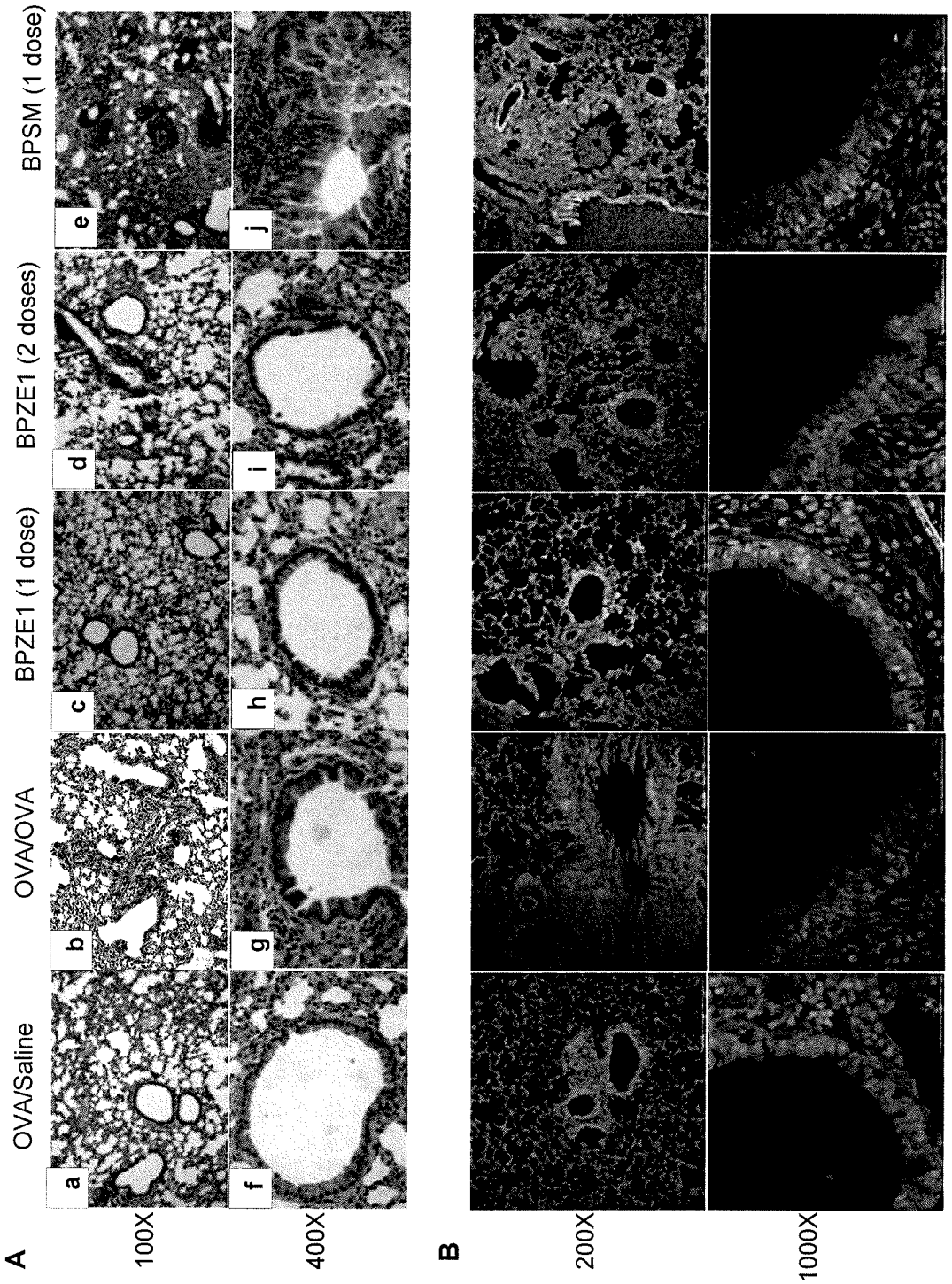

A
OVA/Saline
OVA/OVA
OVA/OVA
BPZE1 (1 dose)
BPZE1 (2 doses)
BPSM (1 dose)
a
b
c
d
e
f
g
h
i
j
100X
400X
B
200X
1000X

Figure 1

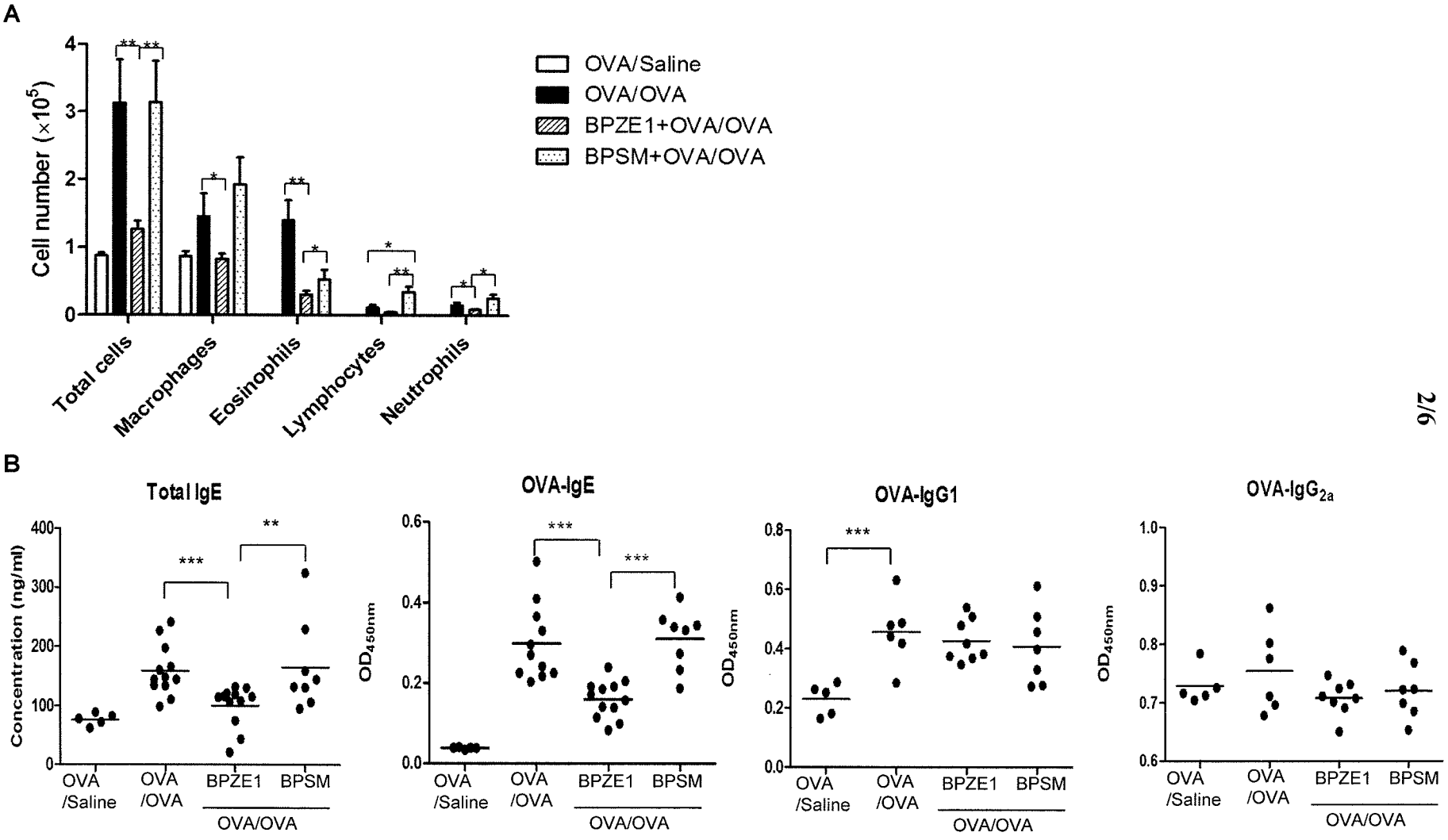

A
Cell number (×10^5)
OVA/Saline
OVA/OVA
BPZE1+OVA/OVA
BPSM+OVA/OVA
Total cells
Macrophages
Eosinophils
Lymphocytes
Neutrophils
B
Total IgE
Concentration (ng/ml)
OVA-IgE
OD450nm
OVA-IgG1
OVA-IgG2a
OVA /Saline
OVA /OVA
BPZE1
BPSM
OVA/OVA

Figure 2

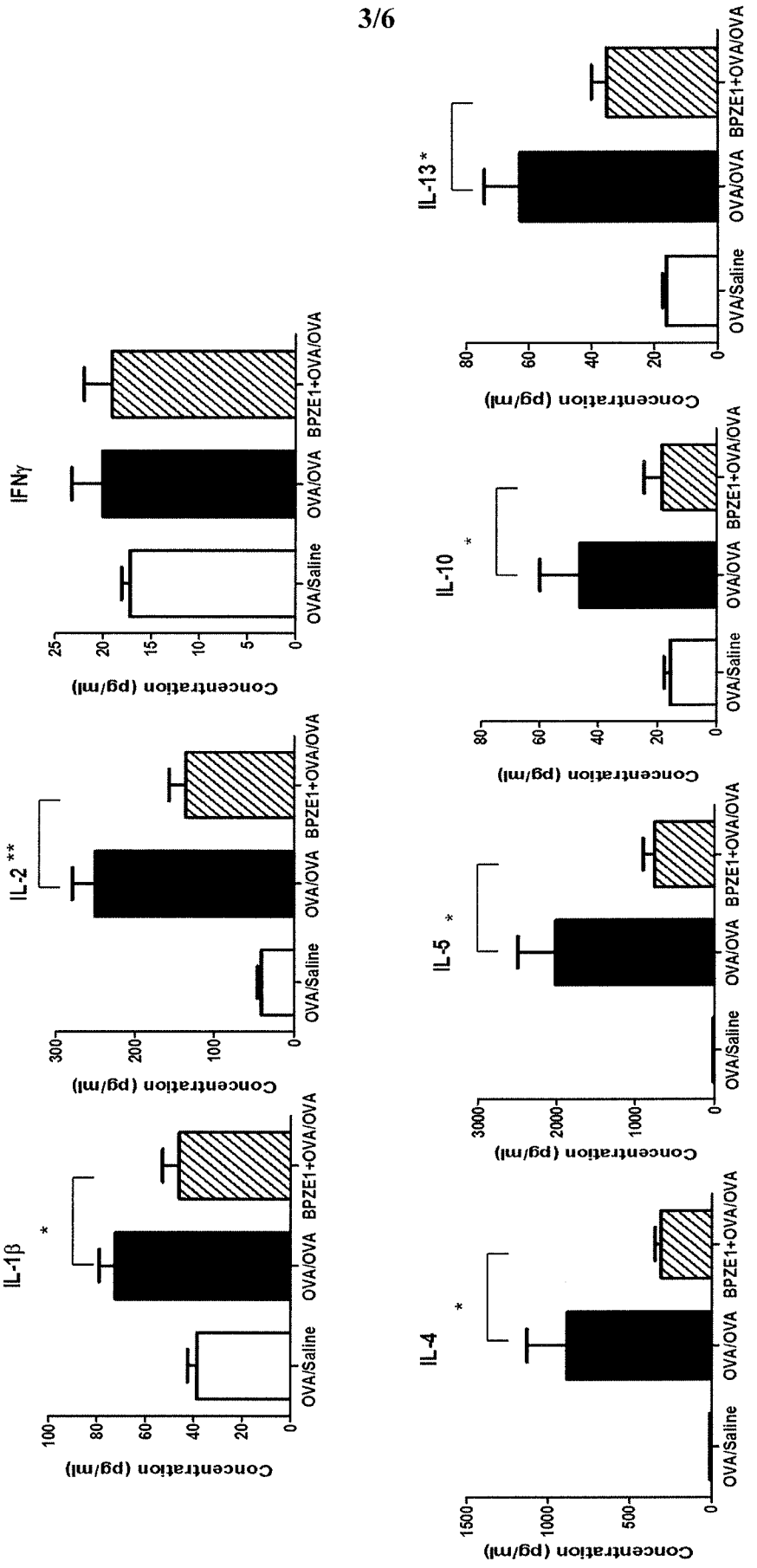
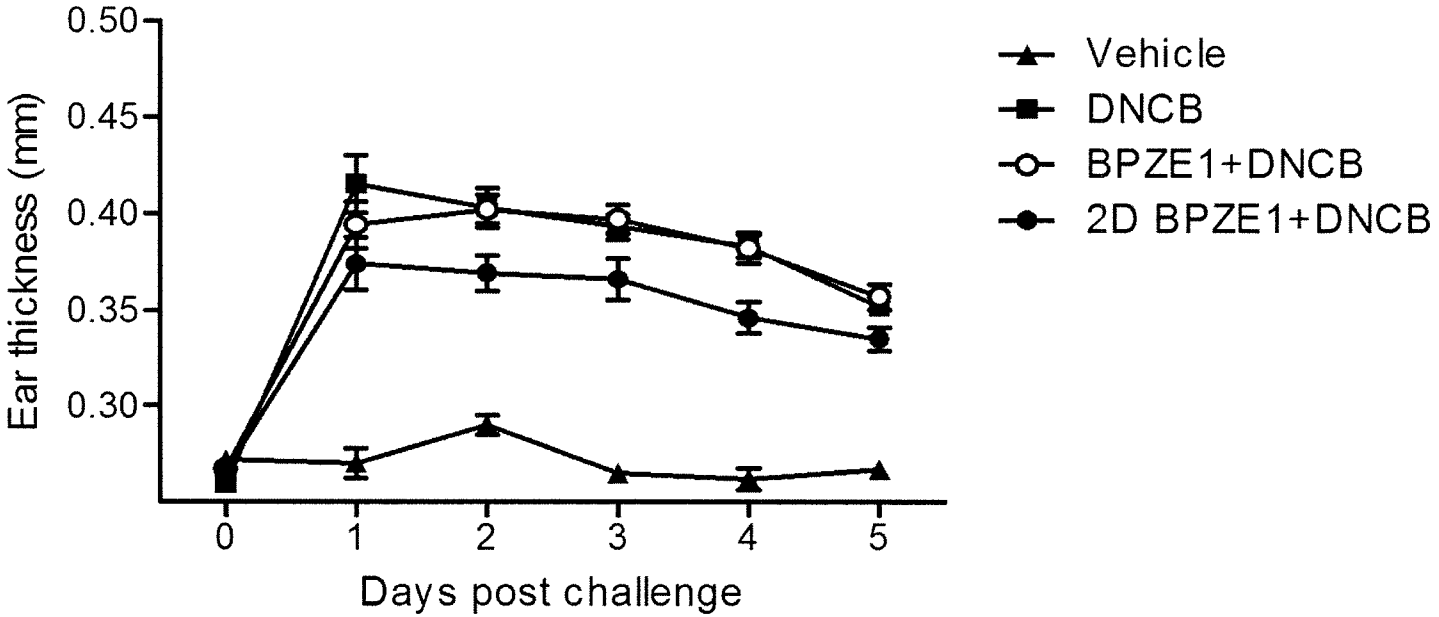

IL-1β
*
Concentration (pg/ml)
100
80
60
40
20
0
OVA/Saline
OVA/OVA
BPZE1+OVA/OVA
IL-2 **
Concentration (pg/ml)
300
200
100
0
OVA/Saline
OVA/OVA
BPZE1+OVA/OVA
IFNγ
Concentration (pg/ml)
25
20
15
10
5
0
OVA/Saline
OVA/OVA
BPZE1+OVA/OVA
IL-4
*
Concentration (pg/ml)
1500
1000
500
0
OVA/Saline
OVA/OVA
BPZE1+OVA/OVA
IL-5 *
Concentration (pg/ml)
3000
2000
1000
0
OVA/Saline
OVA/OVA
BPZE1+OVA/OVA
IL-10 *
Concentration (pg/ml)
80
60
40
20
0
OVA/Saline
OVA/OVA
BPZE1+OVA/OVA
IL-13 *
Concentration (pg/ml)
80
60
40
20
0
OVA/Saline
OVA/OVA
BPZE1+OVA/OVA

Figure 3

A


0.50
0.45
0.40
0.35
0.30
Ear thickness (mm)
0
1
2
3
4
5
Days post challenge
Vehicle
DNCB
BPZE1+DNCB
2D BPZE1+DNCB

B

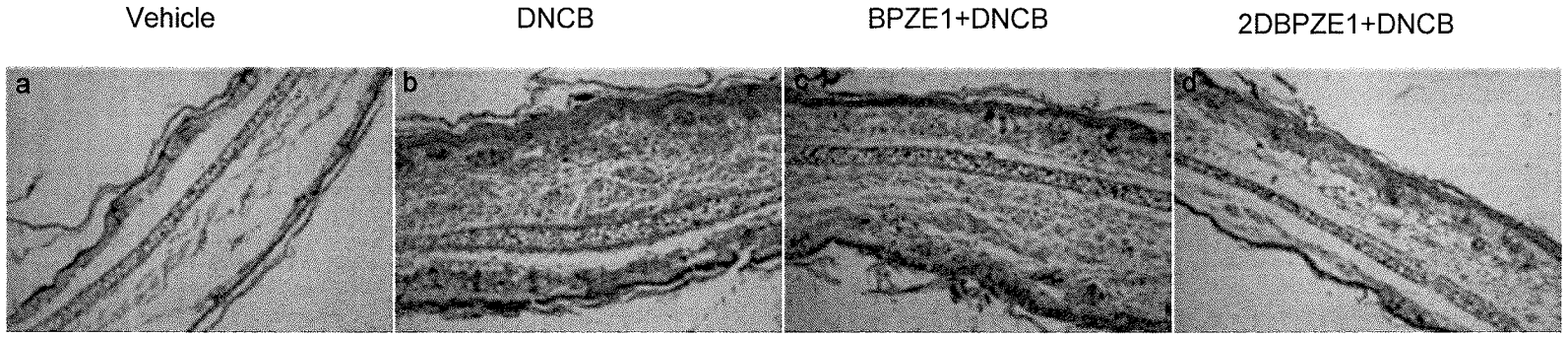

Vehicle
DNCB
BPZE1+DNCB
2DBPZE1+DNCB
a
b
c
d

Figure 4

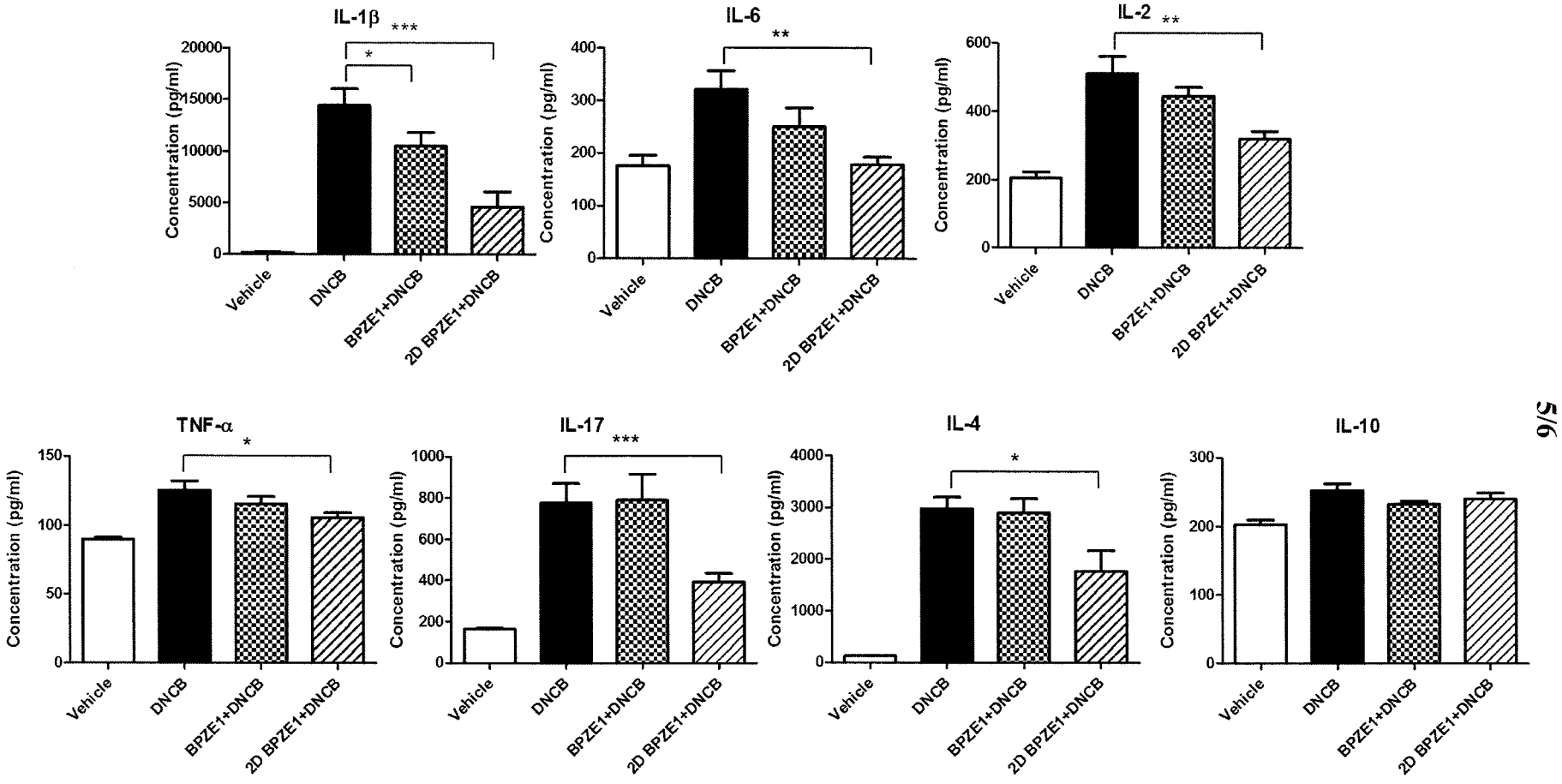

IL-1β
***
*
Concentration (pg/ml)
20000
15000
10000
5000
0
Vehicle
DNCB
BPZE1+DNCB
2D BPZE1+DNCB
IL-6
**
Concentration (pg/ml)
400
300
200
100
0
Vehicle
DNCB
BPZE1+DNCB
2D BPZE1+DNCB
IL-2
**
Concentration (pg/ml)
600
400
200
0
Vehicle
DNCB
BPZE1+DNCB
2D BPZE1+DNCB
TNF-α
*
Concentration (pg/ml)
150
100
50
0
Vehicle
DNCB
BPZE1+DNCB
2D BPZE1+DNCB
IL-17
***
Concentration (pg/ml)
1000
800
600
400
200
0
Vehicle
DNCB
BPZE1+DNCB
2D BPZE1+DNCB
IL-4
*
Concentration (pg/ml)
4000
3000
2000
1000
0
Vehicle
DNCB
BPZE1+DNCB
2D BPZE1+DNCB
IL-10
Concentration (pg/ml)
300
200
100
0
Vehicle
DNCB
BPZE1+DNCB
2D BPZE1+DNCB

Figure 5

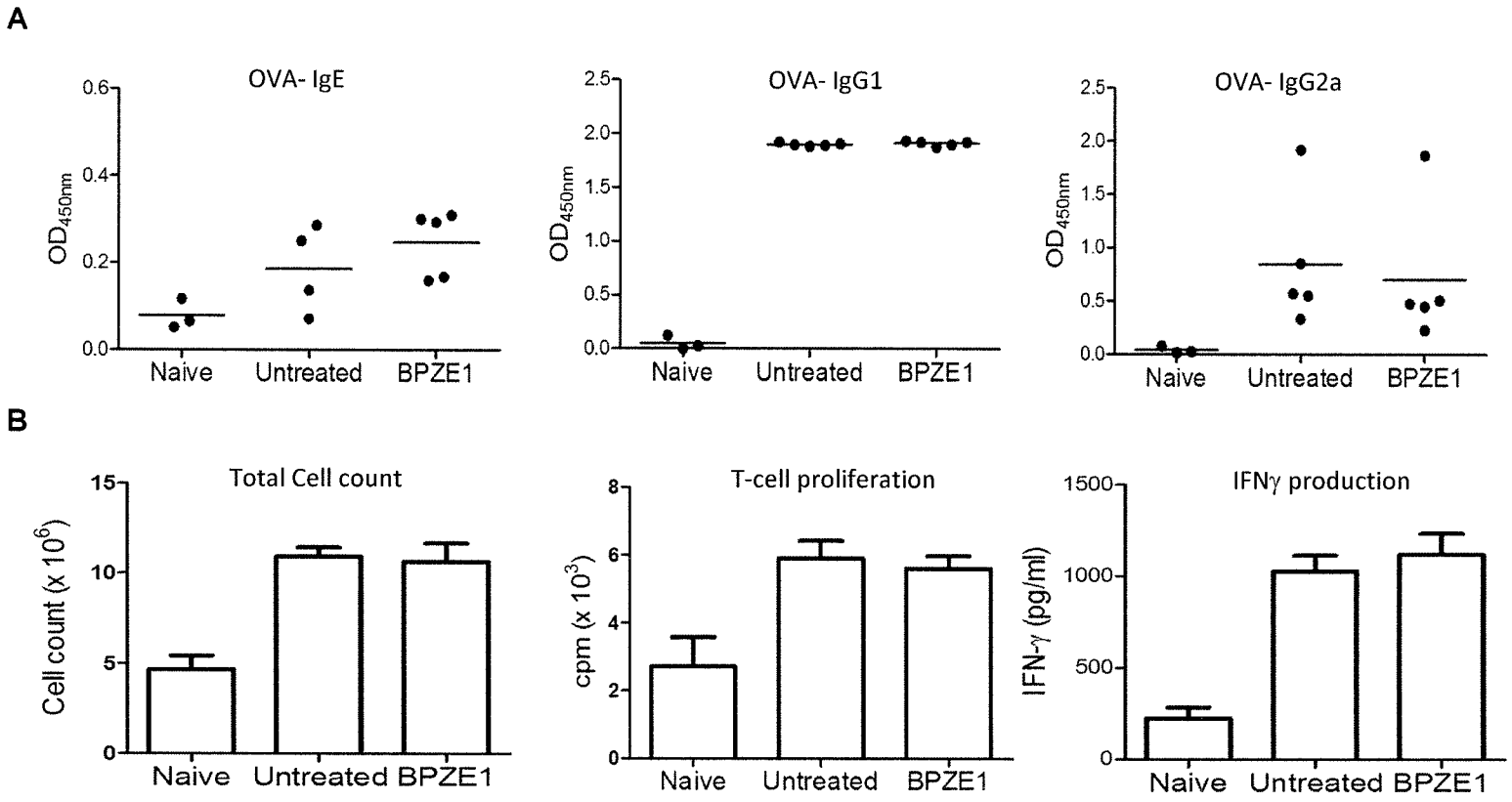

A
OVA- IgE
OVA- IgG1
OVA- IgG2a
OD450nm
0.0
0.2
0.4
0.6
0.5
1.0
1.5
2.0
2.5
Naive
Untreated
BPZE1
B
Total Cell count
Cell count (x 10^6)
0
5
10
15
T-cell proliferation
cpm (x 10^3)
0
2
4
6
8
IFNγ production
IFN-γ (pg/ml)
0
500
1000
1500

Figure 6