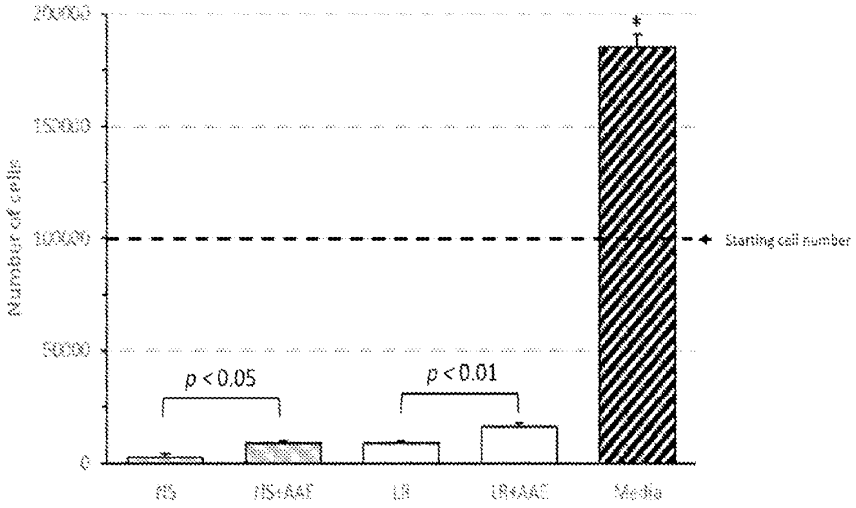

Number of cells
Starting cell number
p < 0.05
p < 0.01
Media

FIG. 1

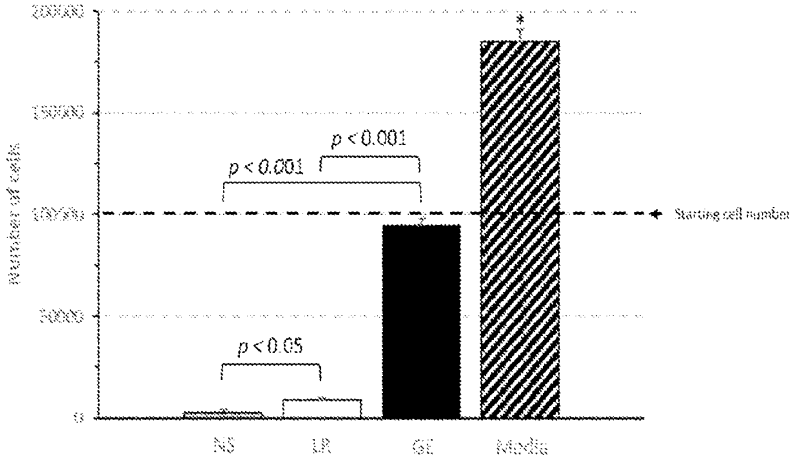

Number of cells
Starting cell number
p < 0.001
p < 0.001
p < 0.05
Media

FIG. 2

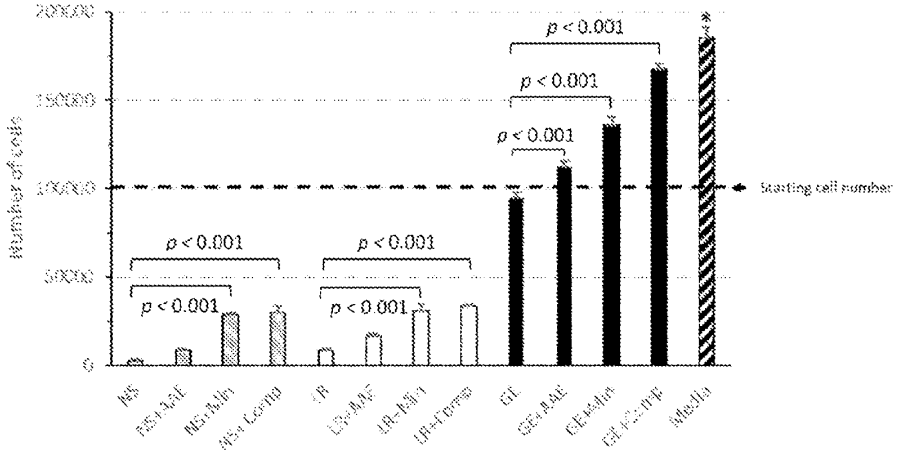

Number of cells
p < 0.001
p < 0.001
p < 0.001
p < 0.001
p < 0.001
p < 0.001
Starting cell number
Media

FIG. 3

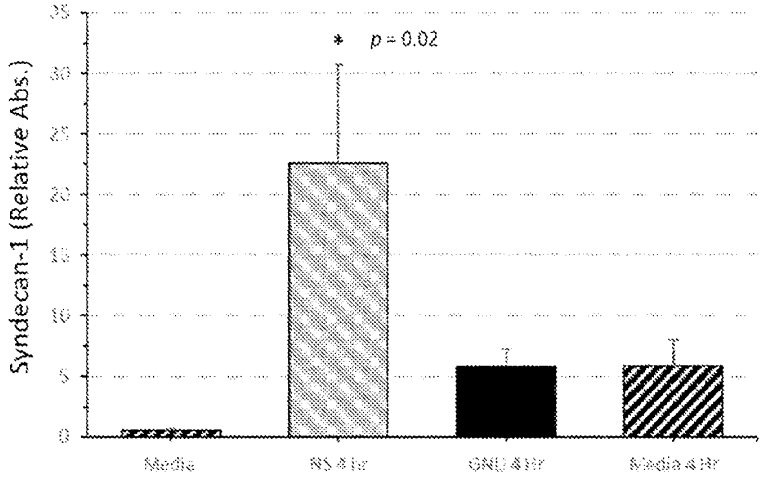

Syndecan-1 (Relative Abs.)
p = 0.02
Media
Media 4 Hr

FIG. 4

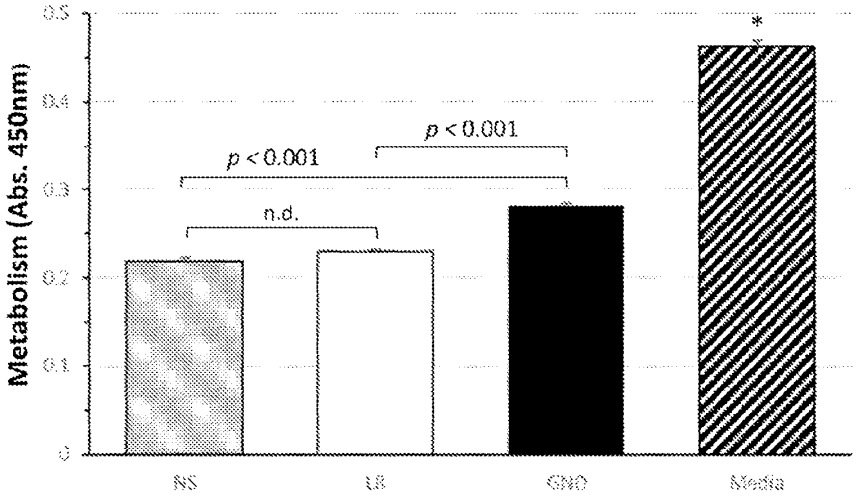

Metabolism (Abs. 450nm)
0.5
0.4
0.3
0.2
0.1
0
p < 0.001
p < 0.001
n.d.
*
NS
LR
GND
Media

FIG. 5

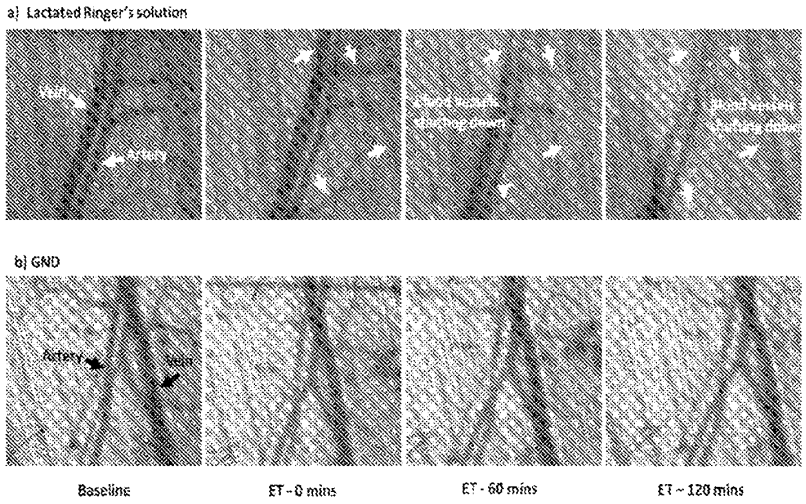

a) Lactated Ringer's solution
Vein
Artery
Blood vessels shrinkage started
Blood vessels shrinkage more
b) GND
Artery
Vein
Baseline
ET - 0 mins
ET - 60 mins
ET - 120 mins

FIG. 6

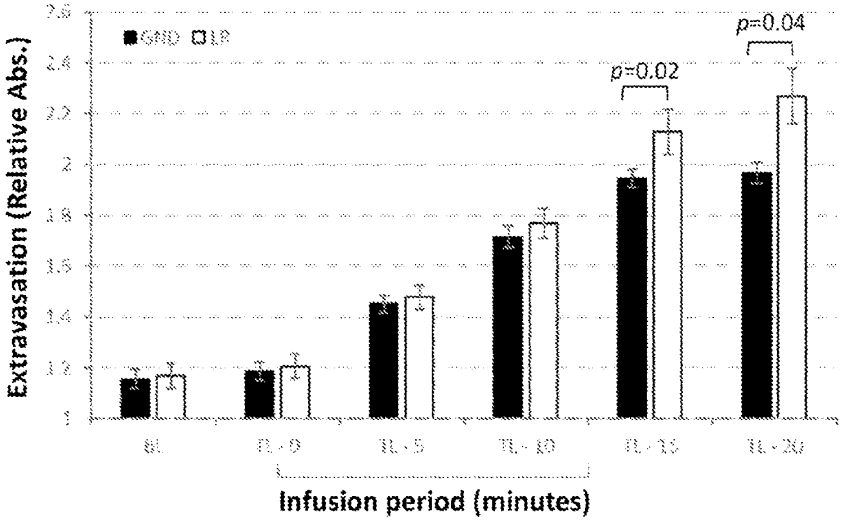

Extravasation (Relative Abs.)
p=0.02
p=0.04
Infusion period (minutes)

FIG. 7

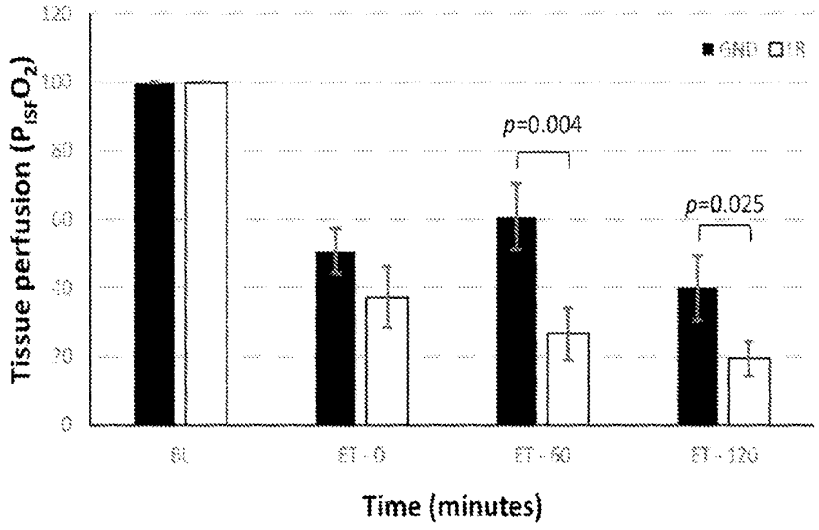

Tissue perfusion ($P_{ISF}O_2$)
p=0.004
p=0.025
Time (minutes)

FIG. 8

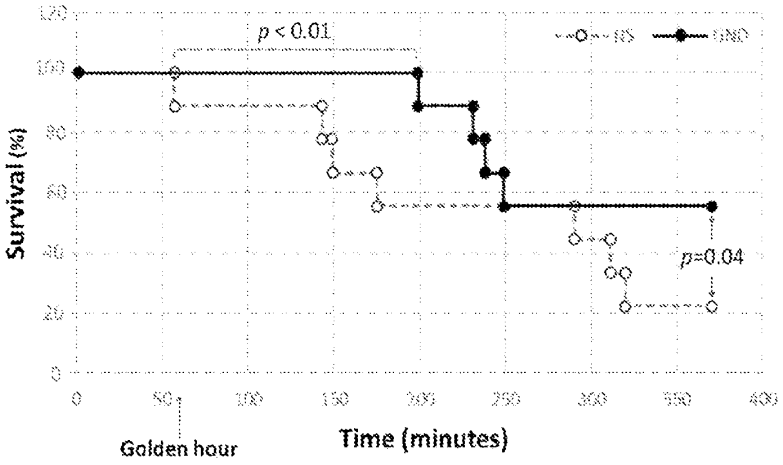

p < 0.01
NS
GND
Survival (%)
120
100
80
60
40
20
0
0
50
100
150
300
350
400
p=0.04
Golden hour
Time (minutes)

FIG. 9

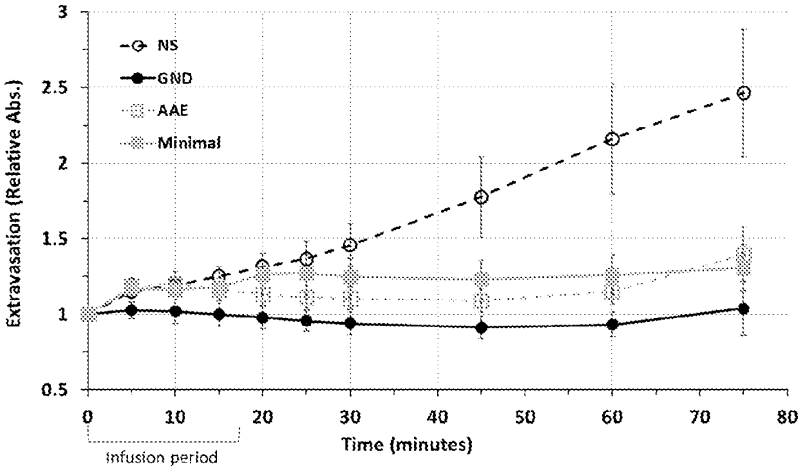

NS
GND
AAE
Minimal
Extravasation (Relative Abs.)
3
2.5
2
1.5
1
0.5
0
10
20
30
40
50
60
70
80
Time (minutes)
Infusion period

FIG. 10

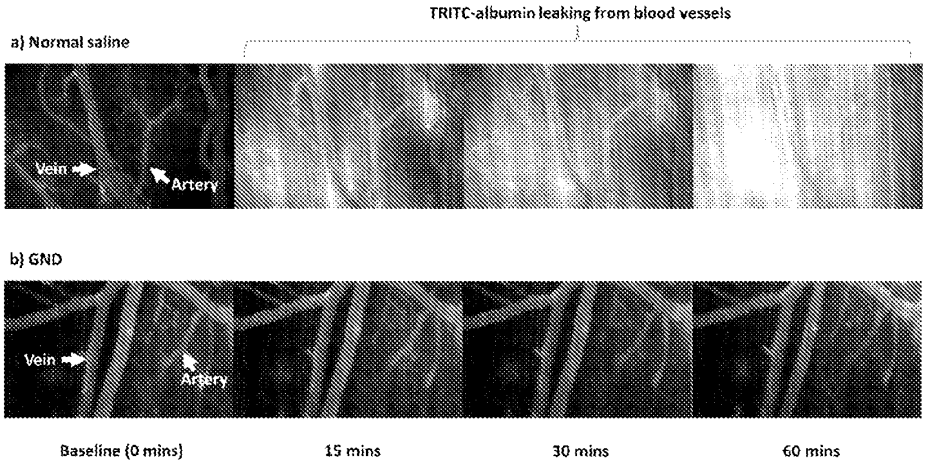


FIG. 11

Sham control (LPS + Surgery + Fluorescent Albumin but no intravenous fluids)

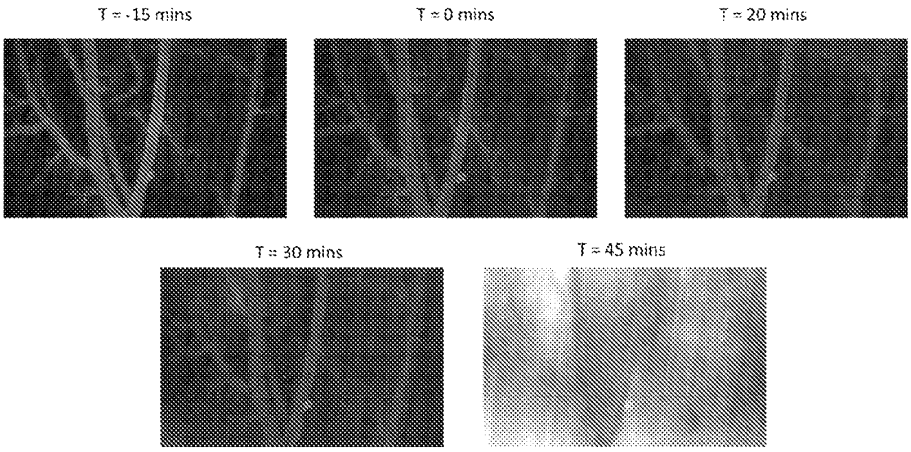


FIG. 12

Normal Saline (LPS + Surgery + Fluorescent Albumin + Intravenous NS)

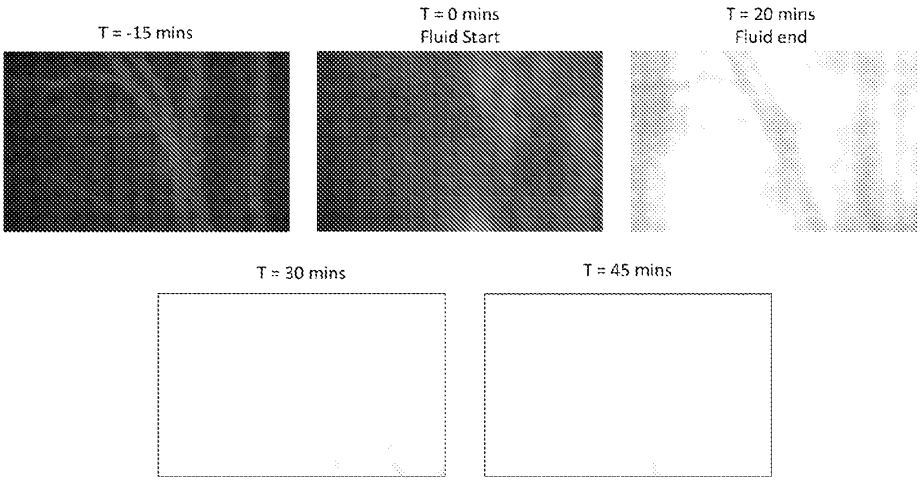


FIG. 13

GND Animal #1 (LPS + Surgery + Fluorescent Albumin + Intravenous GND)

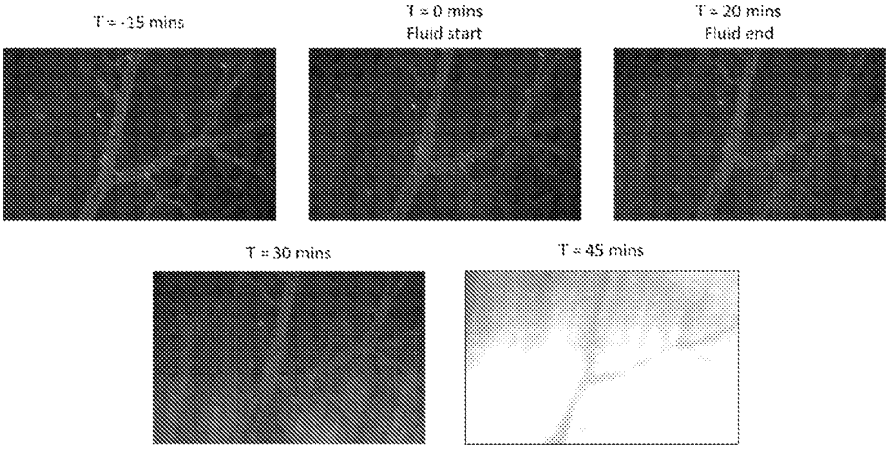


FIG. 14

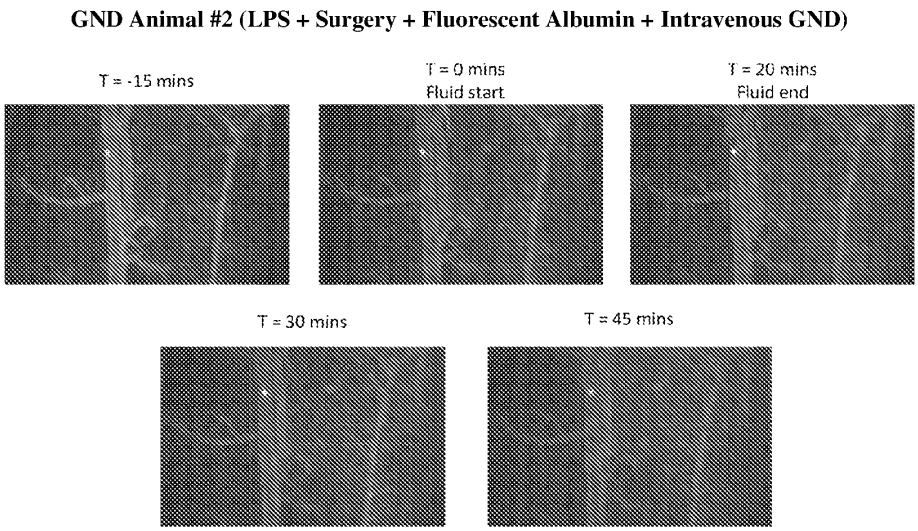

GND Animal #2 (LPS + Surgery + Fluorescent Albumin + Intravenous GND)
T = -15 mins
T = 0 mins
Fluid start
T = 20 mins
Fluid end
T = 30 mins
T = 45 mins

FIG. 15

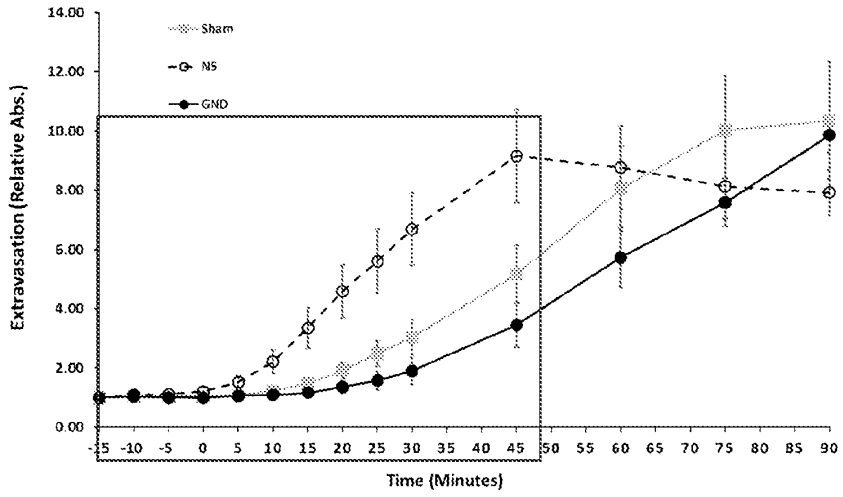

Sham
NS
GND
Extravasation (Relative Abs.)
Time (Minutes)
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
-15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90

FIG. 16

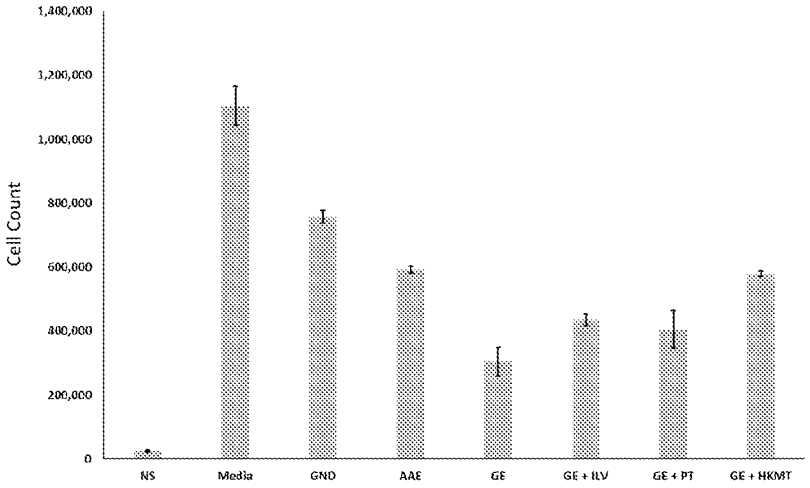

1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Cell Count
NS
Media
GND
AAE
GE
GE + ILV
GE + PT
GE + HKMT

FIG. 17

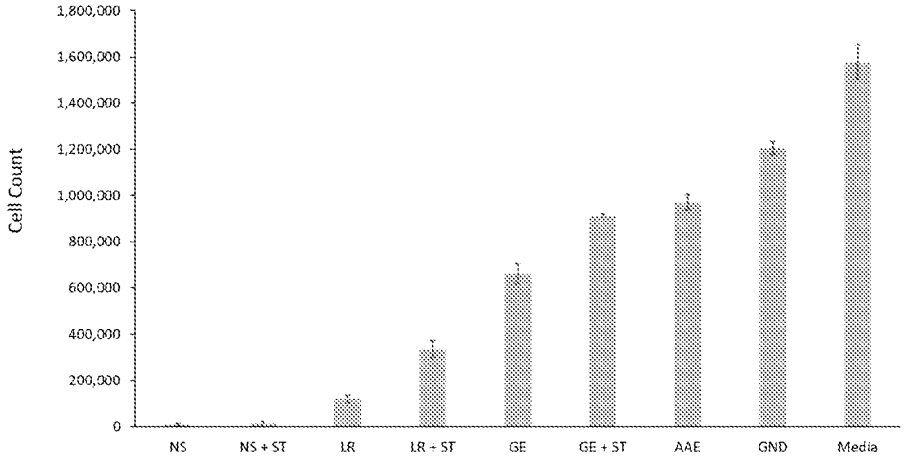

1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Cell Count
NS
NS + ST
LR
LR + ST
GE
GE + ST
AAE
GND
Media

FIG. 18

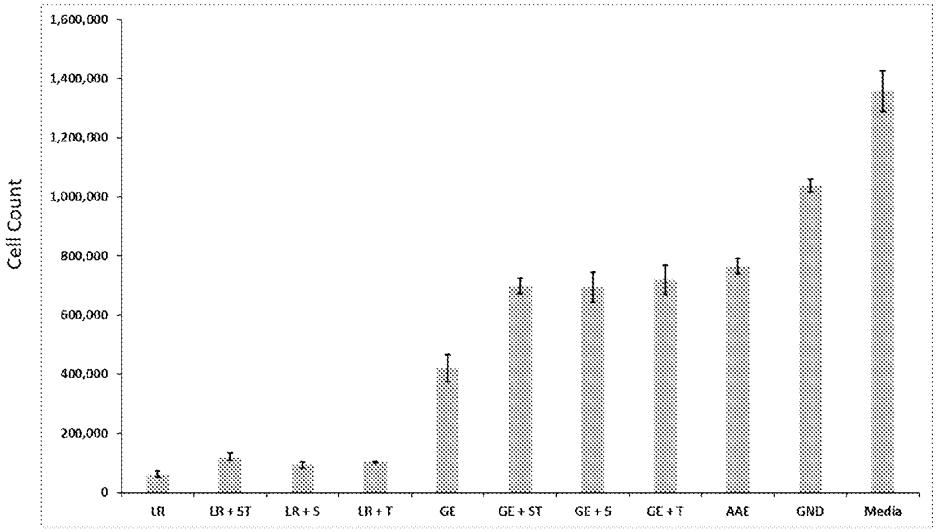

Cell Count
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
LR
LR + ST
LR + S
LR + T
GE
GE + ST
GE + S
GE + T
AAE
GND
Media

FIG. 19

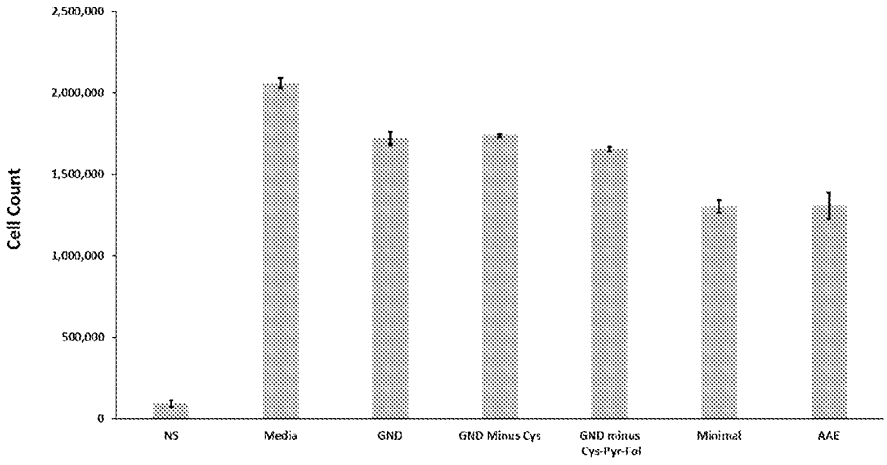

Cell Count
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
NS
Media
GND
GND Minus Cys
GND minus Cys-Pyr-Fol
Minimal
AAE

FIG. 20

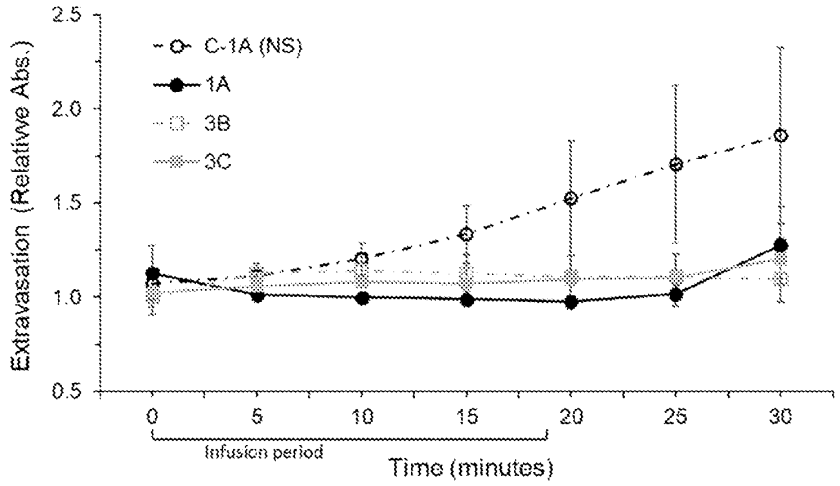

C-1A (NS)
1A
3B
3C
Extravasation (Relative Abs.)
2.5
2.0
1.5
1.0
0.5
0
5
10
15
20
25
30
Infusion period
Time (minutes)

FIG. 21

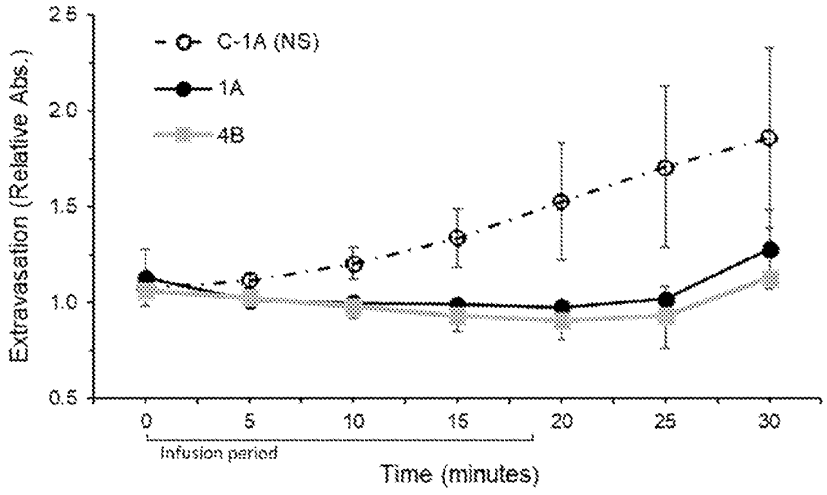

C-1A (NS)
1A
4B
Extravasation (Relative Abs.)
2.5
2.0
1.5
1.0
0.5
0
5
10
15
20
25
30
Infusion period
Time (minutes)

FIG. 22