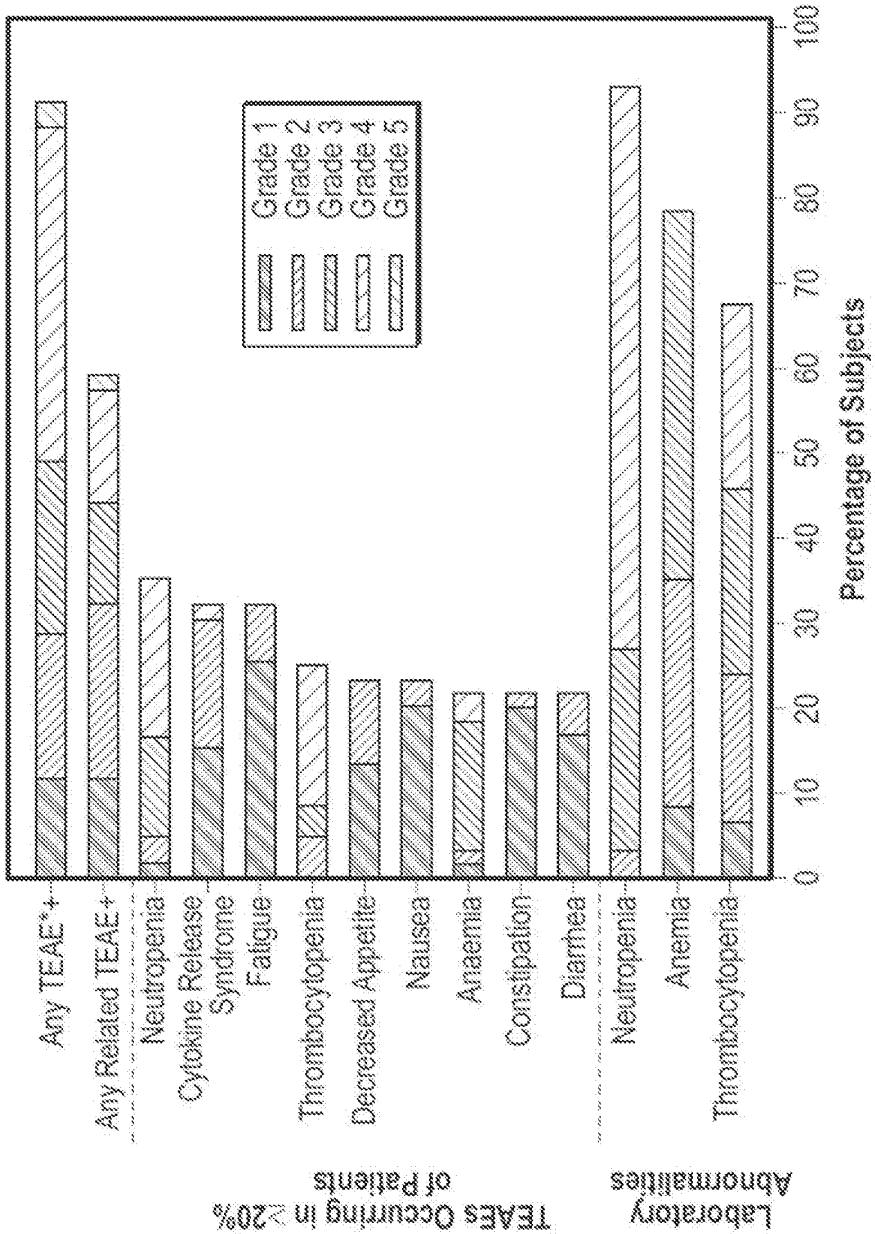

Grade 1
Grade 2
Grade 3
Grade 4
Grade 5
Percentage of Subjects
0
10
20
30
40
50
60
70
80
90
100
Any TEAE*+
Any Related TEAE+
Neutropenia
Cytokine Release Syndrome
Fatigue
Thrombocytopenia
Decreased Appetite
Nausea
Anaemia
Constipation
Diarrhea
Neutropenia
Anemia
Thrombocytopenia
TEAEs Occurring in ≥20% of Patients
Laboratory Abnormalities

FIG. 1

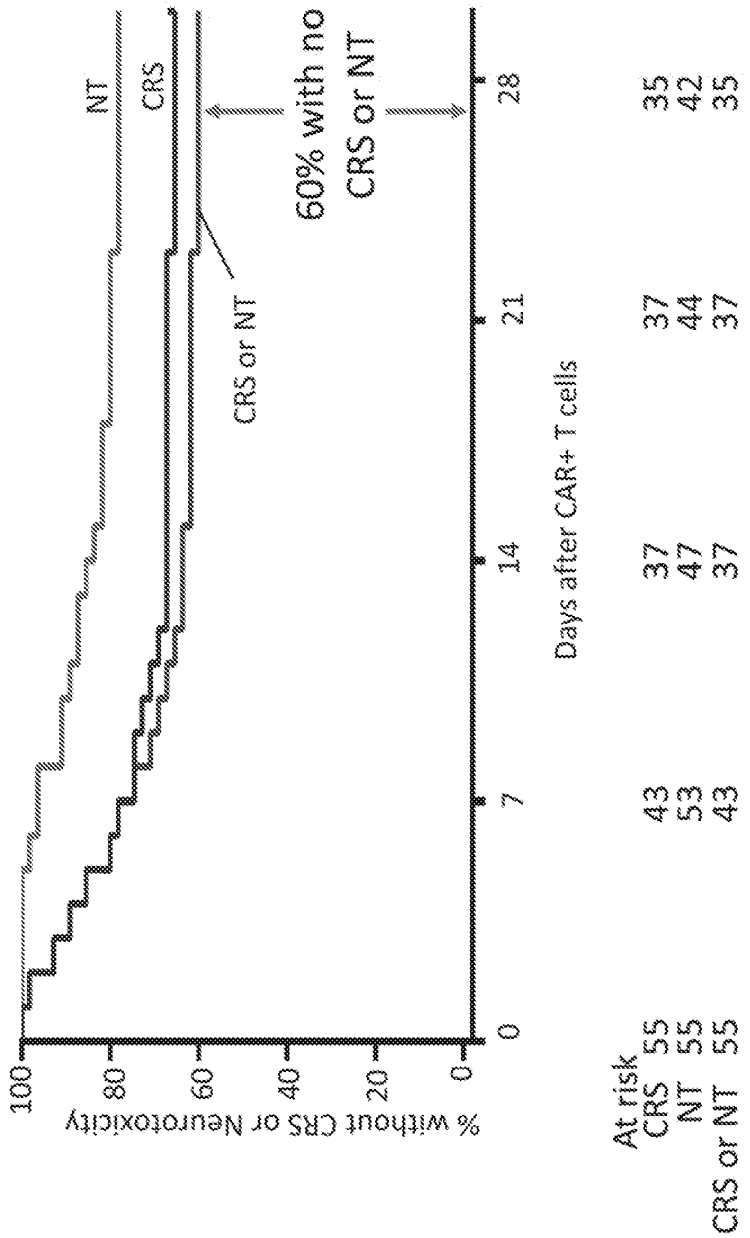

NT
CRS
CRS or NT
60% with no
CRS or NT
% without CRS or Neurotoxicity
100
80
60
40
20
0
0
7
14
21
28
Days after CAR+ T cells
At risk
CRS 55 43 37 37 35
NT 55 53 47 44 42
CRS or NT 55 43 37 37 35

FIG. 2

FIG. 3A

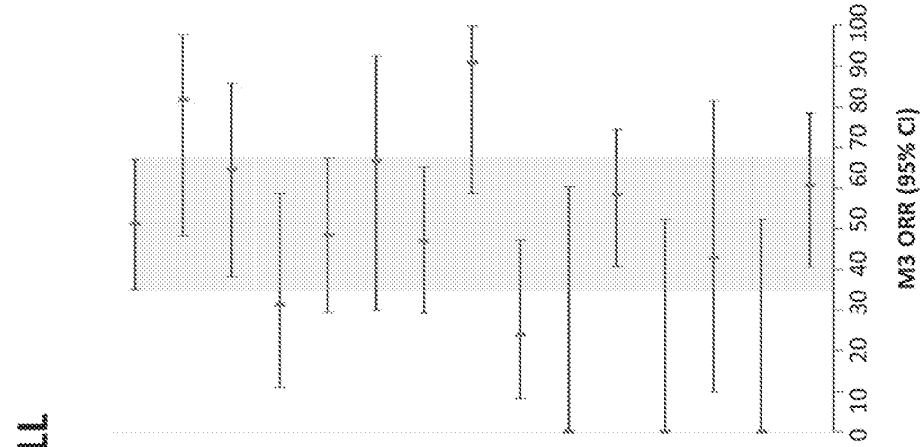

FULL
Population
ORR(95% CI)
N
Overall
51.2(35.1,67.1)
41
Dbl/Trpl Hit
81.8(48.2,97.7)
11
Dbl/Trpl Hit/ Dbl expressors
64.7(38.3,85.8)
17
Primary Refractory
31.3(11,58.7)
16
Never in CR
48.3(29.4,67.5)
29
Chemosensitive
66.7(29.9,92.5)
9
Chemorefractory
46.9(29.1,65.3)
32
Relapse<12m from last ASCT
90.9(58.7,99.8)
11
SD/D to last chemo
23.8(8.2,47.2)
21
Post-Allo
0(0,60.2)
4
ECOG 0-1
58.3(40.8,74.5)
36
ECOG 2
0(0,52.2)
5
tFL
42.9(9.9,81.6)
7
tMZL/CLL
0(0,52.2)
5
DLBCL NOS
60.7(40.6,78.5)
28
0 10 20 30 40 50 60 70 80 90 100
M3 ORR (95% CI)

FIG. 3B

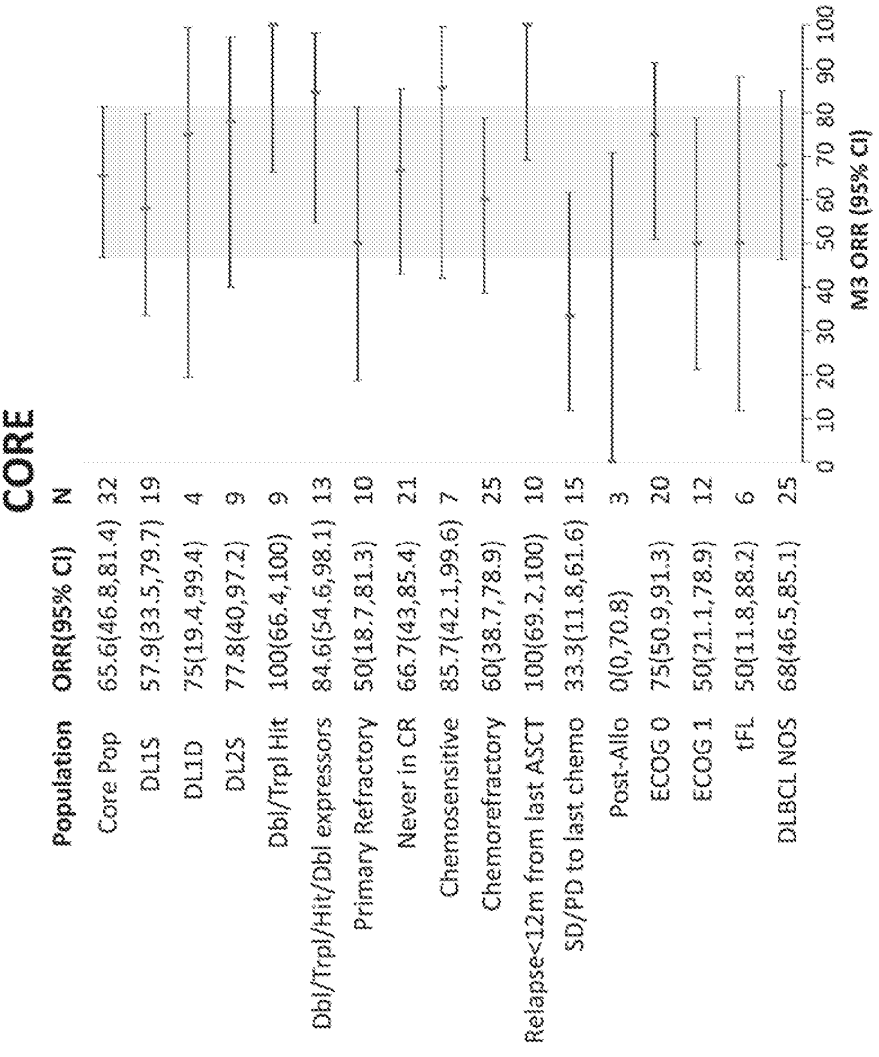

CORE
Population ORR(95% CI) N
Core Pop 65.6(46.8,81.4) 32
DL1S 57.9(33.5,79.7) 19
DL1D 75(19.4,99.4) 4
DL2S 77.8(40,97.2) 9
Dbl/Trpl Hit 100(66.4,100) 9
Dbl/Trpl/Hit/Dbl expressors 84.6(54.6,98.1) 13
Primary Refractory 50(18.7,81.3) 10
Never in CR 66.7(43,85.4) 21
Chemosensitive 85.7(42.1,99.6) 7
Chemorefractory 60(38.7,78.9) 25
Relapse<12m from last ASCT 100(69.2,100) 10
SD/PD to last chemo 33.3(11.8,61.6) 15
Post-Allo 0(0,70.8) 3
ECOG 0 75(50.9,91.3) 20
ECOG 1 50(21.1,78.9) 12
tFL 50(11.8,88.2) 6
DLBCL NOS 68(46.5,85.1) 25
0 10 20 30 40 50 60 70 80 90 100
M3 ORR (95% CI)

FIG. 4A

FULL

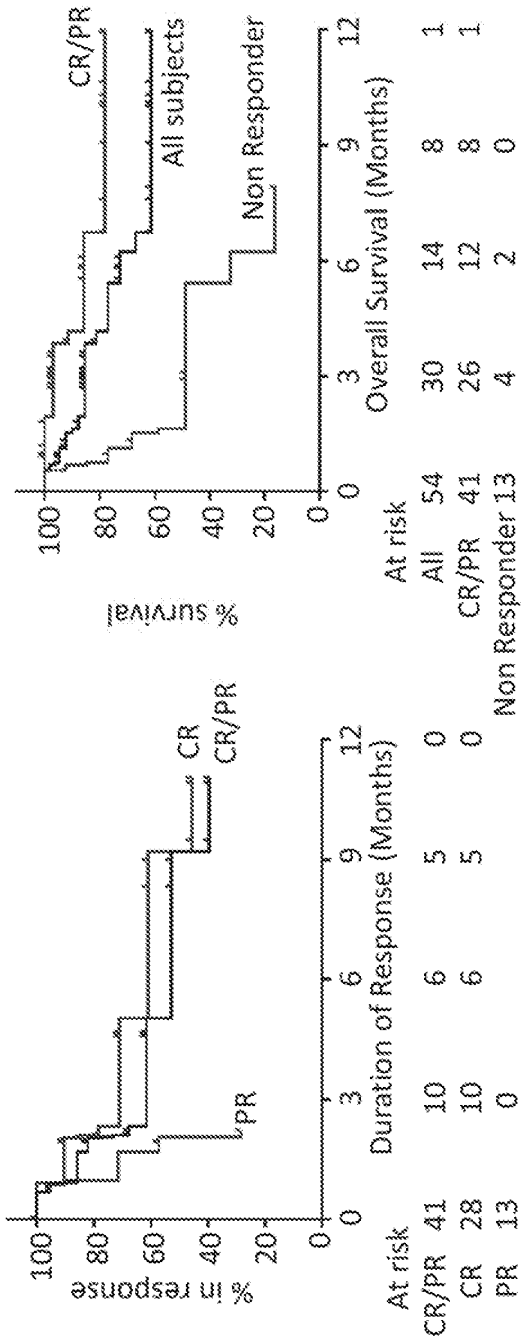

% in response
100
80
60
40
20
0
0
3
6
9
12
Duration of Response (Months)
CR
CR/PR
PR
At risk
CR/PR 41 10 6 5 0
CR 28 10 6 5 0
PR 13 0
% survival
100
80
60
40
20
0
0
3
6
9
12
Overall Survival (Months)
CR/PR
All subjects
Non Responder
At risk
All 54 30 14 8 1
CR/PR 41 26 12 8 1
Non Responder 13 4 2 0

FIG. 4B

CORE

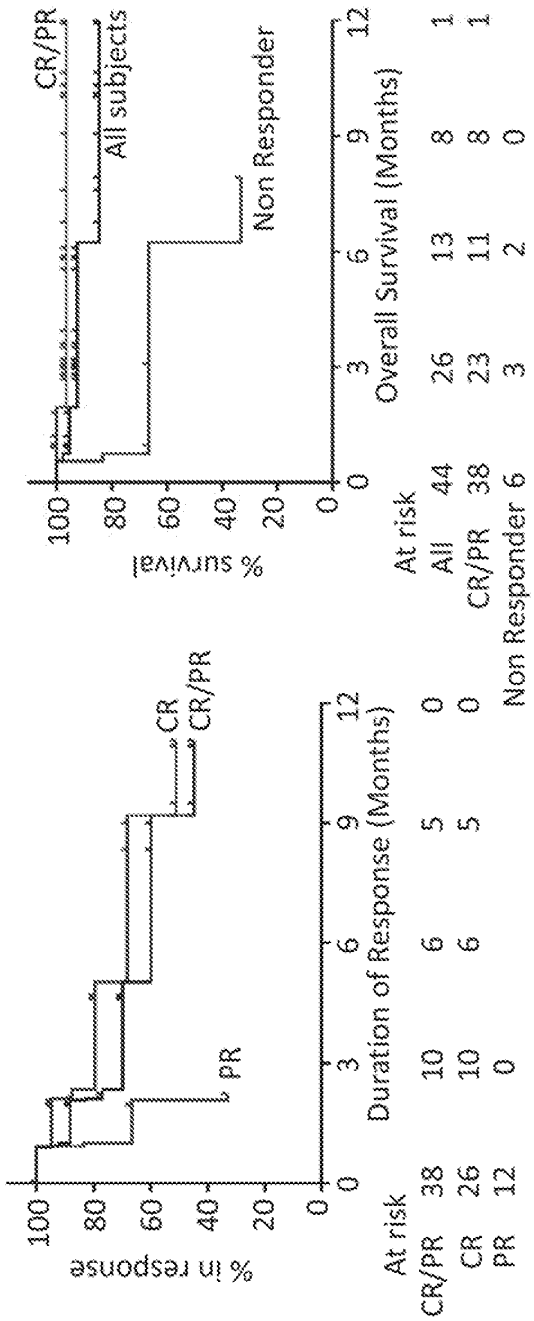

% in response
100
80
60
40
20
0
0
3
6
9
12
Duration of Response (Months)
CR
CR/PR
PR
At risk
CR/PR 38 10 6 5 0
CR 26 10 6 5 0
PR 12 0
% survival
100
80
60
40
20
0
0
3
6
9
12
Overall Survival (Months)
CR/PR
All subjects
Non Responder
At risk
All 44 26 13 8 1
CR/PR 38 23 11 8 1
Non Responder 6 3 2 0

FIG. 5A

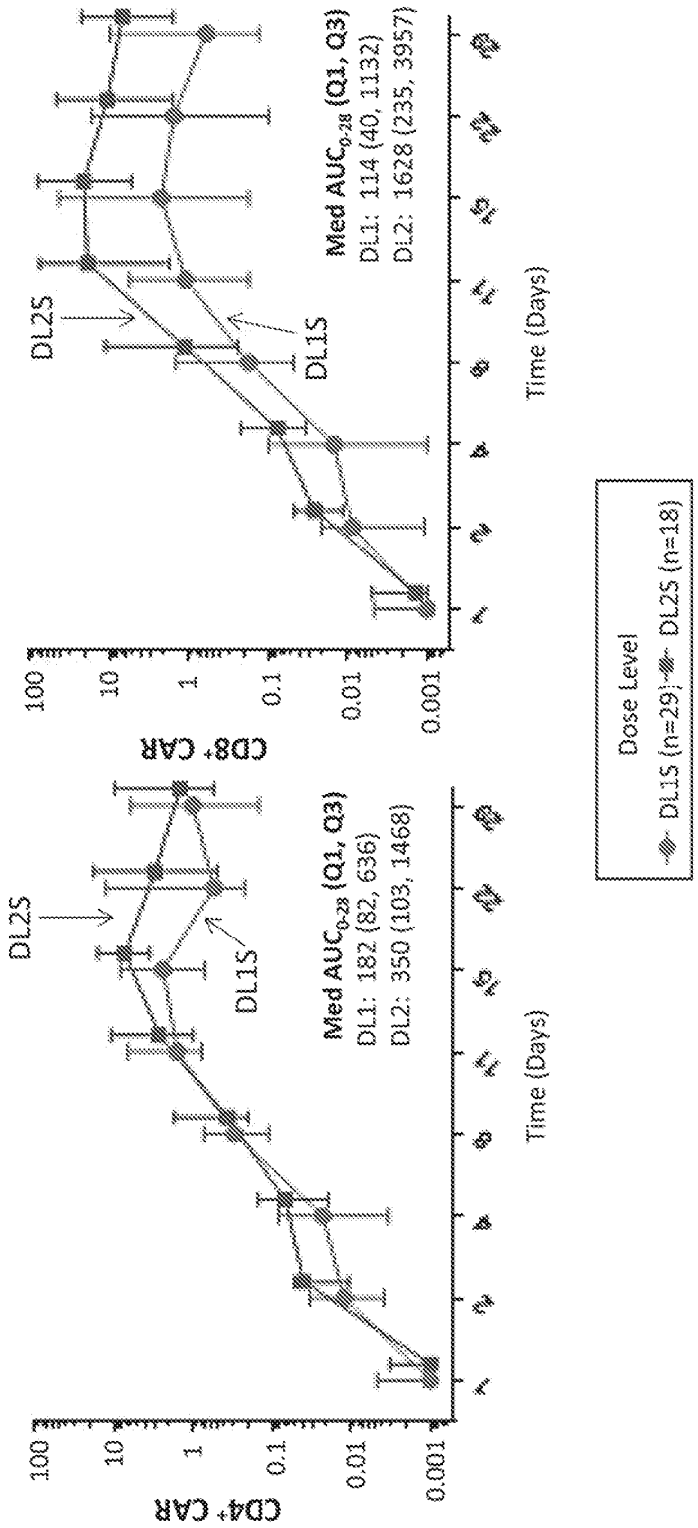

Dose Level
CD4+ CAR
CD8+ CAR
Time (Days)
DL2S
DL1S
Med AUC0-28 (Q1, Q3)
DL1: 182 (82, 636)
DL2: 350 (103, 1468)
Med AUC0-28 (Q1, Q3)
DL1: 114 (40, 1132)
DL2: 1628 (235, 3957)
Dose Level
DL1S (n=29)
DL2S (n=18)

FIG. 5B

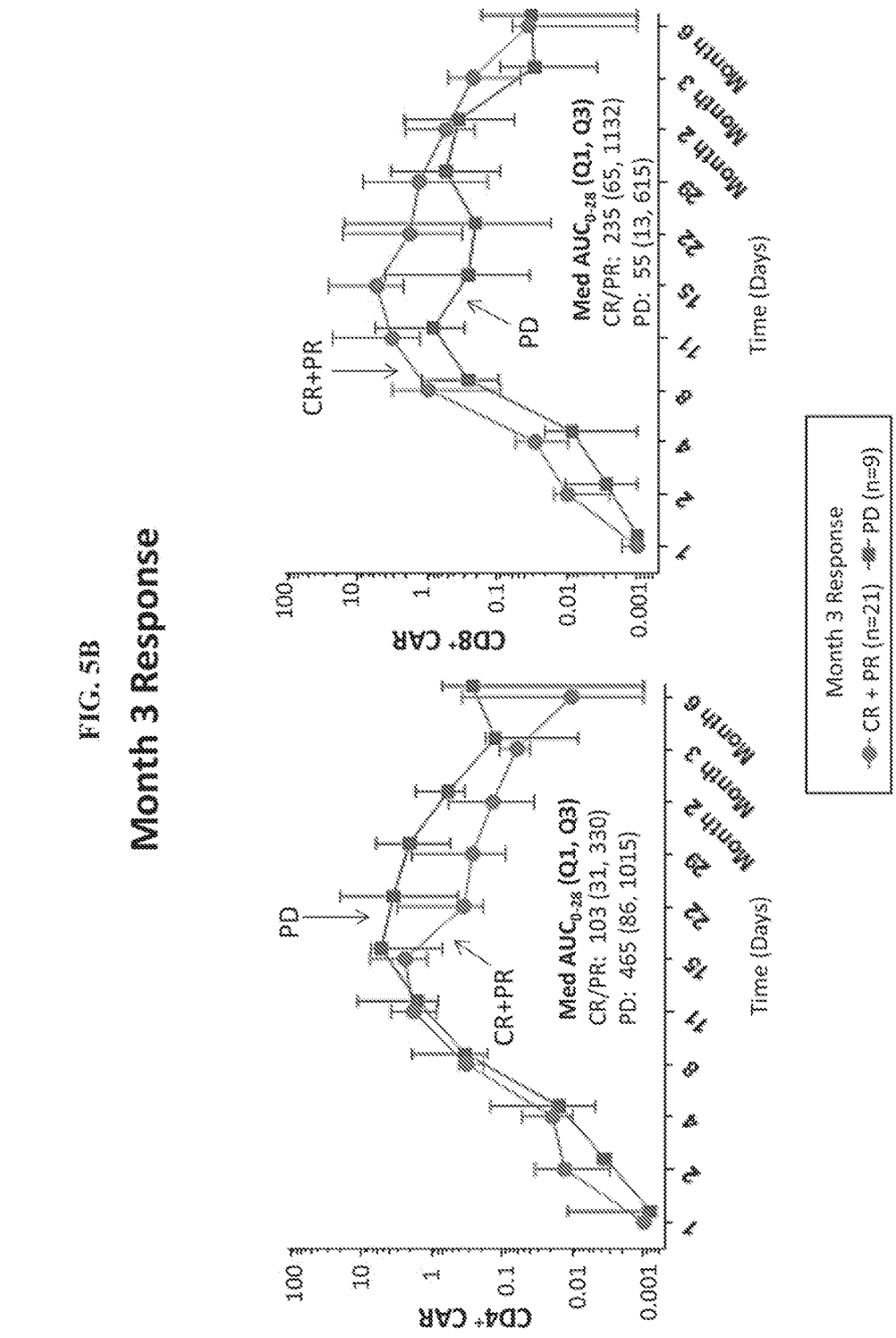
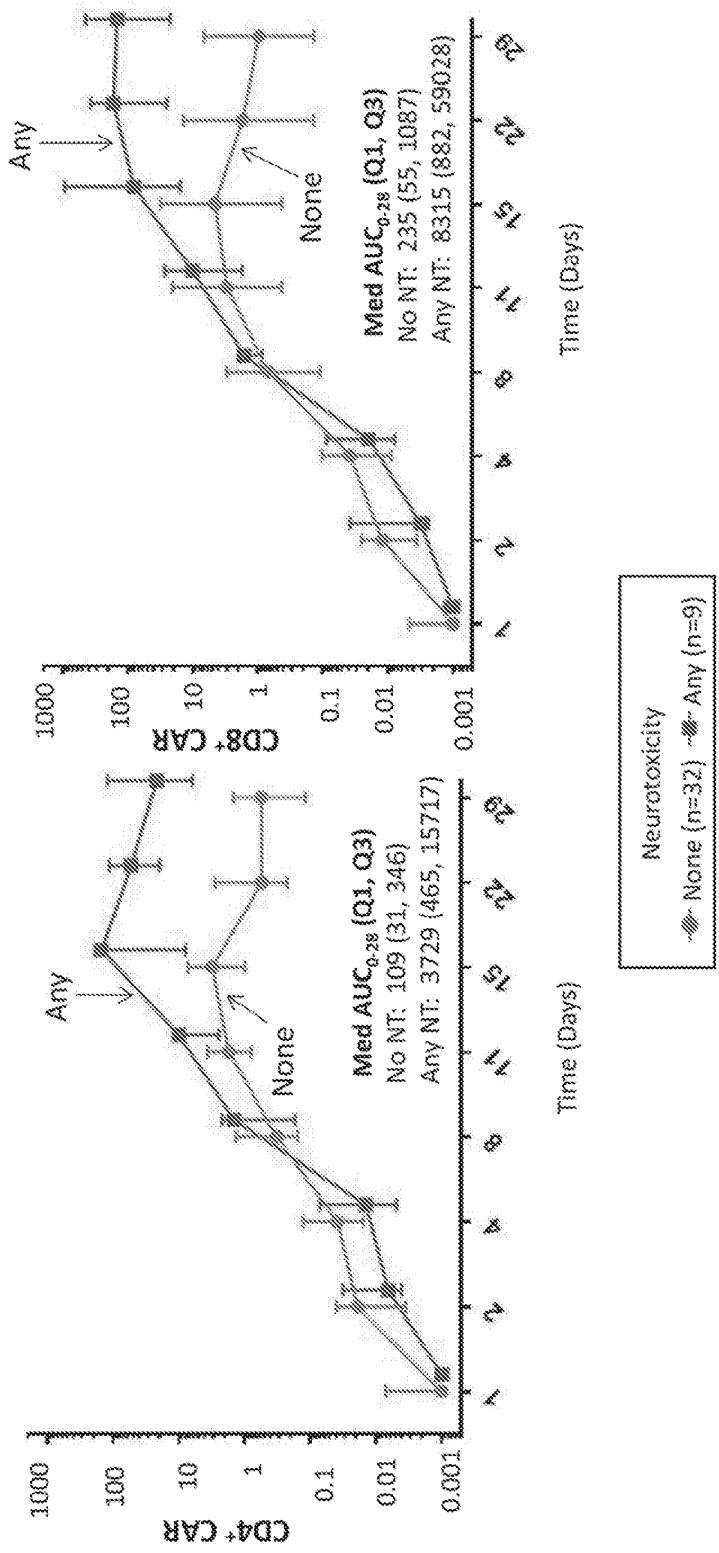

Month 3 Response
CD4+ CAR
CD8+ CAR
100
10
1
0.1
0.01
0.001
PD
CR+PR
Med AUC0-28 (Q1, Q3)
CR/PR: 103 (31, 330)
PD: 465 (86, 1015)
Med AUC0-28 (Q1, Q3)
CR/PR: 235 (65, 1132)
PD: 55 (13, 615)
1
2
4
8
11
15
22
29
Month 2
Month 3
Month 6
Time (Days)
Month 3 Response
CR + PR (n=21)
PD (n=9)

FIG. 5C


Neurotoxicity
CD4+ CAR
CD8+ CAR
Any
None
Med AUC0-28 (Q1, Q3)
No NT: 109 (31, 346)
Any NT: 3729 (465, 15717)
Med AUC0-28 (Q1, Q3)
No NT: 235 (55, 1087)
Any NT: 8315 (882, 59028)
Time (Days)
Neurotoxicity
None (n=32)
Any (n=9)

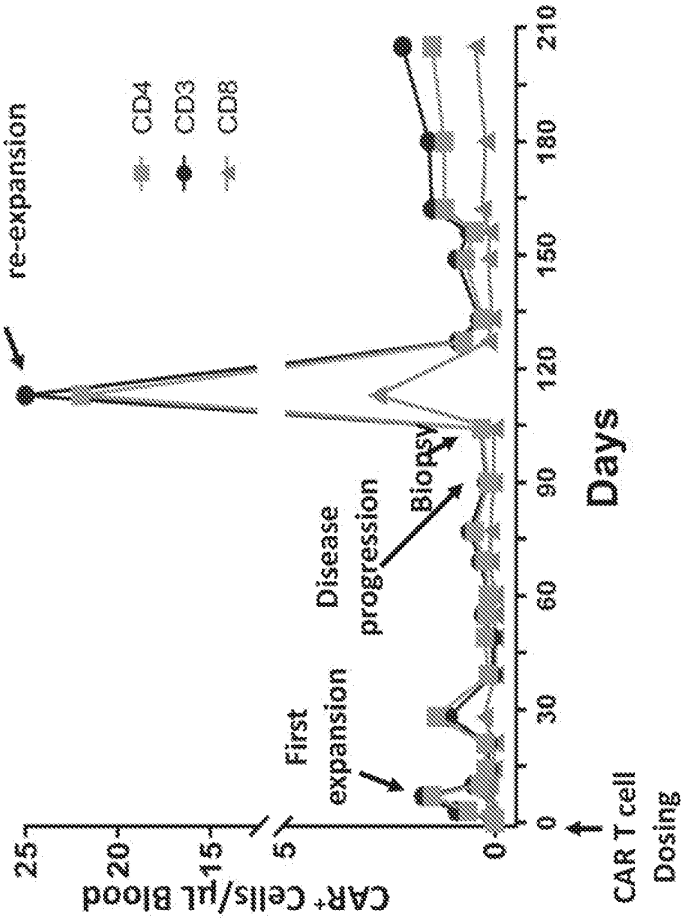

Spontaneous
re-expansion
CD4
CD3
CD8
First
expansion
Disease
progression
Biopsy
CAR+ cells/μL blood
25
20
15
5
0
0
30
60
90
120
150
180
210
Days
CAR T cell
Dosing

FIG. 6A

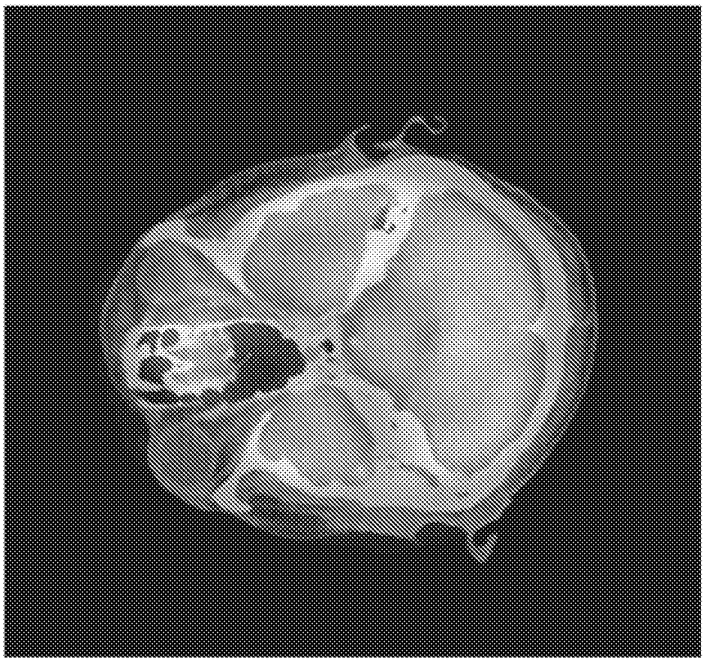


FIG. 6C

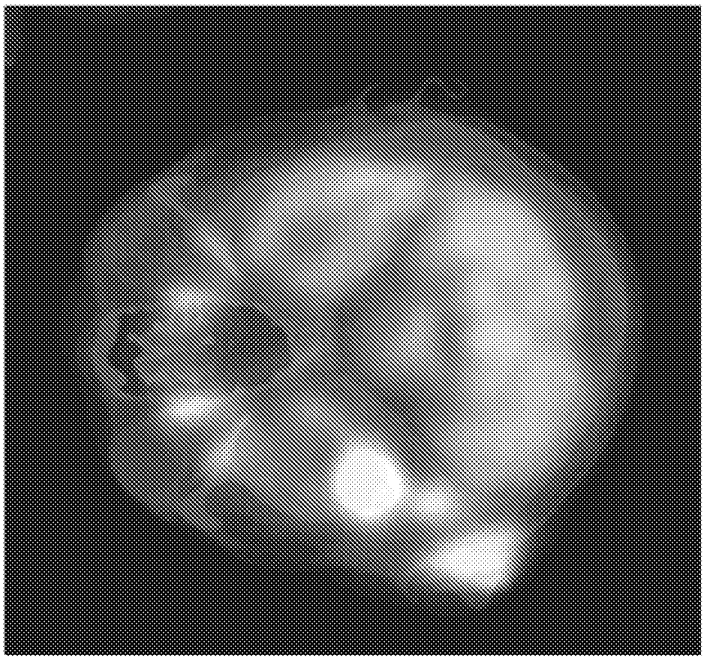


FIG. 6B

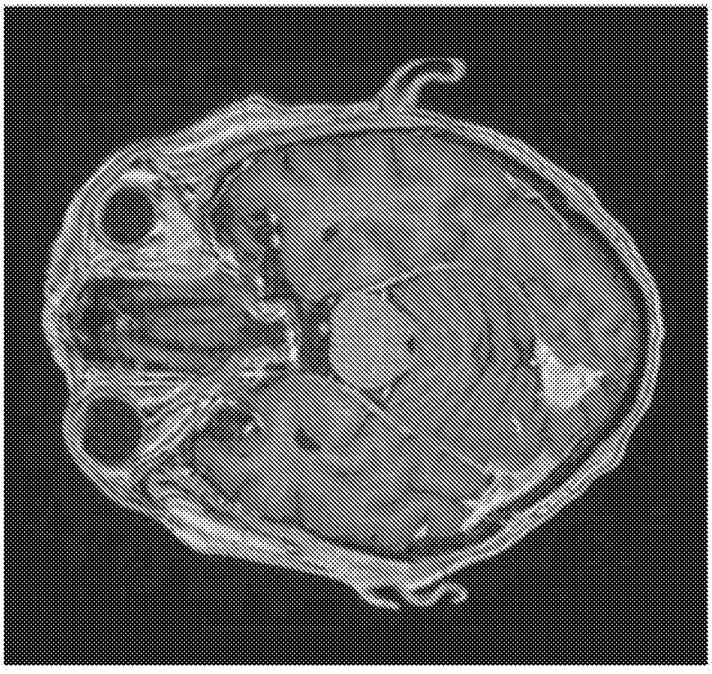


FIG. 6E

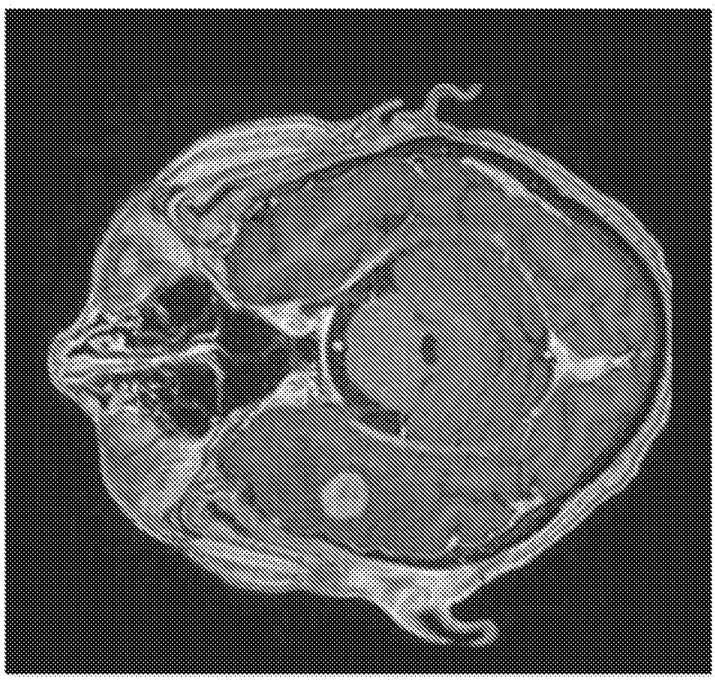


FIG. 6D

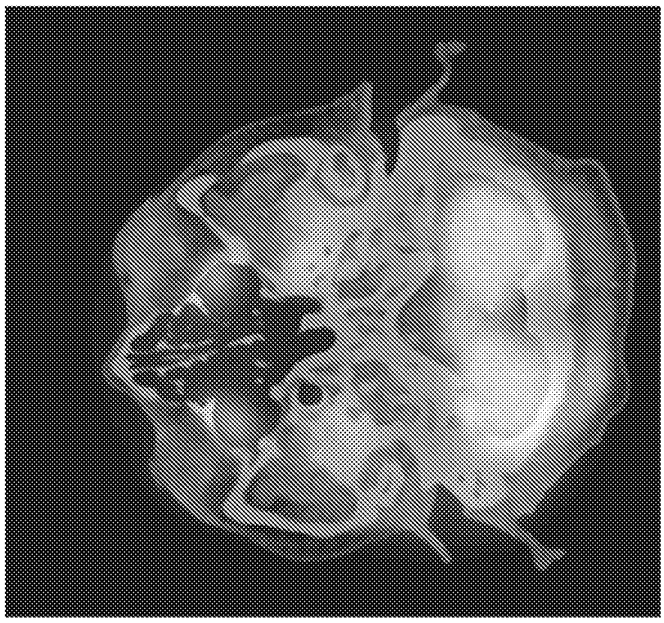


FIG. 6G

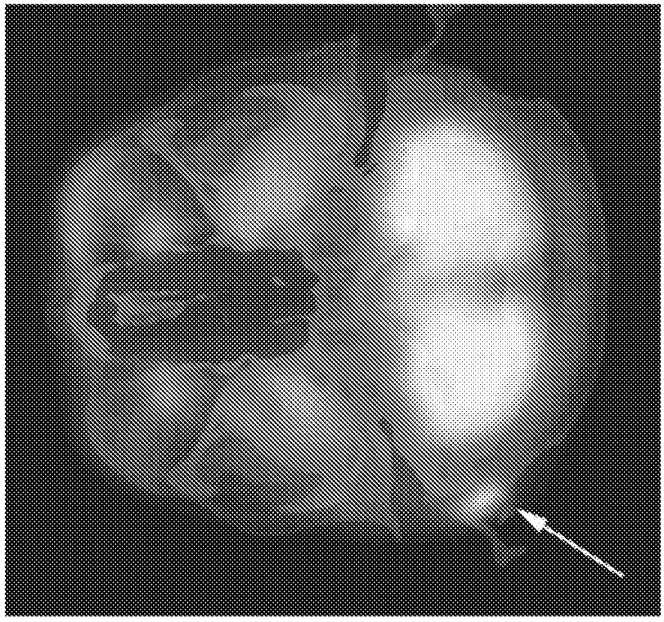


FIG. 6F

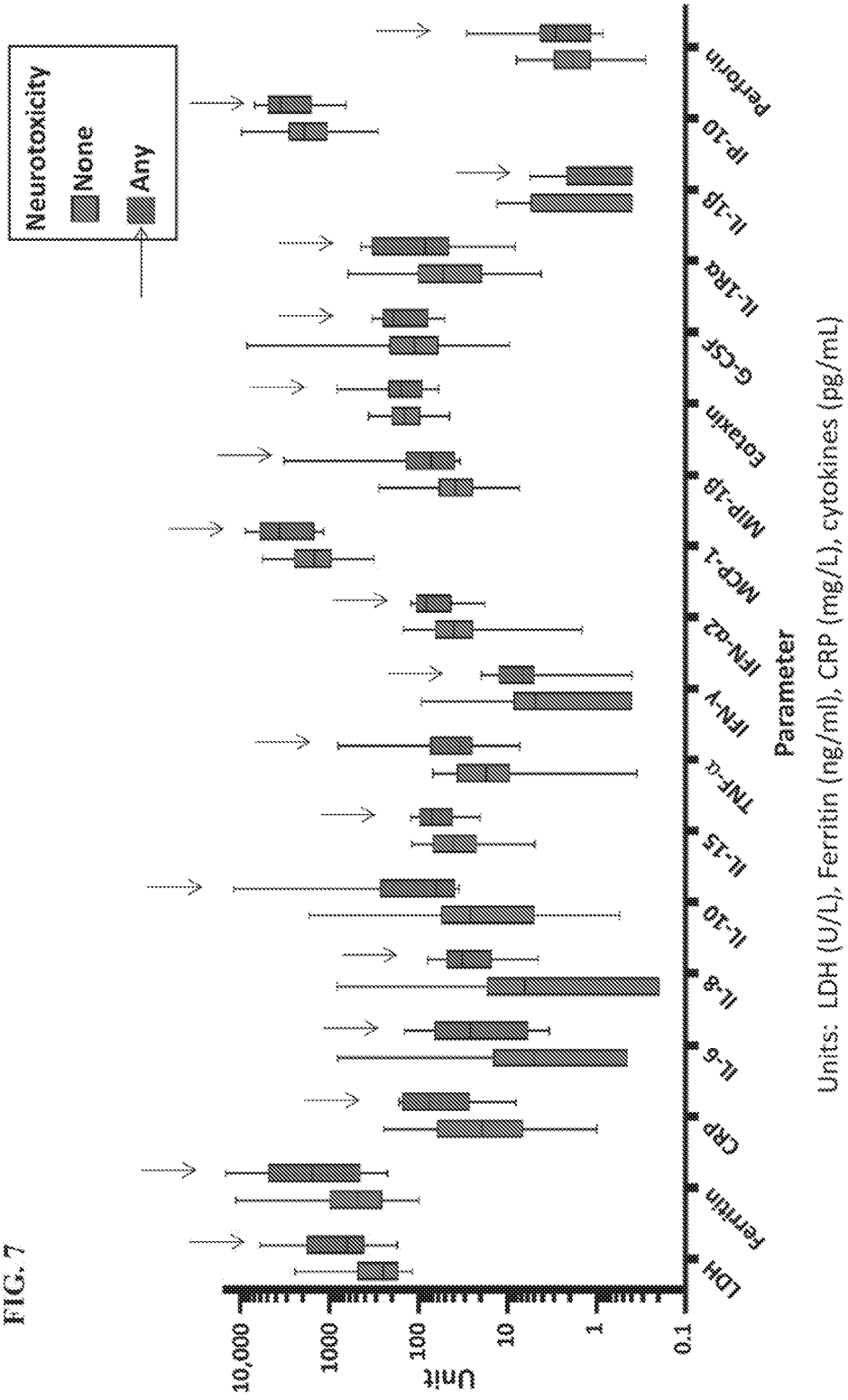

Neurotoxicity
None
Any
Unit
10,000
1000
100
10
1
0.1
LDH
Ferritin
CRP
IL-6
IL-8
IL-10
IL-15
TNF-α
IFN-γ
IFN-α2
MCP-1
MIP-1β
Eotaxin
G-CSF
IL-1Rα
IL-1β
IP-10
Perforin
Parameter
Units: LDH (U/L), Ferritin (ng/ml), CRP (mg/L), cytokines (pg/mL)

FIG. 7

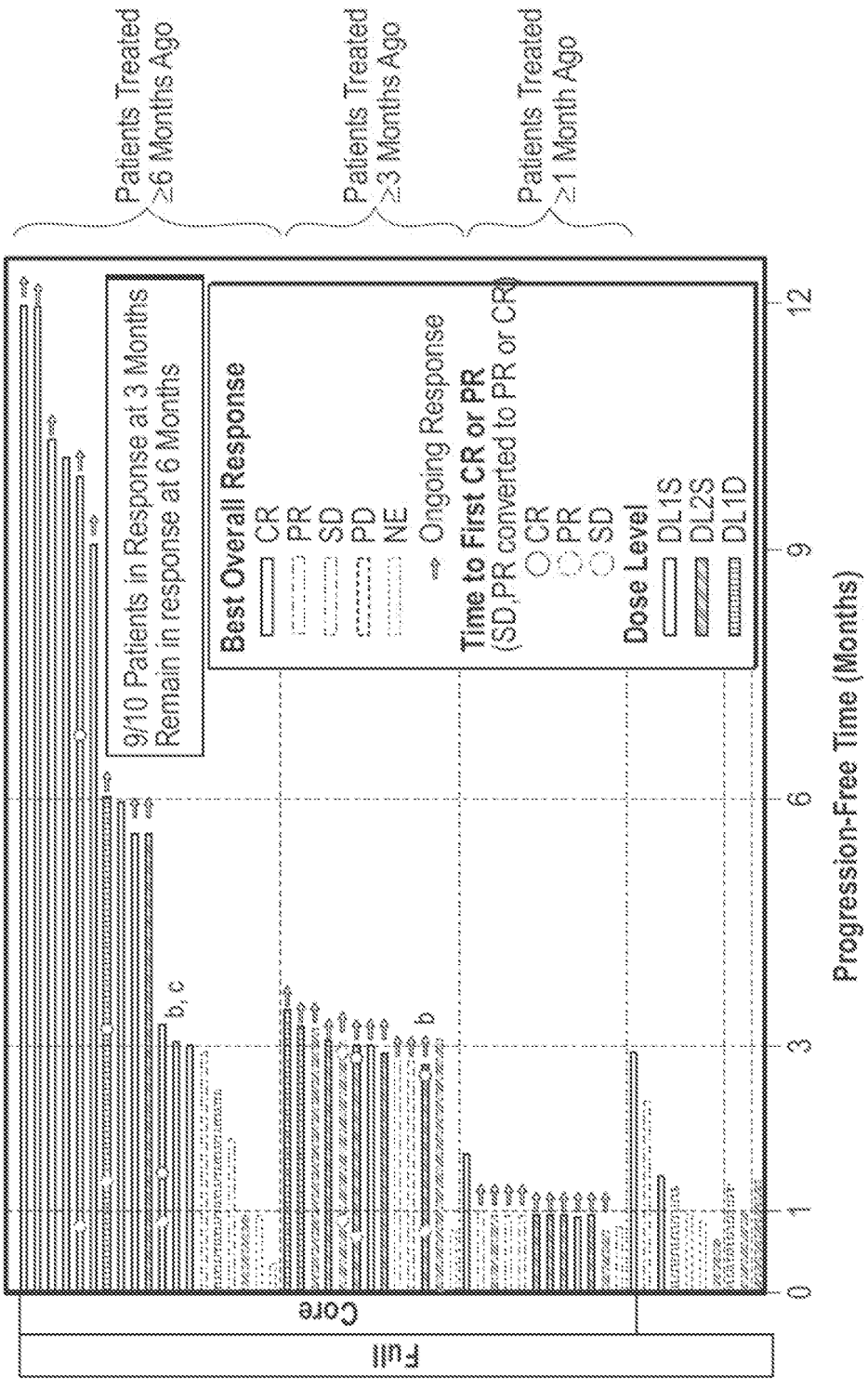

Patients Treated ≥6 Months Ago
Patients Treated ≥3 Months Ago
Patients Treated ≥1 Month Ago
9/10 Patients in Response at 3 Months Remain in response at 6 Months
Best Overall Response
CR
PR
SD
PD
NE
Ongoing Response
Time to First CR or PR (SD,PR converted to PR or CR)
CR
PR
SD
Dose Level
DL1S
DL2S
DL1D
b, c
b
a
Tail
Core
0
1
3
6
9
12
Progression-Free Time (Months)

FIG. 8

FIG. 9B

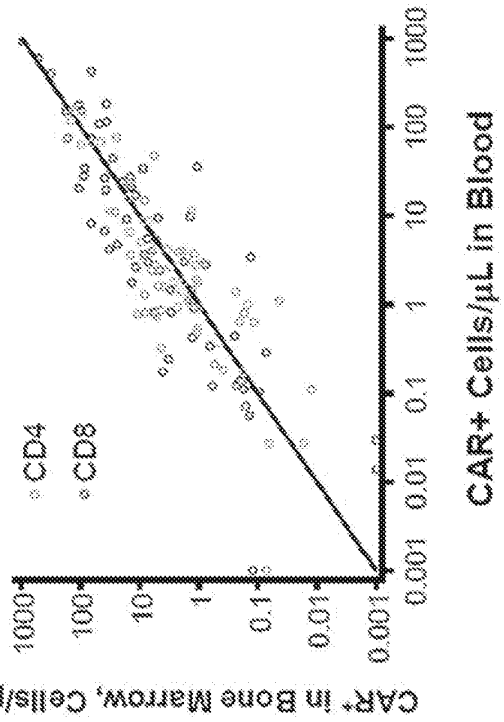

CAR+ Cells/µL in Blood
0.001
0.01
0.1
1
10
100
1000
CD4
CD8
CAR+ in Bone Marrow, cells/µL
0.001
0.01
0.1
1
10
100
1000

FIG. 9A

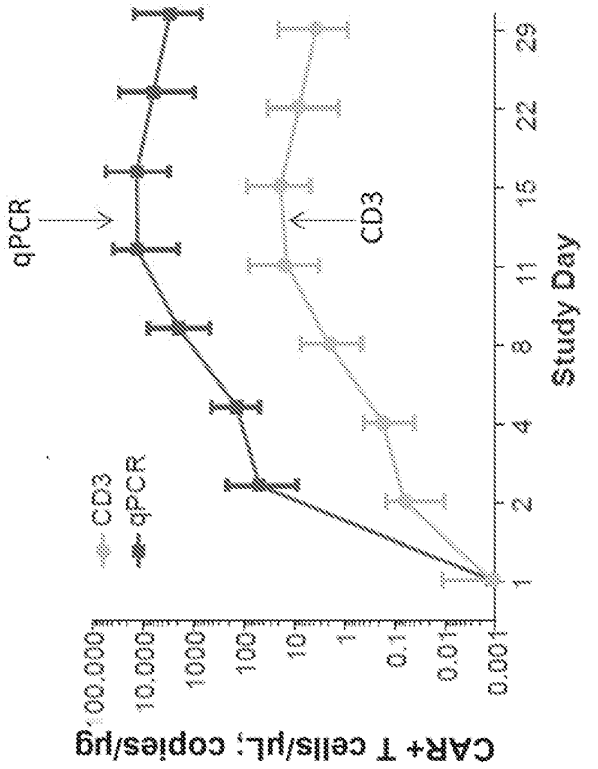

Study Day
1
2
4
8
11
15
22
29
qPCR
CD3
CD3
qPCR
CAR+ T cells/µL; copies/µg
0.001
0.01
0.1
1
10
100
1000
10,000
100,000

FIG. 10A

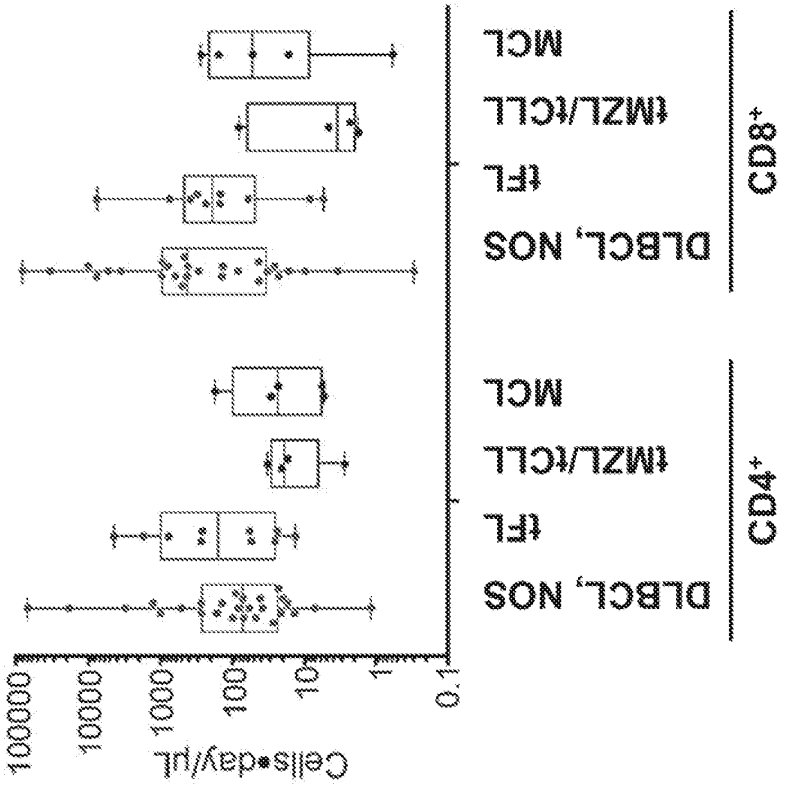
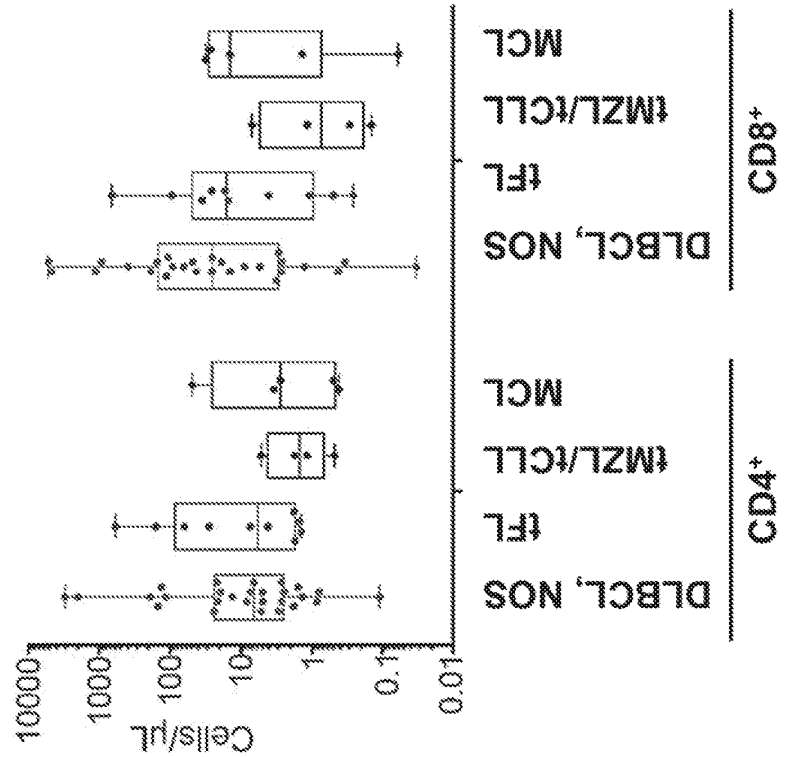


FIG. 10B



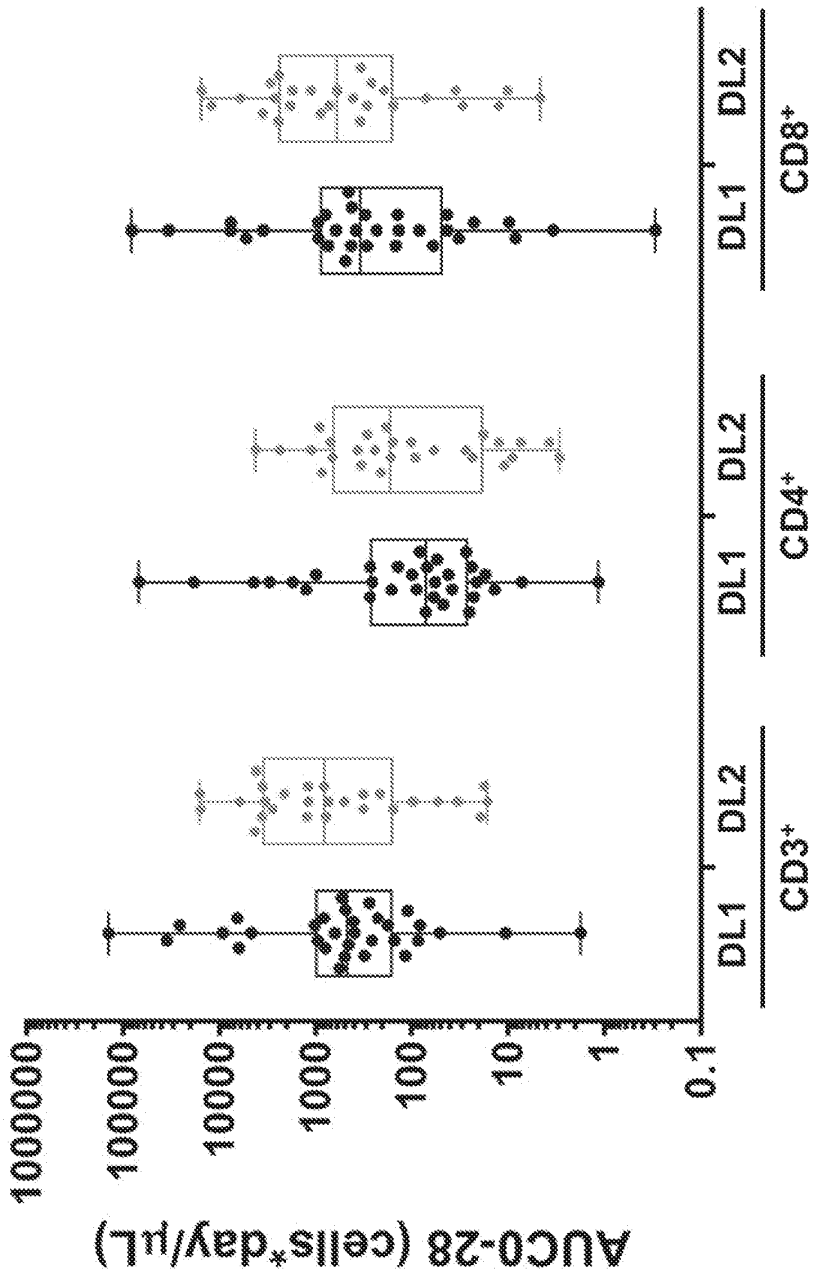

AUC0-28 (cells*day/μL)
1000000
100000
10000
1000
100
10
1
0.1
DL1
DL2
CD3+
DL1
DL2
CD4+
DL1
DL2
CD8+

FIG. 11A

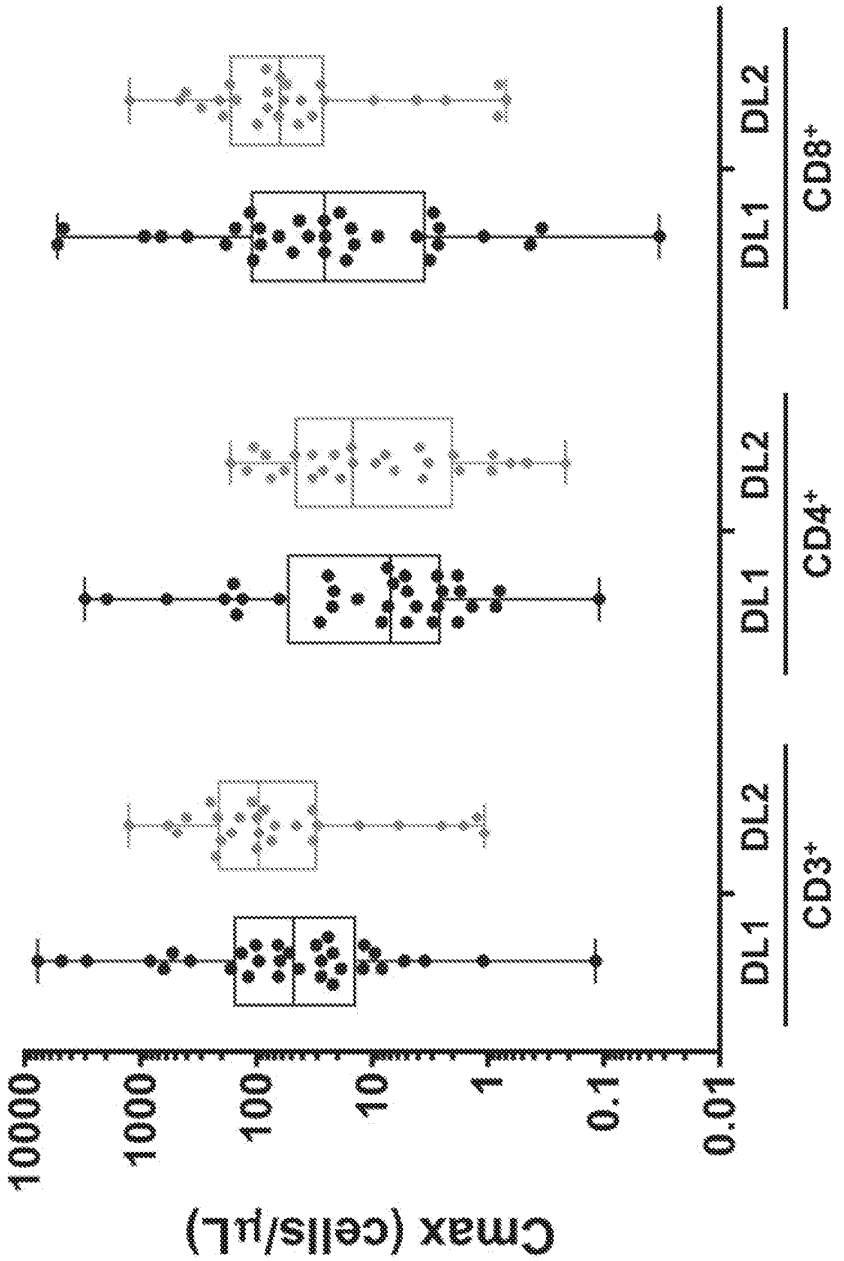

Cmax (cells/μL)
10000
1000
100
10
1
0.1
0.01
CD3+
CD4+
CD8+
DL1
DL2
DL1
DL2
DL1
DL2

FIG. 11B

FIG. 12A

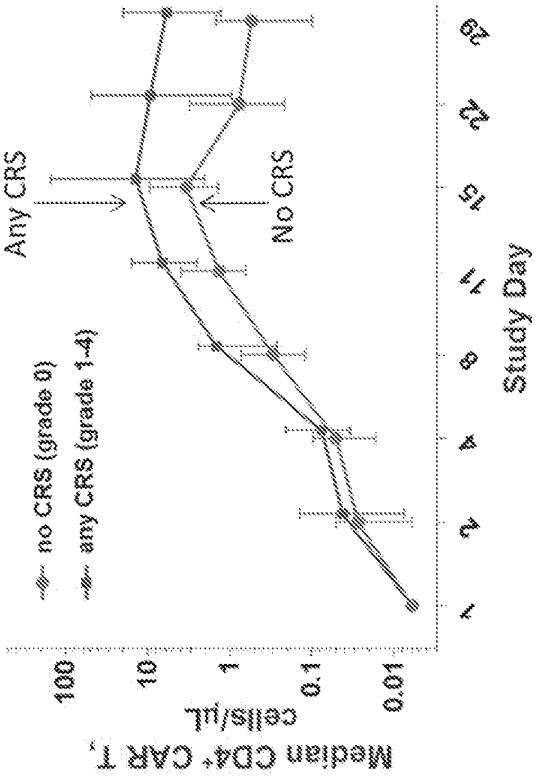


FIG. 12B

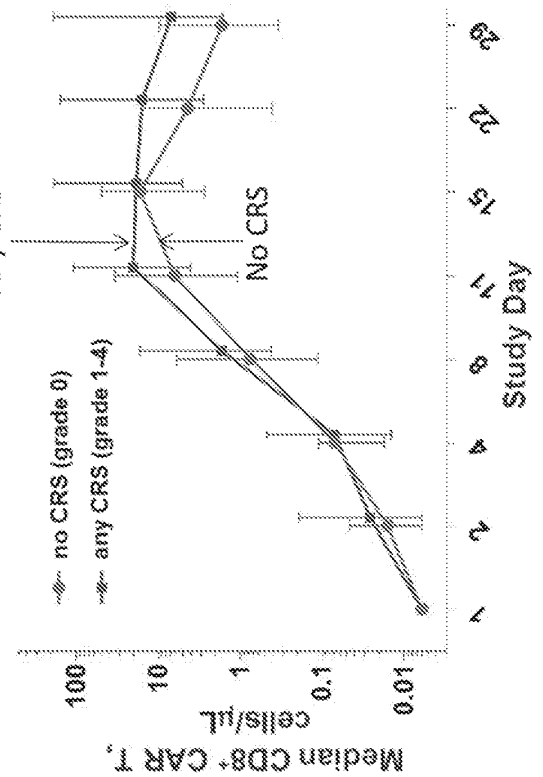


FIG. 12C

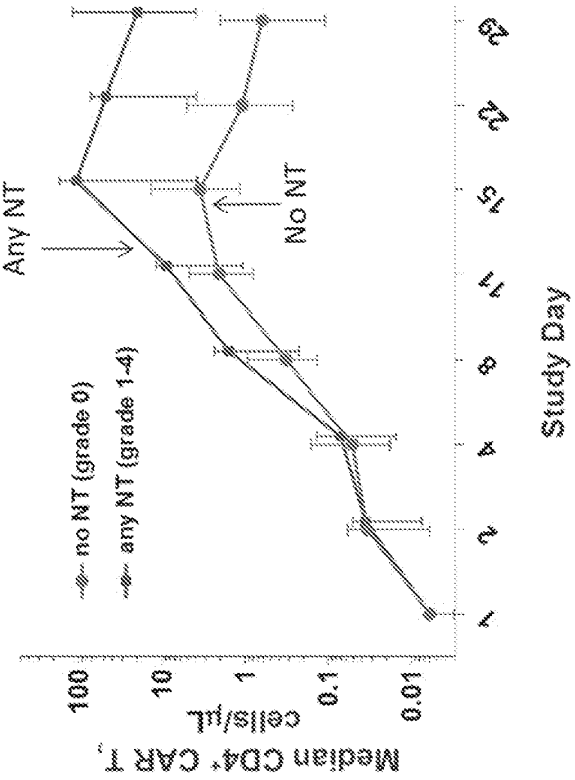
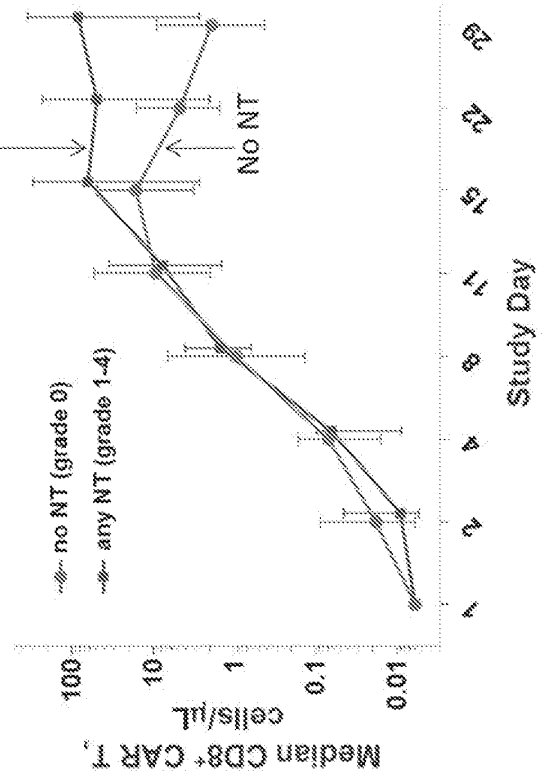


FIG. 12D



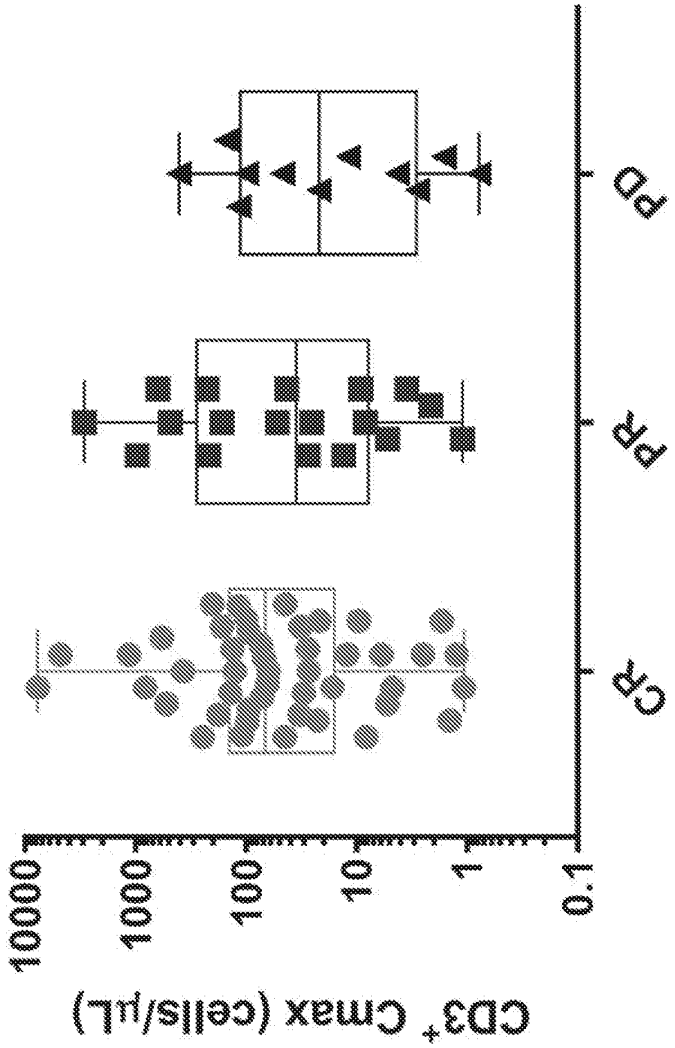


FIG. 13A

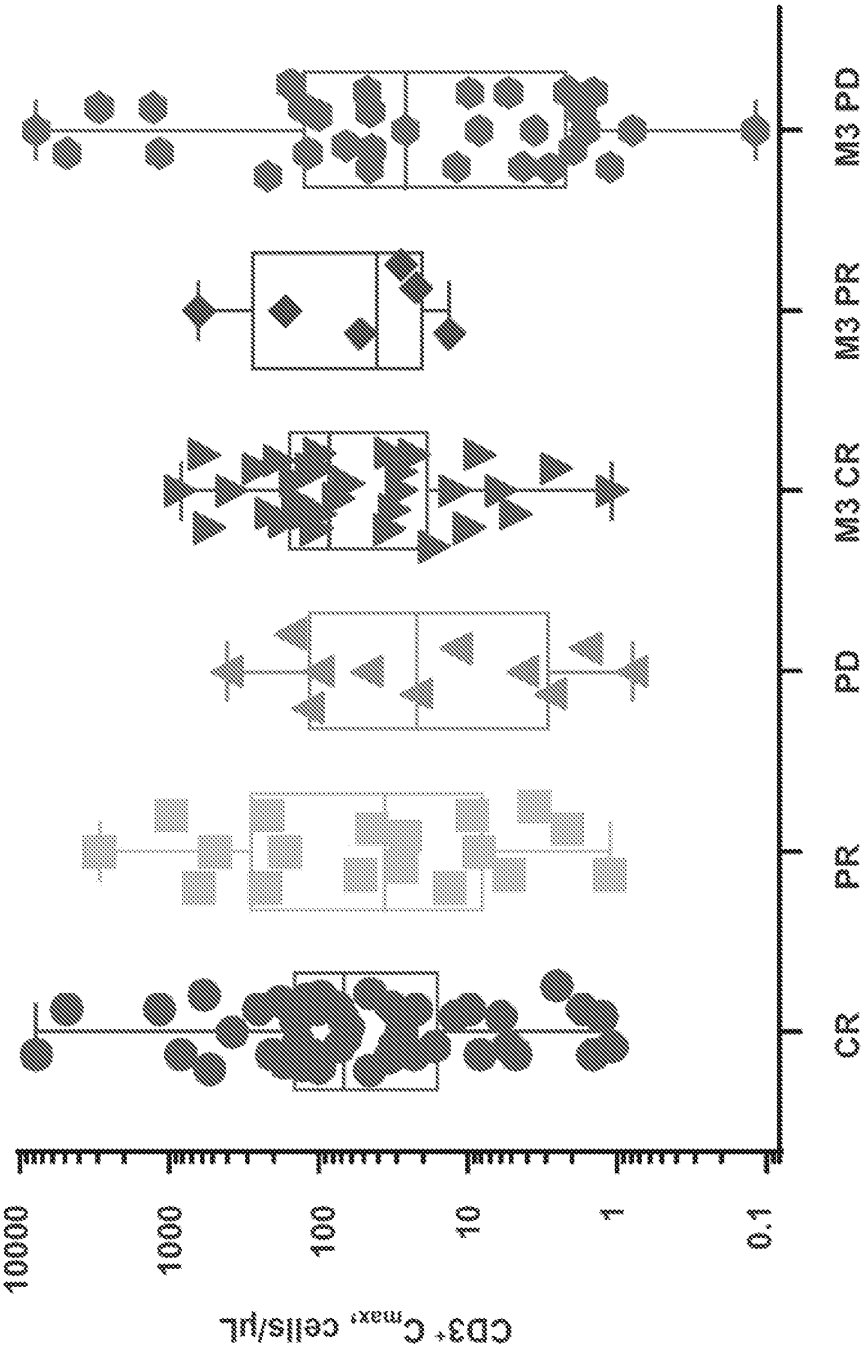


FIG. 13B

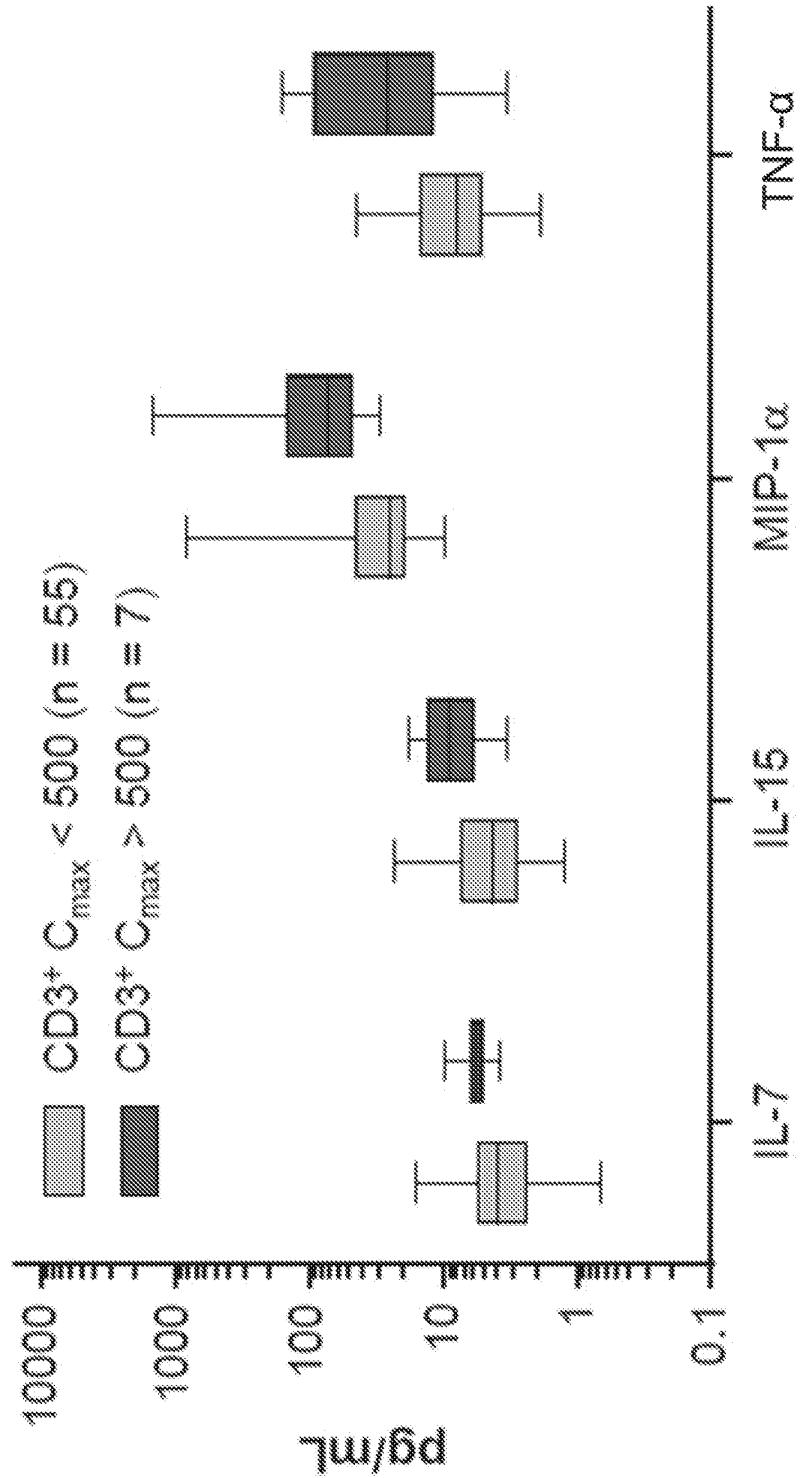

pg/mL
10000
1000
100
10
1
0.1
IL-7
IL-15
MIP-1α
TNF-α
CD3+ Cmax < 500 (n = 55)
CD3+ Cmax > 500 (n = 7)

FIG. 14A

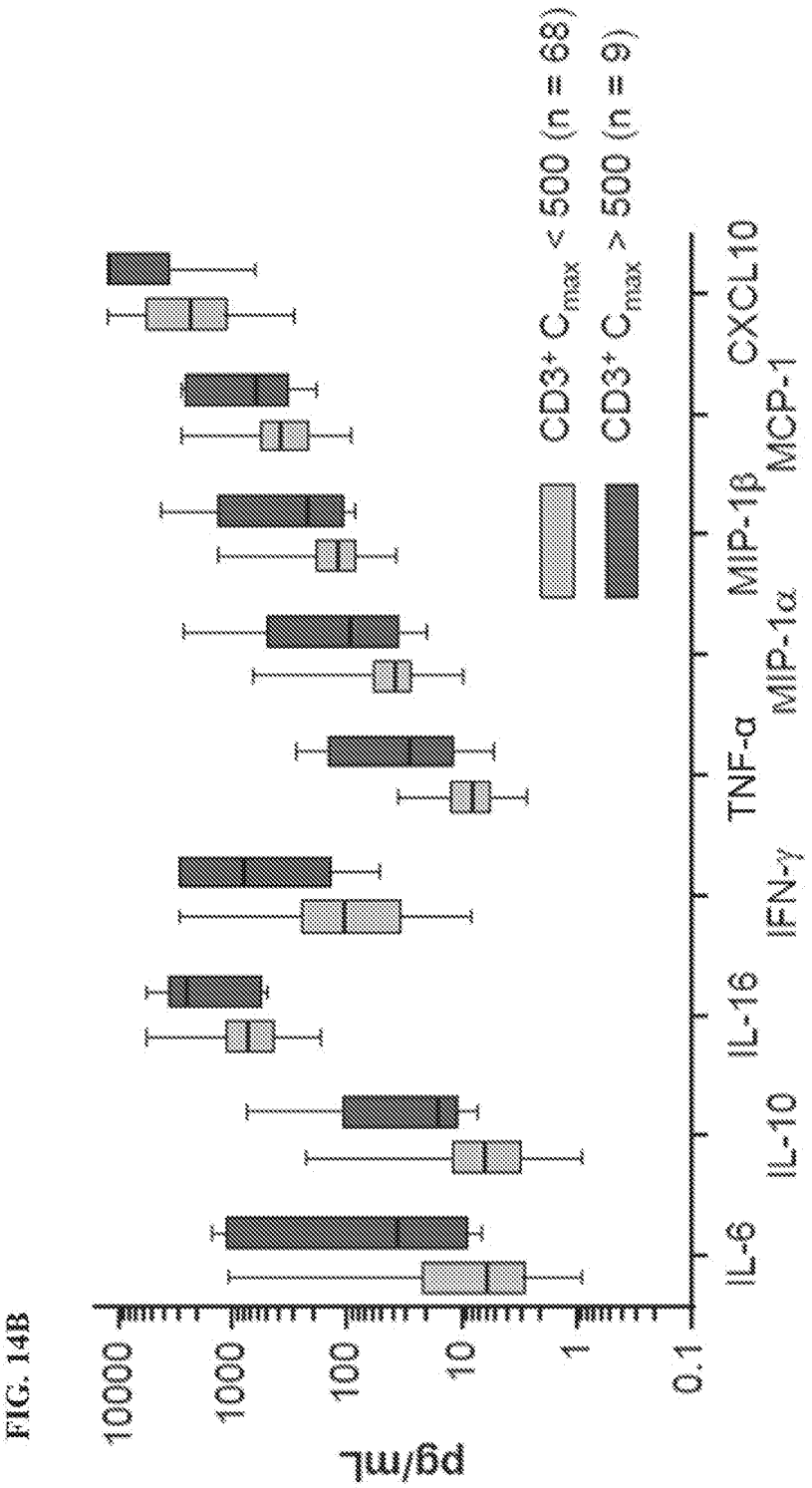
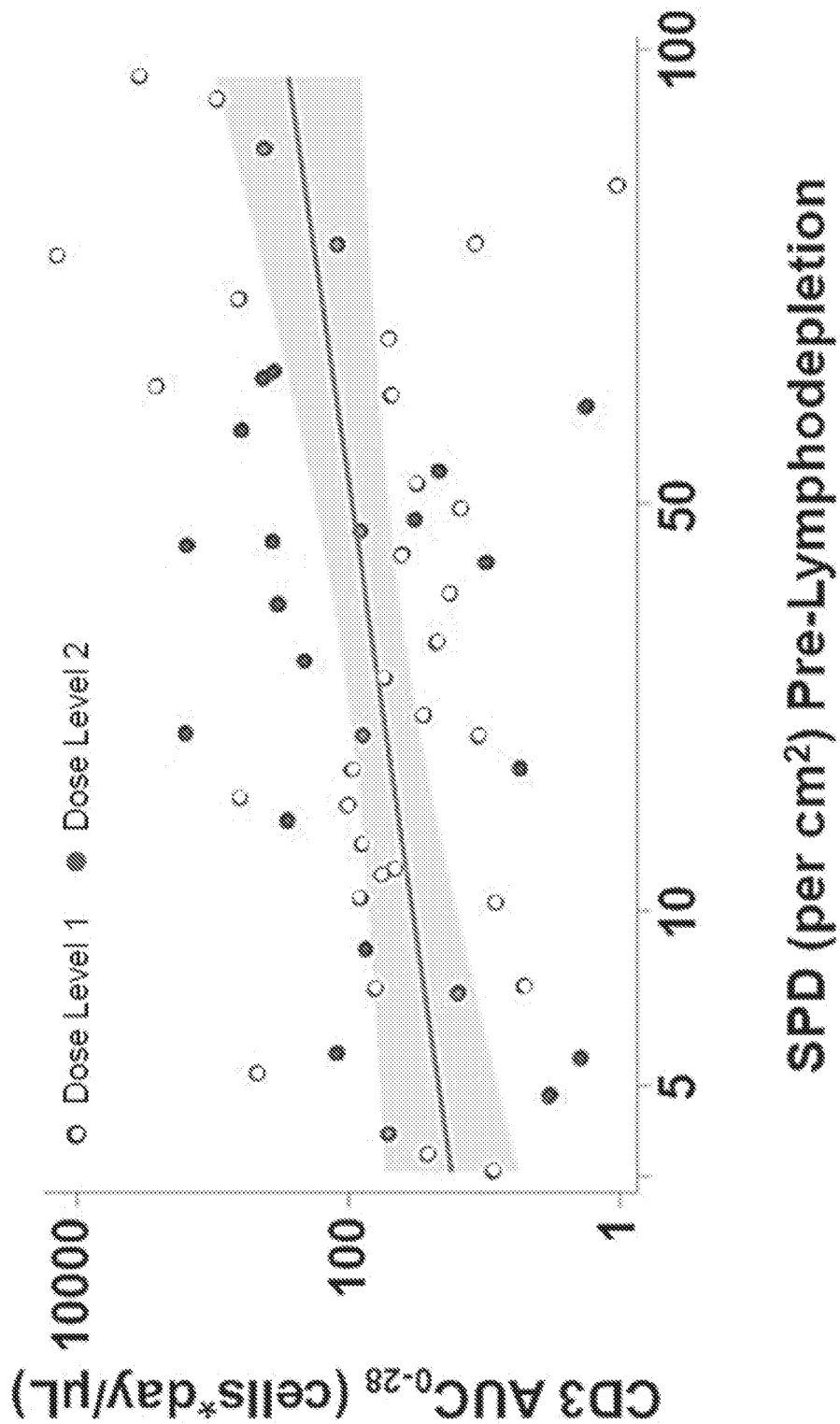

pg/mL
10000
1000
100
10
1
0.1
IL-6
IL-10
IL-16
IFN-γ
TNF-α
MIP-1α
MIP-1β
MCP-1
CXCL10
CD3+ Cmax < 500 (n = 68)
CD3+ Cmax > 500 (n = 9)

FIG. 14B

FIG. 15


CD3 AUC0-28 (cells*day/μL)
10000
100
1
SPD (per cm2) Pre-Lymphodepletion
100
50
10
5
Dose Level 1
Dose Level 2

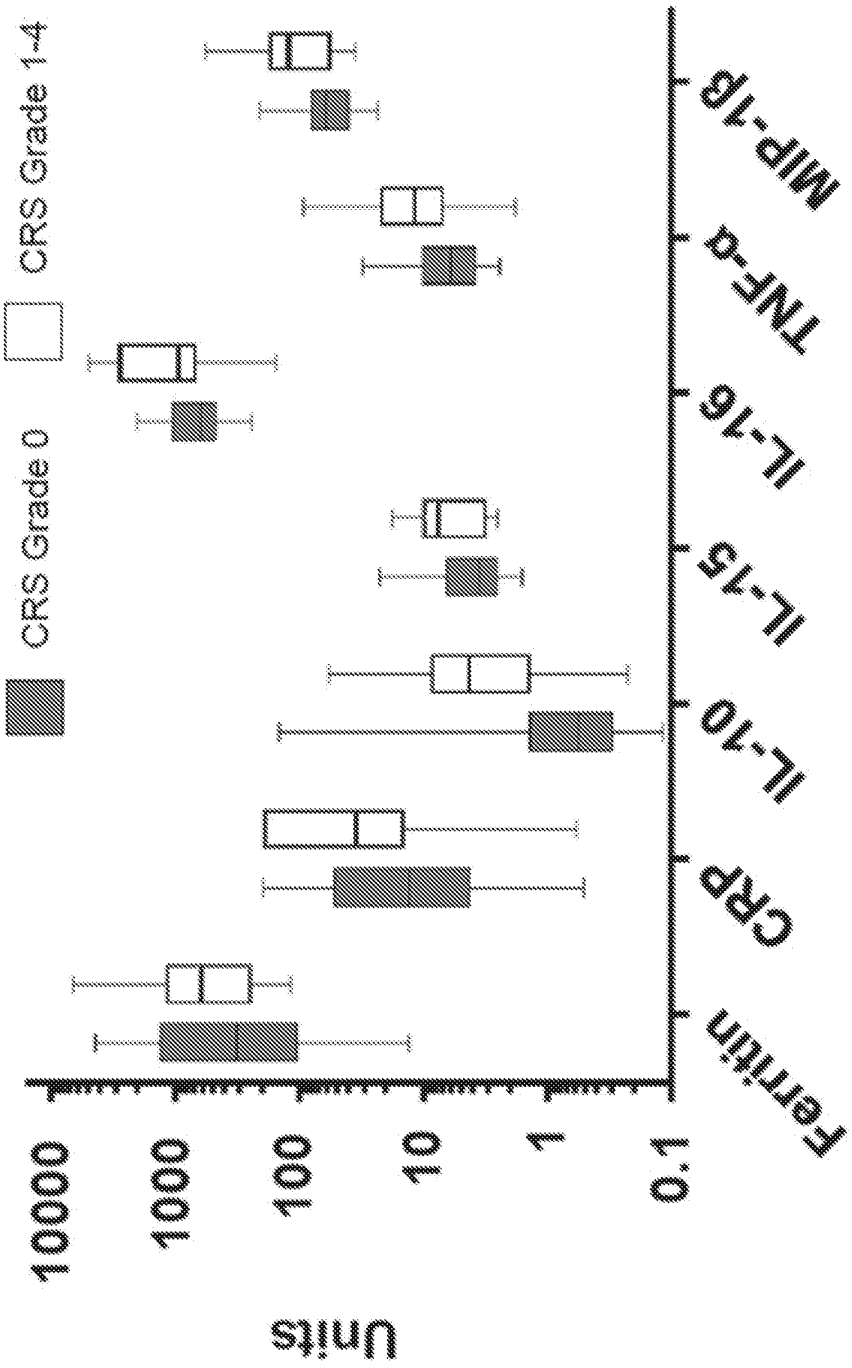

CRS Grade 0
CRS Grade 1-4
Units
10000
1000
100
10
1
0.1
Ferritin
CRP
IL-10
IL-15
IL-16
TNF-α
MIP-1β

FIG. 16A

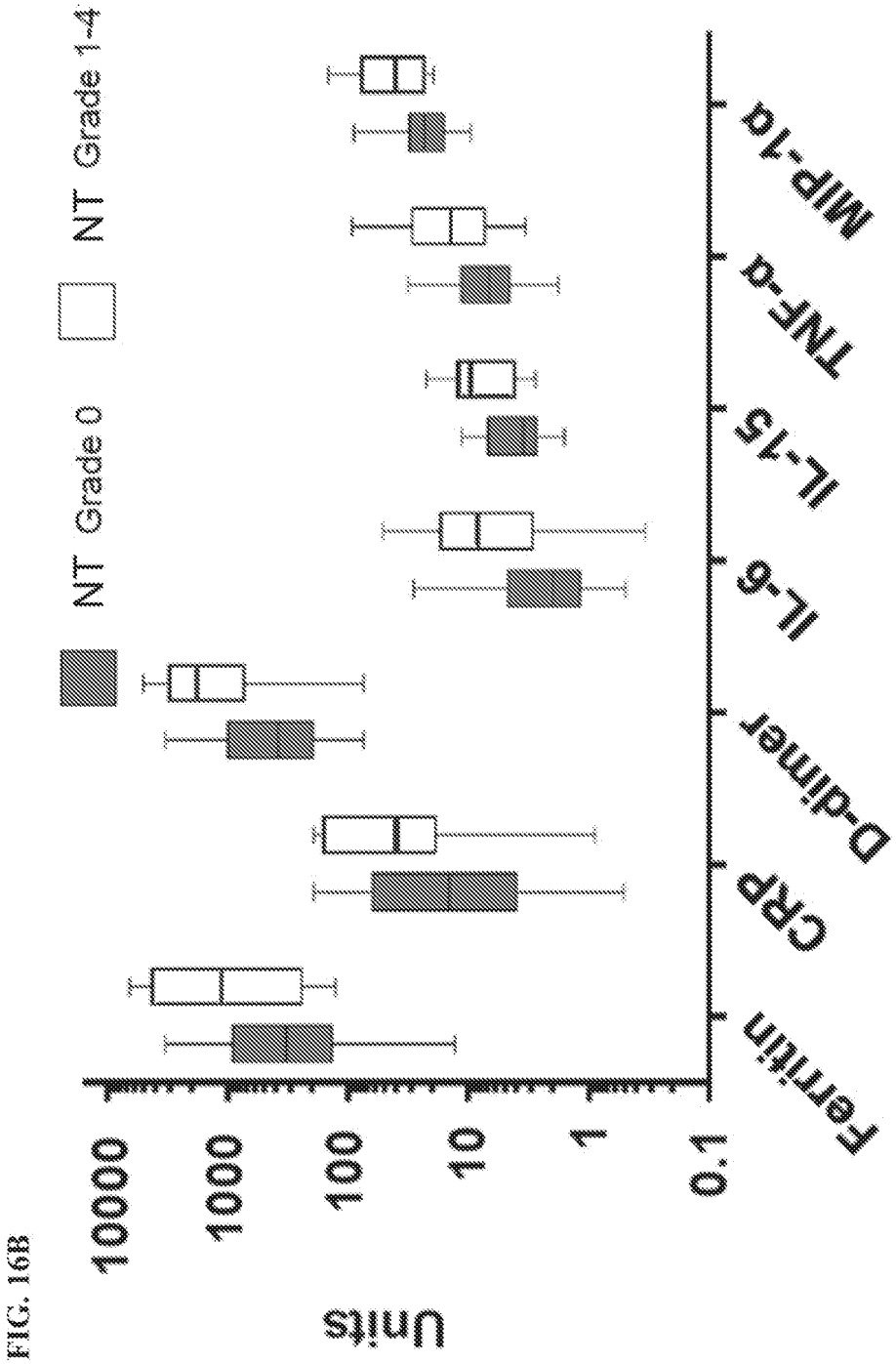

NT Grade 1-4
NT Grade 0
Units
10000
1000
100
10
1
0.1
Ferritin
CRP
D-dimer
IL-6
IL-15
TNF-a
MIP-1a

FIG. 16B

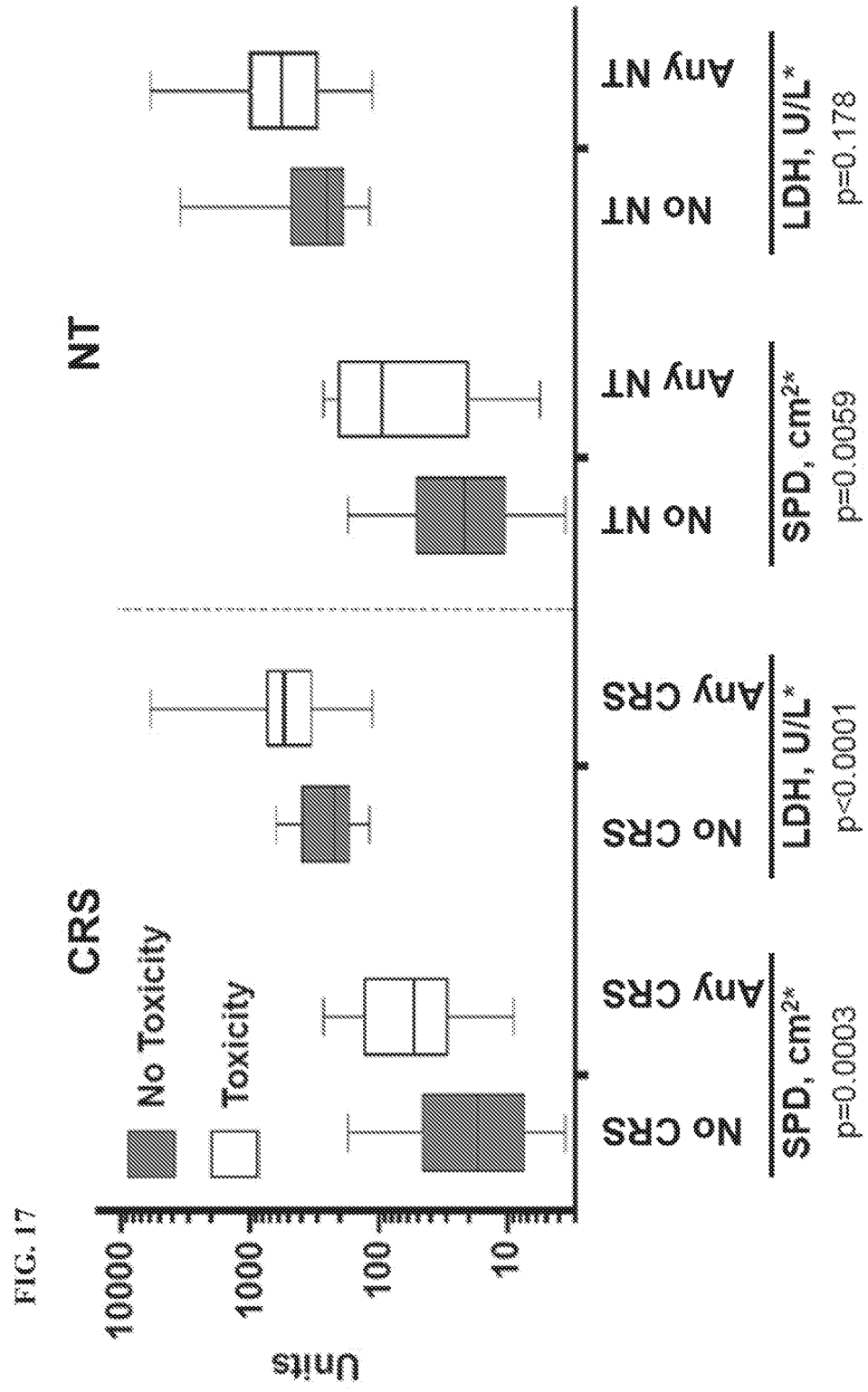

CRS
No Toxicity
Toxicity
Units
10000
1000
100
10
NT
No CRS
Any CRS
No CRS
Any CRS
No NT
Any NT
No NT
Any NT
SPD, cm2*
p=0.0003
LDH, U/L*
p<0.0001
SPD, cm2*
p=0.0059
LDH, U/L*
p=0.178

FIG. 17

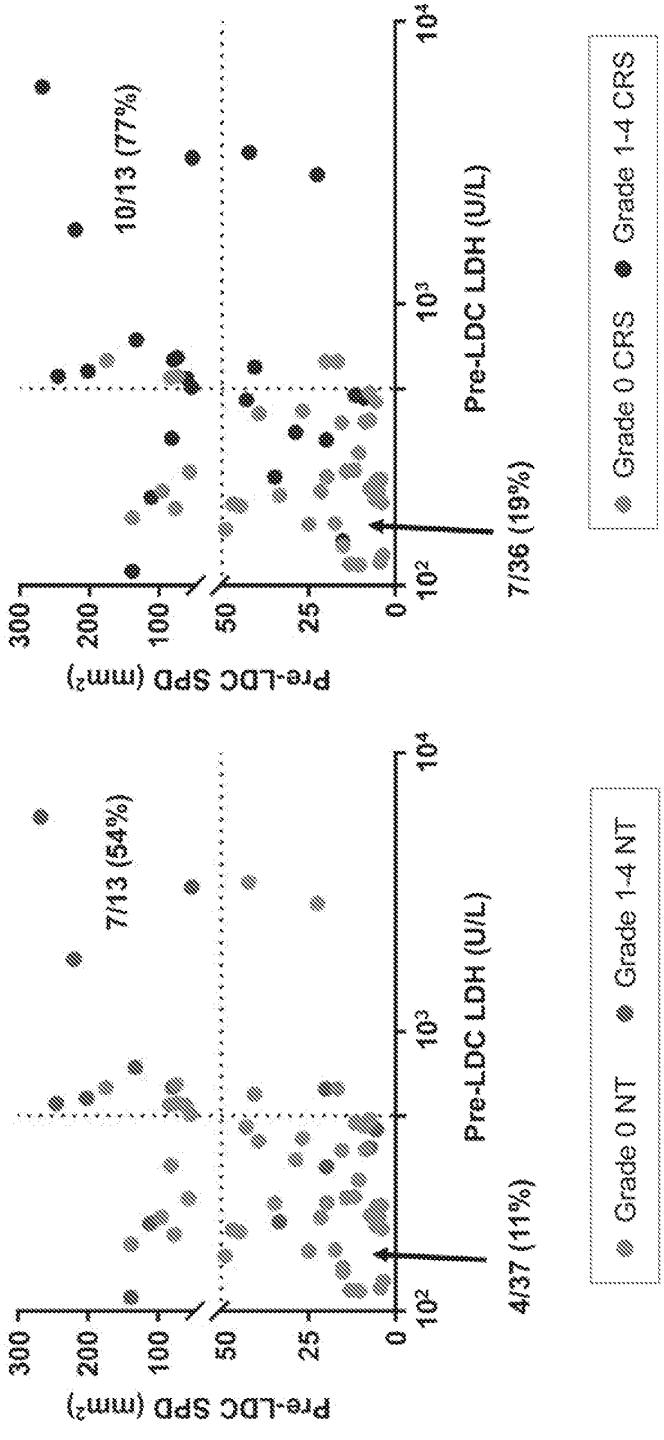

Pre-LDC SPD (mm²)
300
200
100
50
25
0
10/13 (77%)
7/36 (19%)
7/13 (54%)
4/37 (11%)
Pre-LDC LDH (U/L)
10²
10³
10⁴
Grade 0 CRS
Grade 1-4 CRS
Grade 0 NT
Grade 1-4 NT

FIG. 18A

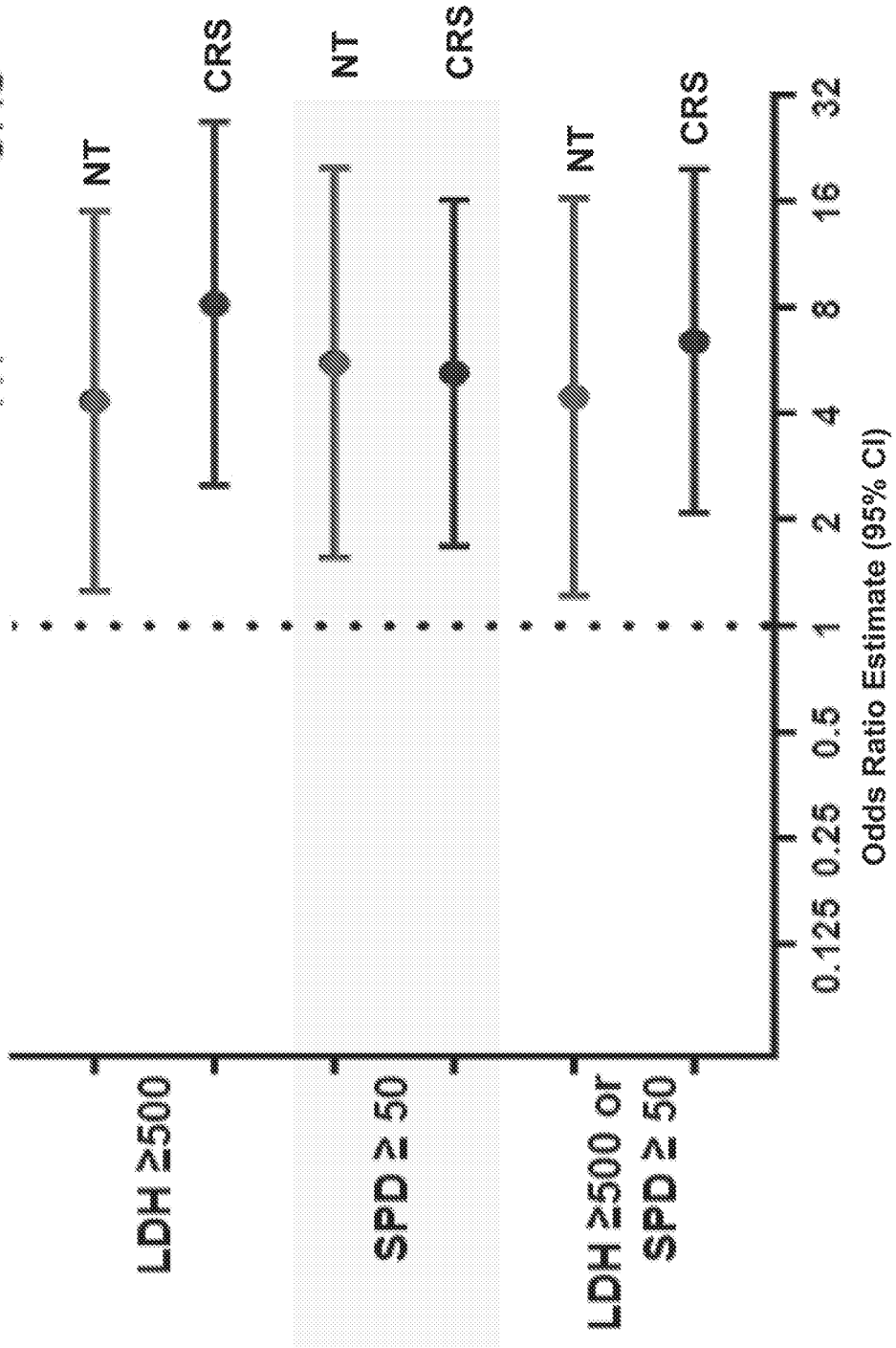

NT
CRS
NT
CRS
NT
CRS
NT
CRS
LDH ≥500
SPD ≥ 50
LDH ≥500 or SPD ≥ 50
0.125
0.25
0.5
1
2
4
8
16
32
Odds Ratio Estimate (95% CI)

FIG. 18B

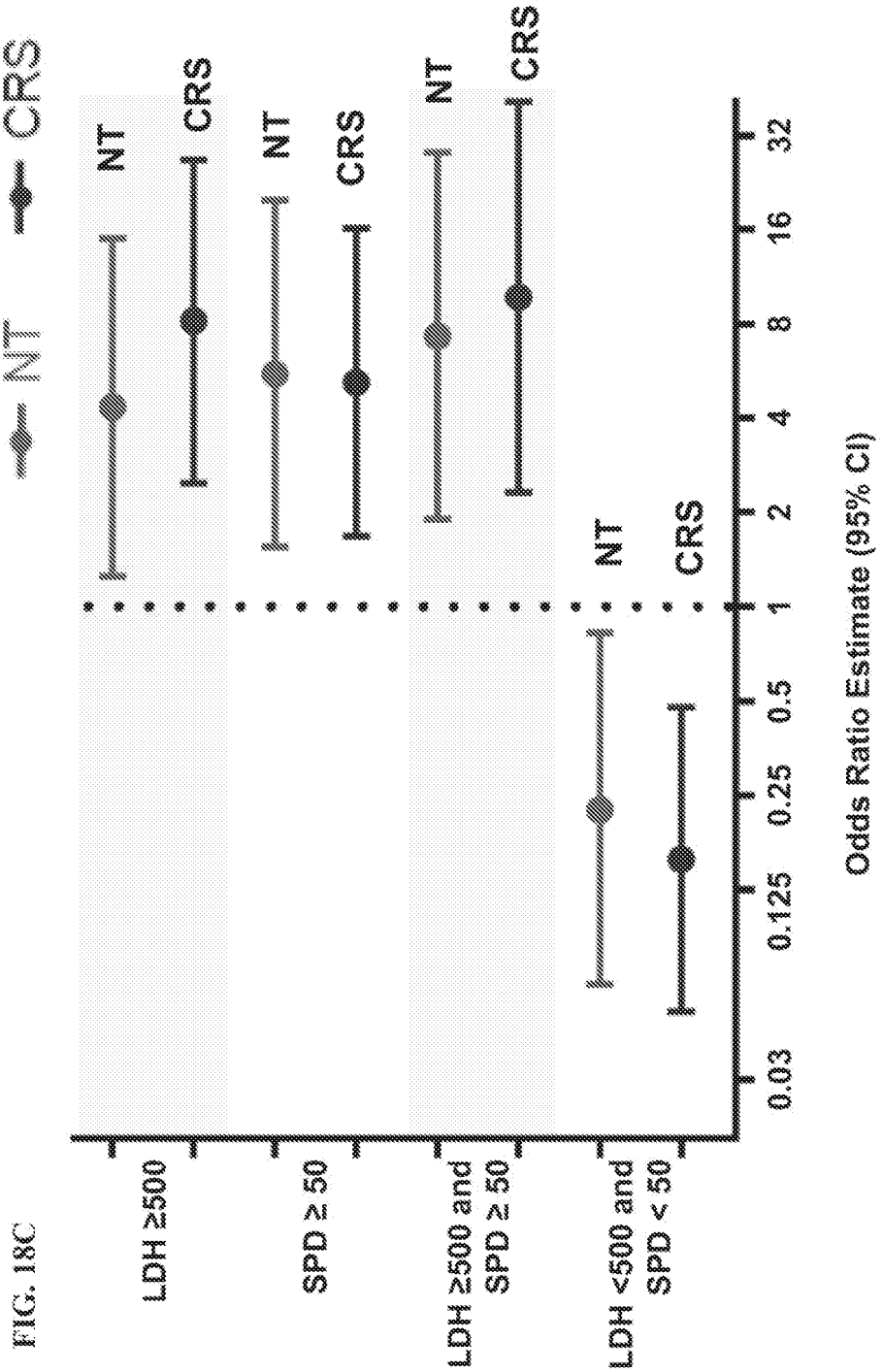

NT
CRS
LDH ≥500
SPD ≥ 50
LDH ≥500 and SPD ≥ 50
LDH <500 and SPD < 50
0.03
0.125
0.25
0.5
1
2
4
8
16
32
Odds Ratio Estimate (95% CI)

FIG. 18C

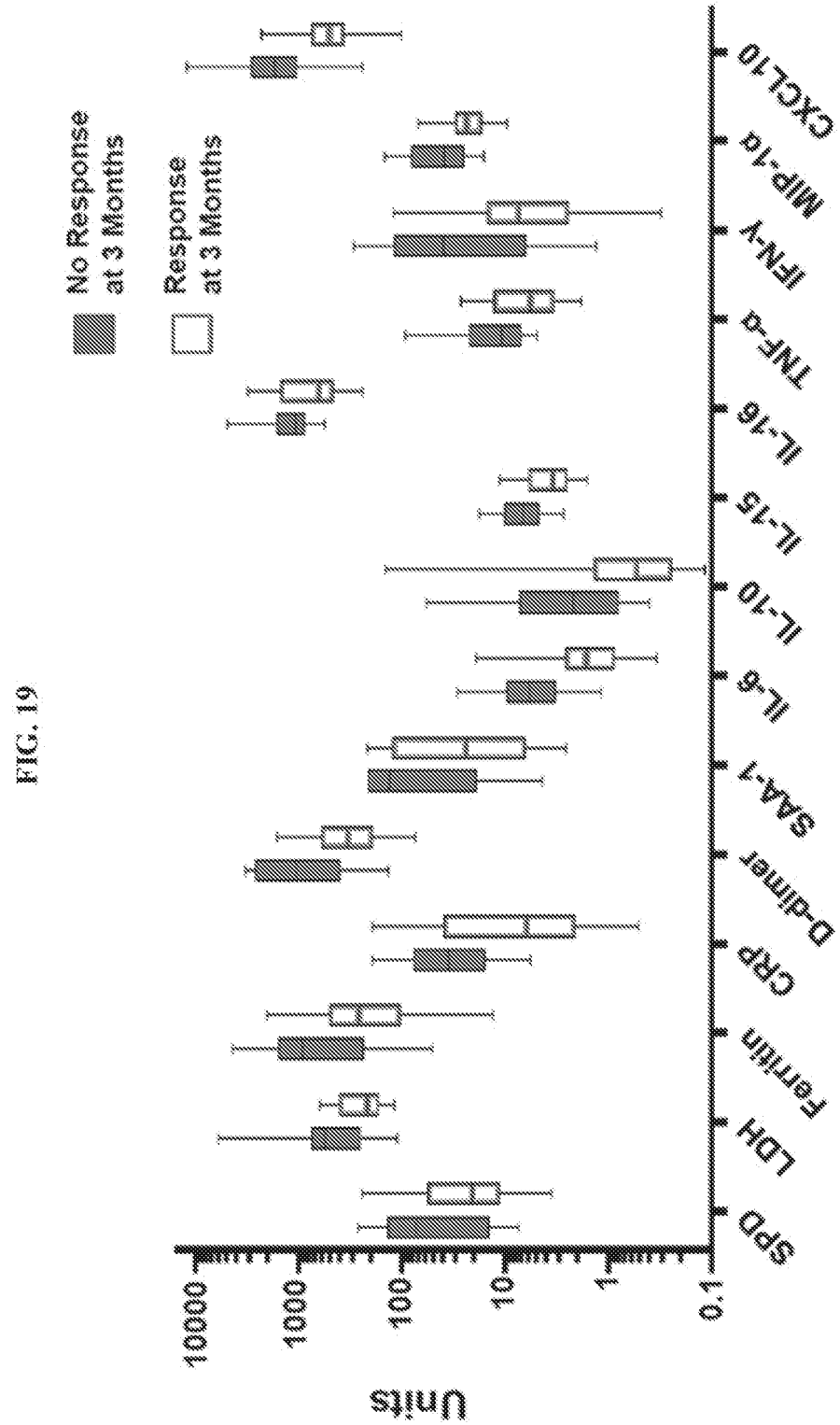

No Response at 3 Months
Response at 3 Months
Units
10000
1000
100
10
1
0.1
SPD
LDH
Ferritin
CRP
D-dimer
SAA-1
IL-6
IL-10
IL-15
IL-16
TNF-α
IFN-γ
MIP-1α
CXCL10

FIG. 19

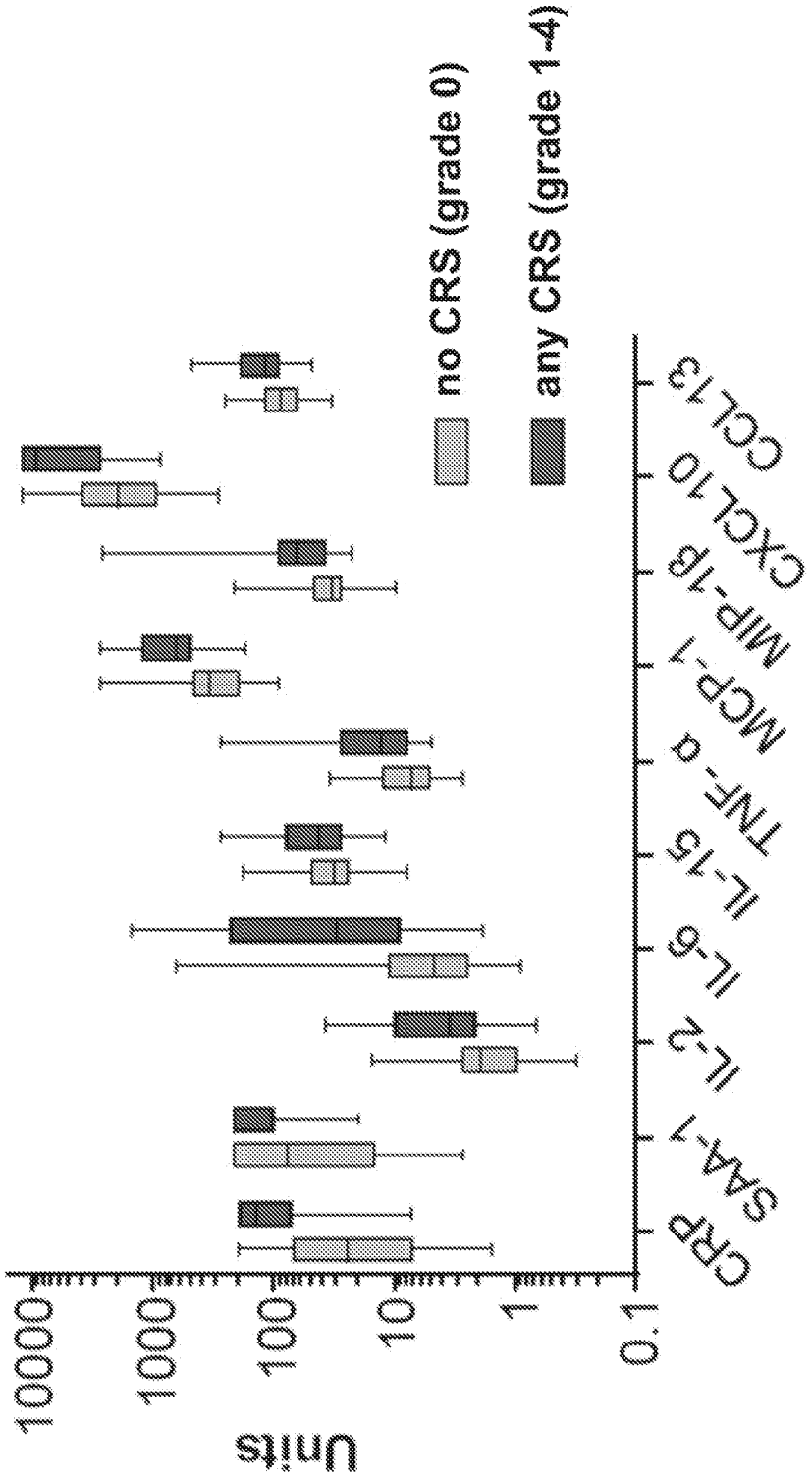

no CRS (grade 0)
any CRS (grade 1-4)
Units
10000
1000
100
10
1
0.1
CRP
SAA-1
IL-2
IL-6
IL-15
TNF-α
MCP-1
MIP-1β
CXCL10
CCL13

FIG. 20A

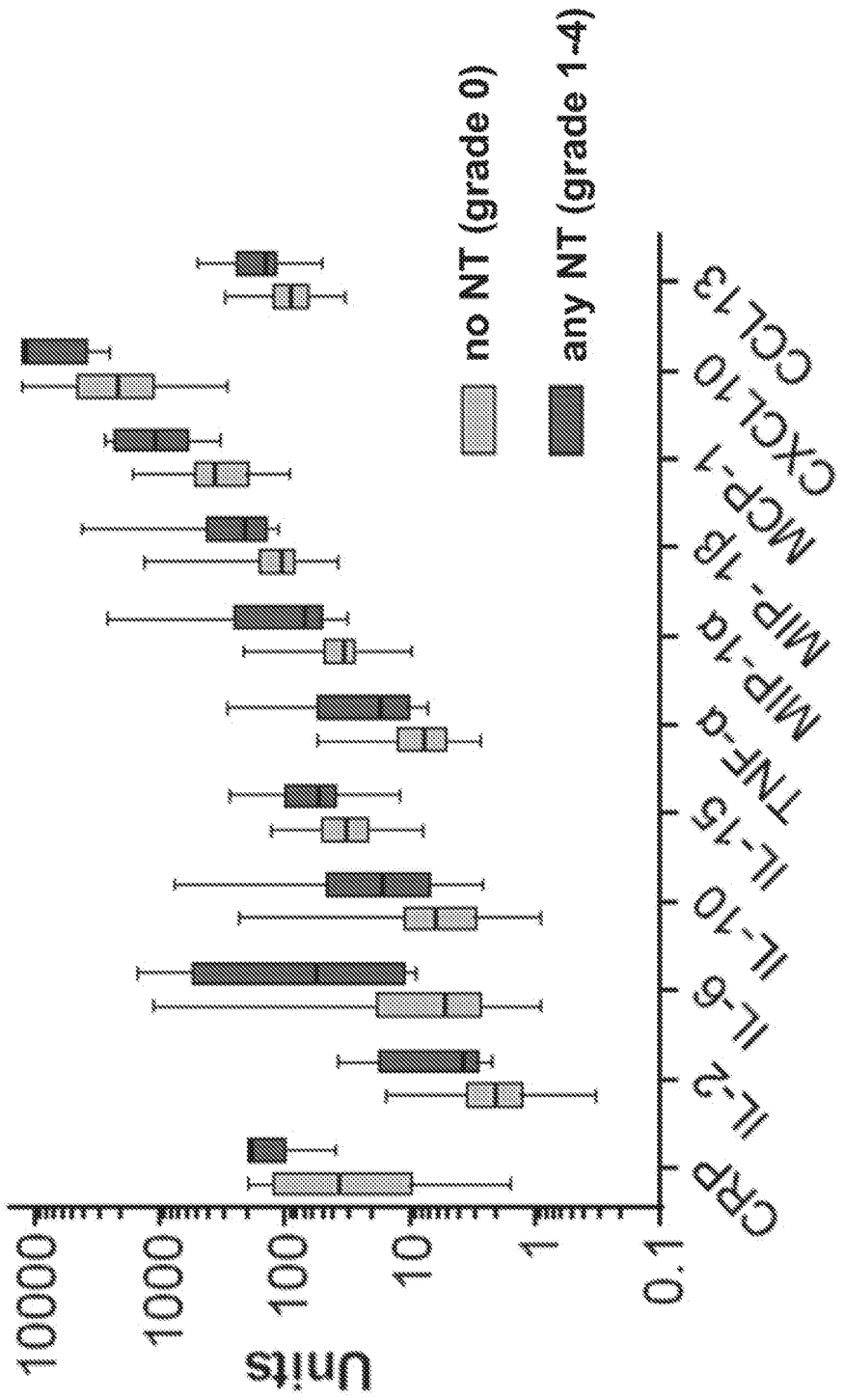

no NT (grade 0)
any NT (grade 1-4)
Units
10000
1000
100
10
1
0.1
CRP
IL-2
IL-6
IL-10
IL-15
TNF-a
MIP-1a
MIP-1B
MCP-1
CXCL10
CCL13

FIG. 20B

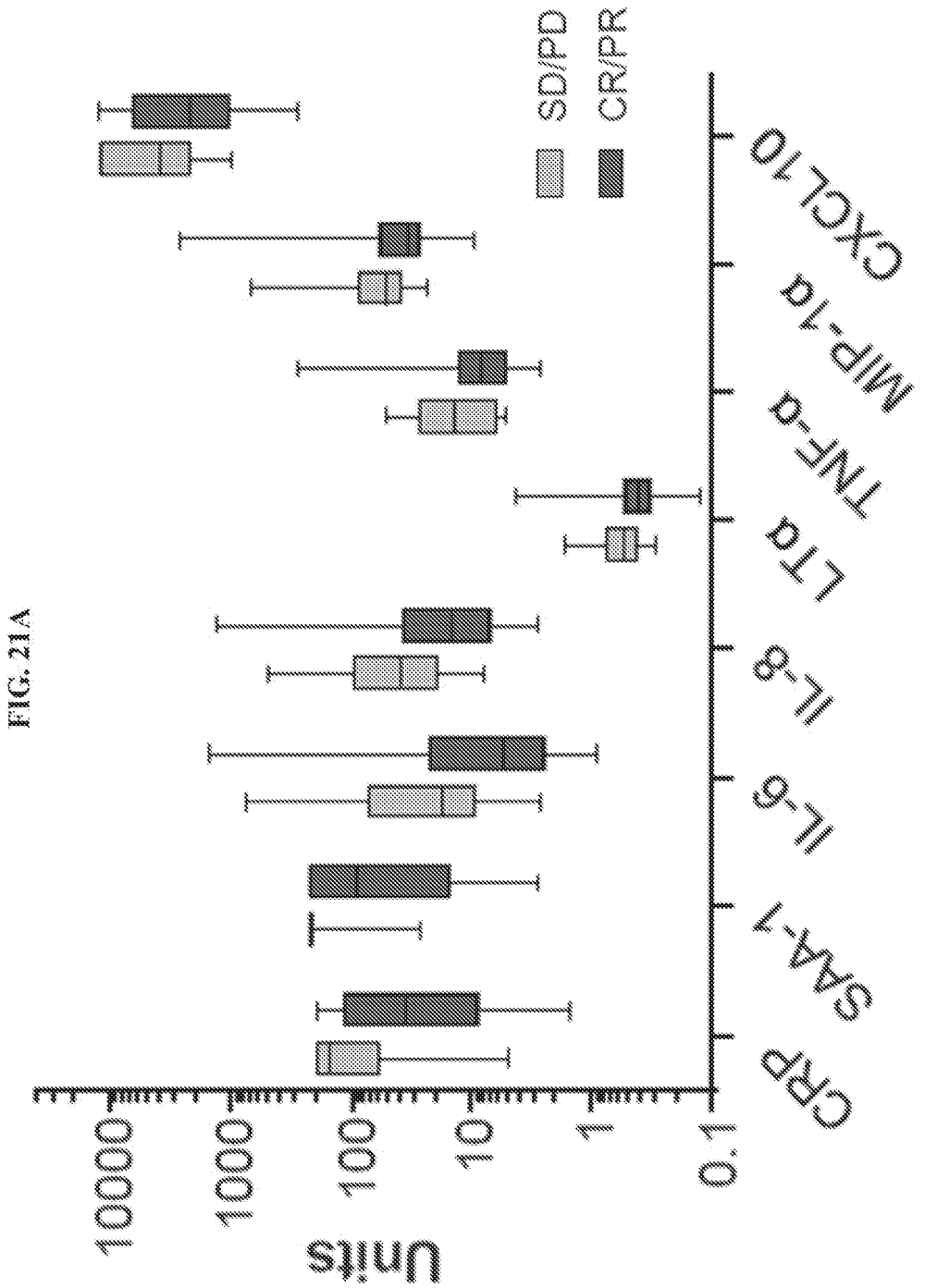

SD/PD
CR/PR
Units
10000
1000
100
10
1
0.1
CRP
SAA-1
IL-6
IL-8
LTa
TNF-a
MIP-1a
CXCL10

FIG. 21A

FIG. 21B

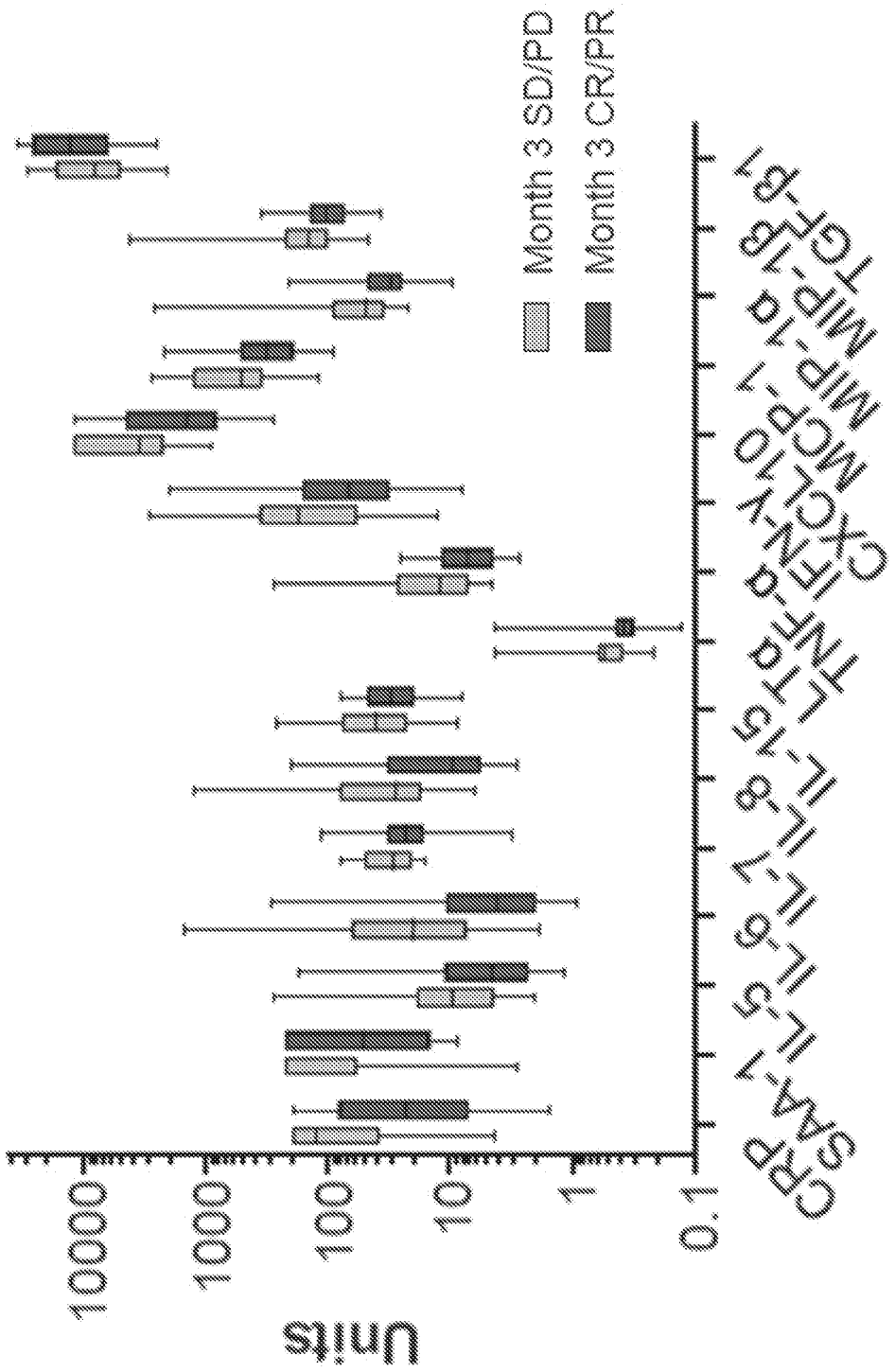
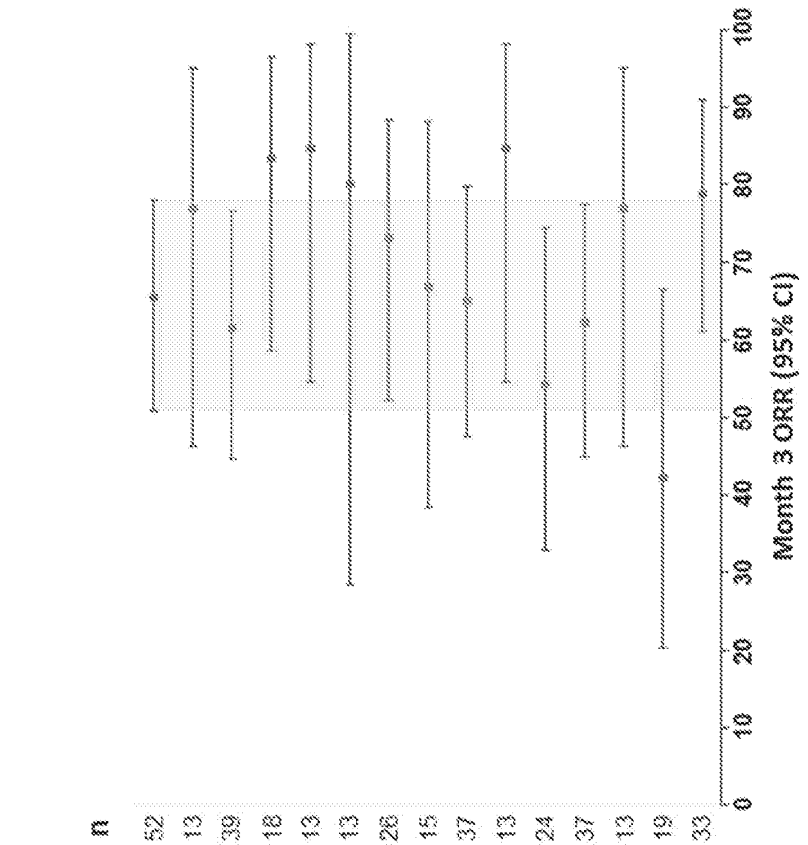

Month 3 SD/PD
Month 3 CR/PR
Units
10000
1000
100
10
1
0.1
CRP
SAA
IL-1β
IL-6
IL-8
IL-15
TNFα
IFN-γ
CXCL10
MCP-1
MIP-1α
MIP-1β
TGF-β1

FIG. 22


Population
ORR (95% CI)
n
CORE Patient Population
65.4 (50.9, 78)
52
tFL
76.9 (46.2, 95)
13
DLBCL NOS
61.5 (44.6, 76.6)
39
Double/triple hit or double expressor
83.3 (58.6, 96.4)
18
Double/triple hit
84.6 (54.6, 98.1)
13
Double expressor
80 (28.4, 99.5)
13
Never in CR
73.1 (52.2, 88.4)
26
Chemosensitive
66.7 (38.4, 88.2)
15
Chemorefractory
64.9 (47.5, 79.8)
37
Relapse <12m from ASCT
84.6 (54.6, 98.1)
13
SD/PD to last chemo
54.2 (32.8, 74.4)
24
Stage 3/4
62.2 (44.8, 77.5)
37
Stage 1/2
76.9 (46.2, 95)
13
IPI 3-5
42.1 (20.3, 66.5)
19
IPI 0-2
78.8 (61.1, 91)
33
0
10
20
30
40
50
60
70
80
90
100
Month 3 ORR (95% CI)

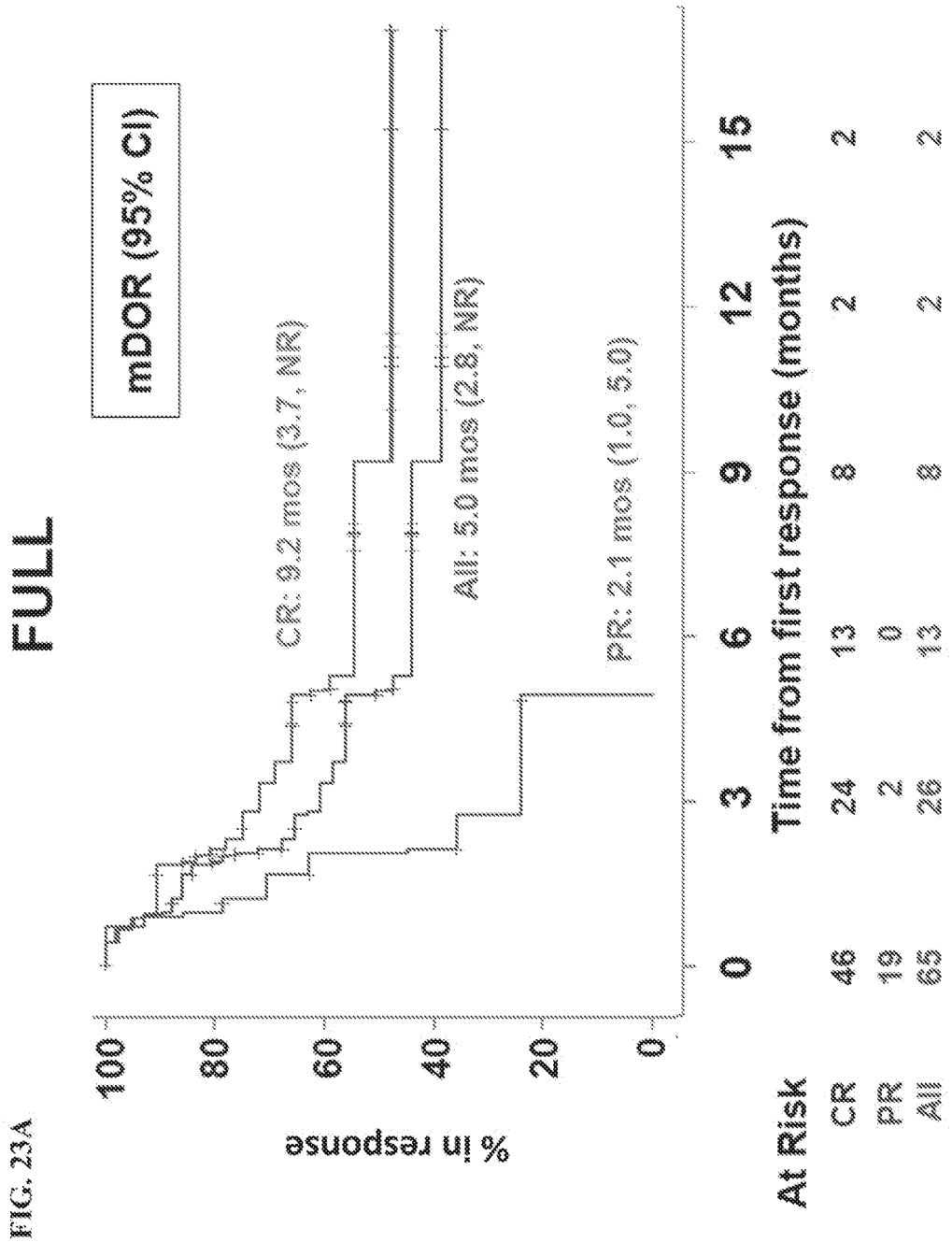

FULL
mDOR (95% CI)
CR: 9.2 mos (3.7, NR)
All: 5.0 mos (2.8, NR)
PR: 2.1 mos (1.0, 5.0)
% in response
100
80
60
40
20
0
Time from first response (months)
0
3
6
9
12
15
At Risk
CR 46 24 13 8 2 2
PR 19 2 0 2
All 65 26 13 8 2 2

FIG. 23A

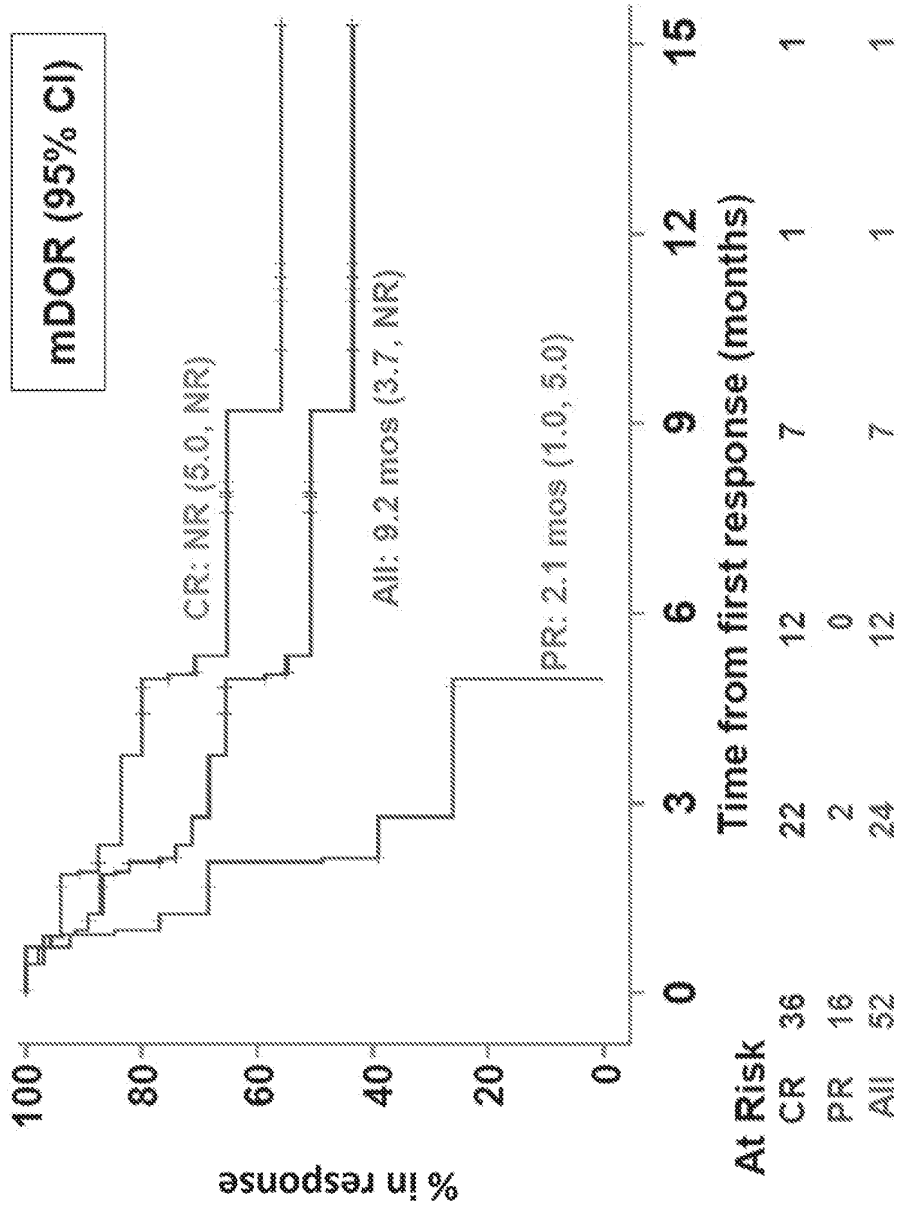
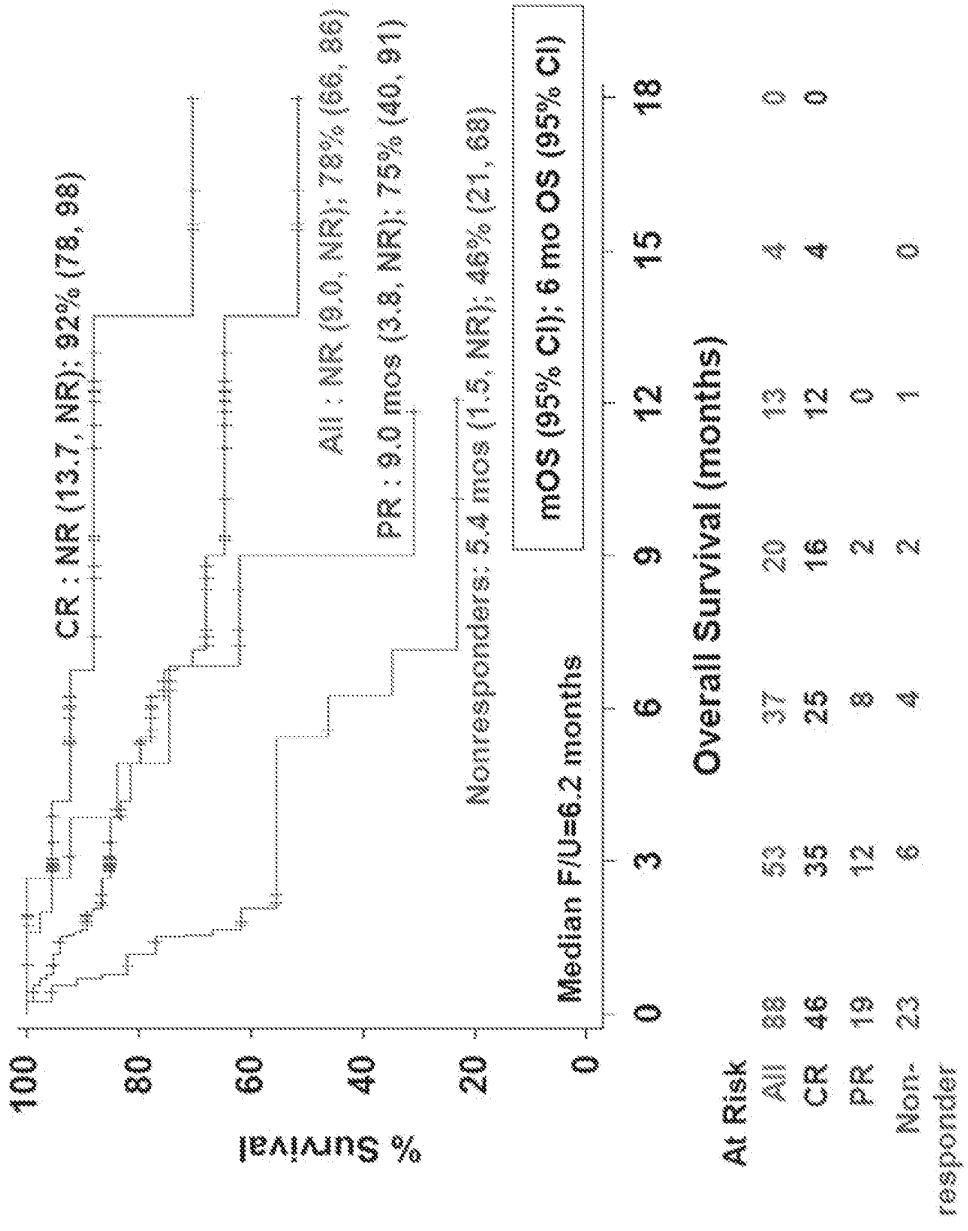

CORE
mDOR (95% CI)
CR: NR (5.0, NR)
All: 9.2 mos (3.7, NR)
PR: 2.1 mos (1.0, 5.0)
% in response
100
80
60
40
20
0
0
3
6
9
12
15
Time from first response (months)
At Risk
CR 36 22 12 7 1 1
PR 16 2 0 7 1 1
All 52 24 12

FIG. 23B

FIG. 23C


FULL
CR : NR (13.7, NR); 92% (78, 98)
All : NR (9.0, NR); 78% (66, 86)
PR : 9.0 mos (3.8, NR); 75% (40, 91)
Nonresponders: 3.4 mos (1.5, NR); 46% (21, 68)
mOS (95% CI); 6 mo OS (95% CI)
Median F/U=6.2 months
% Survival
100
80
60
40
20
0
0
3
6
9
12
15
18
Overall Survival (months)
At Risk
All 88 53 37 20 13 4 0
CR 46 35 25 16 12 4 0
PR 19 12 8 2 0
Non-responder 23 6 4 2 1 0

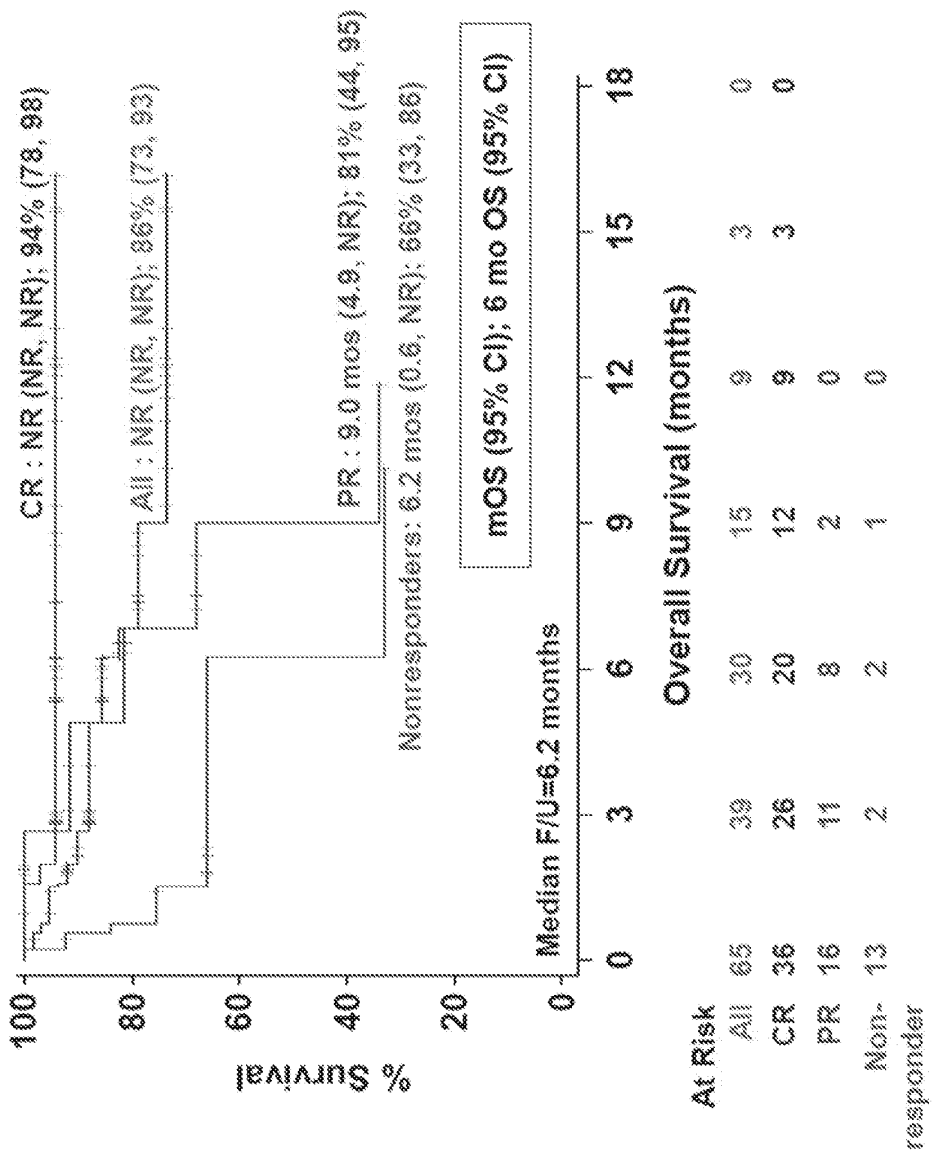

CORE
CR : NR (NR, NR); 94% (78, 98)
All : NR (NR, NR); 86% (73, 93)
PR : 9.0 mos (4.9, NR); 81% (44, 95)
Nonresponders: 6.2 mos (0.6, NR); 66% (33, 86)
mOS (95% CI); 6 mo OS (95% CI)
Median F/U=6.2 months
% Survival
100
80
60
40
20
0
0
3
6
9
12
15
18
Overall Survival (months)
At Risk
All 65 39 30 15 9 3 0
CR 36 26 20 12 9 3 0
PR 16 11 8 2 0
Non-responder 13 2 2 1 0

FIG. 23D

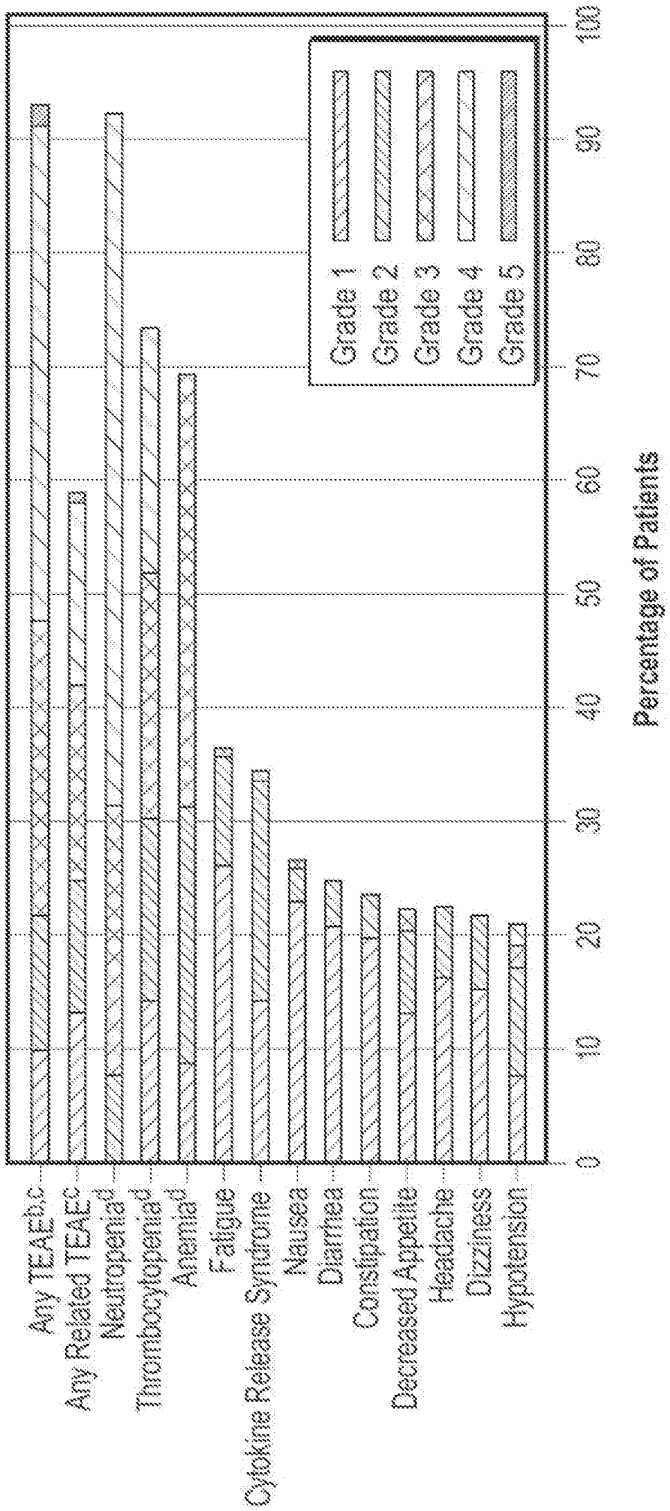

Any TEAE[b,c]
Any Related TEAE[c]
Neutropenia[d]
Thrombocytopenia[d]
Anemia[d]
Fatigue
Cytokine Release Syndrome
Nausea
Diarrhea
Constipation
Decreased Appetite
Headache
Dizziness
Hypotension
Grade 1
Grade 2
Grade 3
Grade 4
Grade 5
0
10
20
30
40
50
60
70
80
90
100
Percentage of Patients

FIG. 24

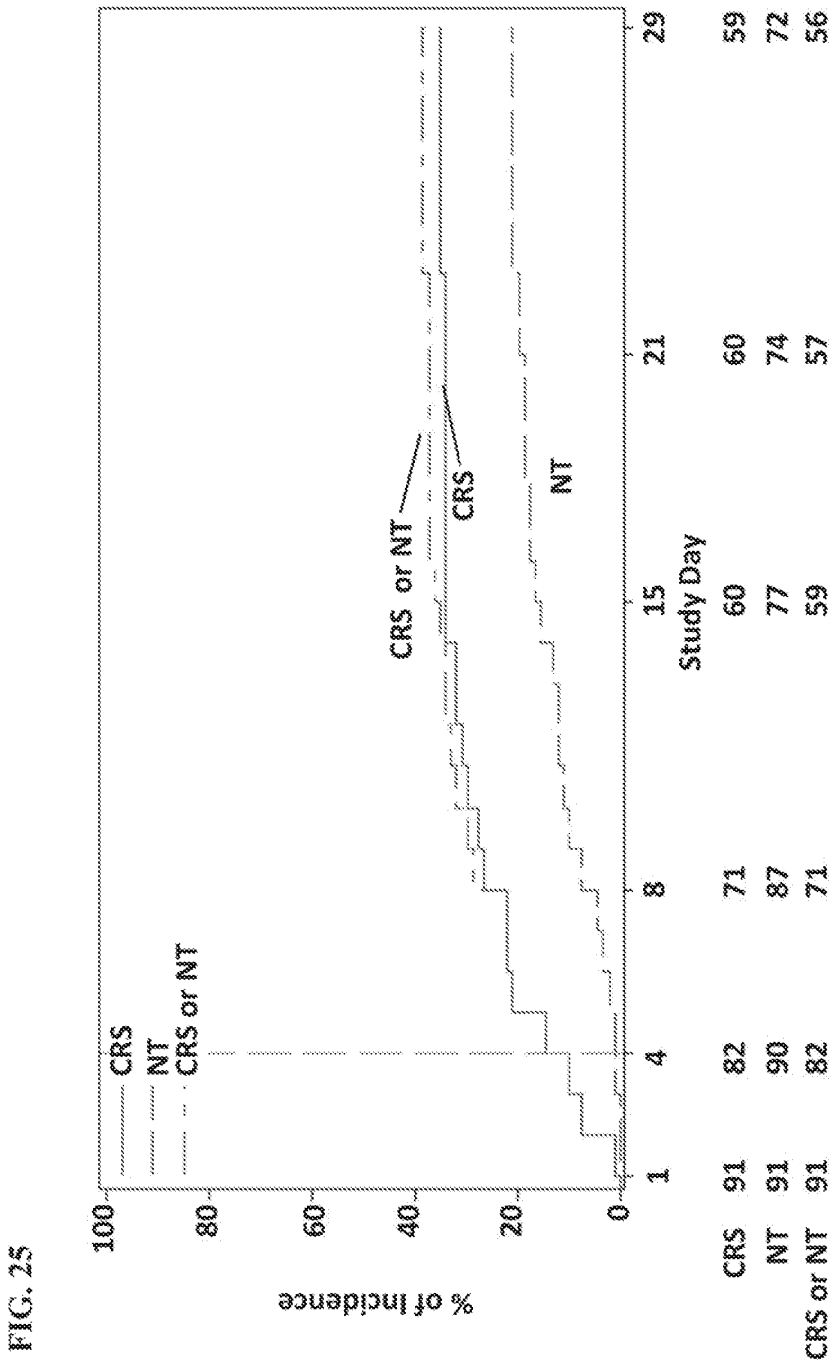

CRS
NT
CRS or NT
100
80
60
40
20
0
% of Incidence
CRS or NT
CRS
NT
1
4
8
15
21
29
Study Day
CRS 91 82 71 60 60 59
NT 91 90 87 77 74 72
CRS or NT 91 82 71 59 57 56

FIG. 25

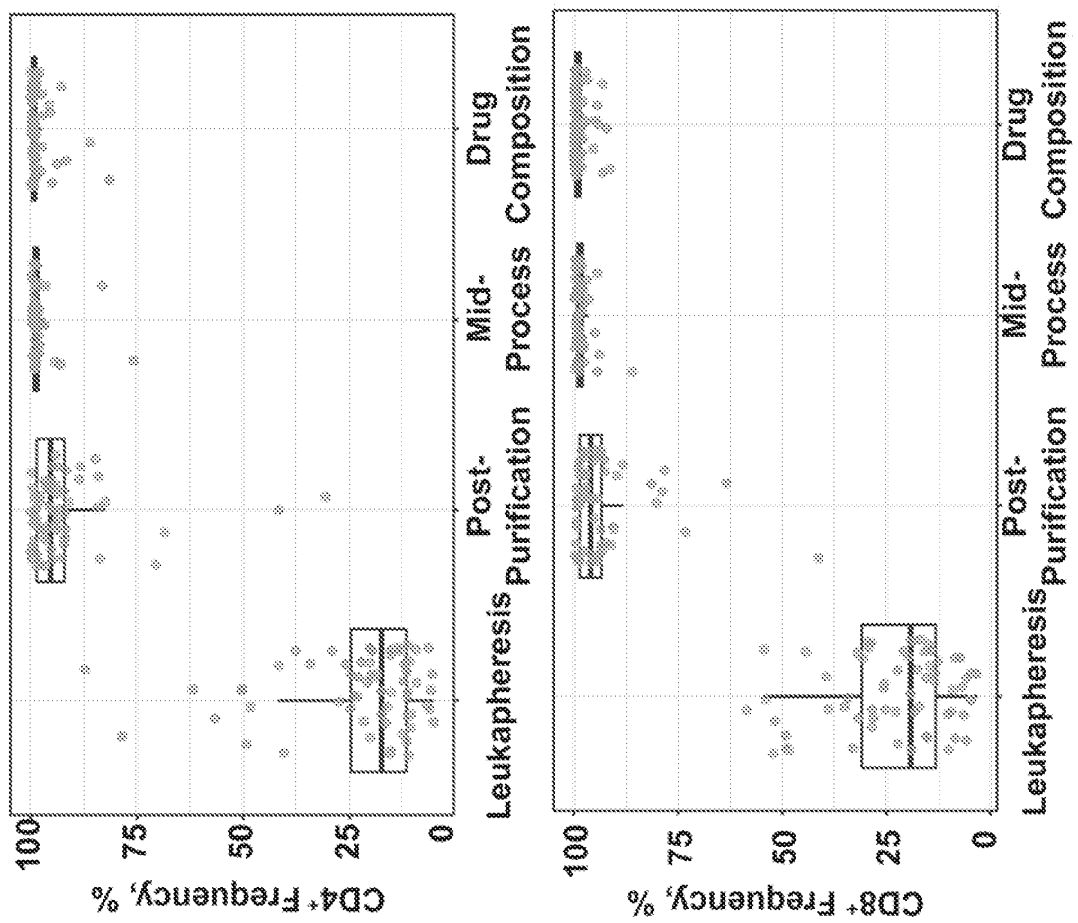

CD4+ Frequency, %
100
75
50
25
0
Leukapheresis
Post-Purification
Mid-Process
Drug Composition
CD8+ Frequency, %
100
75
50
25
0
Leukapheresis
Post-Purification
Mid-Process
Drug Composition

FIG. 26

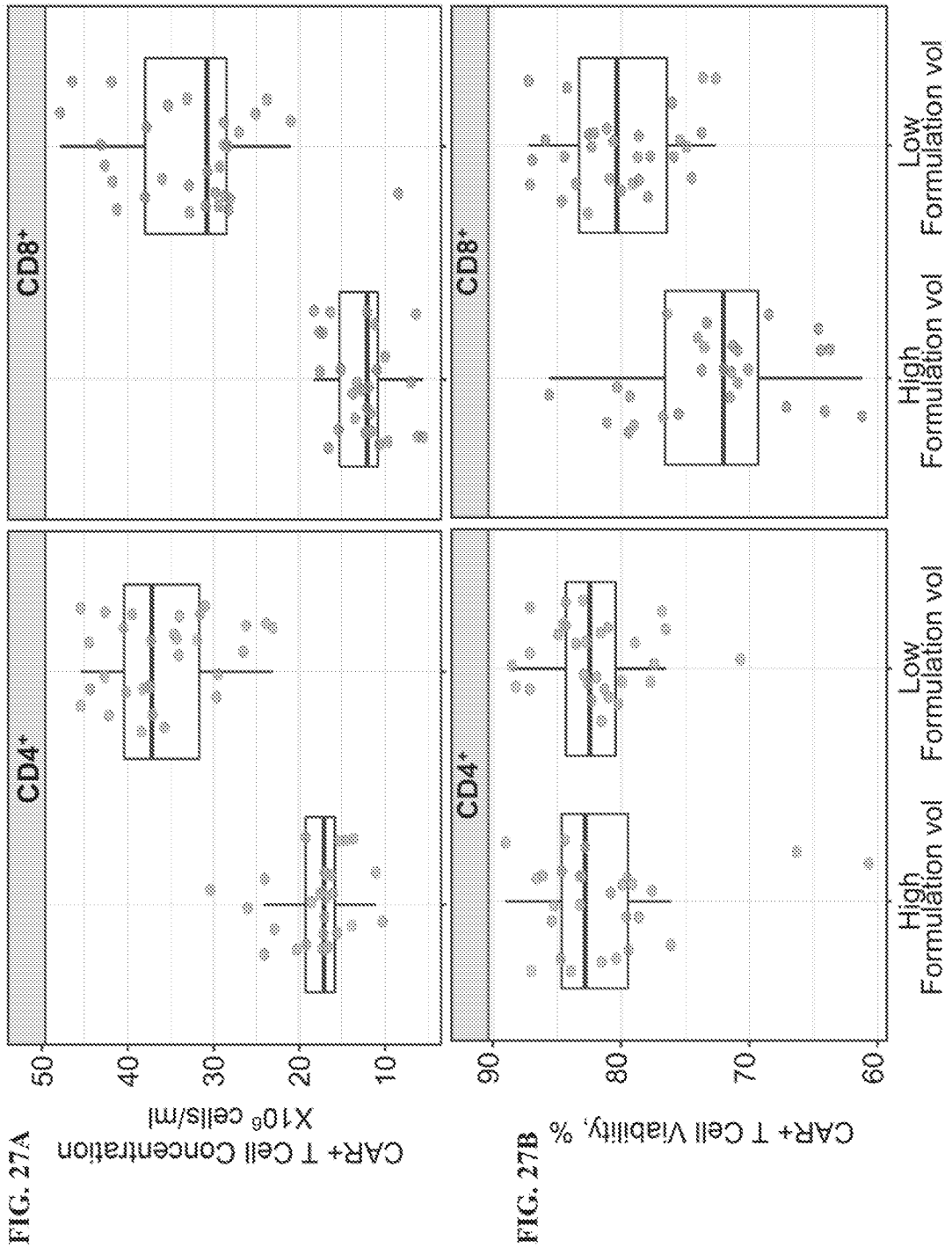


FIG. 27A

FIG. 27B

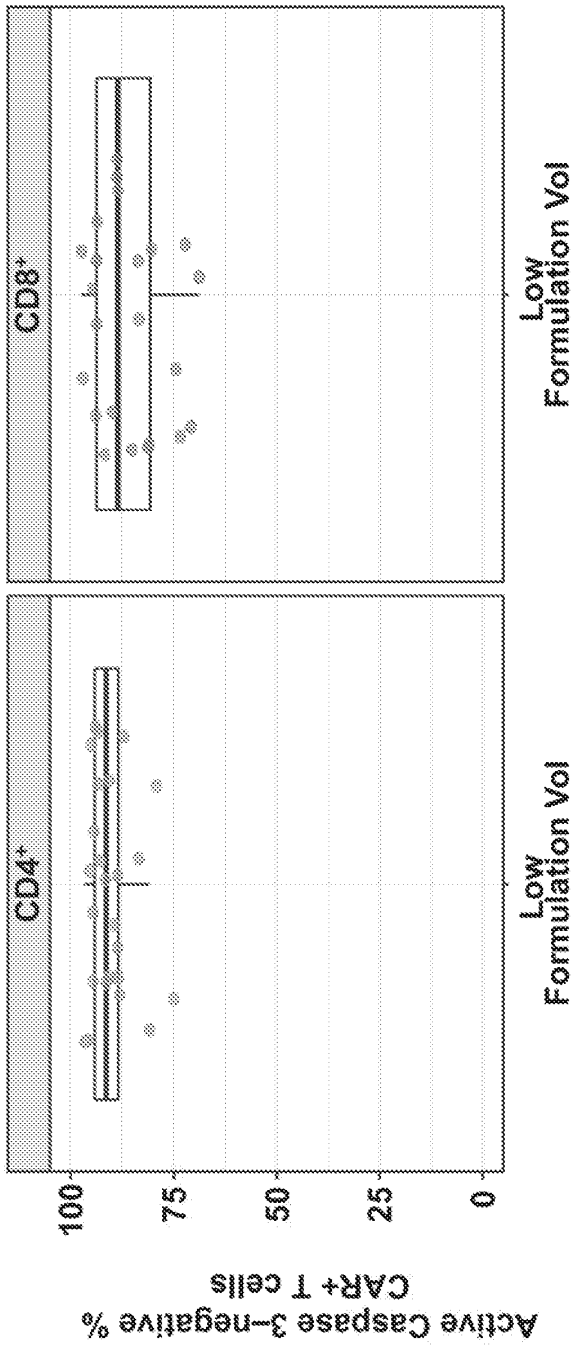

Active Caspase 3–negative %
CAR+ T cells
100
75
50
25
0
CD4+
CD8+
Low
Formulation Vol
Low
Formulation Vol

FIG. 27C

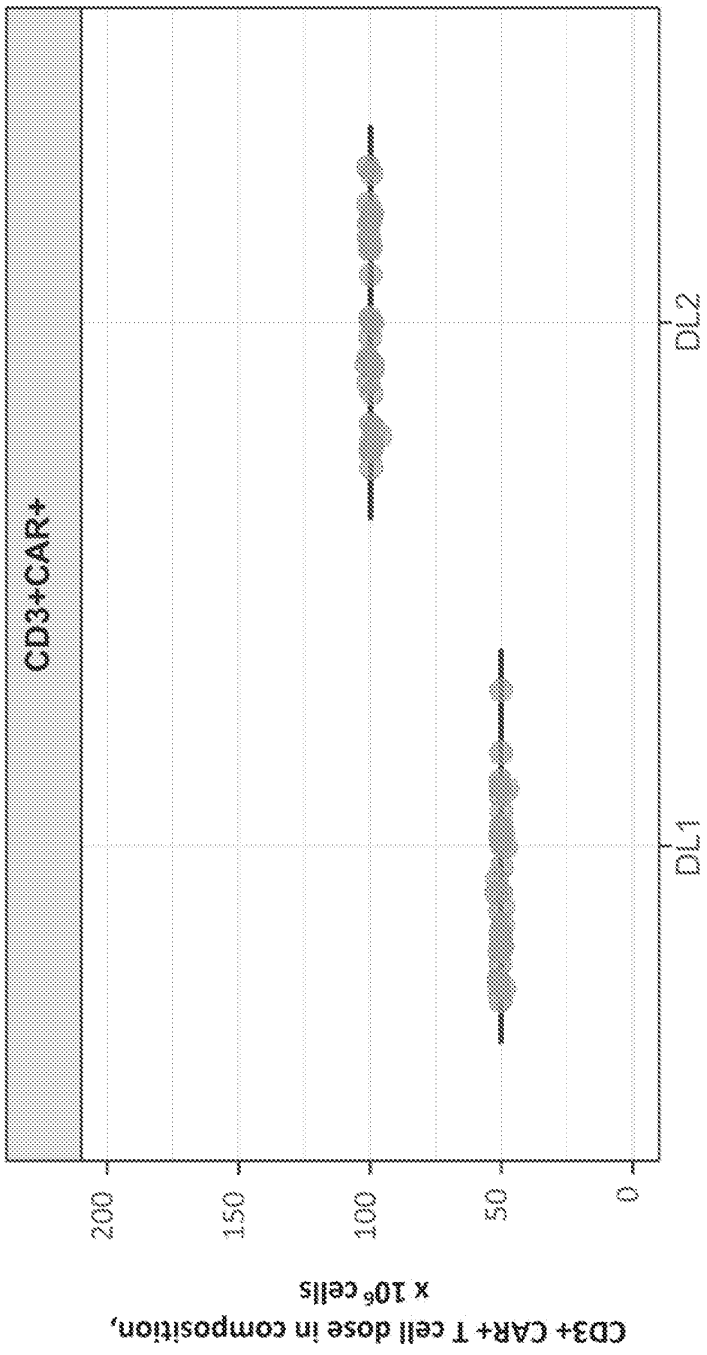

CD3+CAR+
200
150
100
50
0
DL1
DL2
CD3+ CAR+ T cell dose in composition,
x 10^6 cells

FIG. 28A

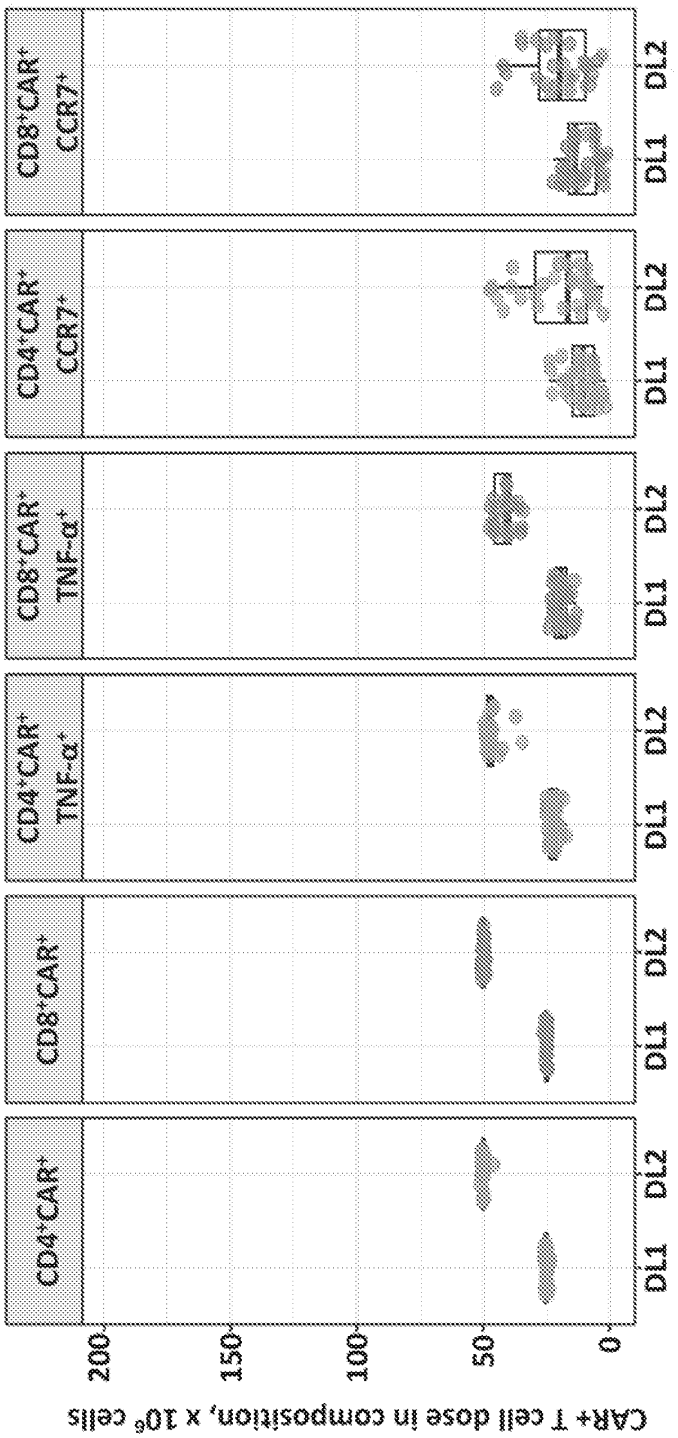

CAR+ T cell dose in composition, x 10^6 cells
200
150
100
50
0
CD4+CAR+
CD8+CAR+
CD4+CAR+ TNF-α+
CD8+CAR+ TNF-α+
CD4+CAR+ CCR7+
CD8+CAR+ CCR7+
DL1
DL2

FIG. 28B

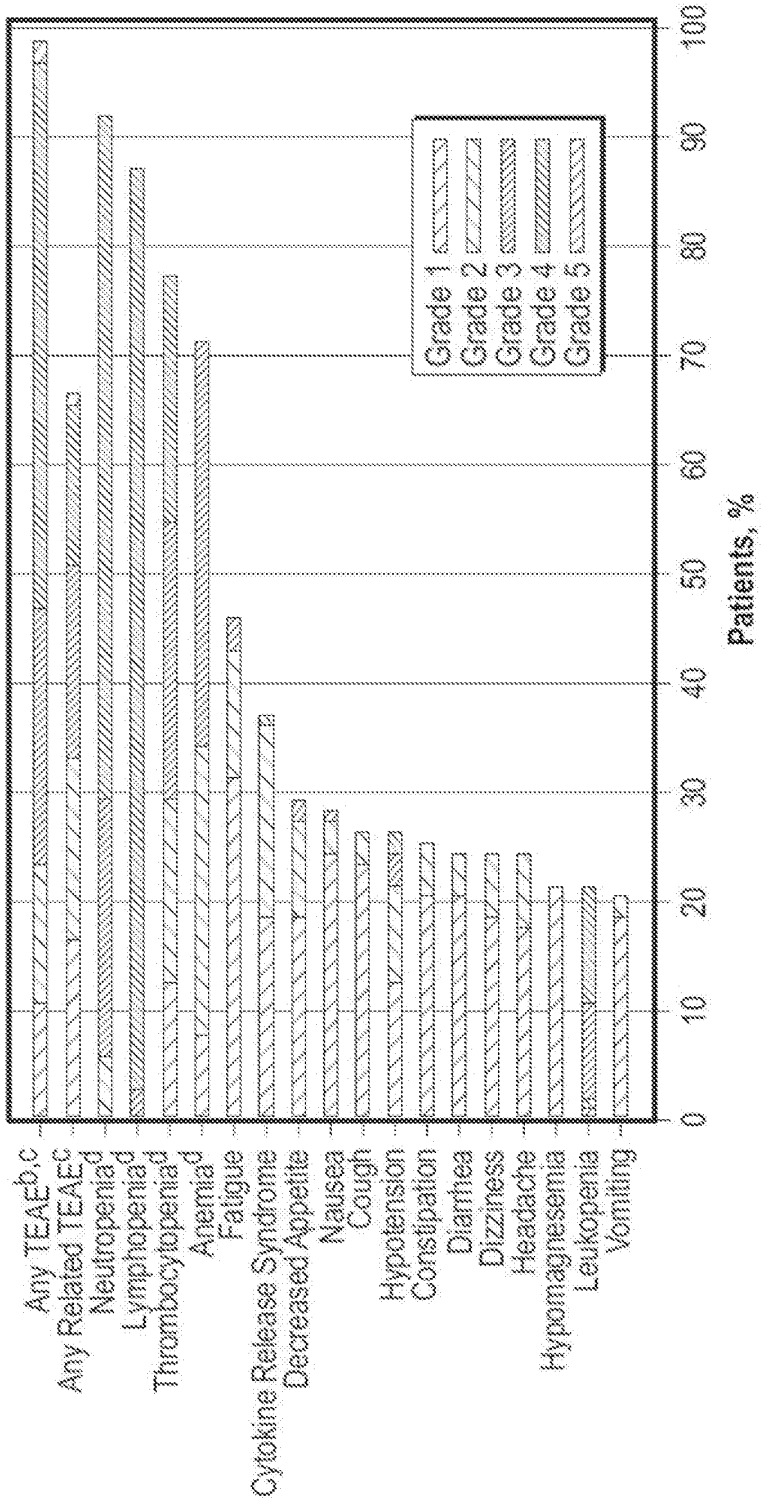
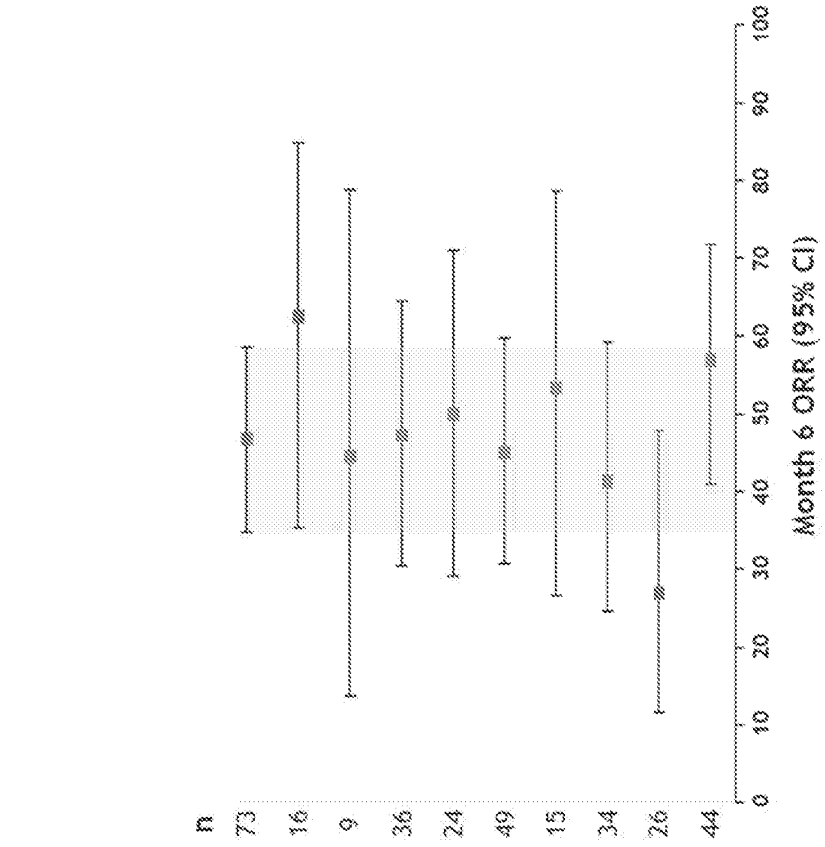

Any TEAE[b,c]
Any Related TEAE[c]
Neutropenia[d]
Lymphopenia[d]
Thrombocytopenia[d]
Anemia[d]
Fatigue
Cytokine Release Syndrome
Decreased Appetite
Nausea
Cough
Hypotension
Constipation
Diarrhea
Dizziness
Headache
Hypomagnesemia
Leukopenia
Vomiting
0
10
20
30
40
50
60
70
80
90
100
Patients, %
Grade 1
Grade 2
Grade 3
Grade 4
Grade 5

FIG. 29

FIG. 30


Population
ORR (95% CI)
n
CORE patient population[a]
46.6 (34.8-58.6)
73
Double/triple hit
62.5 (35.4-84.8)
16
Double expressor
44.4 (13.7-78.8)
9
Never in CR
47.2 (30.4-64.5)
36
Chemosensitive
50 (29.1-70.9)
24
Chemorefractory
44.9 (30.7-59.8)
49
Relapse < 12 m from ASCT
53.3 (26.6-78.7)
15
SD/PD to last chemo
41.2 (24.6-59.3)
34
IPI 3-5
26.9 (11.6-47.8)
26
IPI 0-2
56.8 (41-71.7)
44
0
10
20
30
40
50
60
70
80
90
100
Month 6 ORR (95% CI)

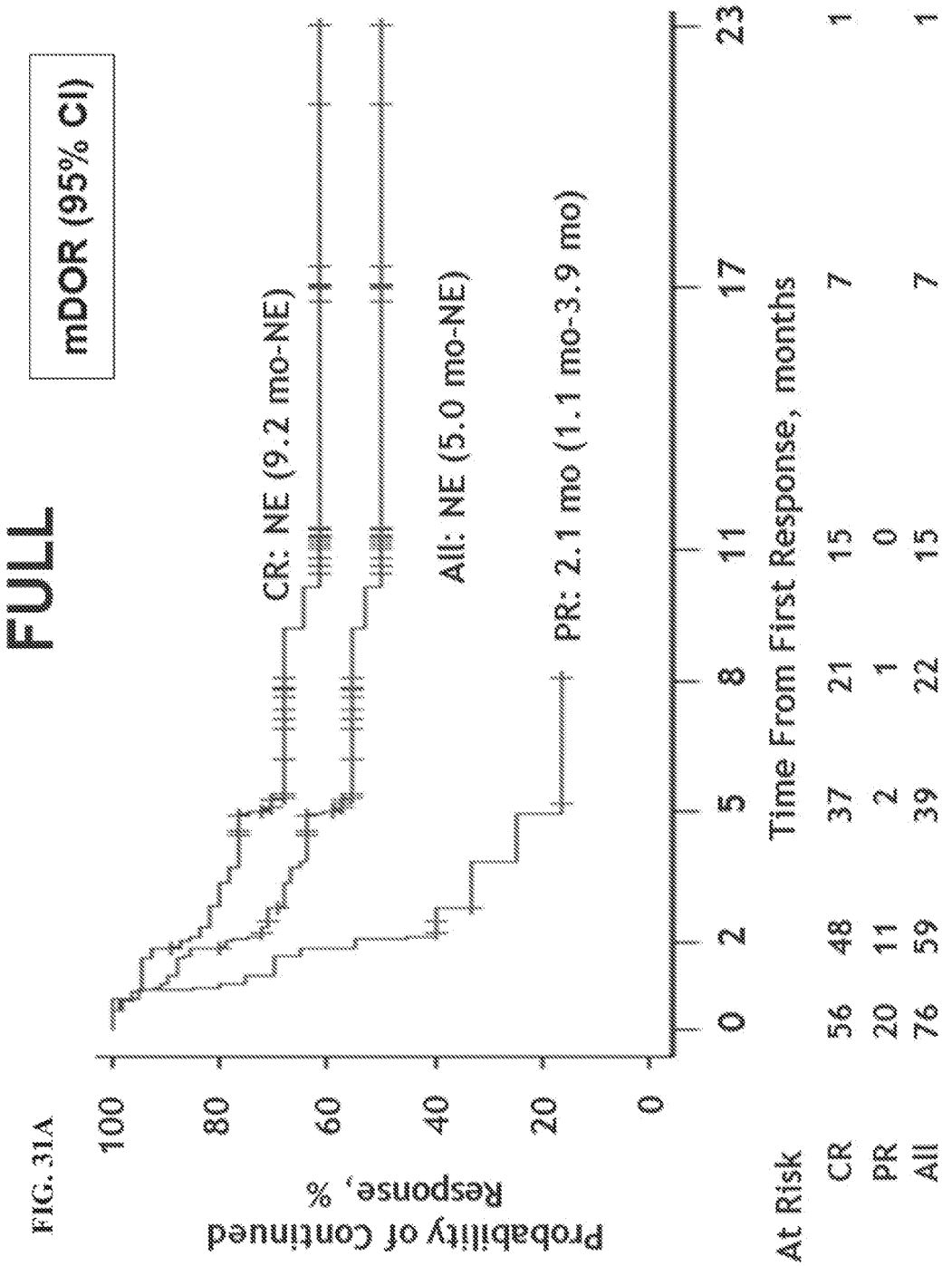

FULL
mDOR (95% CI)
CR: NE (9.2 mo-NE)
All: NE (5.0 mo-NE)
PR: 2.1 mo (1.1 mo-3.9 mo)
Probability of Continued Response, %
100
80
60
40
20
0
Time From First Response, months
0 2 5 8 11 17 23
At Risk
CR 56 48 37 21 15 7 1
PR 20 11 2 1 0
All 76 59 39 22 15 7 1

FIG. 31A

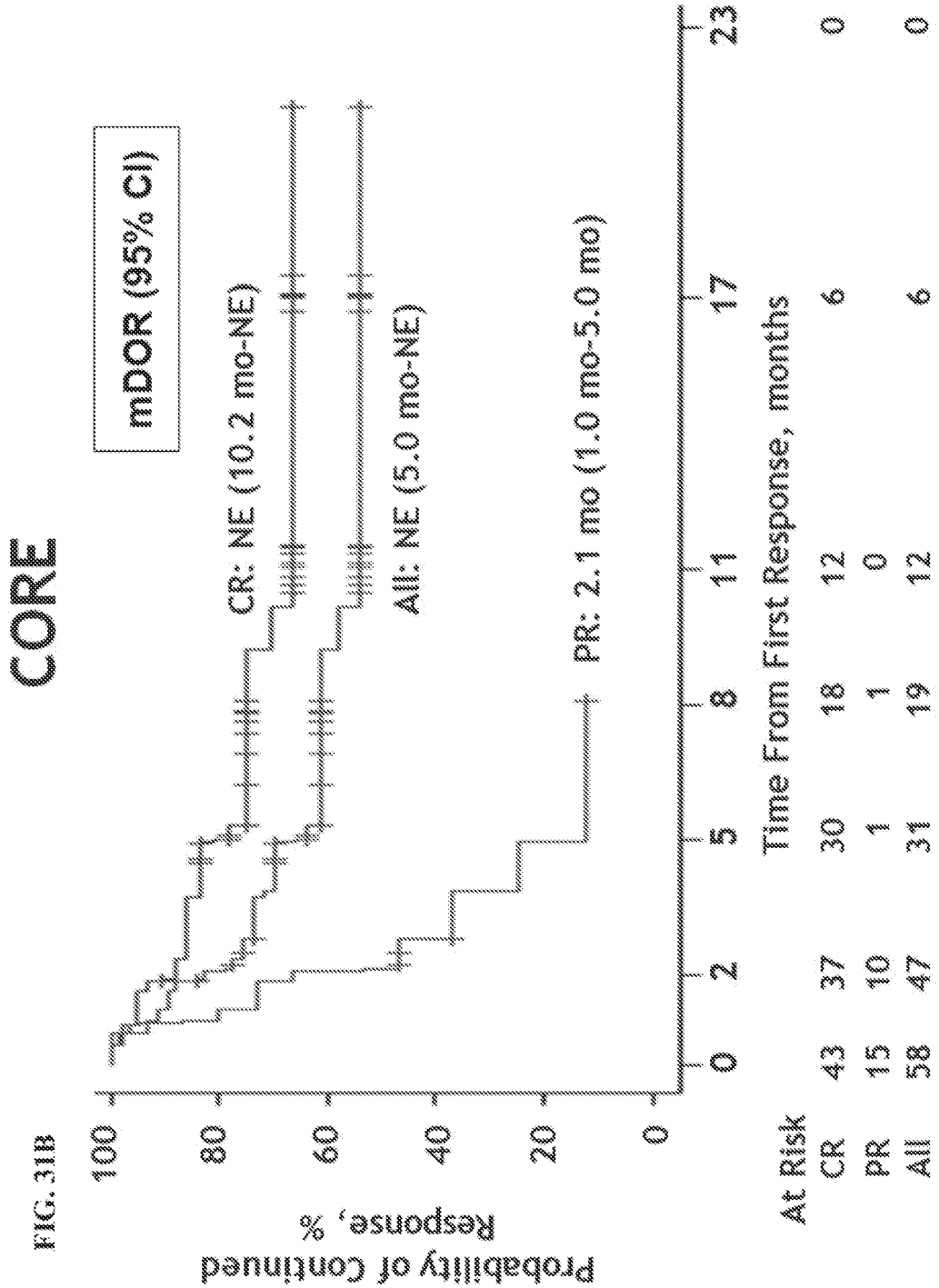

CORE
mDOR (95% CI)
CR: NE (10.2 mo-NE)
All: NE (5.0 mo-NE)
PR: 2.1 mo (1.0 mo-5.0 mo)
Probability of Continued Response, %
100
80
60
40
20
0
Time From First Response, months
0
2
5
8
11
17
23
At Risk
CR 43 37 30 18 12 6 0
PR 15 10 1 1 0
All 58 47 31 19 12 6 0

FIG. 31B

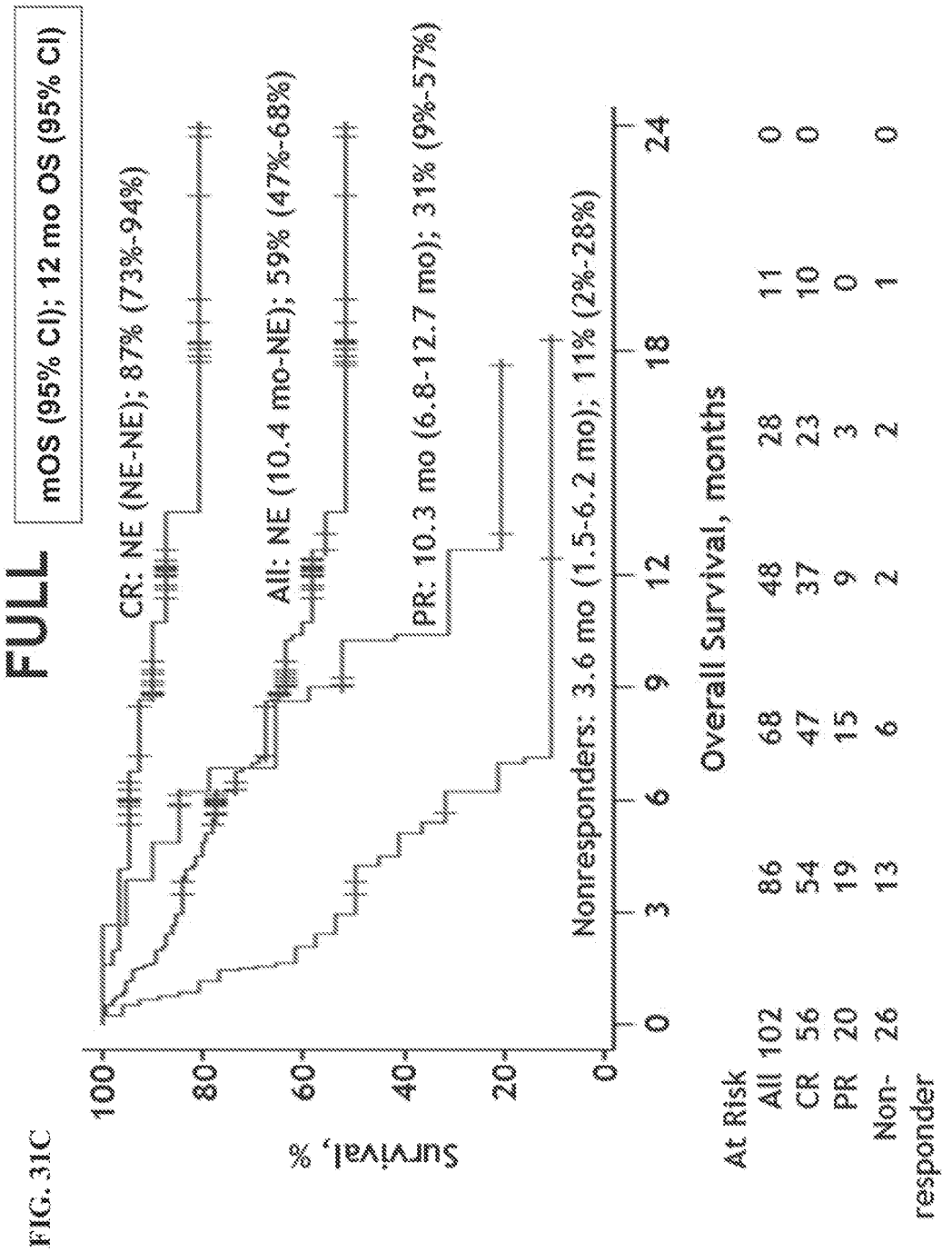

FULL
mOS (95% CI); 12 mo OS (95% CI)
CR: NE (NE-NE); 87% (73%-94%)
All: NE (10.4 mo-NE); 59% (47%-68%)
PR: 10.3 mo (6.8-12.7 mo); 31% (9%-57%)
Nonresponders: 3.6 mo (1.5-6.2 mo); 11% (2%-28%)
Survival, %
100
80
60
40
20
0
Overall Survival, months
0
3
6
9
12
18
24
At Risk
All 102 86 68 48 28 11 0
CR 56 54 47 37 23 10 0
PR 20 19 15 9 3 0
Non-responder 26 13 6 2 2 1 0

FIG. 31C

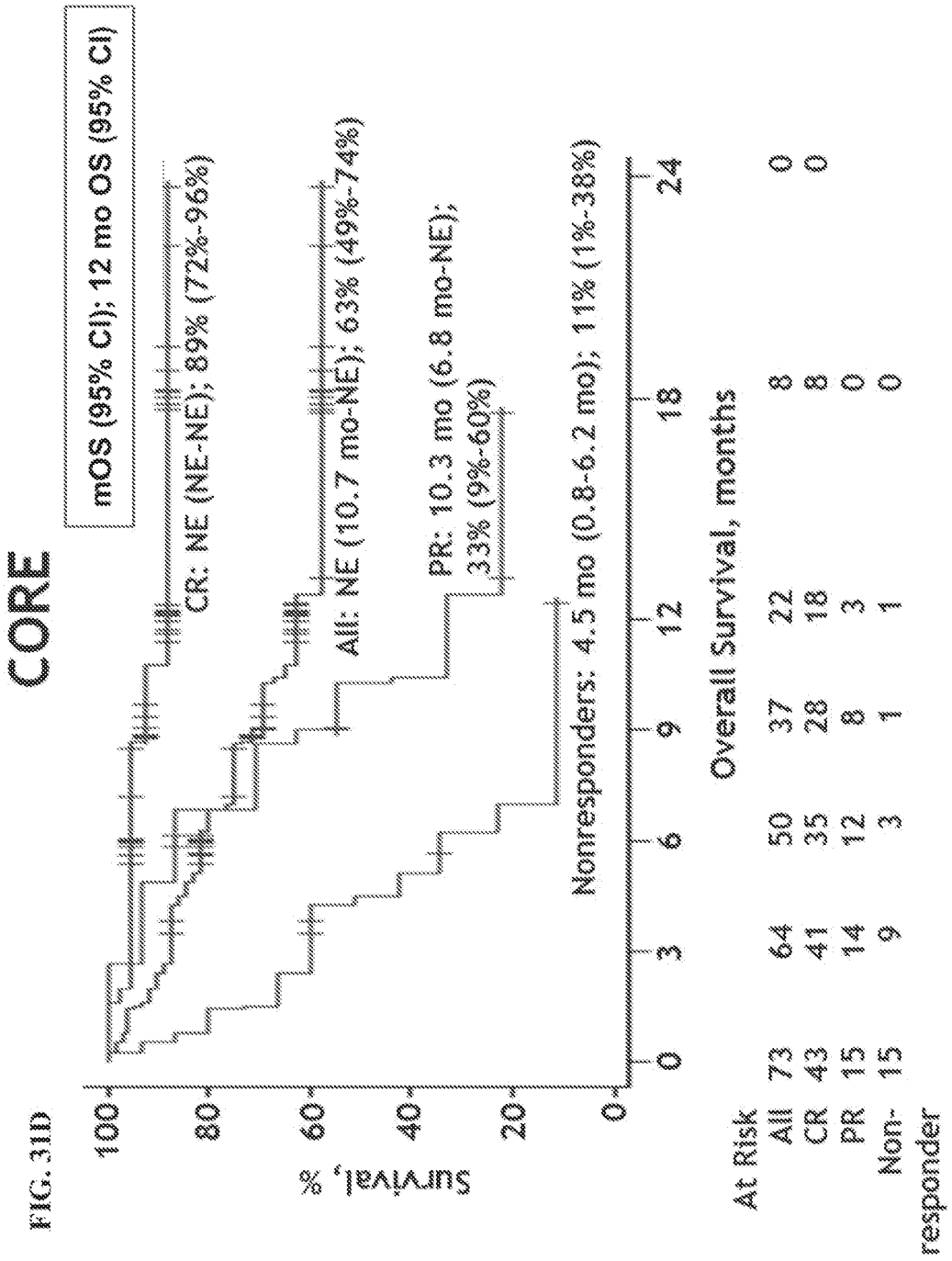

CORE
mOS (95% CI); 12 mo OS (95% CI)
CR: NE (NE-NE); 89% (72%-96%)
All: NE (10.7 mo-NE); 63% (49%-74%)
PR: 10.3 mo (6.8 mo-NE); 33% (9%-60%)
Nonresponders: 4.5 mo (0.8-6.2 mo); 11% (1%-38%)
Survival, %
100
80
60
40
20
0
Overall Survival, months
0 3 6 9 12 18 24
At Risk
All 73 64 50 37 22 8 0
CR 43 41 35 28 18 8 0
PR 15 14 12 8 3 0
Non-responder 15 9 3 1 1 0

FIG. 31D