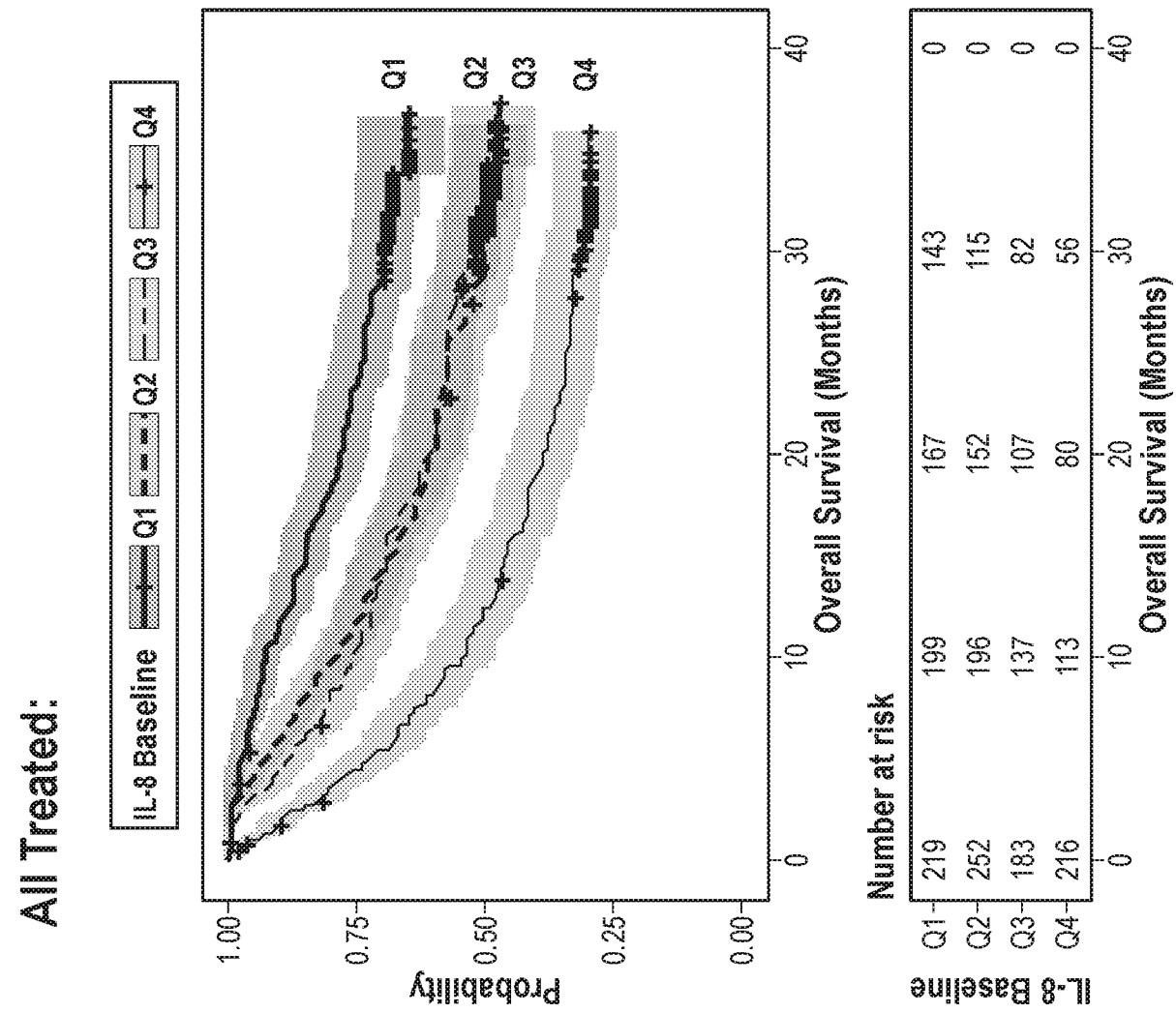

All Treated:
IL-8 Baseline
Q1
Q2
Q3
Q4
1.00
0.75
0.50
0.25
0.00
Probability
0
10
20
30
40
Overall Survival (Months)
Number at risk
IL-8 Baseline
Q1 219 199 167 143 0
Q2 252 196 152 115 0
Q3 183 137 107 82 0
Q4 216 113 80 56 0
0
10
20
30
40
Overall Survival (Months)

FIG. 1A

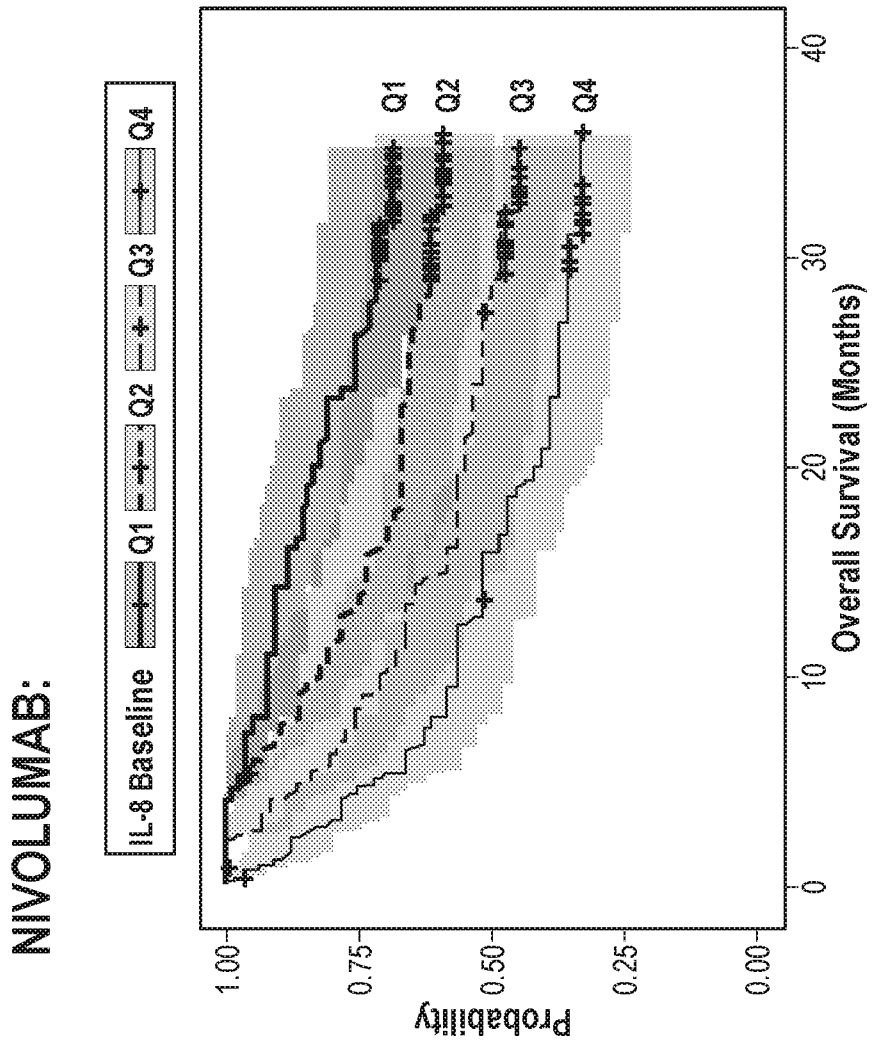

NIVOLUMAB:
IL-8 Baseline
Q1
Q2
Q3
Q4
1.00
0.75
0.50
0.25
0.00
Probability
0
10
20
30
40
Overall Survival (Months)

FIG. 1B

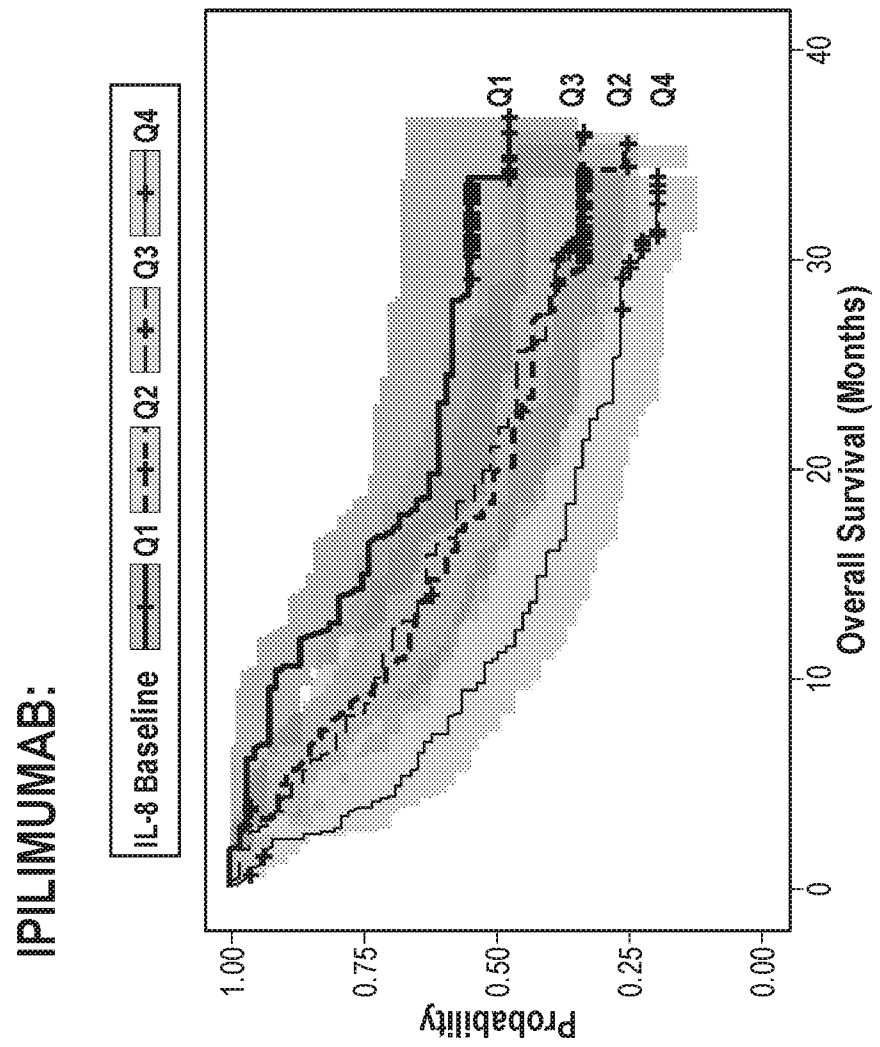

IPILIMUMAB:
IL-8 Baseline
Q1
Q2
Q3
Q4
Probability
1.00
0.75
0.50
0.25
0.00
0
10
20
30
40
Overall Survival (Months)
Q1
Q3
Q2
Q4

FIG. 1C

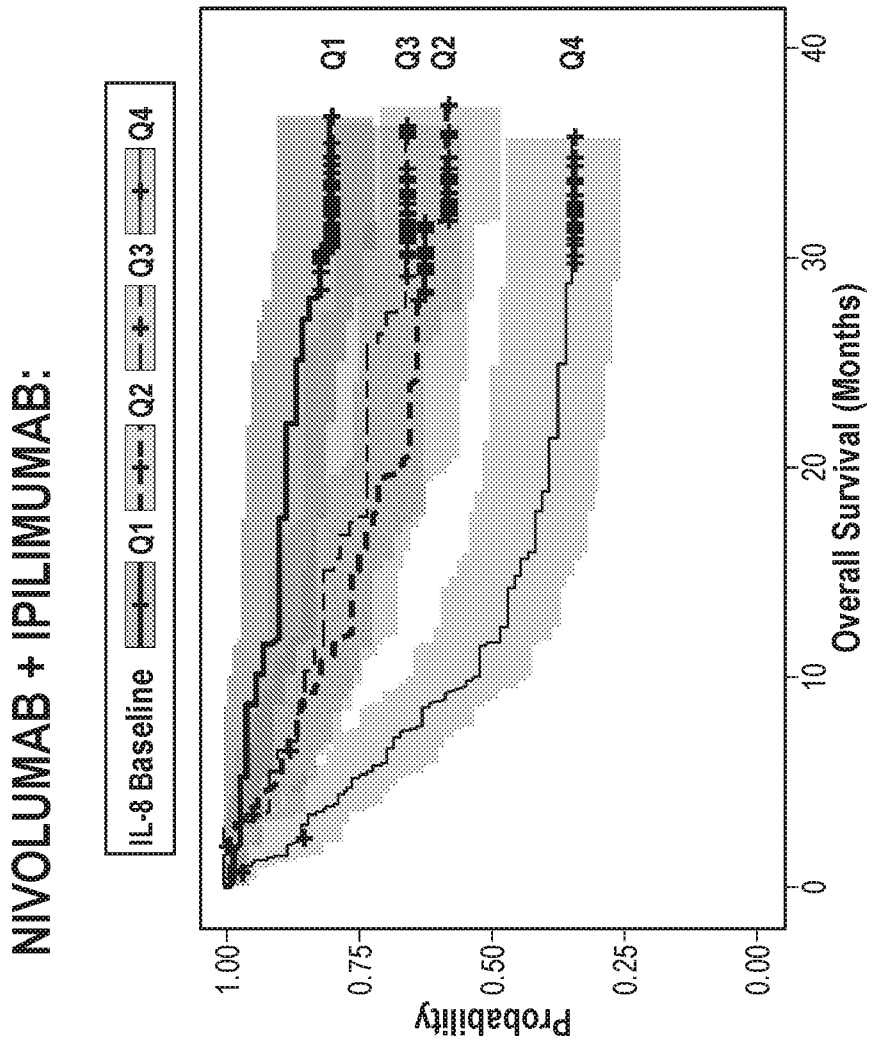

NIVOLUMAB + IPILIMUMAB:
IL-8 Baseline
Q1
Q2
Q3
Q4
Probability
1.00
0.75
0.50
0.25
0.00
0
10
20
30
40
Overall Survival (Months)

FIG. 1D

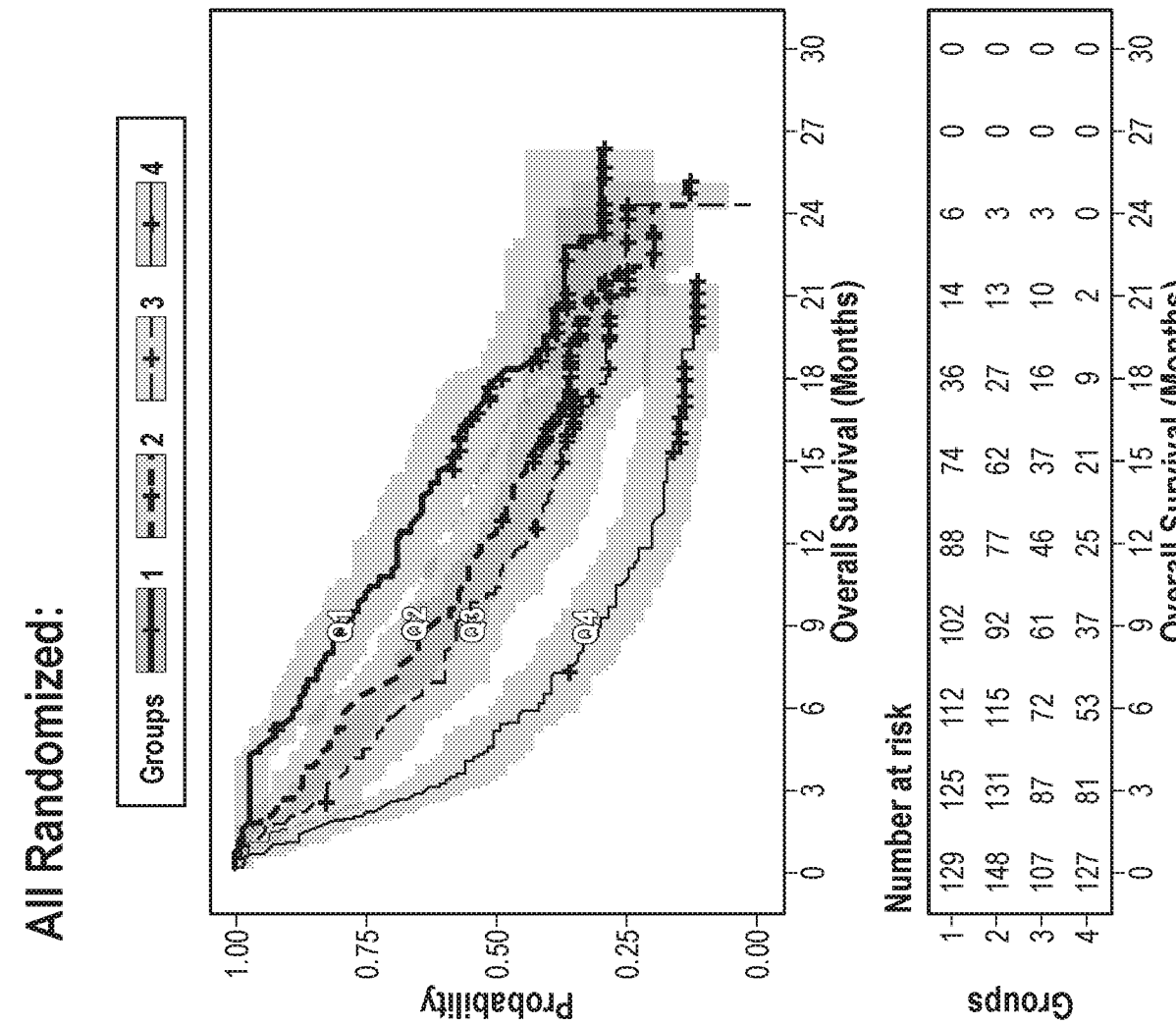

All Randomized:
Groups 1 2 3 4
Probability
1.00
0.75
0.50
0.25
0.00
@1
@2
@3
@4
0 3 6 9 12 15 18 21 24 27 30
Overall Survival (Months)
Number at risk
1 129 125 112 102 88 74 36 14 6 0 0
2 148 131 115 92 77 62 27 13 3 0 0
3 107 87 72 61 46 37 16 10 3 0 0
4 127 81 53 37 25 21 9 2 0 0 0
Groups
0 3 6 9 12 15 18 21 24 27 30
Overall Survival (Months)

FIG. 2A

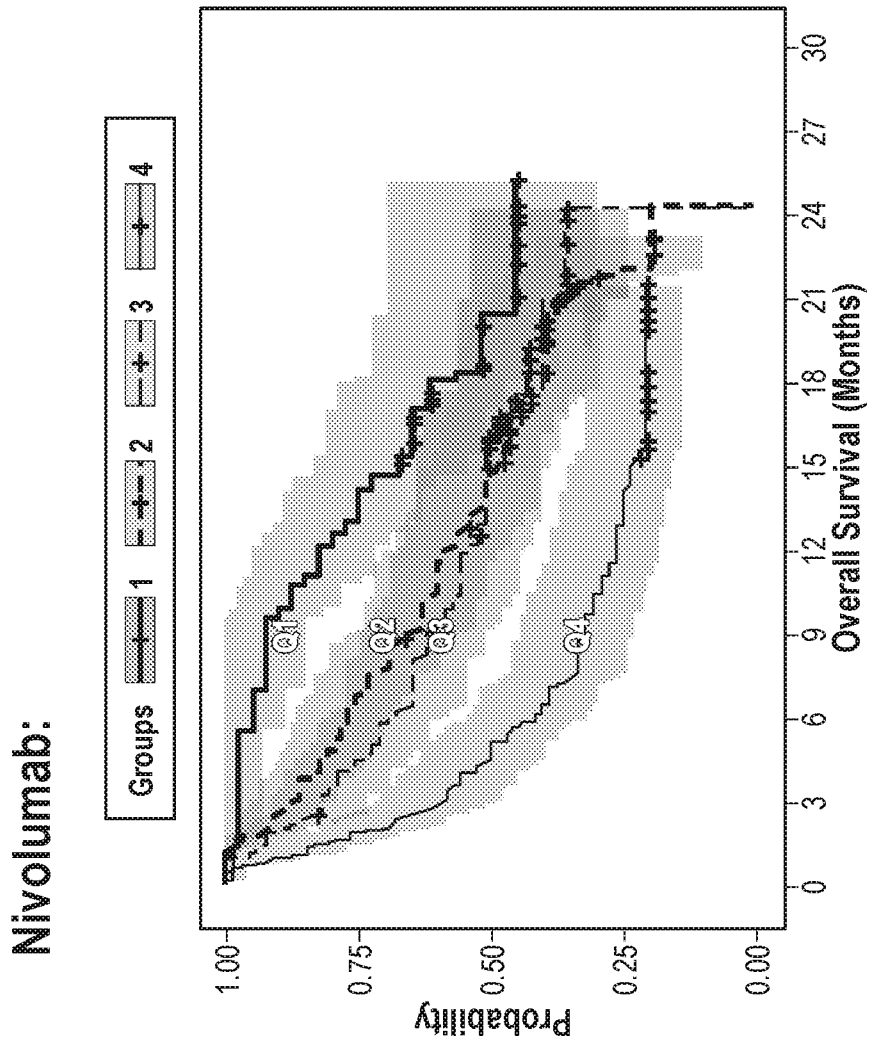

Nivolumab:
Groups
1
2
3
4
1.00
0.75
0.50
0.25
0.00
Probability
0
3
6
9
12
15
18
21
24
27
30
Overall Survival (Months)
@1
@2
@3
@4

FIG. 2B

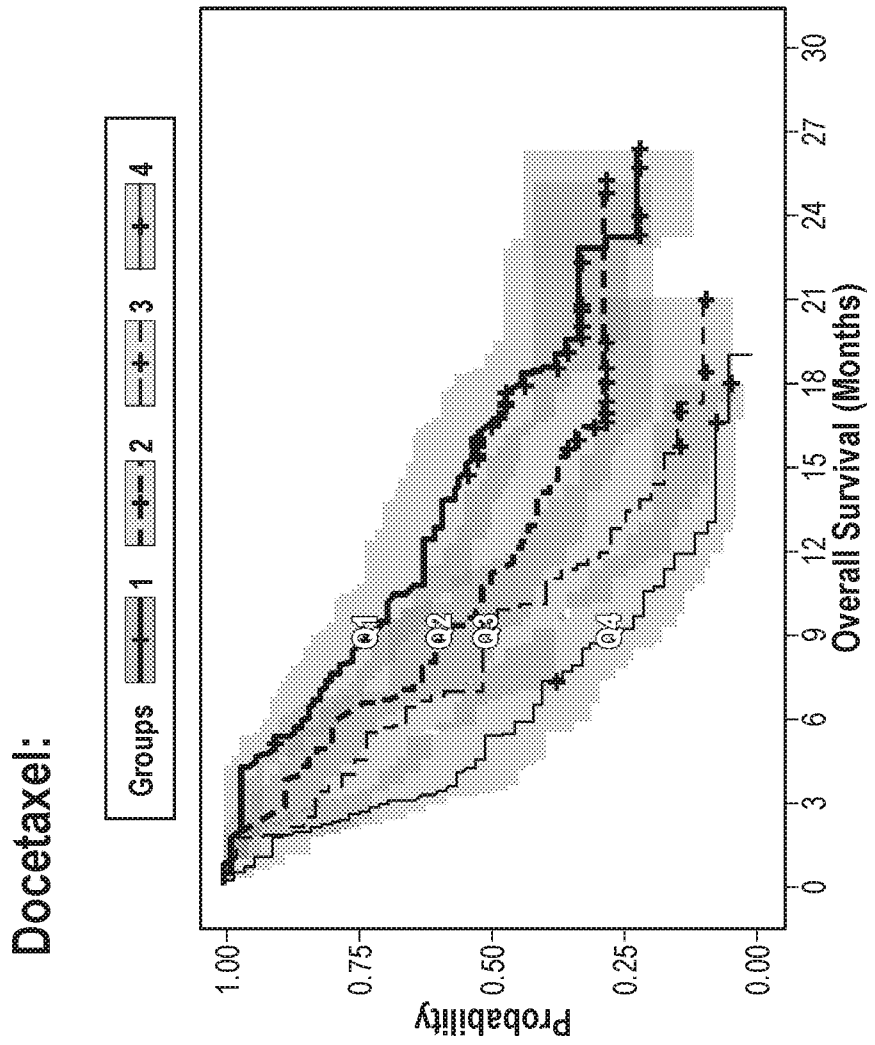

Docetaxel:
Groups
1
2
3
4
1.00
0.75
0.50
0.25
0.00
Probability
0
3
6
9
12
15
18
21
24
27
30
Overall Survival (Months)

FIG. 2C

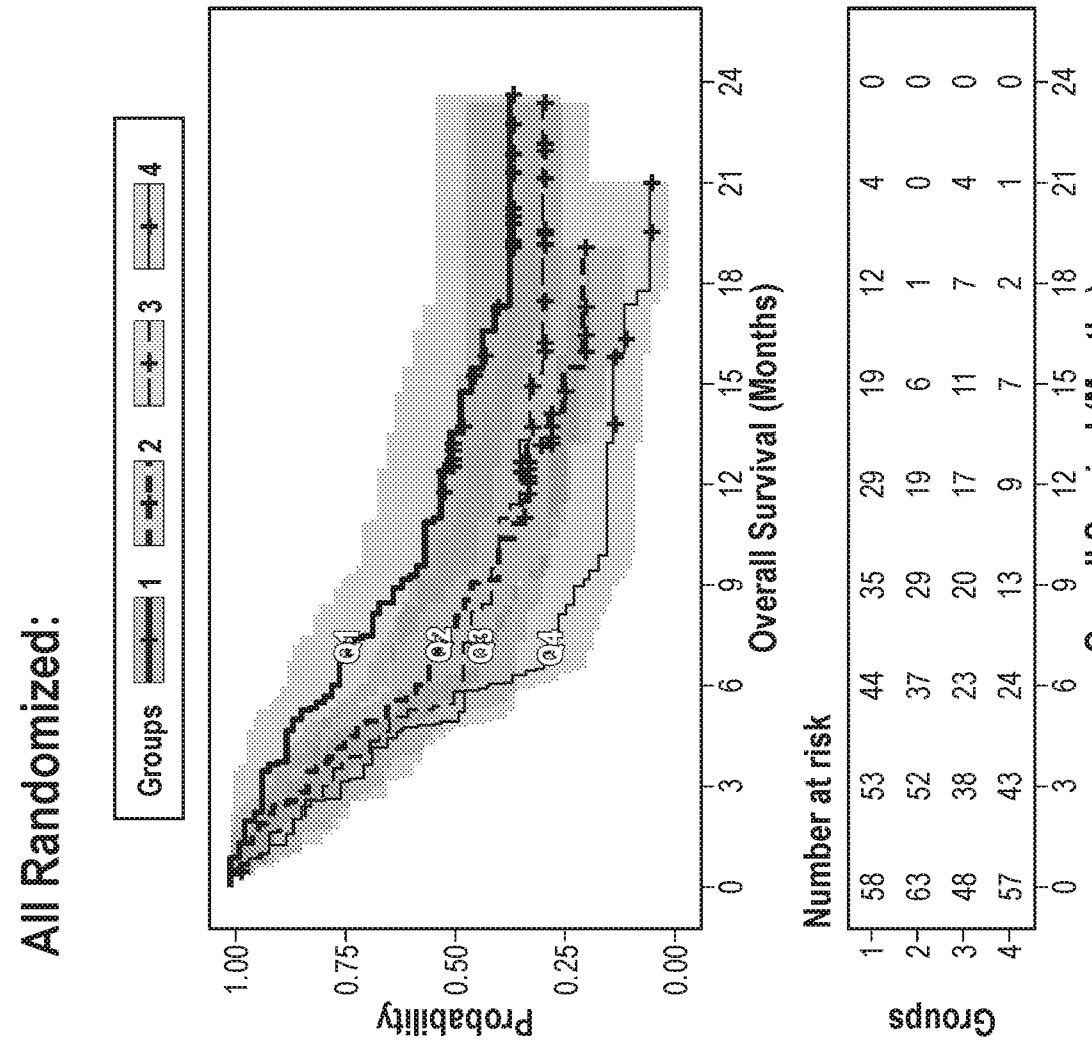

All Randomized:
Groups 1 2 3 4
1.00
0.75
0.50
0.25
0.00
Probability
0 3 6 9 12 15 18 21 24
Overall Survival (Months)
Number at risk
Groups
1 58 53 44 35 29 19 12 4 0
2 63 52 37 29 19 6 1 0 0
3 48 38 23 20 17 11 7 4 0
4 57 43 24 13 9 7 2 1 0
0 3 6 9 12 15 18 21 24
Overall Survival (Months)

FIG. 3A

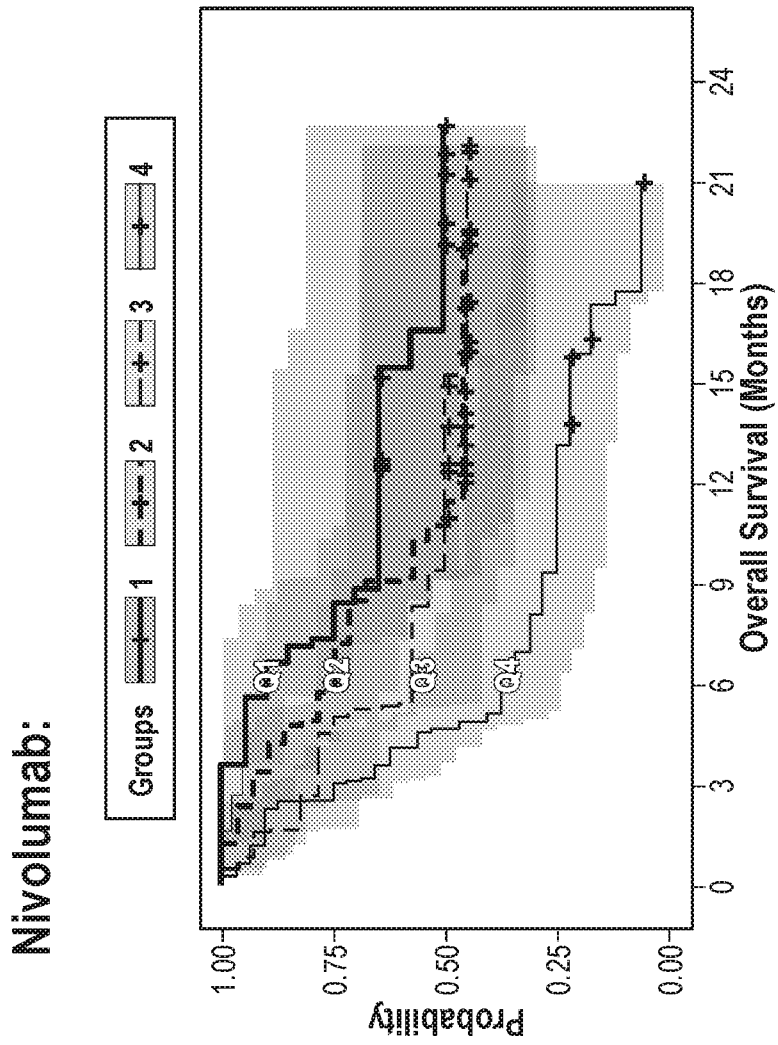

Nivolumab:
Groups
1
2
3
4
Probability
1.00
0.75
0.50
0.25
0.00
0
3
6
9
12
15
18
21
24
Overall Survival (Months)

FIG. 3B

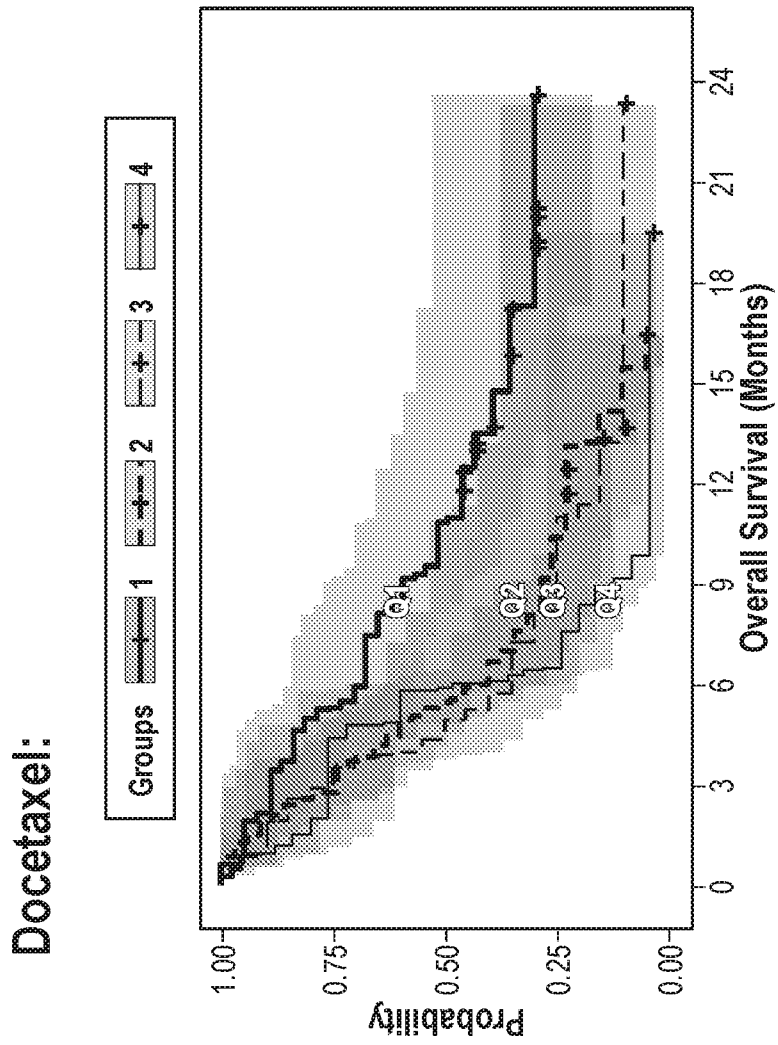

Docetaxel:
Groups
1
2
3
4
Probability
1.00
0.75
0.50
0.25
0.00
0
3
6
9
12
15
18
21
24
Overall Survival (Months)

FIG. 3C

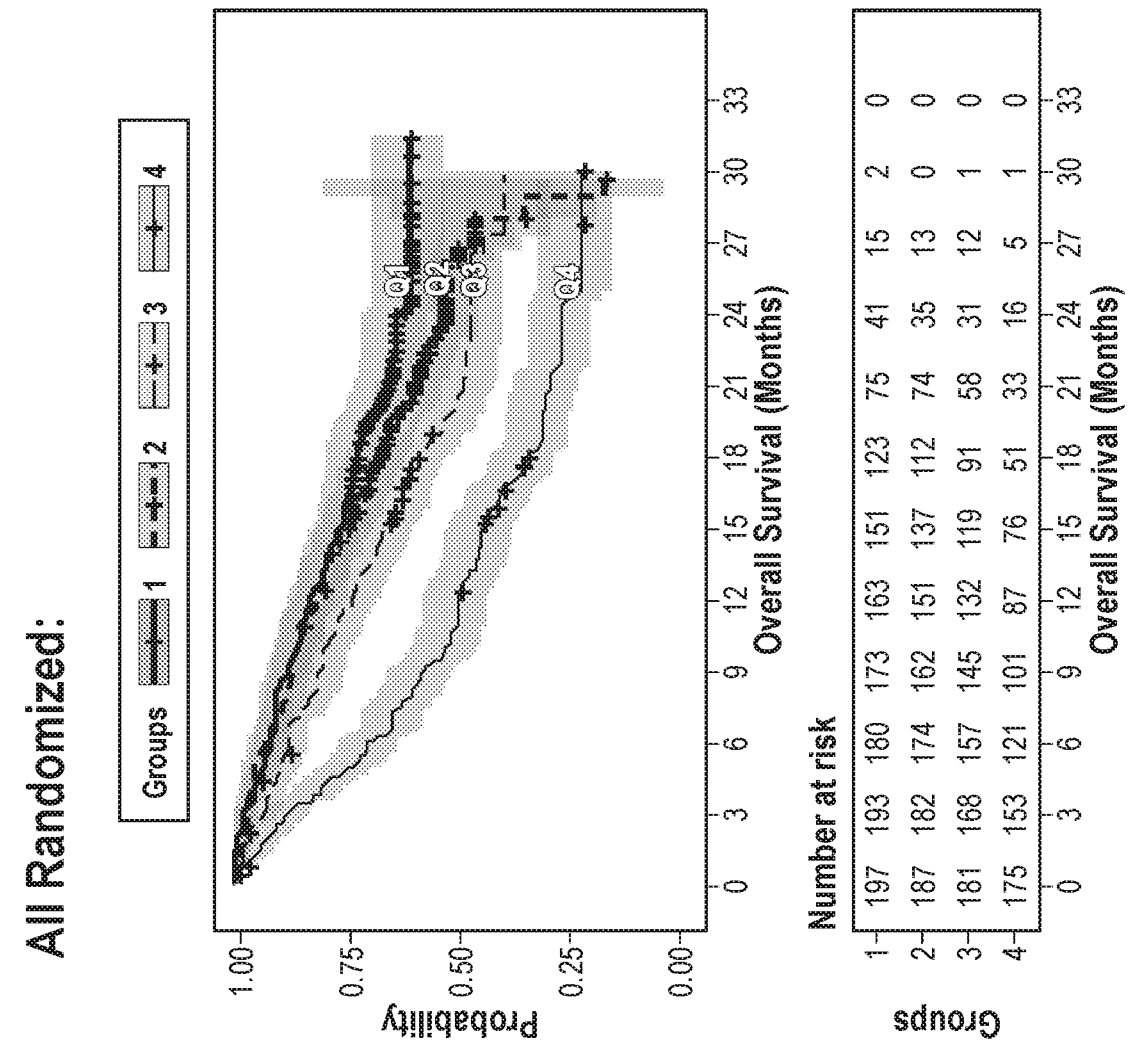

All Randomized:
Groups 1 2 3 4
Probability
1.00
0.75
0.50
0.25
0.00
Q1
Q2
Q3
Q4
0 3 6 9 12 15 18 21 24 27 30 33
Overall Survival (Months)
Number at risk
Groups
1 197 193 180 173 163 151 123 75 41 15 2 0
2 187 182 174 162 151 137 112 74 35 13 0 0
3 181 168 157 145 132 119 91 58 31 12 1 0
4 175 153 121 101 87 76 51 33 16 5 1 0
0 3 6 9 12 15 18 21 24 27 30 33
Overall Survival (Months)

FIG. 4A

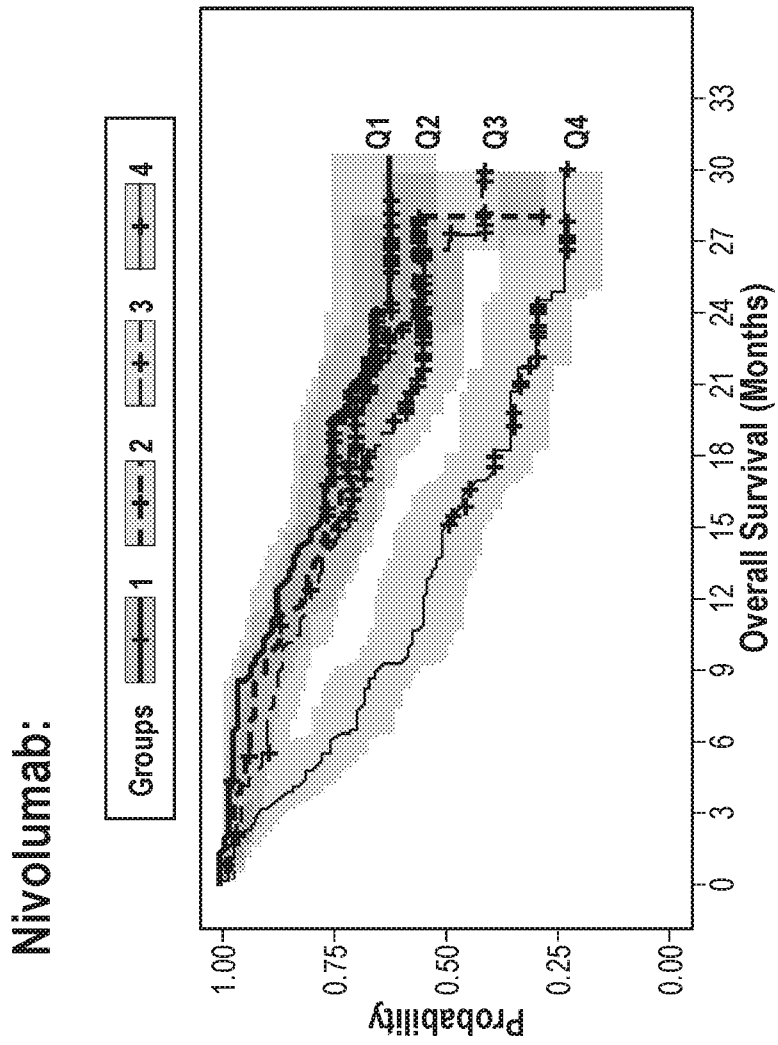

Nivolumab:
Groups
1
2
3
4
Q1
Q2
Q3
Q4
Probability
1.00
0.75
0.50
0.25
0.00
0
3
6
9
12
15
18
21
24
27
30
33
Overall Survival (Months)

FIG. 4B

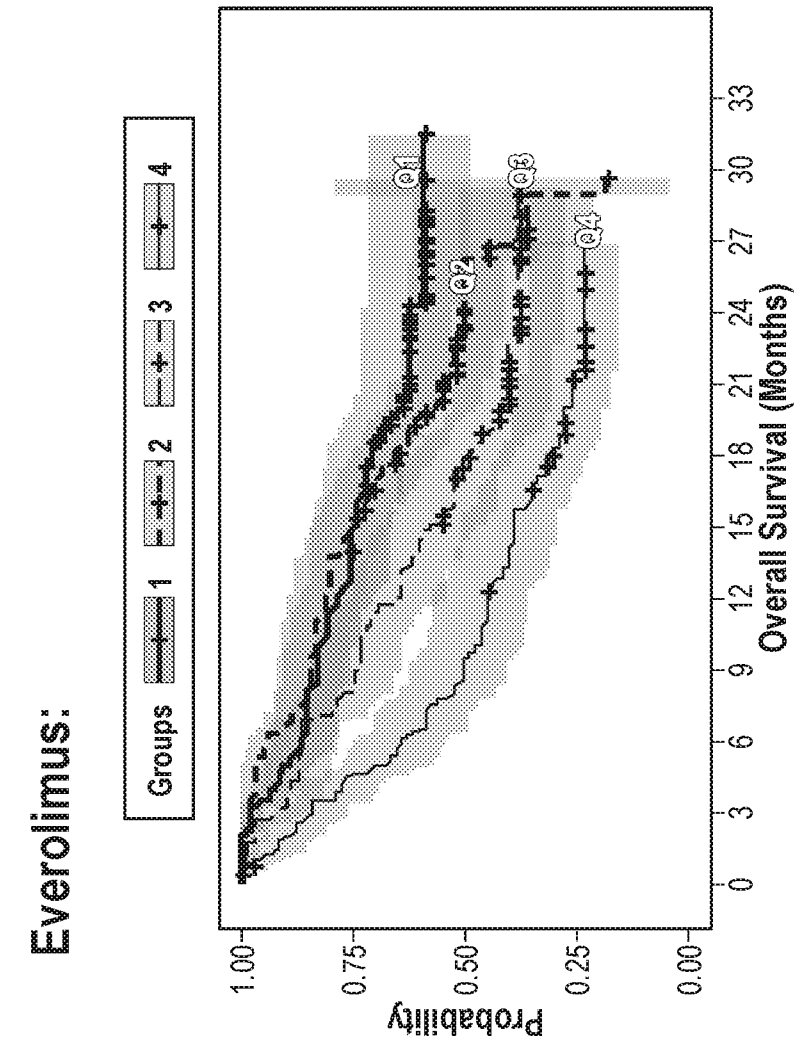

Everolimus:
Groups
1
2
3
4
Q1
Q2
Q3
Q4
Probability
1.00
0.75
0.50
0.25
0.00
0
3
6
9
12
15
18
21
24
27
30
33
Overall Survival (Months)

FIG. 4C

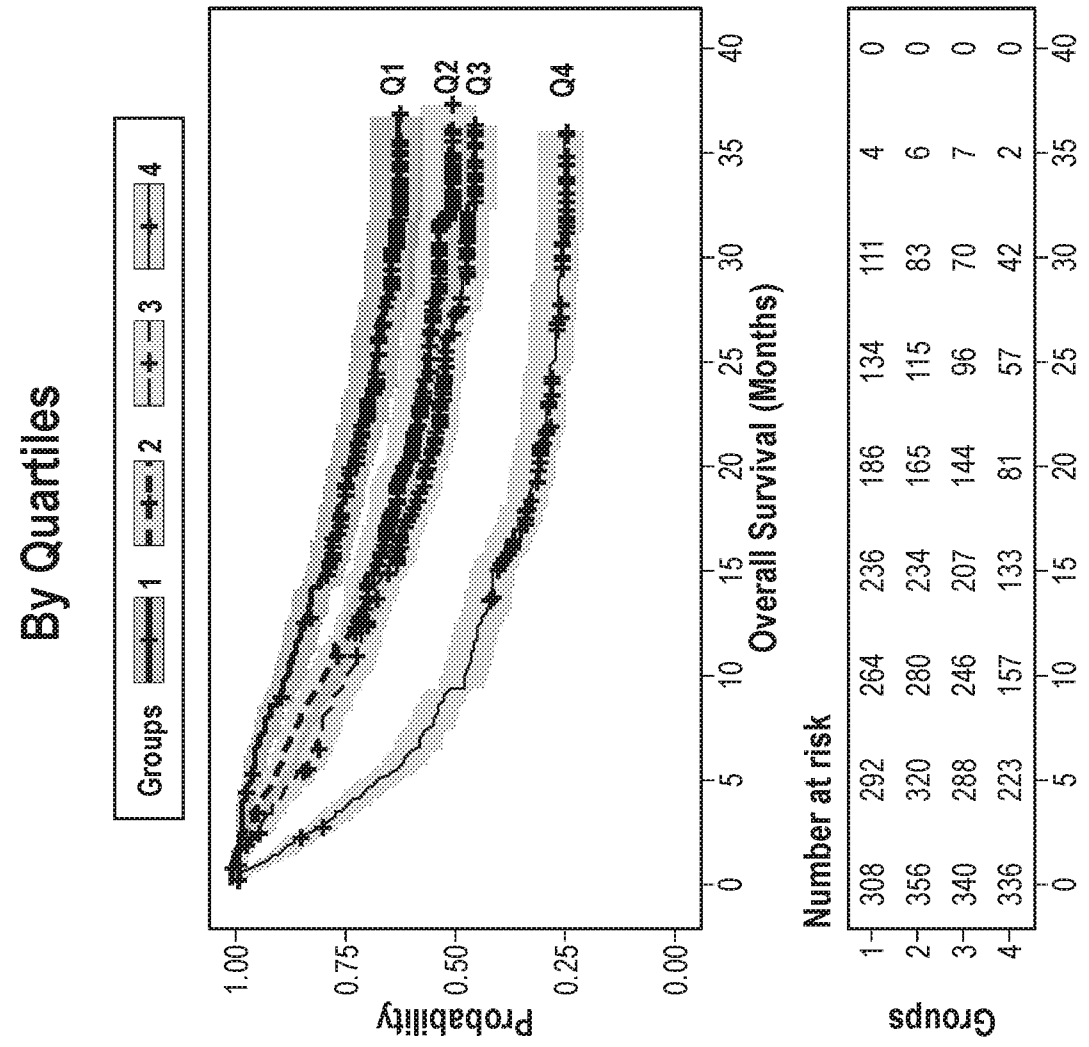

By Quartiles
Groups 1 2 3 4
Q1
Q2
Q3
Q4
Probability
1.00
0.75
0.50
0.25
0.00
0 5 10 15 20 25 30 35 40
Overall Survival (Months)
Number at risk
Groups
1 308 292 264 236 186 134 111 4 0
2 356 320 280 234 165 115 83 6 0
3 340 288 246 207 144 96 70 7 0
4 336 223 157 133 81 57 42 2 0
0 5 10 15 20 25 30 35 40

FIG. 5

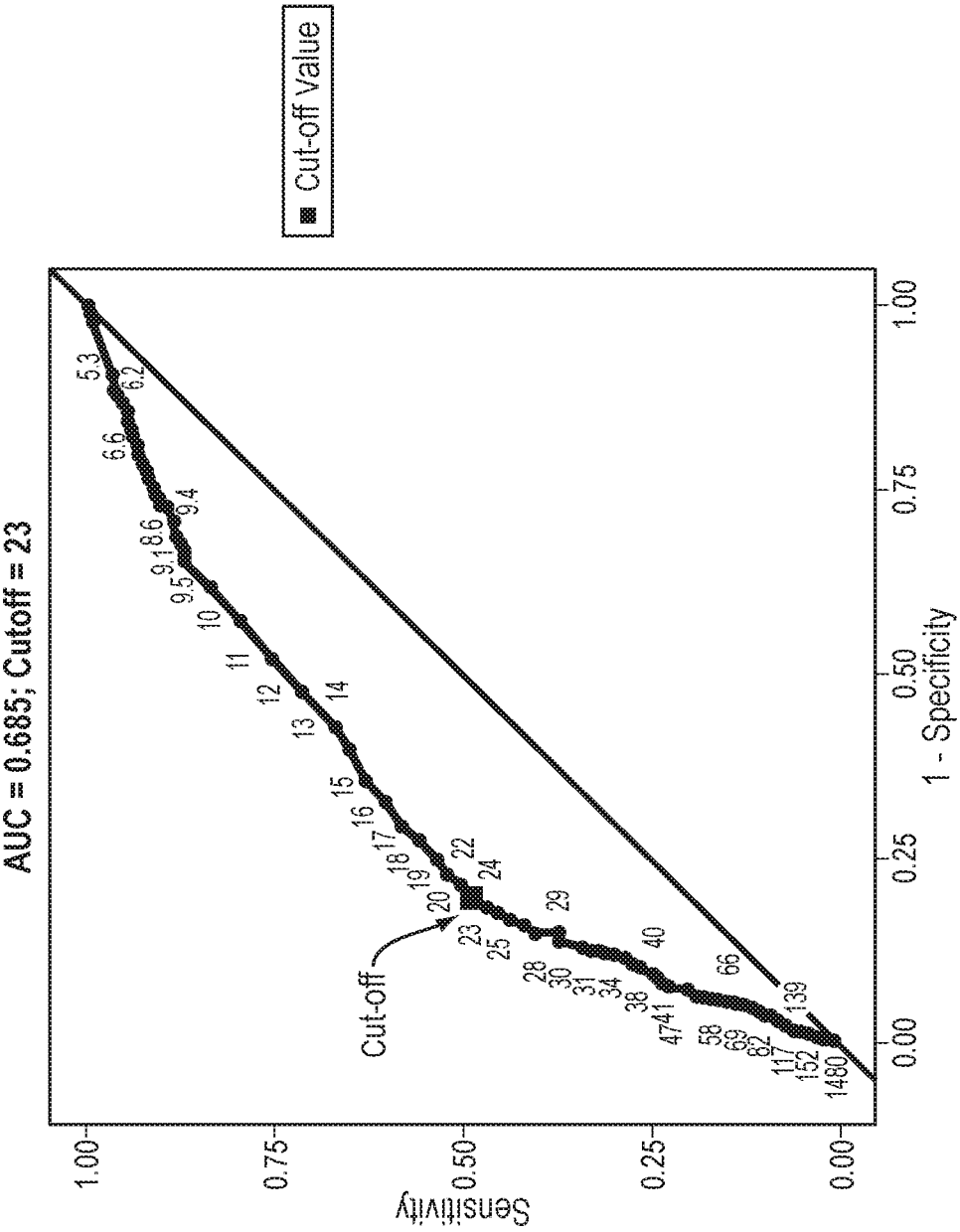

AUC = 0.685; Cutoff = 23
Cut-off Value
Sensitivity
1 - Specificity
0.00
0.25
0.50
0.75
1.00
Cut-off
5.3
6.2
6.6
9.4
18.6
9.1
9.5
10
11
12
13
14
15
16
17
18
19
20
22
24
23
25
29
28
30
31
34
38
40
47
41
58
66
69
82
117
139
152
1480

FIG. 6

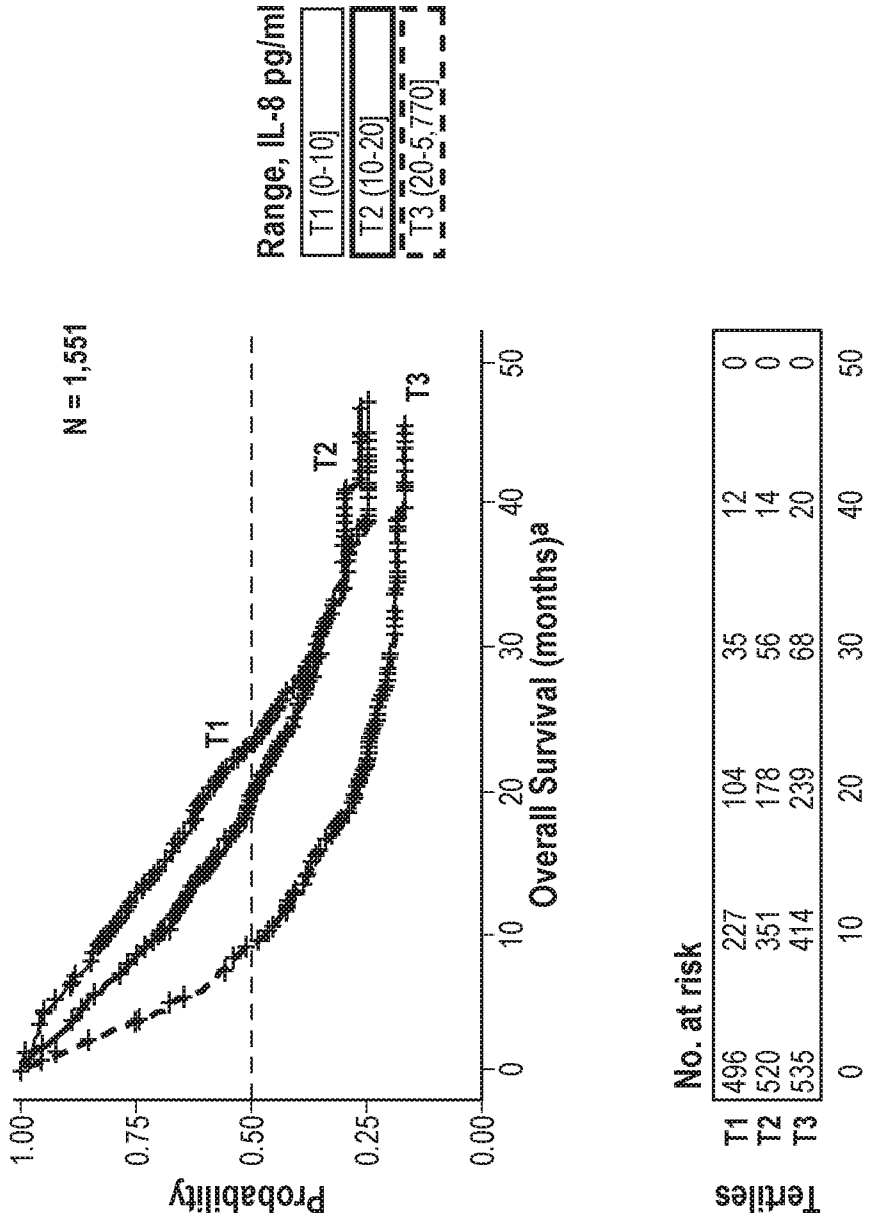

Range, IL-8 pg/ml
T1 (0-10]
T2 (10-20]
T3 (20-5,770]
N = 1,551
T1
T2
T3
Probability
1.00
0.75
0.50
0.25
0.00
0
10
20
30
40
50
Overall Survival (months)a
No. at risk
Tertiles
T1 496 227 104 35 12 0
T2 520 351 178 56 14 0
T3 535 414 239 68 20 0
0 10 20 30 40 50

FIG. 7

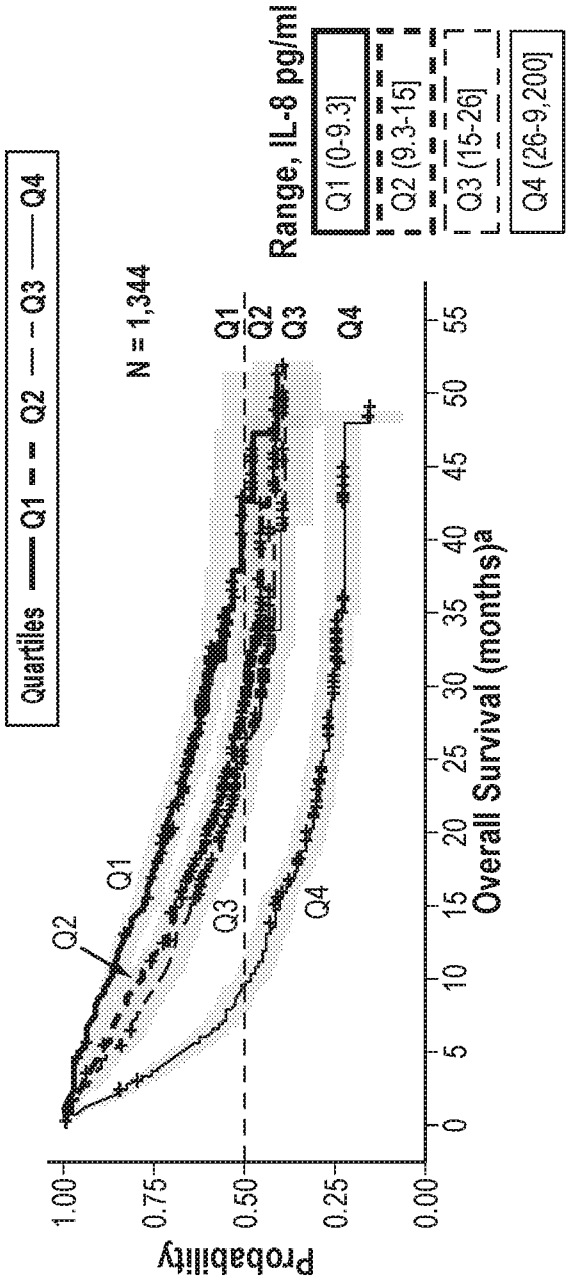

Quartiles Q1 Q2 Q3 Q4
N = 1,344
Range, IL-8 pg/ml
Q1 (0-9.3]
Q2 (9.3-15]
Q3 (15-26]
Q4 (26-9,200]
Probability
1.00
0.75
0.50
0.25
0.00
Overall Survival (months)a
0 5 10 15 20 25 30 35 40 45 50 55
No. at risk
Quartiles
Q1 337 318 291 261 223 177 145 26 19 10 1 0
Q2 371 332 290 251 194 142 104 24 15 5 0 0
Q3 301 257 217 190 148 109 81 22 15 8 1 0
Q4 335 221 159 135 94 73 55 13 11 3 0 0
0 5 10 15 20 25 30 45 40 45 50 55

FIG. 8

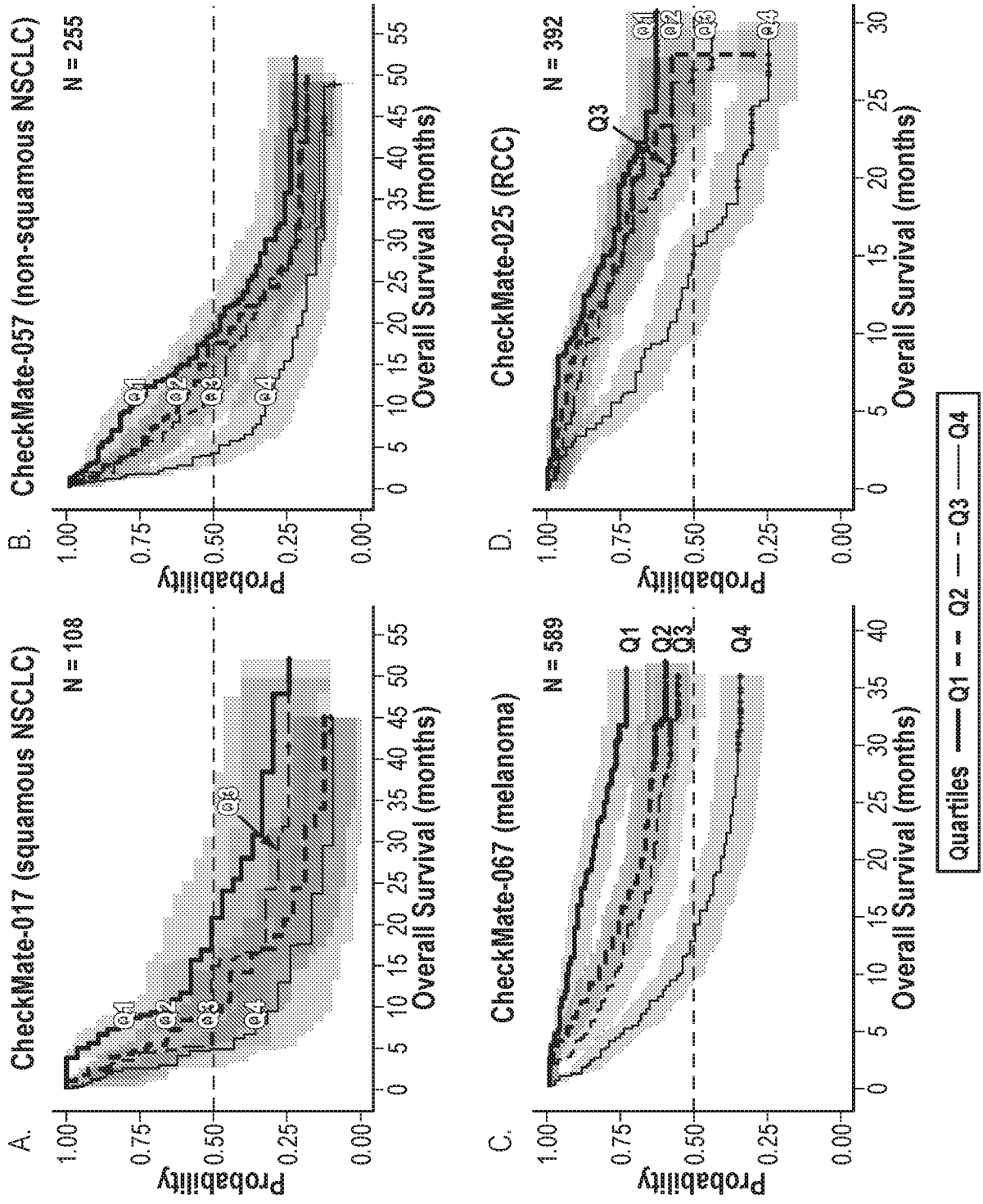

A.
CheckMate-017 (squamous NSCLC)
N = 108
B.
CheckMate-057 (non-squamous NSCLC)
N = 255
C.
CheckMate-067 (melanoma)
N = 589
D.
CheckMate-025 (RCC)
N = 392
Probability
Overall Survival (months)
Q1
Q2
Q3
Q4
Quartiles Q1 Q2 Q3 Q4

FIG. 9

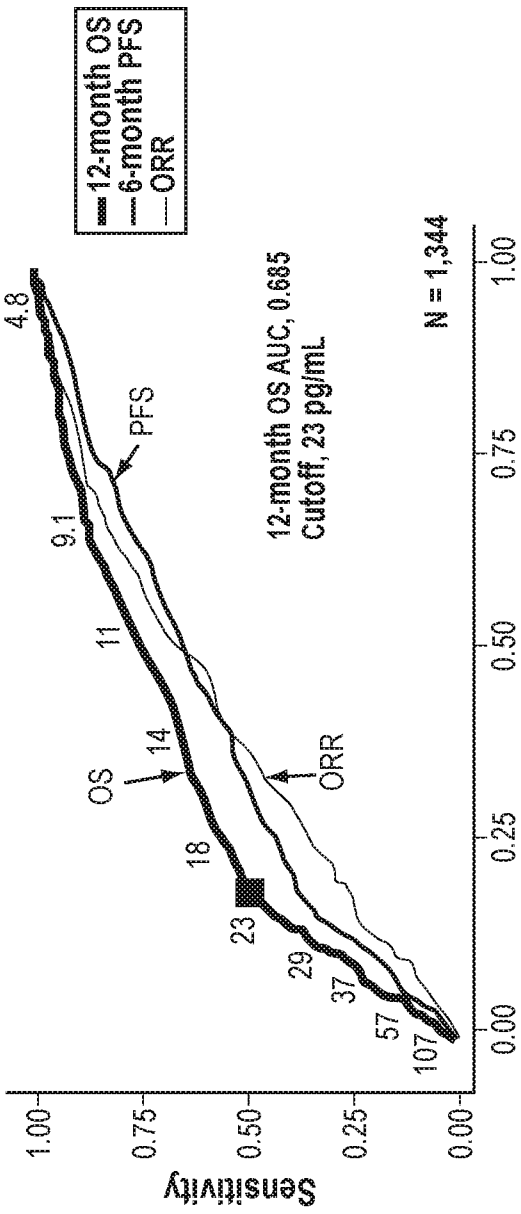

12-month OS
6-month PFS
ORR
12-month OS AUC, 0.685
Cutoff, 23 pg/mL
N = 1,344
4.8
9.1
11
14
18
23
29
37
57
107
OS
PFS
ORR
Sensitivity
1-specificity
0.00
0.25
0.50
0.75
1.00

FIG. 10

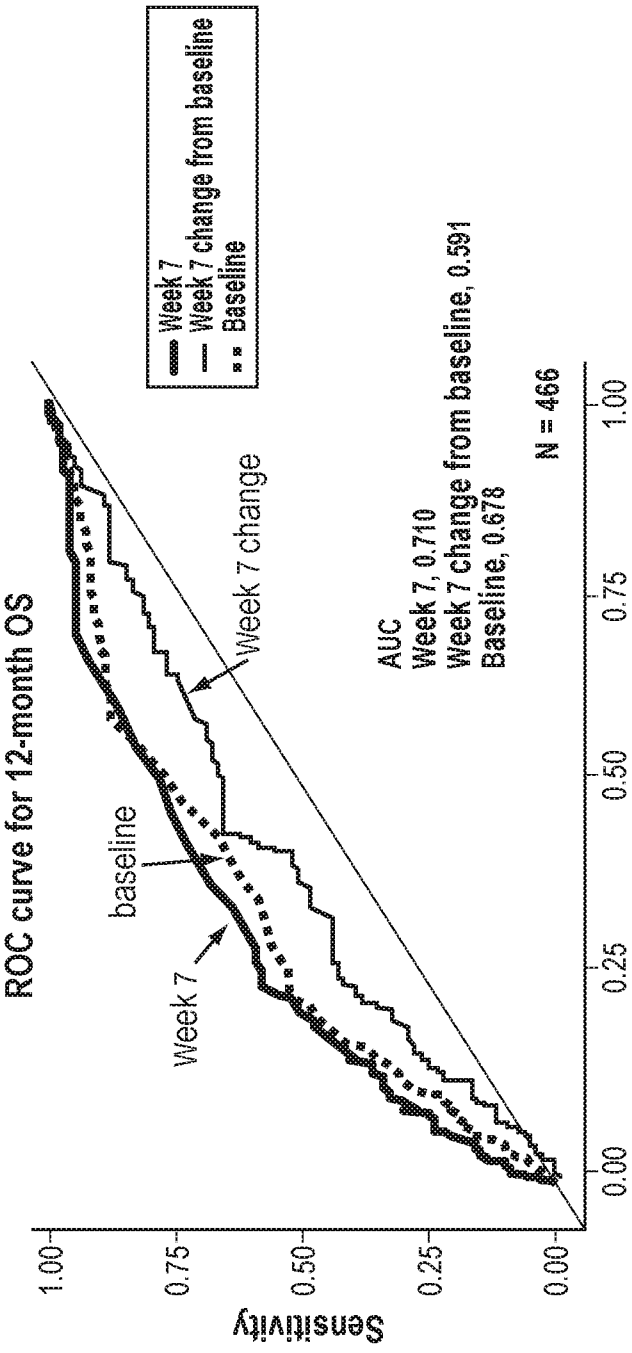

ROC curve for 12-month OS
Week 7
Week 7 change from baseline
Baseline
baseline
Week 7
Week 7 change
AUC
Week 7, 0.710
Week 7 change from baseline, 0.591
Baseline, 0.678
N = 466
Sensitivity
1-specificity
0.00
0.25
0.50
0.75
1.00

FIG. 11

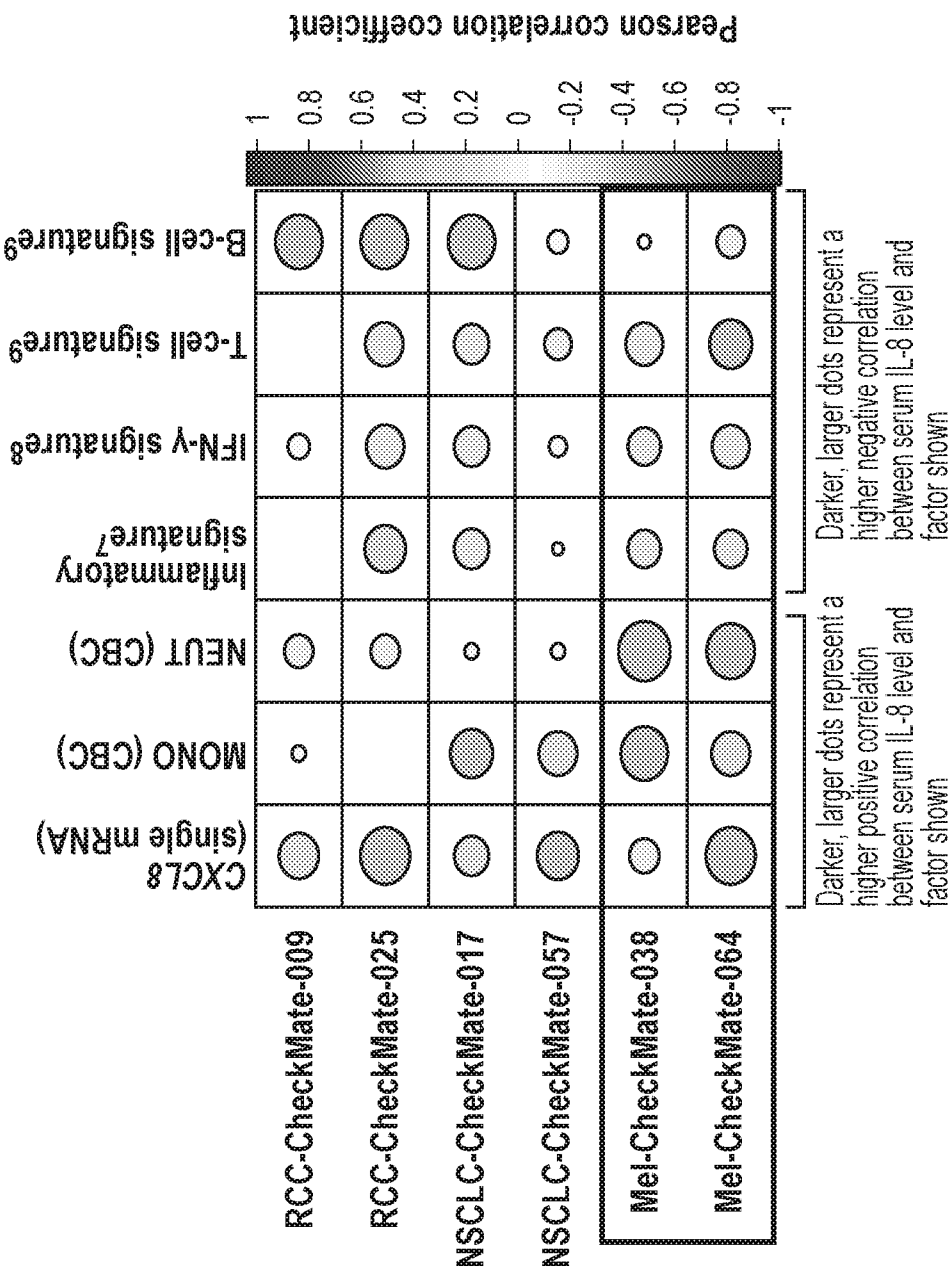

RCC-CheckMate-009
RCC-CheckMate-025
NSCLC-CheckMate-017
NSCLC-CheckMate-057
Mel-CheckMate-038
Mel-CheckMate-064
CXCL8 (single mRNA)
MONO (CBC)
NEUT (CBC)
Inflammatory signature7
IFN-γ signature8
T-cell signature9
B-cell signature9
Darker, larger dots represent a higher positive correlation between serum IL-8 level and factor shown
Darker, larger dots represent a higher negative correlation between serum IL-8 level and factor shown
Pearson correlation coefficient
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1

FIG. 12

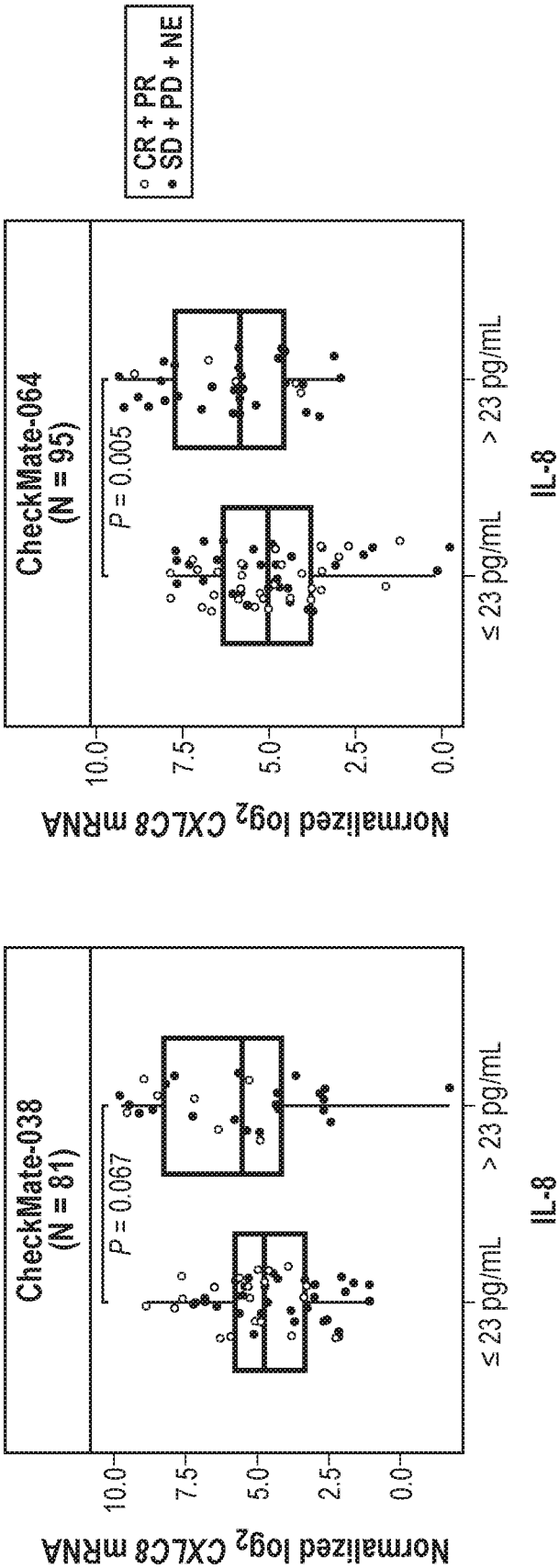
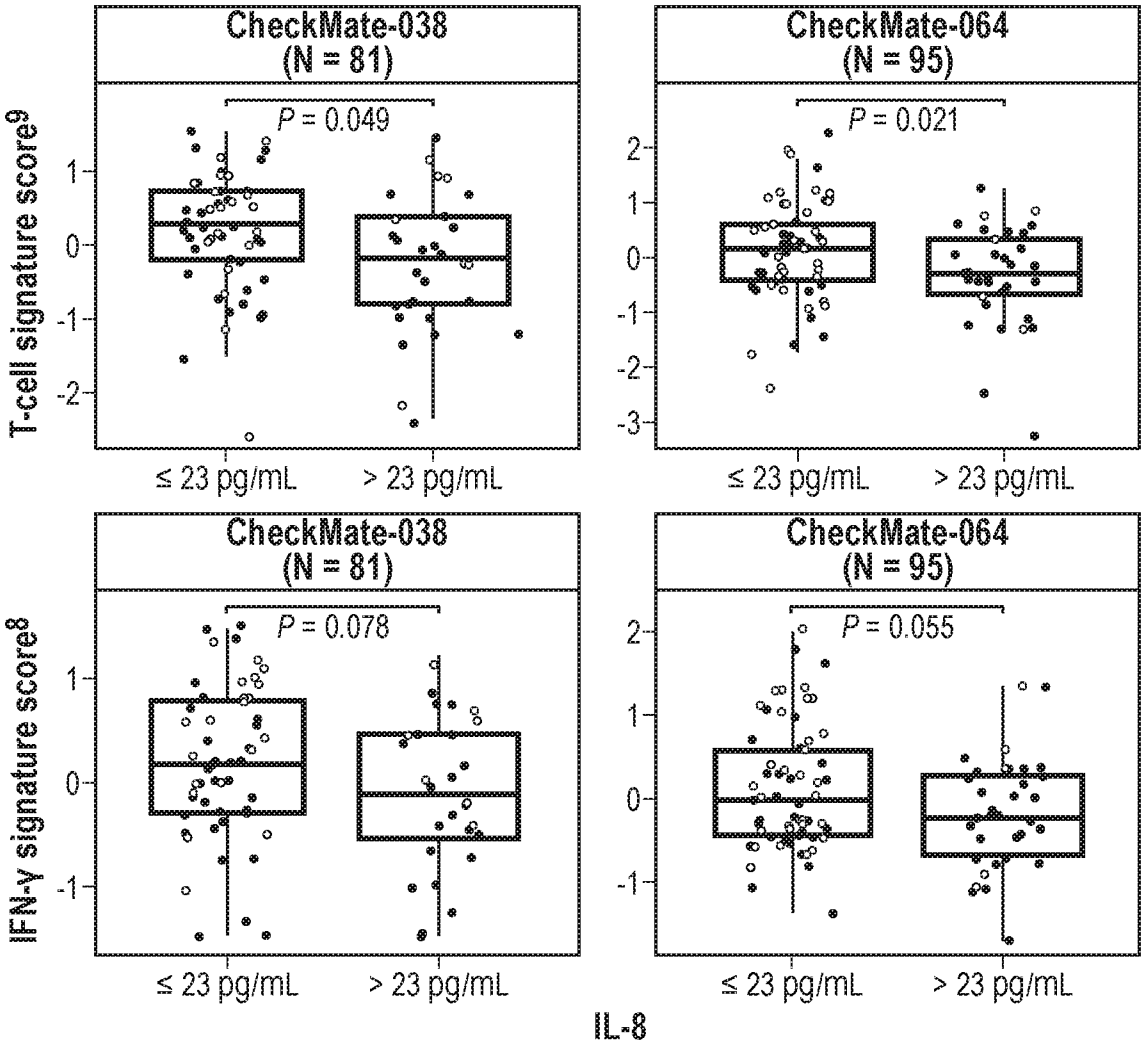

CheckMate-038
(N = 81)
P = 0.067
Normalized log2 CXLC8 mRNA
10.0
7.5
5.0
2.5
0.0
≤ 23 pg/mL
> 23 pg/mL
IL-8
CheckMate-064
(N = 95)
P = 0.005
CR + PR
SD + PD + NE
Normalized log2 CXLC8 mRNA
10.0
7.5
5.0
2.5
0.0
≤ 23 pg/mL
> 23 pg/mL
IL-8

FIG. 13A



Study	Serum IL-8 level	CR + PR	PD + SD + NE
CheckMate-038	≤ 23 pg/mL	20	33
CheckMate-038	> 23 pg/mL	7	21
CheckMate-064	≤ 23 pg/mL	31	30
CheckMate-064	> 23 pg/mL	5	29

FIG. 13B