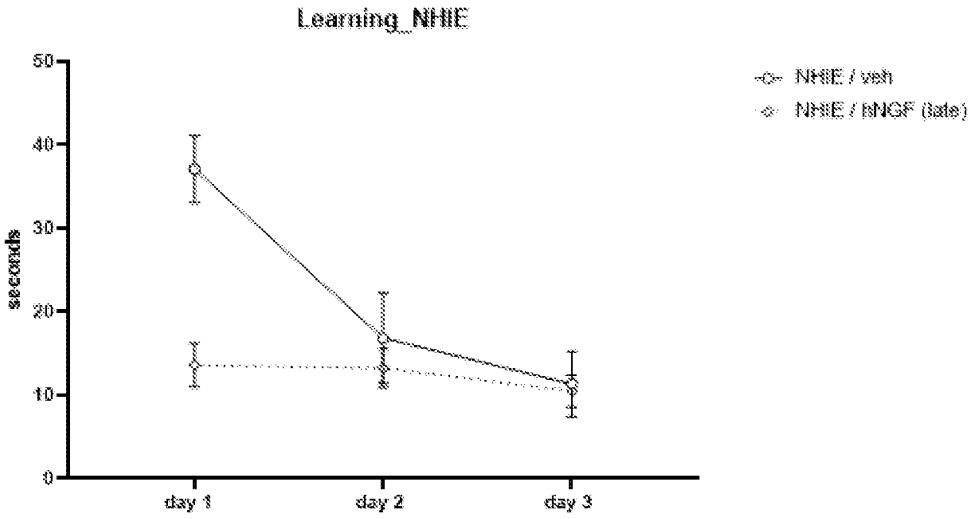

Learning_NHE
60
40
20
0
seconds
day 1
day 2
day 3
NHE / veh
NHE / hNGF (early)

FIGURE 14


Learning_NHE
NHE / veh
NHE / bNGF (late)
seconds
50
40
30
20
10
0
day 1
day 2
day 3

FIGURES 15A-15C

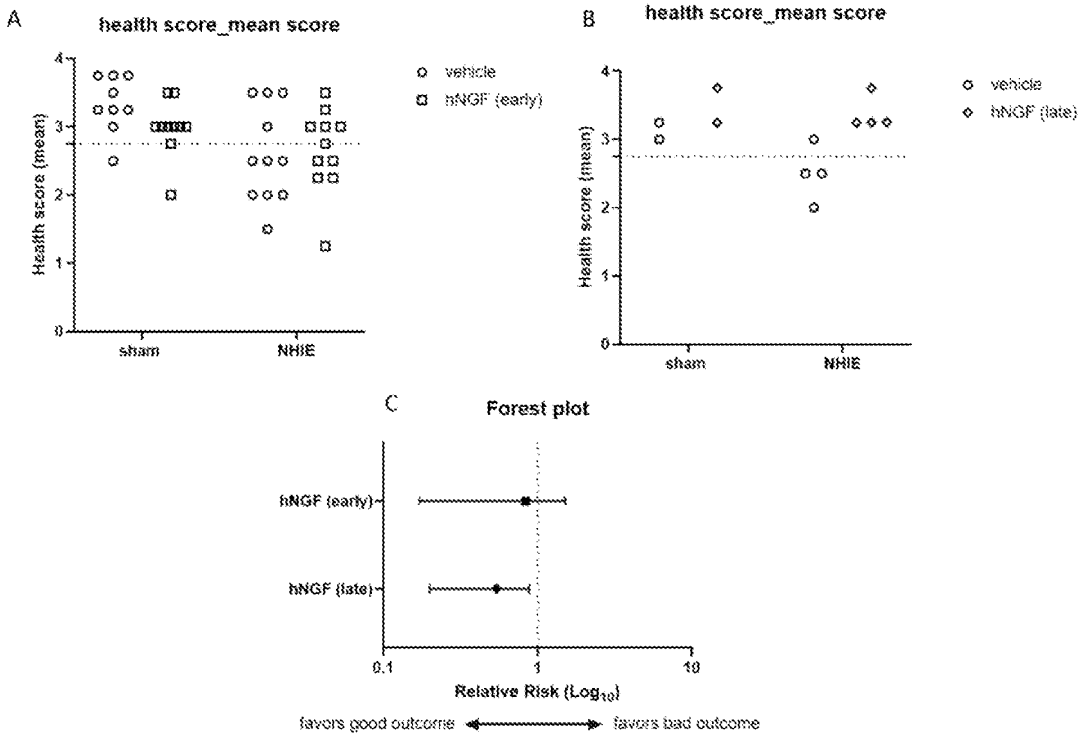


FIGURE 16

