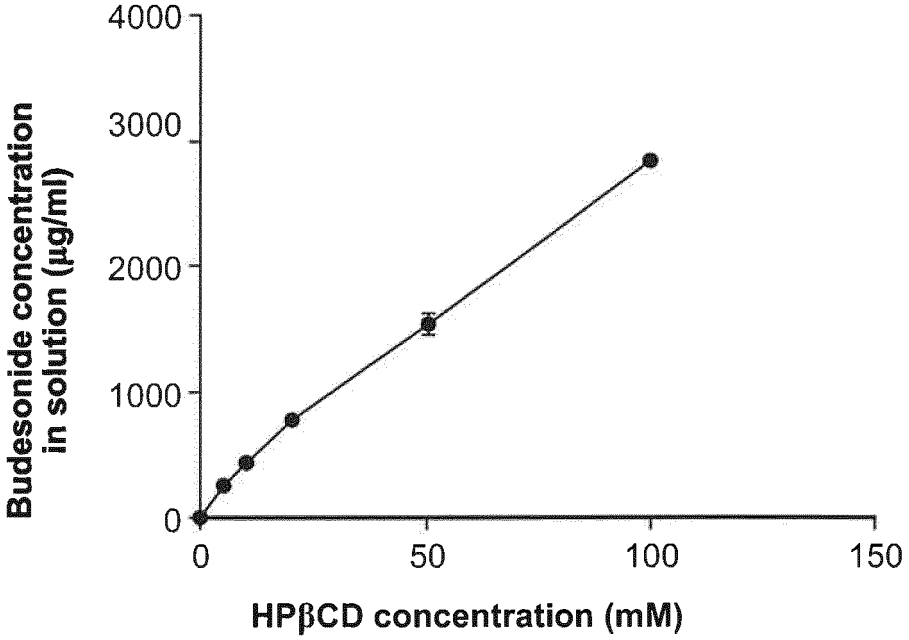

Budesonide concentration in solution (µg/ml)
4000
3000
2000
1000
0
0
50
100
150
HPβCD concentration (mM)

FIG. 1

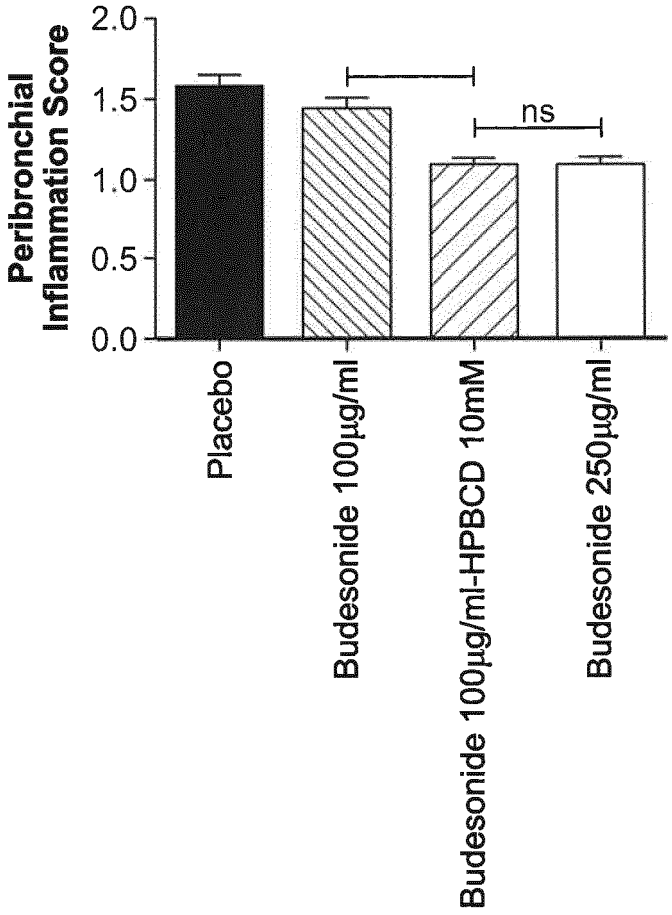

Peribronchial Inflammation Score
2.0
1.5
1.0
0.5
0.0
ns
Placebo
Budesonide 100µg/ml
Budesonide 100µg/ml-HPBCD 10mM
Budesonide 250µg/ml

FIG. 2

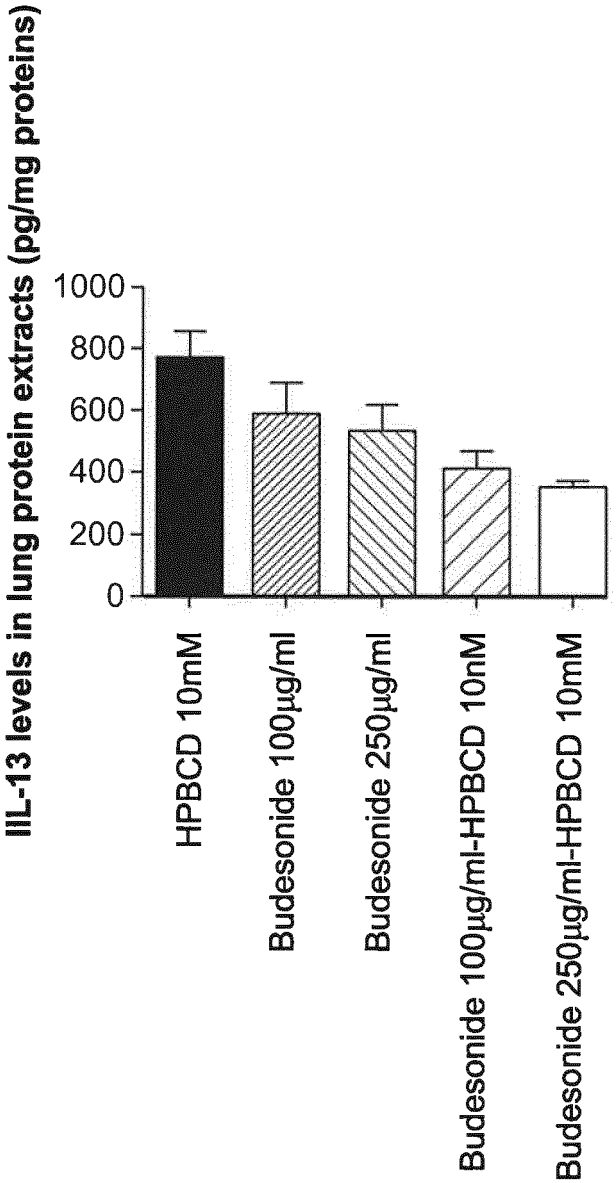

IIL-13 levels in lung protein extracts (pg/mg proteins)
1000
800
600
400
200
0
HPBCD 10mM
Budesonide 100µg/ml
Budesonide 250µg/ml
Budesonide 100µg/ml-HPBCD 10nM
Budesonide 250µg/ml-HPBCD 10mM

FIG. 3

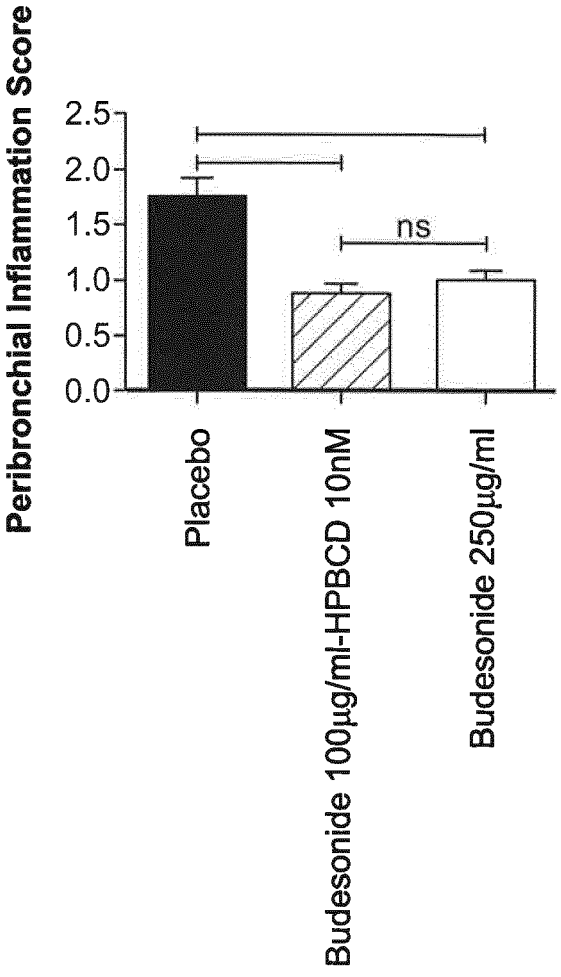

Peribronchial Inflammation Score
2.5
2.0
1.5
1.0
0.5
0.0
ns
Placebo
Budesonide 100µg/ml-HPBCD 10nM
Budesonide 250µg/ml

FIG. 4

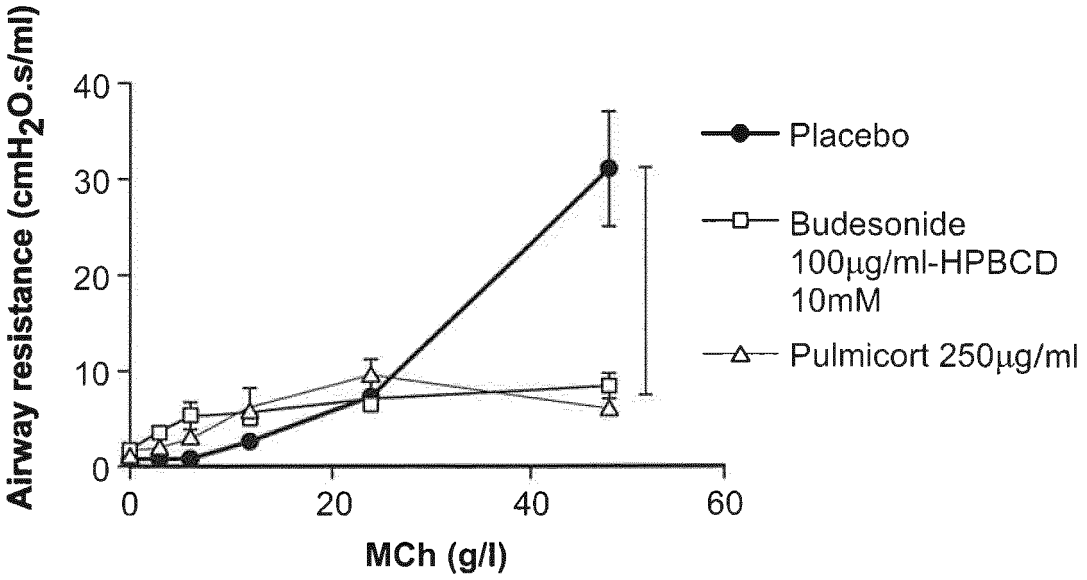

Airway resistance (cmH2O.s/ml)
40
30
20
10
0
0
20
40
60
MCh (g/l)
Placebo
Budesonide 100µg/ml-HPBCD 10mM
Pulmicort 250µg/ml

FIG. 5

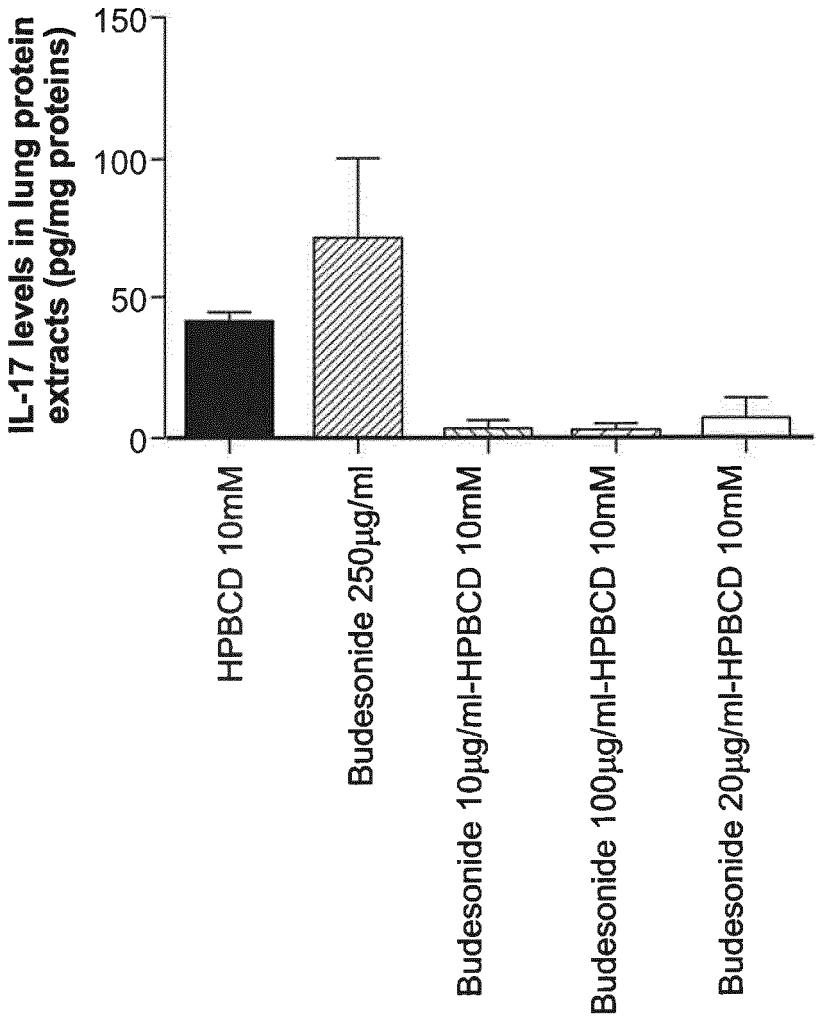

IL-17 levels in lung protein extracts (pg/mg proteins)
150
100
50
0
HPBCD 10mM
Budesonide 250µg/ml
Budesonide 10µg/ml-HPBCD 10mM
Budesonide 100µg/ml-HPBCD 10mM
Budesonide 20µg/ml-HPBCD 10mM

FIG. 6

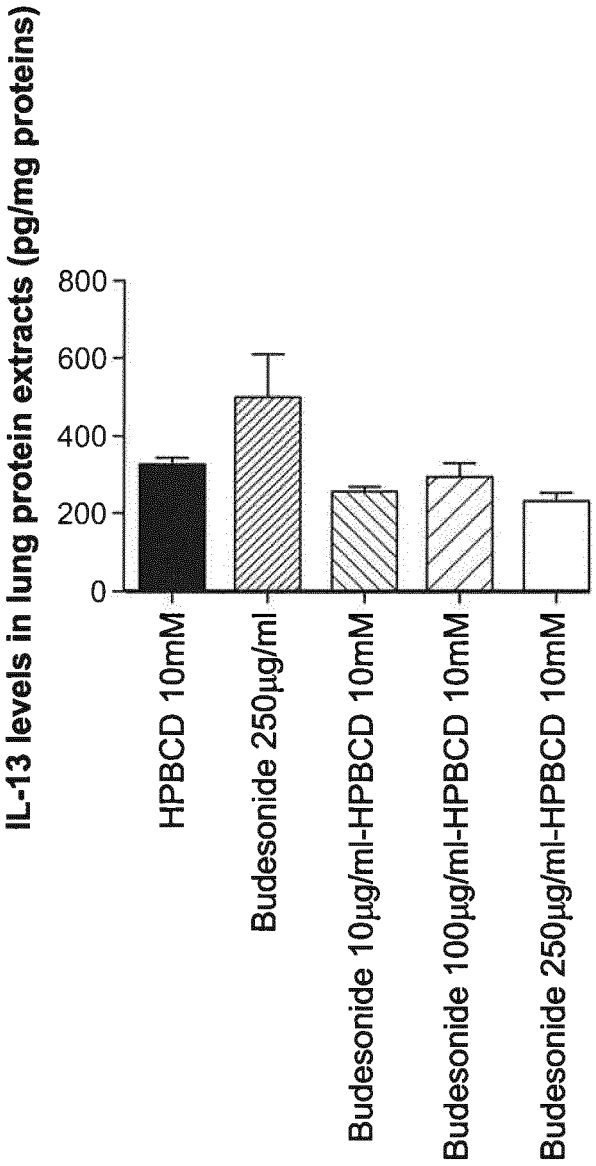

IL-13 levels in lung protein extracts (pg/mg proteins)
800
600
400
200
0
HPBCD 10mM
Budesonide 250µg/ml
Budesonide 10µg/ml-HPBCD 10mM
Budesonide 100µg/ml-HPBCD 10mM
Budesonide 250µg/ml-HPBCD 10mM

FIG. 7

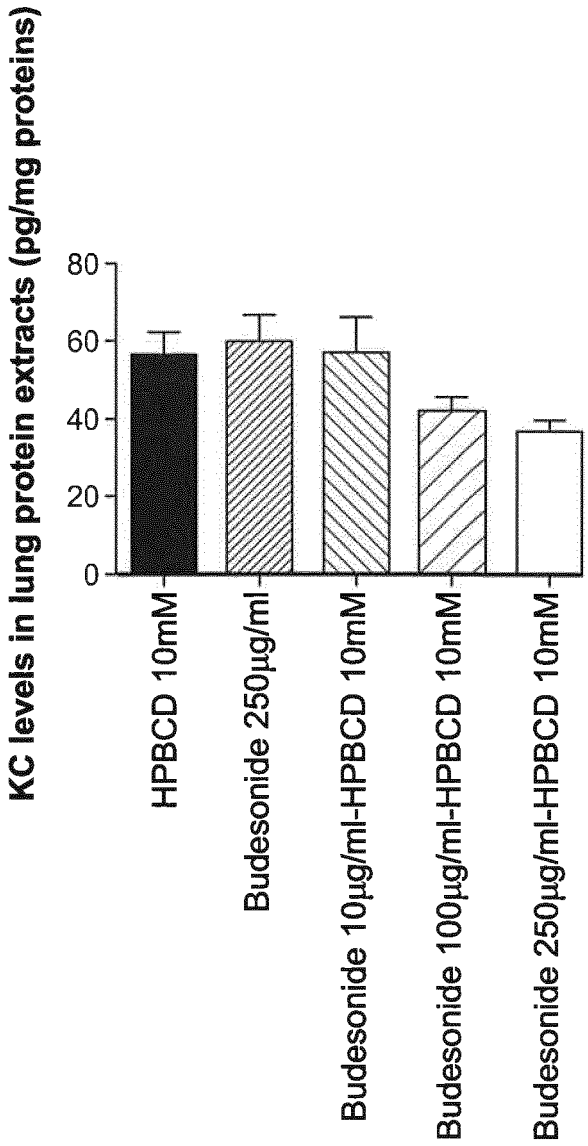

KC levels in lung protein extracts (pg/mg proteins)
80
60
40
20
0
HPBCD 10mM
Budesonide 250µg/ml
Budesonide 10µg/ml-HPBCD 10mM
Budesonide 100µg/ml-HPBCD 10mM
Budesonide 250µg/ml-HPBCD 10mM

FIG. 8

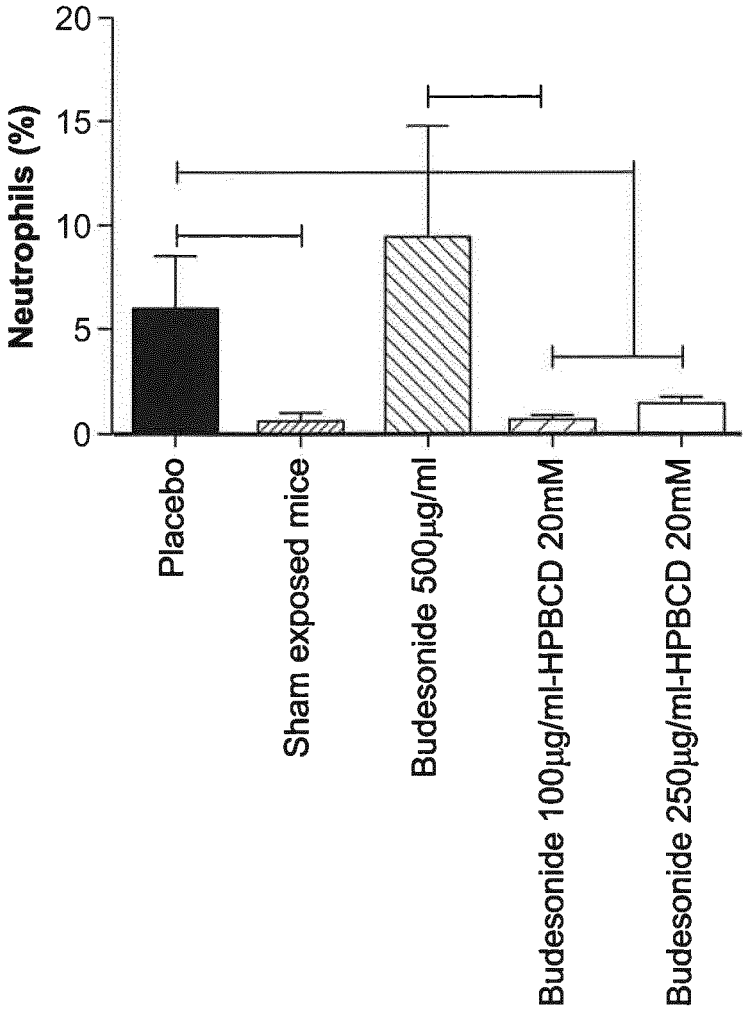

Neutrophils (%)
20
15
10
5
0
Placebo
Sham exposed mice
Budesonide 500µg/ml
Budesonide 100µg/ml-HPBCD 20mM
Budesonide 250µg/ml-HPBCD 20mM

FIG. 9

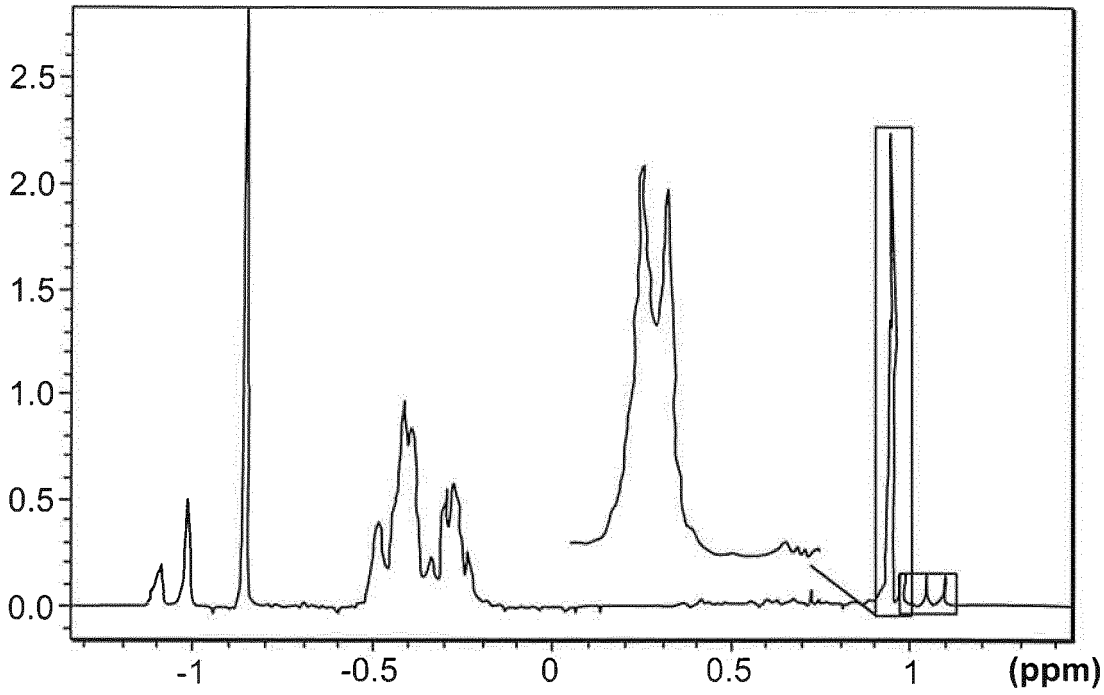


FIG. 10A

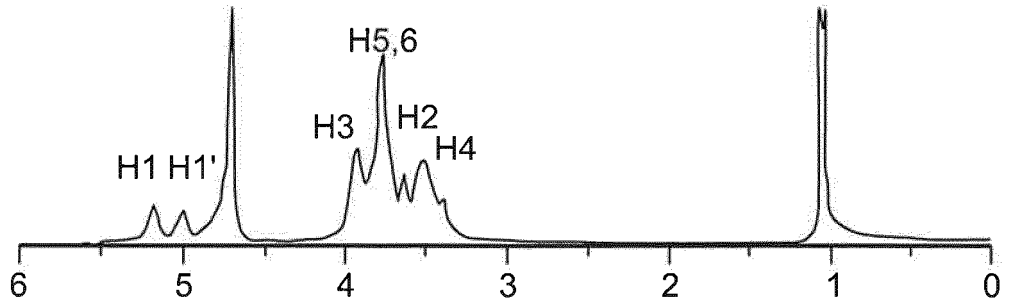
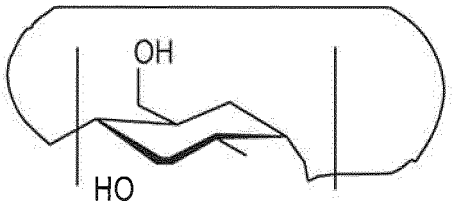
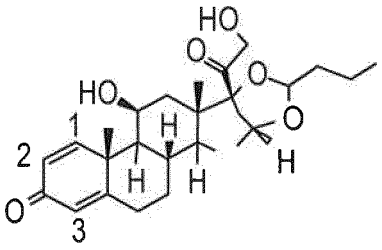
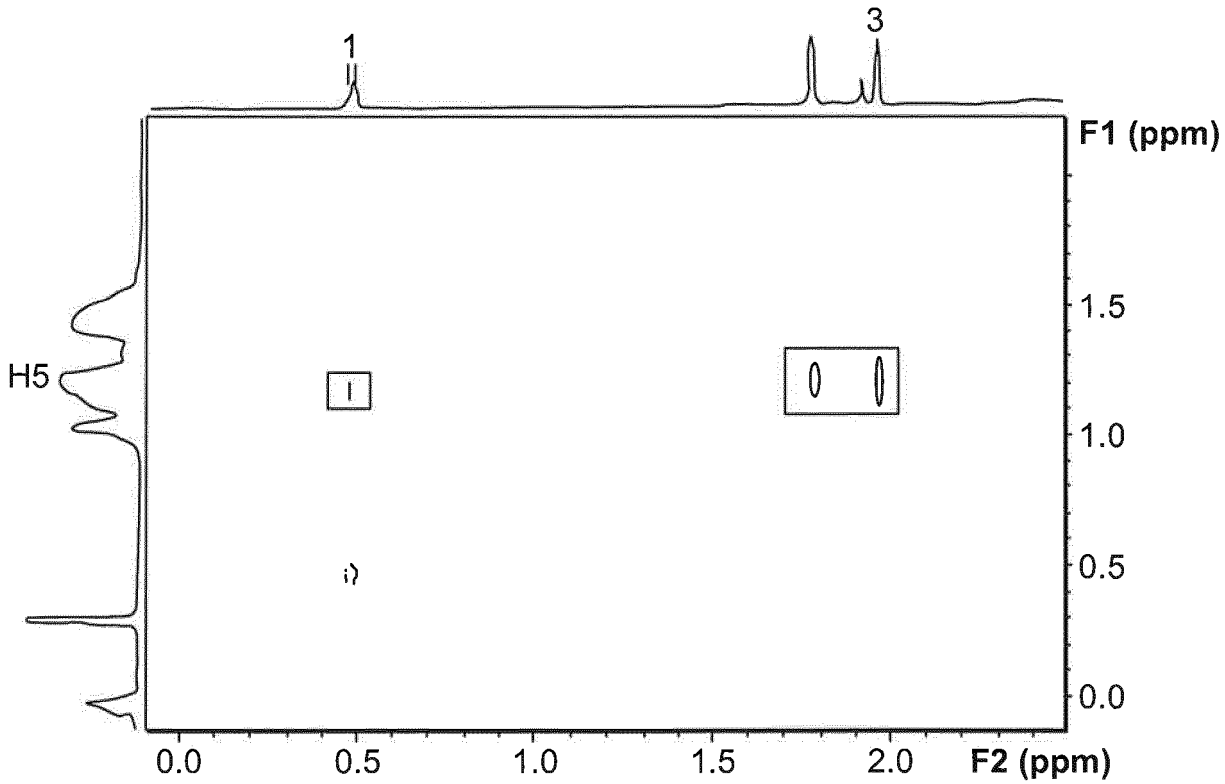


FIG. 10B

FIG. 11


OH
HO


HO
O
O
HO
1
H
2
H
H
O
H
3


1
3
F1 (ppm)
H5
1.5
1.0
0.5
0.0
0.0
0.5
1.0
1.5
2.0
F2 (ppm)

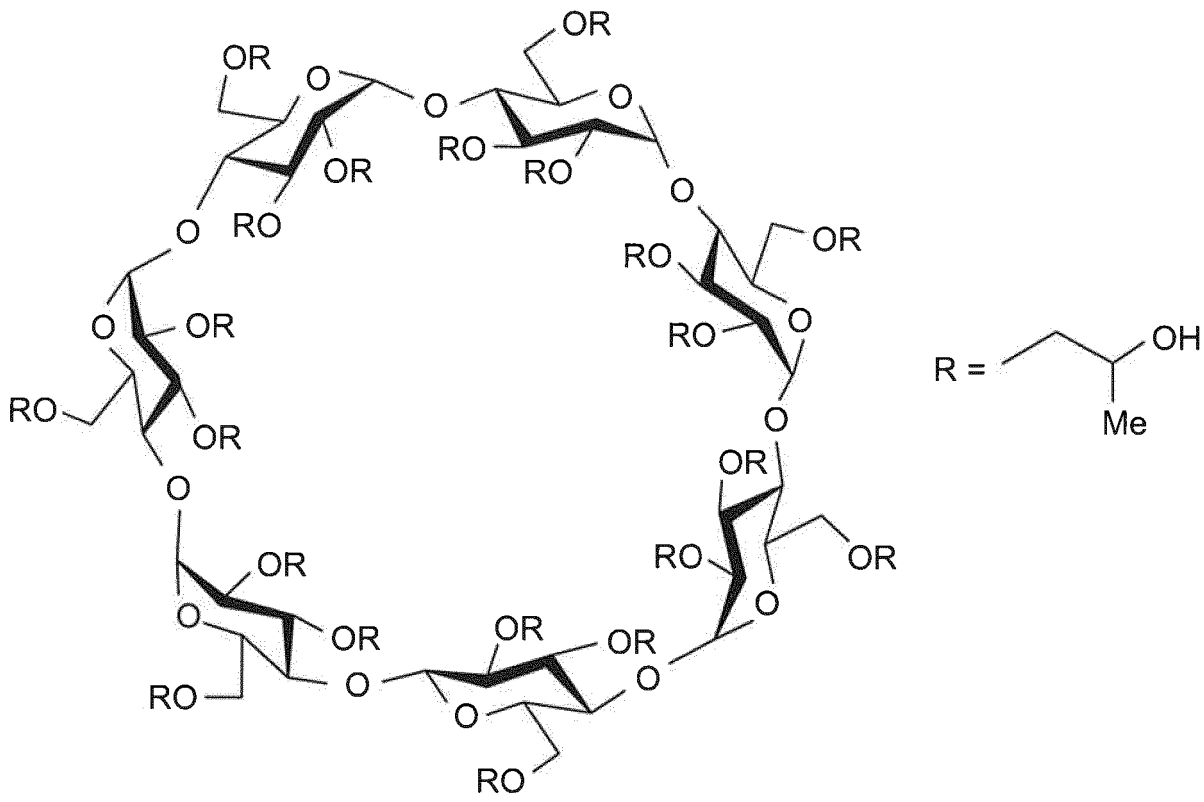


FIG. 12

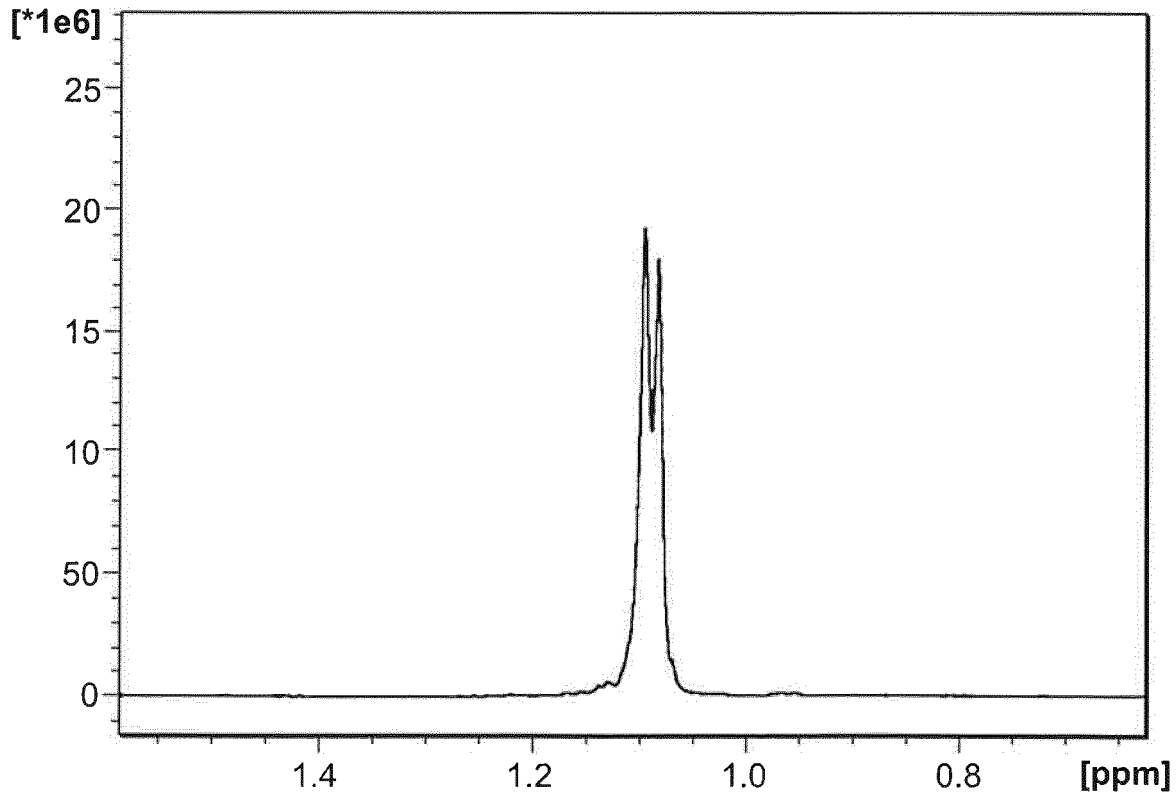


FIG. 13

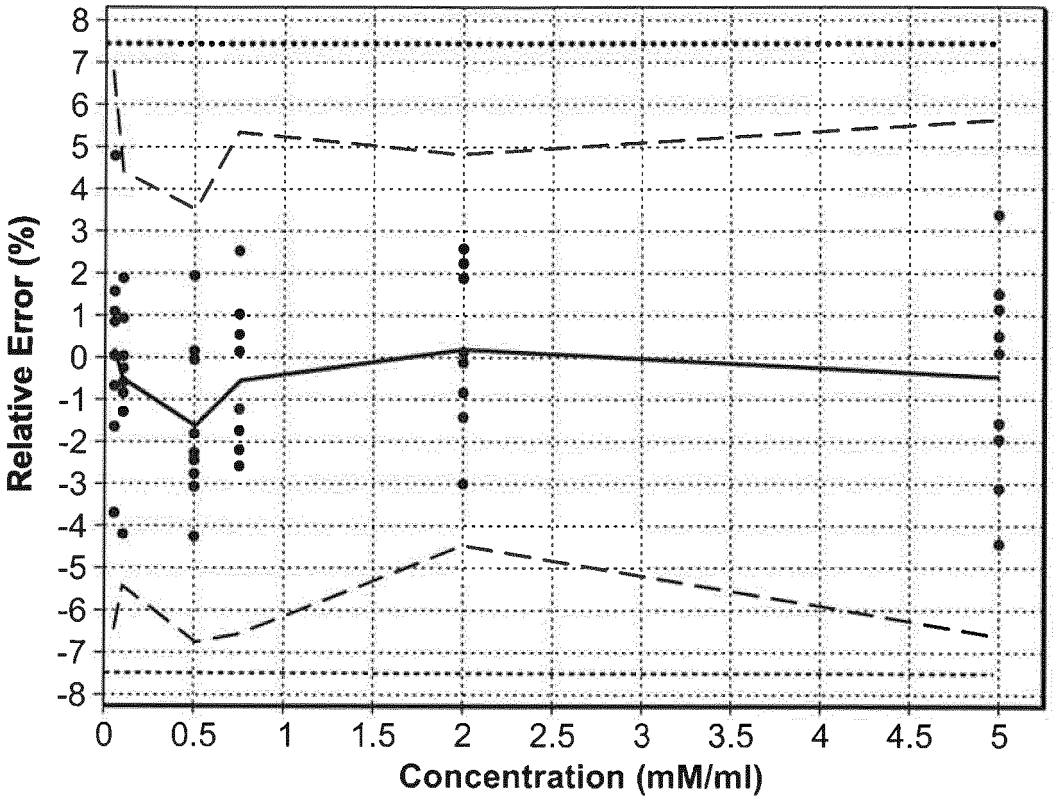

Relative Error (%)
8
7
6
5
4
3
2
1
0
-1
-2
-3
-4
-5
-6
-7
-8
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
Concentration (mM/ml)

FIG. 14

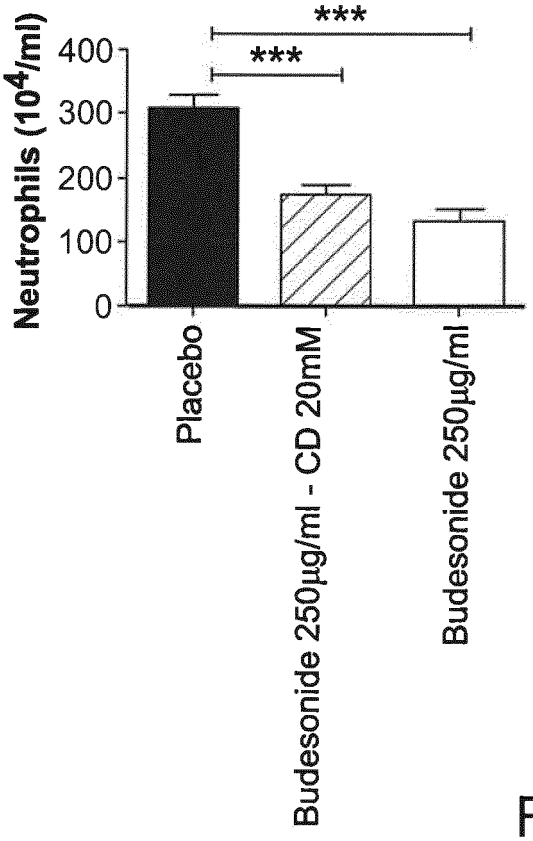

Neutrophils (10^4/ml)
400
300
200
100
0
***
***
Placebo
Budesonide 250µg/ml - CD 20mM
Budesonide 250µg/ml

FIG. 15

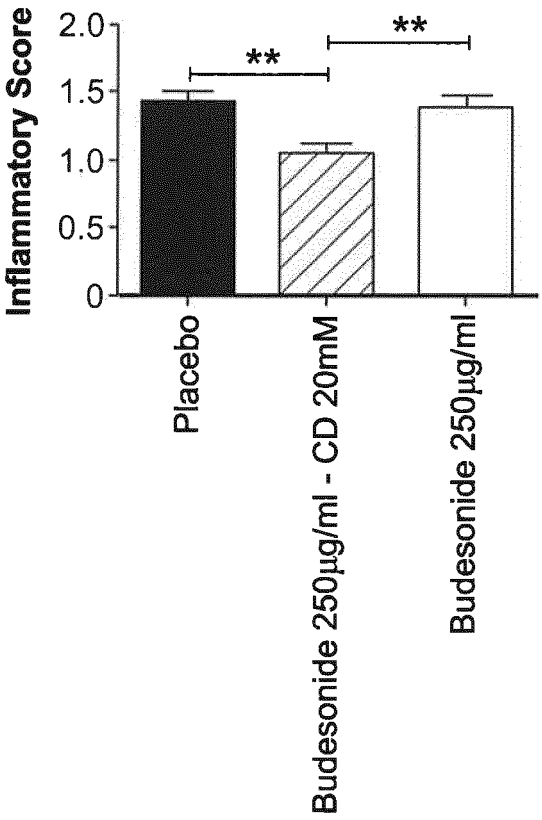
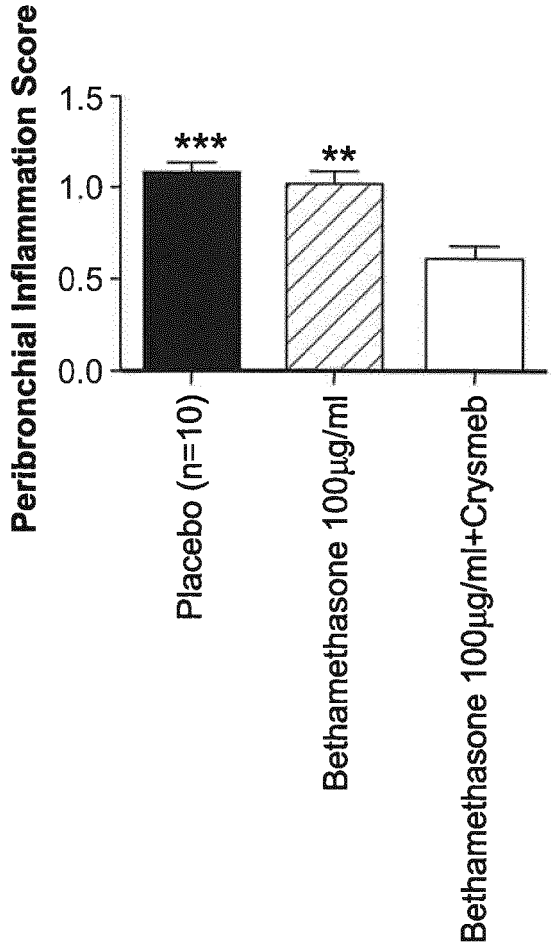


FIG. 16



*** Placebo vs Bethamethasone 100ug/ml+Crysmeb 20mM

** Bethamethasone 100mg/ml vs bethamethasone 100 mg/ml + Crysmeb 20mM

FIG. 17

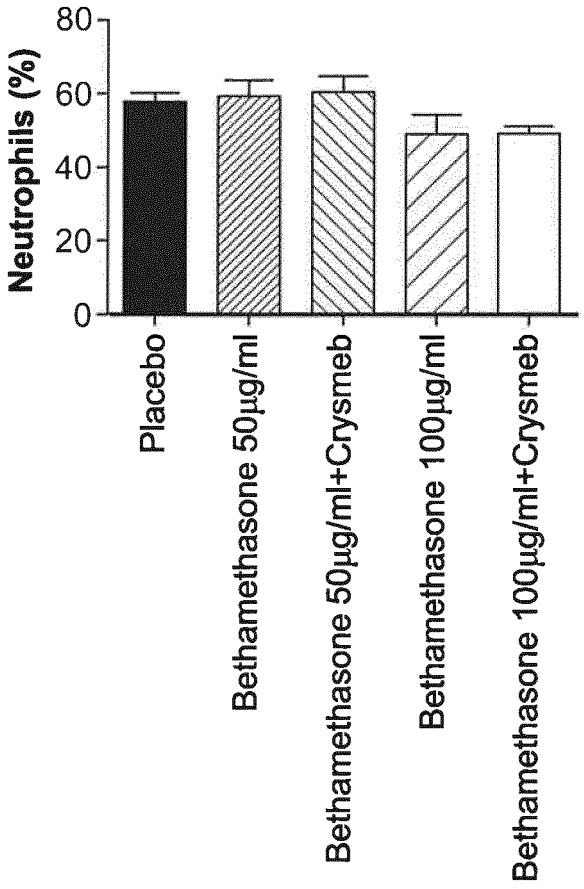

Neutrophils (%)
80
60
40
20
0
Placebo
Bethamethasone 50µg/ml
Bethamethasone 50µg/ml+Crysmeb
Bethamethasone 100µg/ml
Bethamethasone 100µg/ml+Crysmeb

FIG. 18

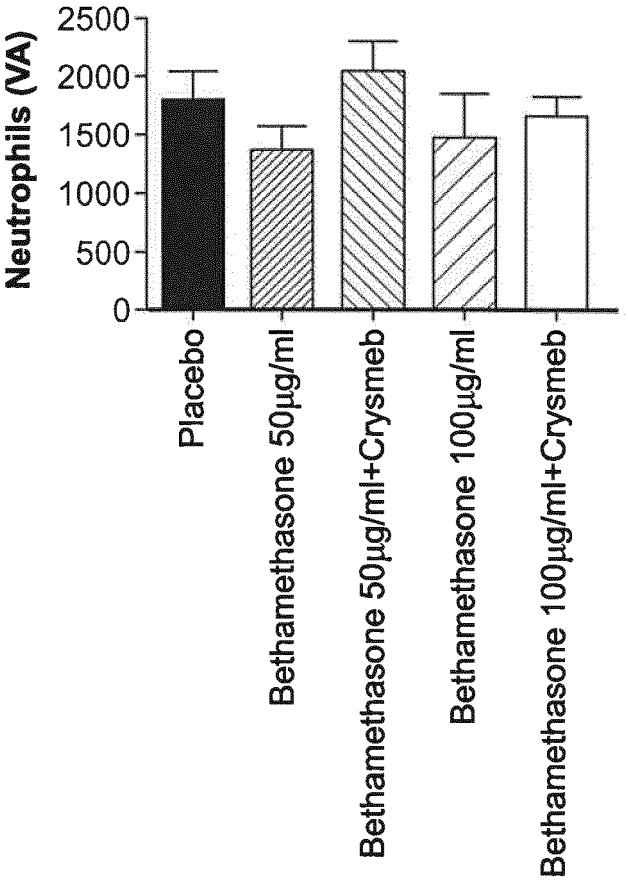
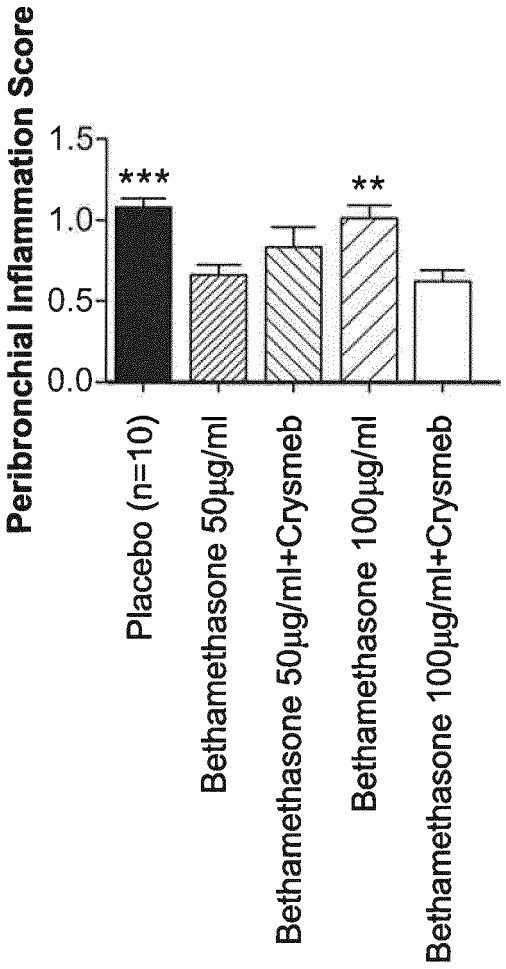

Neutrophils (VA)
2500
2000
1500
1000
500
0
Placebo
Bethamethasone 50µg/ml
Bethamethasone 50µg/ml+Crysmeb
Bethamethasone 100µg/ml
Bethamethasone 100µg/ml+Crysmeb

FIG. 19

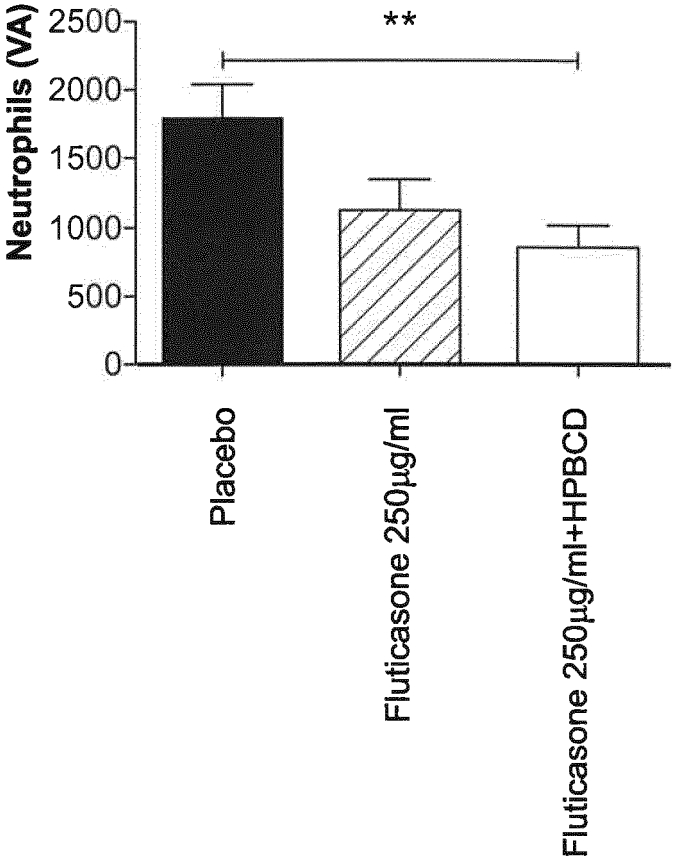


*** Placebo vs Bethamethasone 50µg/ml

*** Placebo vs Bethamethasone 100µg/ml+Crysmeb 20mM

** Bethamethasone 100µg/ml vs bethamethasone 100 µg/ml + Crysmeb 20mM

FIG. 20



** Placebo vs Fluticasone 250µg/ml + HPBCD

FIG. 21