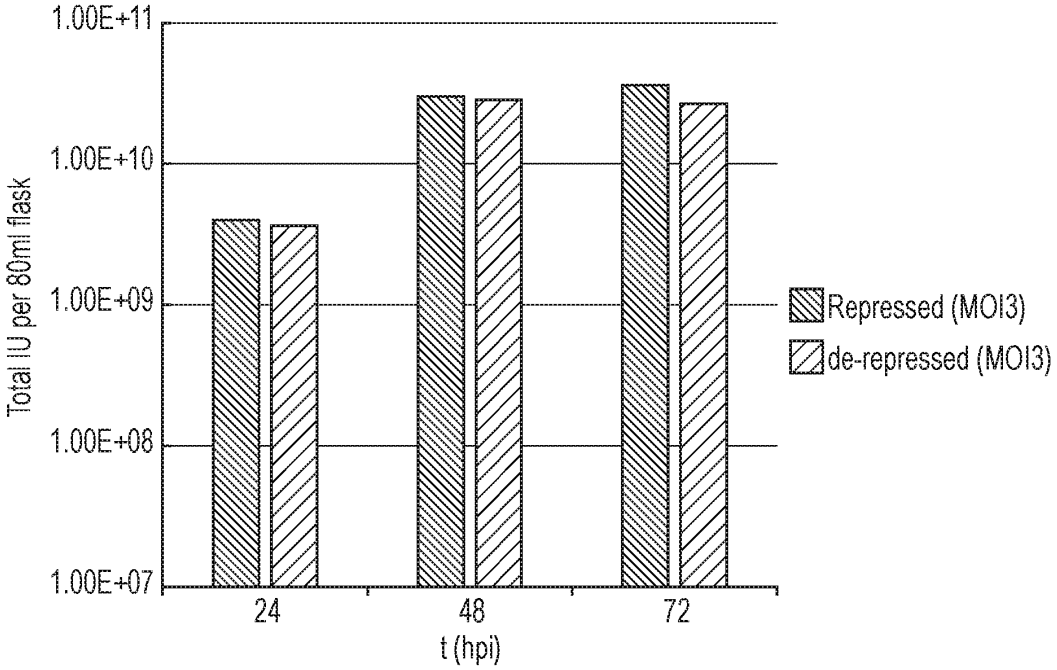

1.00E+11
1.00E+10
1.00E+09
1.00E+08
1.00E+07
Total IU per 80ml flask
24
48
72
t (hpi)
Repressed (MOI3)
de-repressed (MOI3)

FIG. 1

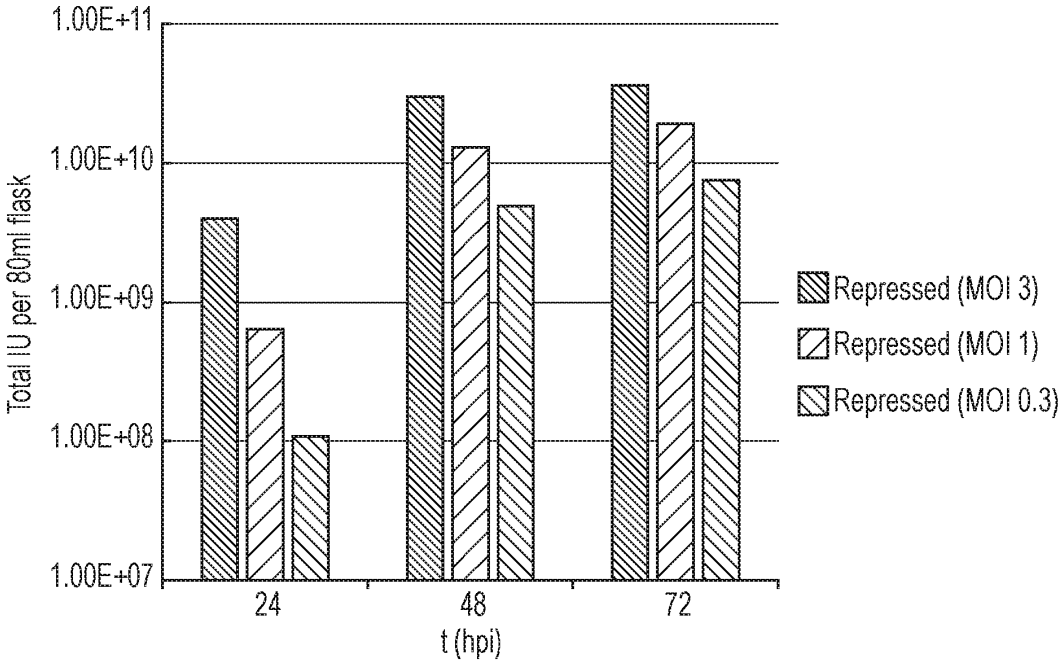

1.00E+11
1.00E+10
1.00E+09
1.00E+08
1.00E+07
Total IU per 80ml flask
24
48
72
t (hpi)
Repressed (MOI 3)
Repressed (MOI 1)
Repressed (MOI 0.3)

FIG. 2

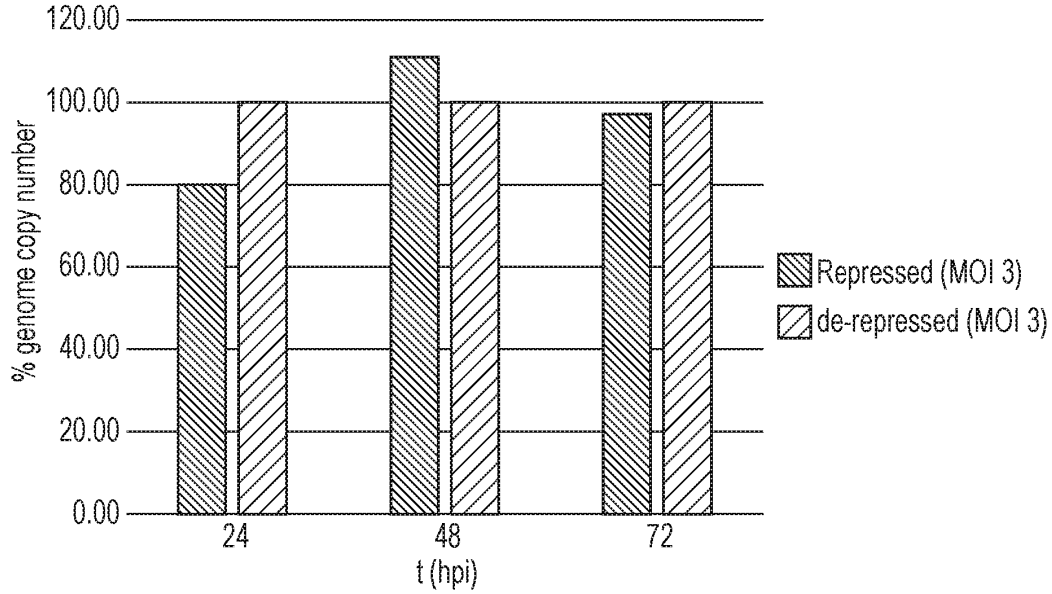

120.00
100.00
80.00
60.00
40.00
20.00
0.00
% genome copy number
24
48
72
t (hpi)
Repressed (MOI 3)
de-repressed (MOI 3)

FIG. 3

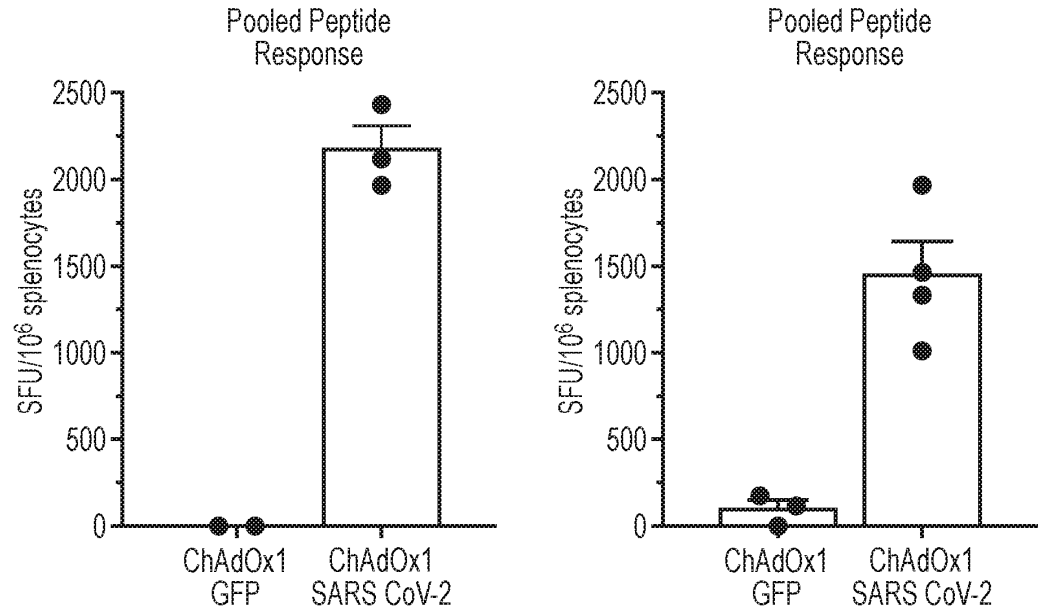

Pooled Peptide Response
2500
2000
1500
1000
500
0
SFU/10^6 splenocytes
ChAdOx1 GFP
ChAdOx1 SARS CoV-2
Pooled Peptide Response
2500
2000
1500
1000
500
0
SFU/10^6 splenocytes
ChAdOx1 GFP
ChAdOx1 SARS CoV-2

FIG. 4

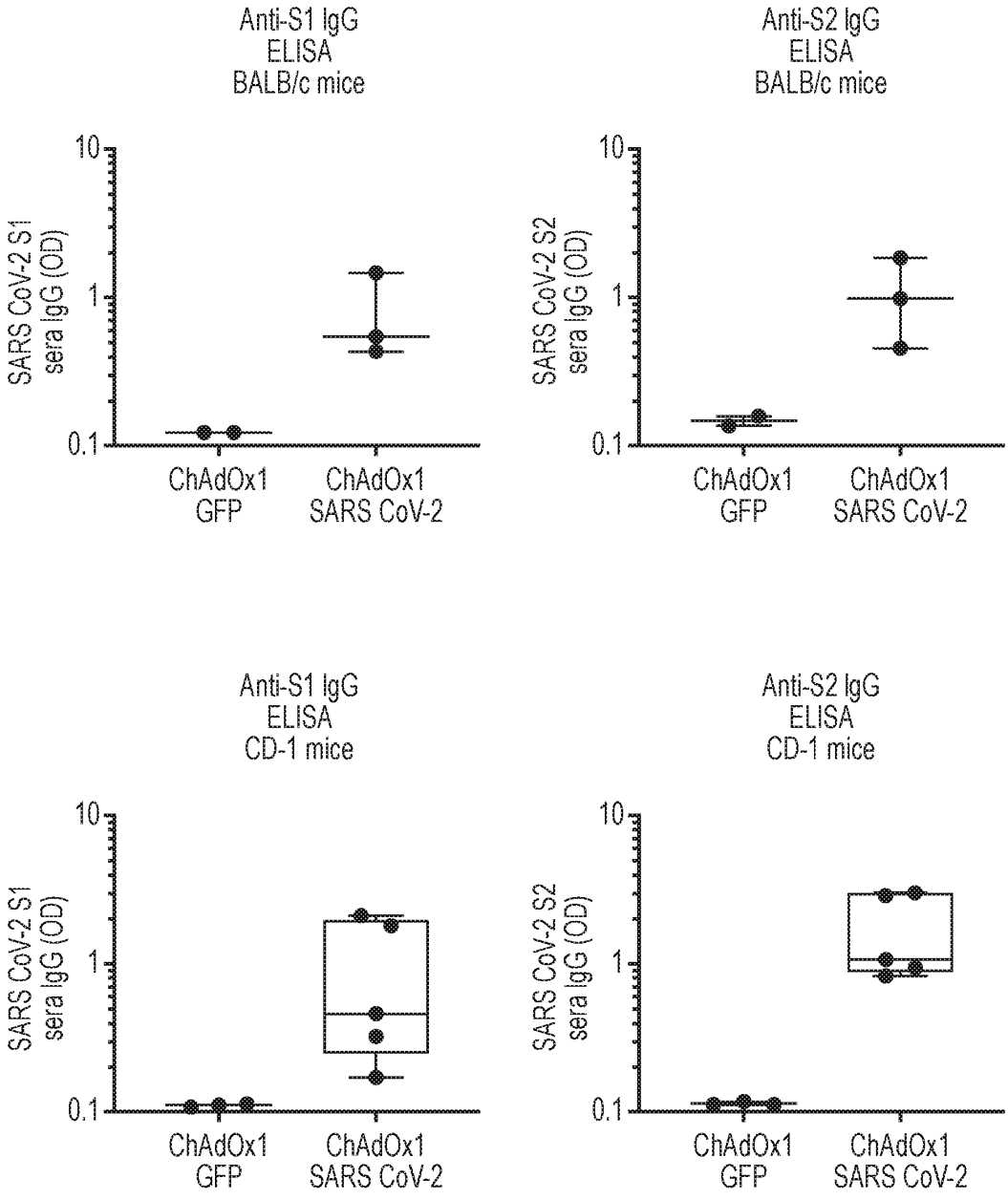
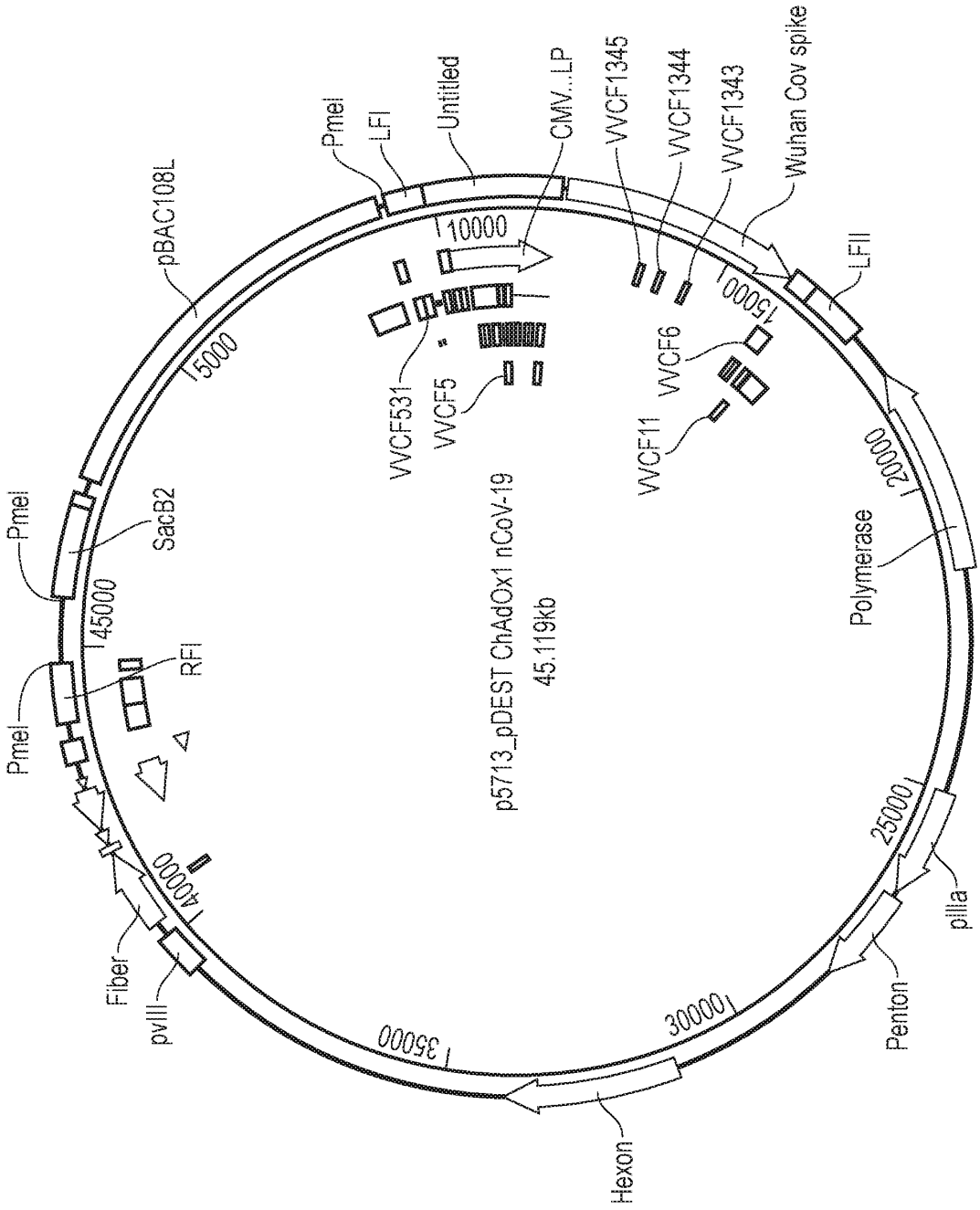

Anti-S1 IgG
ELISA
BALB/c mice
SARS CoV-2 S1
sera IgG (OD)
10
1
0.1
ChAdOx1
GFP
ChAdOx1
SARS CoV-2
Anti-S2 IgG
ELISA
BALB/c mice
SARS CoV-2 S2
sera IgG (OD)
10
1
0.1
ChAdOx1
GFP
ChAdOx1
SARS CoV-2
Anti-S1 IgG
ELISA
CD-1 mice
SARS CoV-2 S1
sera IgG (OD)
10
1
0.1
ChAdOx1
GFP
ChAdOx1
SARS CoV-2
Anti-S2 IgG
ELISA
CD-1 mice
SARS CoV-2 S2
sera IgG (OD)
10
1
0.1
ChAdOx1
GFP
ChAdOx1
SARS CoV-2

FIG. 5

FIG. 6


pBAC108L
5000
PmeI
SacB2
45000
PmeI
RFI
40000
Fiber
pVIII
35000
Hexon
30000
Penton
pIIIa
25000
Polymerase
20000
LFII
15000
Wuhan Cov spike
VVCF1343
VVCF1344
VVCF1345
CMV...LP
10000
Untitled
LFI
PmeI
VVCF531
VVCF5
VVCF6
VVCF11
p5713_pDEST ChAdOx1 nCoV-19
45.119kb

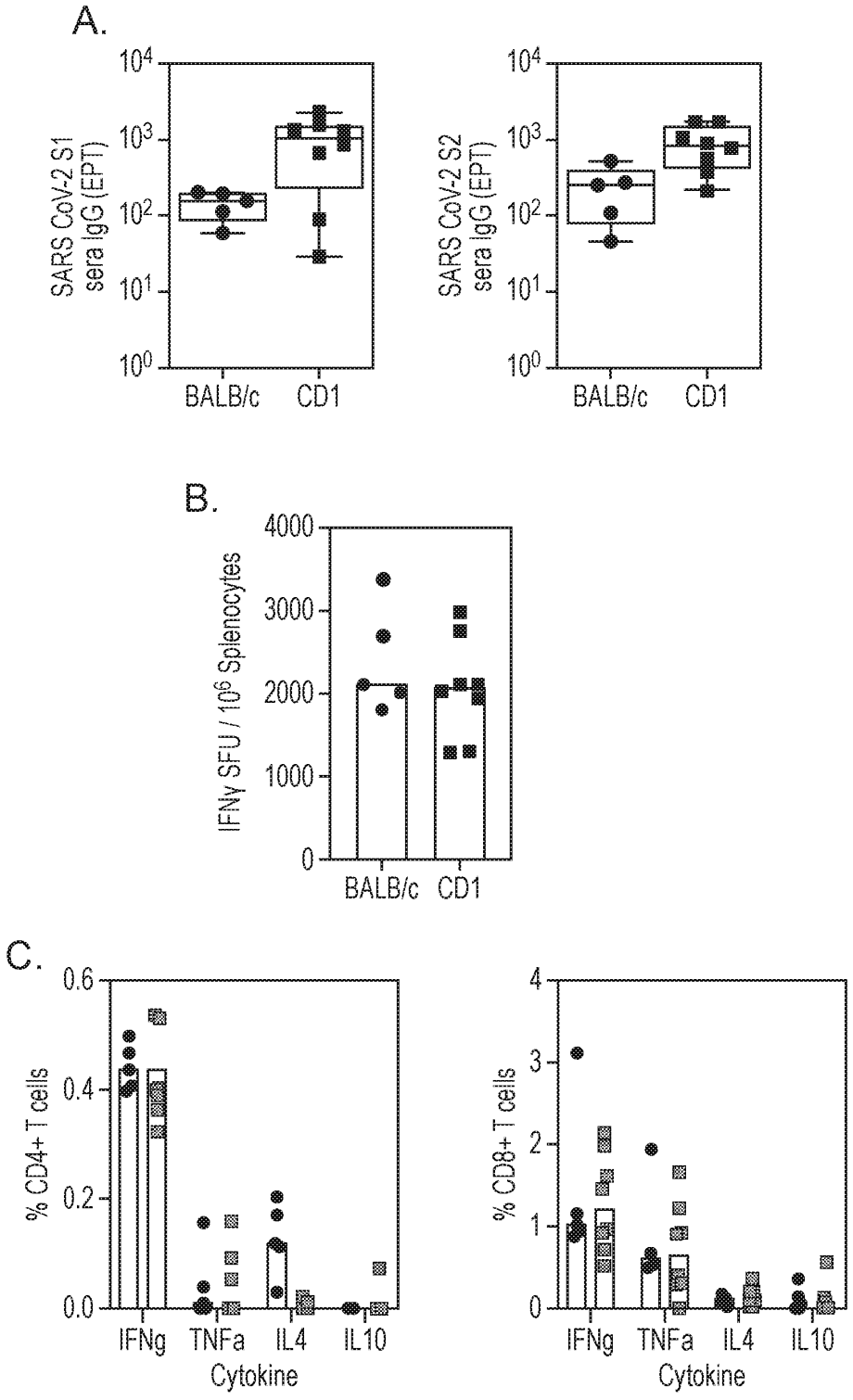

A.
SARS CoV-2 S1 sera IgG (EPT)
10^4
10^3
10^2
10^1
10^0
BALB/c
CD1
SARS CoV-2 S2 sera IgG (EPT)
10^4
10^3
10^2
10^1
10^0
BALB/c
CD1
B.
IFNγ SFU / 10^6 Splenocytes
4000
3000
2000
1000
0
BALB/c
CD1
C.
% CD4+ T cells
0.6
0.4
0.2
0.0
IFNg
TNFa
IL4
IL10
Cytokine
% CD8+ T cells
4
3
2
1
0
IFNg
TNFa
IL4
IL10
Cytokine

FIG. 7

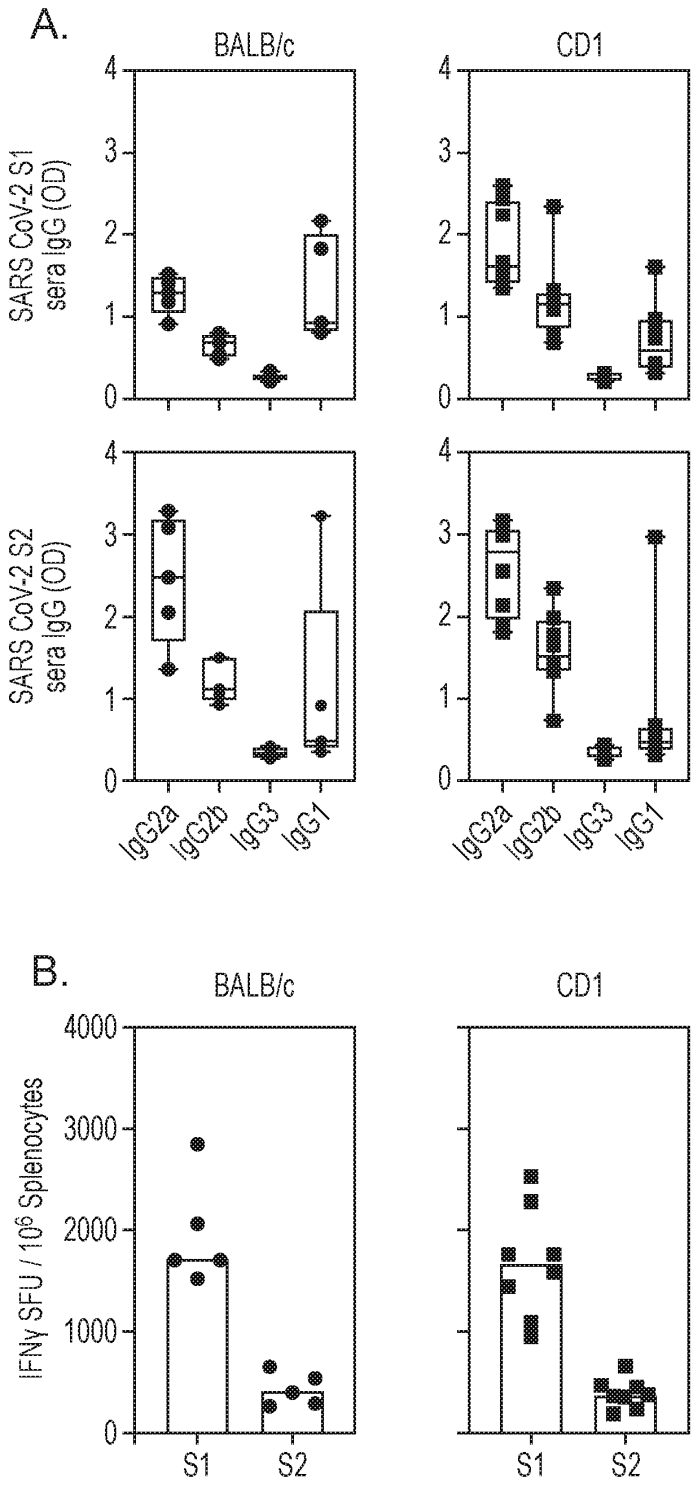

A.
BALB/c
CD1
SARS CoV-2 S1 sera IgG (OD)
SARS CoV-2 S2 sera IgG (OD)
0
1
2
3
4
IgG2a
IgG2b
IgG3
IgG1
B.
BALB/c
CD1
IFNγ SFU / 10^6 Splenocytes
0
1000
2000
3000
4000
S1
S2

FIG. 8

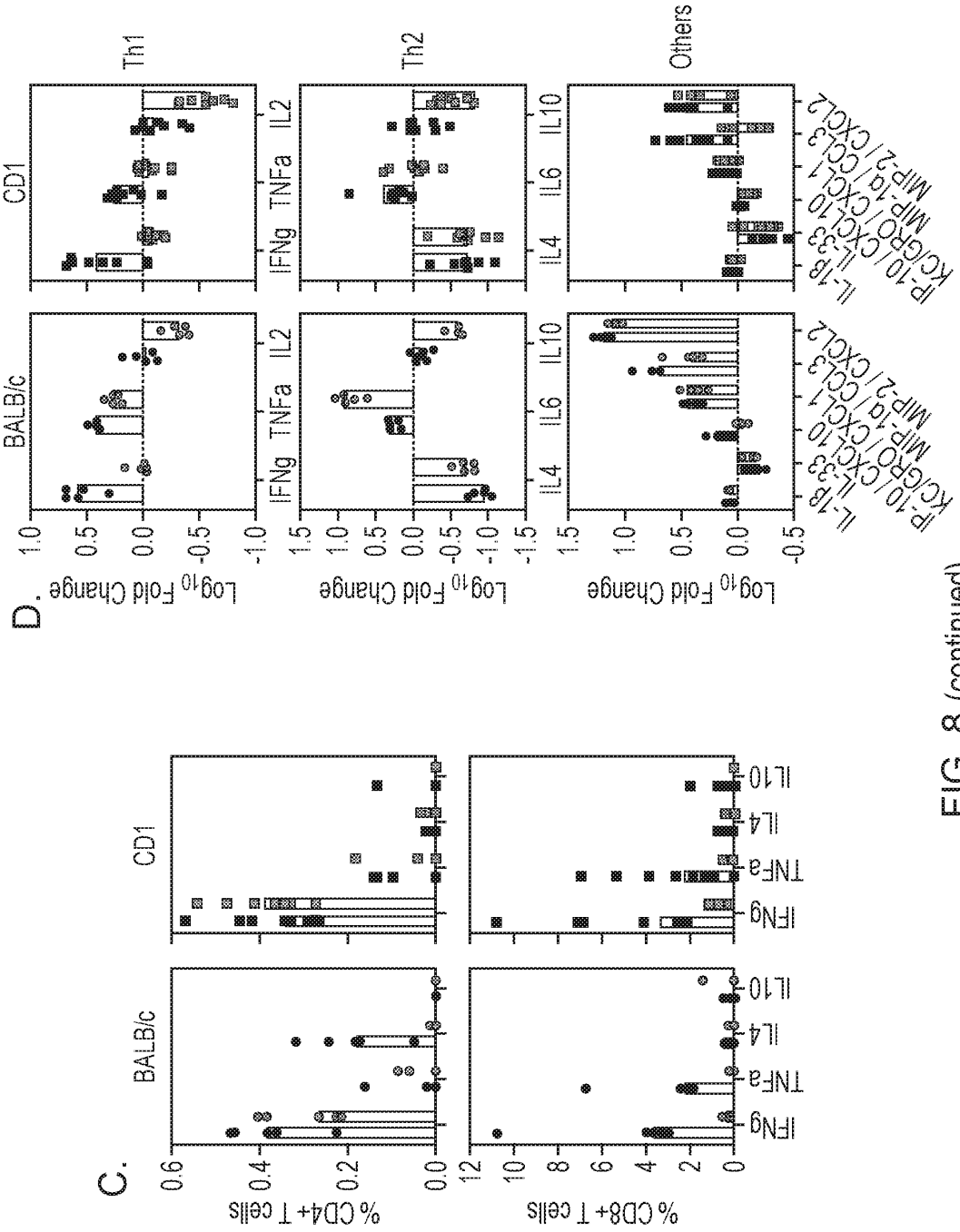


FIG. 8 (continued)

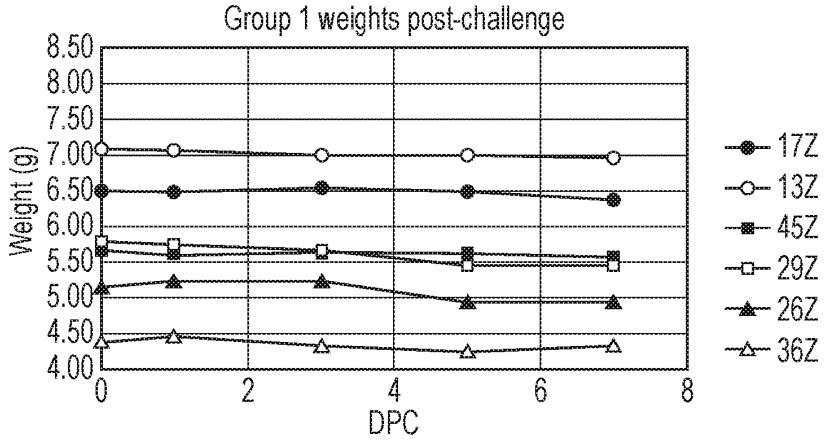


FIG. 9A

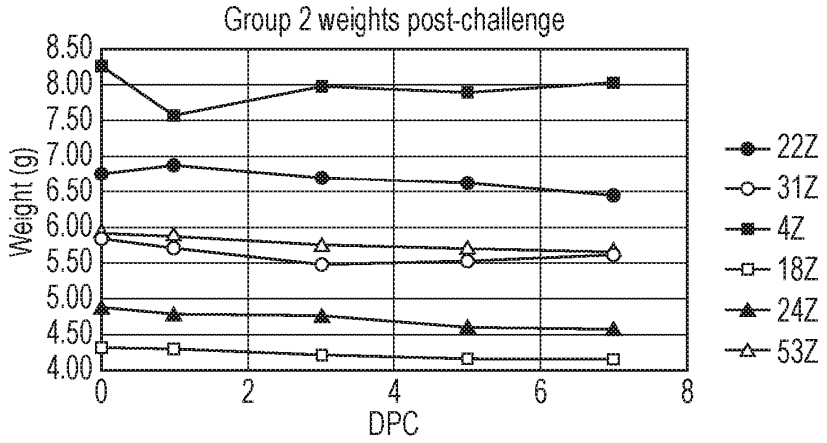


FIG. 9B

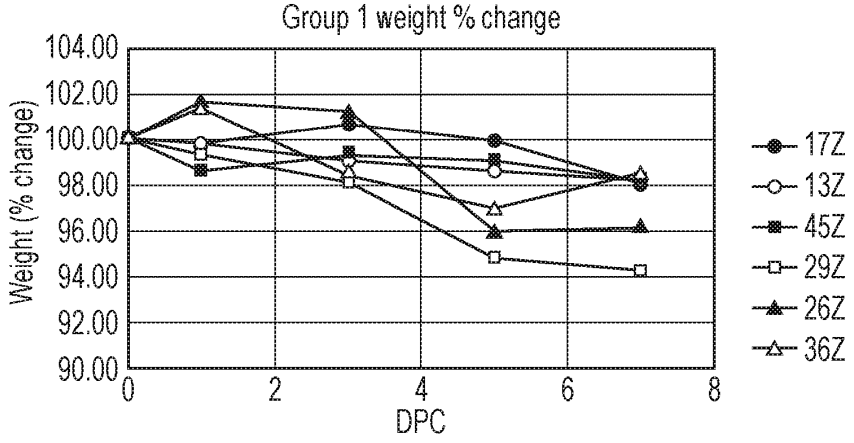


FIG. 9C

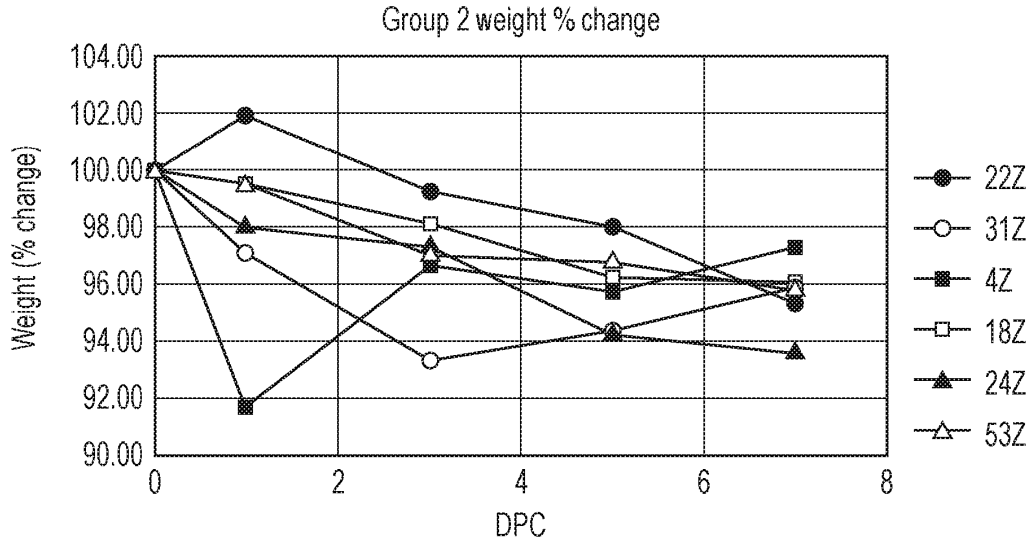


FIG. 9D

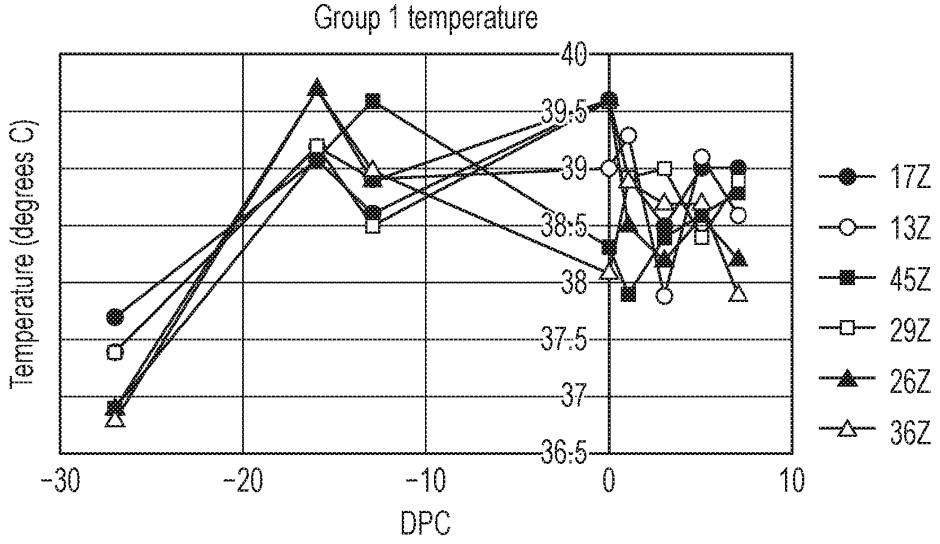


FIG. 10A

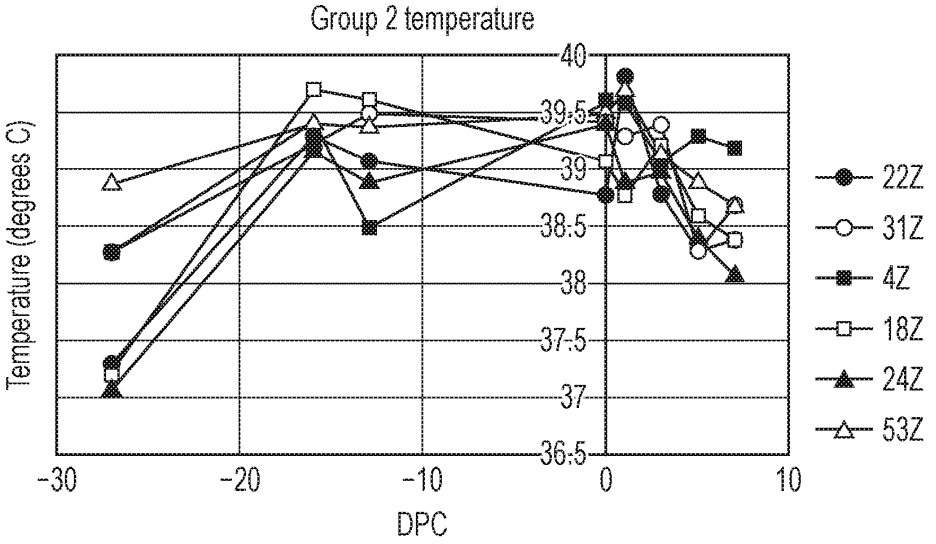


FIG. 10B

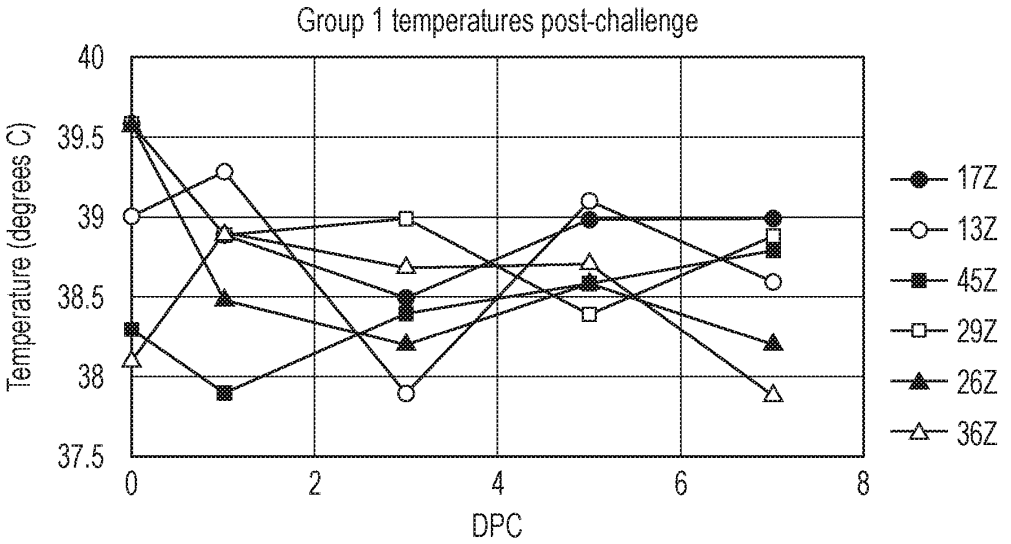


FIG. 10C

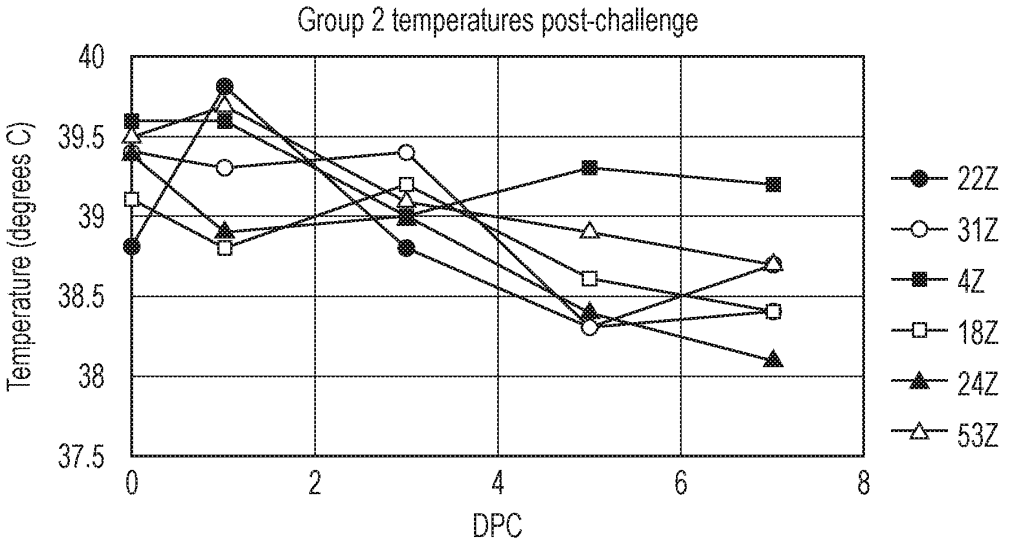


FIG. 10D

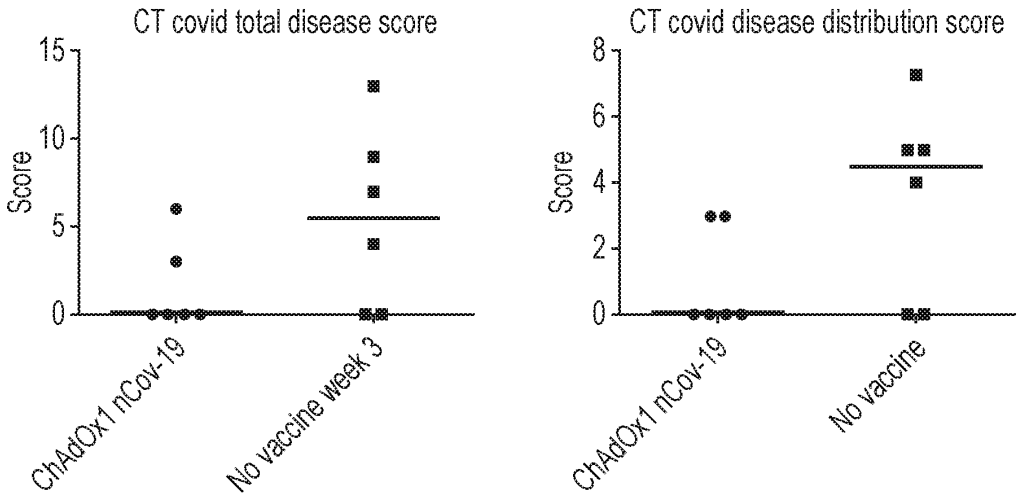


FIG. 11

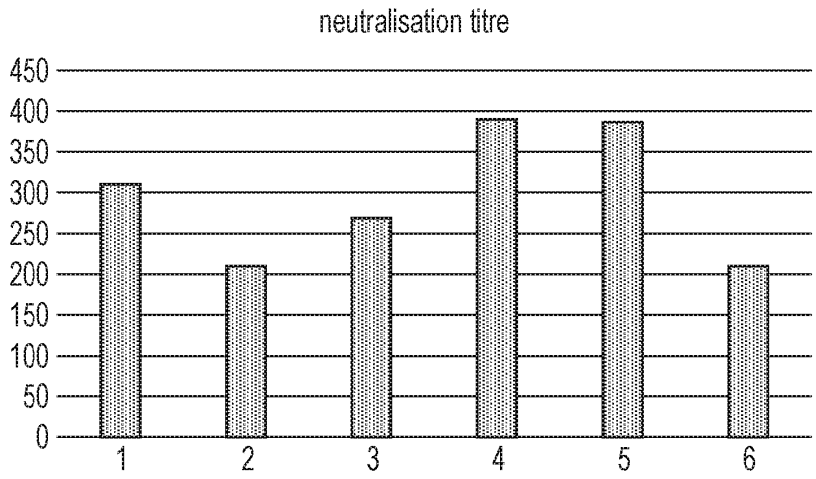

neutralisation titre
450
400
350
300
250
200
150
100
50
0
1
2
3
4
5
6

FIG. 12

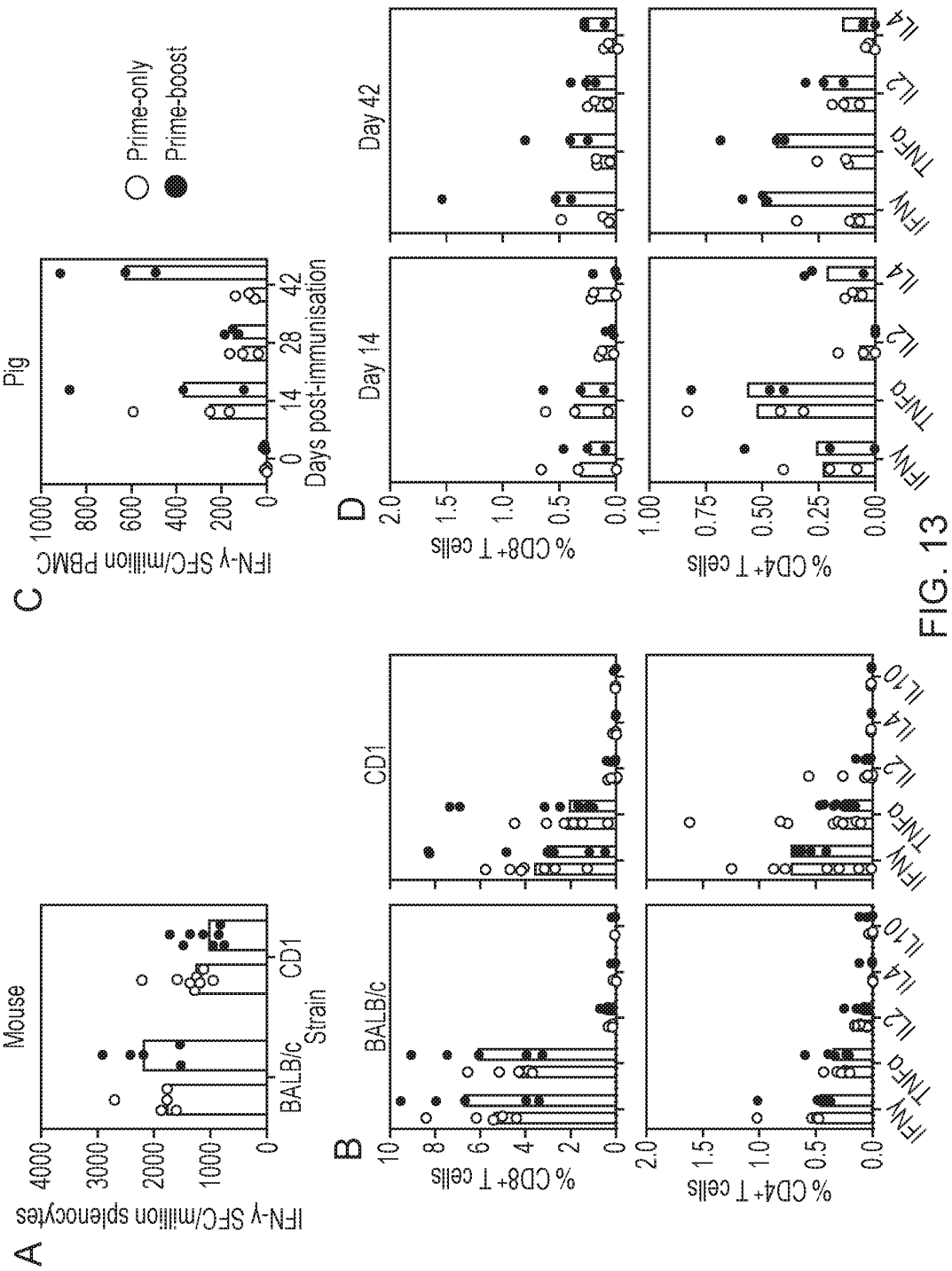

A
Mouse
IFN-γ SFC/million splenocytes
4000
3000
2000
1000
0
BALB/c
CD1
Strain
B
BALB/c
CD1
% CD8+ T cells
% CD4+ T cells
IFNγ
TNFα
IL2
IL4
IL10
C
Pig
IFN-γ SFC/million PBMC
1000
800
600
400
200
0
0
14
28
42
Days post-immunisation
Prime-only
Prime-boost
D
Day 14
Day 42
% CD8+ T cells
% CD4+ T cells
IFNγ
TNFα
IL2
IL4

FIG. 13

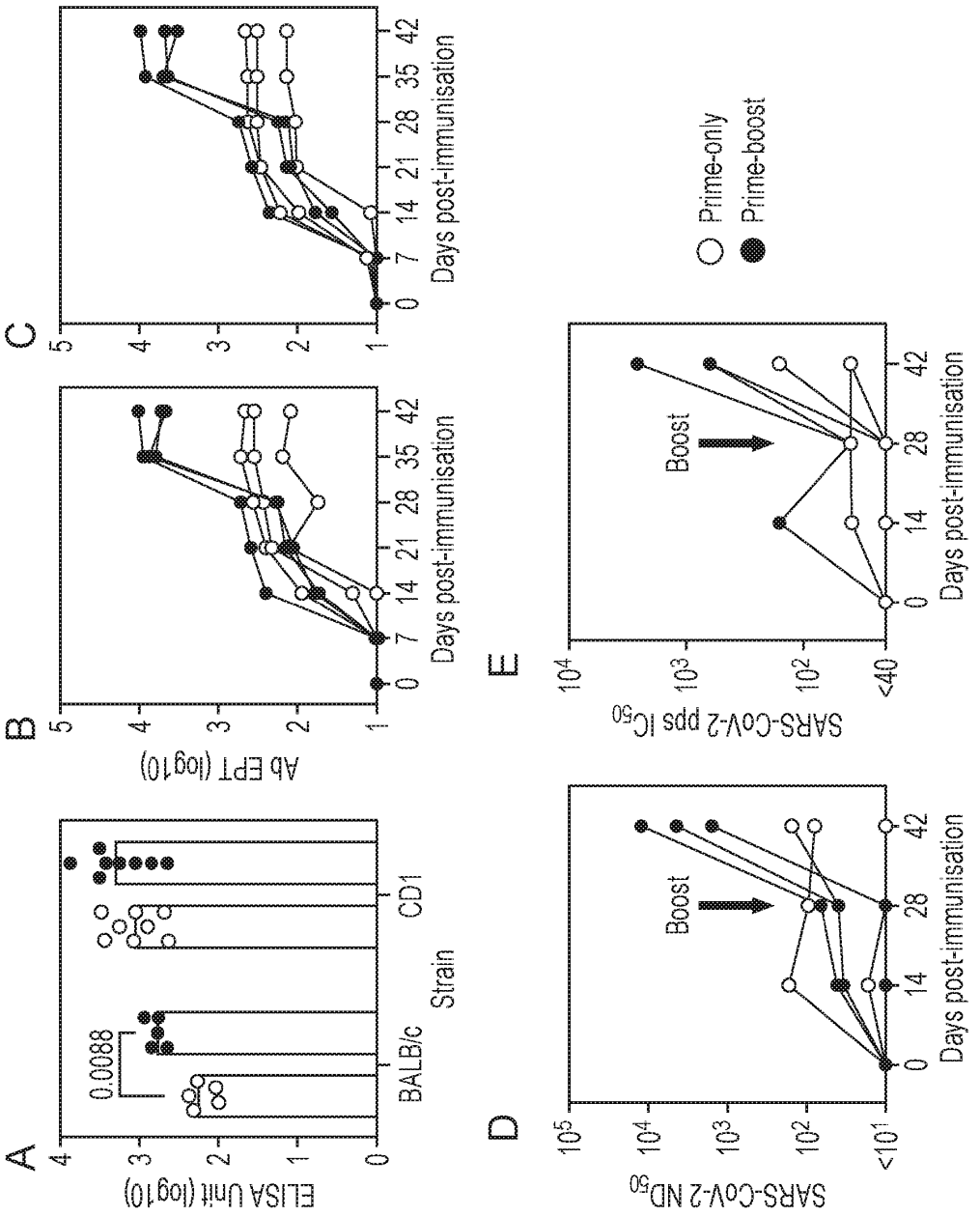

A
ELISA Unit (log10)
0.0088
BALB/c
CD1
Strain
B
Ab EPT (log10)
Days post-immunisation
C
Days post-immunisation
D
SARS-CoV-2 ND50
Boost
Days post-immunisation
E
SARS-CoV-2 pps IC50
Boost
Days post-immunisation
Prime-only
Prime-boost

FIG. 14

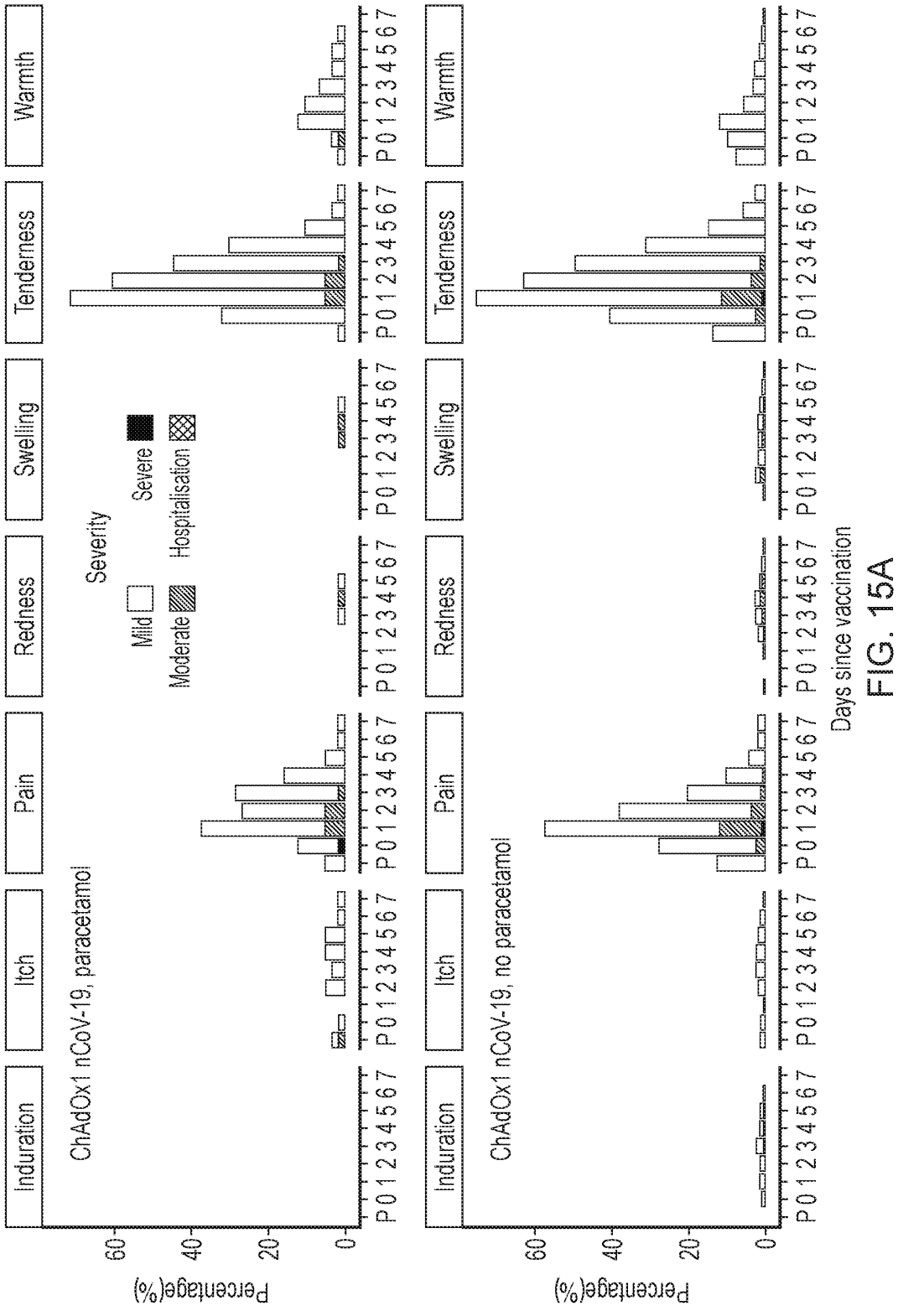

Induration
Itch
Pain
Redness
Swelling
Tenderness
Warmth
ChAdOx1 nCoV-19, paracetamol
ChAdOx1 nCoV-19, no paracetamol
Severity
Mild
Severe
Moderate
Hospitalisation
Percentage(%)
0
20
40
60
P0 1 2 3 4 5 6 7
Days since vaccination

FIG. 15A

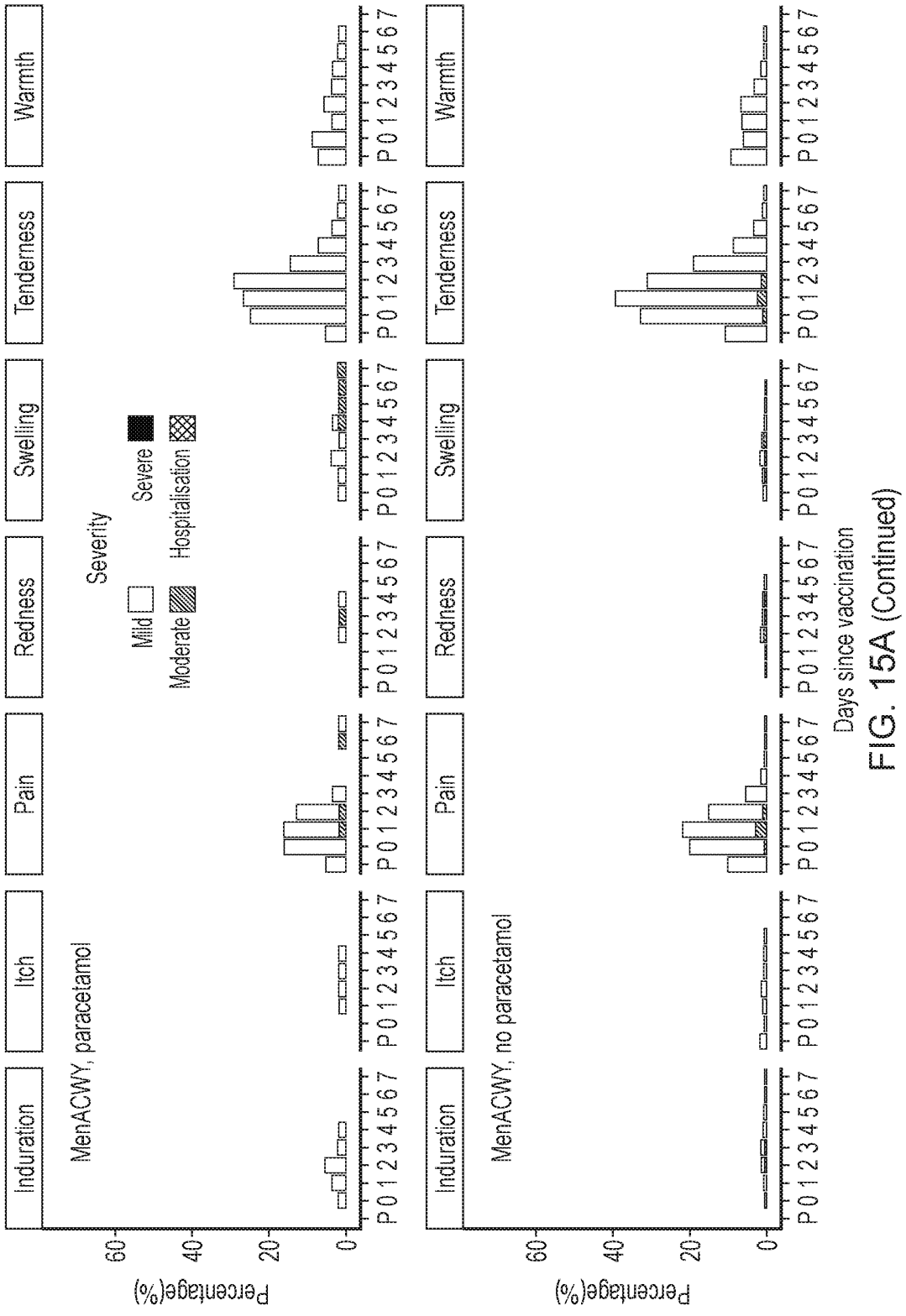


FIG. 15A (Continued)

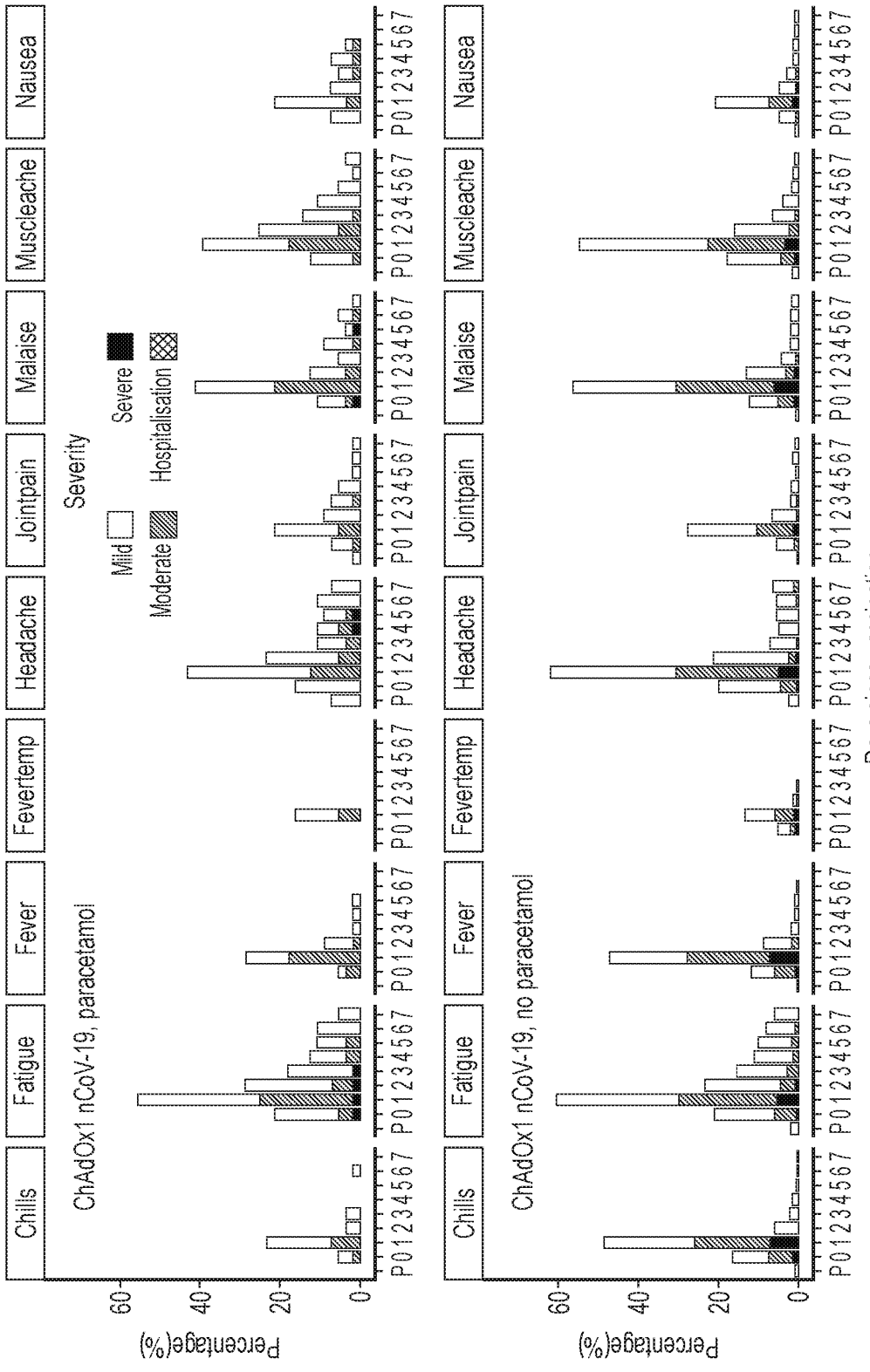

Chills
Fatigue
Fever
Fevertemp
Headache
Jointpain
Malaise
Muscleache
Nausea
ChAdOx1 nCoV-19, paracetamol
ChAdOx1 nCoV-19, no paracetamol
Severity
Mild
Moderate
Severe
Hospitalisation
Percentage(%)
0
20
40
60
P01234567
Days since vaccination

FIG. 15B

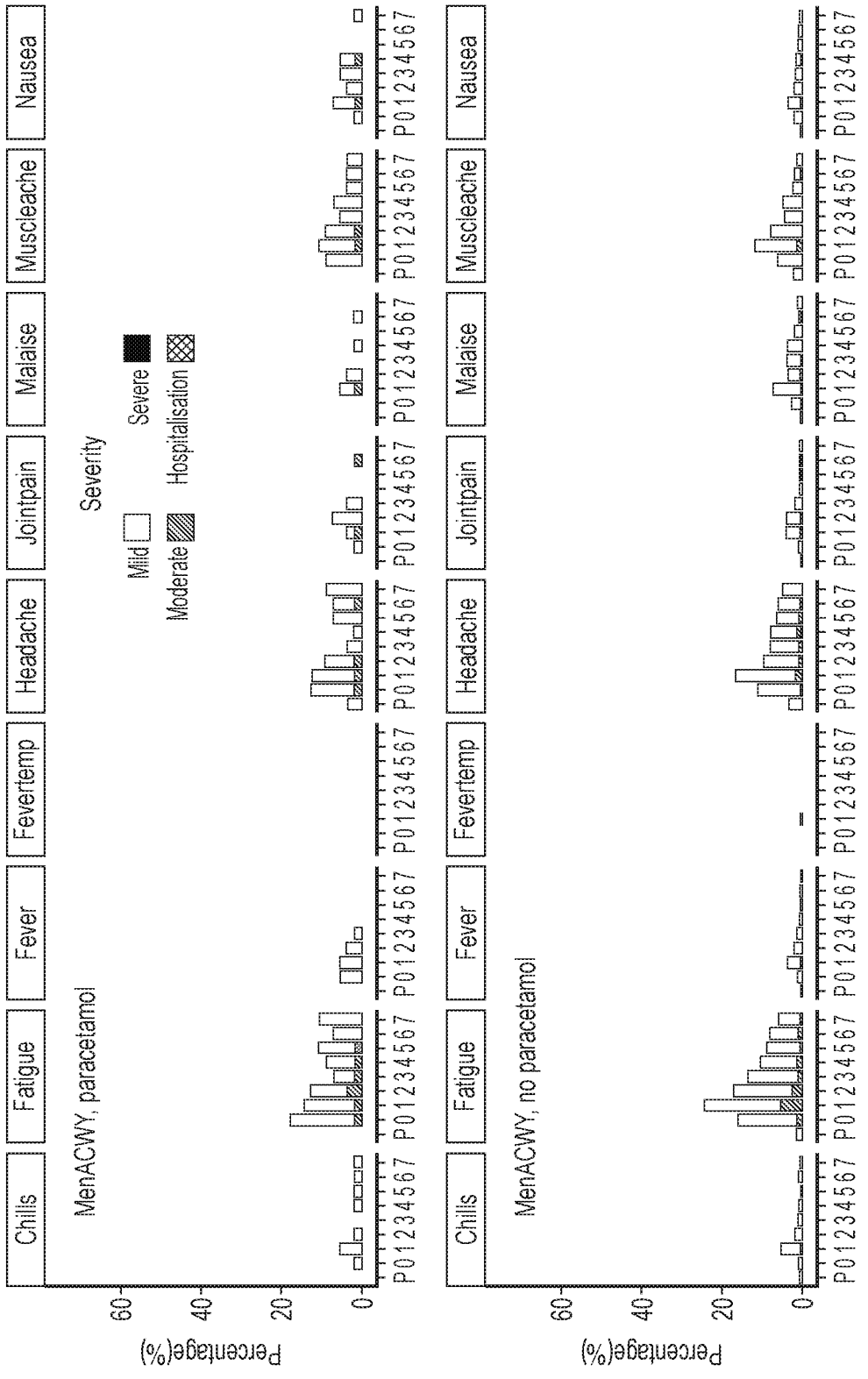


FIG. 15B (Continued)

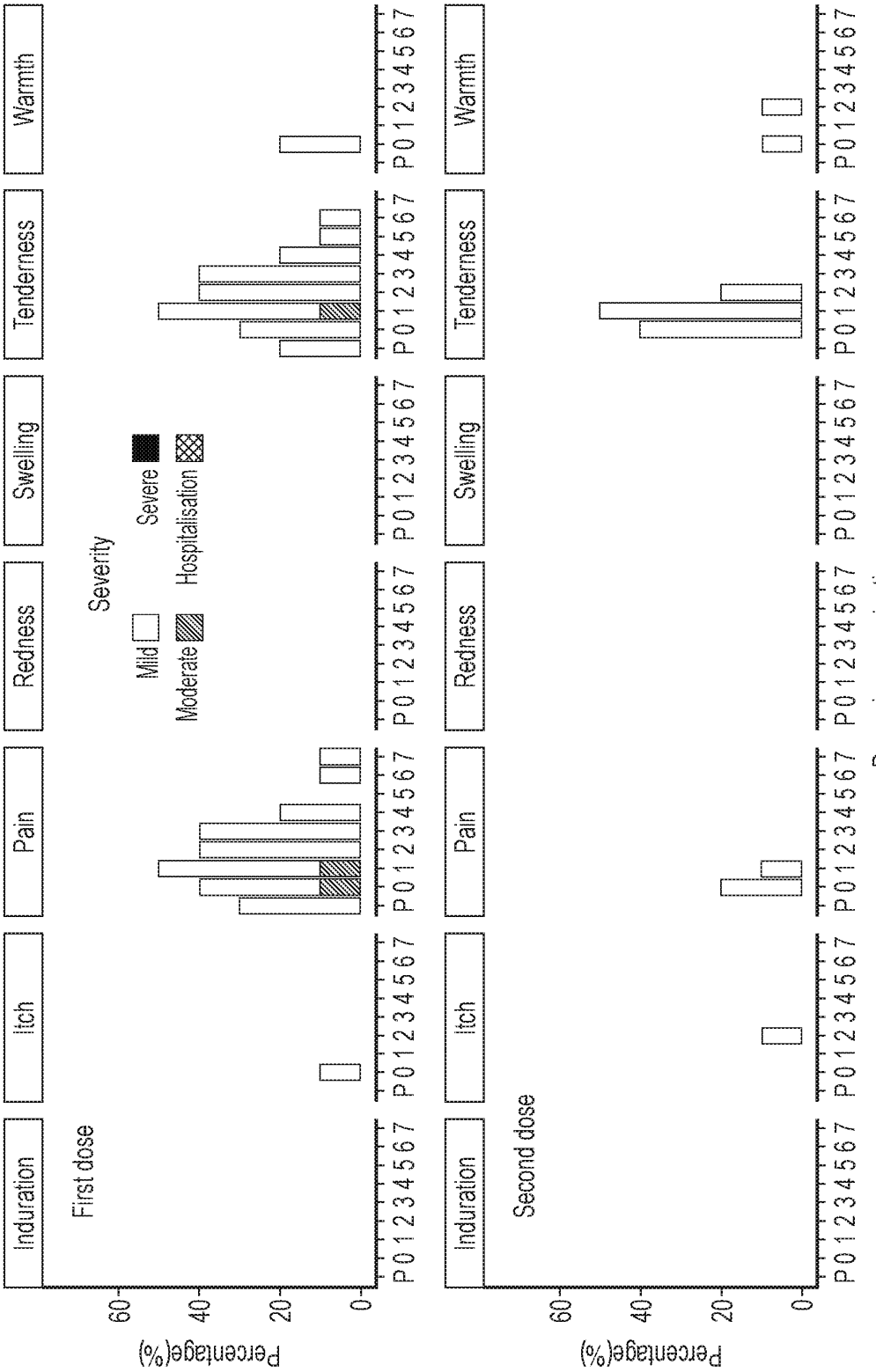

Induration
Itch
Pain
Redness
Swelling
Tenderness
Warmth
First dose
Second dose
Severity
Mild
Severe
Moderate
Hospitalisation
Percentage(%)
0
20
40
60
P0 1 2 3 4 5 6 7
Days since vaccination

FIG. 16A

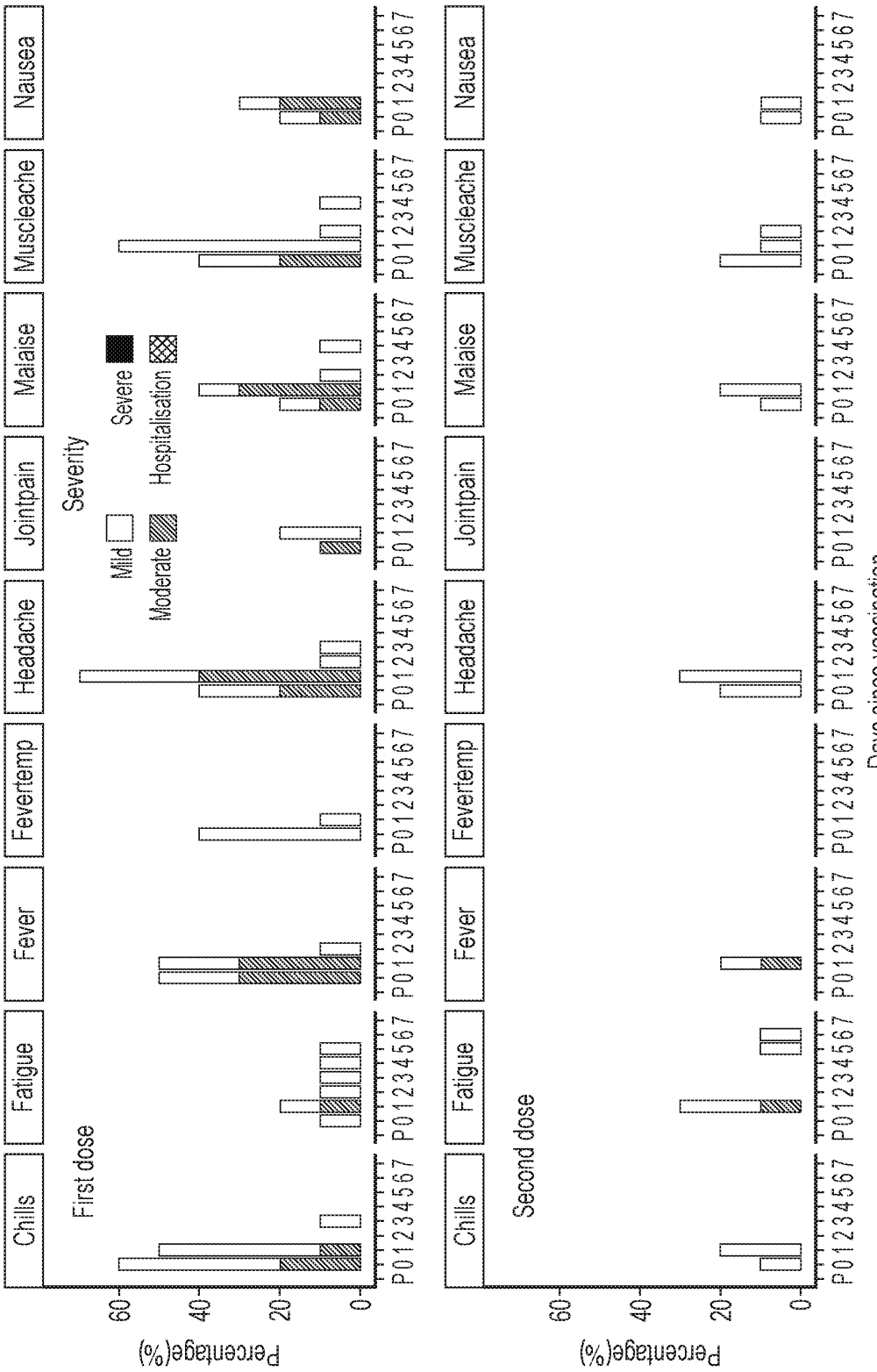

Chills
Fatigue
Fever
Fevertemp
Headache
Jointpain
Malaise
Muscleache
Nausea
First dose
Second dose
Severity
Mild
Moderate
Severe
Hospitalisation
Percentage(%)
0
20
40
60
P01234567
Days since vaccination

FIG. 16B

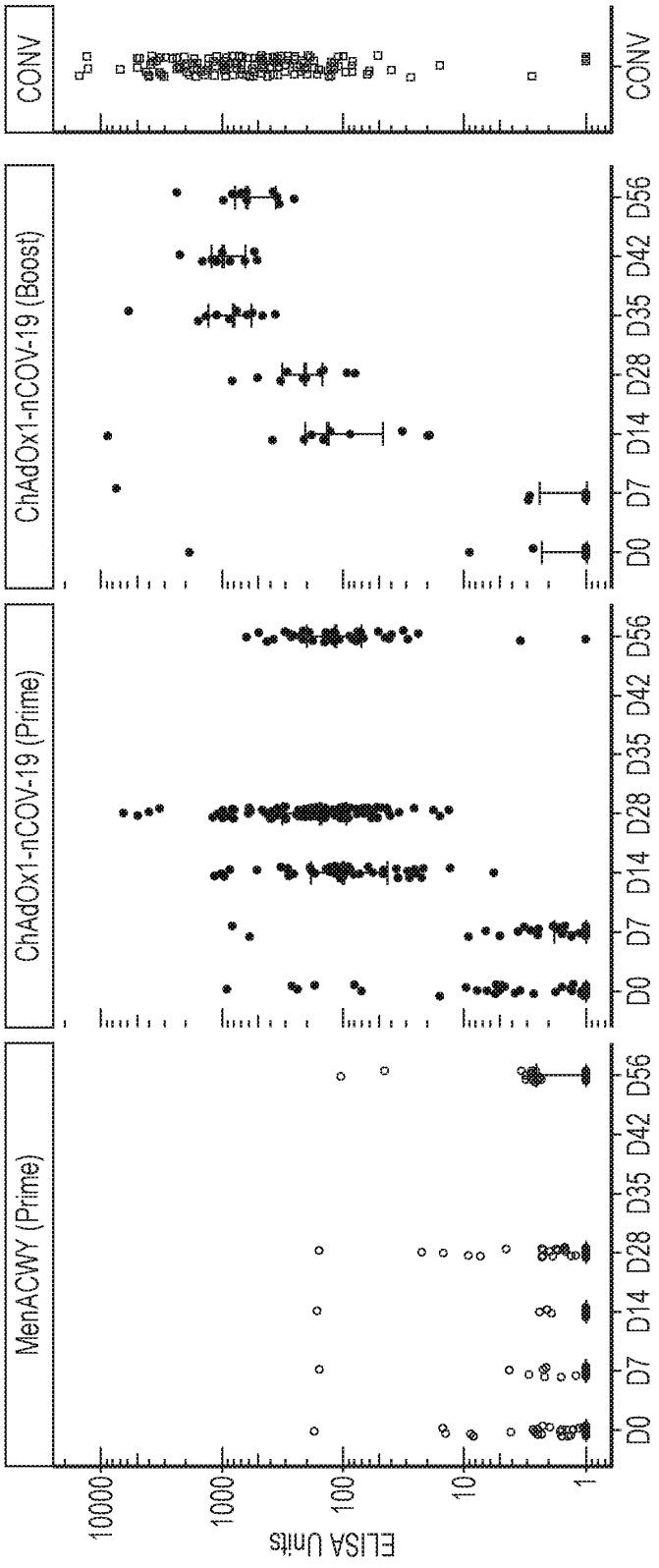

CONV
ChAdOx1-nCOV-19 (Boost)
ChAdOx1-nCOV-19 (Prime)
MenACWY (Prime)
D0
D7
D14
D28
D35
D42
D56
10000
1000
100
10
1
ELISA Units

FIG. 17

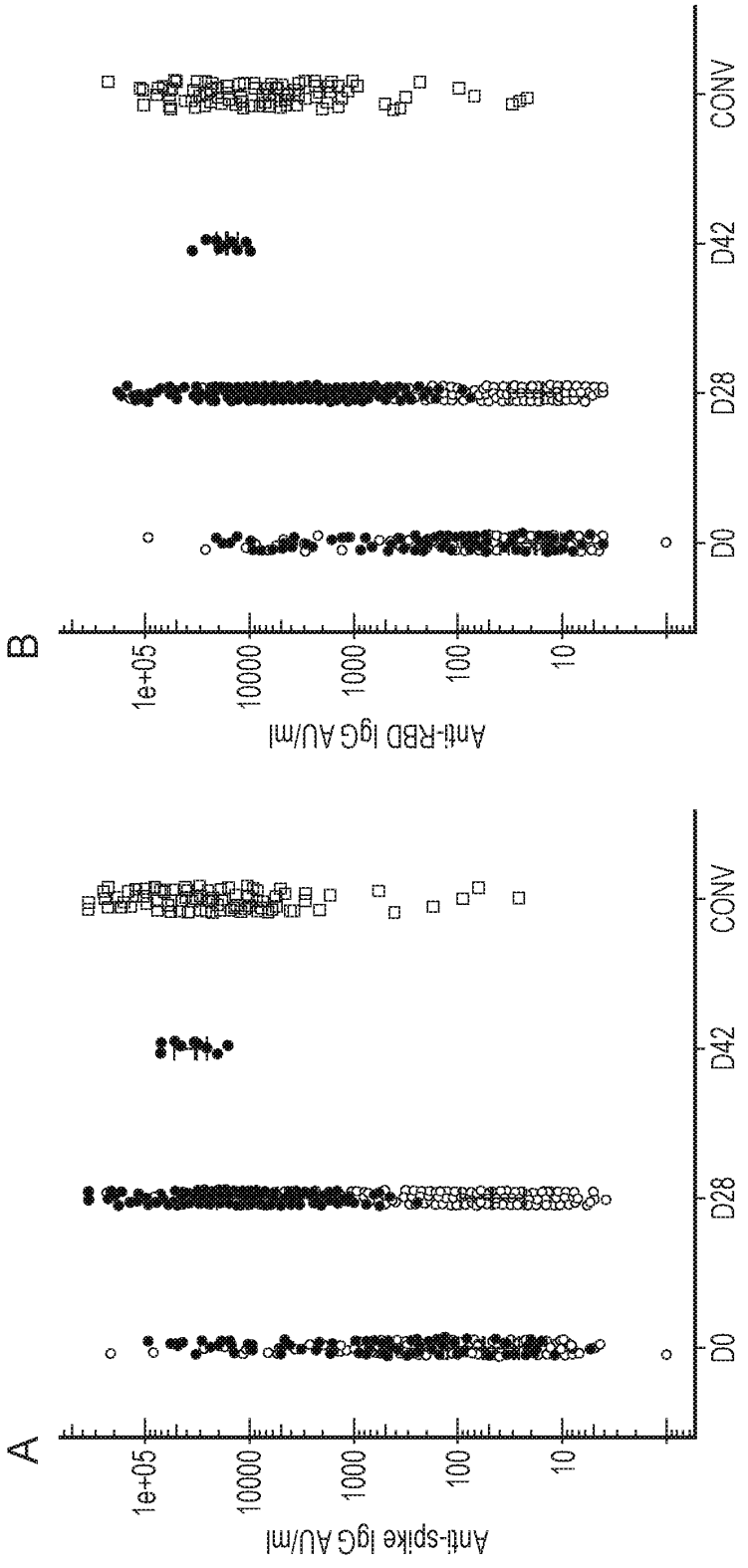

A
Anti-spike IgG AU/ml
1e+05
10000
1000
100
10
D0
D28
D42
CONV
B
Anti-RBD IgG AU/ml
1e+05
10000
1000
100
10
D0
D28
D42
CONV

FIG. 18

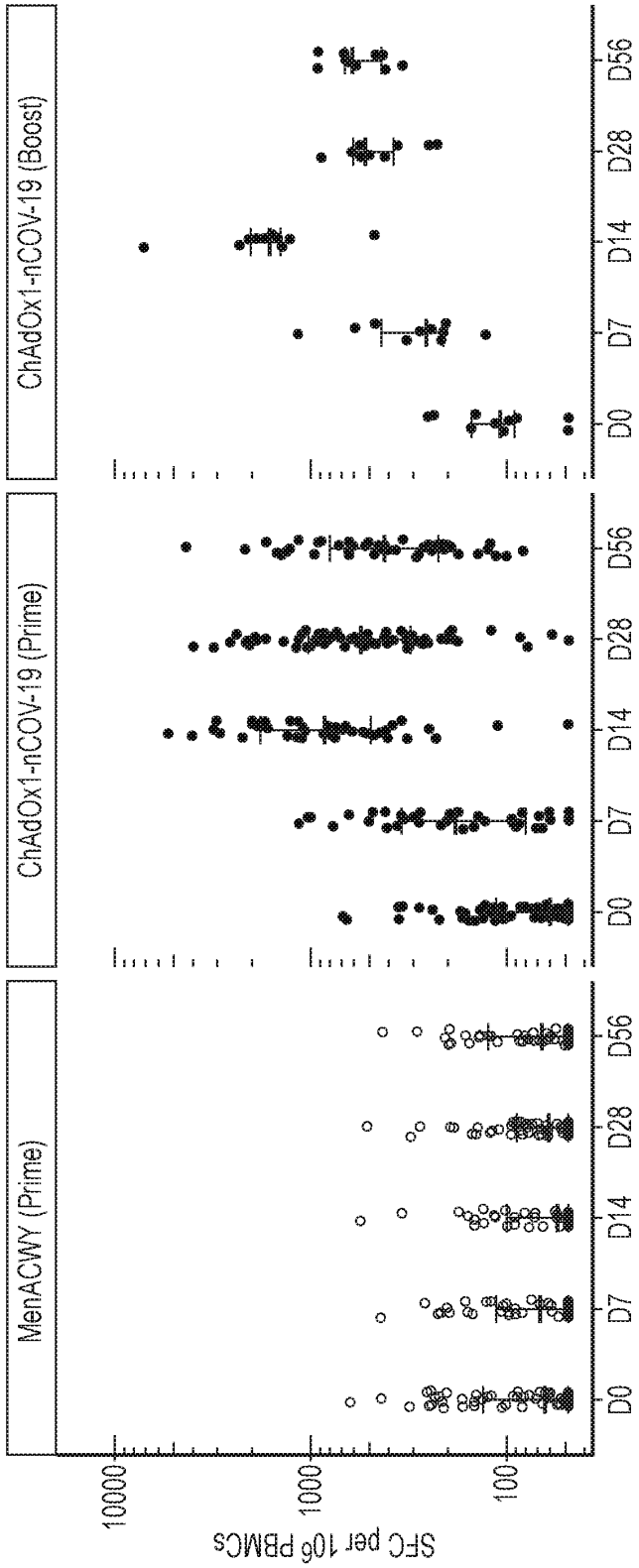

ChAdOx1-nCOV-19 (Boost)
ChAdOx1-nCOV-19 (Prime)
MenACWY (Prime)
D0
D7
D14
D28
D56
10000
1000
100
SFC per 10^6 PBMCs

FIG. 19

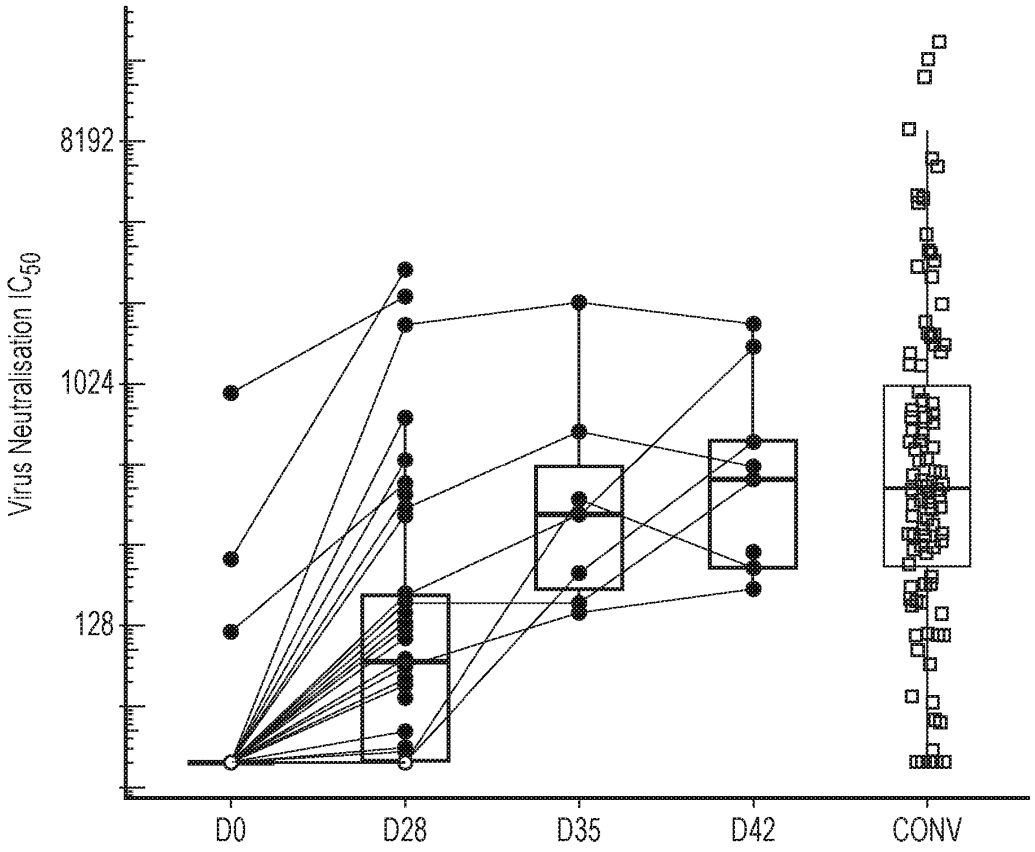


FIG. 20

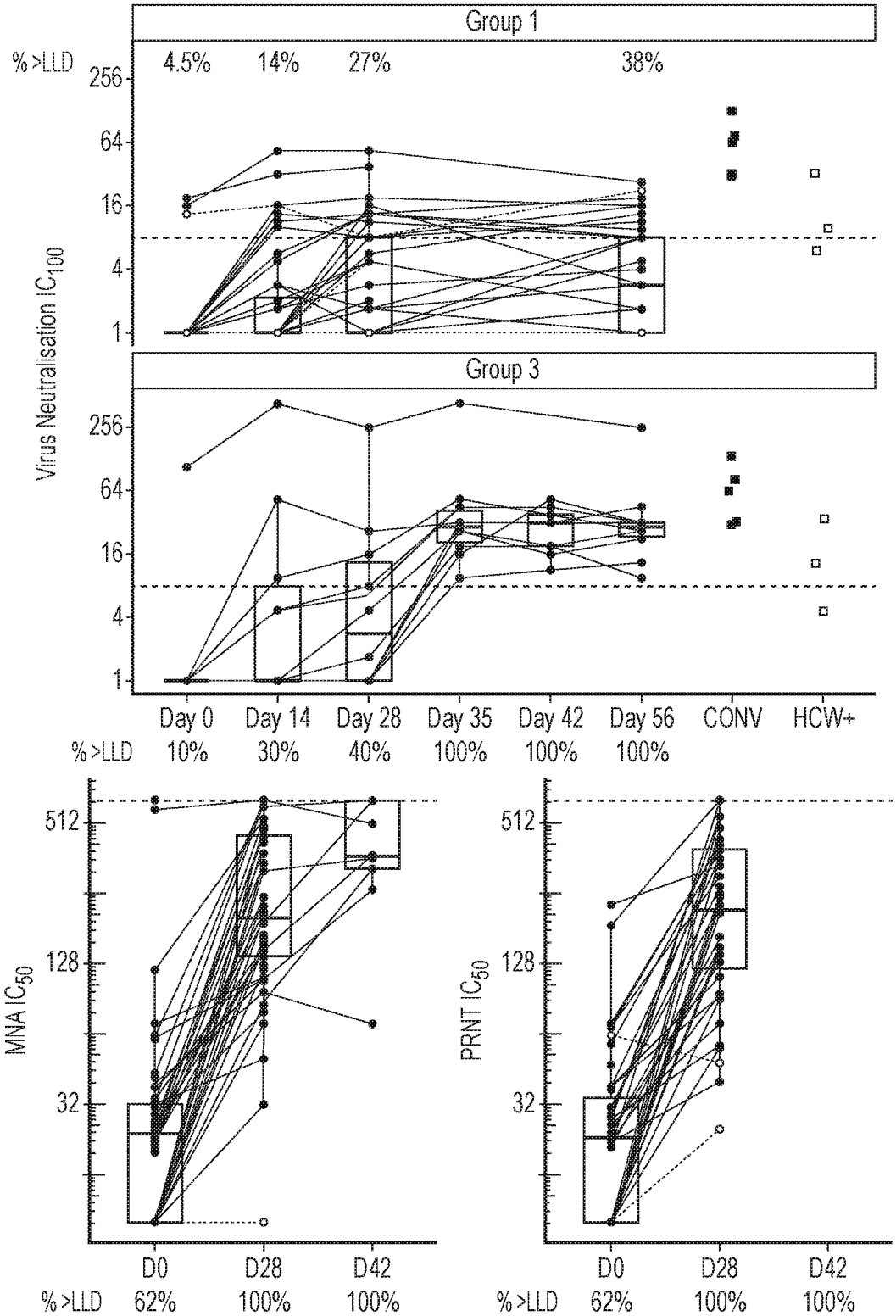

Group 1
%>LLD
4.5%
14%
27%
38%
256
64
16
4
1
Virus Neutralisation IC100
Group 3
256
64
16
4
1
Day 0
Day 14
Day 28
Day 35
Day 42
Day 56
CONV
HCW+
%>LLD
10%
30%
40%
100%
100%
100%
512
128
32
MNA IC50
D0
D28
D42
%>LLD
62%
100%
100%
512
128
32
PRNT IC50
D0
D28
D42
%>LLD
62%
100%
100%

FIG. 21

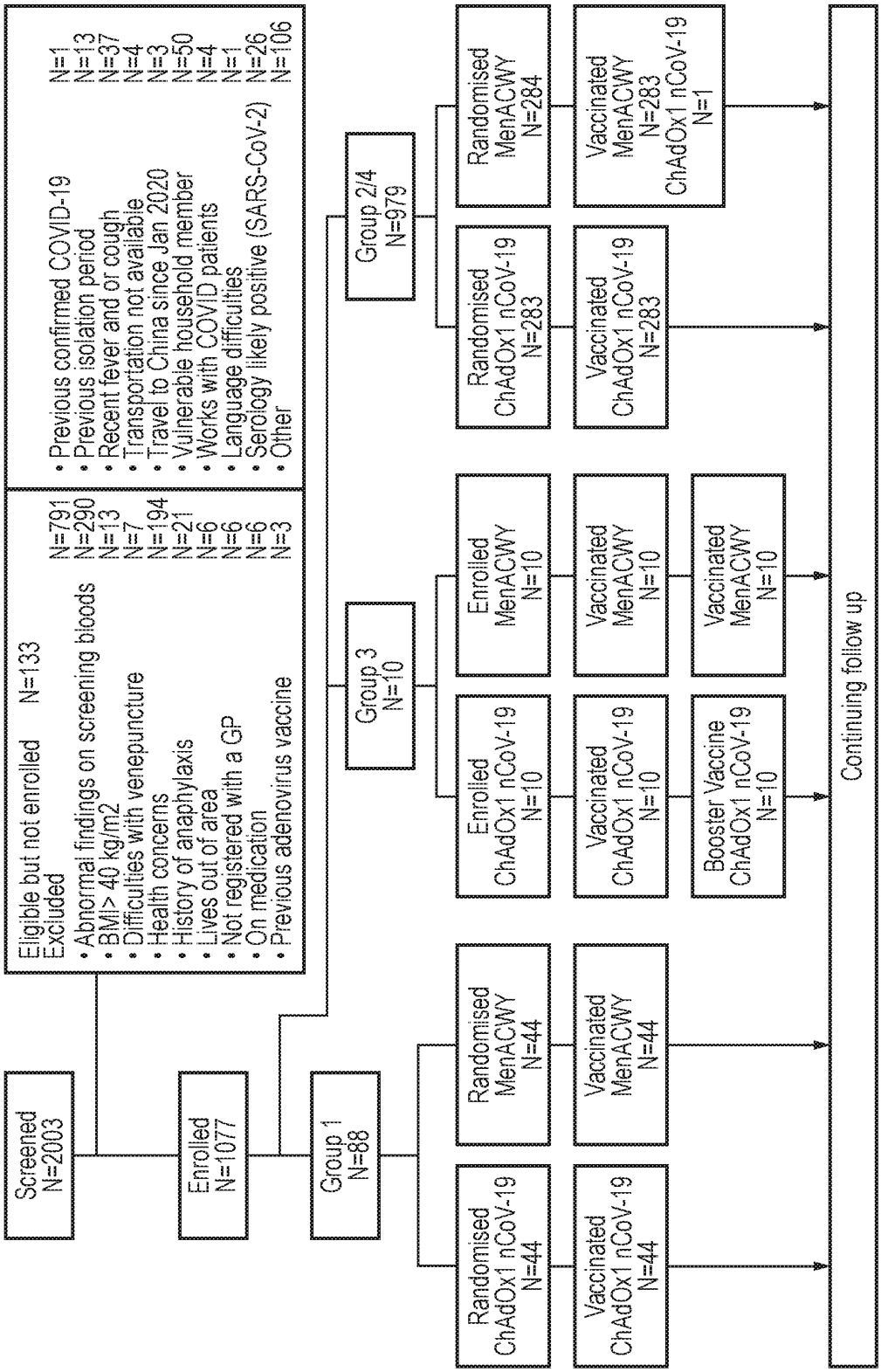

Screened N=2003
Eligible but not enrolled N=133
Excluded
• Abnormal findings on screening bloods N=791
• BMI> 40 kg/m2 N=290
• Difficulties with venepuncture N=13
• Health concerns N=7
• History of anaphylaxis N=194
• Lives out of area N=21
• Not registered with a GP N=6
• On medication N=6
• Previous adenovirus vaccine N=3
• Previous confirmed COVID-19 N=1
• Previous isolation period N=13
• Recent fever and or cough N=37
• Transportation not available N=4
• Travel to China since Jan 2020 N=3
• Vulnerable household member N=50
• Works with COVID patients N=4
• Language difficulties N=1
• Serology likely positive (SARS-CoV-2) N=26
• Other N=106
Enrolled N=1077
Group 1 N=88
Group 2/4 N=979
Group 3 N=10
Randomised ChAdOx1 nCoV-19 N=44
Vaccinated ChAdOx1 nCoV-19 N=44
Randomised MenACWY N=44
Vaccinated MenACWY N=44
Randomised ChAdOx1 nCoV-19 N=283
Vaccinated ChAdOx1 nCoV-19 N=283
Randomised MenACWY N=284
Vaccinated MenACWY N=283
ChAdOx1 nCoV-19 N=1
Enrolled ChAdOx1 nCoV-19 N=10
Vaccinated ChAdOx1 nCoV-19 N=10
Booster Vaccine ChAdOx1 nCoV-19 N=10
Enrolled MenACWY N=10
Vaccinated MenACWY N=10
Vaccinated MenACWY N=10
Continuing follow up

FIG. 22

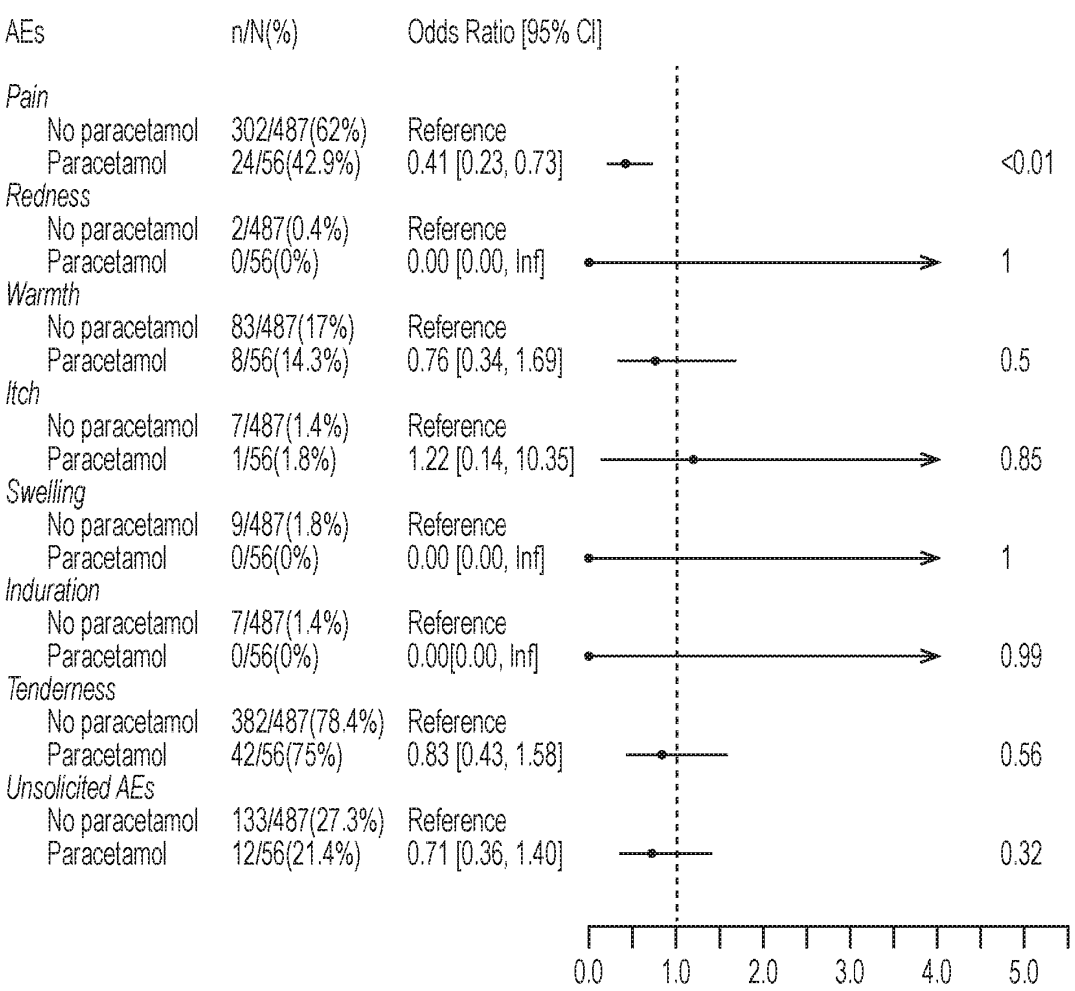

AEs
n/N(%)
Odds Ratio [95% CI]
Pain
No paracetamol 302/487(62%) Reference
Paracetamol 24/56(42.9%) 0.41 [0.23, 0.73] <0.01
Redness
No paracetamol 2/487(0.4%) Reference
Paracetamol 0/56(0%) 0.00 [0.00, Inf] 1
Warmth
No paracetamol 83/487(17%) Reference
Paracetamol 8/56(14.3%) 0.76 [0.34, 1.69] 0.5
Itch
No paracetamol 7/487(1.4%) Reference
Paracetamol 1/56(1.8%) 1.22 [0.14, 10.35] 0.85
Swelling
No paracetamol 9/487(1.8%) Reference
Paracetamol 0/56(0%) 0.00 [0.00, Inf] 1
Induration
No paracetamol 7/487(1.4%) Reference
Paracetamol 0/56(0%) 0.00[0.00, Inf] 0.99
Tenderness
No paracetamol 382/487(78.4%) Reference
Paracetamol 42/56(75%) 0.83 [0.43, 1.58] 0.56
Unsolicited AEs
No paracetamol 133/487(27.3%) Reference
Paracetamol 12/56(21.4%) 0.71 [0.36, 1.40] 0.32
0.0
1.0
2.0
3.0
4.0
5.0

FIG. 23A

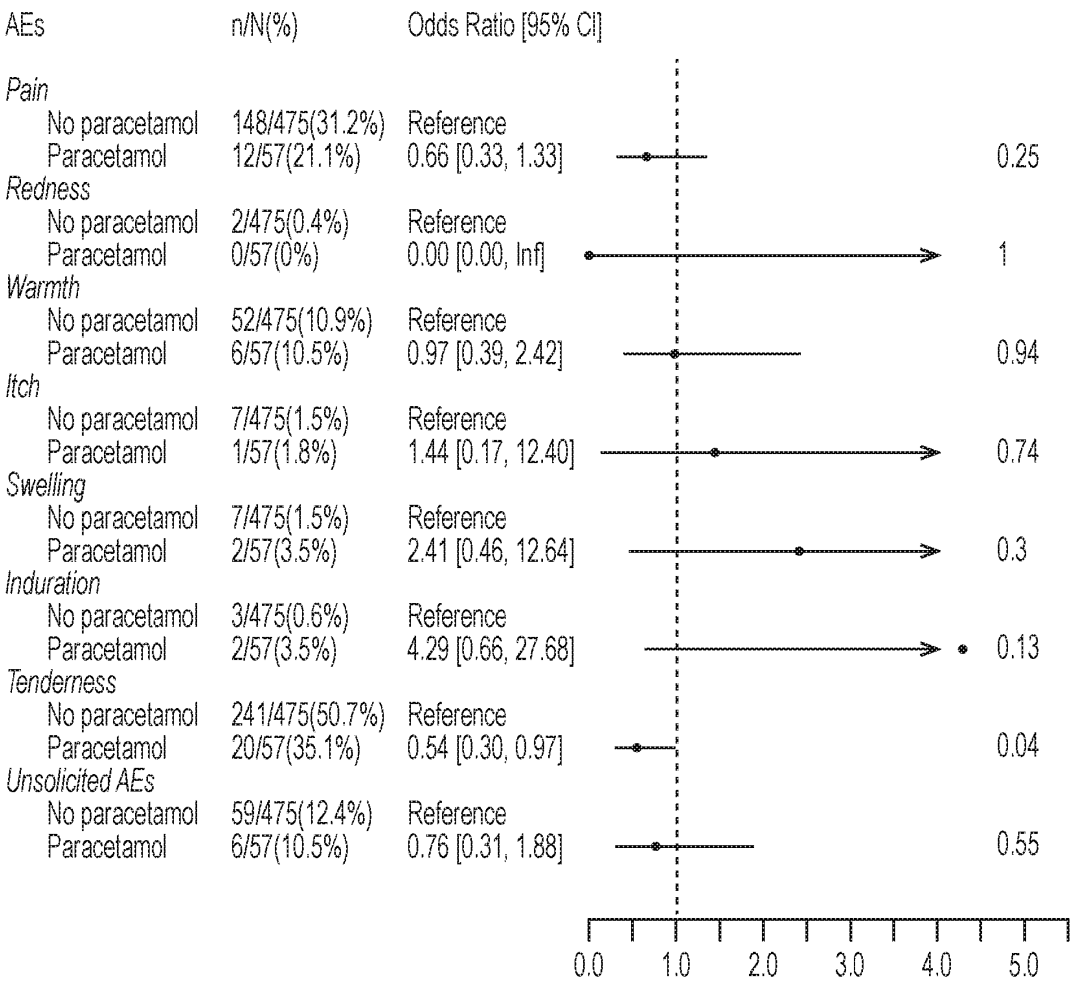

AEs
n/N(%)
Odds Ratio [95% CI]
Pain
No paracetamol 148/475(31.2%) Reference
Paracetamol 12/57(21.1%) 0.66 [0.33, 1.33] 0.25
Redness
No paracetamol 2/475(0.4%) Reference
Paracetamol 0/57(0%) 0.00 [0.00, Inf] 1
Warmth
No paracetamol 52/475(10.9%) Reference
Paracetamol 6/57(10.5%) 0.97 [0.39, 2.42] 0.94
Itch
No paracetamol 7/475(1.5%) Reference
Paracetamol 1/57(1.8%) 1.44 [0.17, 12.40] 0.74
Swelling
No paracetamol 7/475(1.5%) Reference
Paracetamol 2/57(3.5%) 2.41 [0.46, 12.64] 0.3
Induration
No paracetamol 3/475(0.6%) Reference
Paracetamol 2/57(3.5%) 4.29 [0.66, 27.68] 0.13
Tenderness
No paracetamol 241/475(50.7%) Reference
Paracetamol 20/57(35.1%) 0.54 [0.30, 0.97] 0.04
Unsolicited AEs
No paracetamol 59/475(12.4%) Reference
Paracetamol 6/57(10.5%) 0.76 [0.31, 1.88] 0.55
0.0
1.0
2.0
3.0
4.0
5.0

FIG. 23B

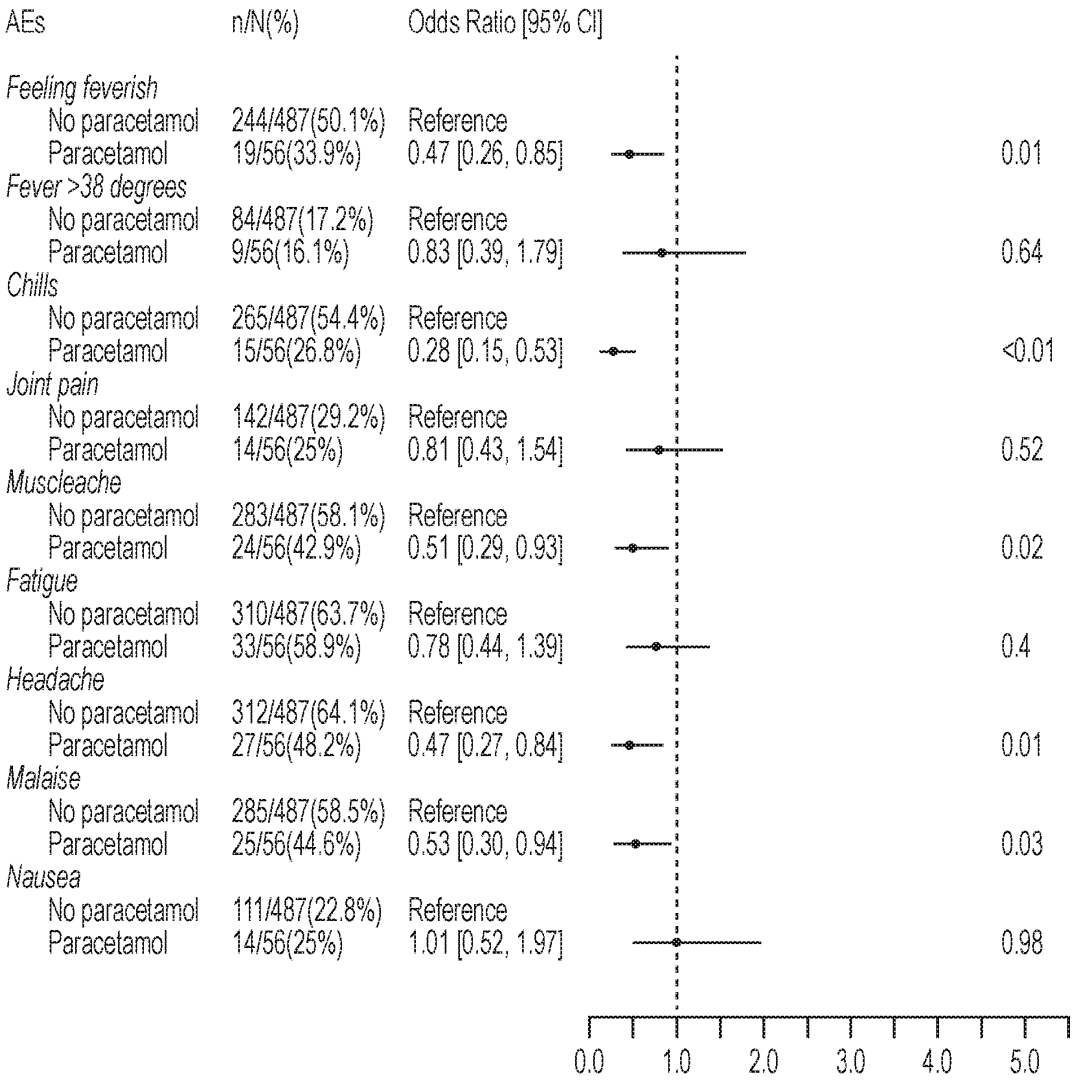

AEs
n/N(%)
Odds Ratio [95% CI]
Feeling feverish
No paracetamol 244/487(50.1%) Reference
Paracetamol 19/56(33.9%) 0.47 [0.26, 0.85] 0.01
Fever >38 degrees
No paracetamol 84/487(17.2%) Reference
Paracetamol 9/56(16.1%) 0.83 [0.39, 1.79] 0.64
Chills
No paracetamol 265/487(54.4%) Reference
Paracetamol 15/56(26.8%) 0.28 [0.15, 0.53] <0.01
Joint pain
No paracetamol 142/487(29.2%) Reference
Paracetamol 14/56(25%) 0.81 [0.43, 1.54] 0.52
Muscleache
No paracetamol 283/487(58.1%) Reference
Paracetamol 24/56(42.9%) 0.51 [0.29, 0.93] 0.02
Fatigue
No paracetamol 310/487(63.7%) Reference
Paracetamol 33/56(58.9%) 0.78 [0.44, 1.39] 0.4
Headache
No paracetamol 312/487(64.1%) Reference
Paracetamol 27/56(48.2%) 0.47 [0.27, 0.84] 0.01
Malaise
No paracetamol 285/487(58.5%) Reference
Paracetamol 25/56(44.6%) 0.53 [0.30, 0.94] 0.03
Nausea
No paracetamol 111/487(22.8%) Reference
Paracetamol 14/56(25%) 1.01 [0.52, 1.97] 0.98
0.0
1.0
2.0
3.0
4.0
5.0

FIG. 24A

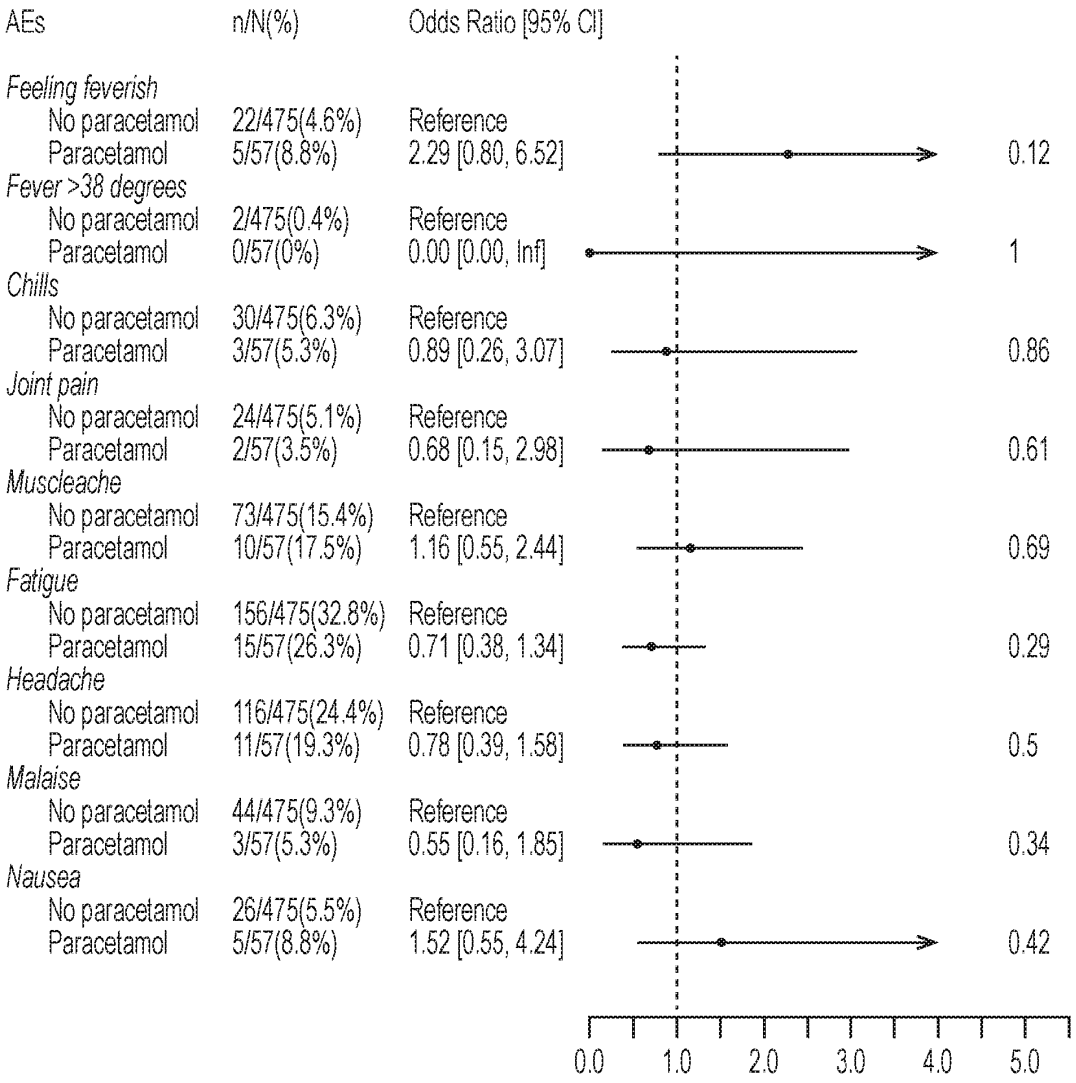

AEs
n/N(%)
Odds Ratio [95% CI]
Feeling feverish
No paracetamol 22/475(4.6%) Reference
Paracetamol 5/57(8.8%) 2.29 [0.80, 6.52] 0.12
Fever >38 degrees
No paracetamol 2/475(0.4%) Reference
Paracetamol 0/57(0%) 0.00 [0.00, Inf] 1
Chills
No paracetamol 30/475(6.3%) Reference
Paracetamol 3/57(5.3%) 0.89 [0.26, 3.07] 0.86
Joint pain
No paracetamol 24/475(5.1%) Reference
Paracetamol 2/57(3.5%) 0.68 [0.15, 2.98] 0.61
Muscleache
No paracetamol 73/475(15.4%) Reference
Paracetamol 10/57(17.5%) 1.16 [0.55, 2.44] 0.69
Fatigue
No paracetamol 156/475(32.8%) Reference
Paracetamol 15/57(26.3%) 0.71 [0.38, 1.34] 0.29
Headache
No paracetamol 116/475(24.4%) Reference
Paracetamol 11/57(19.3%) 0.78 [0.39, 1.58] 0.5
Malaise
No paracetamol 44/475(9.3%) Reference
Paracetamol 3/57(5.3%) 0.55 [0.16, 1.85] 0.34
Nausea
No paracetamol 26/475(5.5%) Reference
Paracetamol 5/57(8.8%) 1.52 [0.55, 4.24] 0.42
0.0
1.0
2.0
3.0
4.0
5.0

FIG. 24B

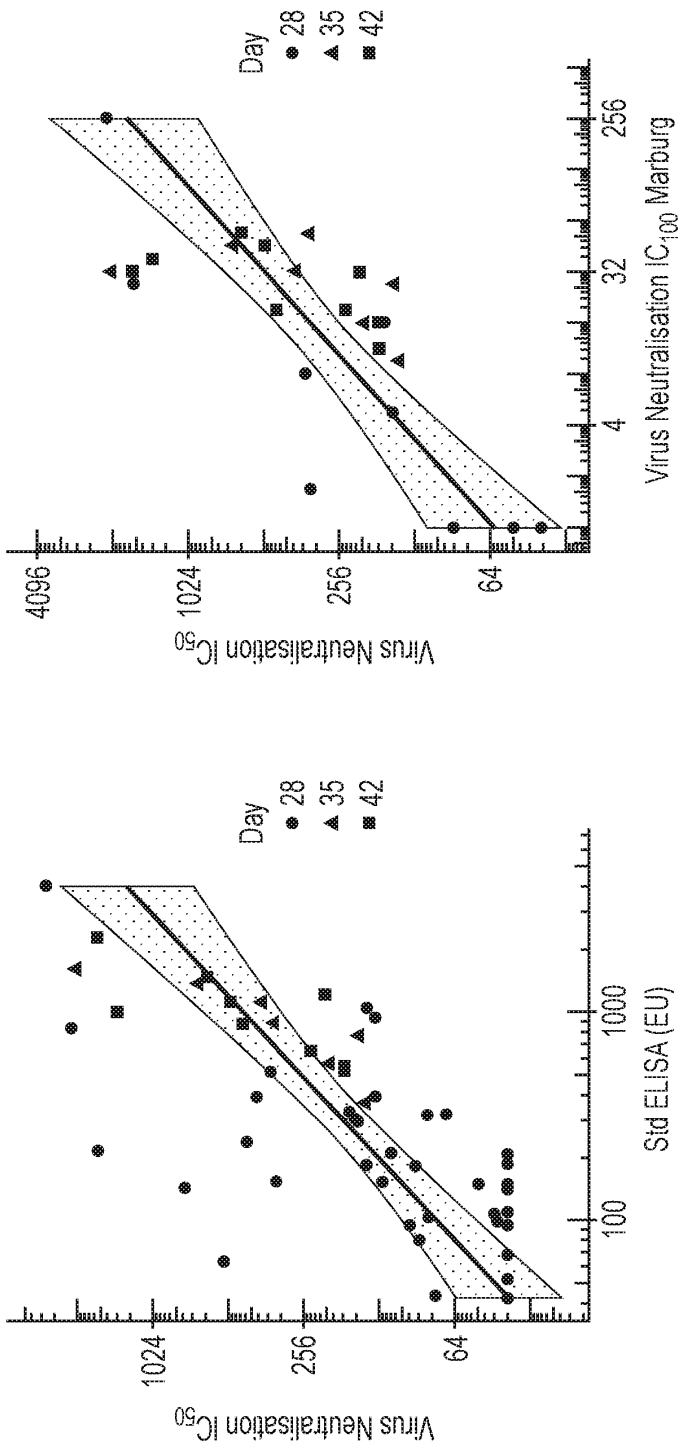

Day
28
35
42
Virus Neutralisation IC50
4096
1024
256
64
Virus Neutralisation IC100 Marburg
256
32
4
Day
28
35
42
Virus Neutralisation IC50
1024
256
64
Std ELISA (EU)
1000
100

FIG. 25

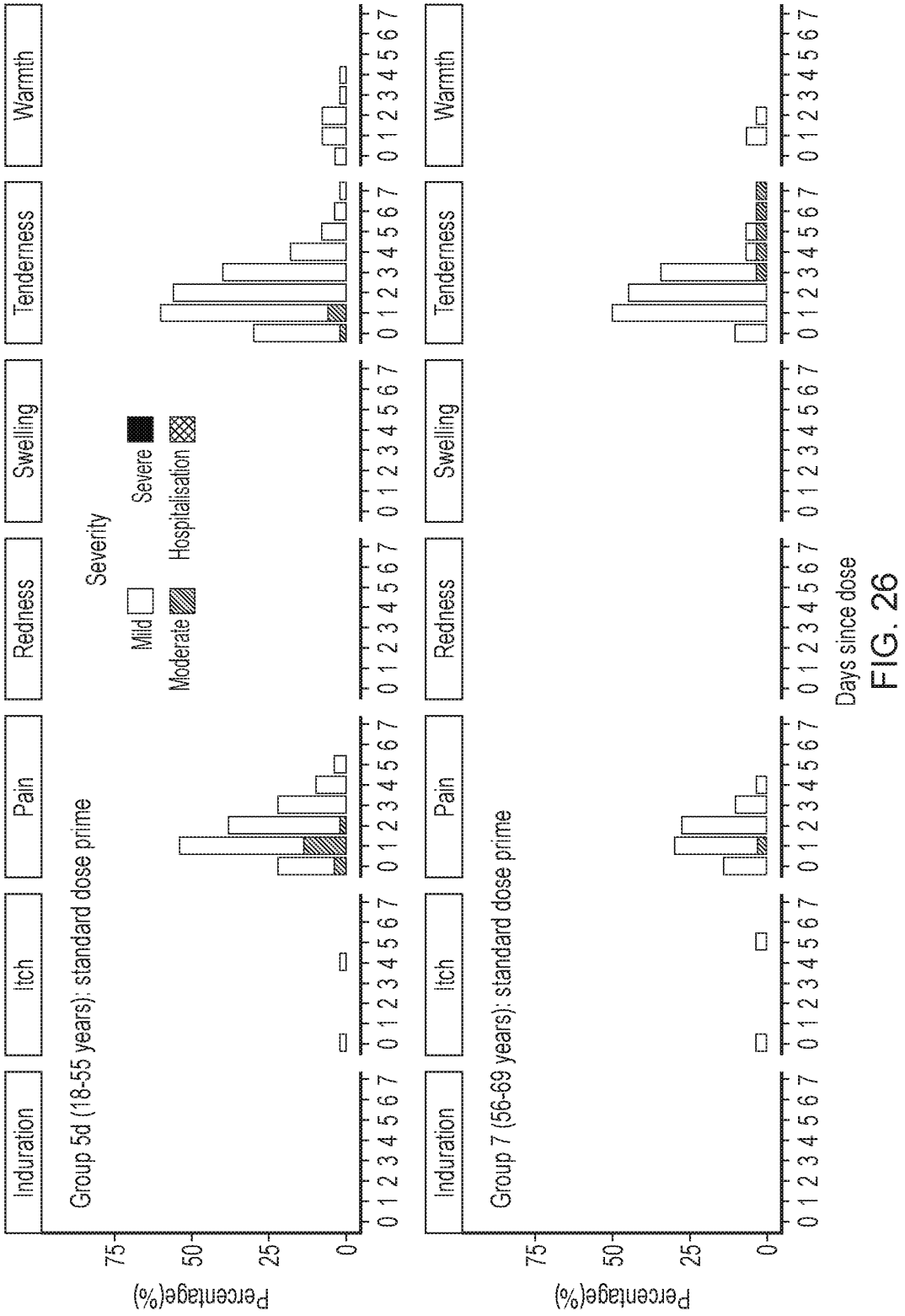

Induration
Itch
Pain
Redness
Swelling
Tenderness
Warmth
Group 5d (18-55 years): standard dose prime
Group 7 (56-69 years): standard dose prime
Severity
Mild
Severe
Moderate
Hospitalisation
Percentage(%)
0
25
50
75
0 1 2 3 4 5 6 7
Days since dose

FIG. 26

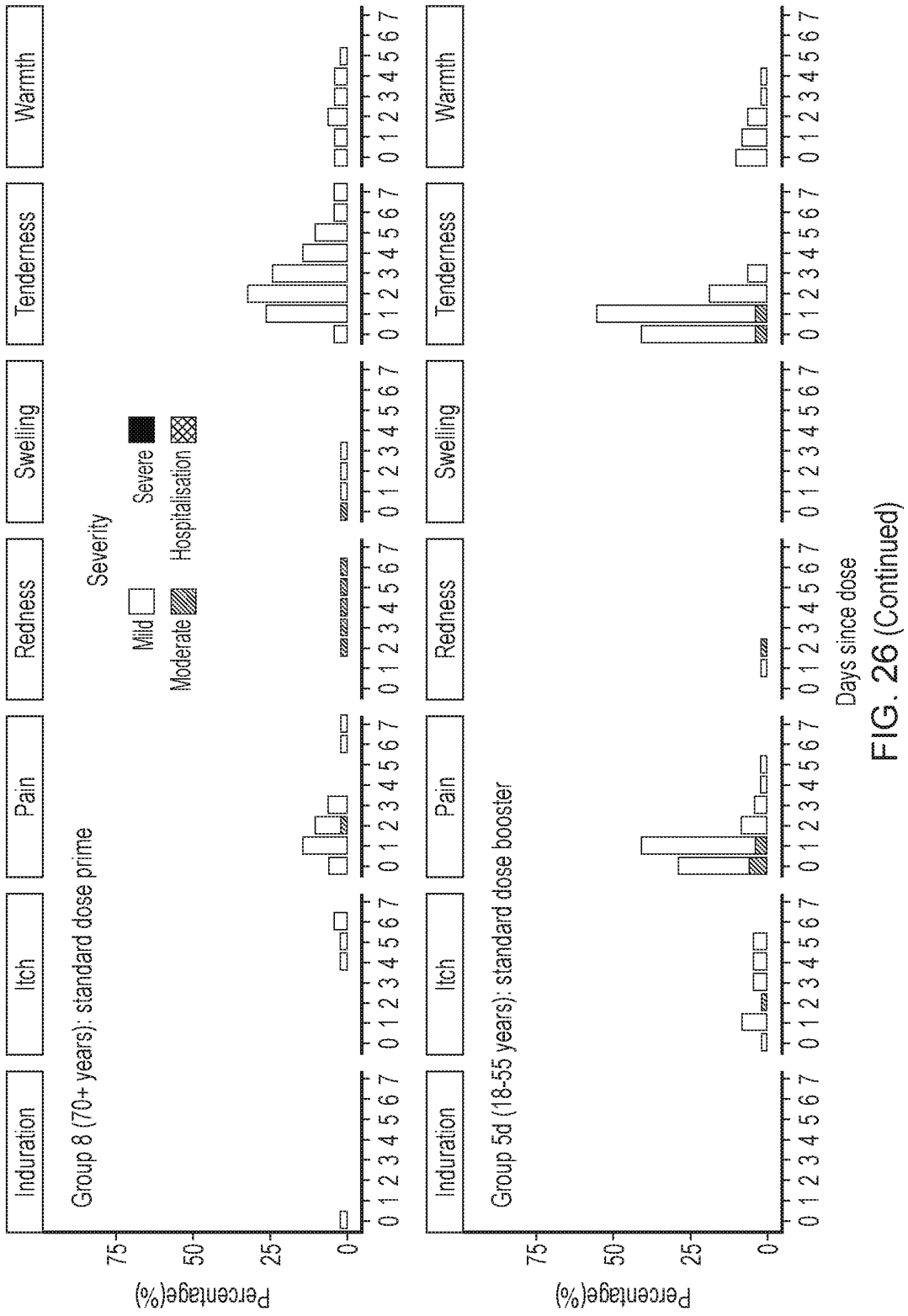


FIG. 26 (Continued)

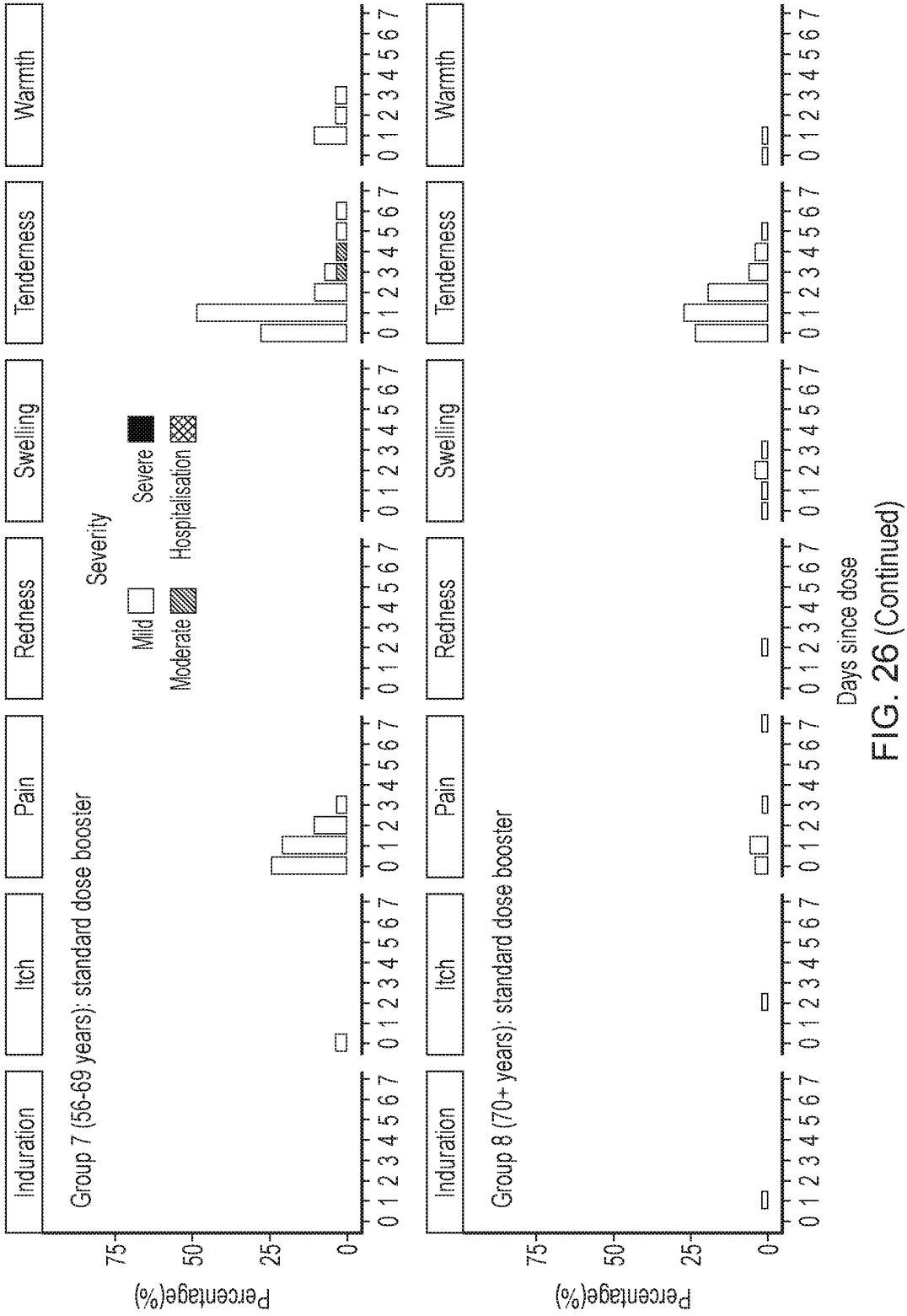


FIG. 26 (Continued)

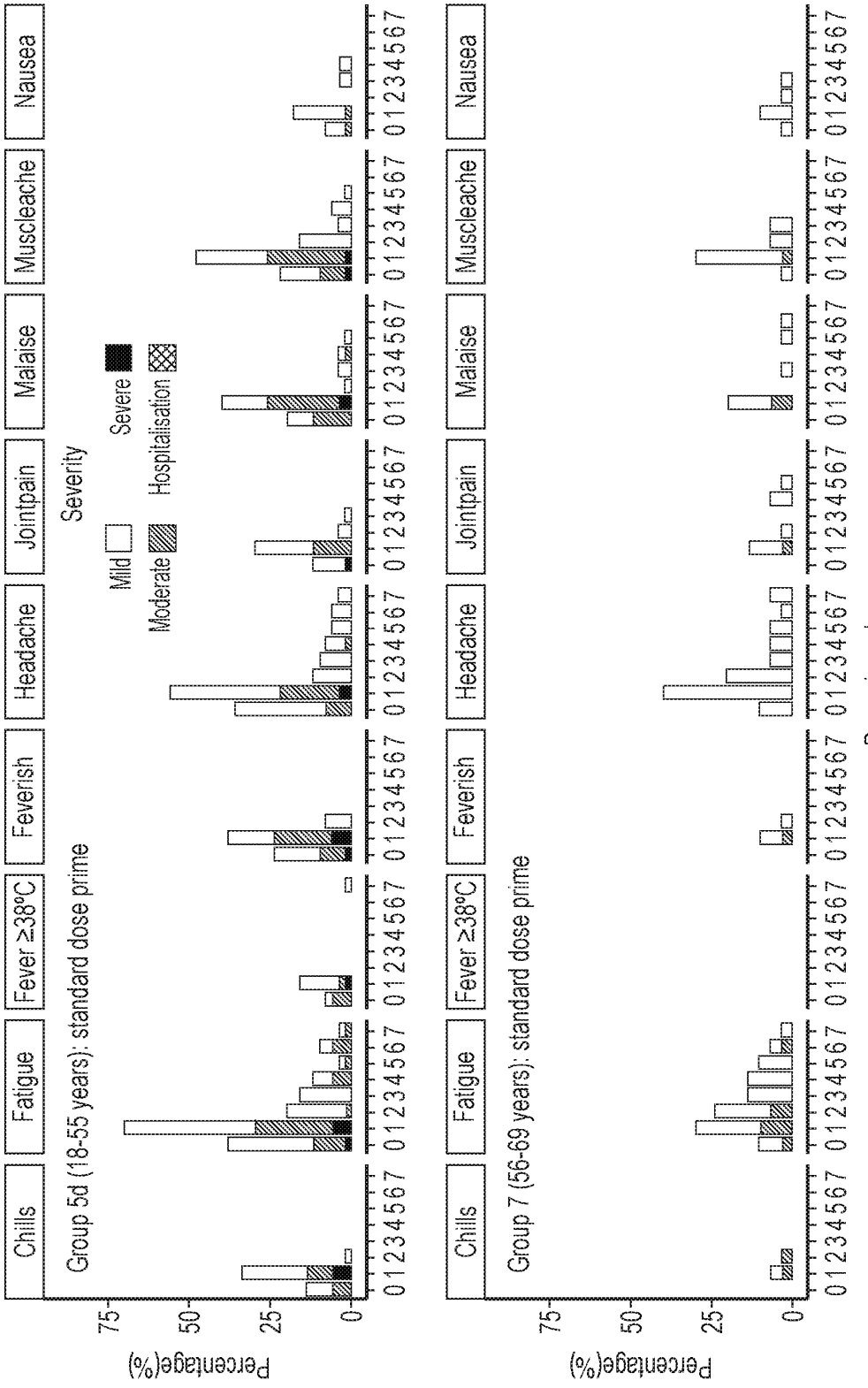

Chills
Fatigue
Fever ≥38°C
Feverish
Headache
Jointpain
Malaise
Muscleache
Nausea
Group 5d (18-55 years): standard dose prime
Group 7 (56-69 years): standard dose prime
Severity
Mild
Moderate
Severe
Hospitalisation
Percentage(%)
0
25
50
75
0 1 2 3 4 5 6 7
Days since dose

FIG. 27

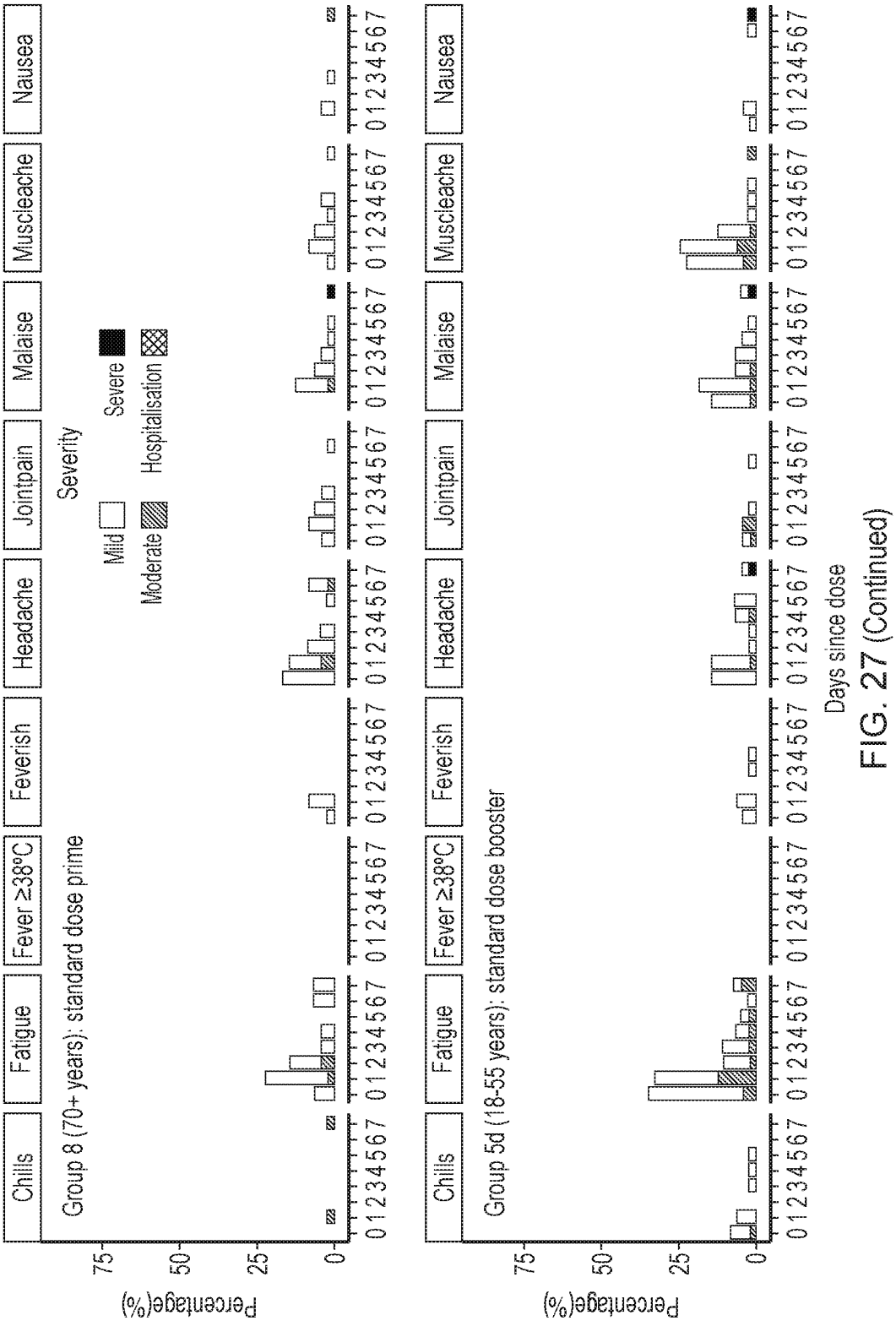


FIG. 27 (Continued)

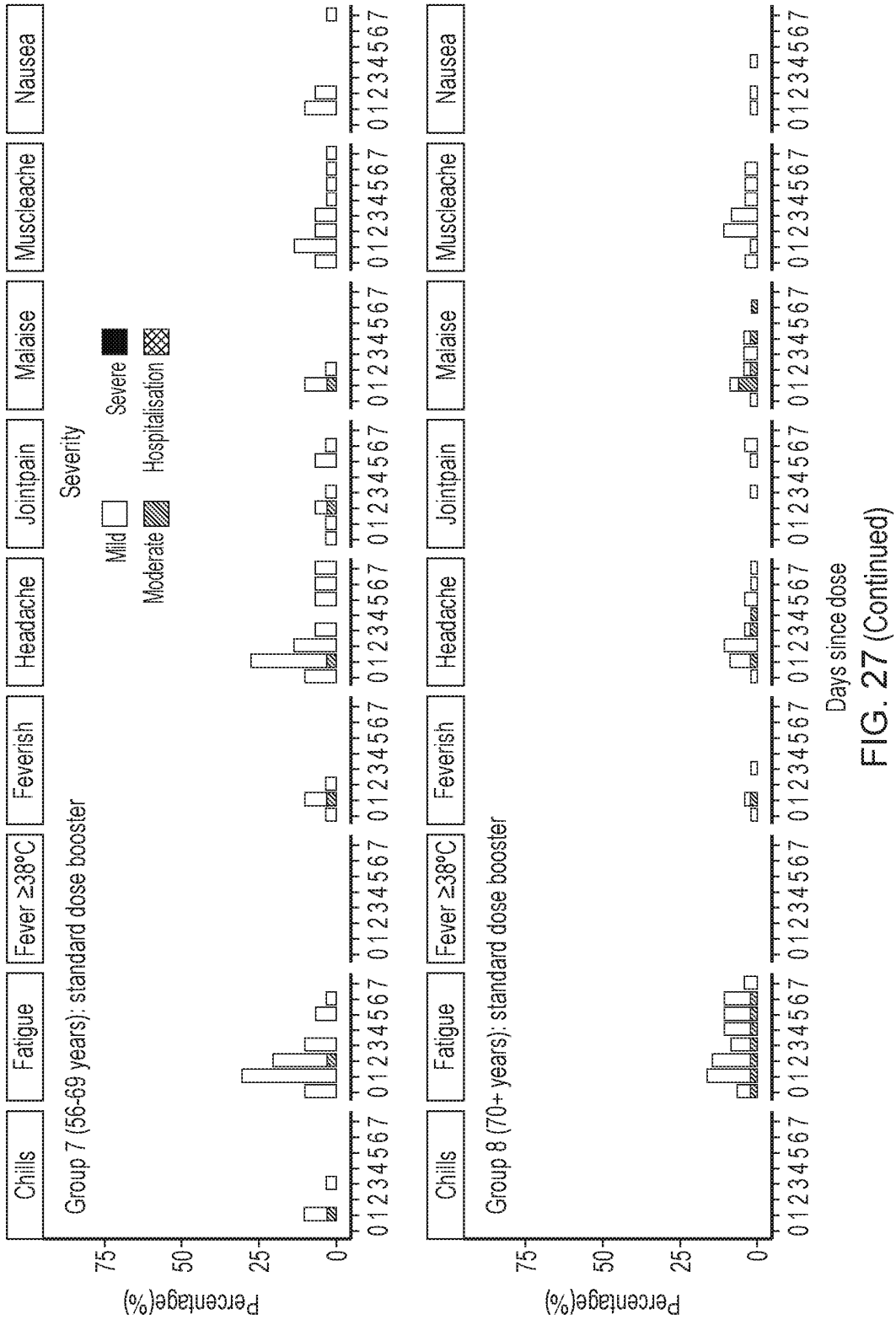


FIG. 27 (Continued)

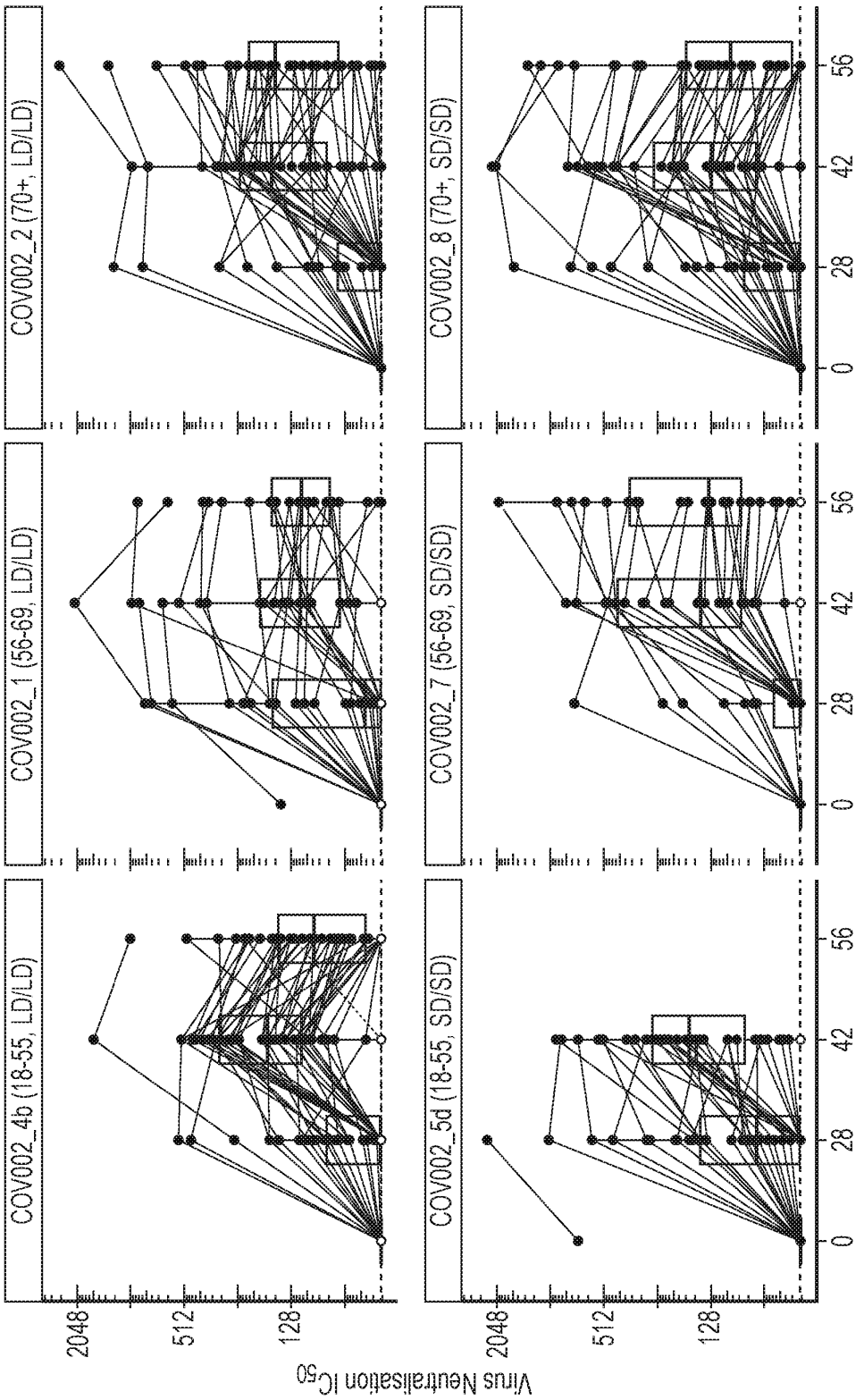

COV002_2 (70+, LD/LD)
COV002_8 (70+, SD/SD)
COV002_1 (56-69, LD/LD)
COV002_7 (56-69, SD/SD)
COV002_4b (18-55, LD/LD)
COV002_5d (18-55, SD/SD)
Virus Neutralisation IC50
2048
512
128
0
28
42
56

FIG. 28

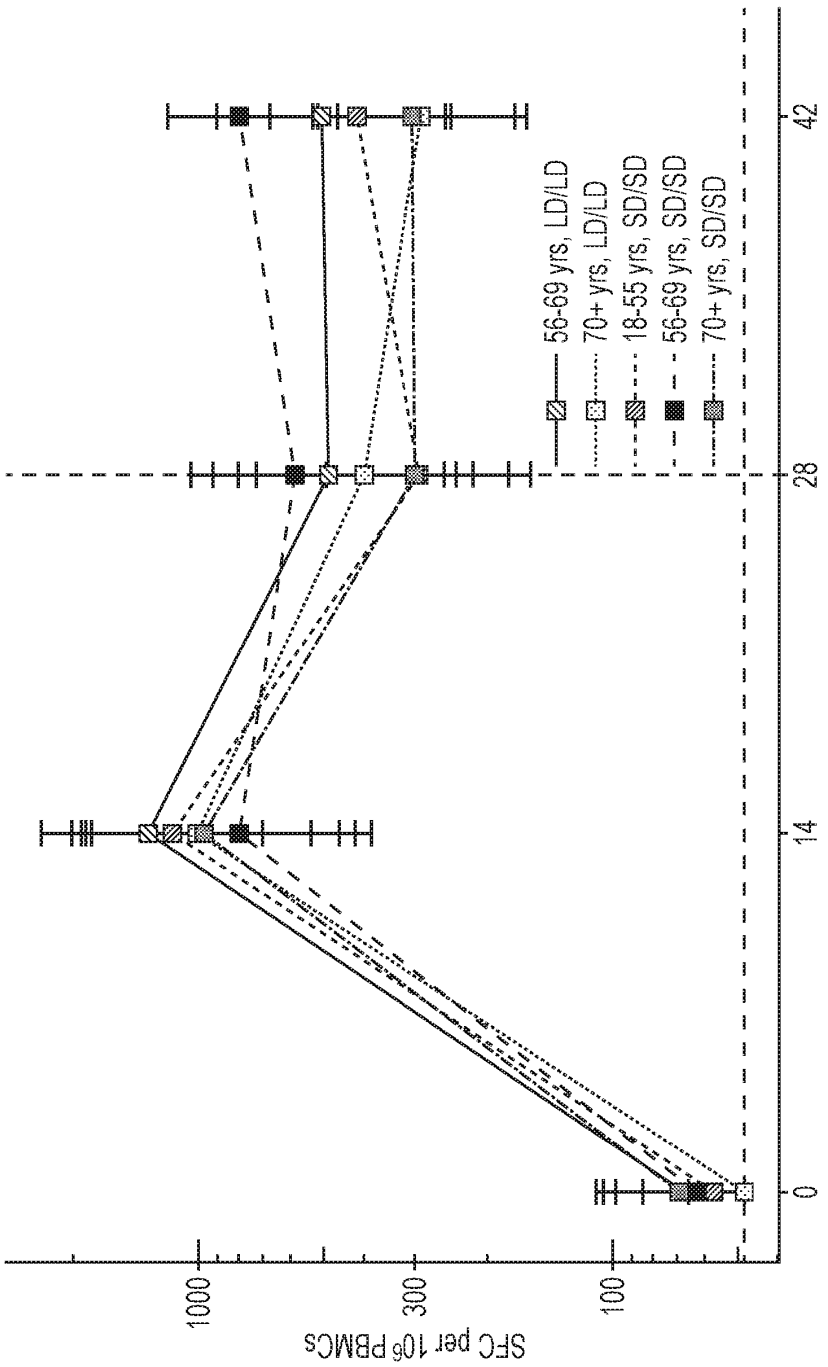

SFC per 10⁶ PBMCs
1000
300
100
0
14
28
42
Days post vaccination
56-69 yrs, LD/LD
70+ yrs, LD/LD
18-55 yrs, SD/SD
56-69 yrs, SD/SD
70+ yrs, SD/SD

FIG. 29

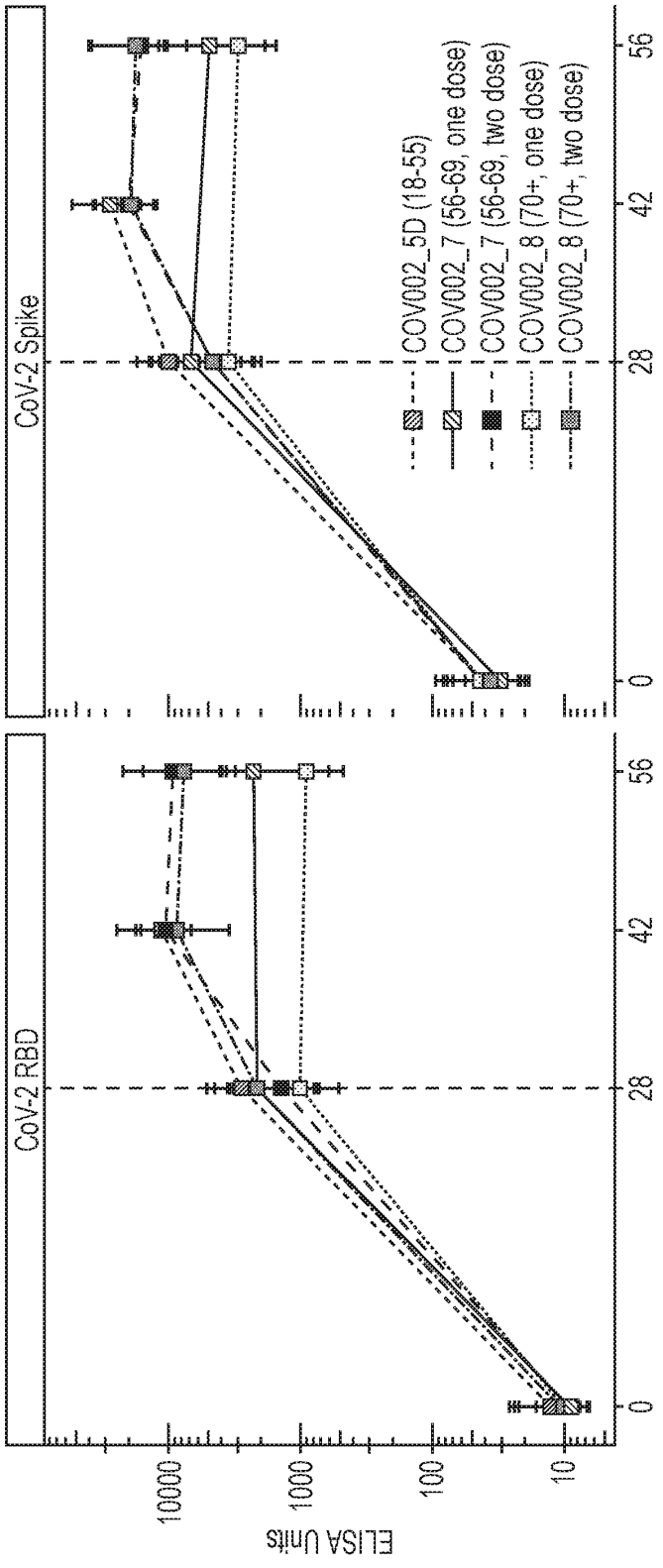

CoV-2 Spike
CoV-2 RBD
COV002_5D (18-55)
COV002_7 (56-69, one dose)
COV002_7 (56-69, two dose)
COV002_8 (70+, one dose)
COV002_8 (70+, two dose)
ELISA Units
10000
1000
100
10
0
28
42
56
Days post vaccination

FIG. 30

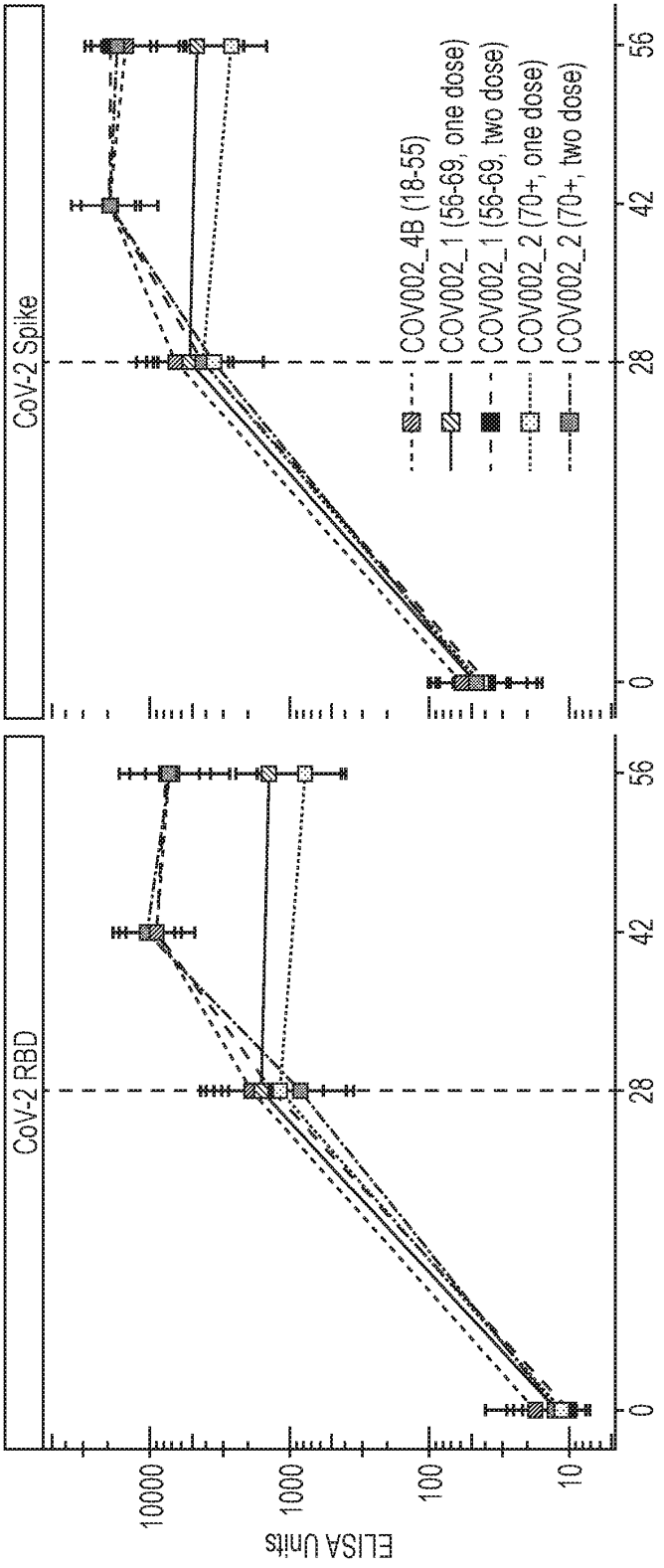


FIG. 30 (continued)

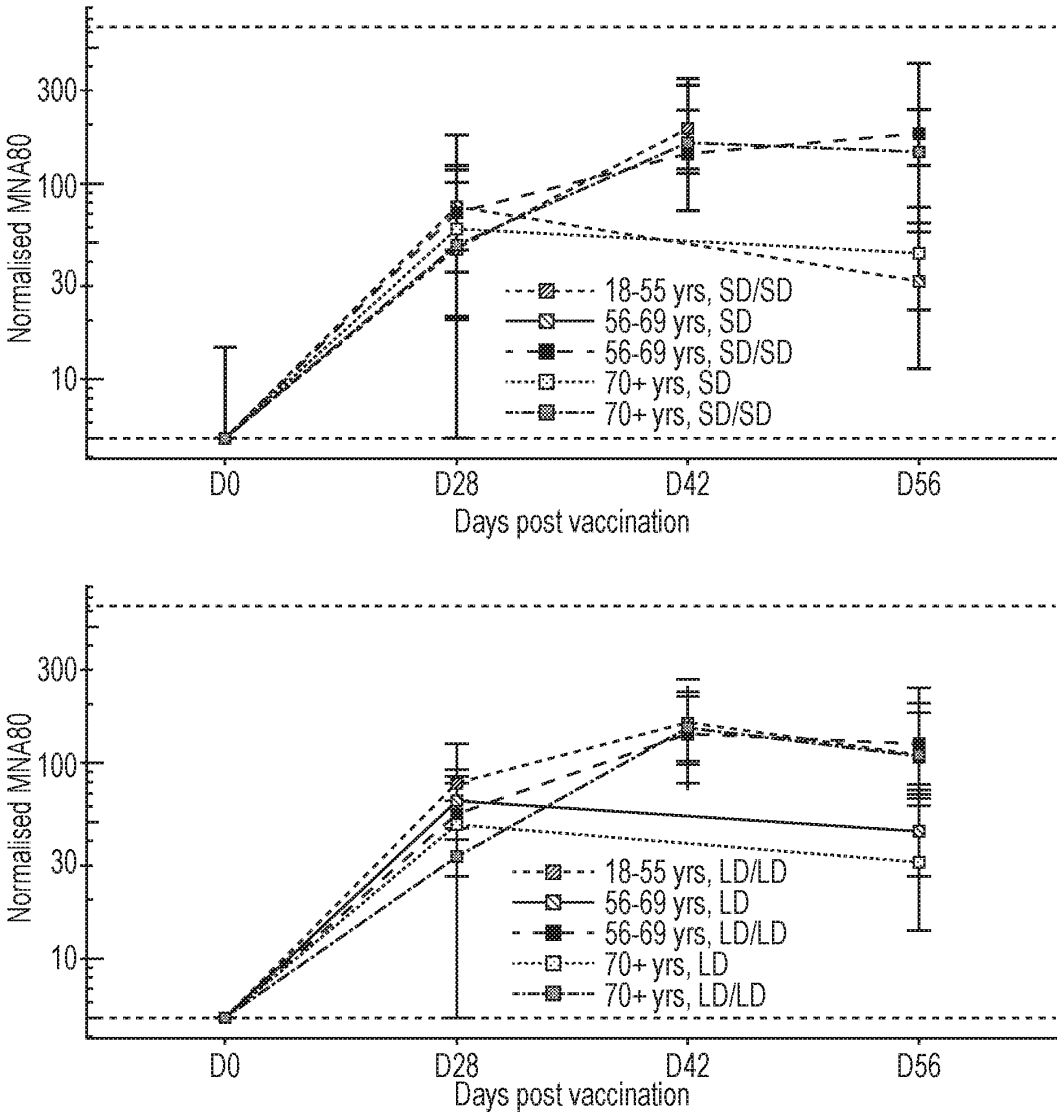

Normalised MNA80
300
100
30
10
18-55 yrs, SD/SD
56-69 yrs, SD
56-69 yrs, SD/SD
70+ yrs, SD
70+ yrs, SD/SD
D0
D28
D42
D56
Days post vaccination
Normalised MNA80
300
100
30
10
18-55 yrs, LD/LD
56-69 yrs, LD
56-69 yrs, LD/LD
70+ yrs, LD
70+ yrs, LD/LD
D0
D28
D42
D56
Days post vaccination

FIG. 31

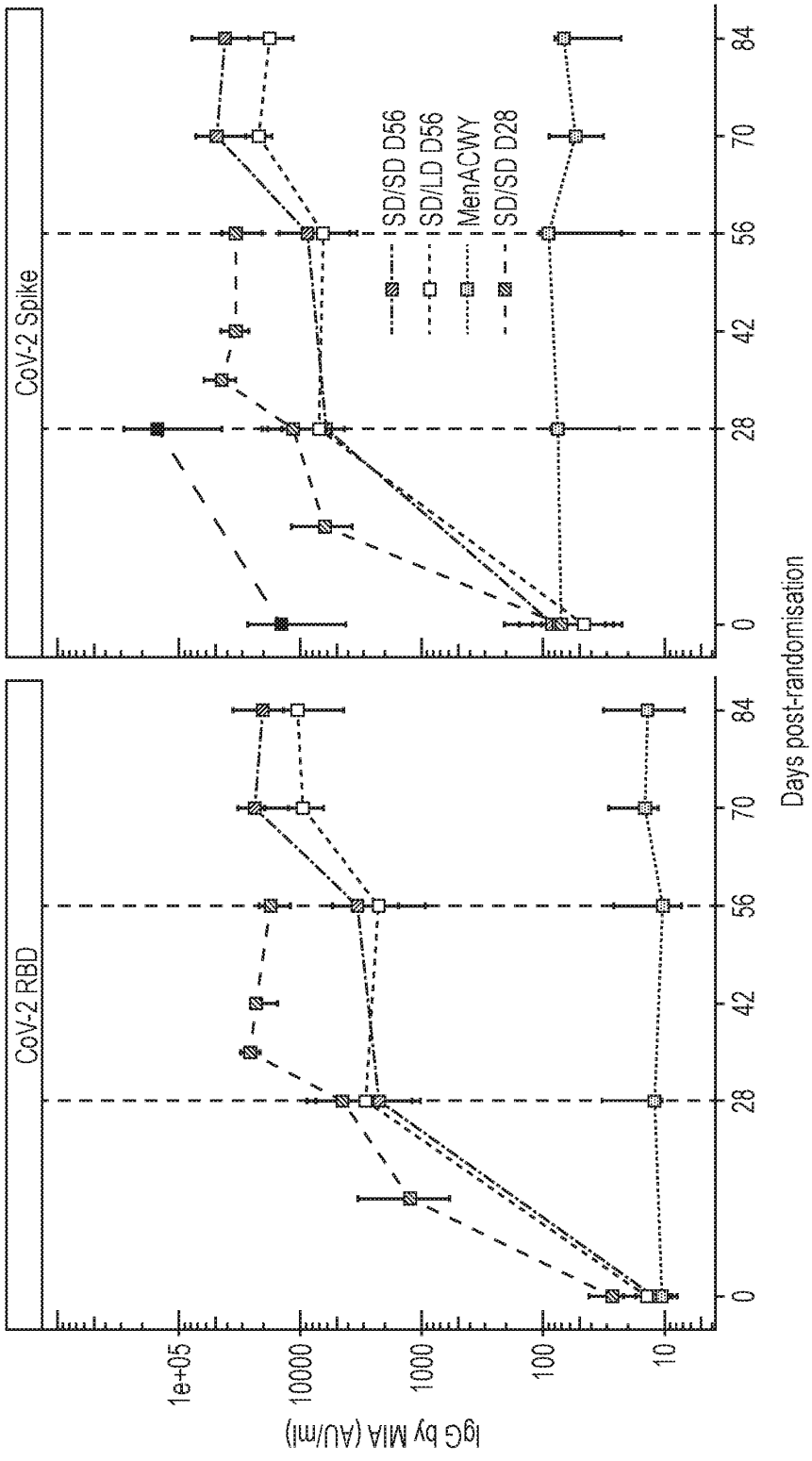

CoV-2 Spike
CoV-2 RBD
SD/SD D56
SD/LD D56
MenACWY
SD/SD D28
IgG by MIA (AU/ml)
1e+05
10000
1000
100
10
0
28
42
56
70
84
Days post-randomisation

FIG. 32

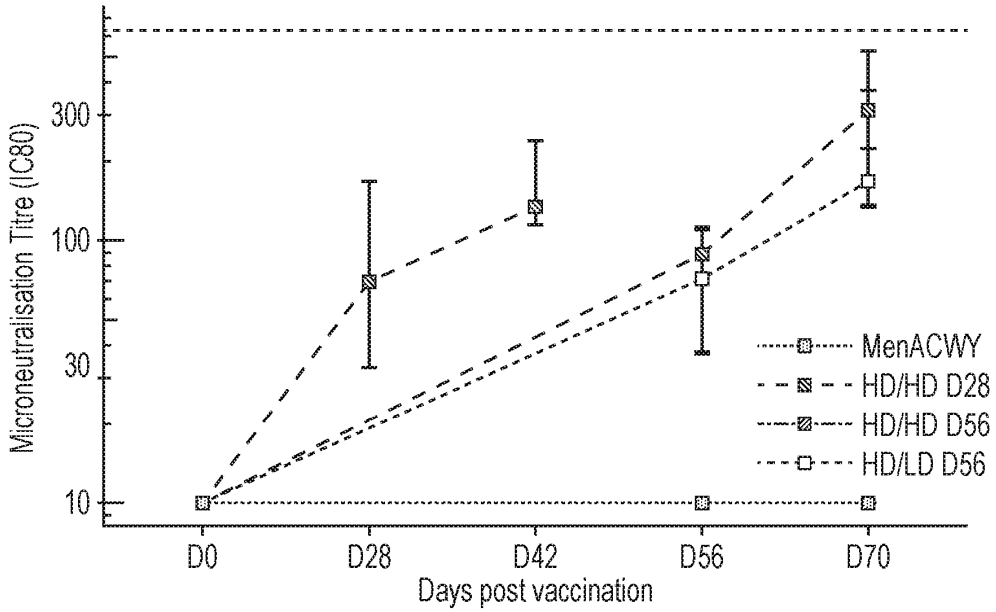

Microneutralisation Titre (IC80)
300
100
30
10
D0
D28
D42
D56
D70
Days post vaccination
MenACWY
HD/HD D28
HD/HD D56
HD/LD D56

FIG. 33

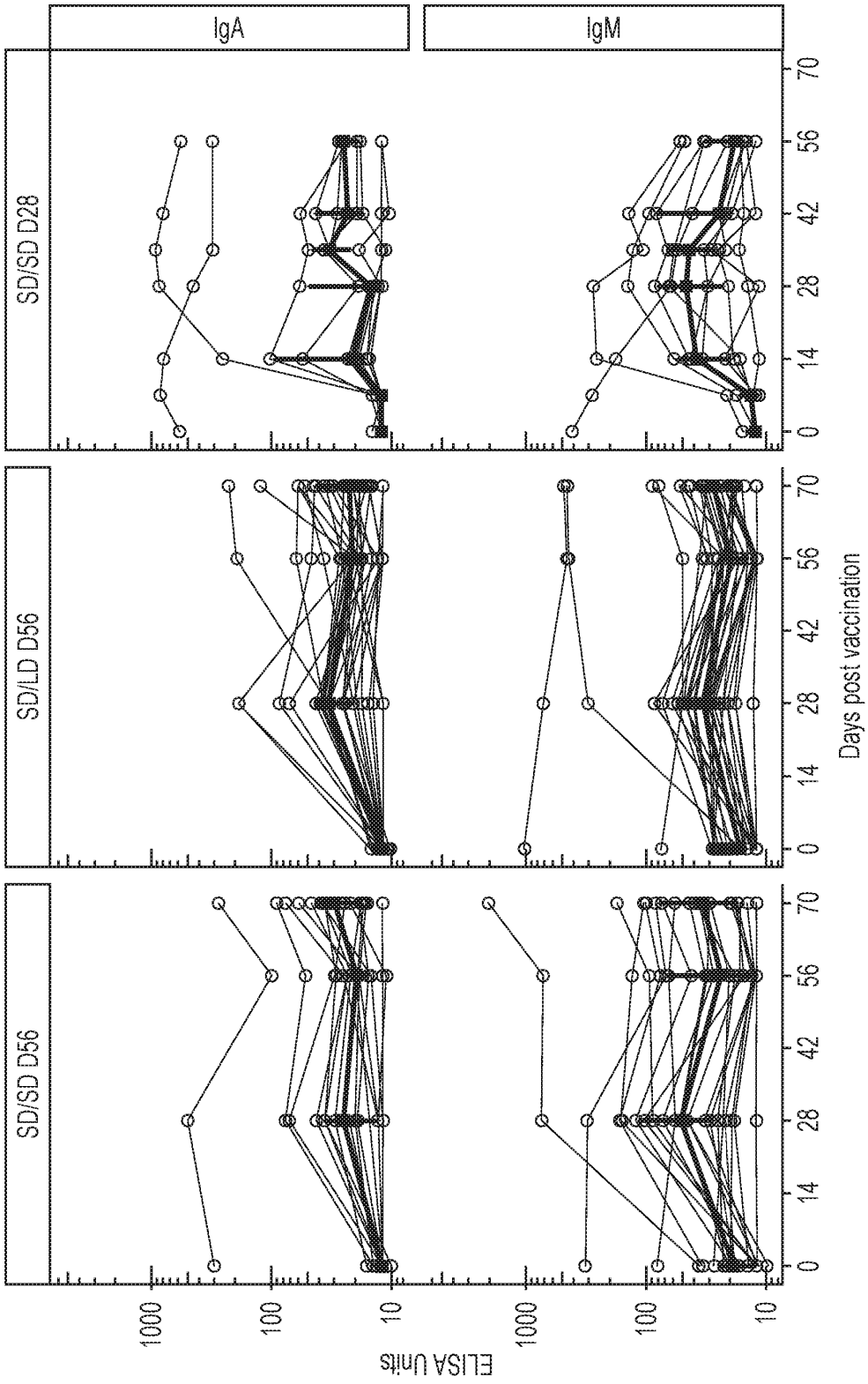

IgA
IgM
SD/SD D28
SD/LD D56
SD/SD D56
ELISA Units
1000
100
10
Days post vaccination
0
14
28
42
56
70

FIG. 34

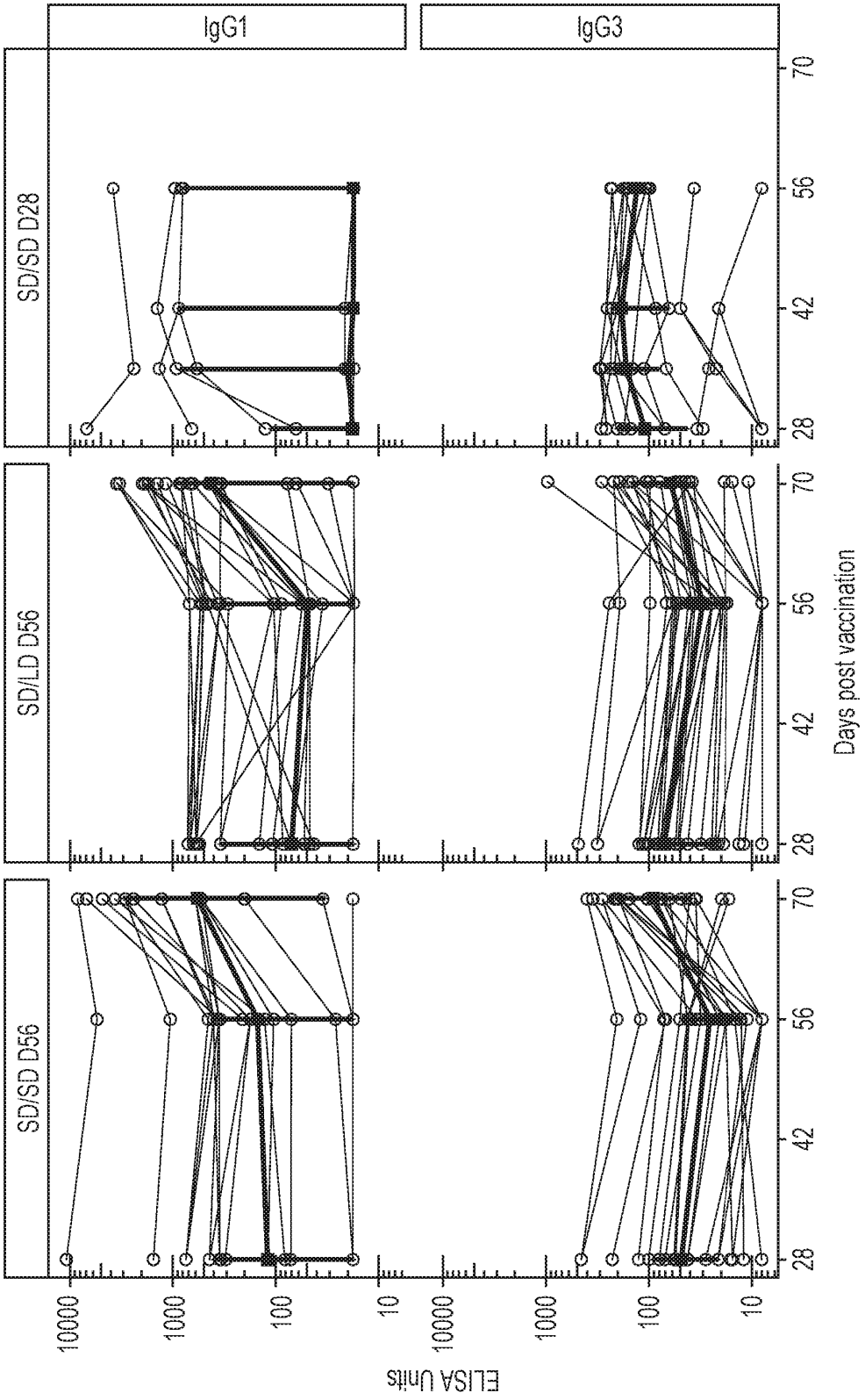

IgG1
IgG3
SD/SD D28
SD/LD D56
SD/SD D56
10000
1000
100
10
ELISA Units
28
42
56
70
Days post vaccination

FIG. 35

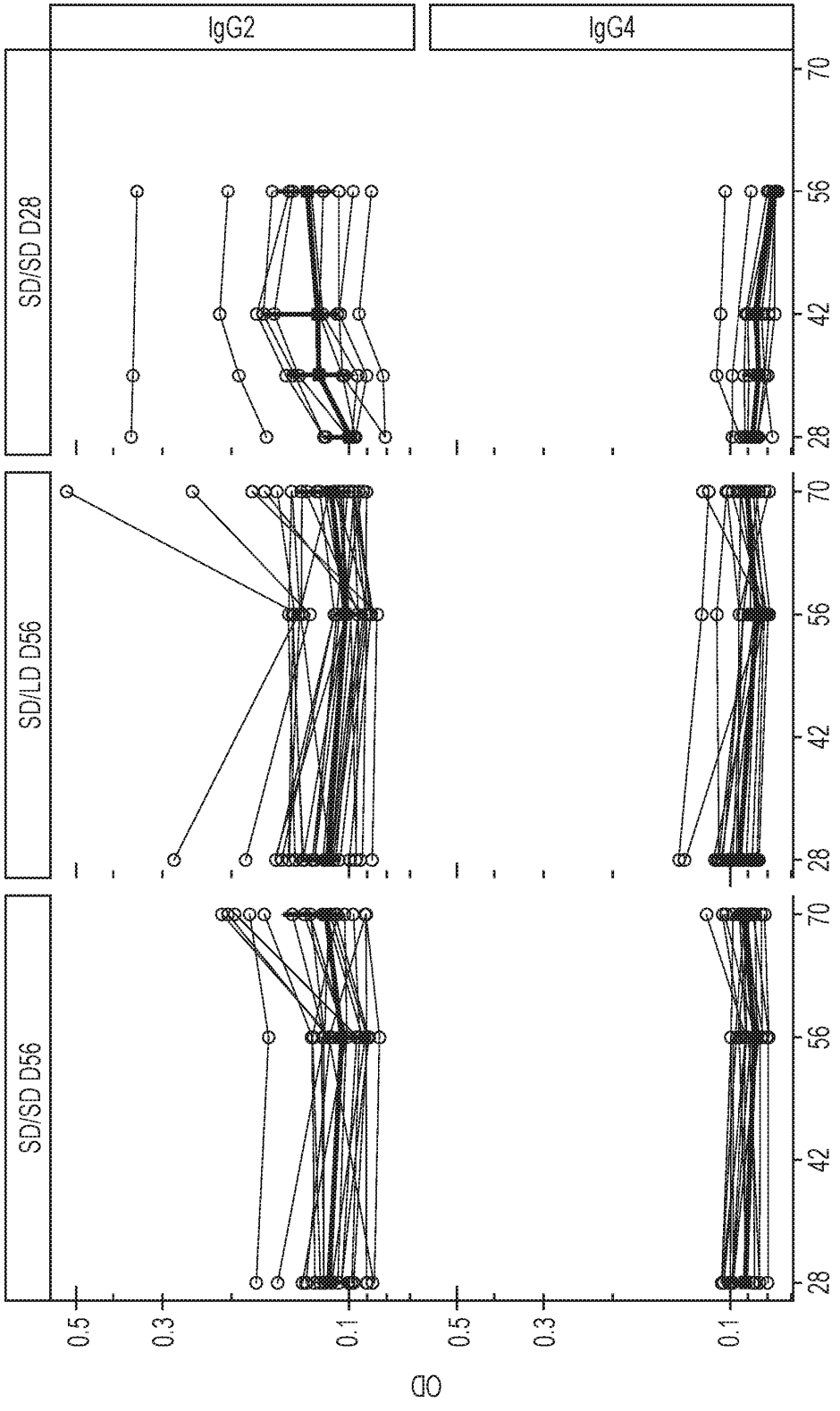


FIG. 35 (continued)

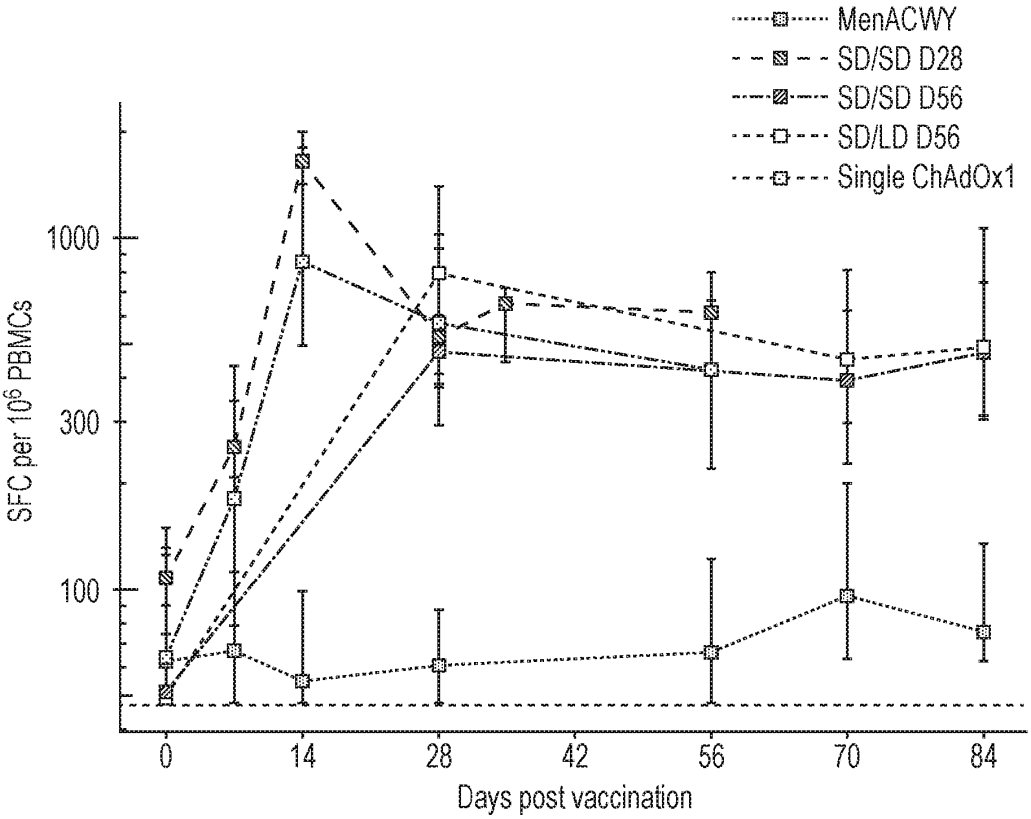

MenACWY
SD/SD D28
SD/SD D56
SD/LD D56
Single ChAdOx1
SFC per 10^6 PBMCs
1000
300
100
0
14
28
42
56
70
84
Days post vaccination

FIG. 36

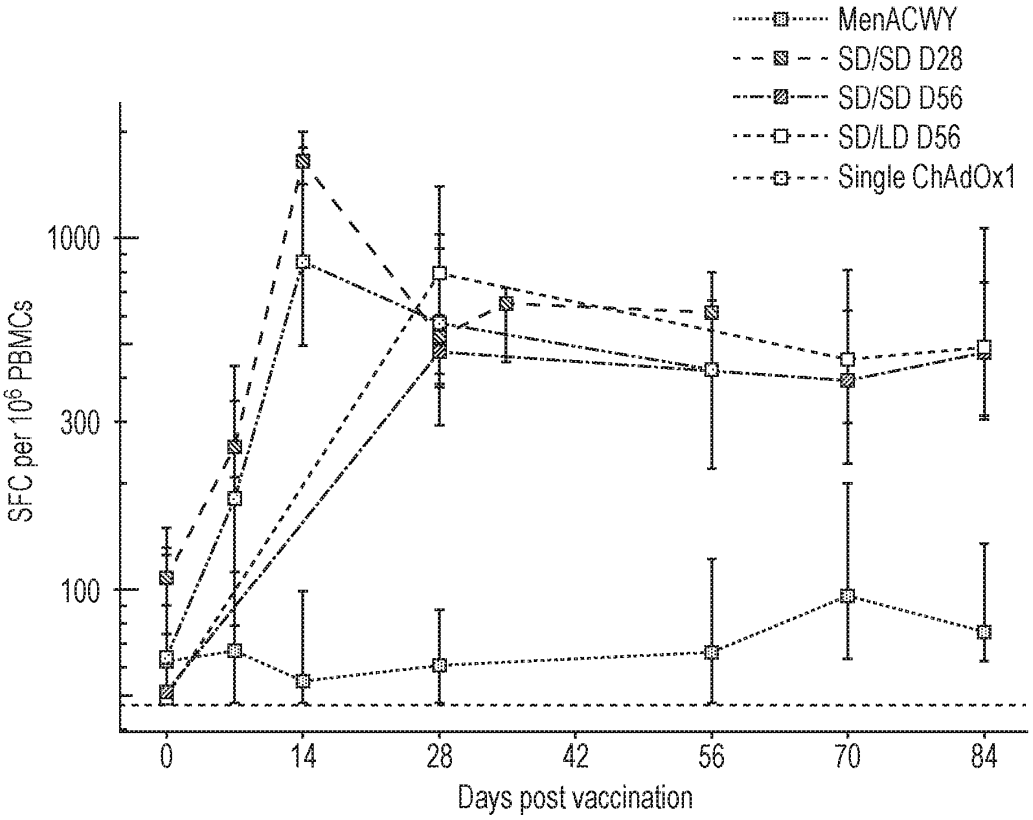

MenACWY
SD/SD D28
SD/SD D56
SD/LD D56
Single ChAdOx1
SFC per 10^6 PBMCs
1000
300
100
0
14
28
42
56
70
84
Days post vaccination

FIG. 37

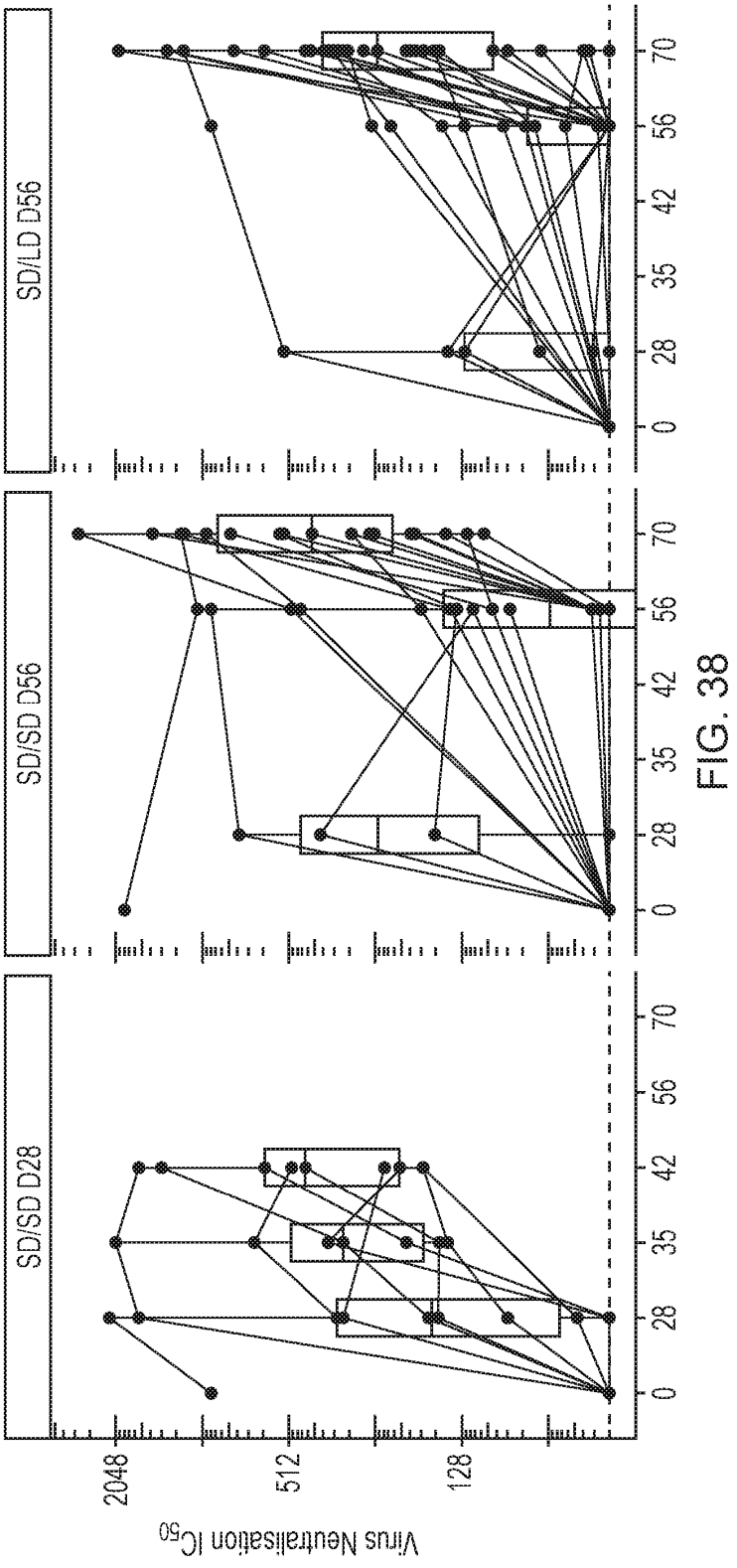

SD/LD D56
SD/SD D56
SD/SD D28
0
28
35
42
56
70
2048
512
128
Virus Neutralisation IC50

FIG. 38

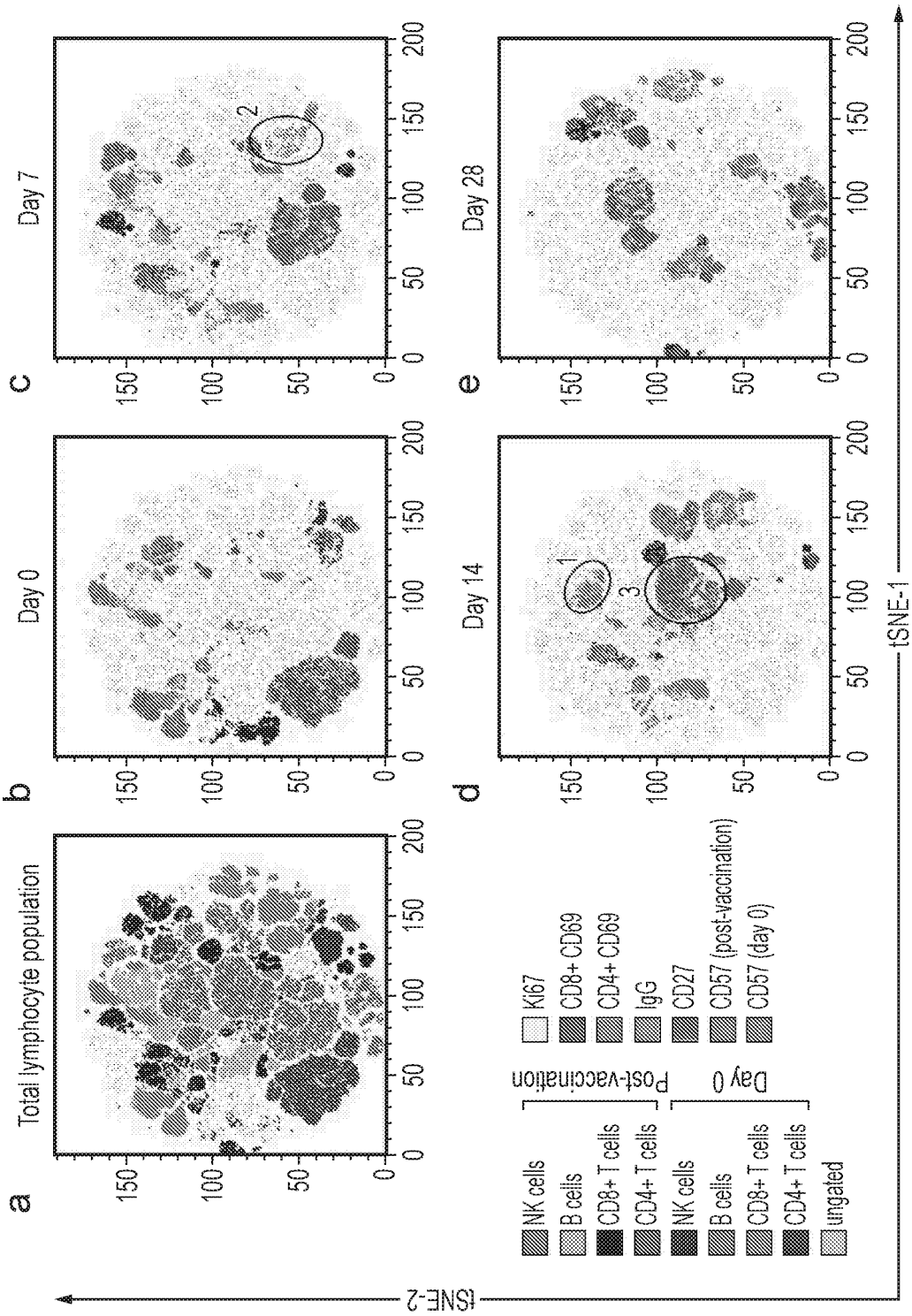

a
Total lymphocyte population
b
Day 0
c
Day 7
d
Day 14
e
Day 28
tSNE-1
tSNE-2
NK cells
B cells
CD8+ T cells
CD4+ T cells
ungated
Day 0
NK cells
B cells
CD8+ T cells
CD4+ T cells
Post-vaccination
Ki67
CD8+ CD69
CD4+ CD69
IgG
CD27
CD57 (post-vaccination)
CD57 (day 0)

FIG. 39

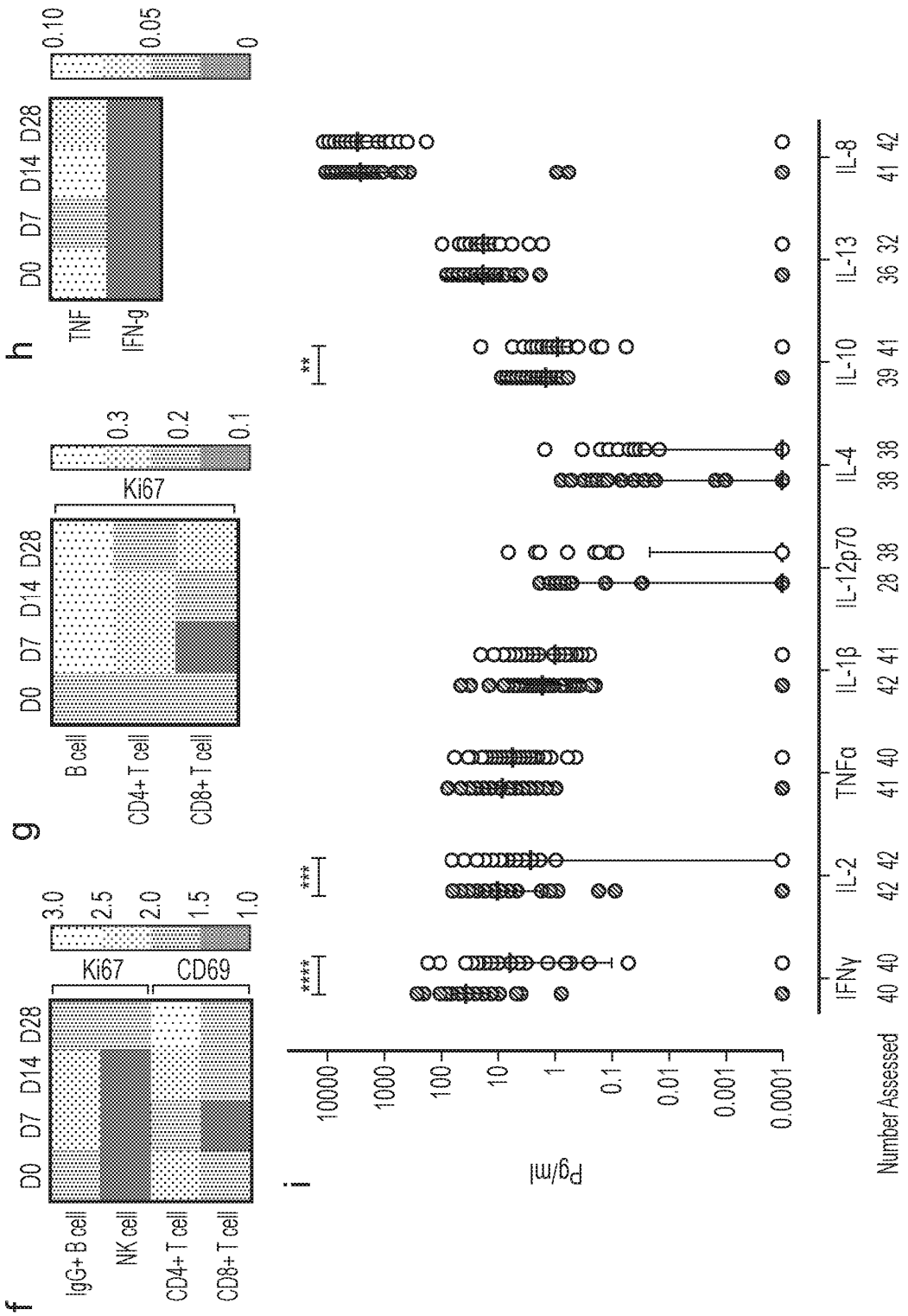


FIG. 39 (Continued)

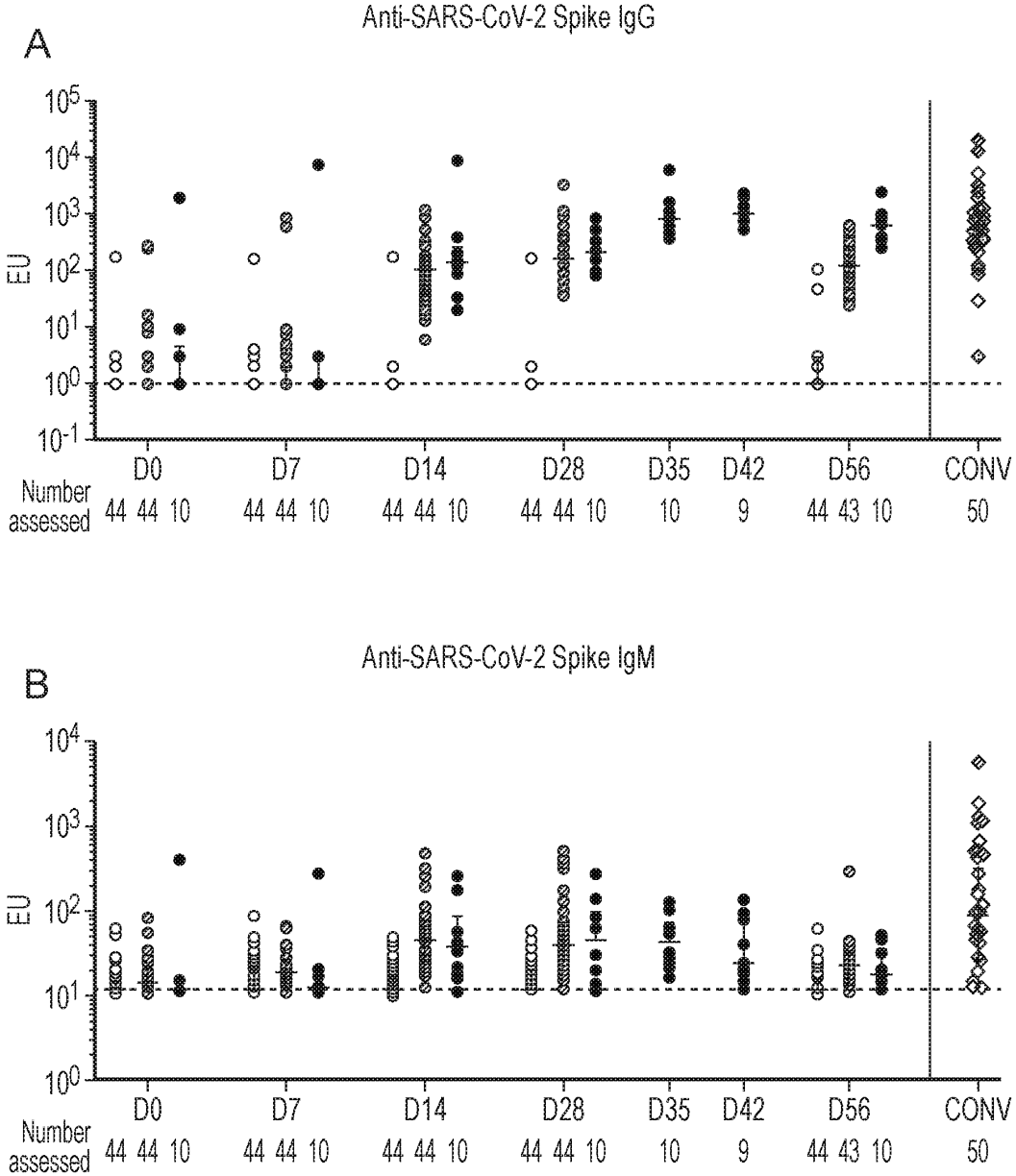
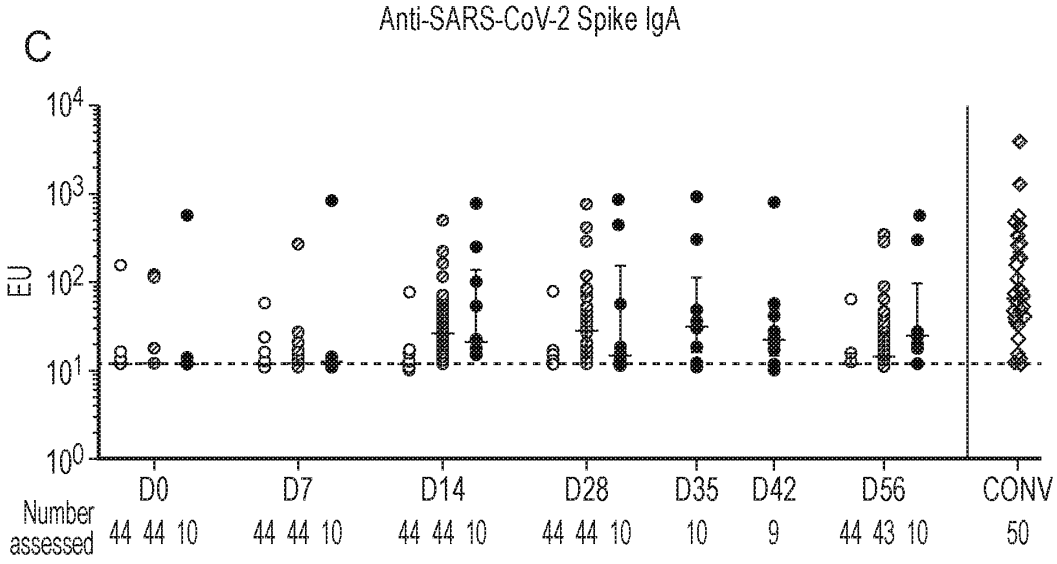
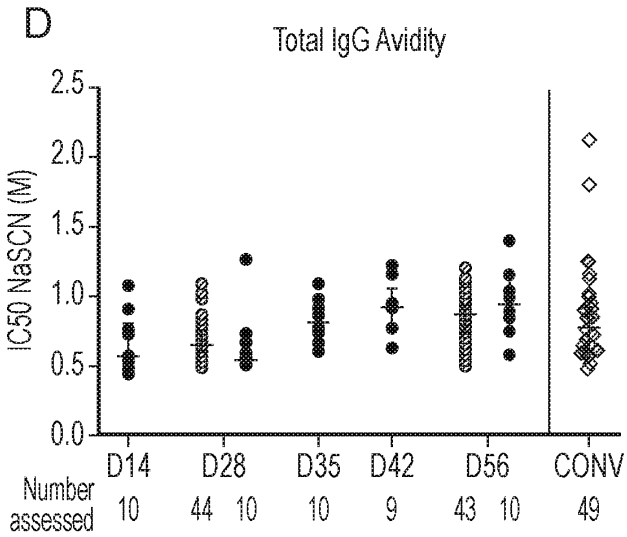

A
Anti-SARS-CoV-2 Spike IgG
EU
10^5
10^4
10^3
10^2
10^1
10^0
10^{-1}
D0 D7 D14 D28 D35 D42 D56 CONV
Number assessed
44 44 10 44 44 10 44 44 10 44 44 10 10 9 44 43 10 50
B
Anti-SARS-CoV-2 Spike IgM
EU
10^4
10^3
10^2
10^1
10^0
D0 D7 D14 D28 D35 D42 D56 CONV
Number assessed
44 44 10 44 44 10 44 44 10 44 44 10 10 9 44 43 10 50

FIG. 40





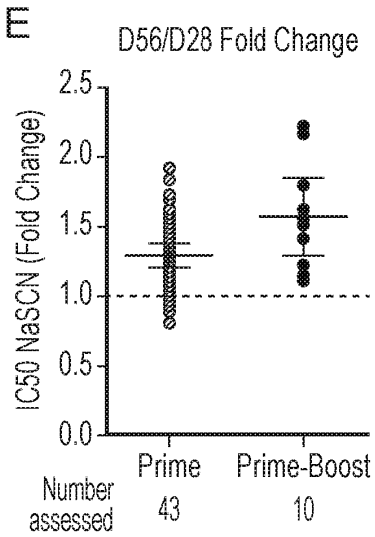


FIG. 40 (Continued)

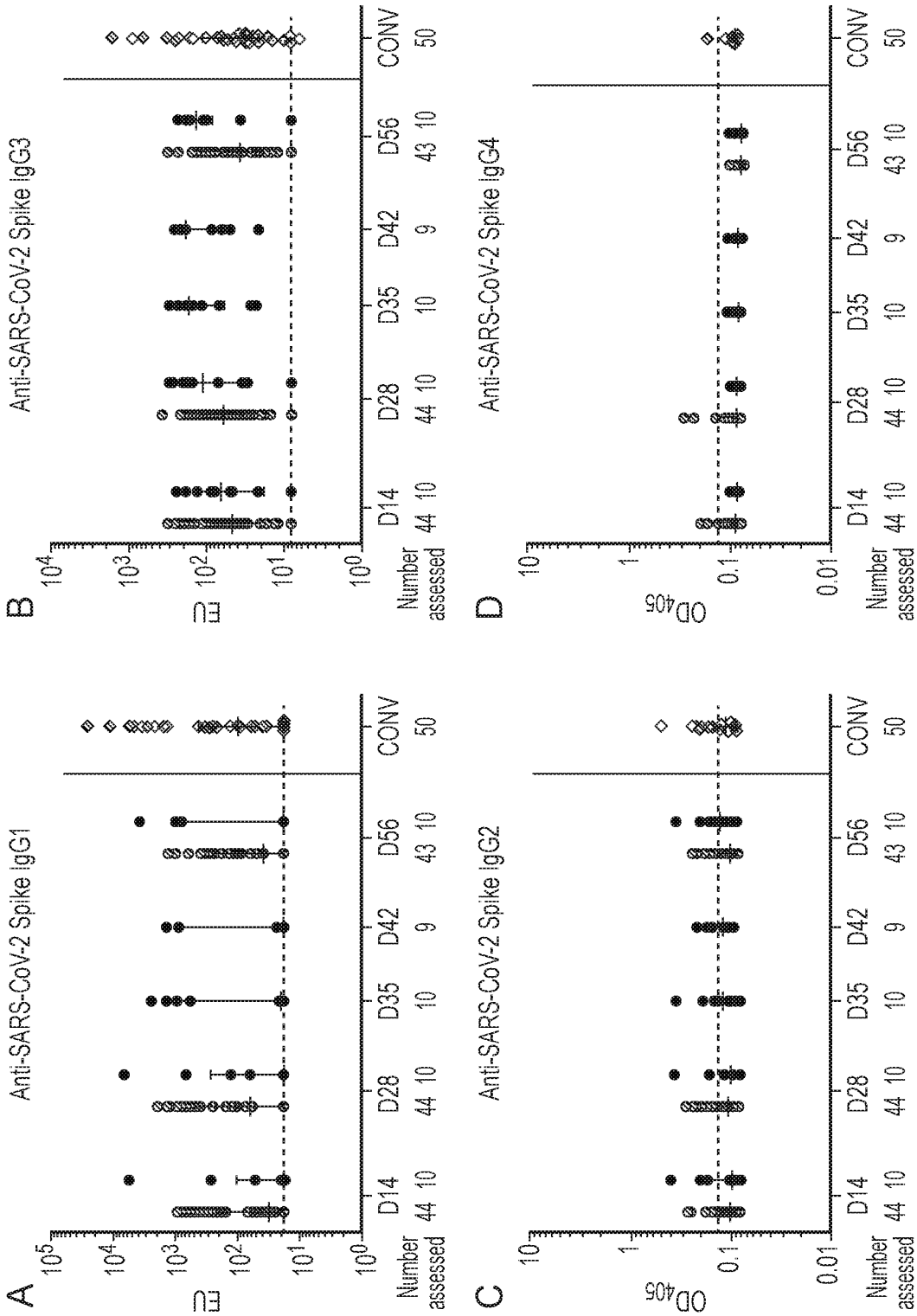
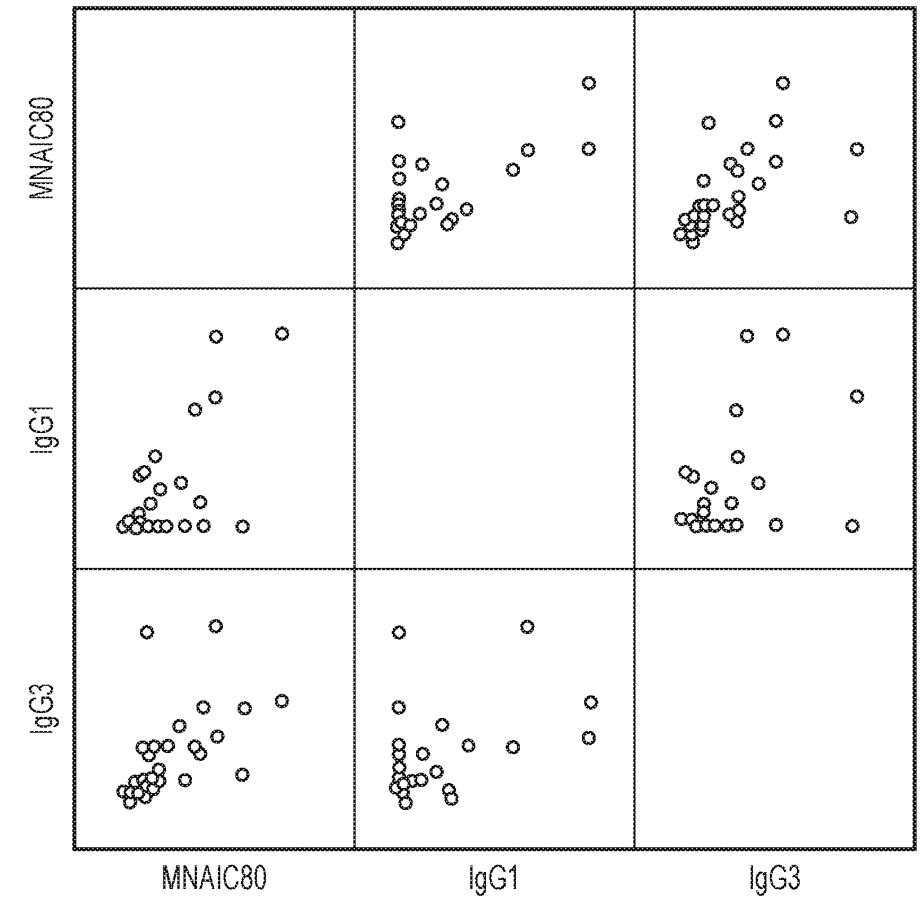

A
Anti-SARS-CoV-2 Spike IgG1
EU
B
Anti-SARS-CoV-2 Spike IgG3
EU
C
Anti-SARS-CoV-2 Spike IgG2
OD405
D
Anti-SARS-CoV-2 Spike IgG4
OD405
D14 D28 D35 D42 D56 CONV
Number assessed
44 10 44 10 10 9 43 10 50

FIG. 41

E



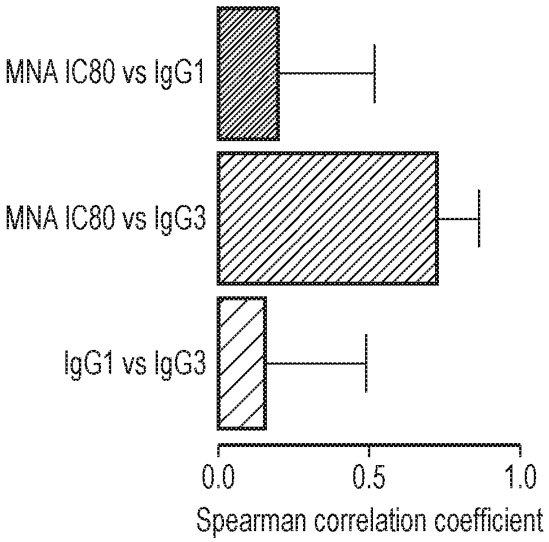


FIG. 41 (Continued)

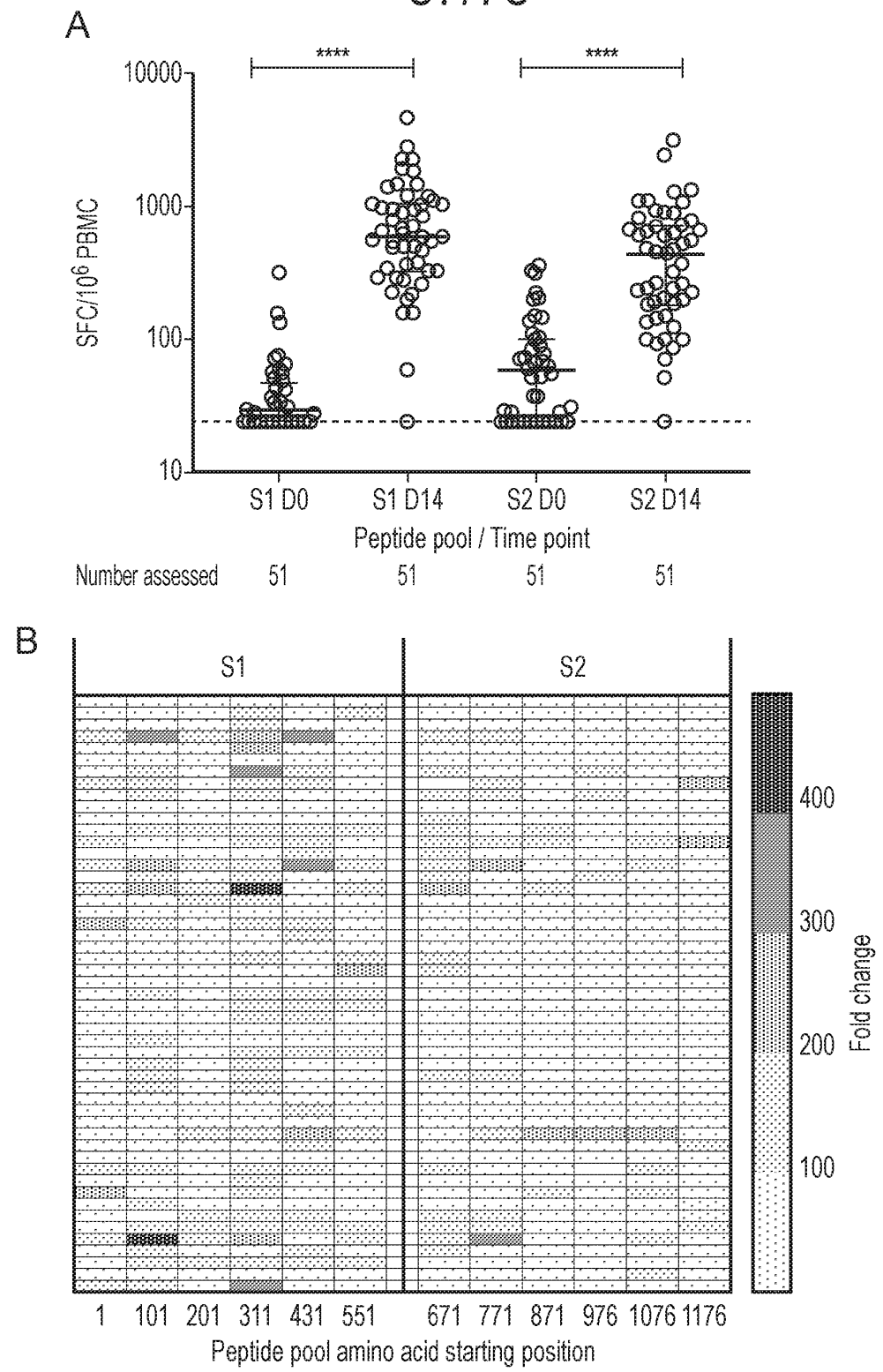

A
****
****
10000
1000
100
10
SFC/10^6 PBMC
S1 D0
S1 D14
S2 D0
S2 D14
Peptide pool / Time point
Number assessed
51
51
51
51
B
S1
S2
400
300
200
100
Fold change
1
101
201
311
431
551
671
771
871
976
1076
1176
Peptide pool amino acid starting position

FIG. 42

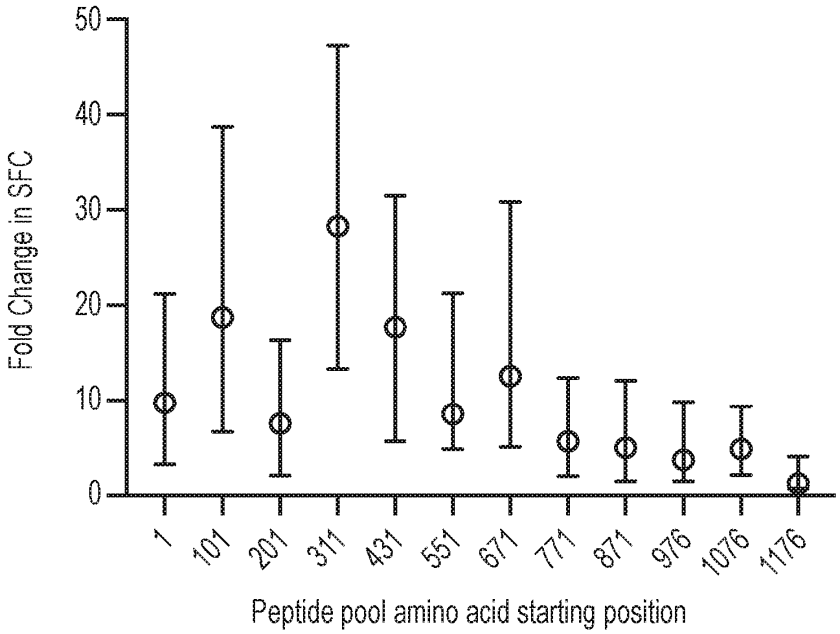

Fold Change in SFC
50
40
30
20
10
0
1
101
201
311
431
551
671
771
871
976
1076
1176
Peptide pool amino acid starting position

FIG. 43

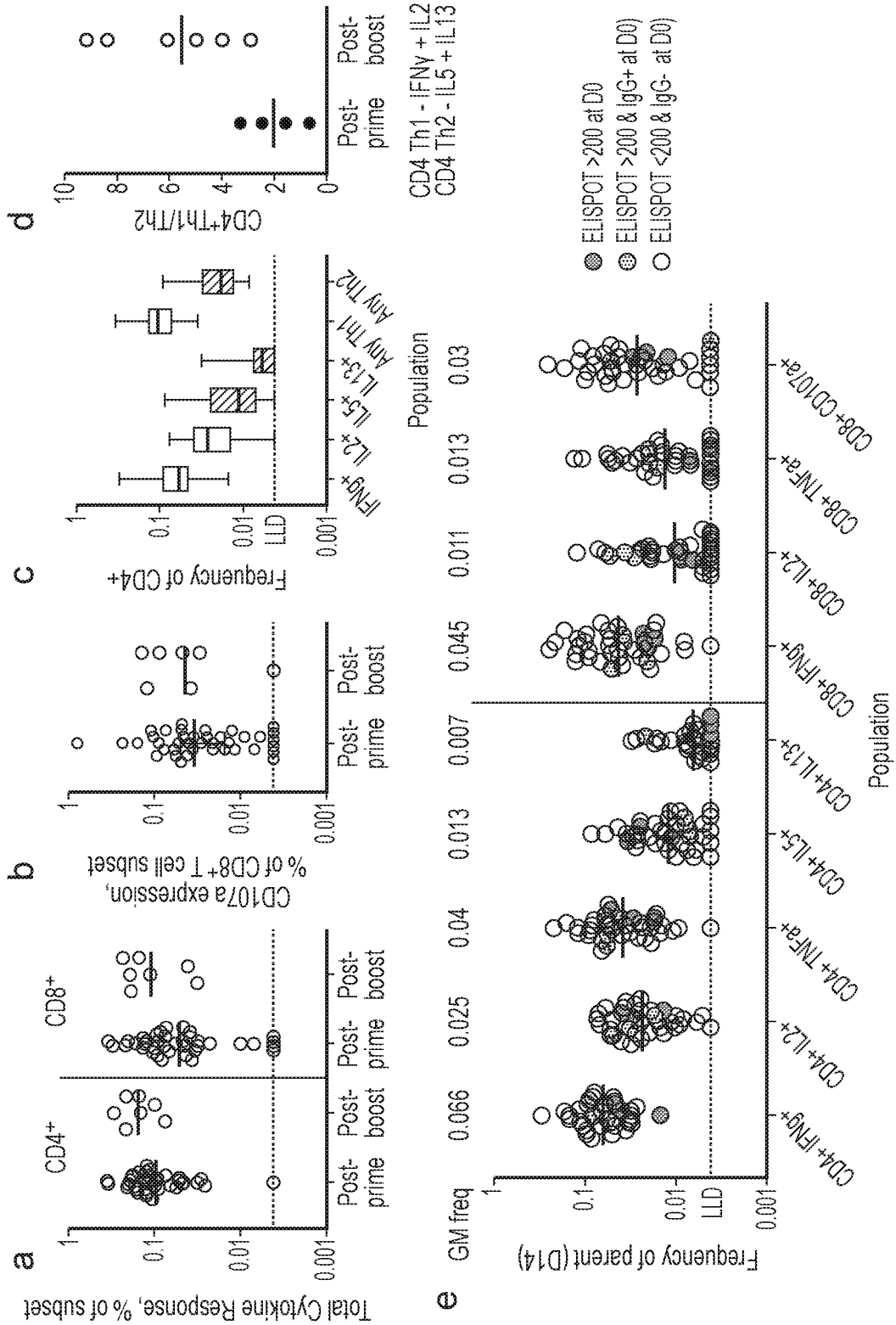

a
Total Cytokine Response, % of subset
CD4+
CD8+
Post-prime
Post-boost
Post-prime
Post-boost
b
CD107a expression, % of CD8+ T cell subset
c
Frequency of CD4+
IFNg+
IL2
IL5
IL13
Any Th1
Any Th2
LLD
d
CD4+Th1/Th2
CD4 Th1 - IFNγ + IL2
CD4 Th2 - IL5 + IL13
e
GM freq
Population
Frequency of parent (D14)
ELISPOT >200 at D0
ELISPOT >200 & IgG+ at D0)
ELISPOT <200 & IgG- at D0)
CD4+ IFNg+
CD4+ IL2+
CD4+ TNFa+
CD4+ IL5+
CD4+ IL13+
CD8+ IFNg+
CD8+ IL2+
CD8+ TNFa+
CD8+ CD107a+

FIG. 44

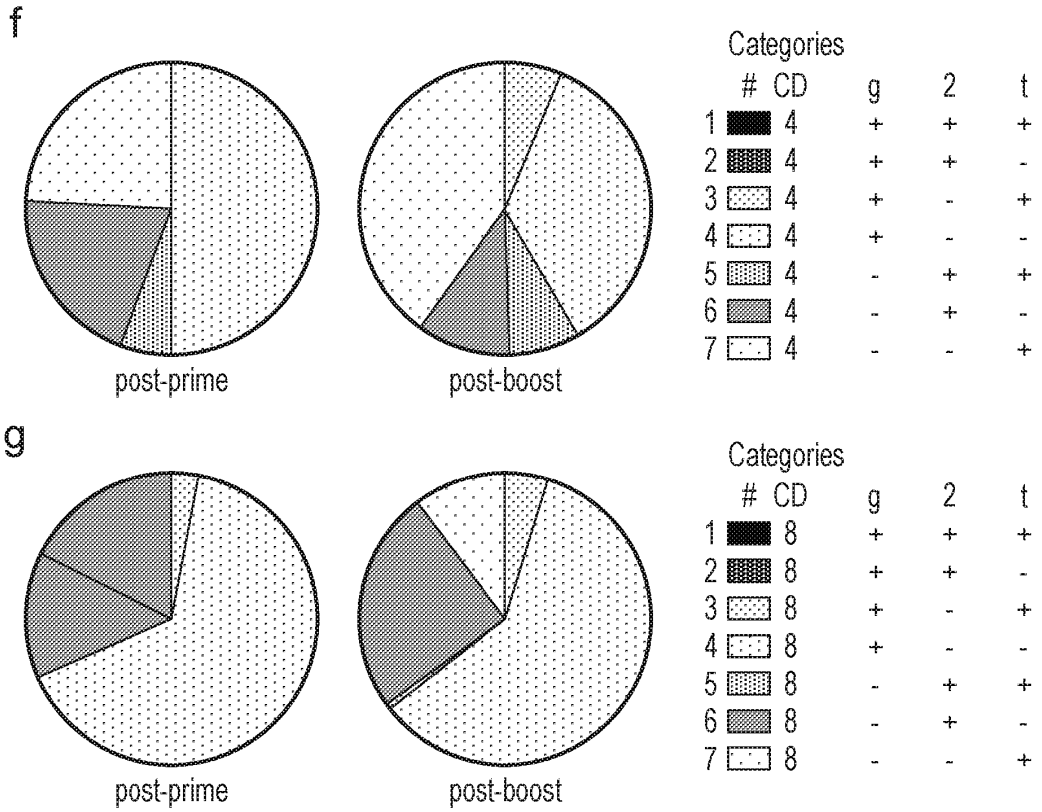


FIG. 44 (Continued)

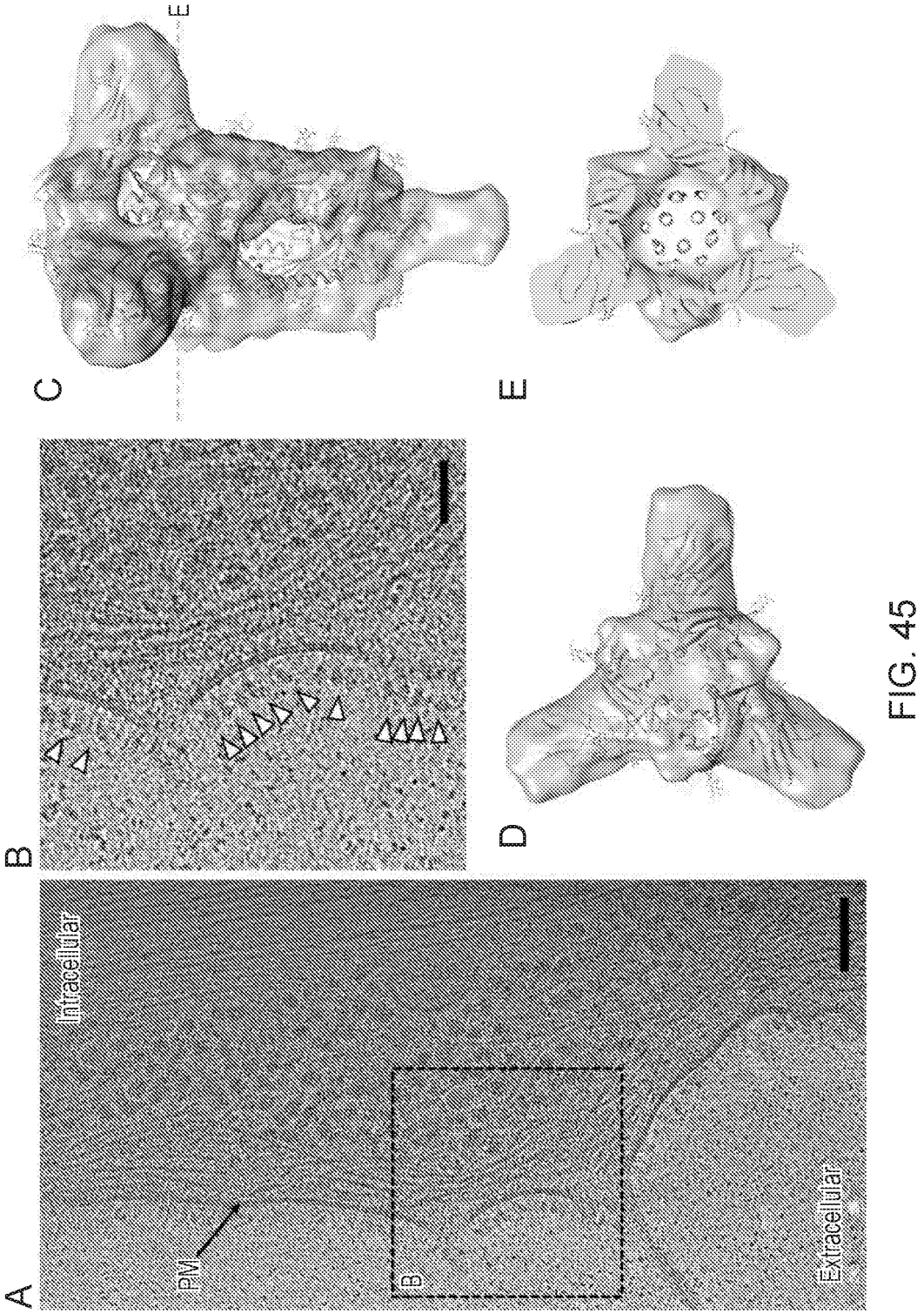


FIG. 45

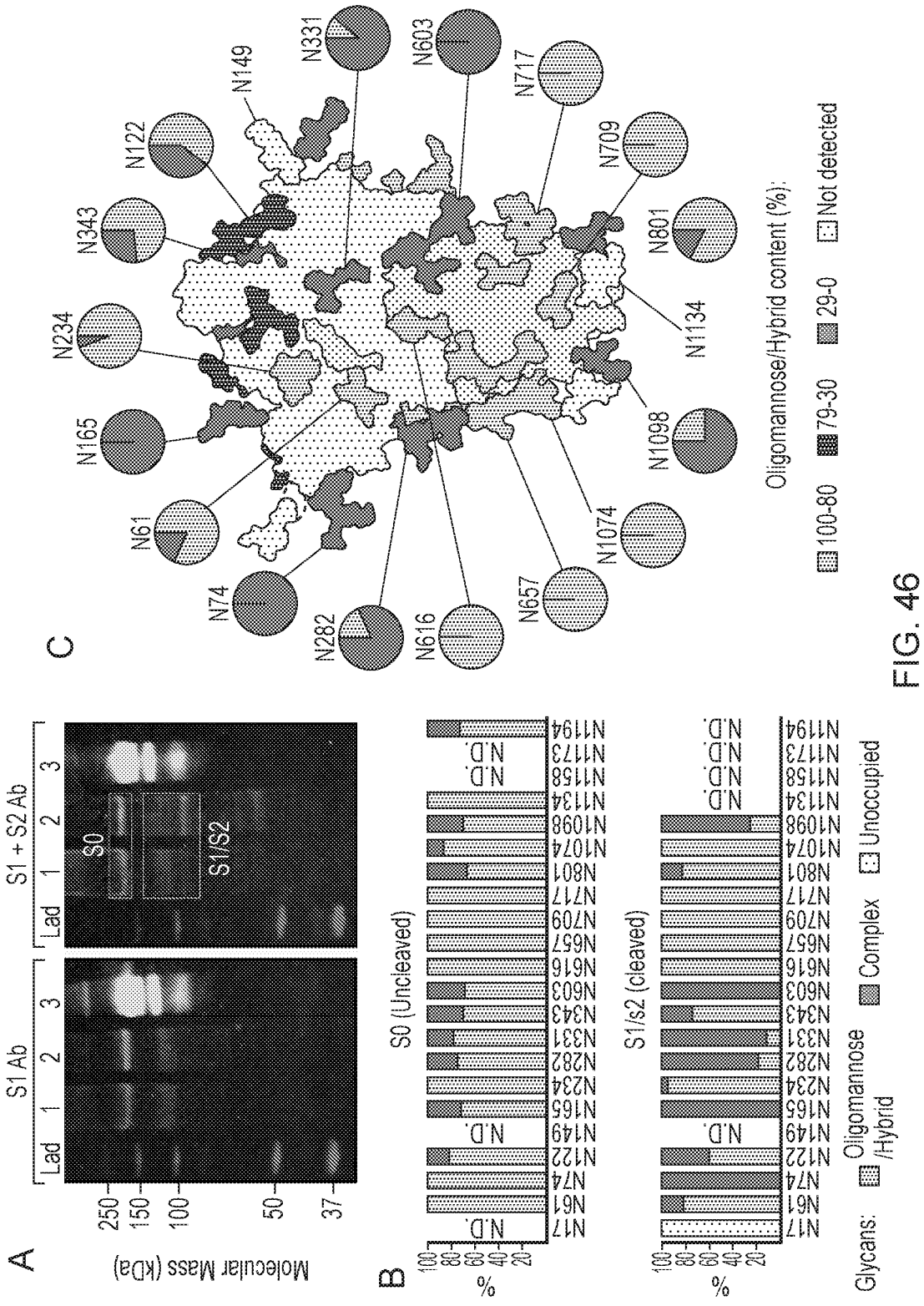

A
S1 Ab
S1 + S2 Ab
Lad 1 2 3
Lad 1 2 3
S0
S1/S2
Molecular Mass (kDa)
250
150
100
50
37
B
S0 (Uncleaved)
S1/s2 (cleaved)
%
N17
N61
N74
N122
N149
N165
N234
N282
N331
N343
N603
N616
N657
N709
N717
N801
N1074
N1098
N1134
N1158
N1173
N1194
N.D.
Glycans:
Oligomannose /Hybrid
Complex
Unoccupied
C
Oligomannose/Hybrid content (%):
100-80
79-30
29-0
Not detected

FIG. 46

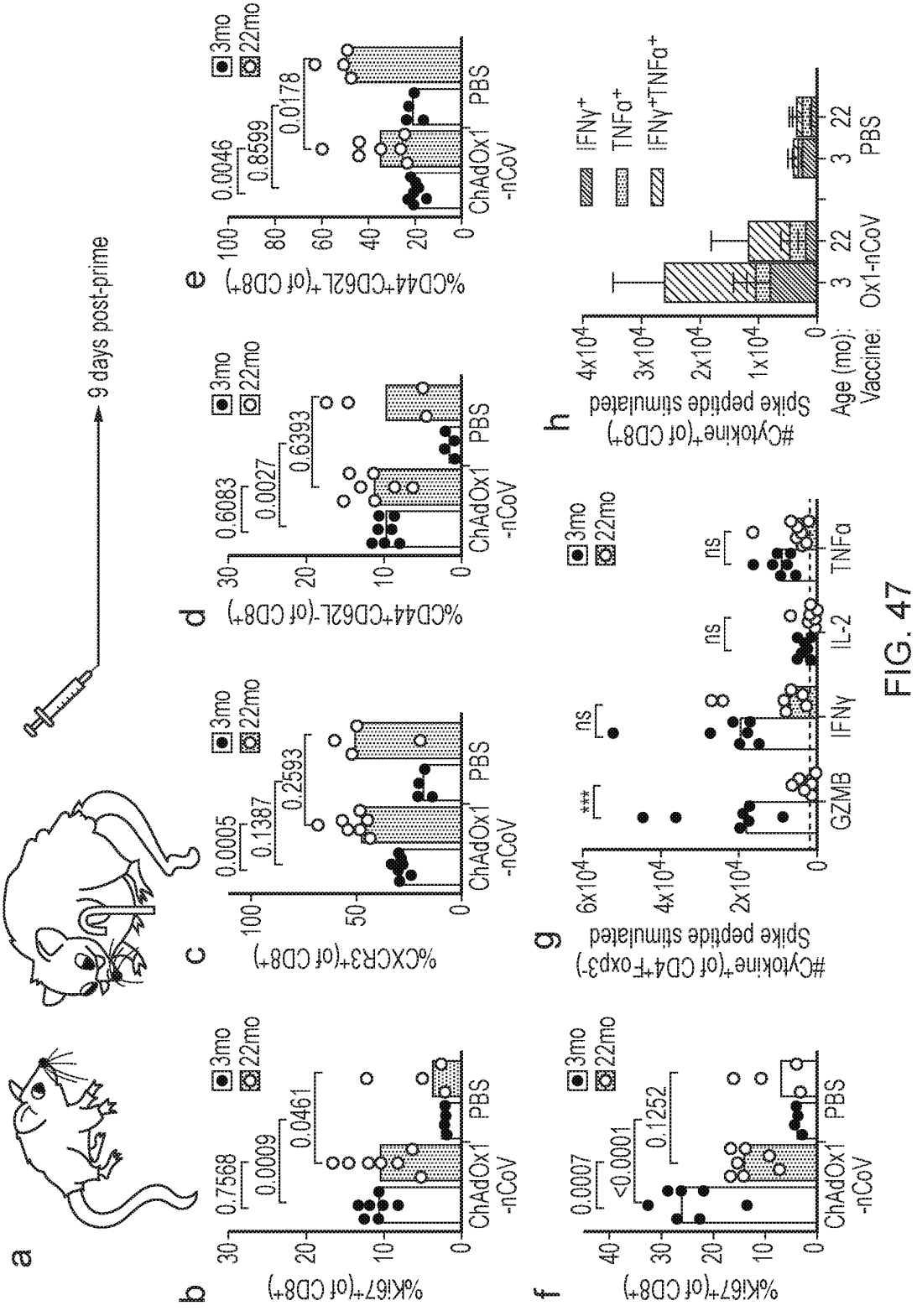

a
9 days post-prime
b
%Ki67+(of CD8+)
0.7568
0.0009
0.0461
3mo
22mo
ChAdOx1 -nCoV
PBS
c
%CXCR3+(of CD8+)
0.0005
0.1387
0.2593
d
%CD44+CD62L-(of CD8+)
0.6083
0.0027
0.6393
e
%CD44+CD62L+(of CD8+)
0.0046
0.8599
0.0178
f
%Ki67+(of CD8+)
0.0007
<0.0001
0.1252
g
#Cytokine+(of CD4+Foxp3-)
Spike peptide stimulated
***
ns
GZMB
IFNγ
IL-2
TNFα
h
#Cytokine+(of CD8+)
Spike peptide stimulated
IFNγ+
TNFα+
IFNγ+TNFα+
Age (mo):
Vaccine:
Ox1-nCoV
PBS

FIG. 47

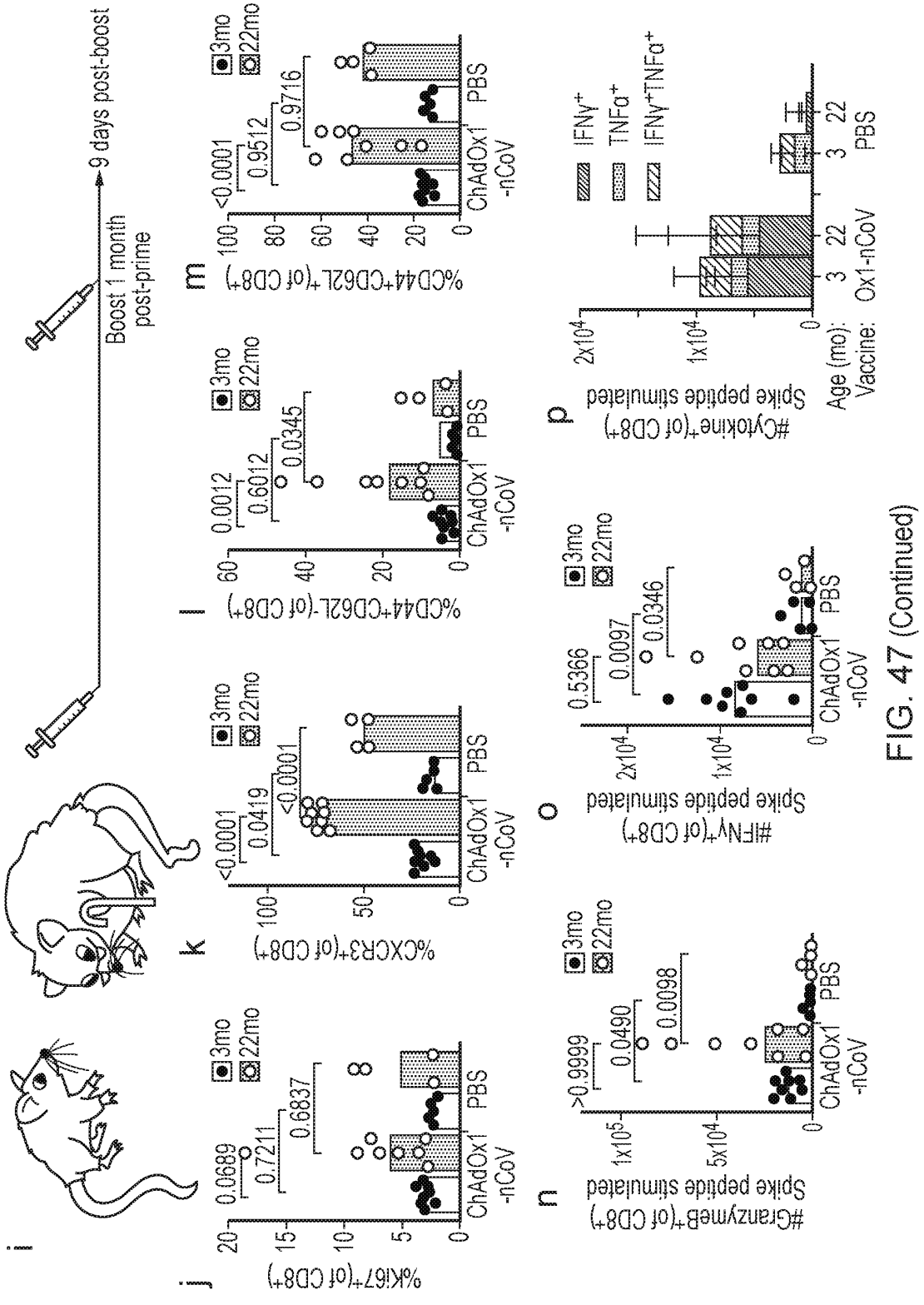


FIG. 47 (Continued)

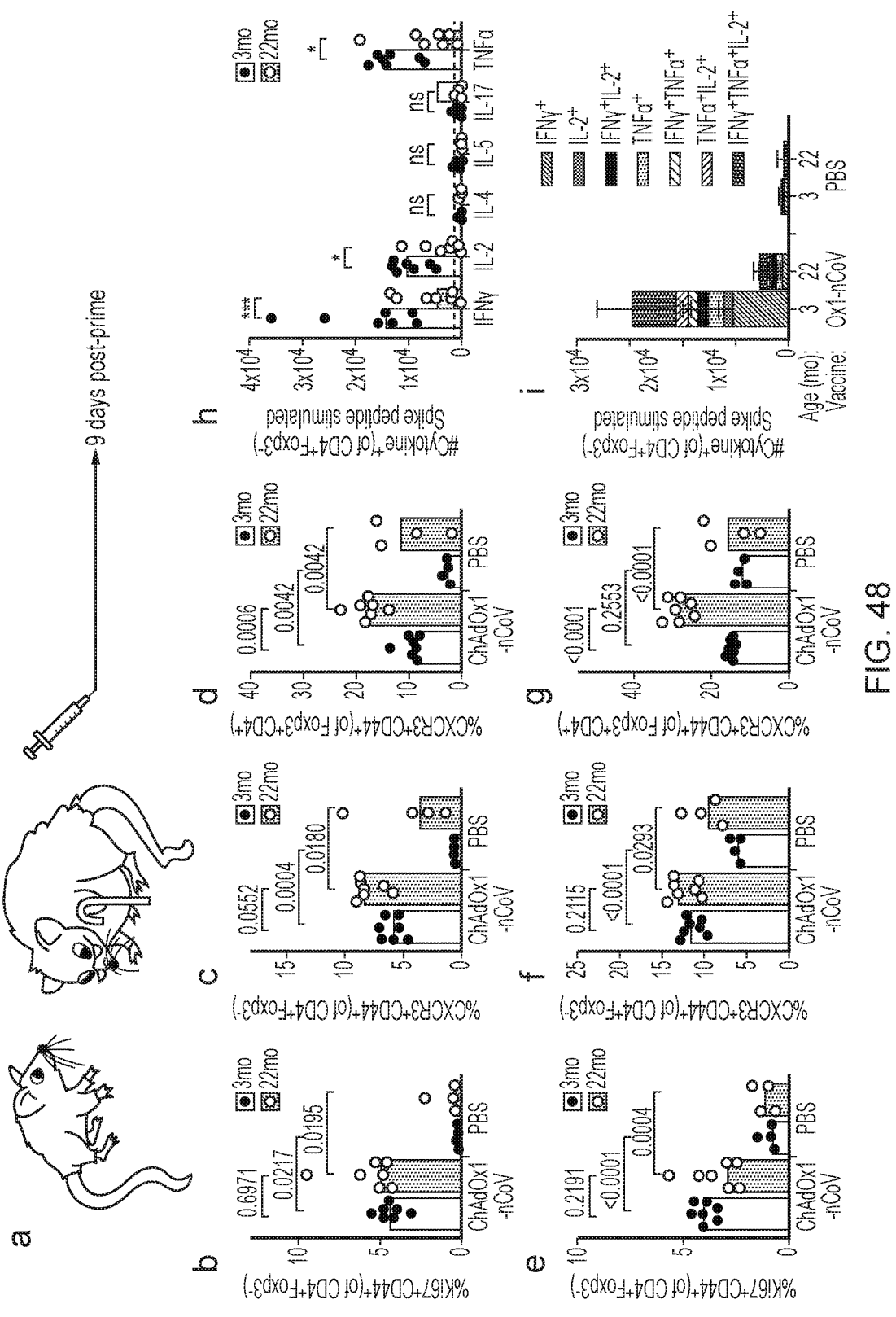

a
9 days post-prime
b
%Ki67+CD44+(of CD4+Foxp3-)
0.6971
0.0217
0.0195
3mo
22mo
ChAdOx1 -nCoV
PBS
c
%CXCR3+CD44+(of CD4+Foxp3-)
0.0552
0.0004
0.0180
d
%CXCR3+CD44+(of Foxp3+CD4+)
0.0006
0.0042
0.0042
e
%Ki67+CD44+(of CD4+Foxp3-)
0.2191
<0.0001
0.0004
f
%CXCR3+CD44+(of CD4+Foxp3-)
0.2115
<0.0001
0.0293
g
%CXCR3+CD44+(of Foxp3+CD4+)
<0.0001
0.2553
<0.0001
h
#Cytokine+(of CD4+Foxp3-) Spike peptide stimulated
***
*
ns
ns
ns
*
IFNγ IL-2 IL-4 IL-5 IL-17 TNFα
i
#Cytokine+(of CD4+Foxp3-) Spike peptide stimulated
IFNγ+
IL-2+
IFNγ+IL-2+
TNFα+
IFNγ+TNFα+
TNFα+IL-2+
IFNγ+TNFα+IL-2+
Age (mo): 3 22 3 22
Vaccine: Ox1-nCoV PBS

FIG. 48

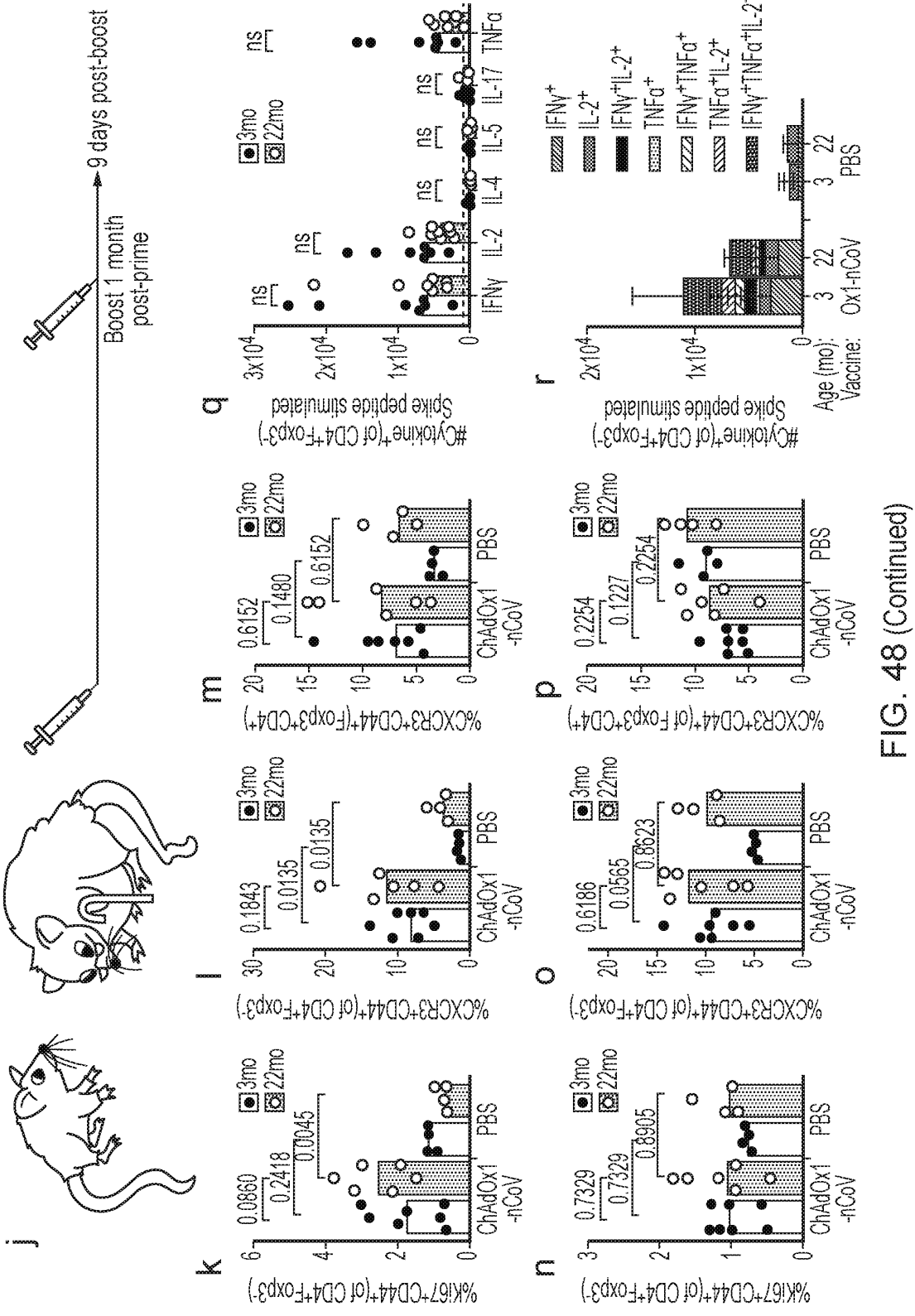


FIG. 48 (Continued)

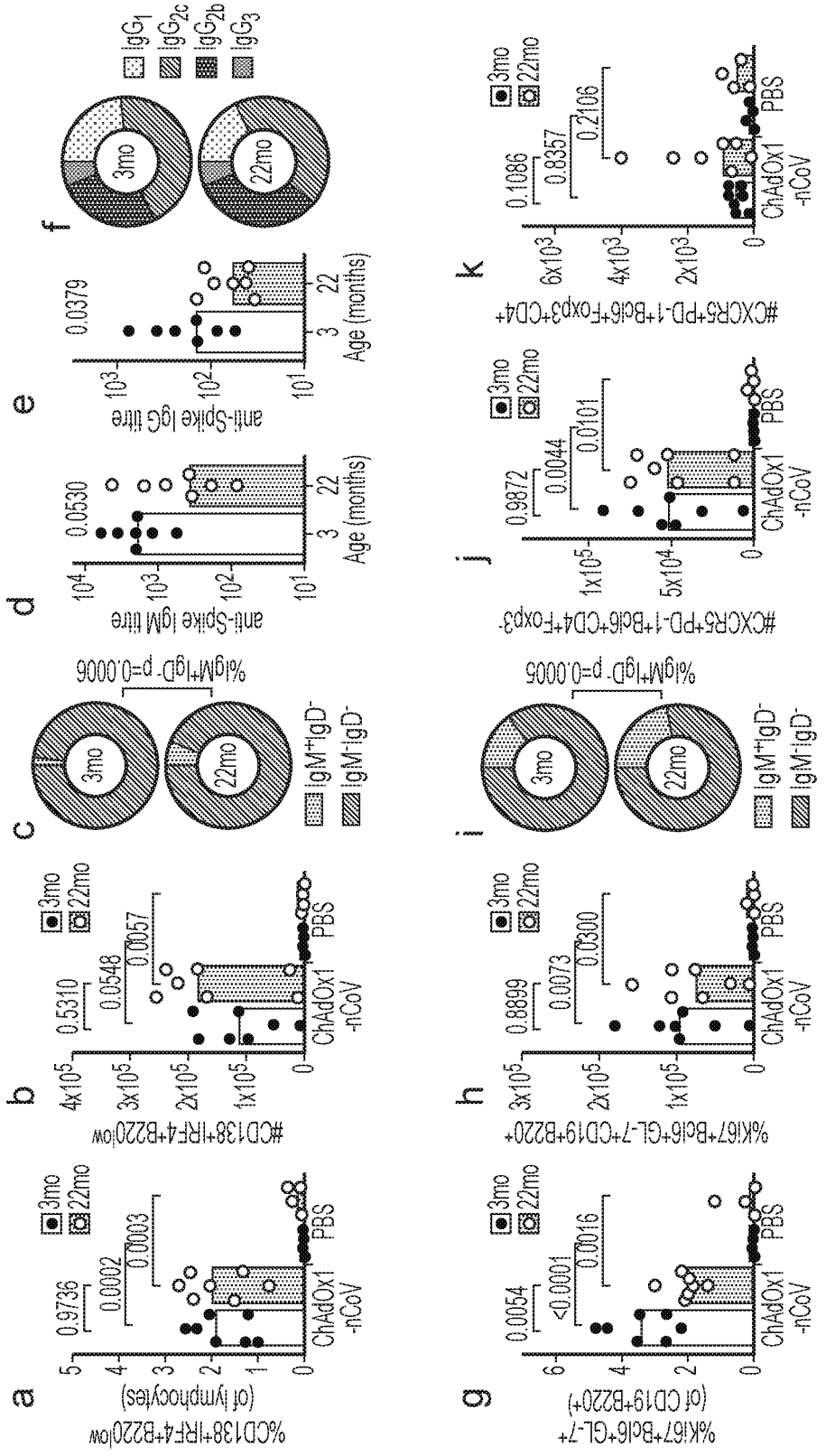

a
%CD138+IRF4+B220low
(of lymphocytes)
0.9736
0.0002
0.0003
3mo
22mo
ChAdOx1 -nCoV
PBS
b
#CD138+IRF4+B220low
0.5310
0.0548
0.0057
c
%IgM+IgD- p=0.0006
IgM+IgD-
IgM-IgD-
d
anti-Spike IgM titre
0.0530
Age (months)
e
anti-Spike IgG titre
0.0379
f
IgG1
IgG2c
IgG2b
IgG3
g
%Ki67+Bcl6+GL-7+
(of CD19+B220+)
0.0054
<0.0001
0.0016
h
%Ki67+Bcl6+GL-7+CD19+B220+
0.8899
0.0073
0.0300
i
%IgM+IgD- p=0.0005
j
#CXCR5+PD-1+Bcl6+CD4+Foxp3-
0.9872
0.0044
0.0101
k
#CXCR5+PD-1+Bcl6+Foxp3+CD4+
0.1086
0.8357
0.2106

FIG. 49

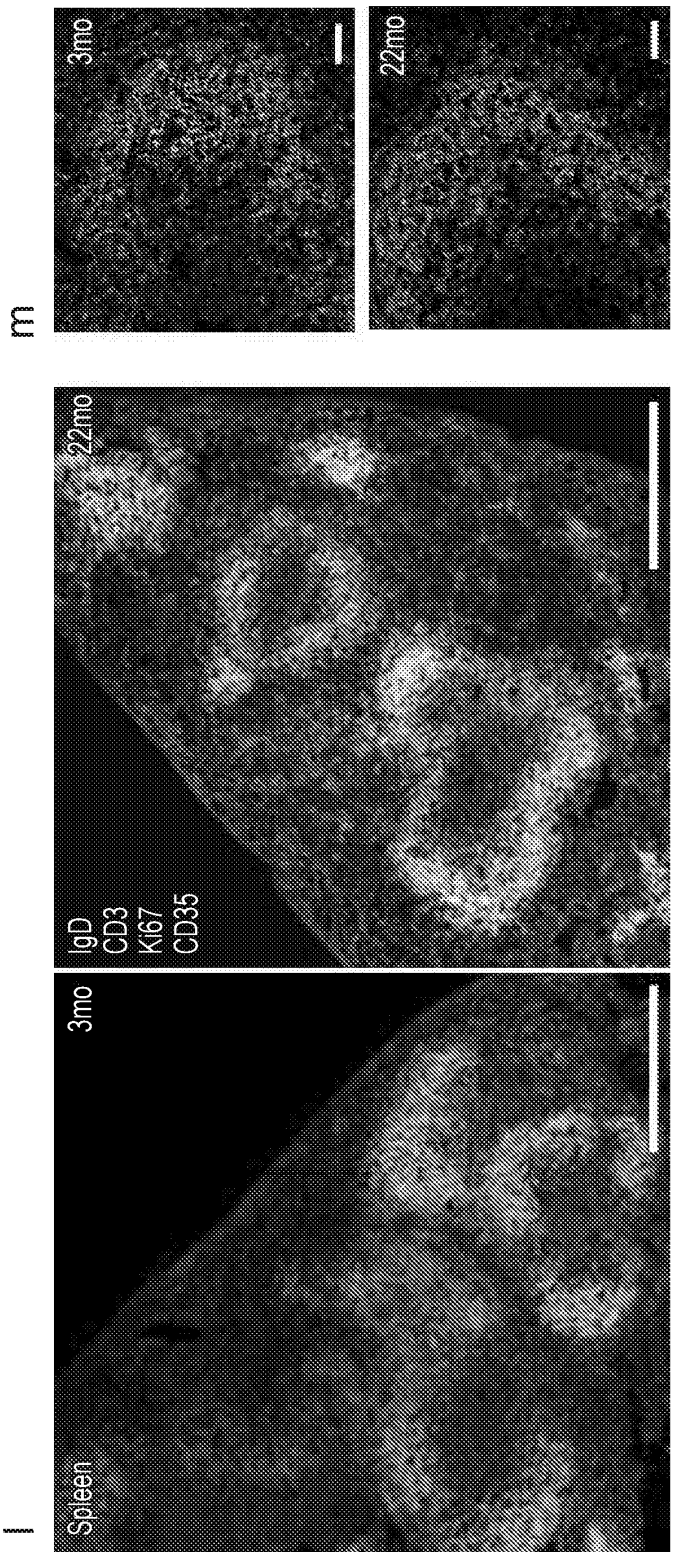


FIG. 49 (Continued)

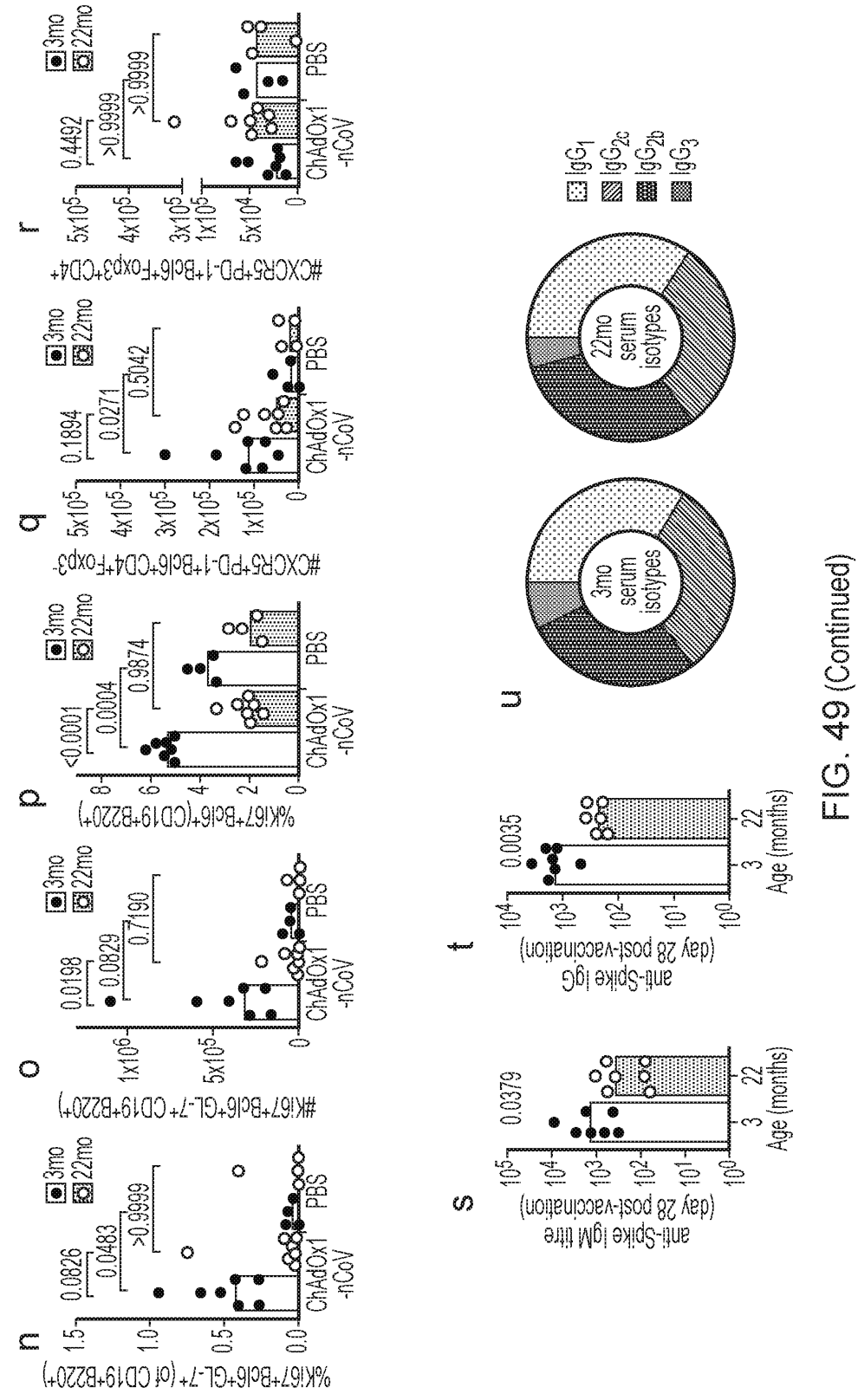


FIG. 49 (Continued)

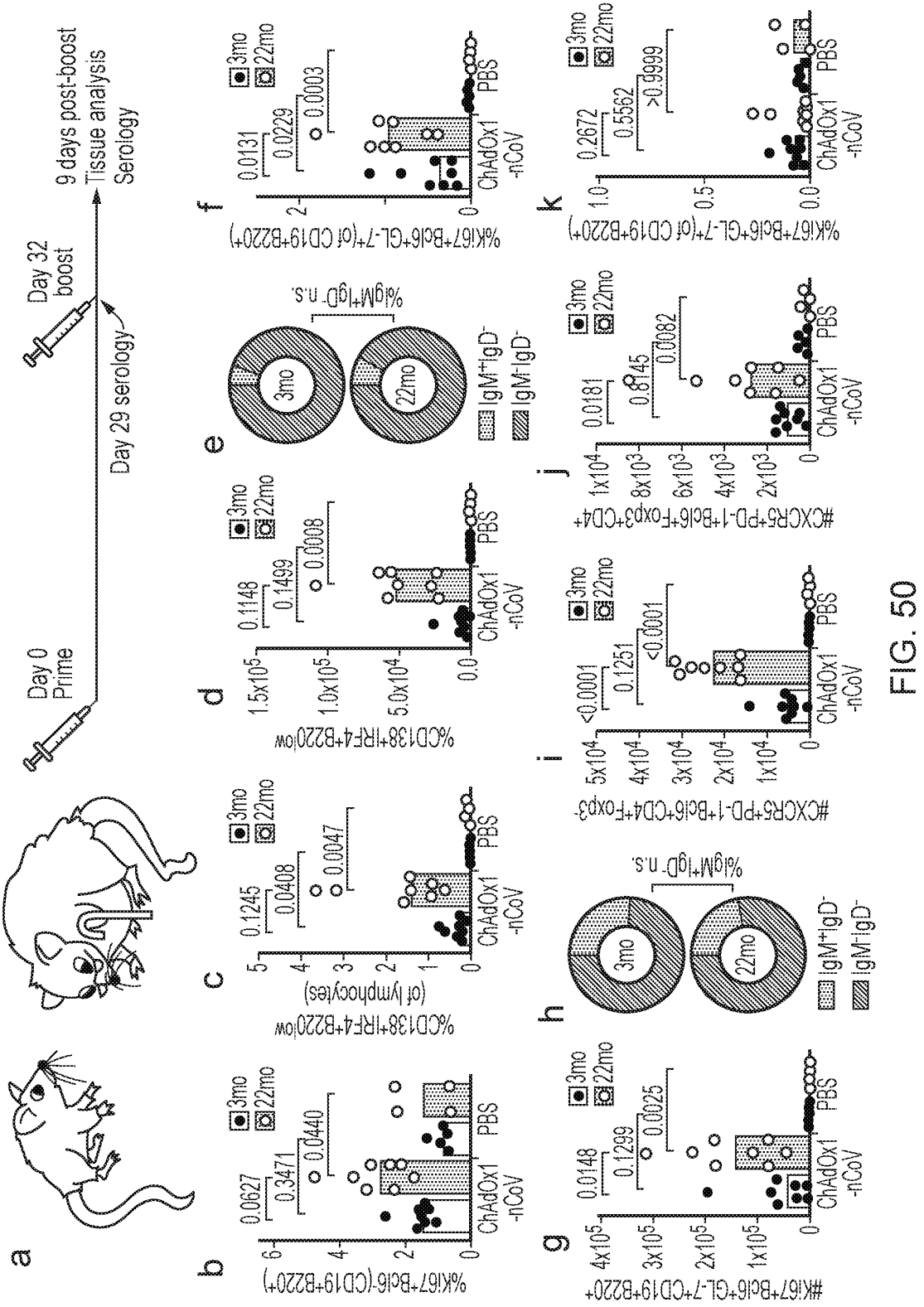

a
Day 0
Prime
Day 32
boost
Day 29 serology
9 days post-boost
Tissue analysis
Serology
b
%Ki67+Bcl6+(CD19+B220+)
c
%CD138+IRF4+B220low
(of lymphocytes)
d
%CD138+IRF4+B220low
e
%IgM+IgD- n.s.
IgM+IgD+
IgM+IgD-
f
%Ki67+Bcl6+GL-7+(of CD19+B220+)
g
#Ki67+Bcl6+GL-7+CD19+B220+
h
%IgM+IgD- n.s.
i
#CXCR5+PD-1+Bcl6+CD4+Foxp3-
j
#CXCR5+PD-1+Bcl6+Foxp3+CD4+
k
%Ki67+Bcl6+GL-7+(of CD19+B220+)
3mo
22mo
ChAdOx1 -nCoV
PBS

FIG. 50

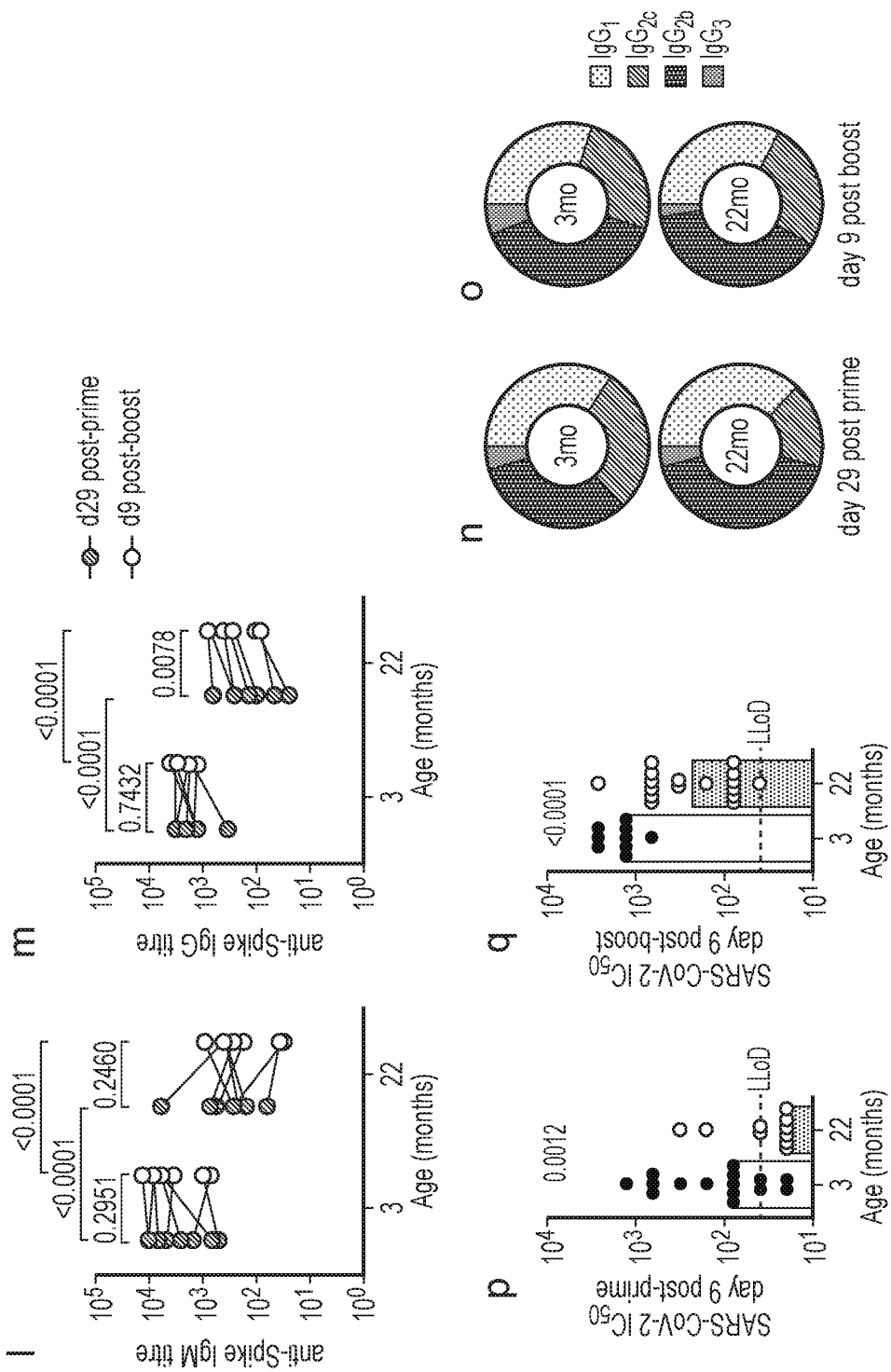


FIG. 50 (Continued)

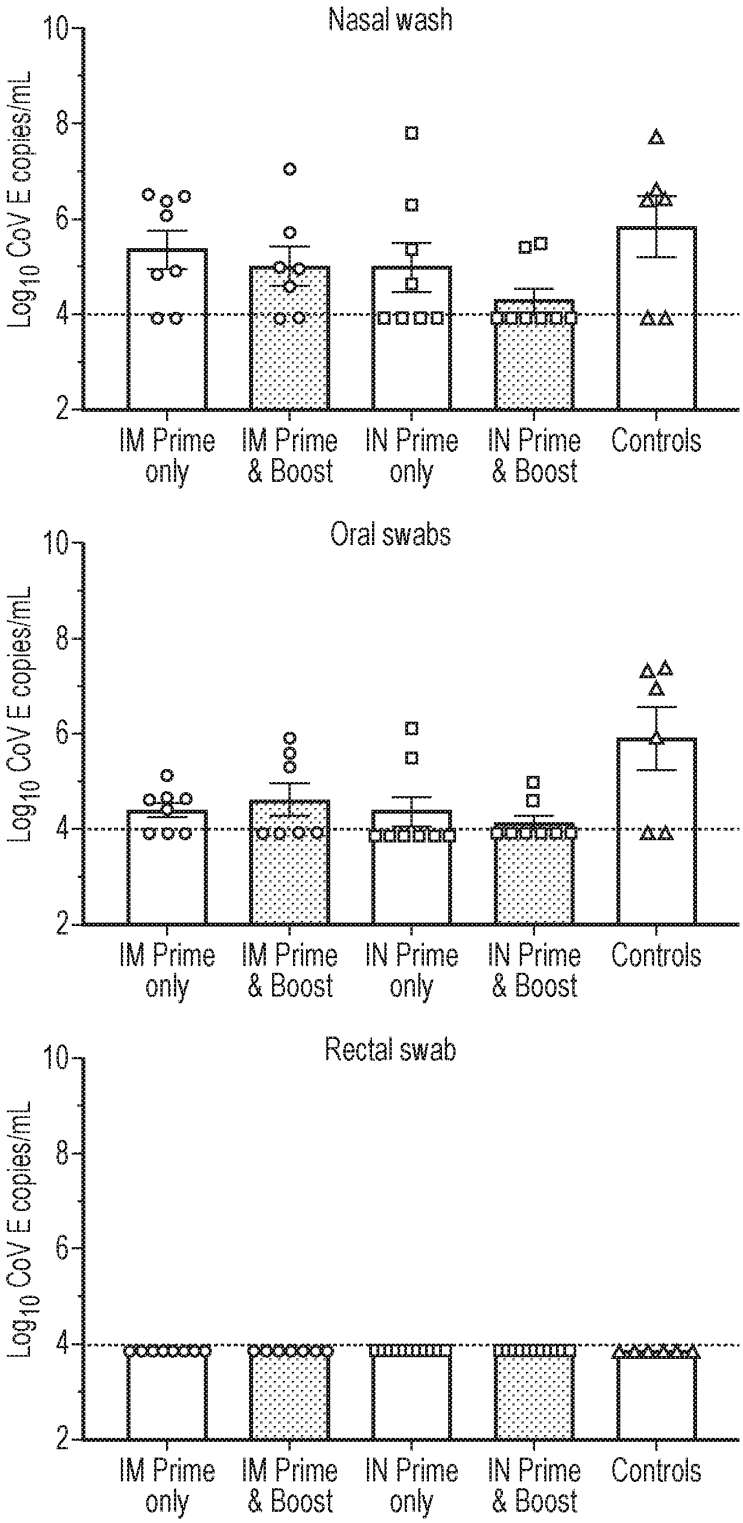

Nasal wash
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls
Oral swabs
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls
Rectal swab
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls

FIG. 51

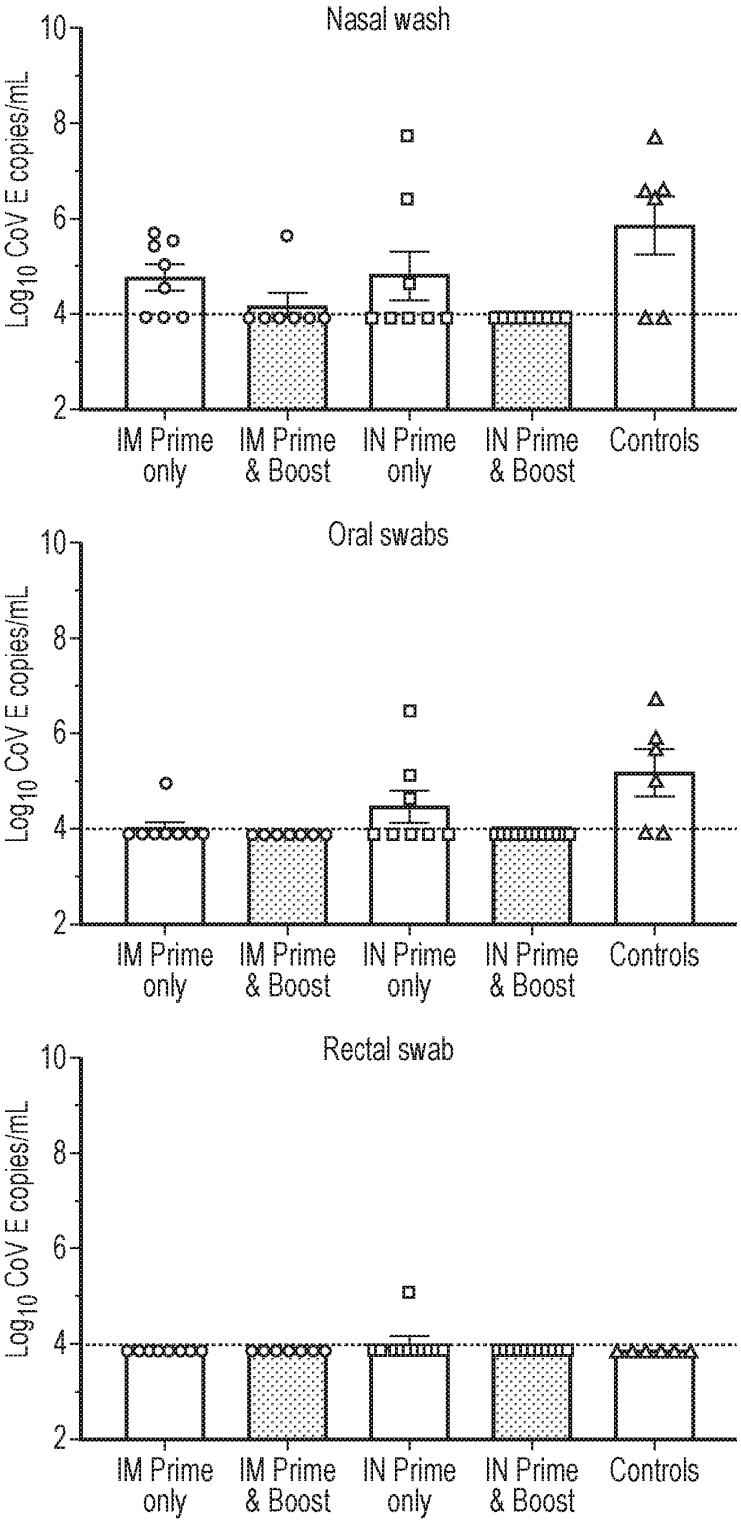

Nasal wash
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls
Oral swabs
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls
Rectal swab
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls

FIG. 52

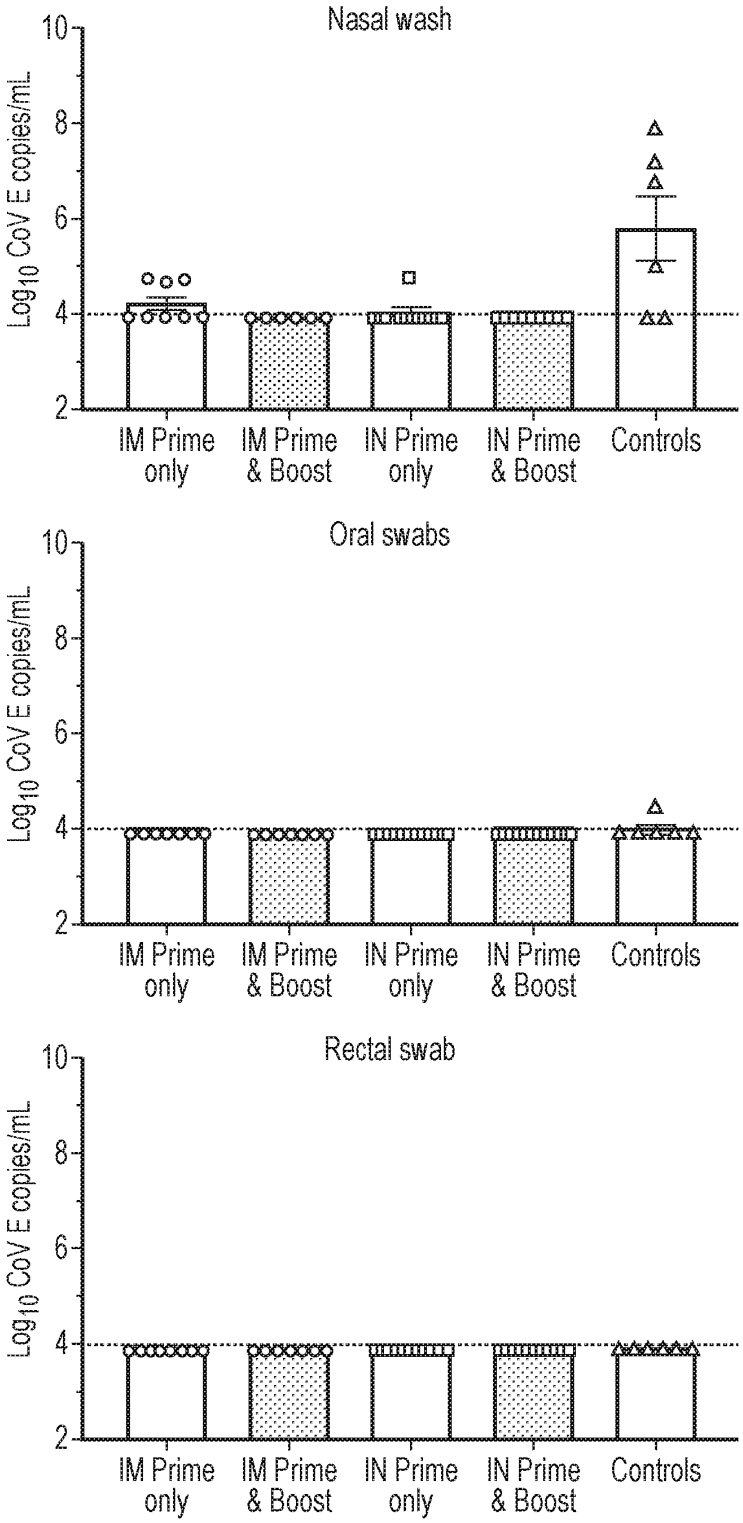

Nasal wash
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls
Oral swabs
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls
Rectal swab
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls

FIG. 53

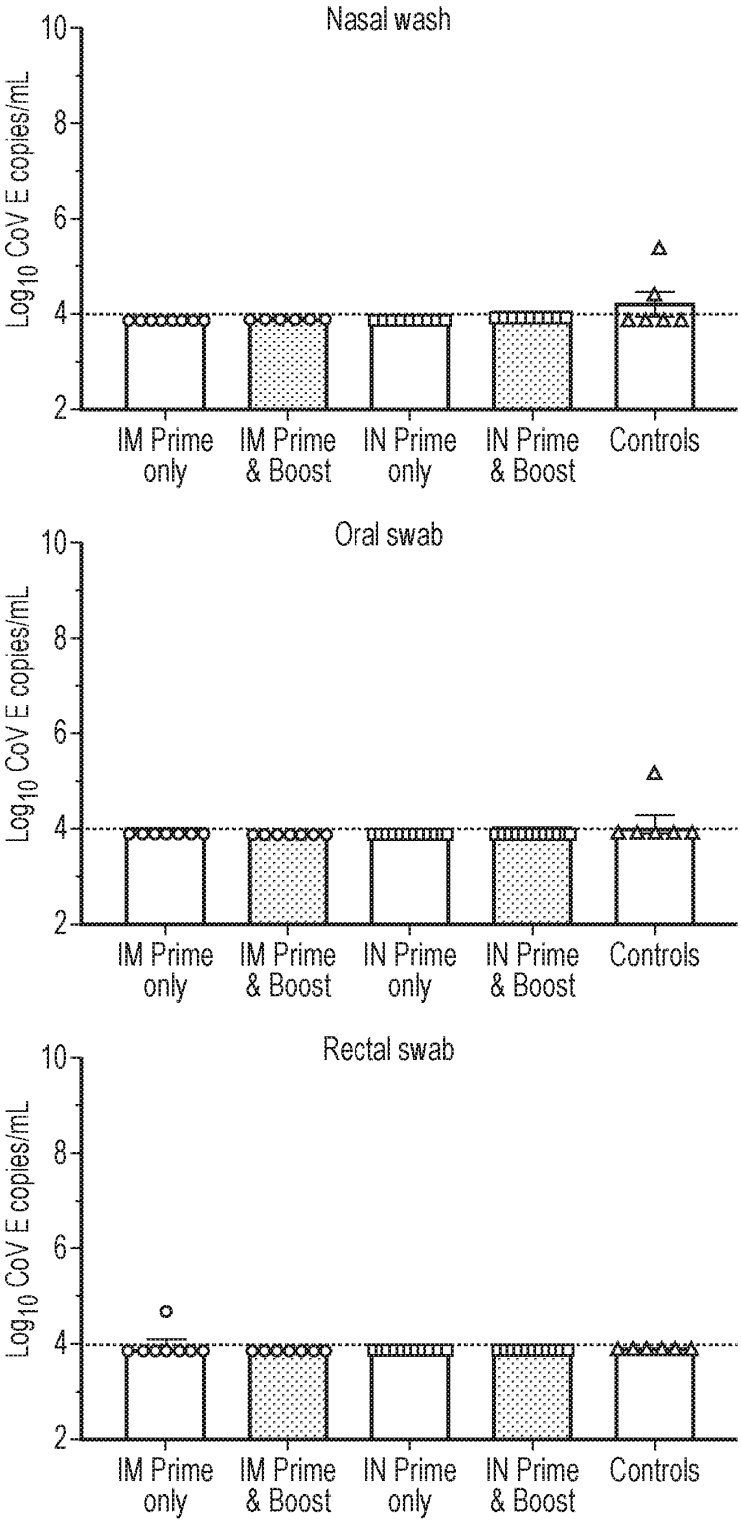

Nasal wash
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls
Oral swab
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls
Rectal swab
Log10 CoV E copies/mL
10
8
6
4
2
IM Prime only
IM Prime & Boost
IN Prime only
IN Prime & Boost
Controls

FIG. 54

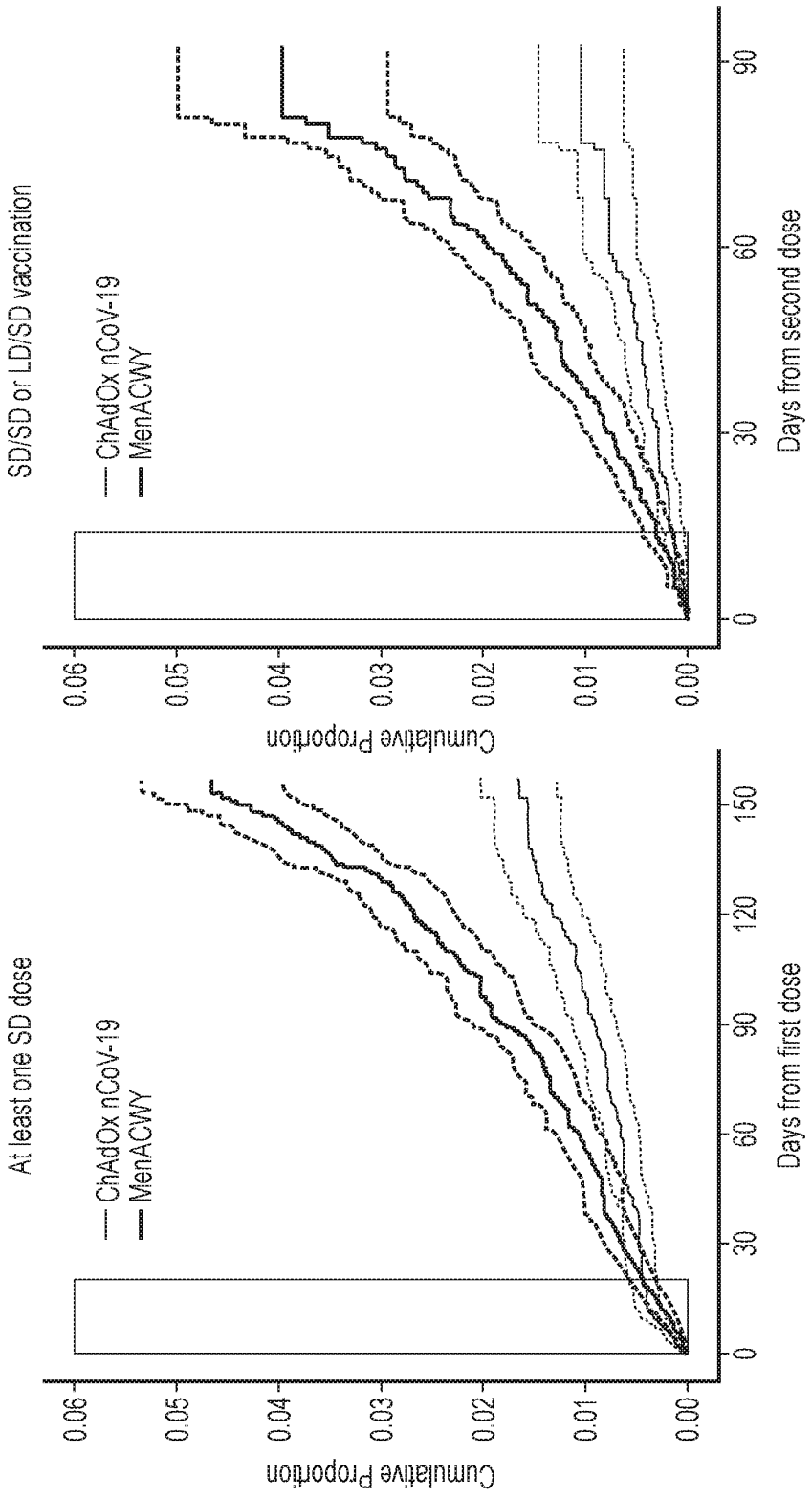

At least one SD dose
SD/SD or LD/SD vaccination
ChAdOx nCoV-19
MenACWY
Cumulative Proportion
0.00
0.01
0.02
0.03
0.04
0.05
0.06
0
30
60
90
120
150
Days from first dose
Days from second dose

FIG. 55