

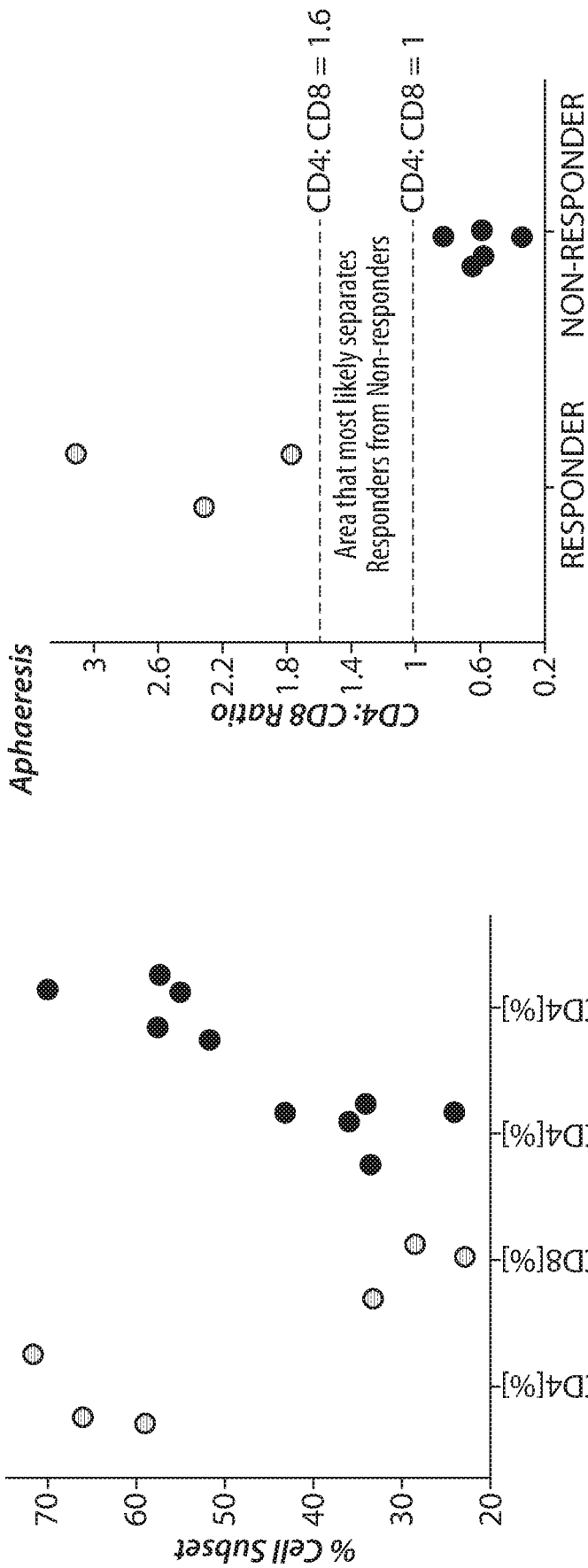


FIG. 1B

FIG. 1A

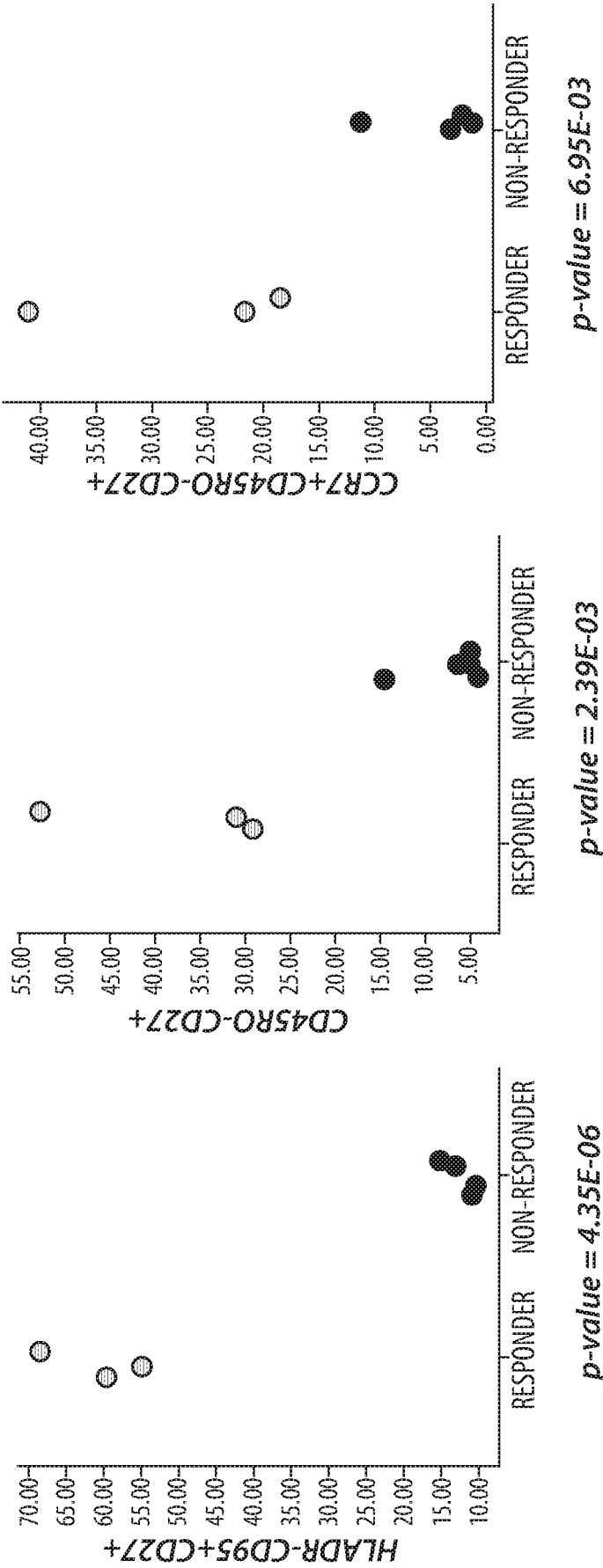
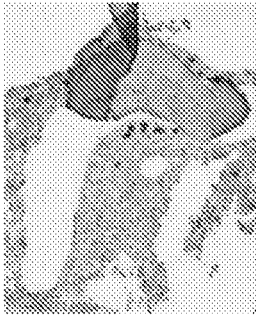
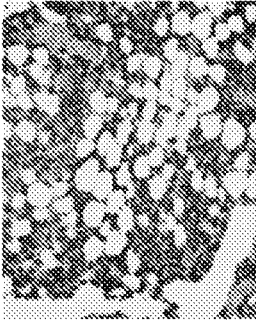
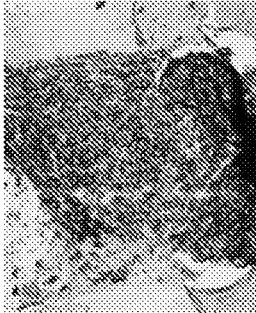
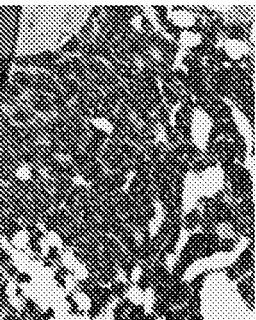
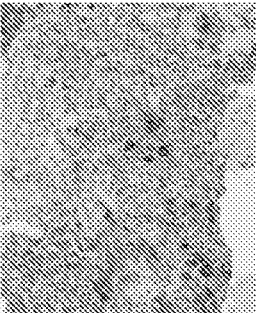
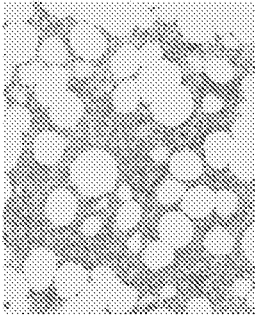
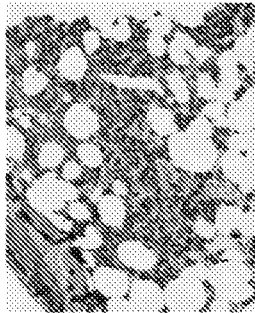


FIG. 2A

FIG. 2B

FIG. 2C

CD138 localization

	MR Patient 13	SD Patient 14	VGPR Patient 15	PR Patient 16	PR Patient 17
Pre					
Day 28					
3 month		N/A			

Minimal CD138 expression detected at all time points in patient 13

Increased numbers of CD138 MM cells were observed at 28 days in patient 14

Extensive infiltration of CD138 MM cells at base line was observed in patients 15, 16 and 17 followed by reductions at 28 days and increased numbers at 3 months

FIG. 3

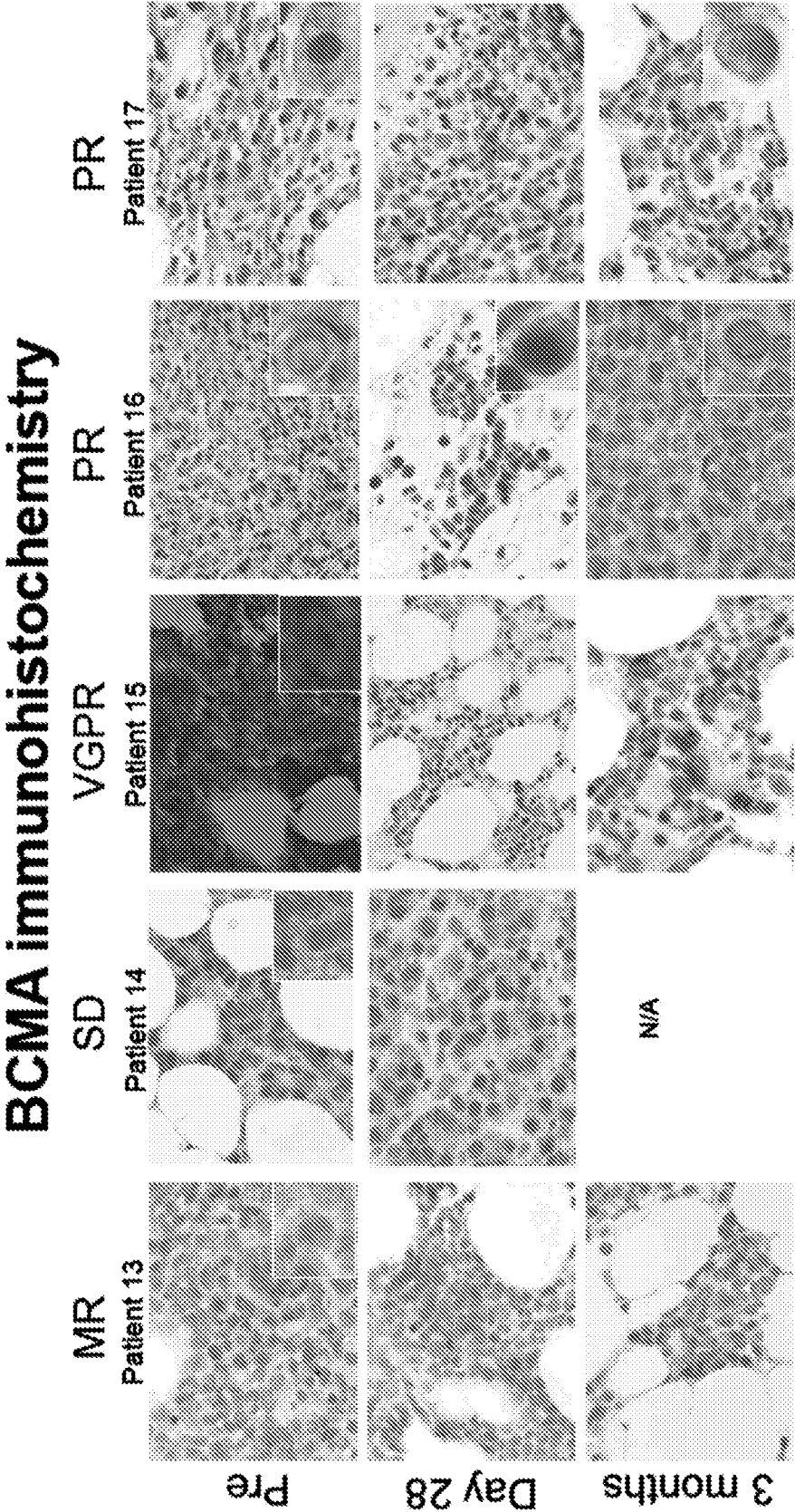
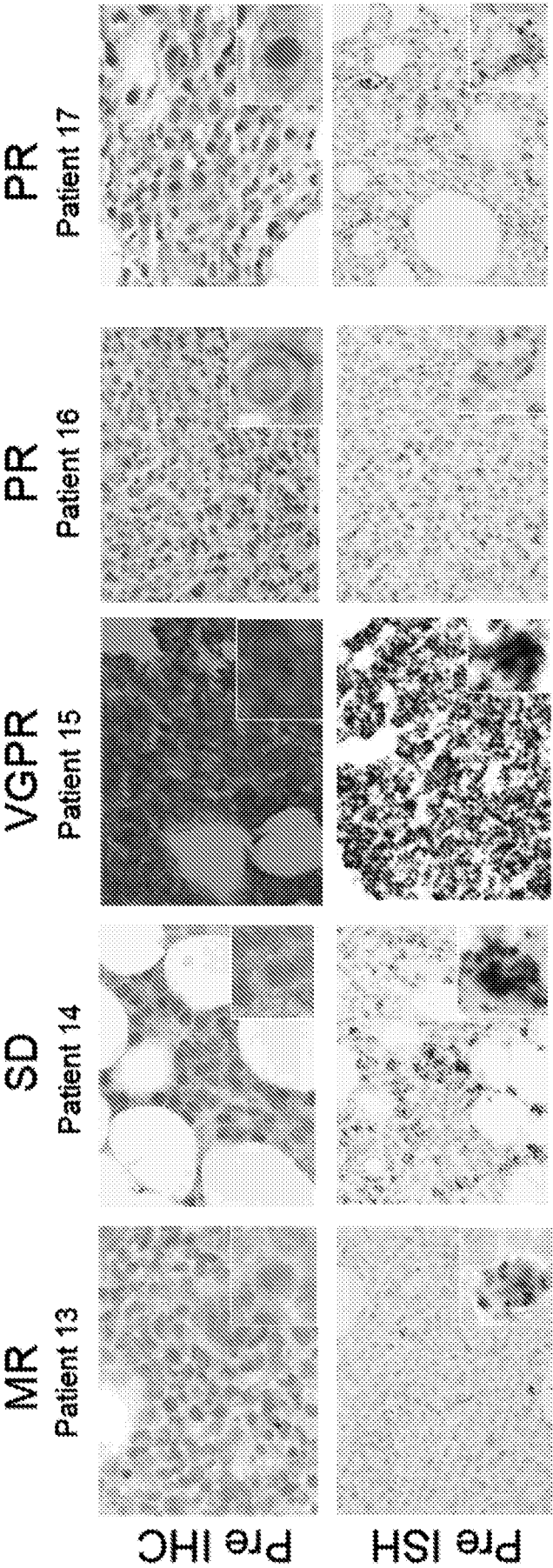


FIG. 4

BCMA IHC vs ISH at base line



- Discordance between BCMA surface protein and mRNA expression observed in patients 13 and 14

FIG. 5

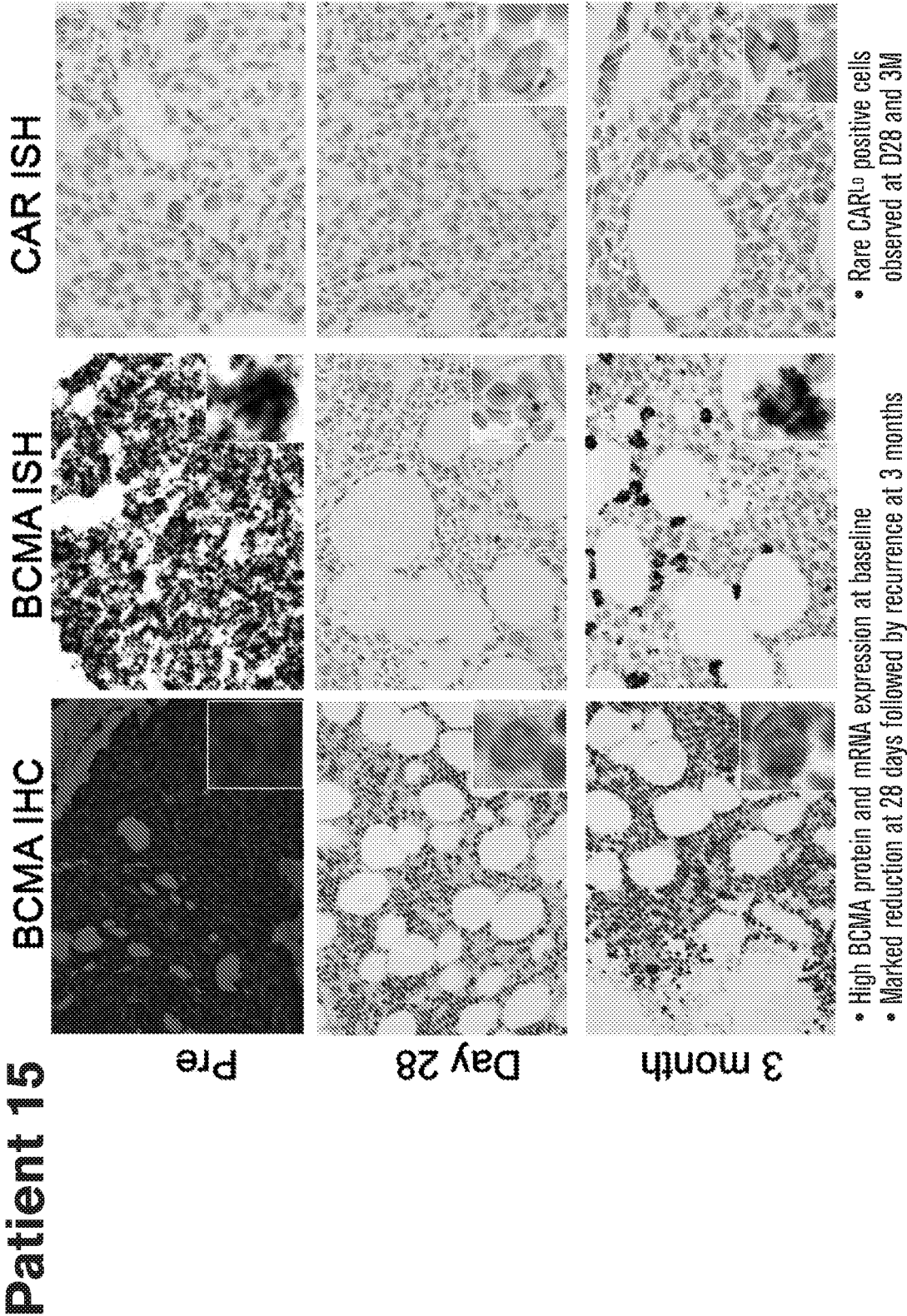


FIG. 6A

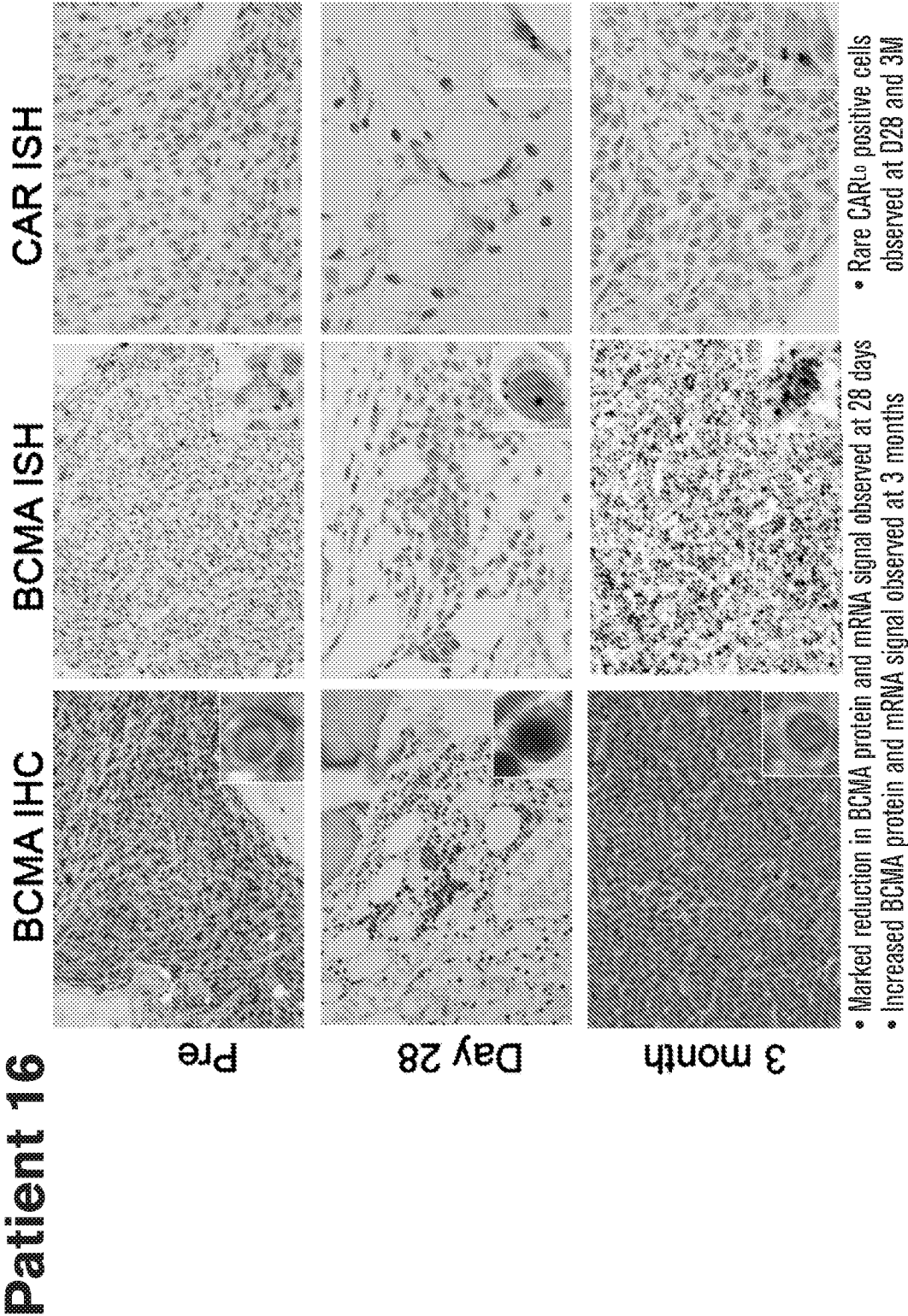


FIG. 6B

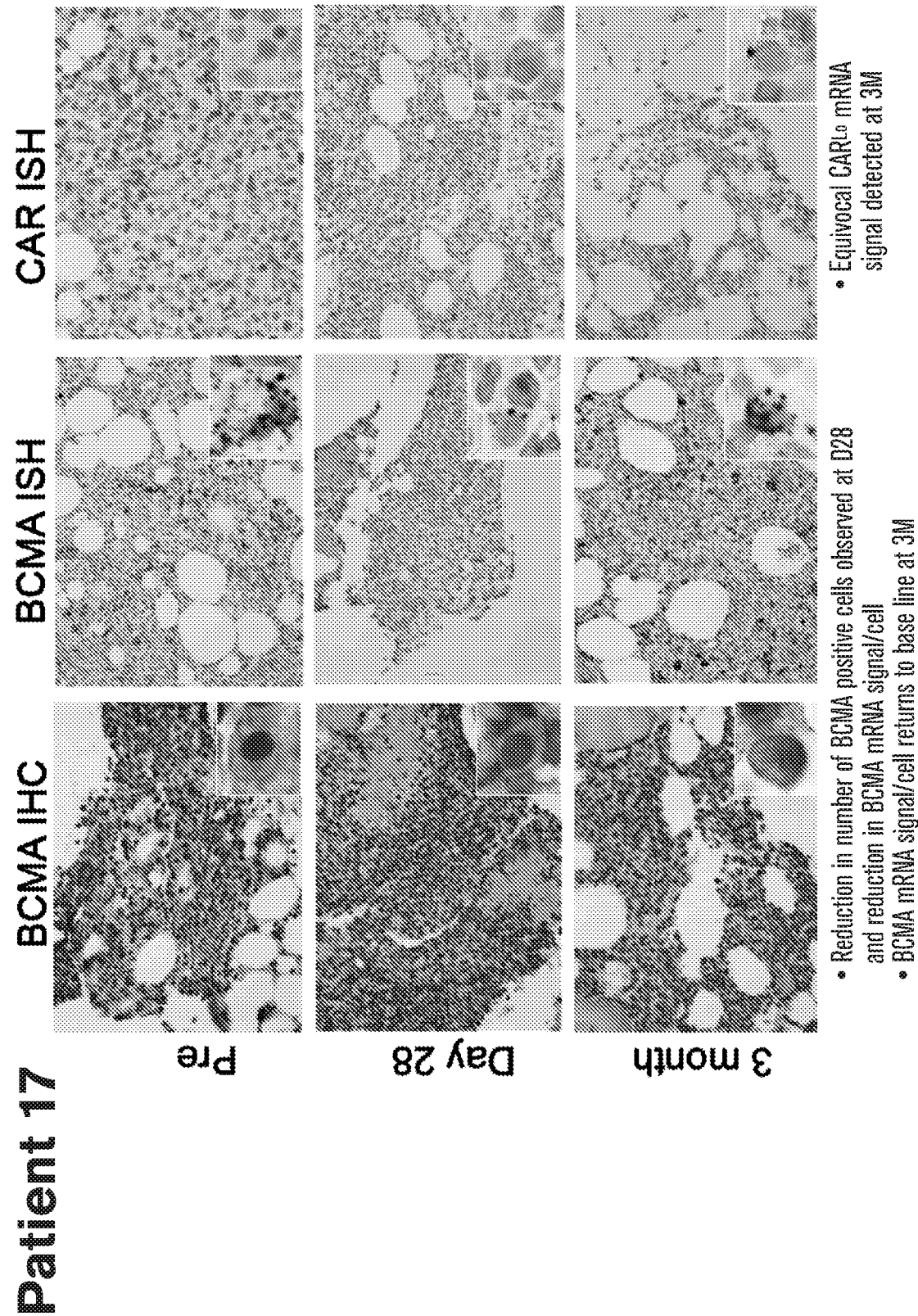


FIG. 6C

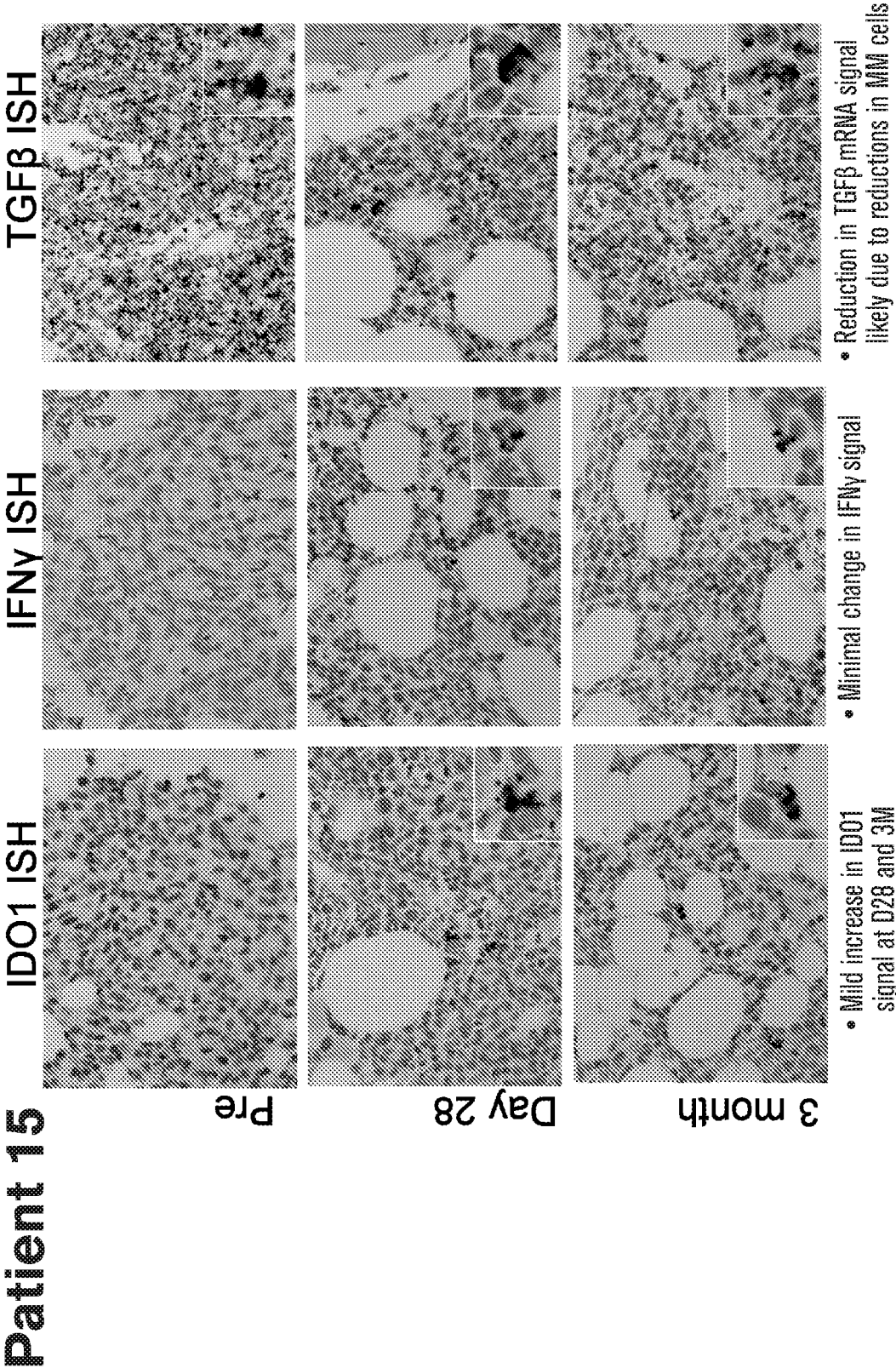


FIG. 7A

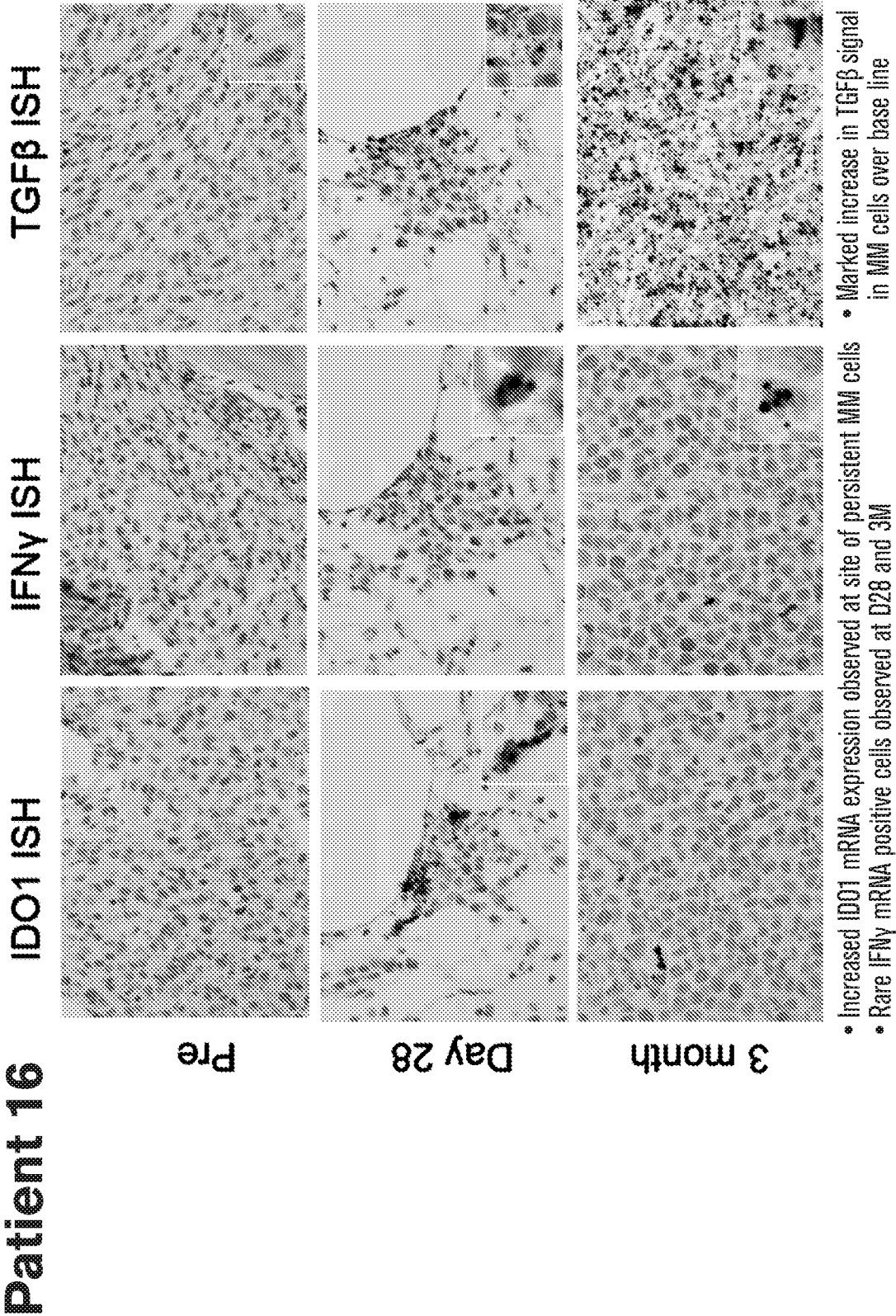


FIG. 7B

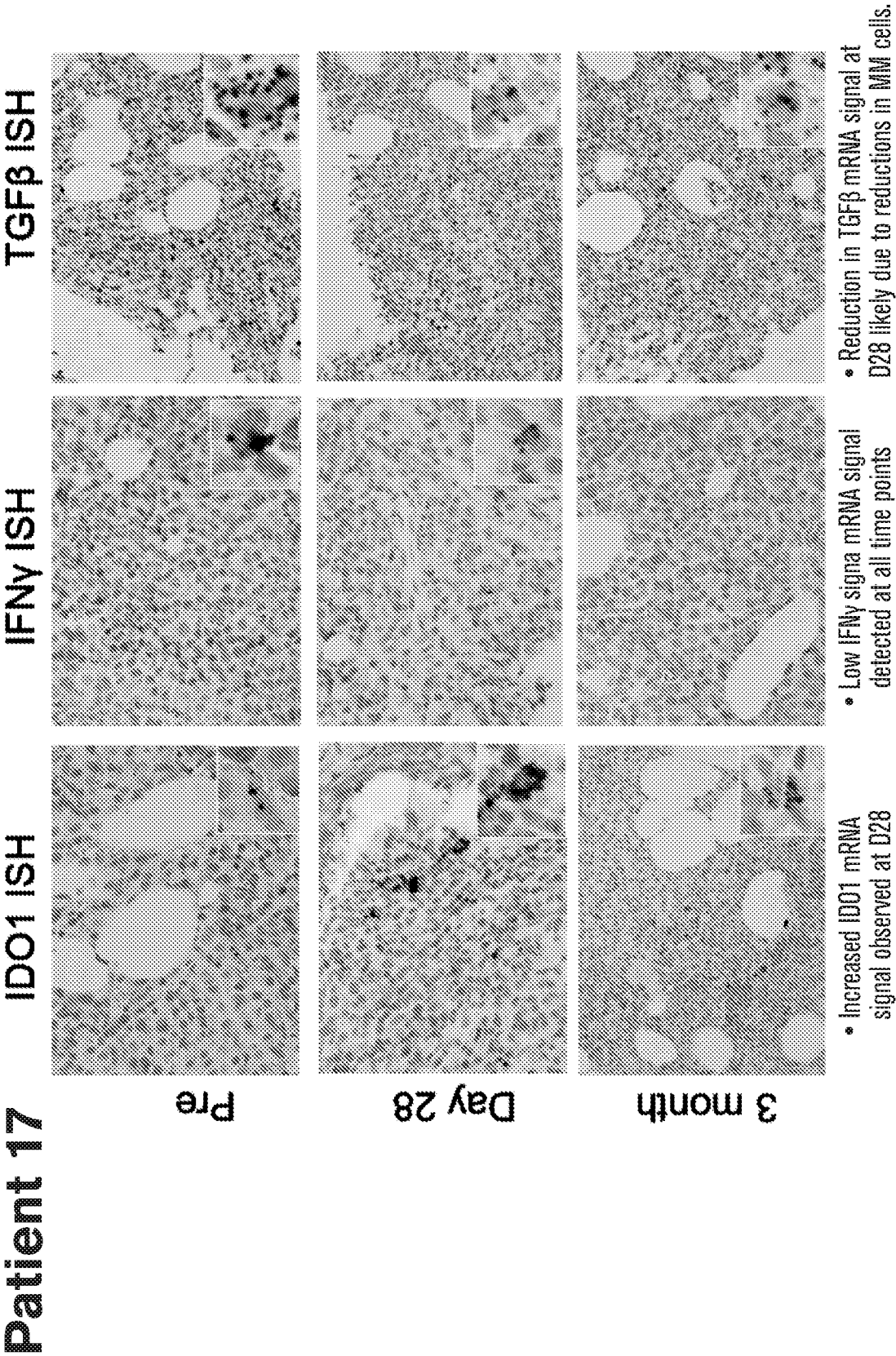
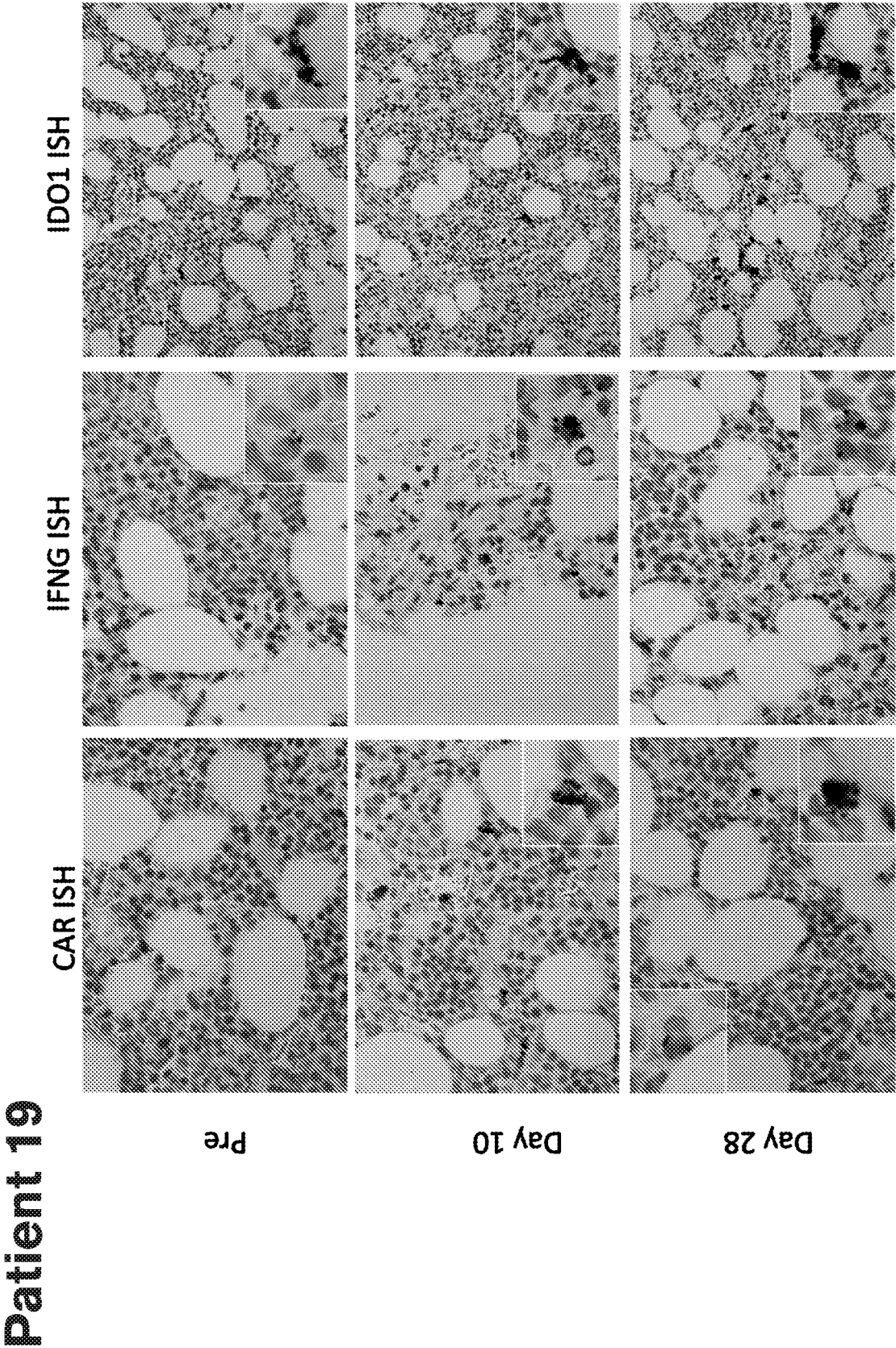


FIG. 7C



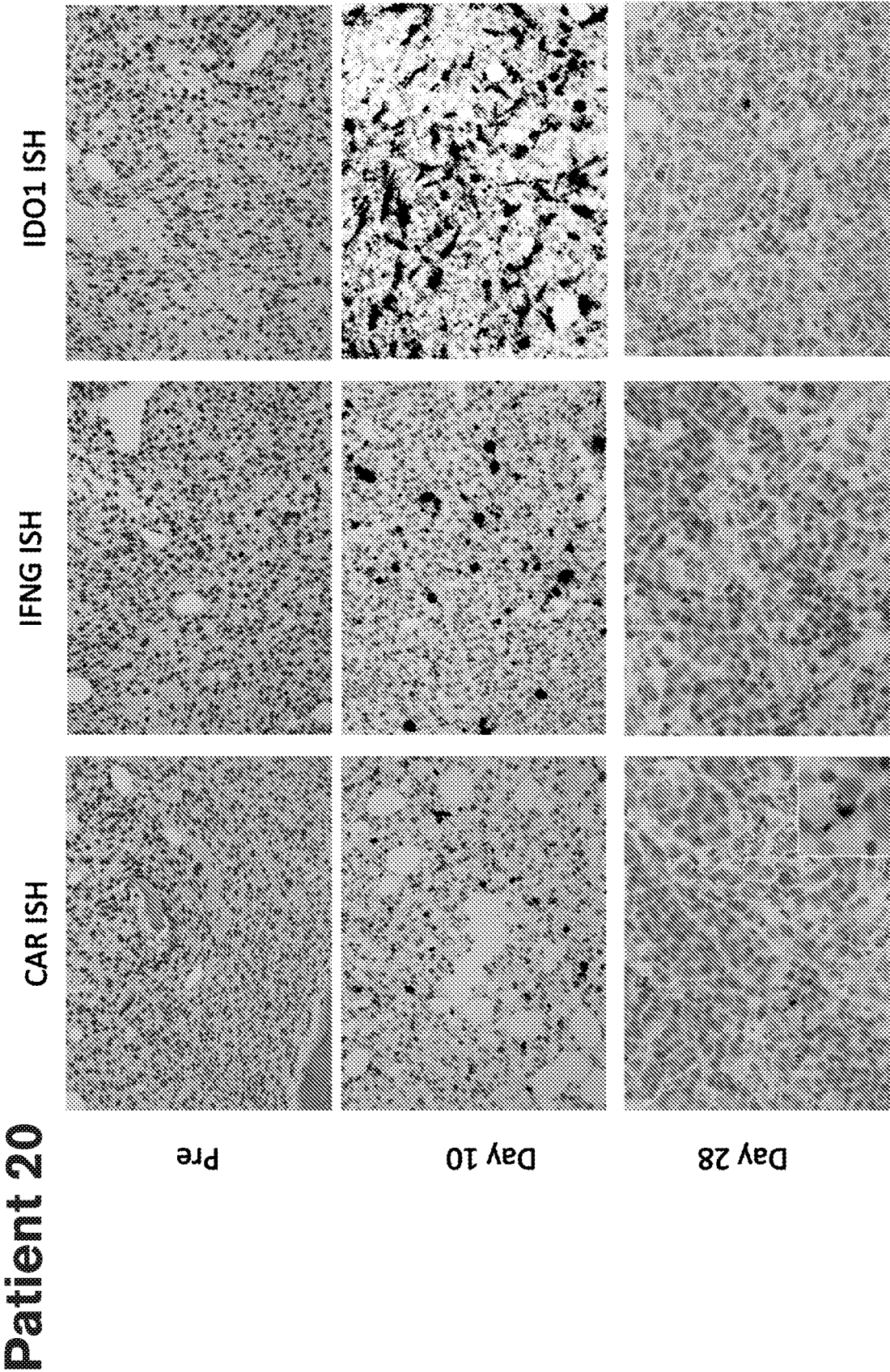


FIG. 7E

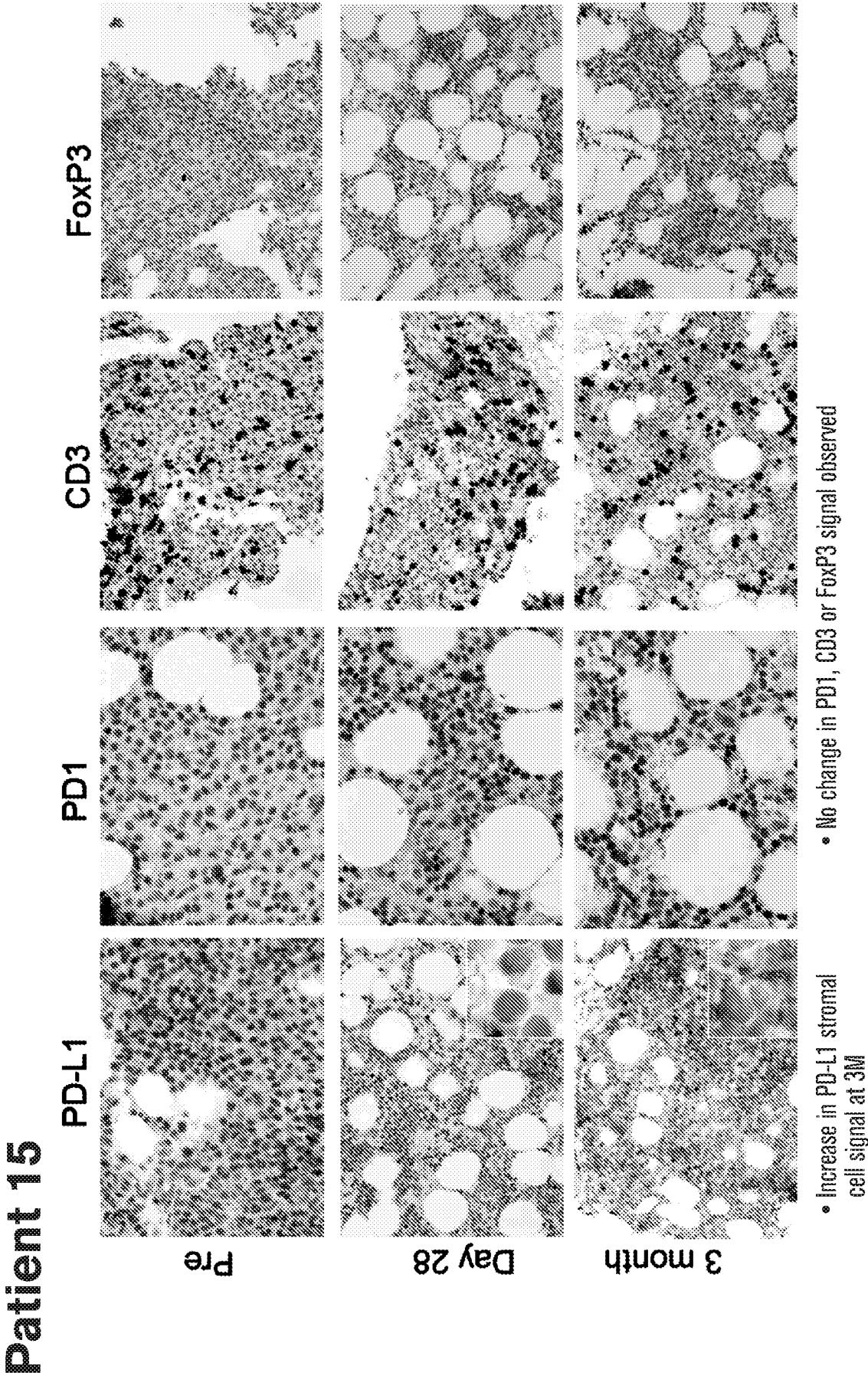


FIG. 8A

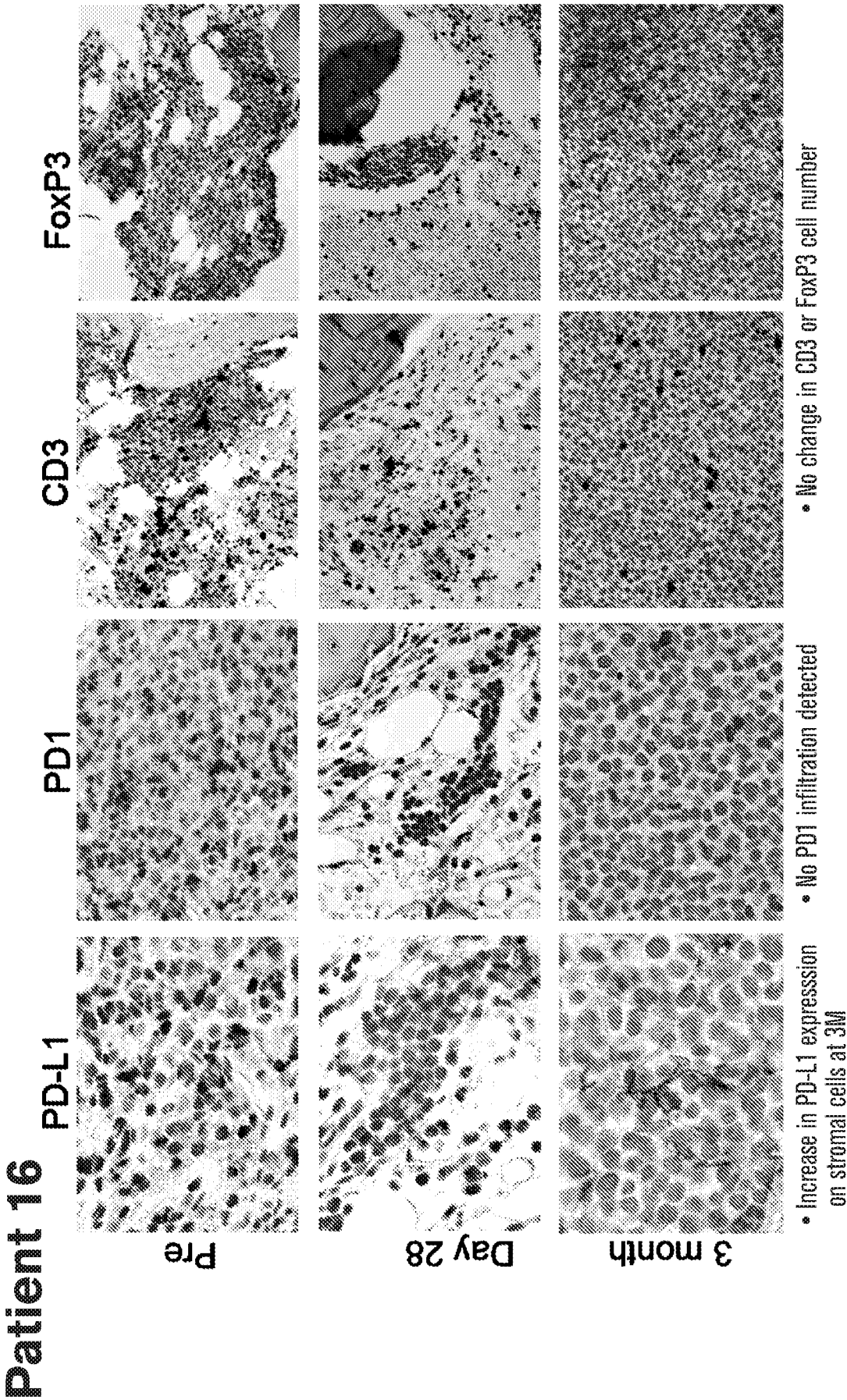


FIG. 8B

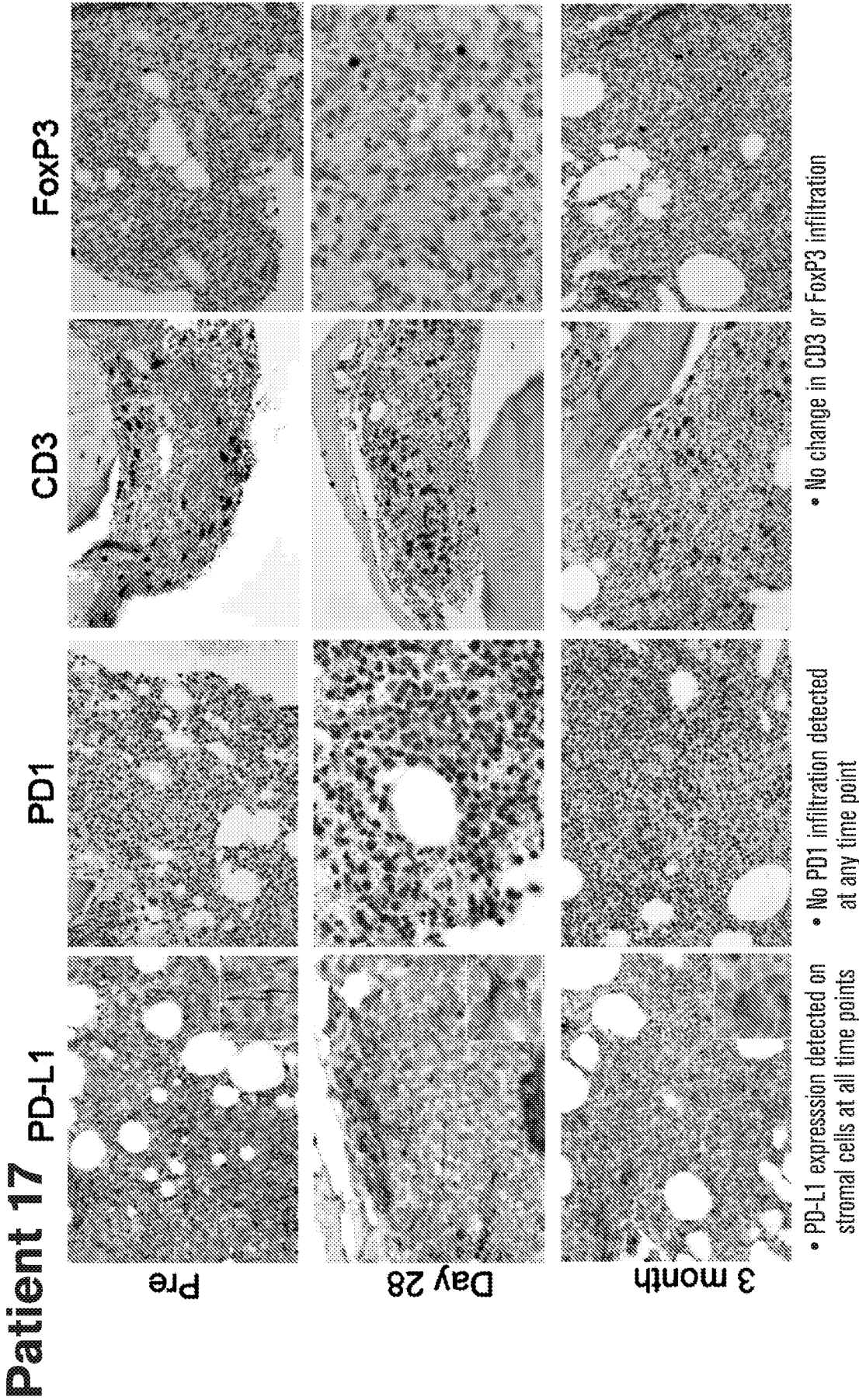


FIG. 8C

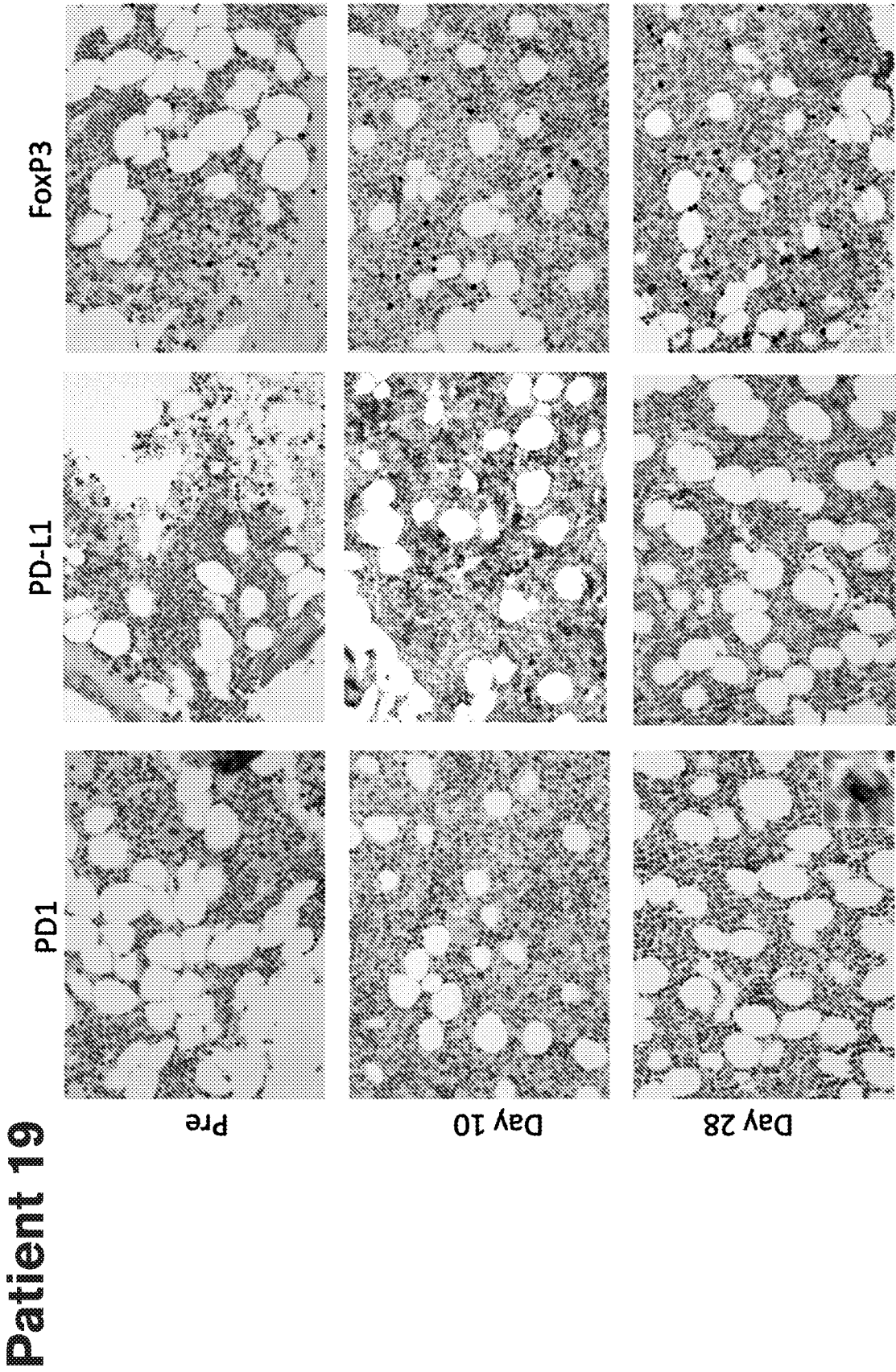


FIG. 8D

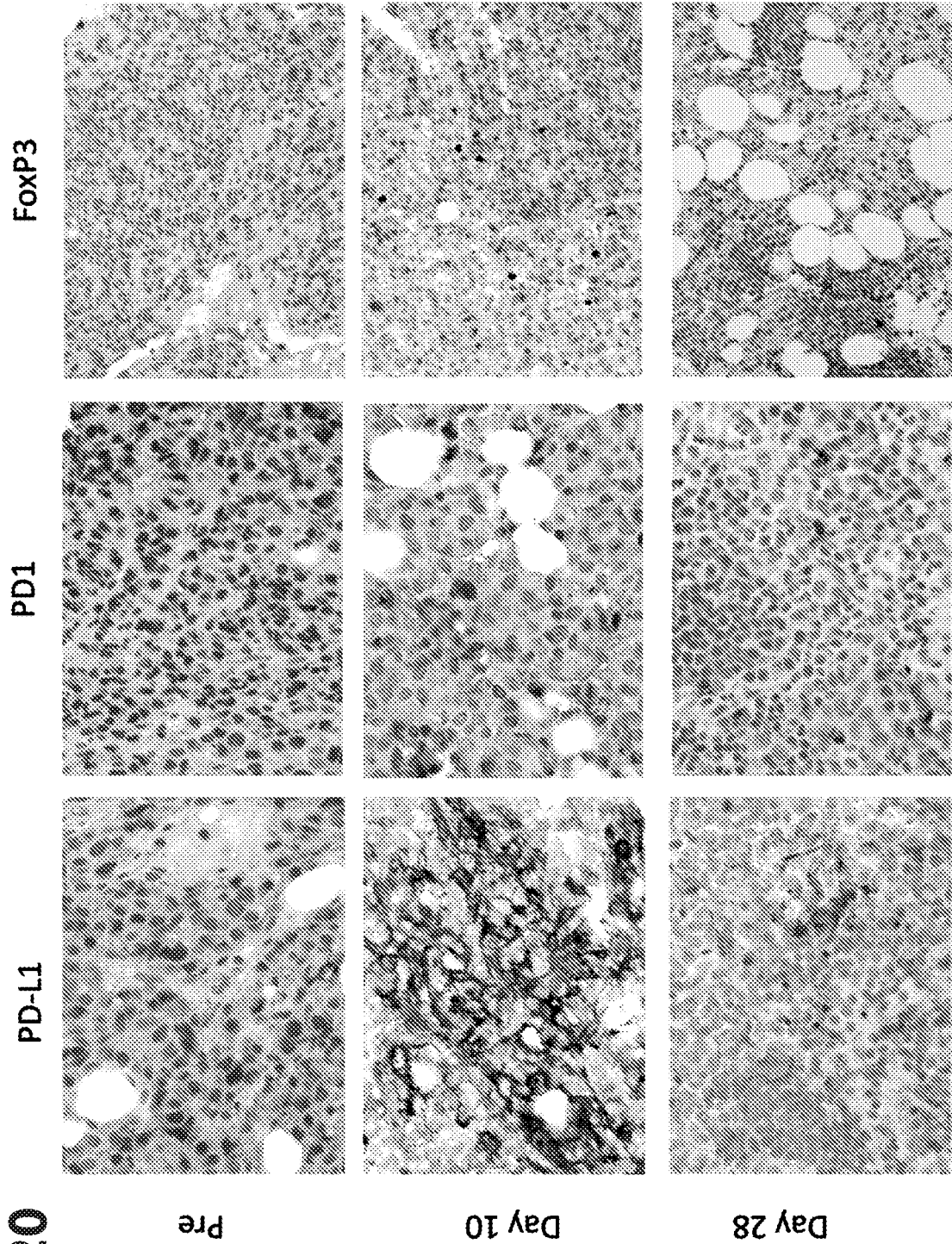


FIG. 8E

CD19 immunohistochemistry

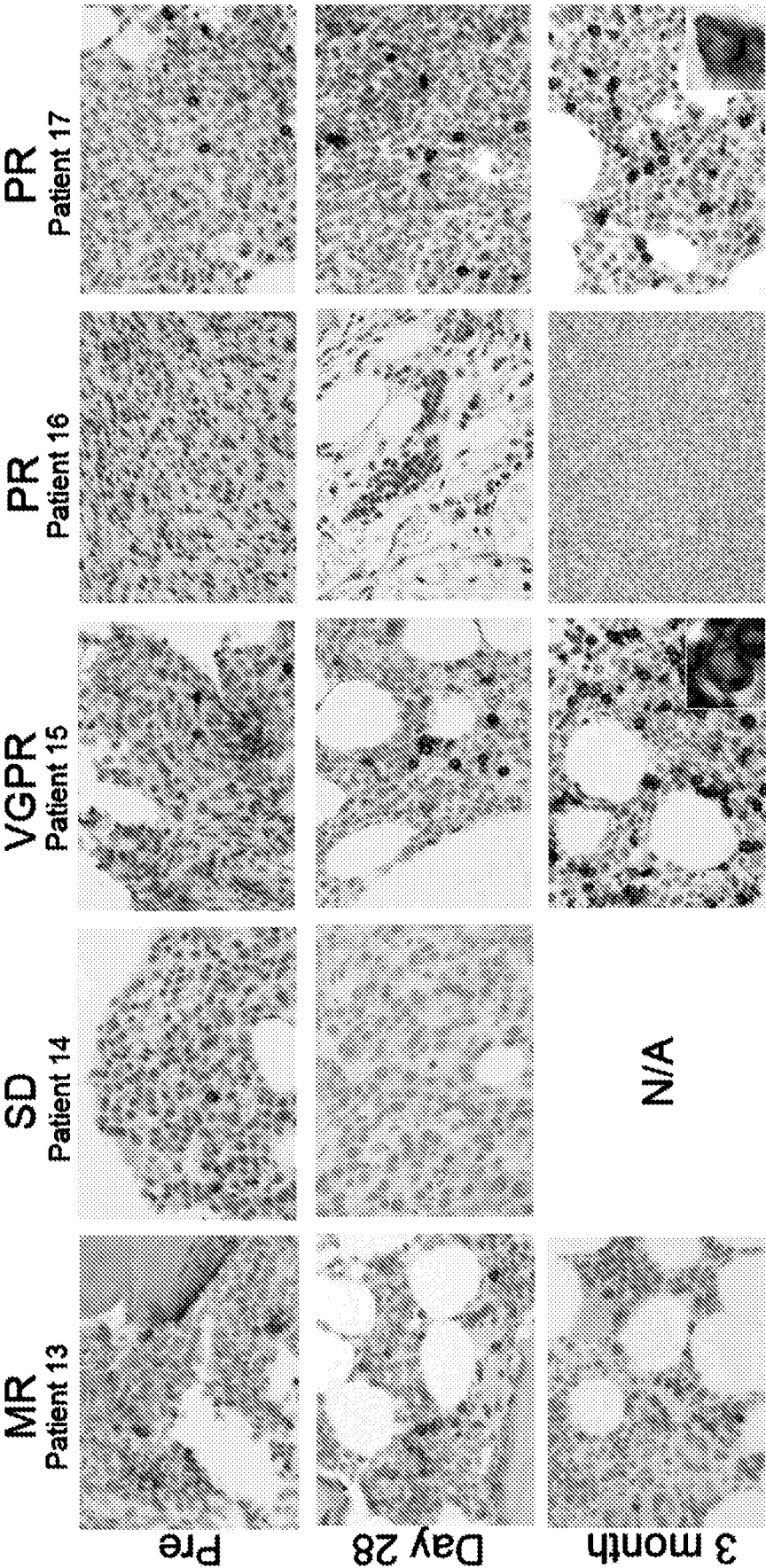


FIG. 9

CD20 immunohistochemistry

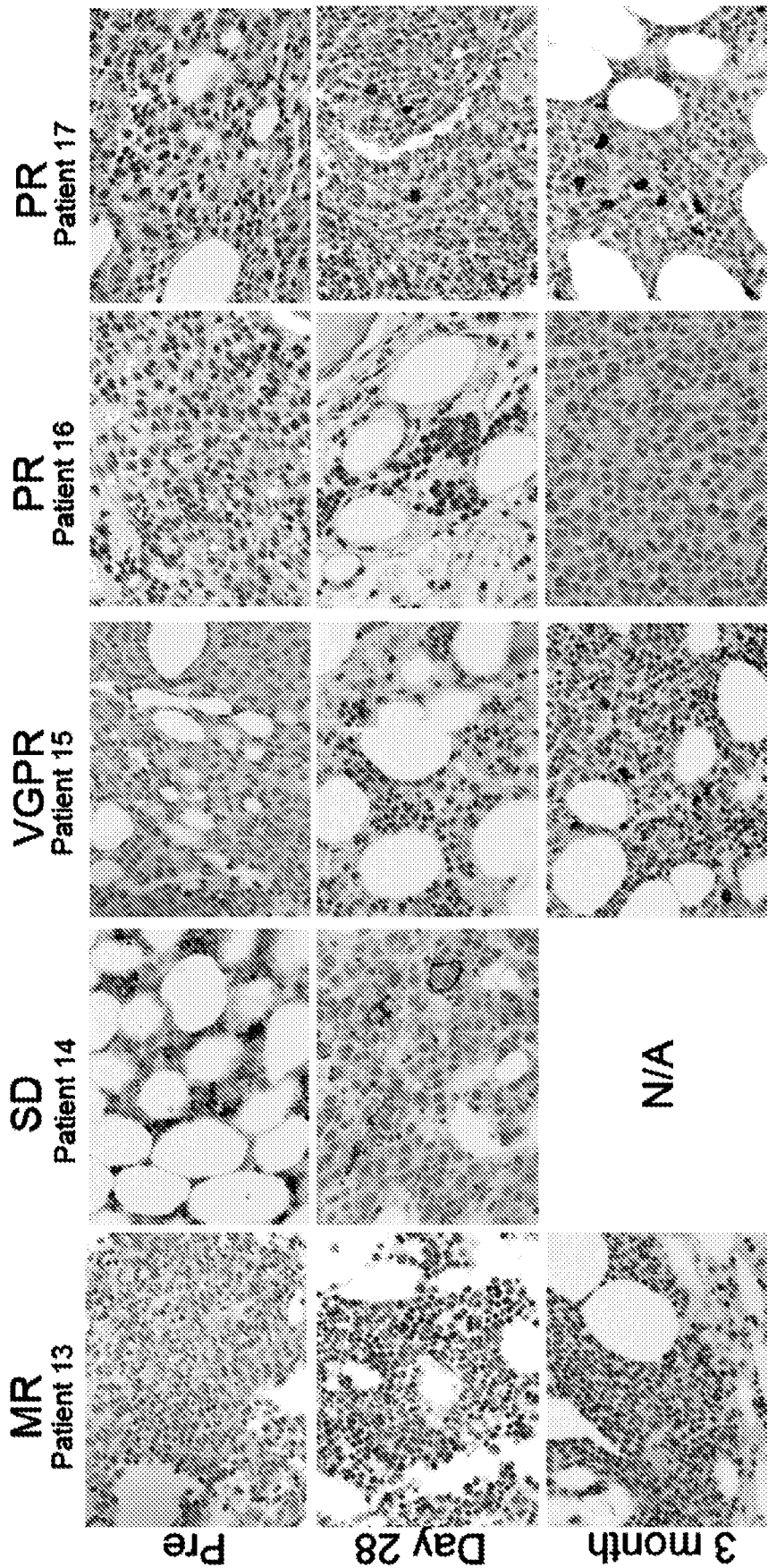


FIG. 10

Patient 15 pre

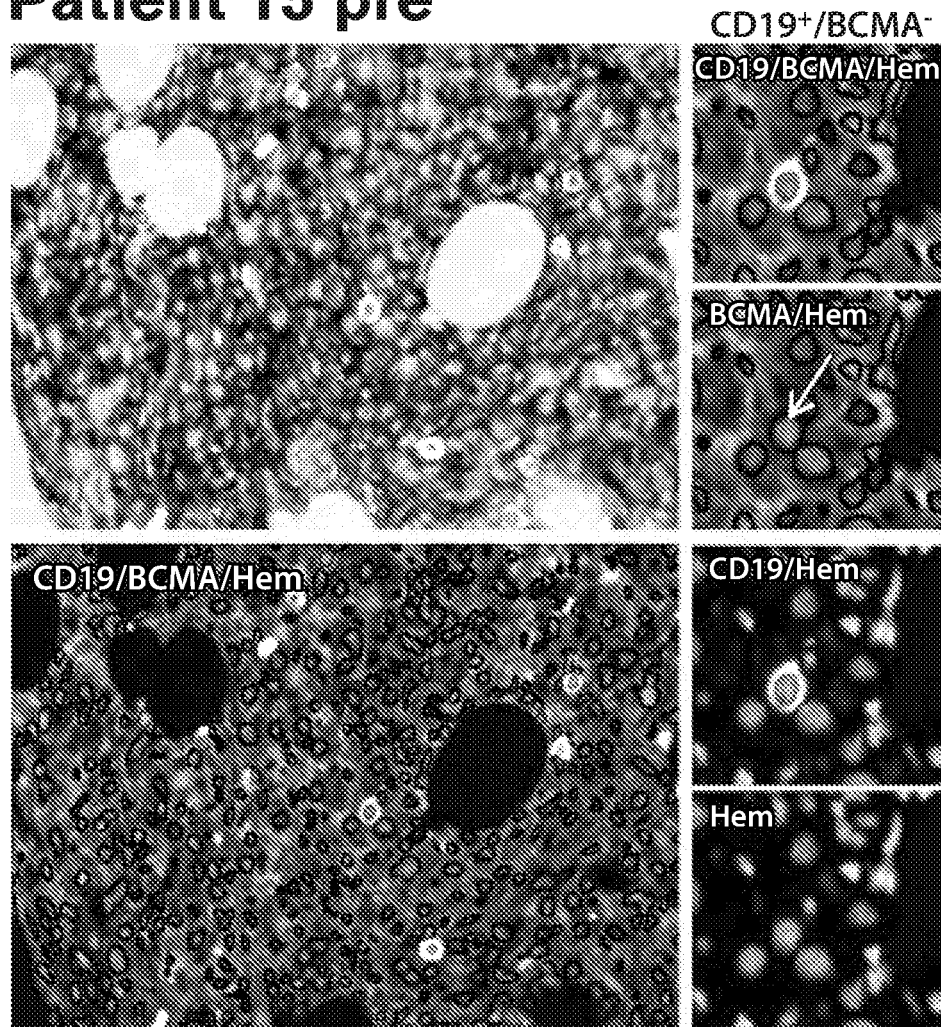


FIG. 11A

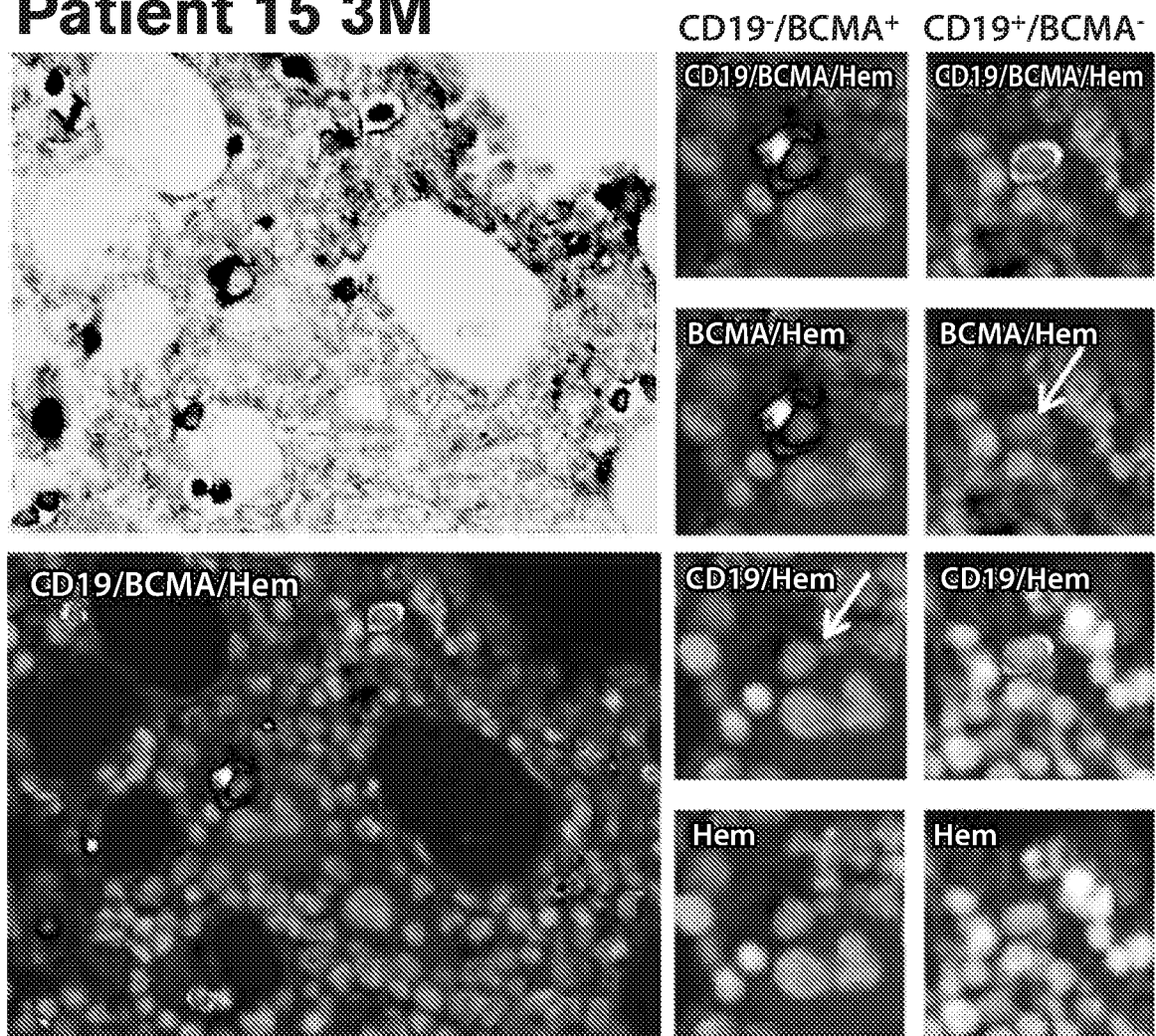
Patient 15 3M

FIG. 11B

Patient 15 pre

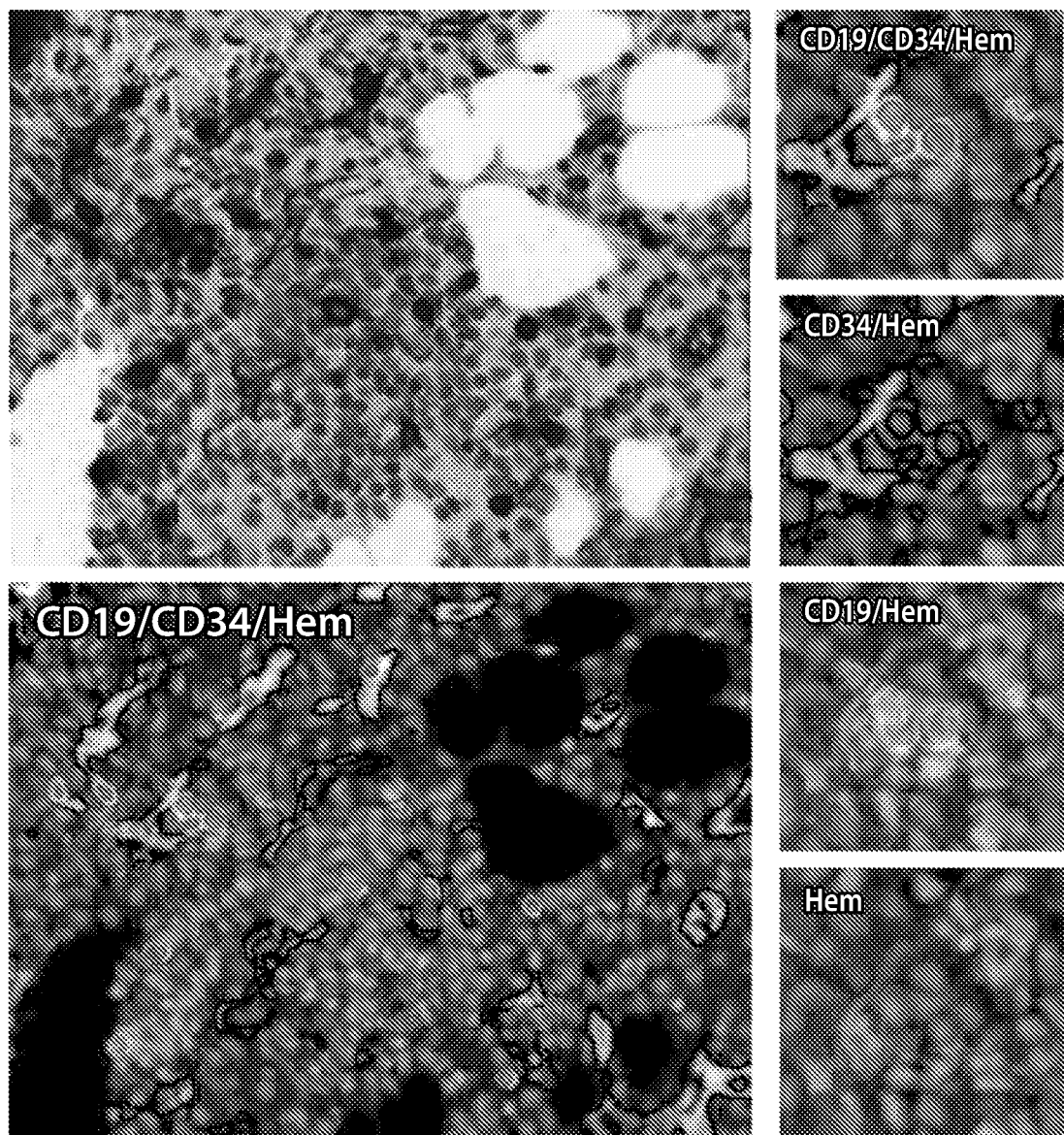


FIG. 12A

Patient 17 pre

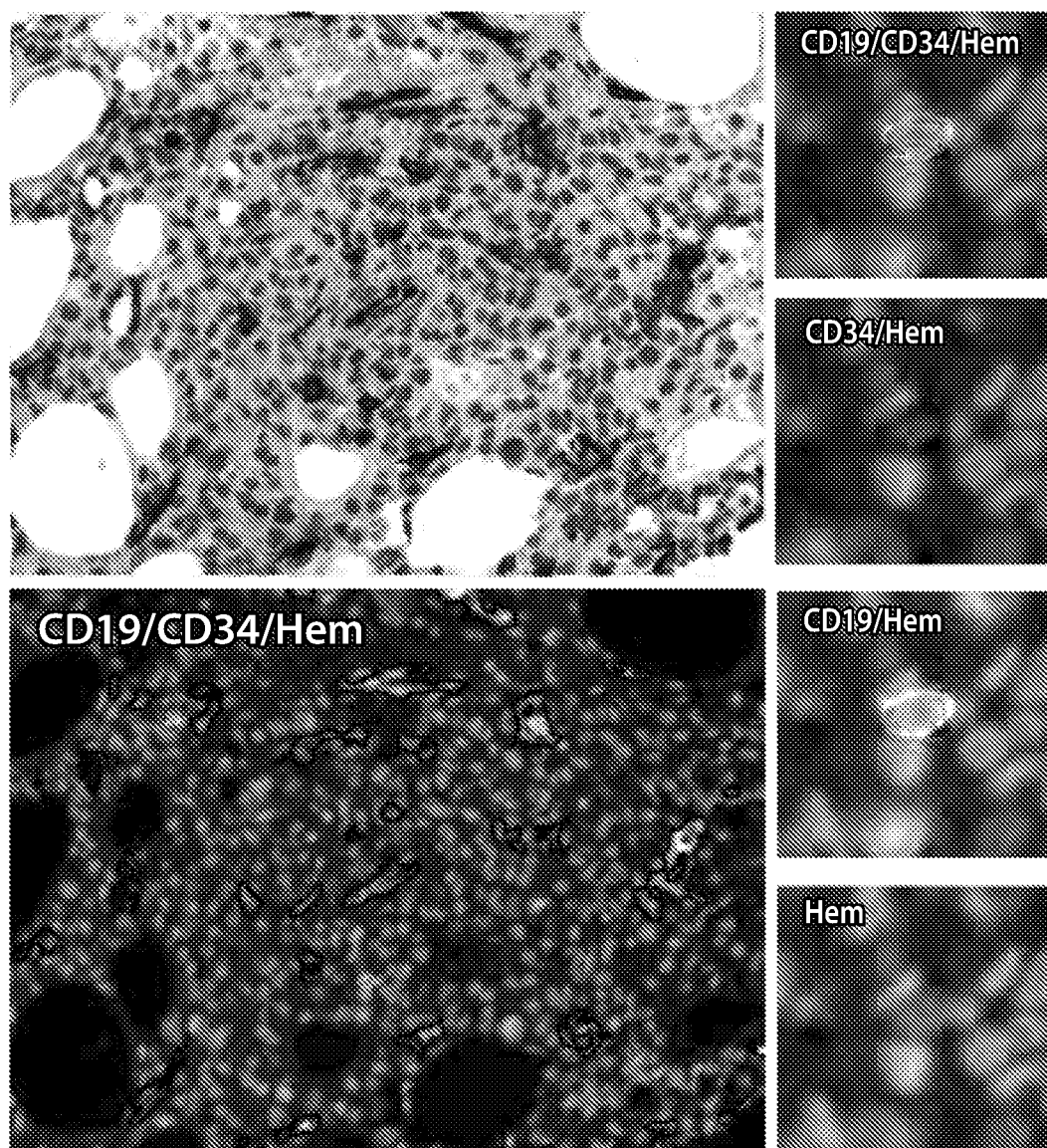


FIG. 12B

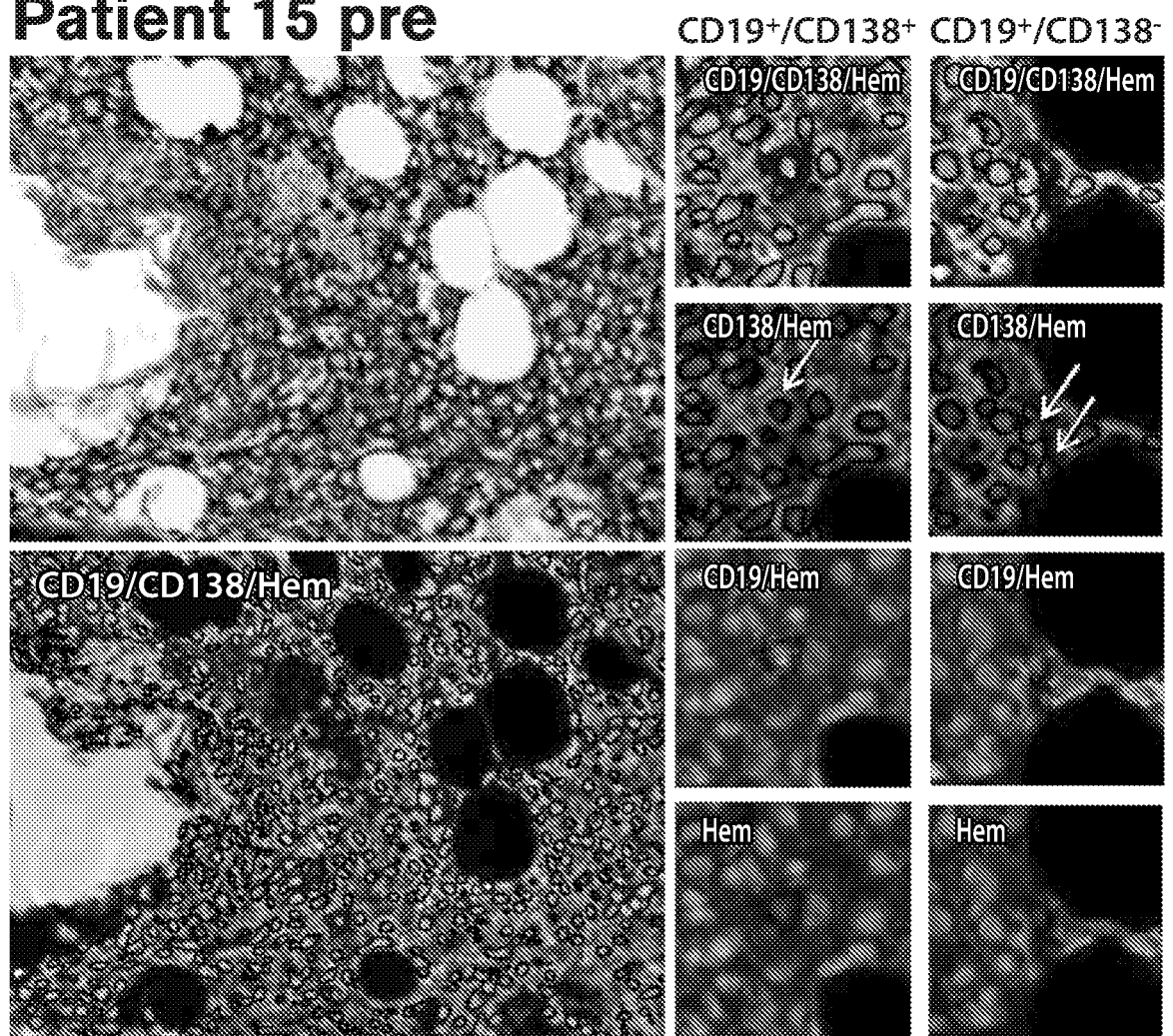
Patient 15 pre

FIG. 13

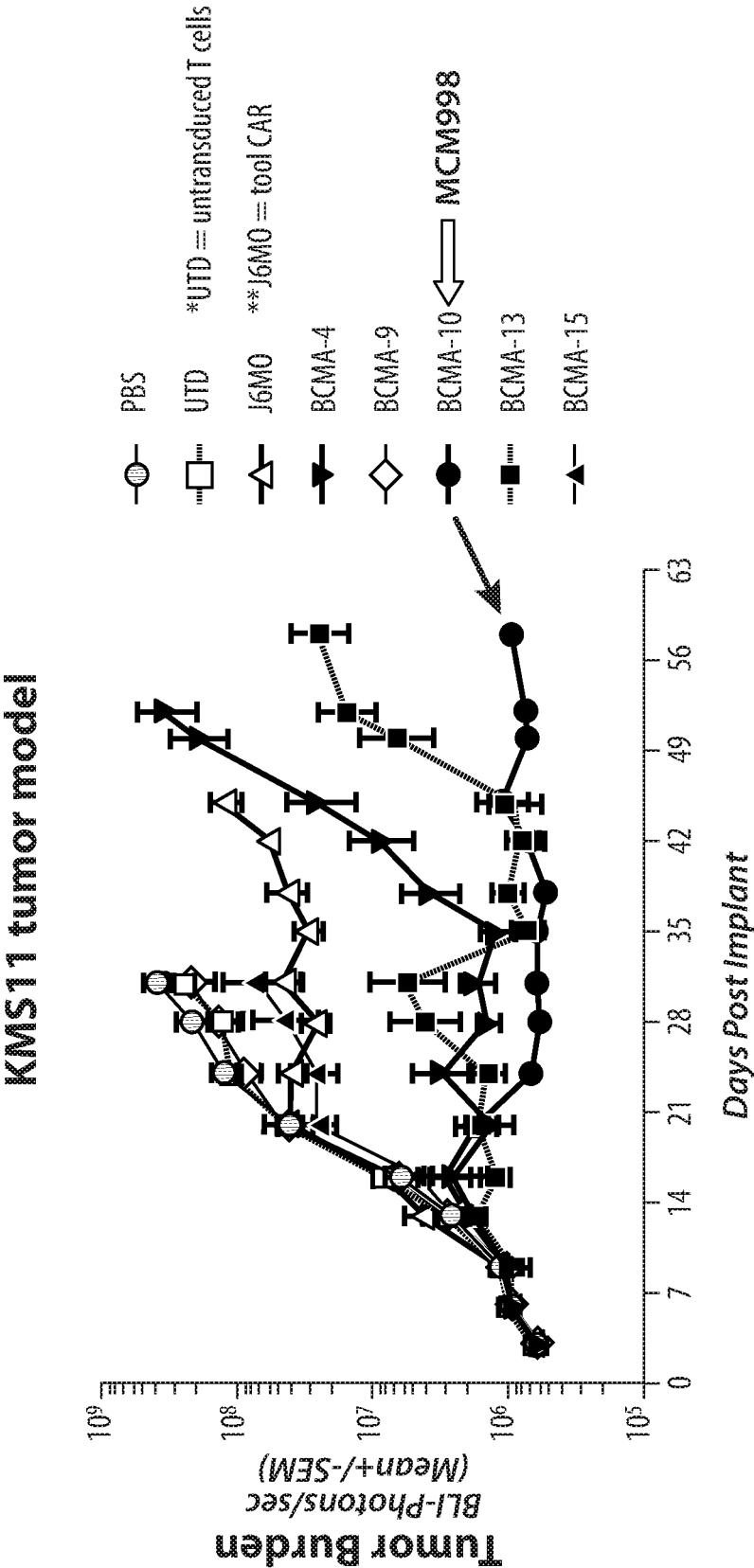


FIG. 14

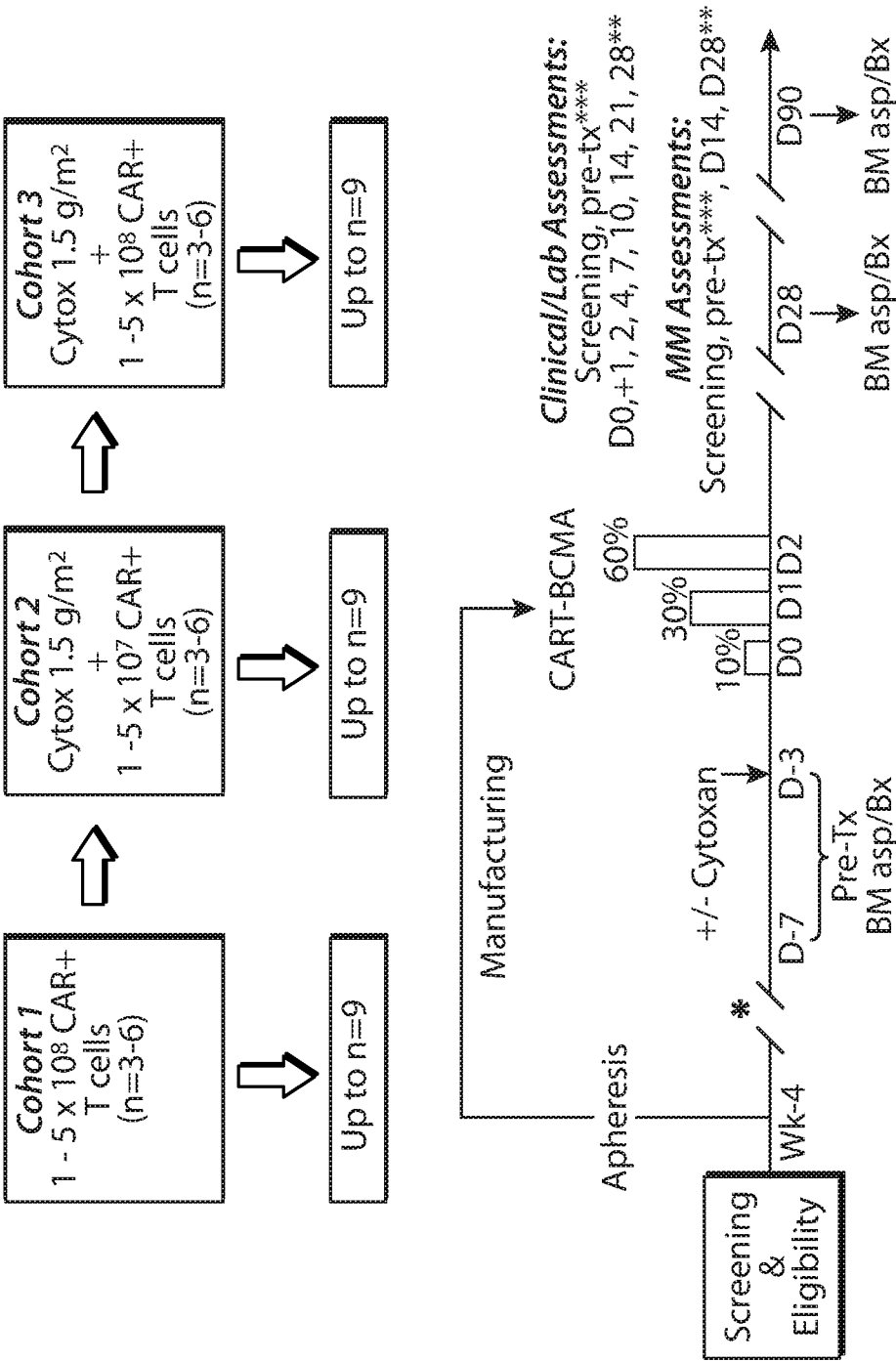


FIG. 15

	All patients (n=14)	Cohort 1 (n=9)	Cohort 2/3 (n=5)
Age	55.5 (44-70)	57 (44-70)	54 (51-64)
Gender	57% M; 43% F	67% male; 33% female	40% M; 60% F
Years from diagnosis	4.9 (1.8-9.6)	4.9 (1.8-9.6)	4.9 (2.9-9.4)
Isotype	IgG (42%), IgA (42%) LC (14%)	IgG (33%), IgA (44%) LC (22%)	IgG (60%), IgA (40%)
Prior lines of therapy	7 (4-11)	9 (4-11)	7 (5-10)
Lenalidomide	100% (ref 86%)	100% (refractory: 78%)	100% (ref 80%)
Bortezomib	100% (ref 86%)	100% (refr: 89%)	100% (ref 80%)
Pomalidomide	100% (ref 93%)	100% (refr: 89%)	100% (ref 100%)
Carfilzomib	93%* (ref 92%)	100%* (refr: 89%)	80%* (ref 80%)
Autologous SCT	86%	78%	100%
Cyclophosphamide	100% (ref 71%)	100% (refr: 67%)	100% (ref 80%)
Daratumumab	57% (ref 57%)	44% (refr: 44%)	80% (ref 80%)
Anti-PD1	29% (ref 29%)	33% (refr: 33%)	20% (ref 20%)
High-risk genetics -17P or TP53 mutation	100% 64%	100% 67%	100% 60%
Extramedullary dz	35%	33%	40%
% BM plasma cells	65% (0-95)	80 (15-95)	45% (0-95%)

FIG. 16A

Median peripheral T cell counts (cells/ μ L)

	Cohort 1 (n=9)	Cohort 2/3 (n=5)
Pre-pheresis	CD3: 325 (171 - 1134) CD4: 182 (42 - 519) CD8: 149 (80 - 600)	CD3: 633 (295 - 1231) CD4: 371 (129 - 518) CD8: 395 (168 - 706)
Pre-Cytoxan		CD3: 423 (237 - 646) CD4: 158 (95 - 296) CD8: 277 (140 - 343)
Day 0	CD3: 258 (117 - 1354) CD4: 169 (36 - 497) CD8: 126 (66 - 832)	CD3: 138 (79 - 261) CD4: 62 (42 - 131) CD8: 84 (37 - 161)

FIG. 16B

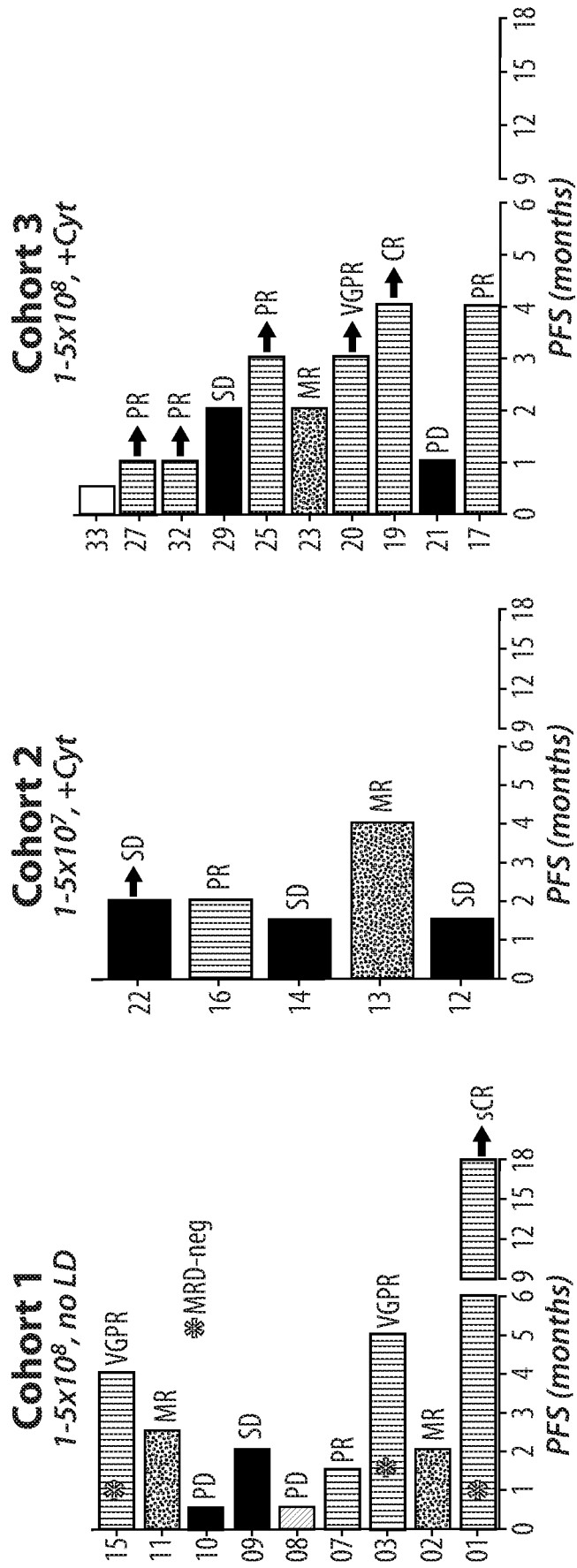


FIG. 17A

FIG. 17B

FIG. 17C

FIG. 18A-1

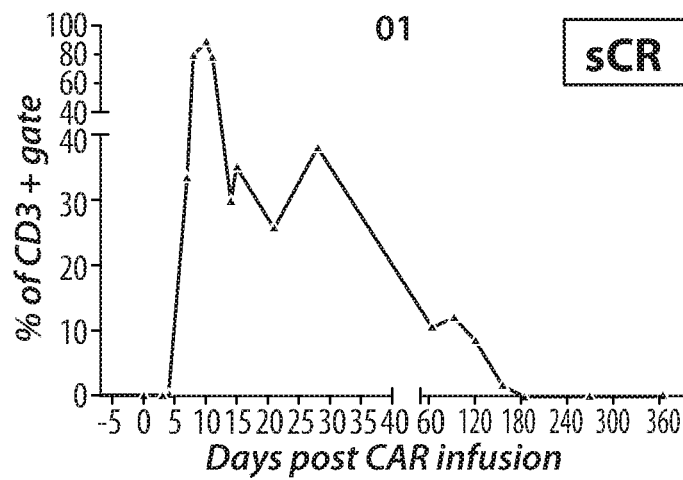


FIG. 18A-2

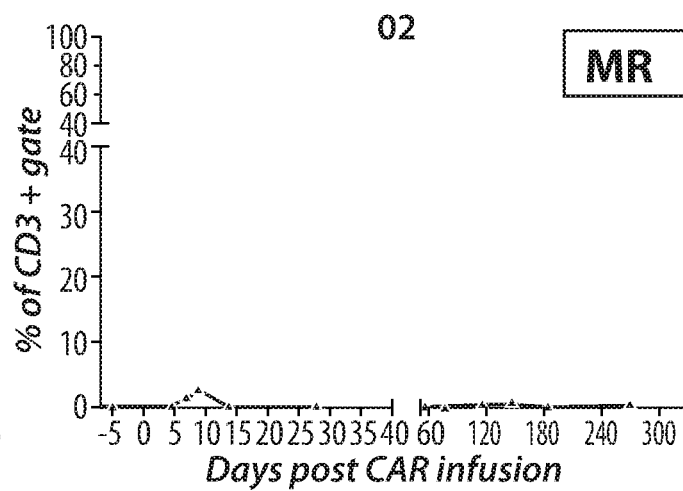


FIG. 18A-3

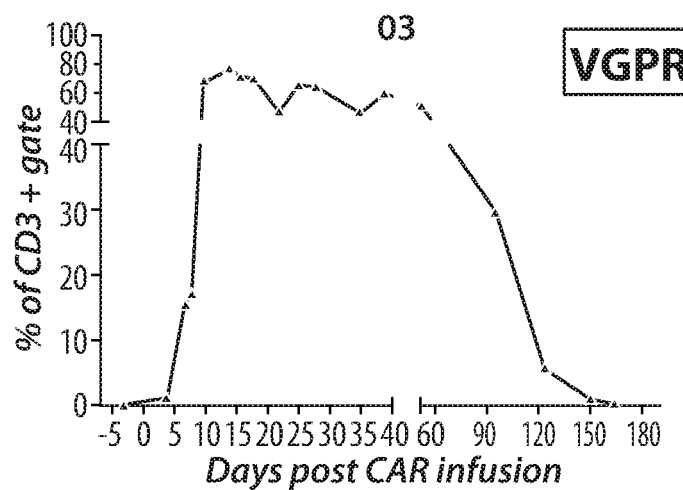


FIG. 18A-4

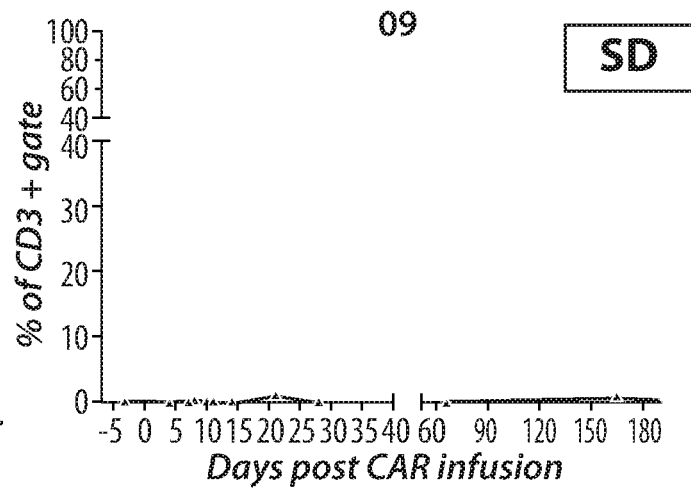


FIG. 18A-5

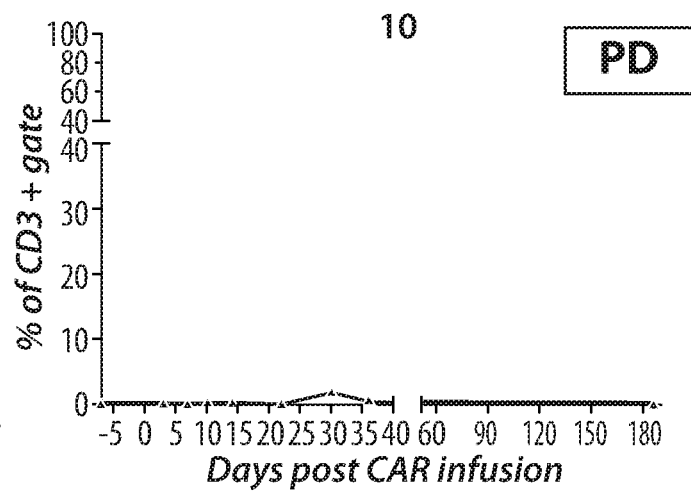
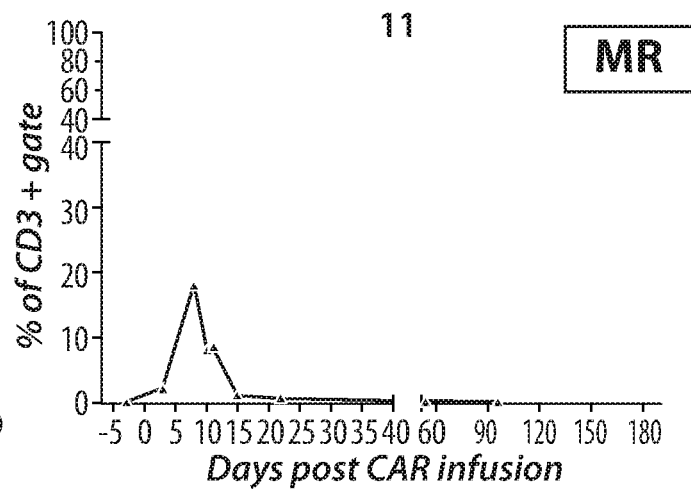
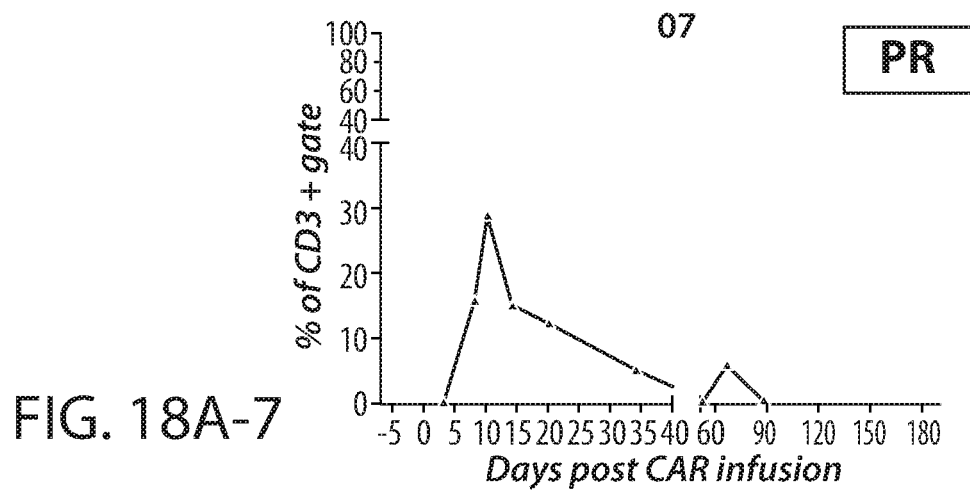
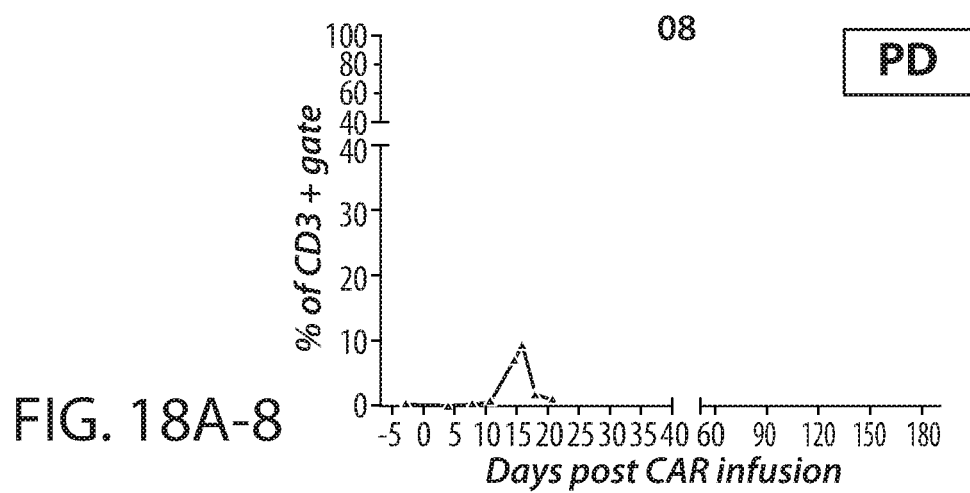
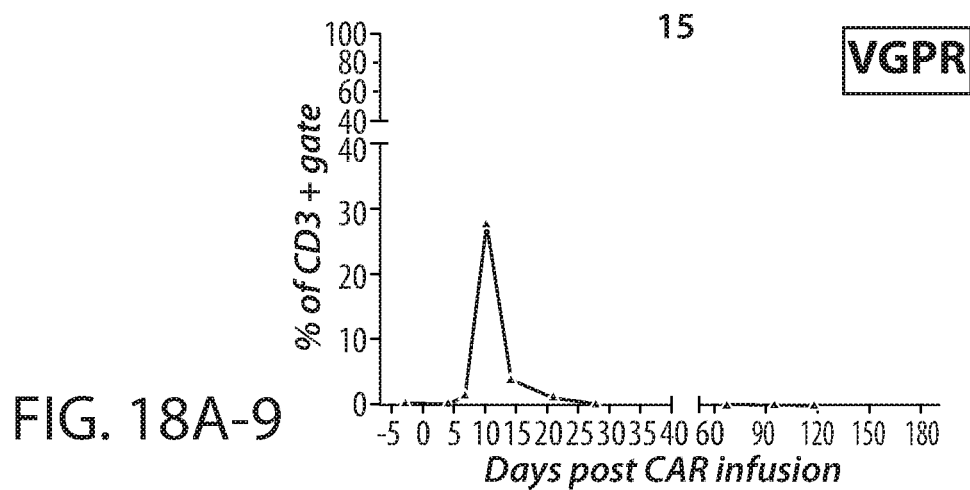
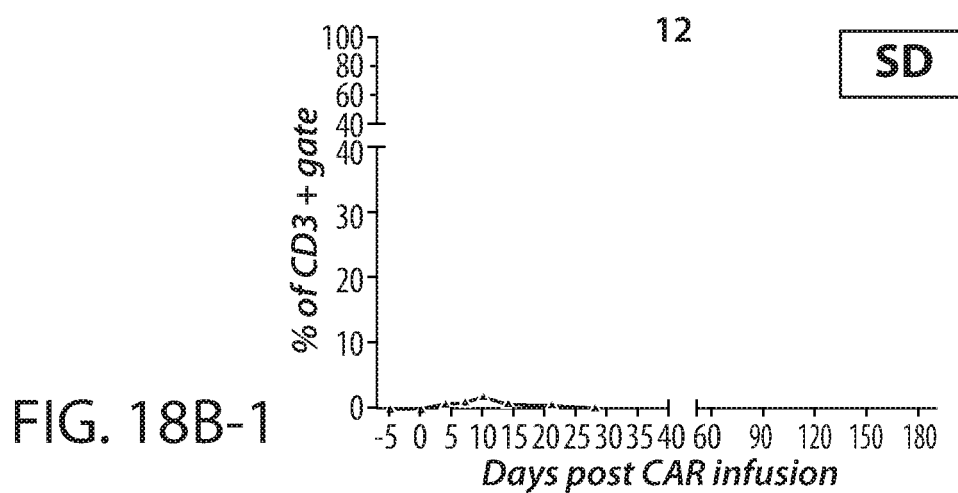
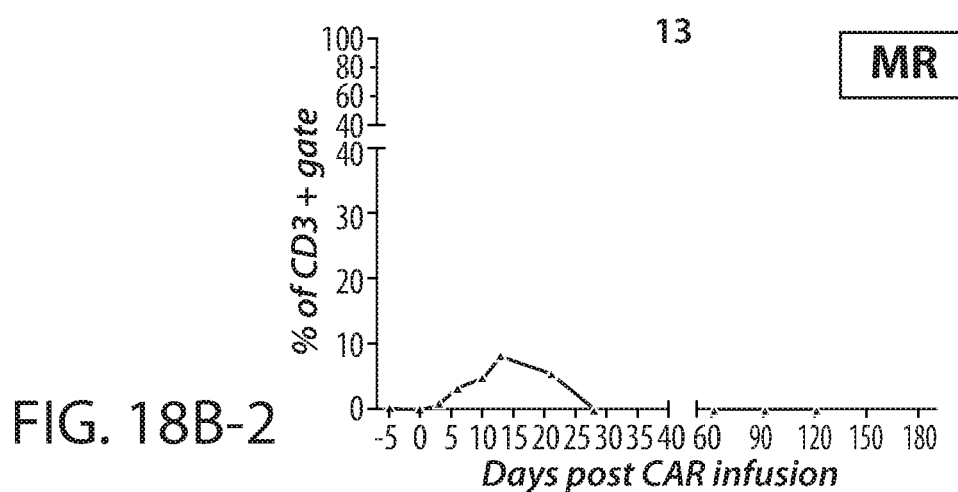
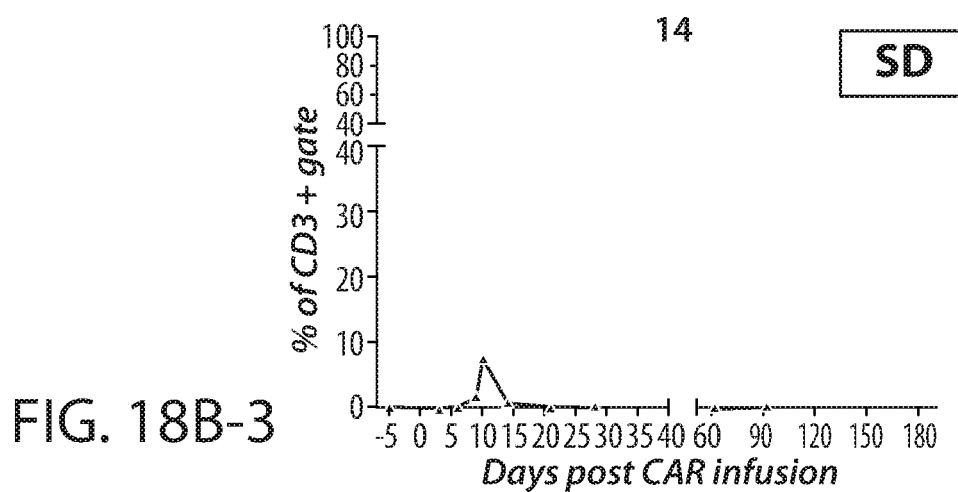


FIG. 18A-6







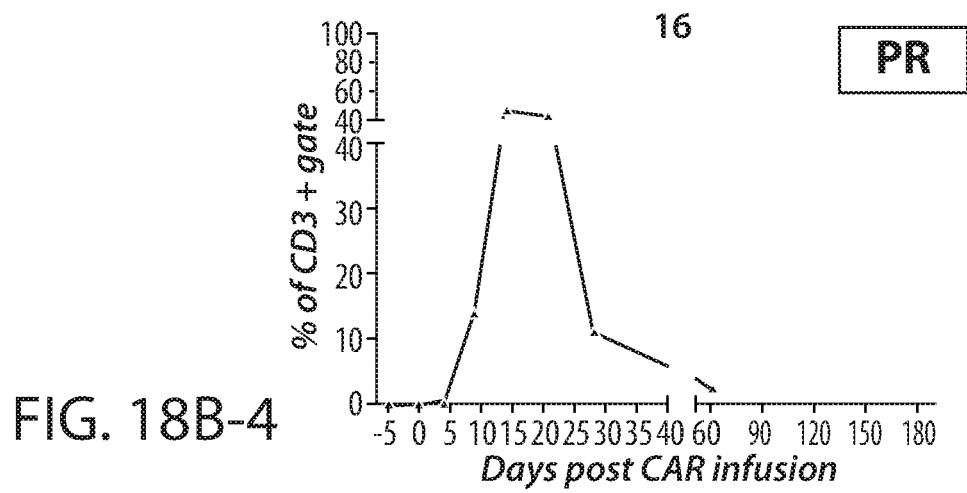
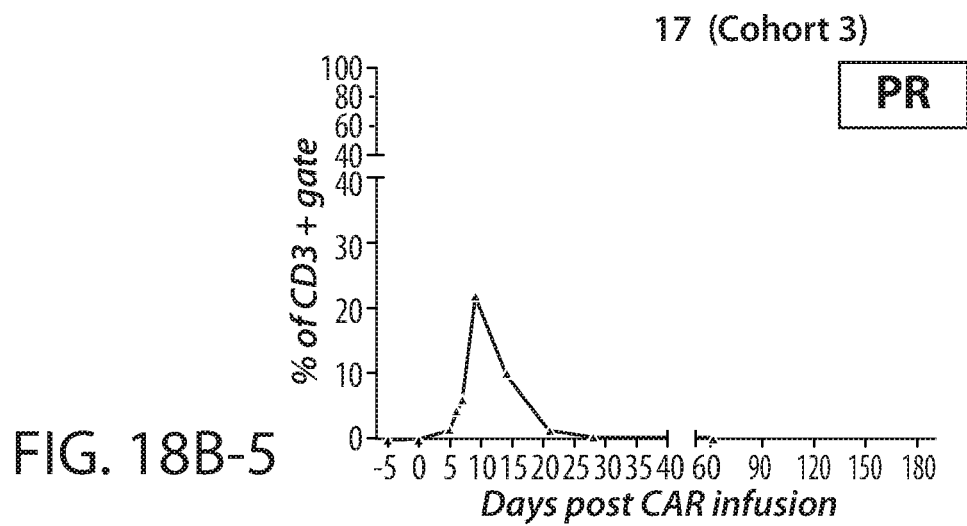


FIG. 19A-1

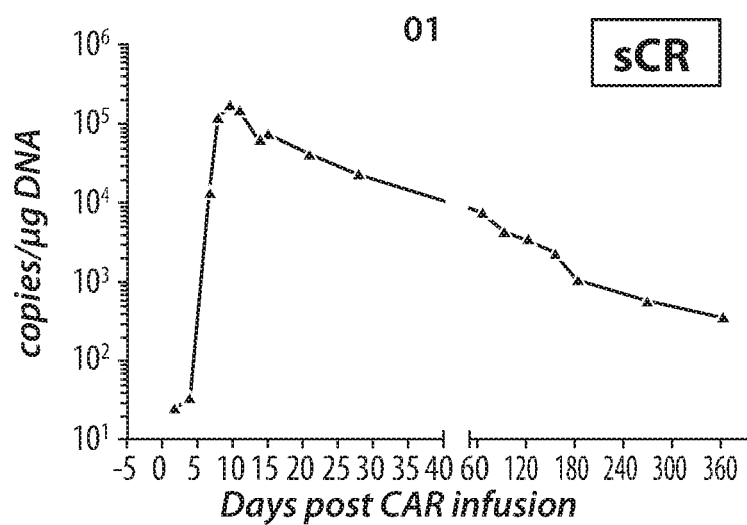


FIG. 19A-2

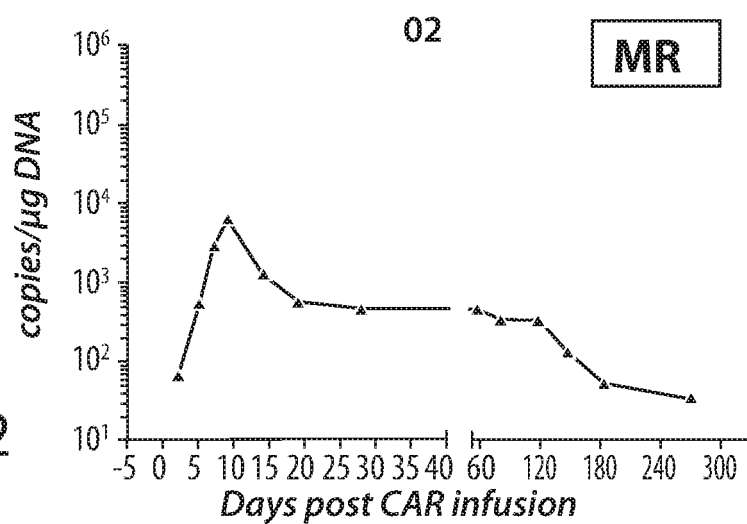


FIG. 19A-3

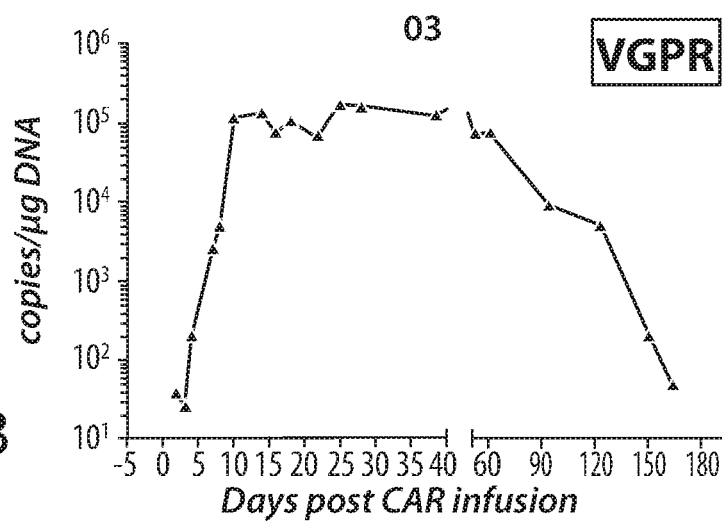


FIG. 19A-4

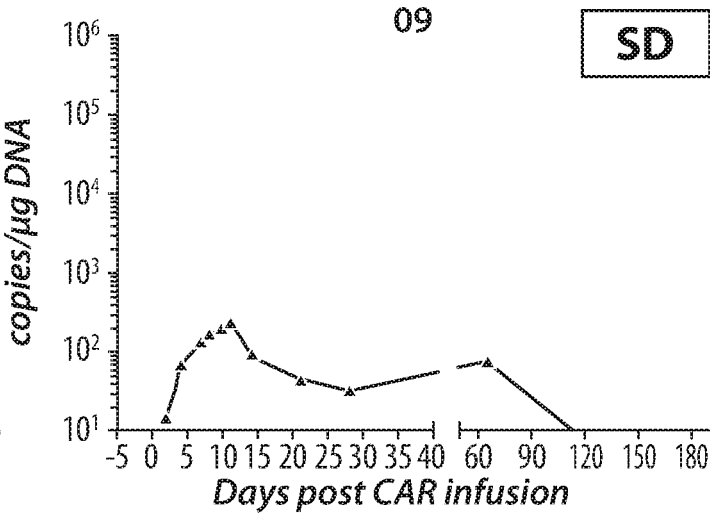


FIG. 19A-5

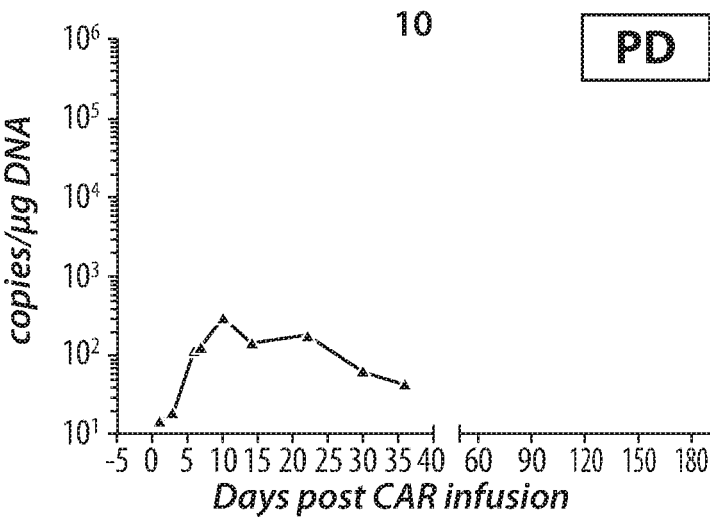


FIG. 19A-6

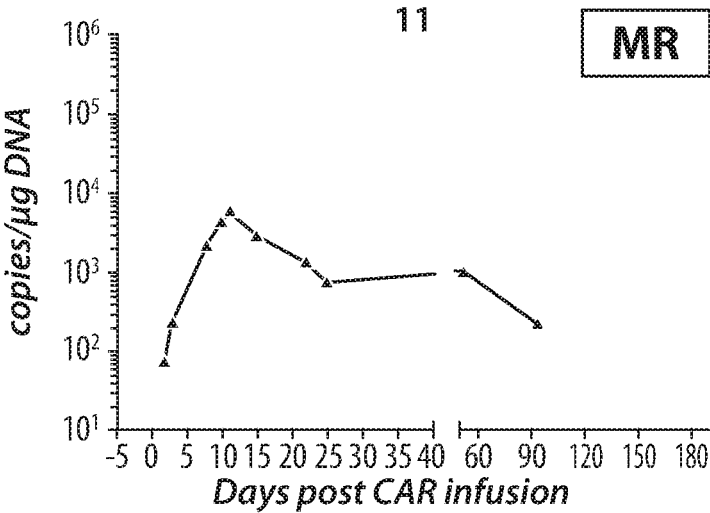


FIG. 19A-7

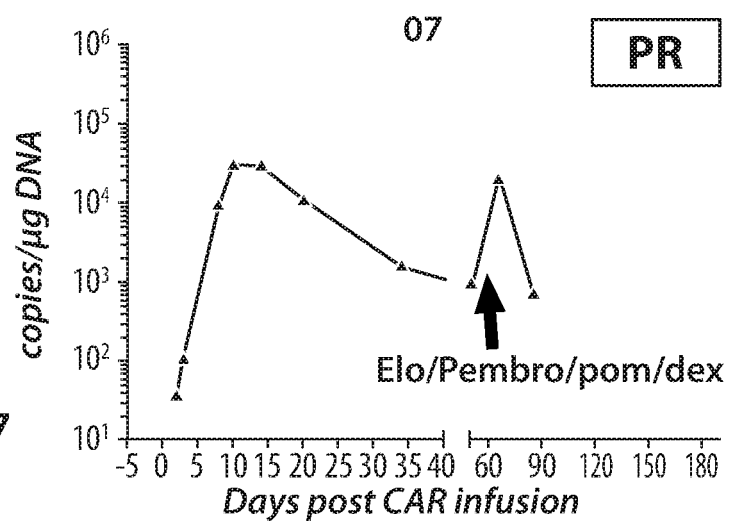


FIG. 19A-8

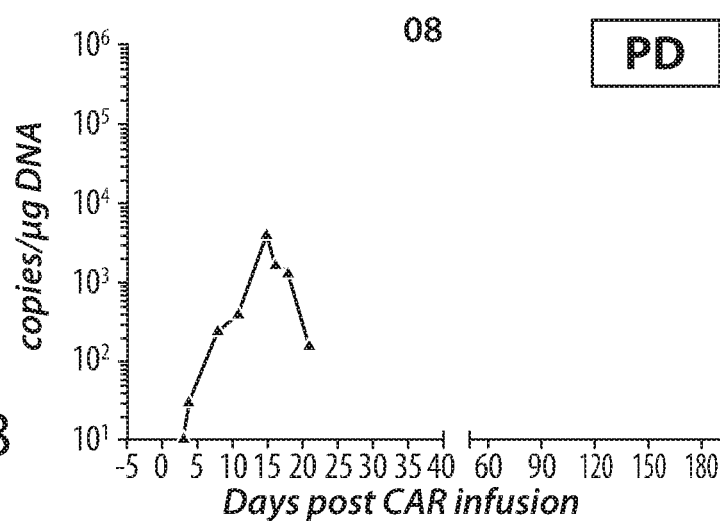
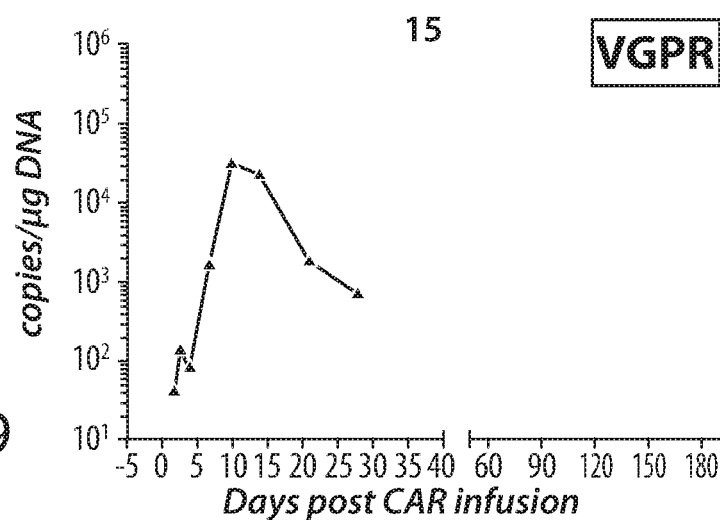


FIG. 19A-9



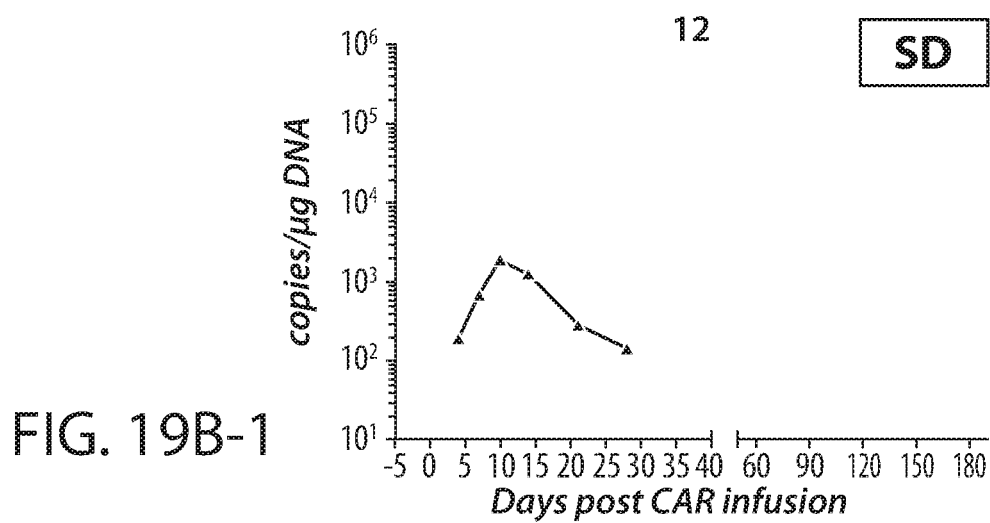
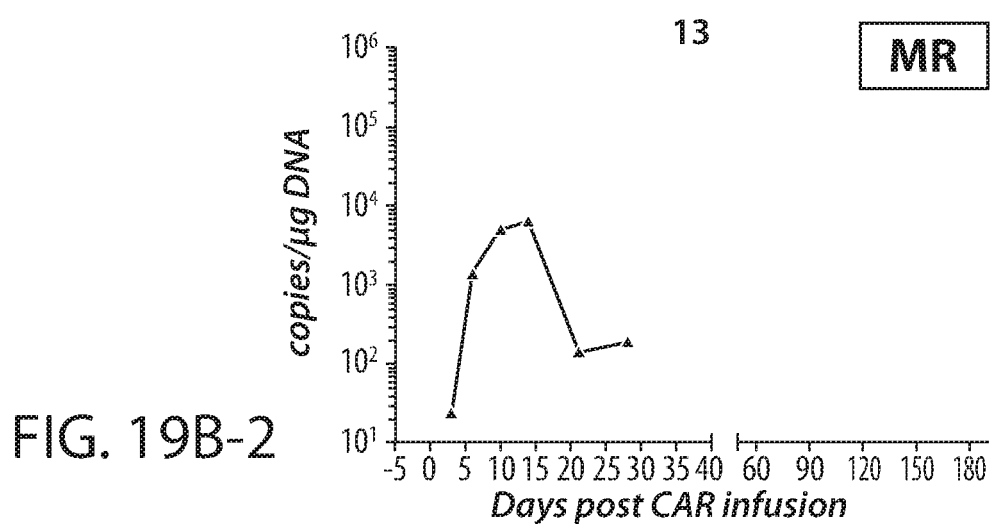
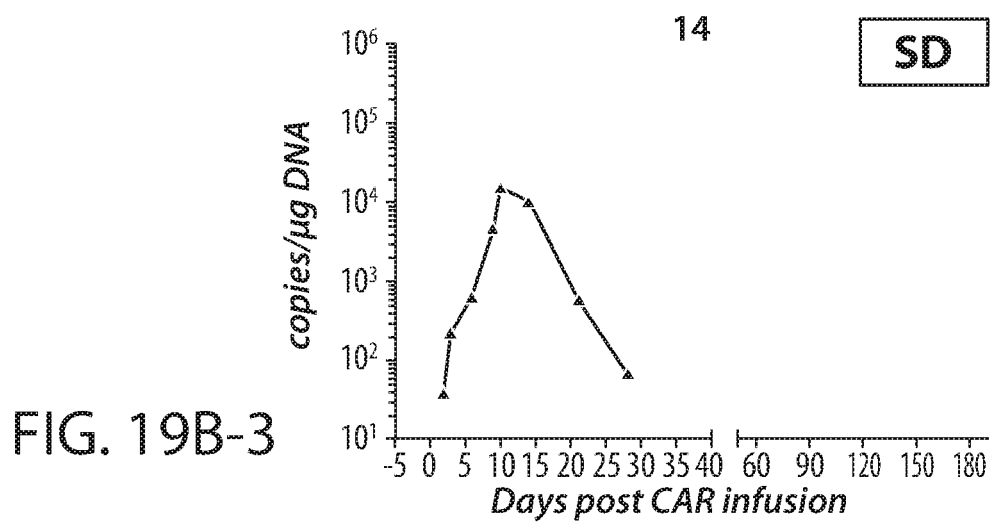


FIG. 19B-4

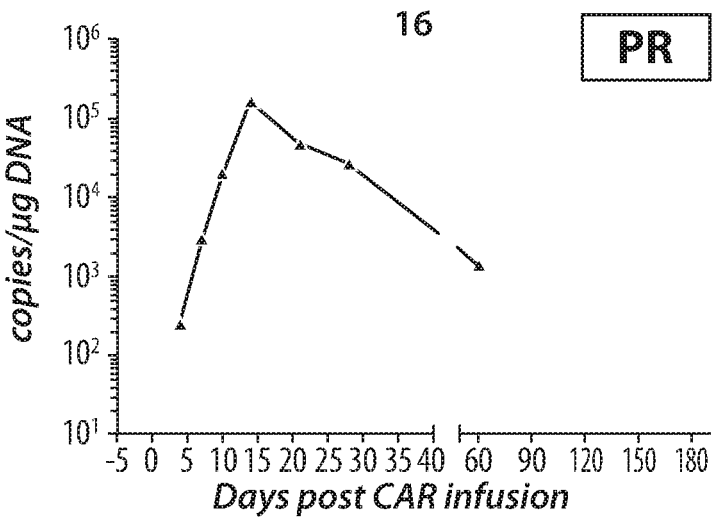
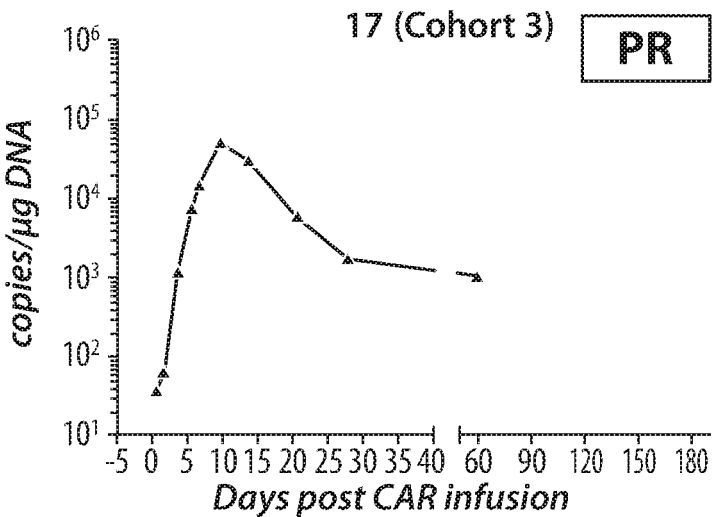


FIG. 19B-5



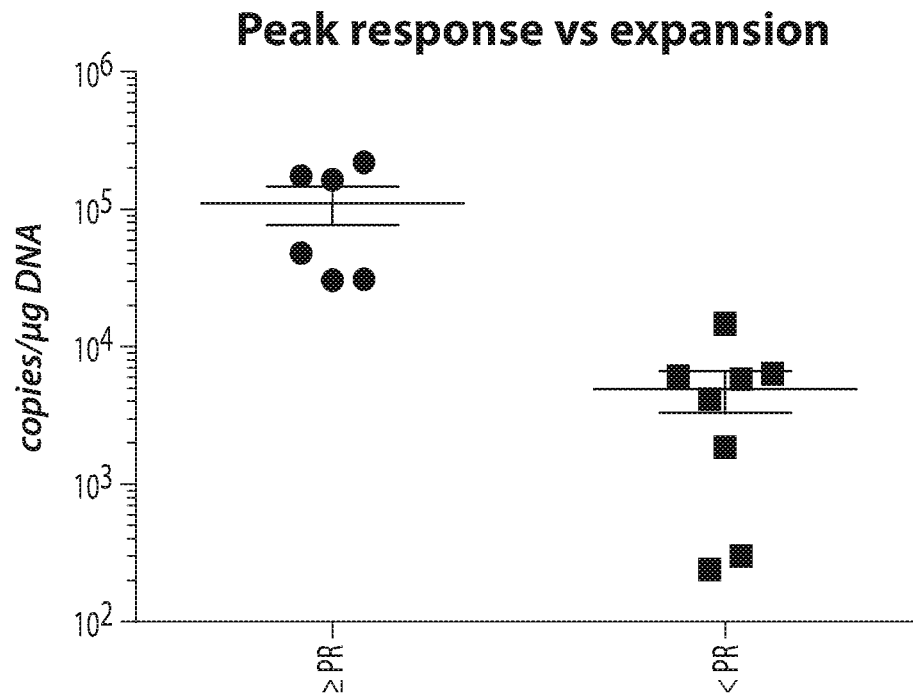


FIG. 20A

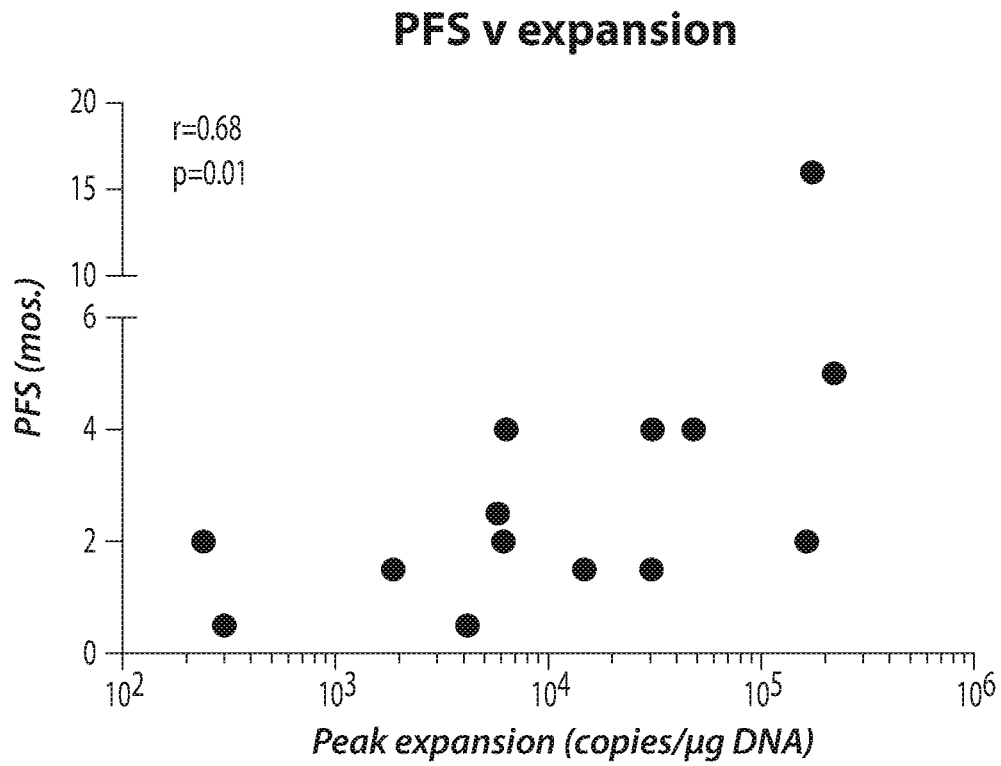


FIG. 20B

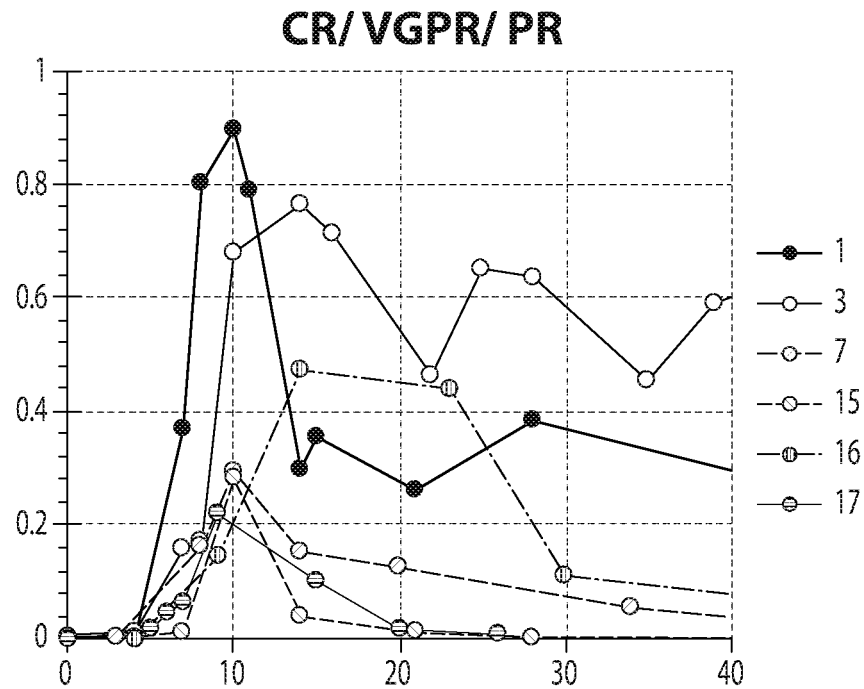


FIG. 21A

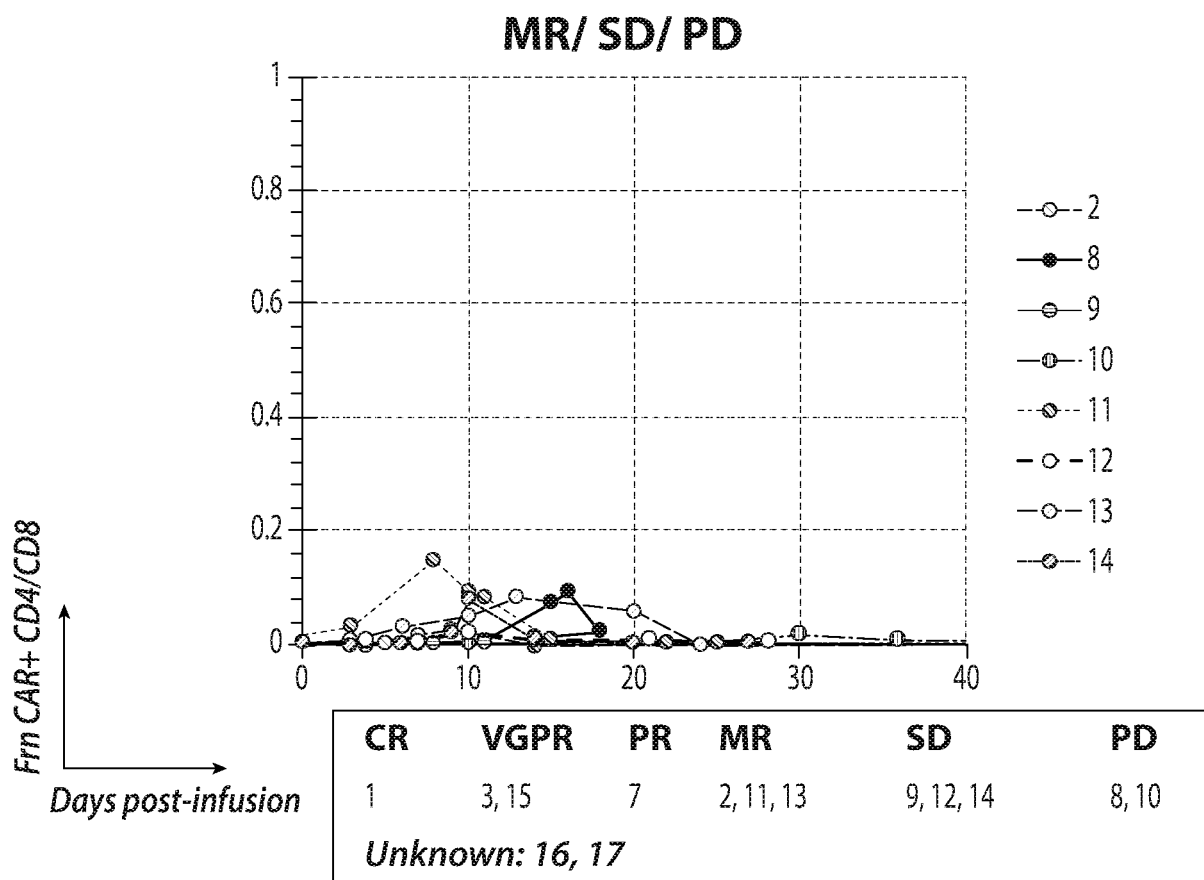


FIG. 21B

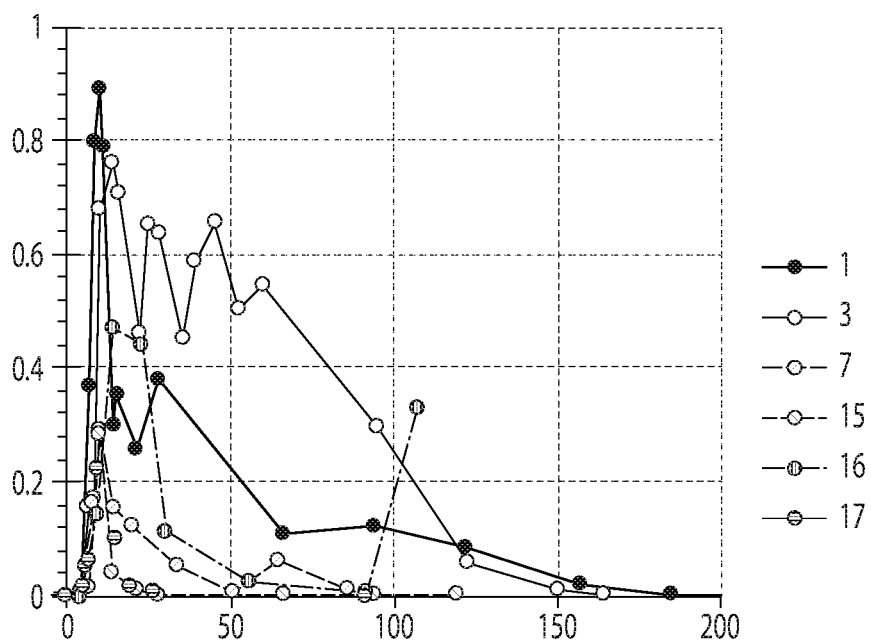
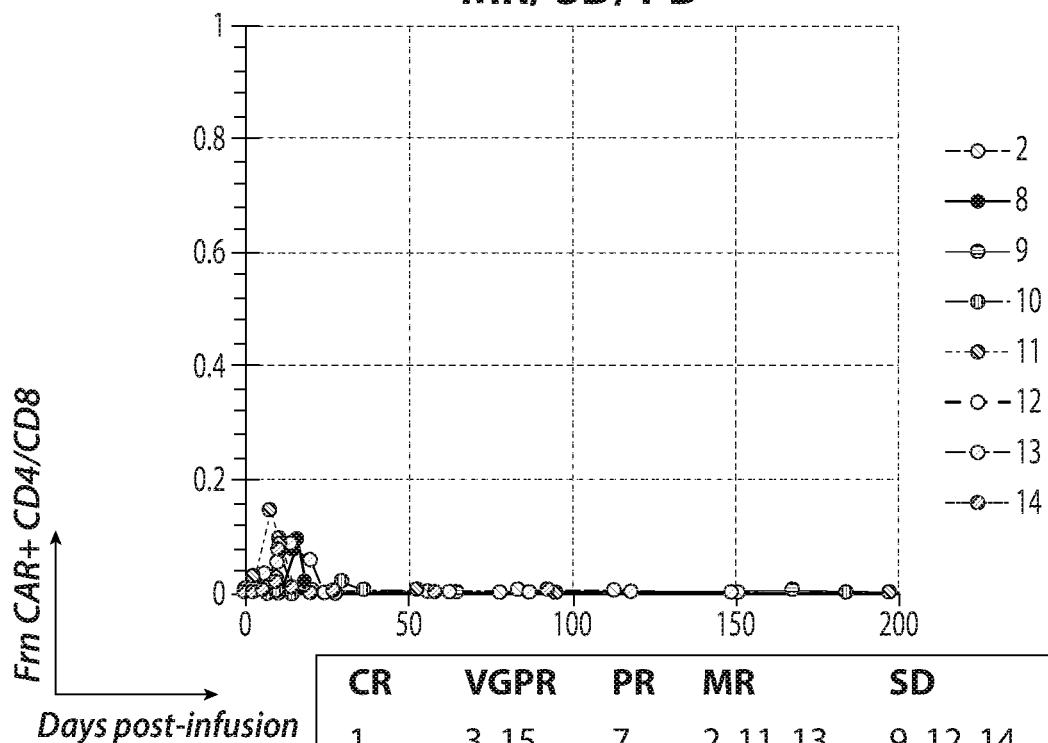
CR/ VGPR/ PR

FIG. 21C

MR/ SD/ PD

Frn CAR+ CD4/CD8

Days post-infusion

CR	VGPR	PR	MR	SD	PD
1	3, 15	7	2, 11, 13	9, 12, 14	8, 10
Unknown: 16, 17					

FIG. 21D

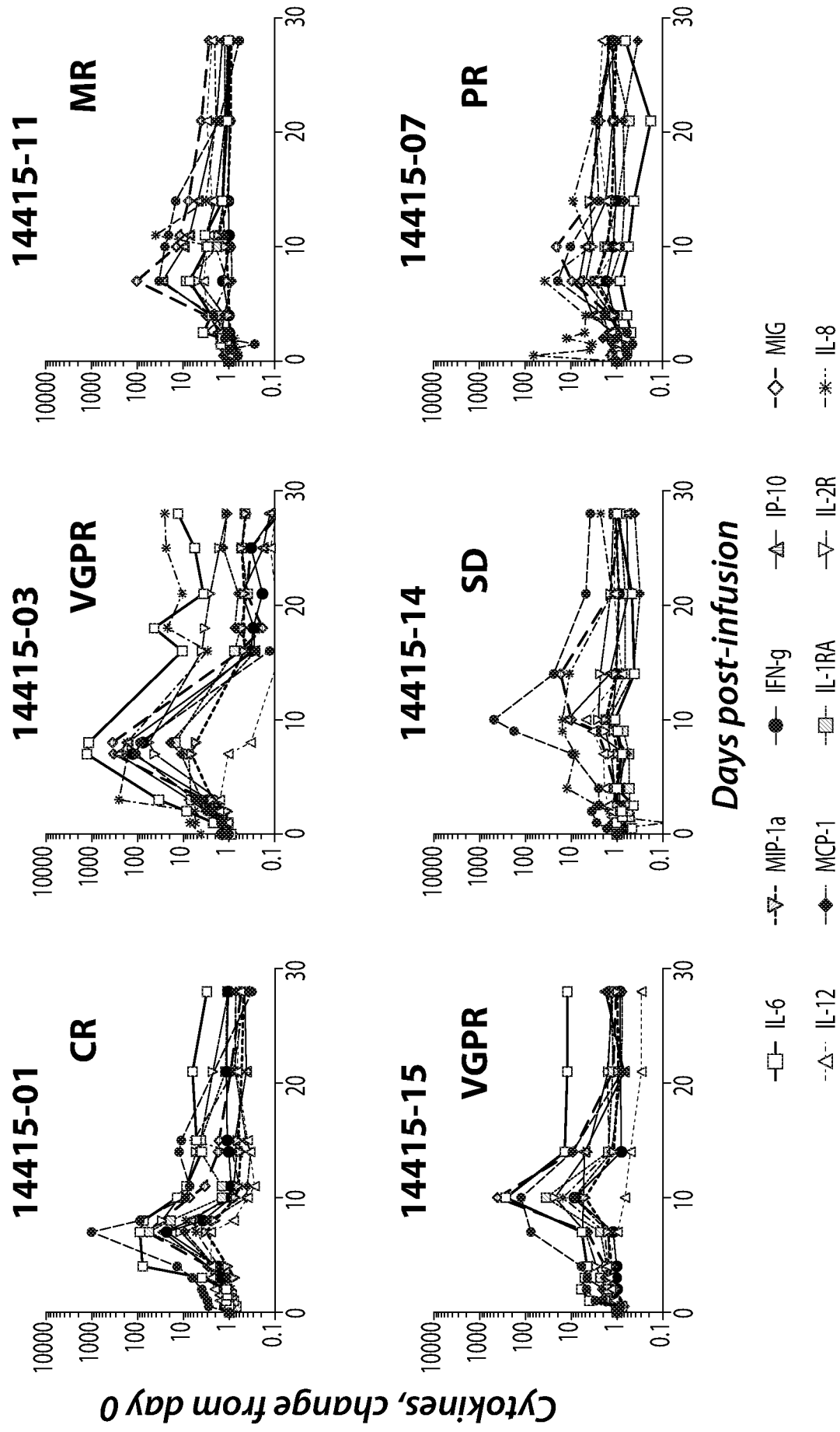


Fig. 22-1

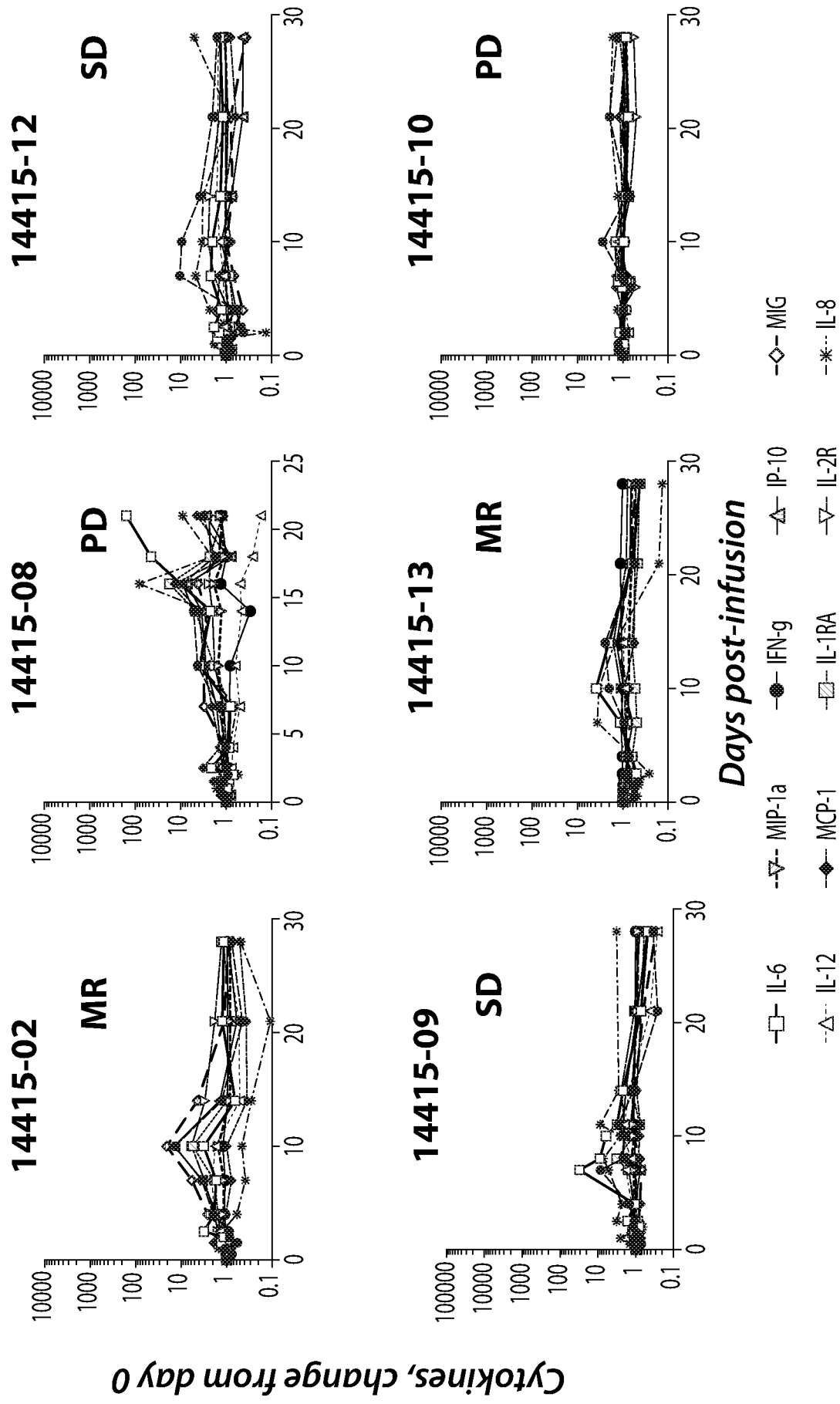
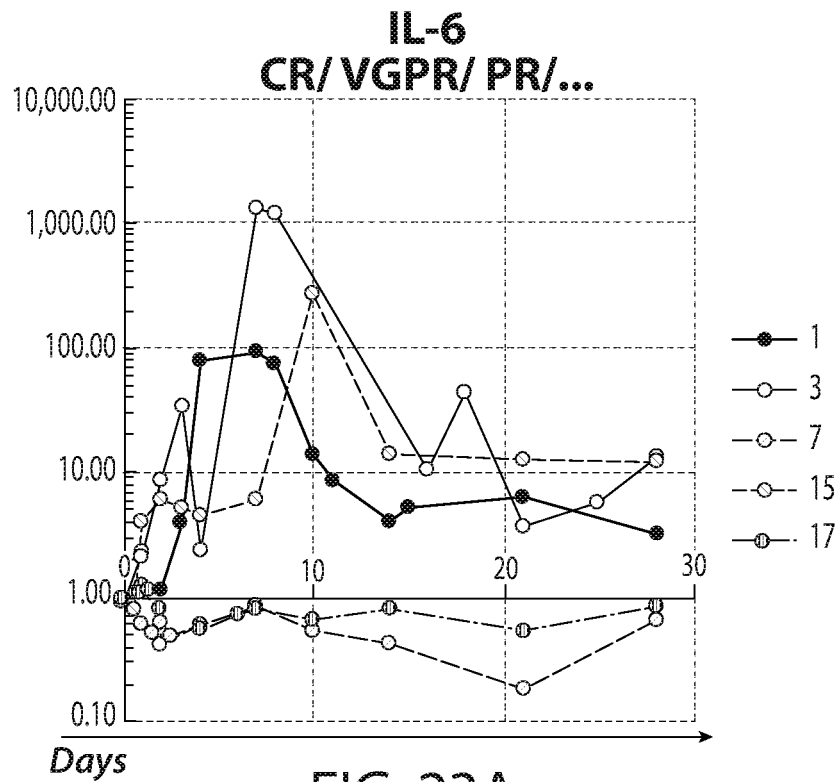
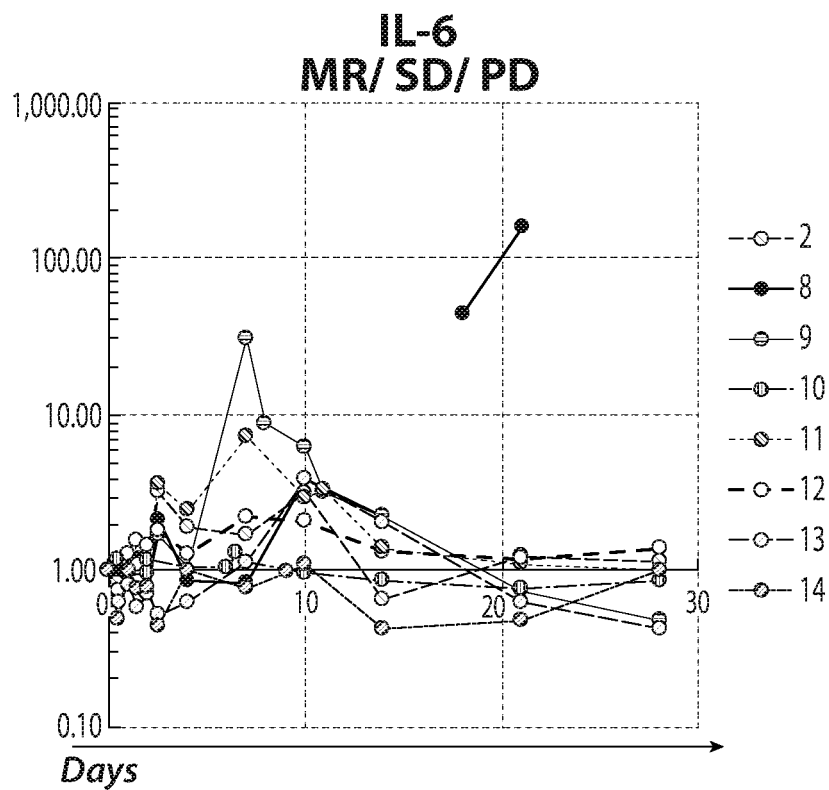
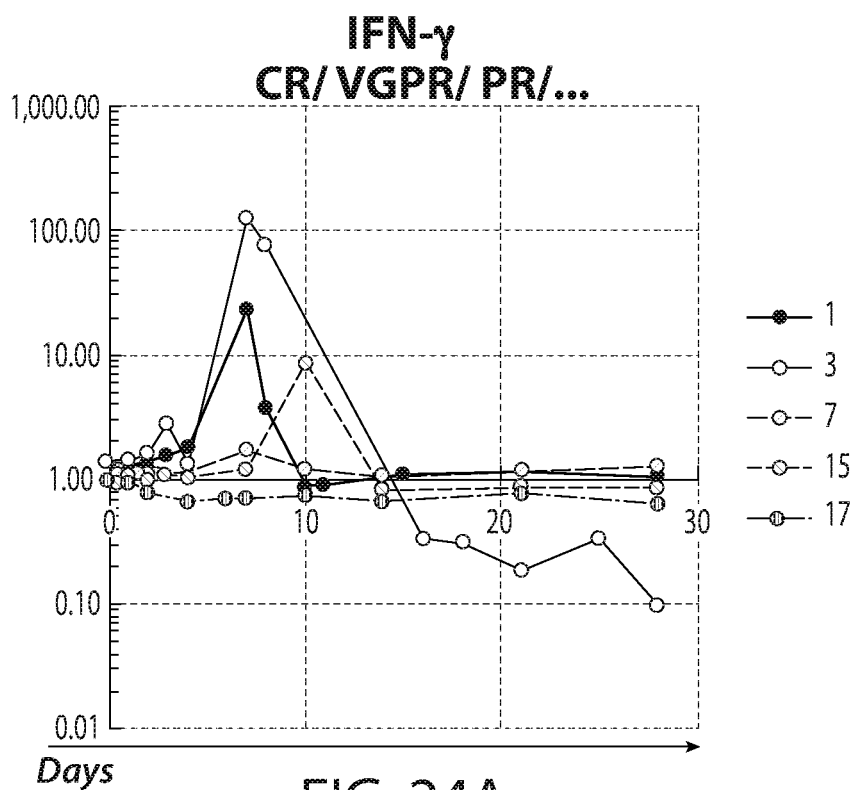
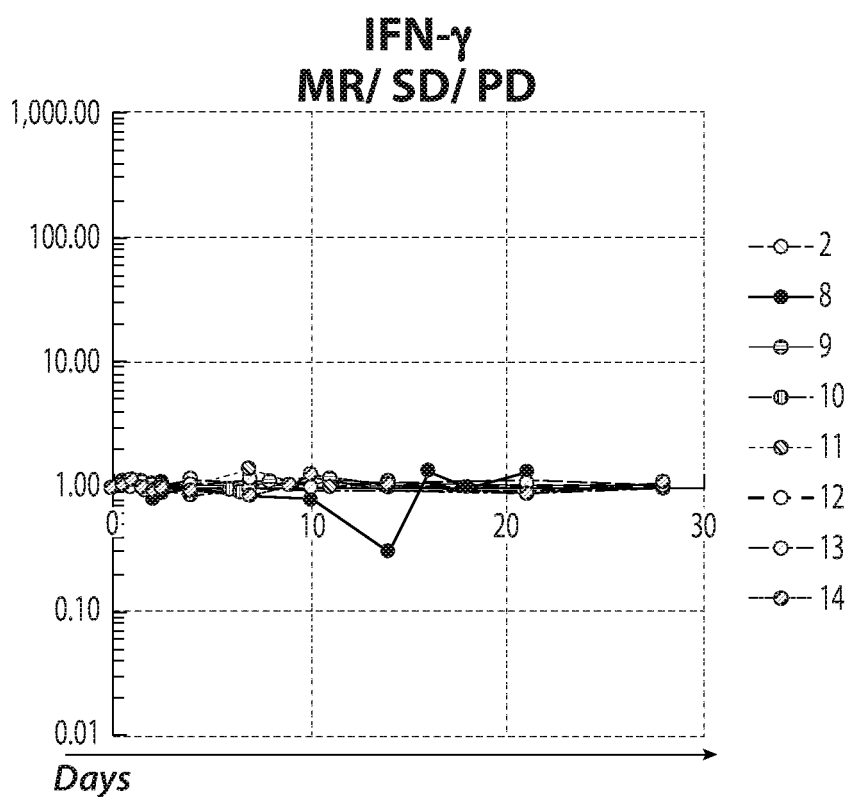


Fig. 22-2



CR	VGPR	PR	MR	SD	PD
1	3, 15	7	2, 11, 13	9, 12, 14	8, 10
Unknown: 16, 17					

FIG. 23B



CR	VGPR	PR	MR	SD	PD
1	3, 15	7	2, 11, 13	9, 12, 14	8, 10
Unknown: 16, 17					

FIG. 24B

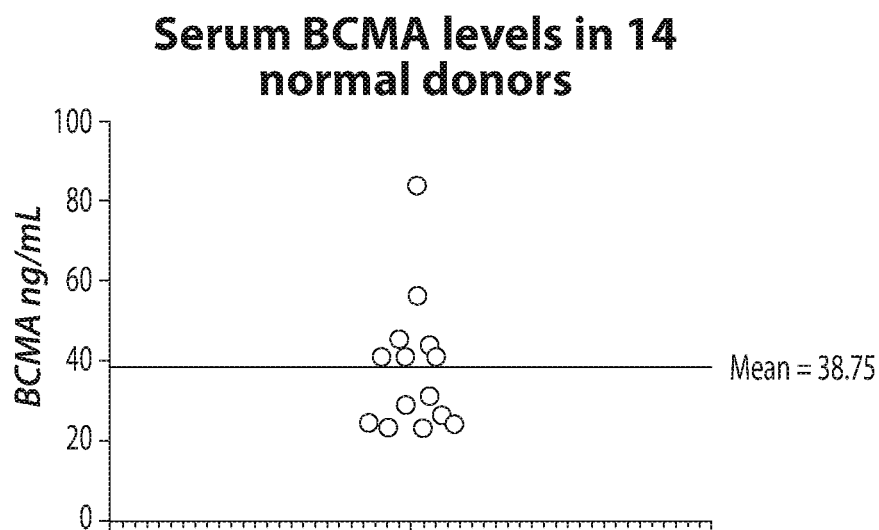


FIG. 25A

Serum BCMA levels in 12 myeloma patients (baseline)

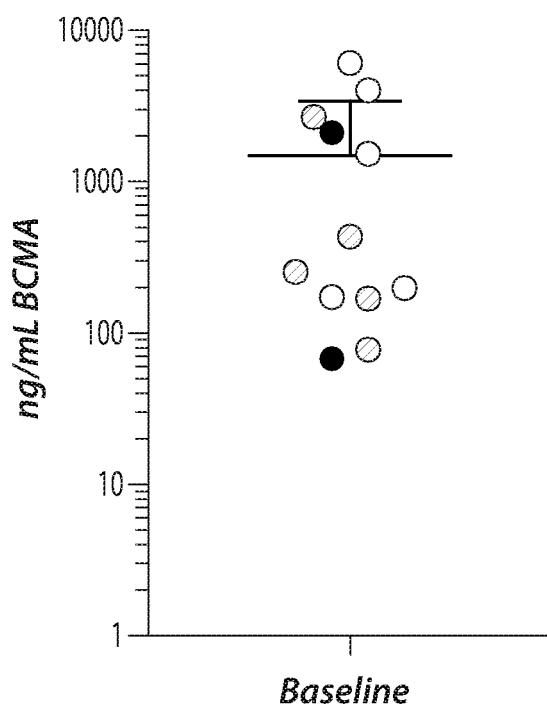
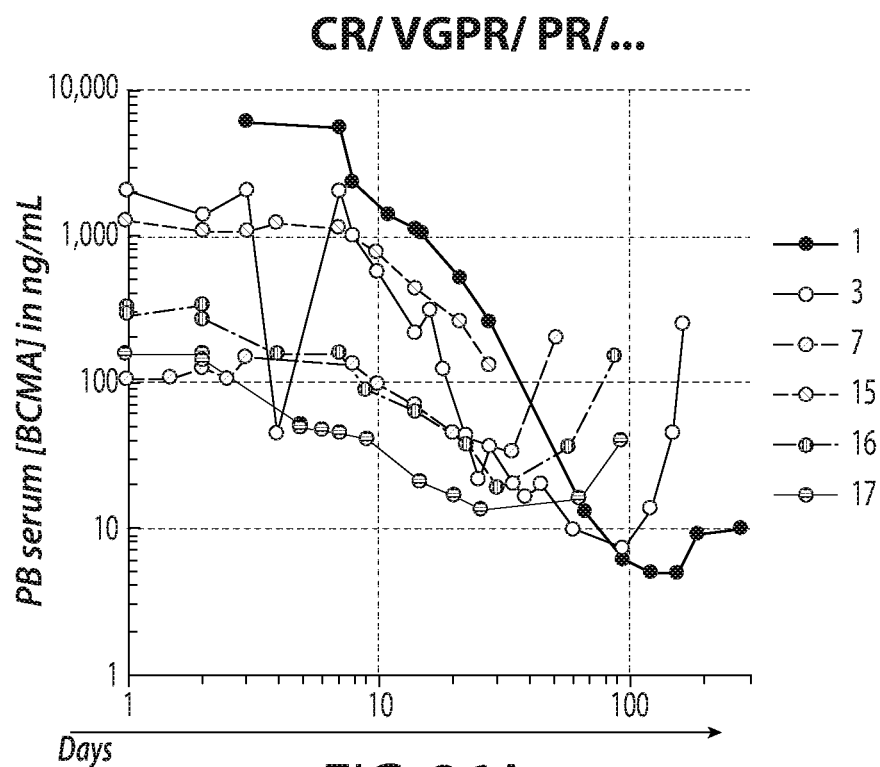
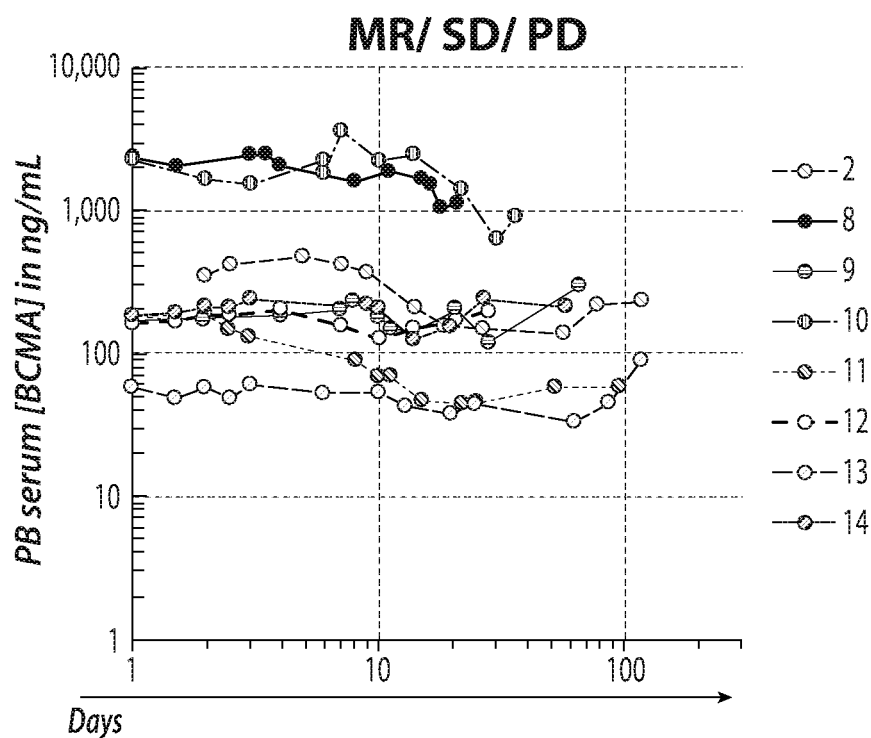


FIG. 25B



CR	VGPR	PR	MR	SD	PD
1	3, 15	7	2, 11, 13	9, 12, 14	8, 10
Unknown: 16, 17					

FIG. 26B

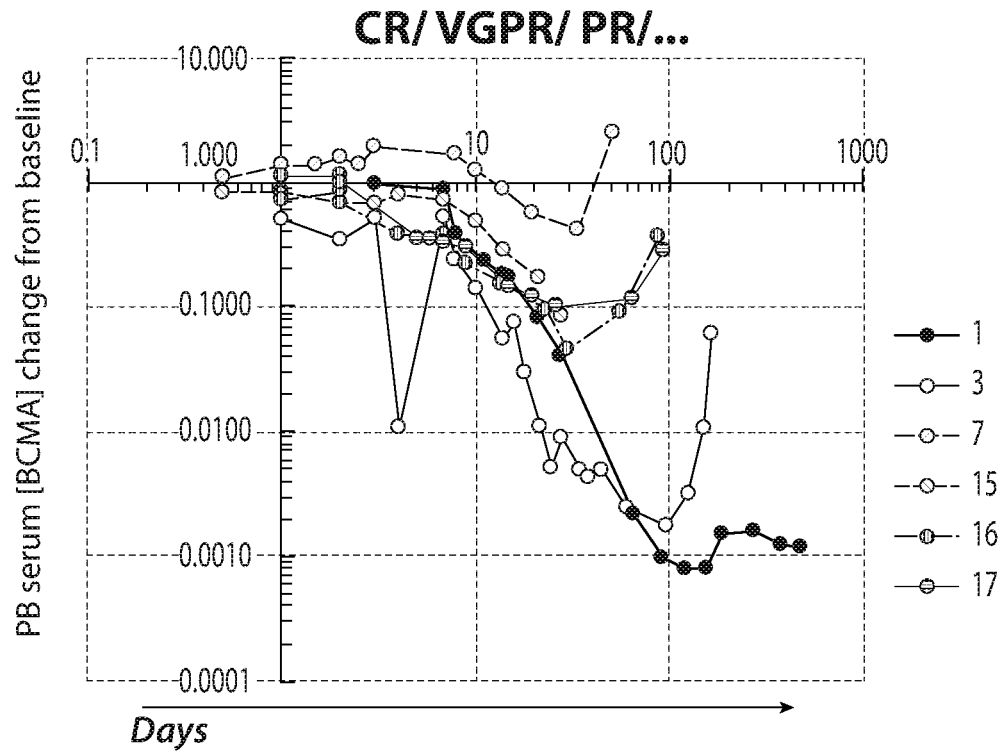
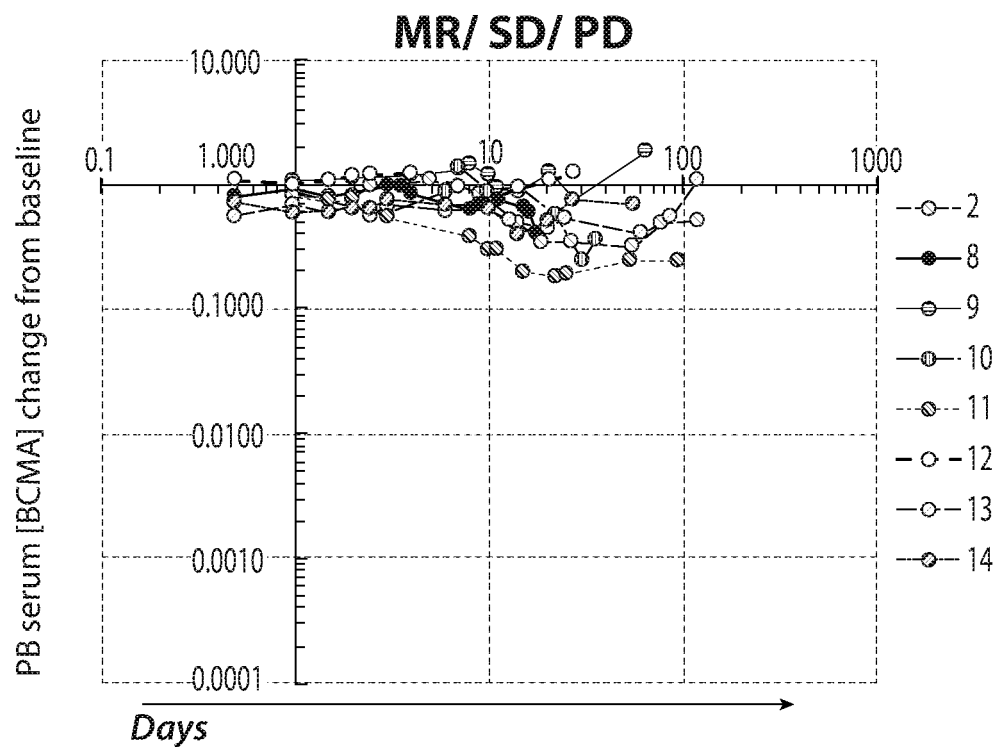


FIG. 26C



CR	VGPR	PR	MR	SD	PD
1	3, 15	7	2, 11, 13	9, 12, 14	8, 10
Unknown: 16, 17					

FIG. 26D

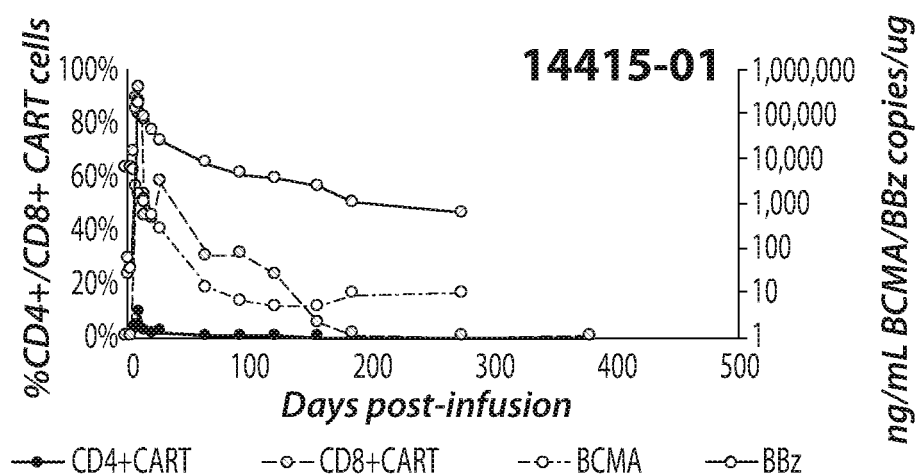


FIG. 27A

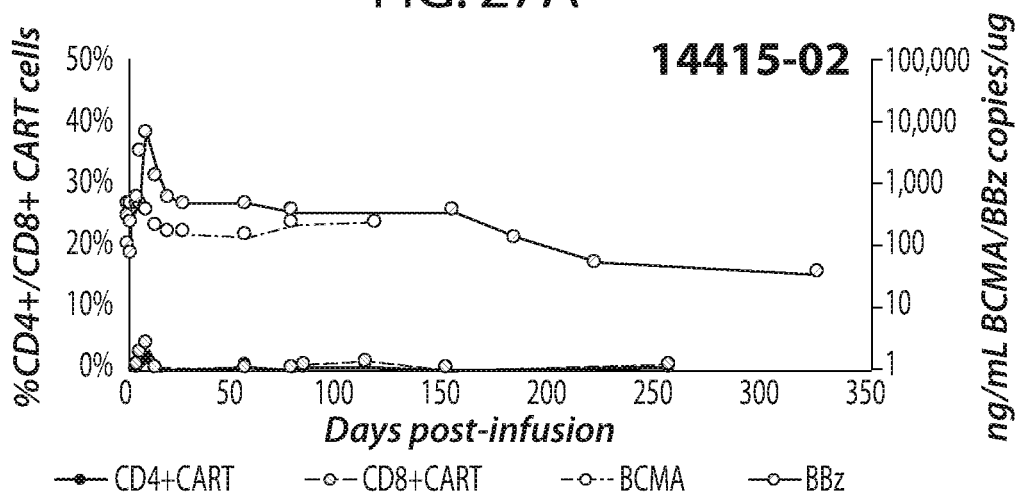


FIG. 27B

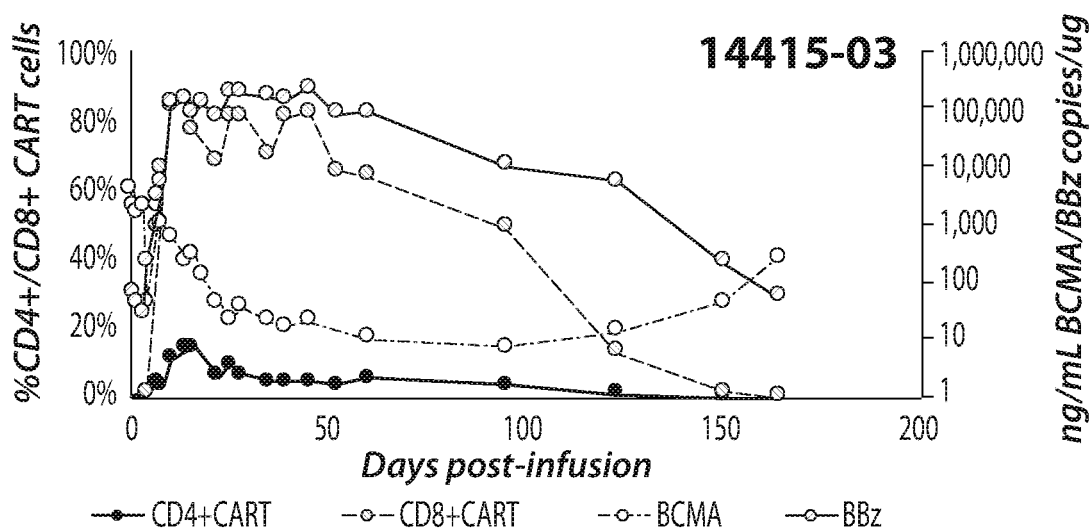


FIG. 27C

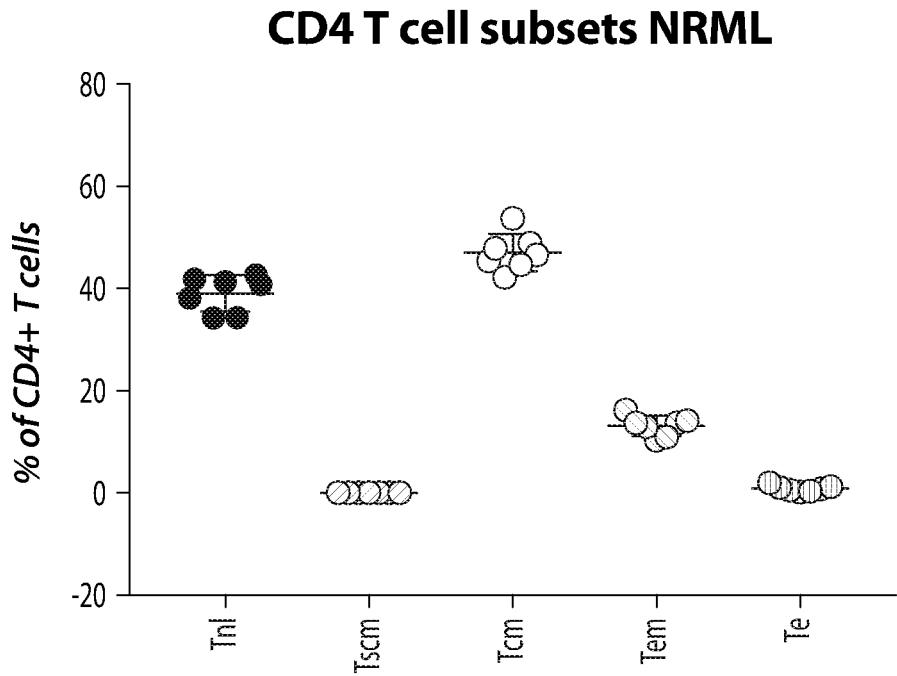


FIG. 28A

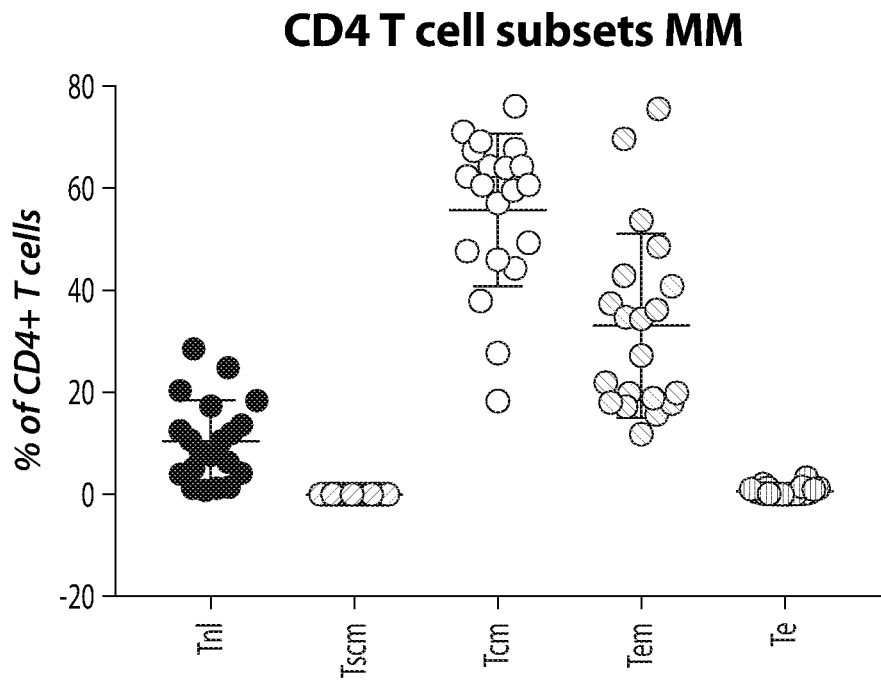


FIG. 28B

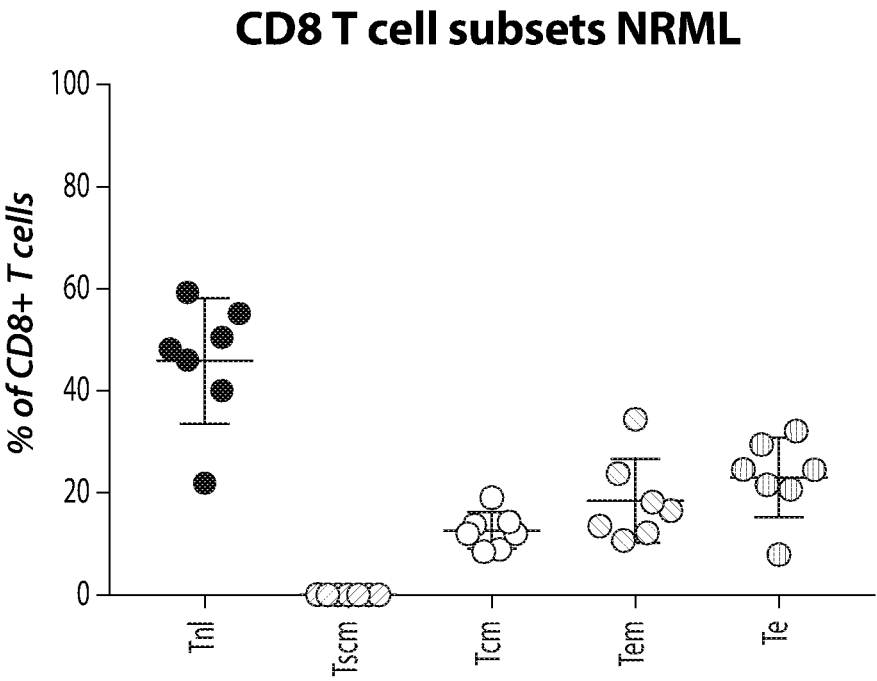


FIG. 28C

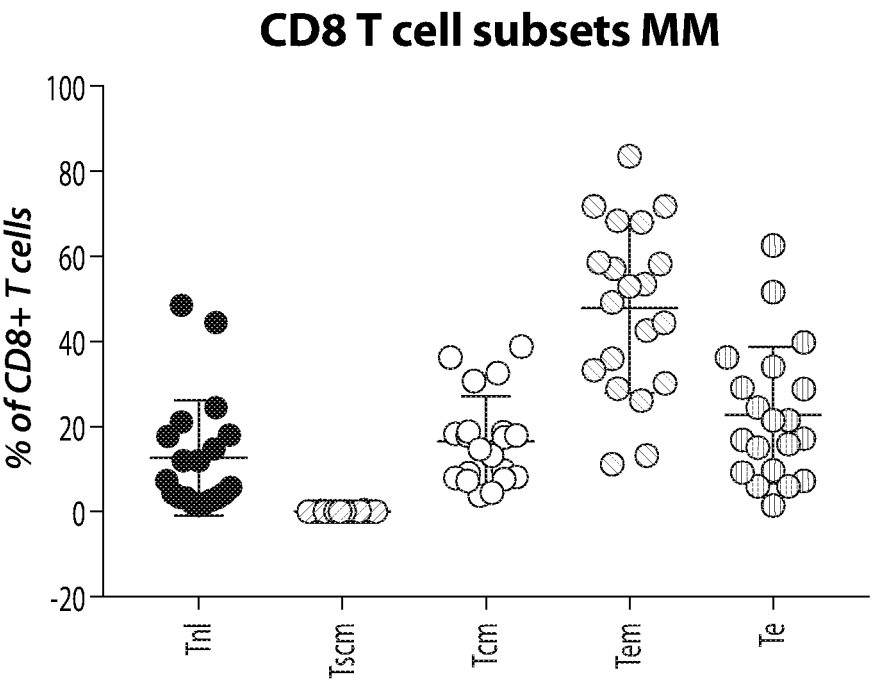


FIG. 28D

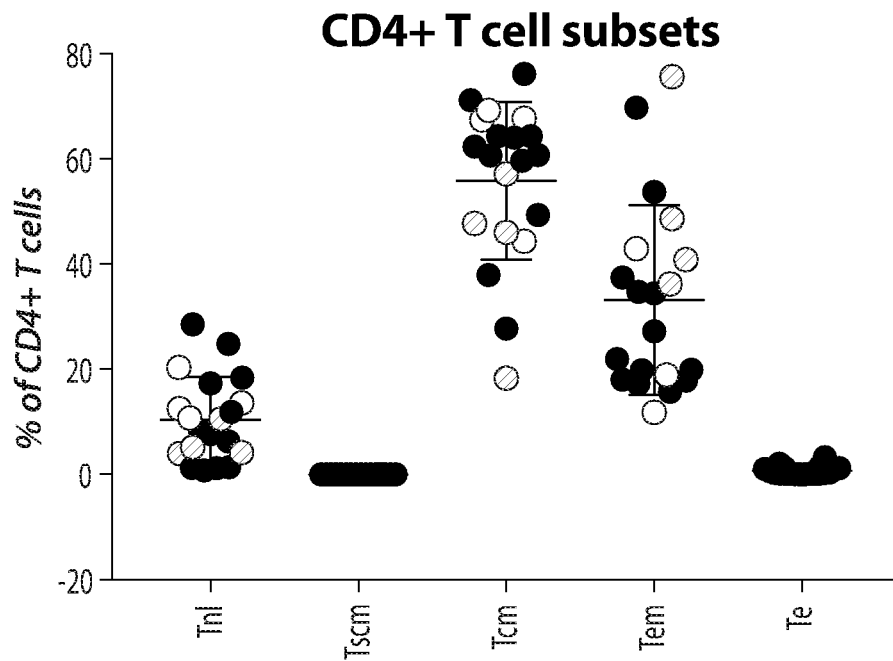


FIG. 28E

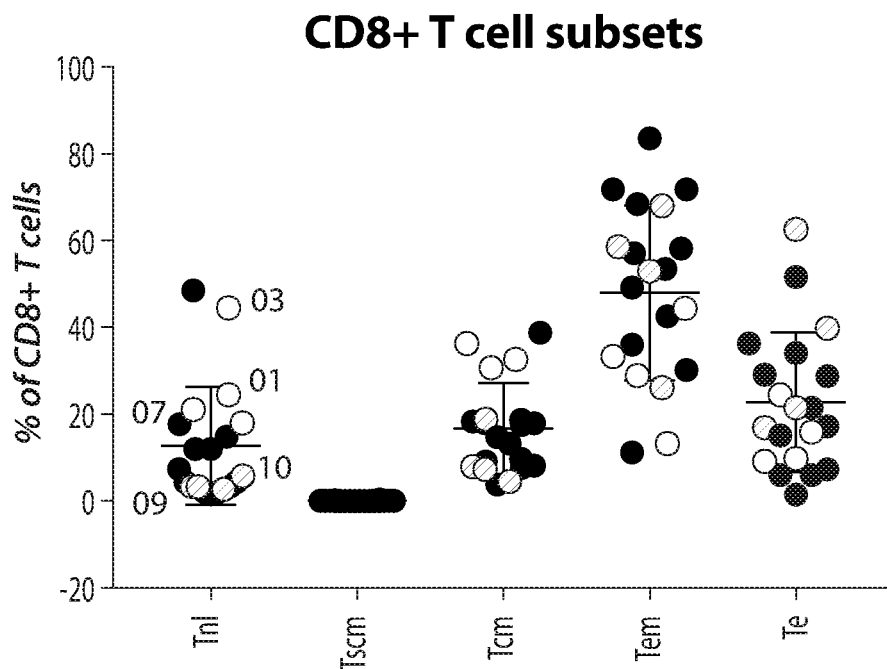


FIG. 28F

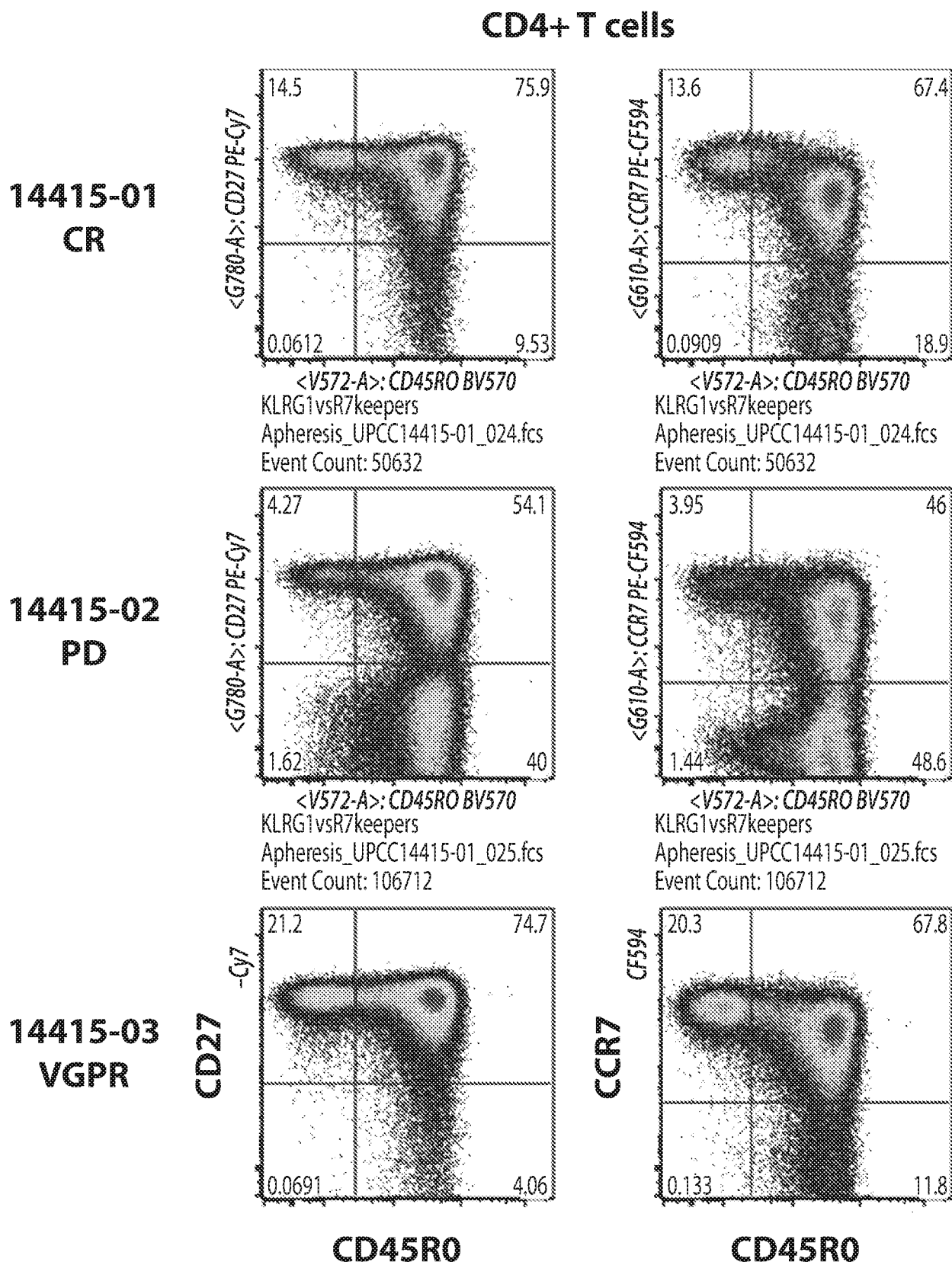


FIG. 29-1

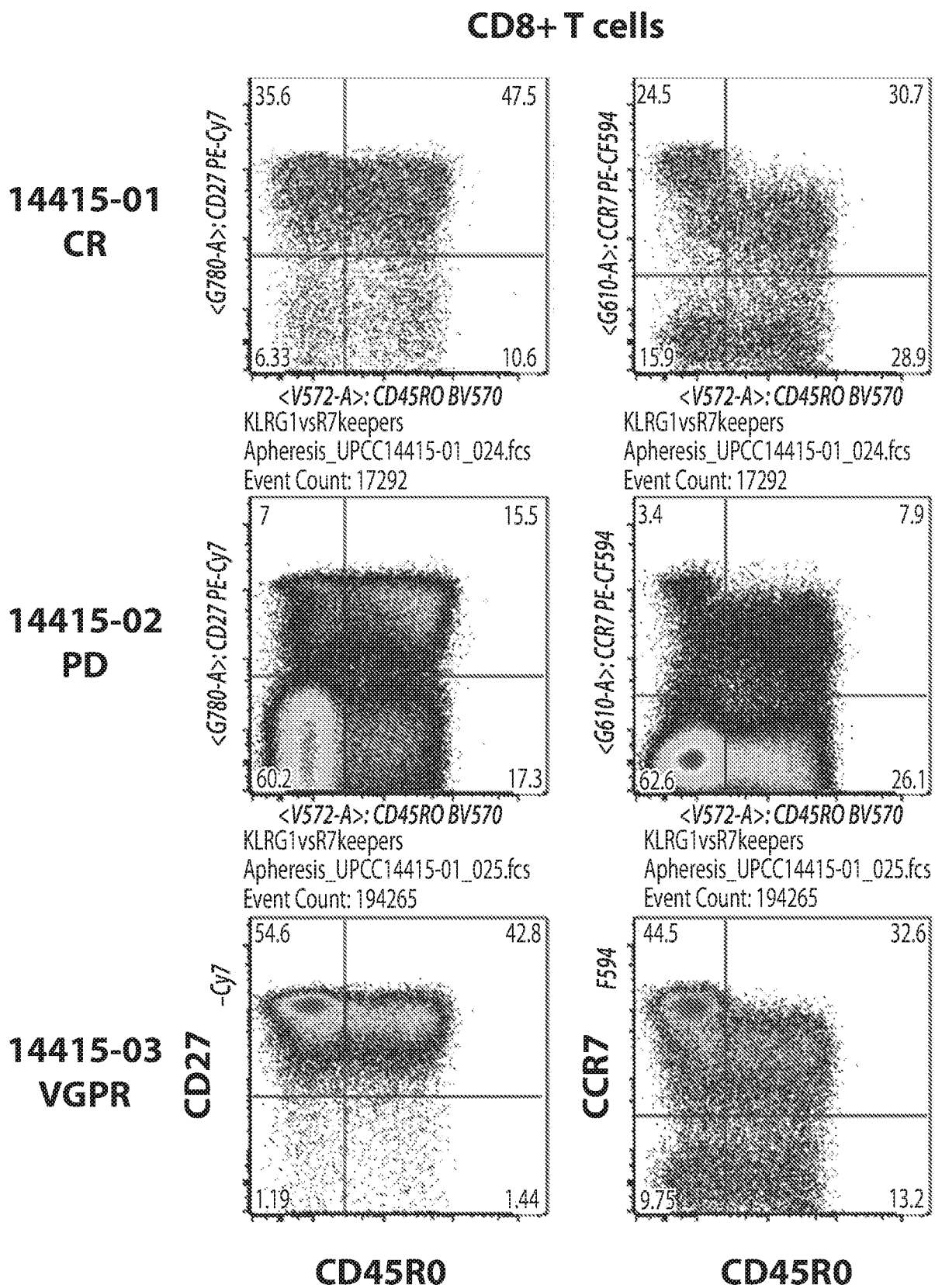


FIG. 29-2

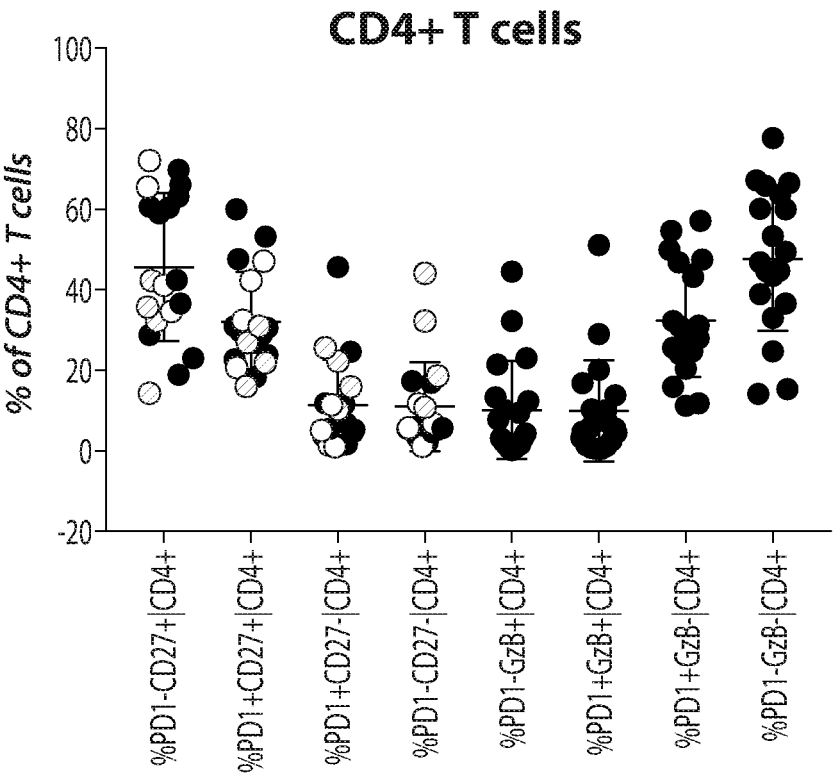


FIG. 30A

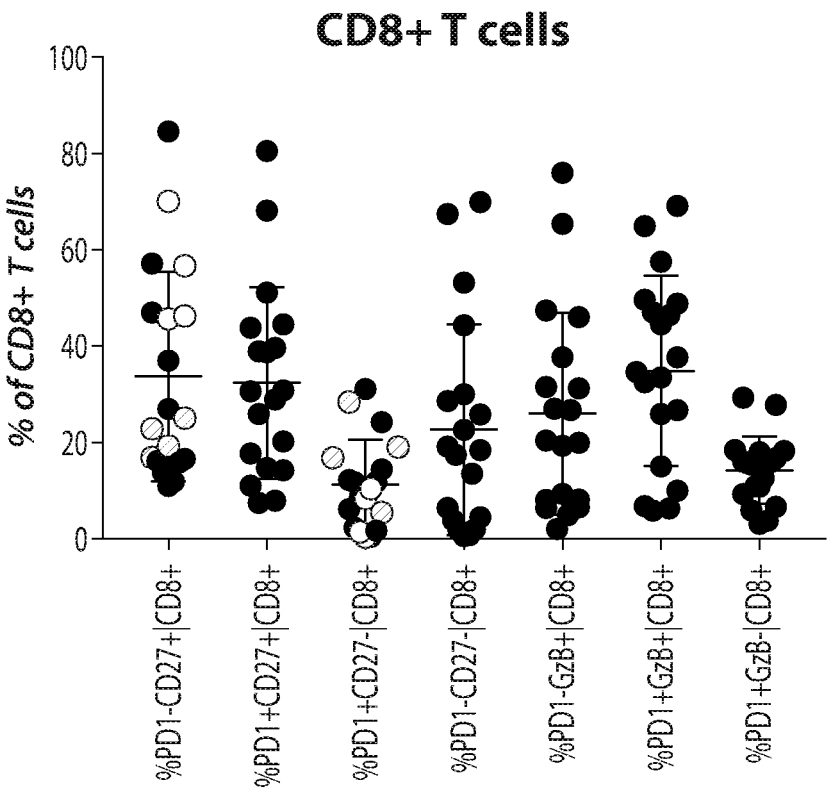
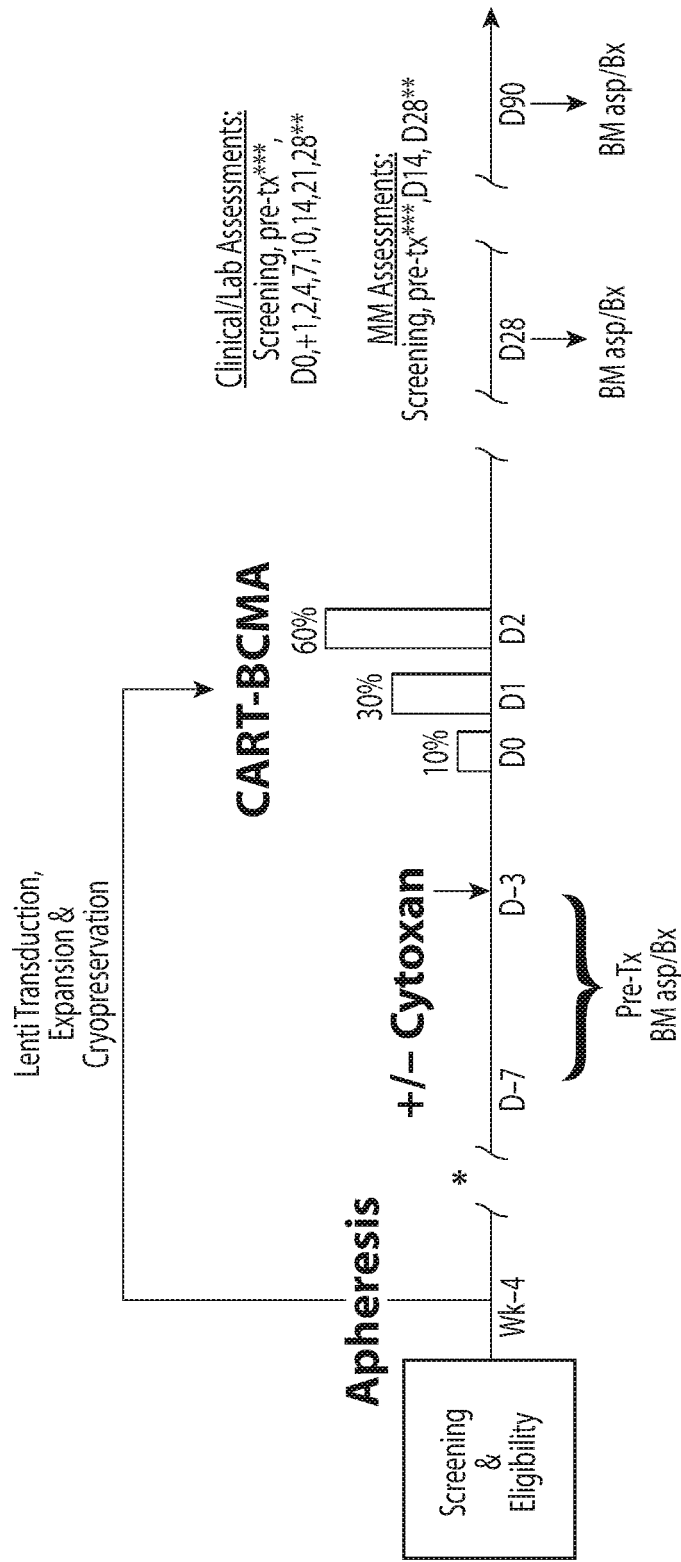


FIG. 30B



* Patients may receive therapy during manufacturing to maintain disease control
** After first 28 days, follow-up is q4 awks up to 6 mos, then q3 mos. up to 2 years
*** Pre-tx = pre-treatment, 3 to 7 days before CART T cell infusion

FIG. 31

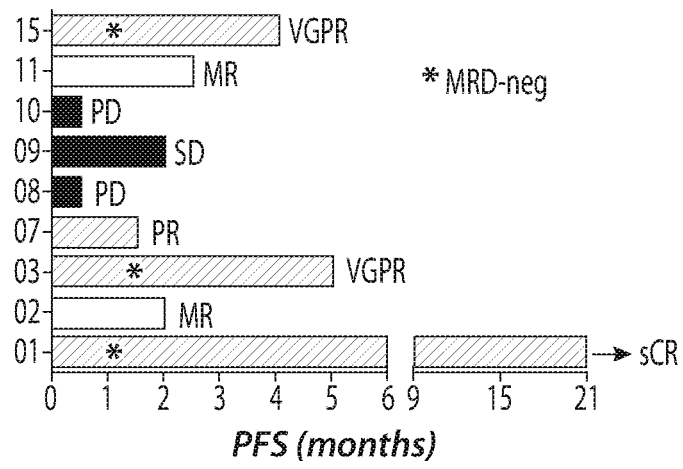


FIG. 32A

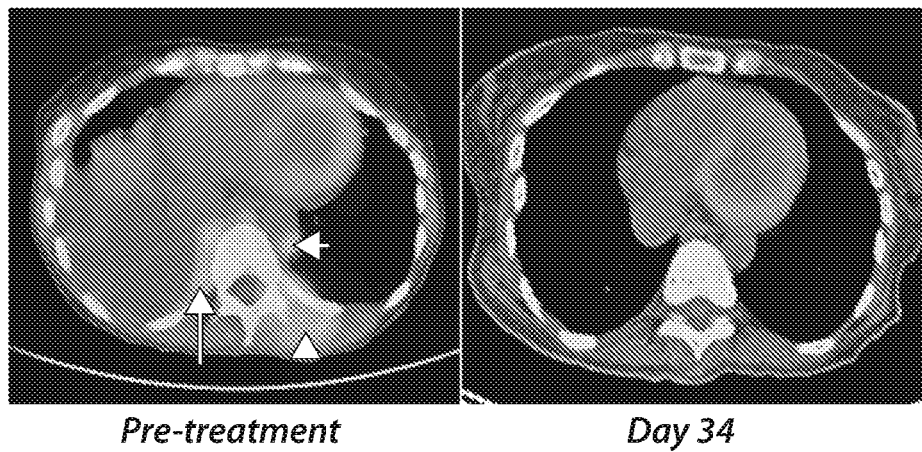


FIG. 32B

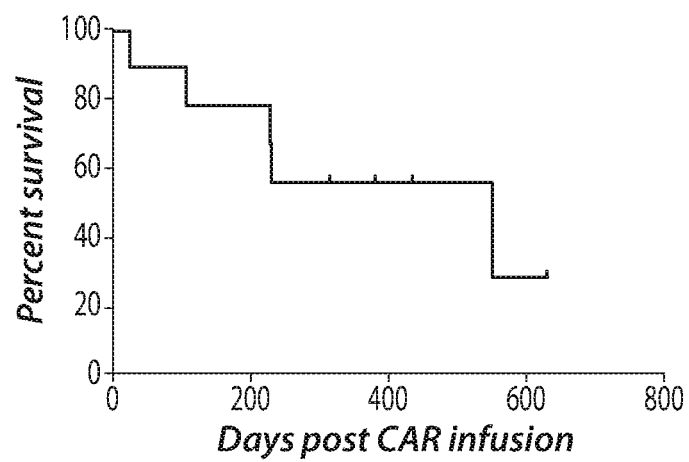


FIG. 32C

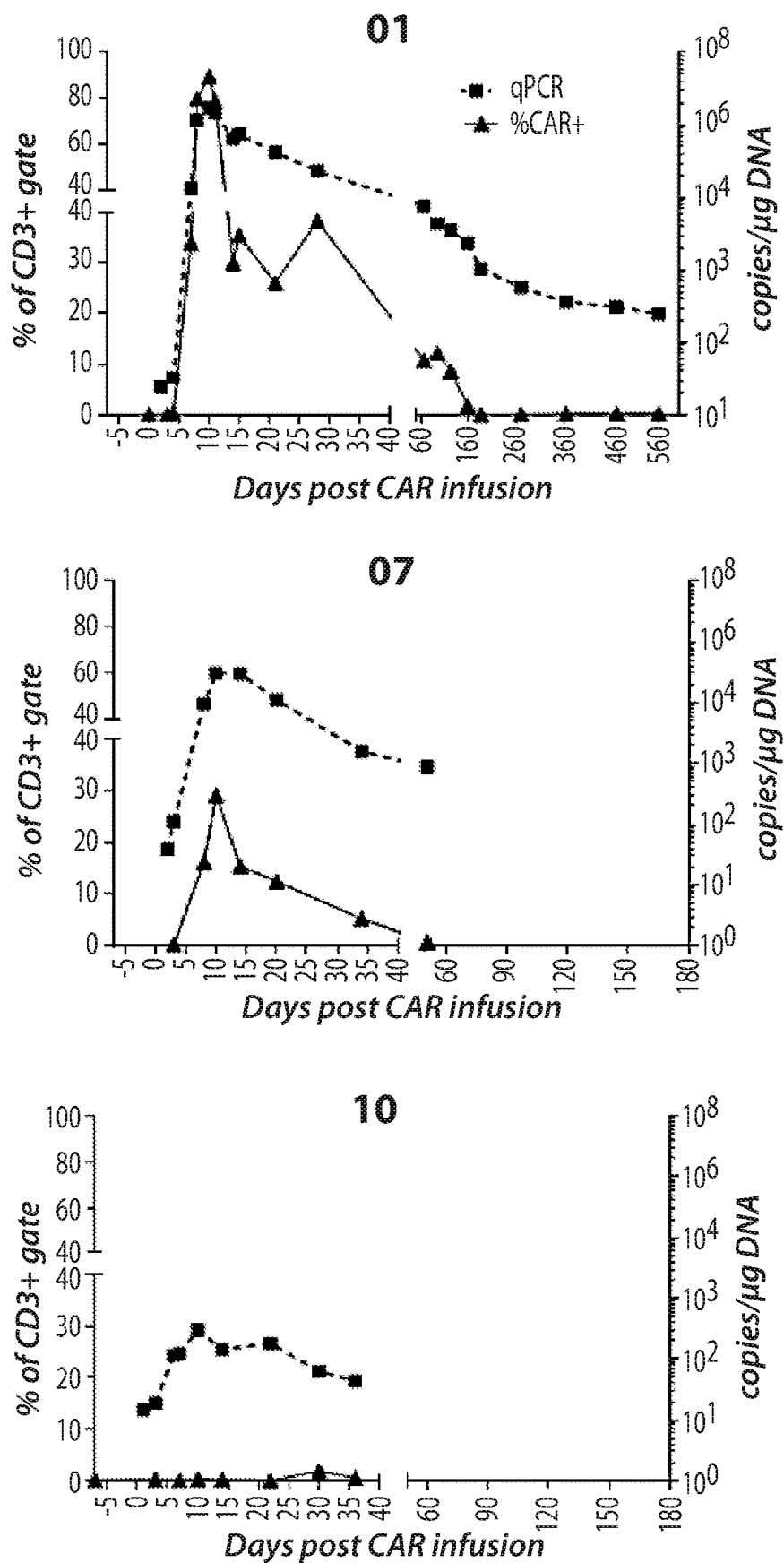


FIG. 33A-1

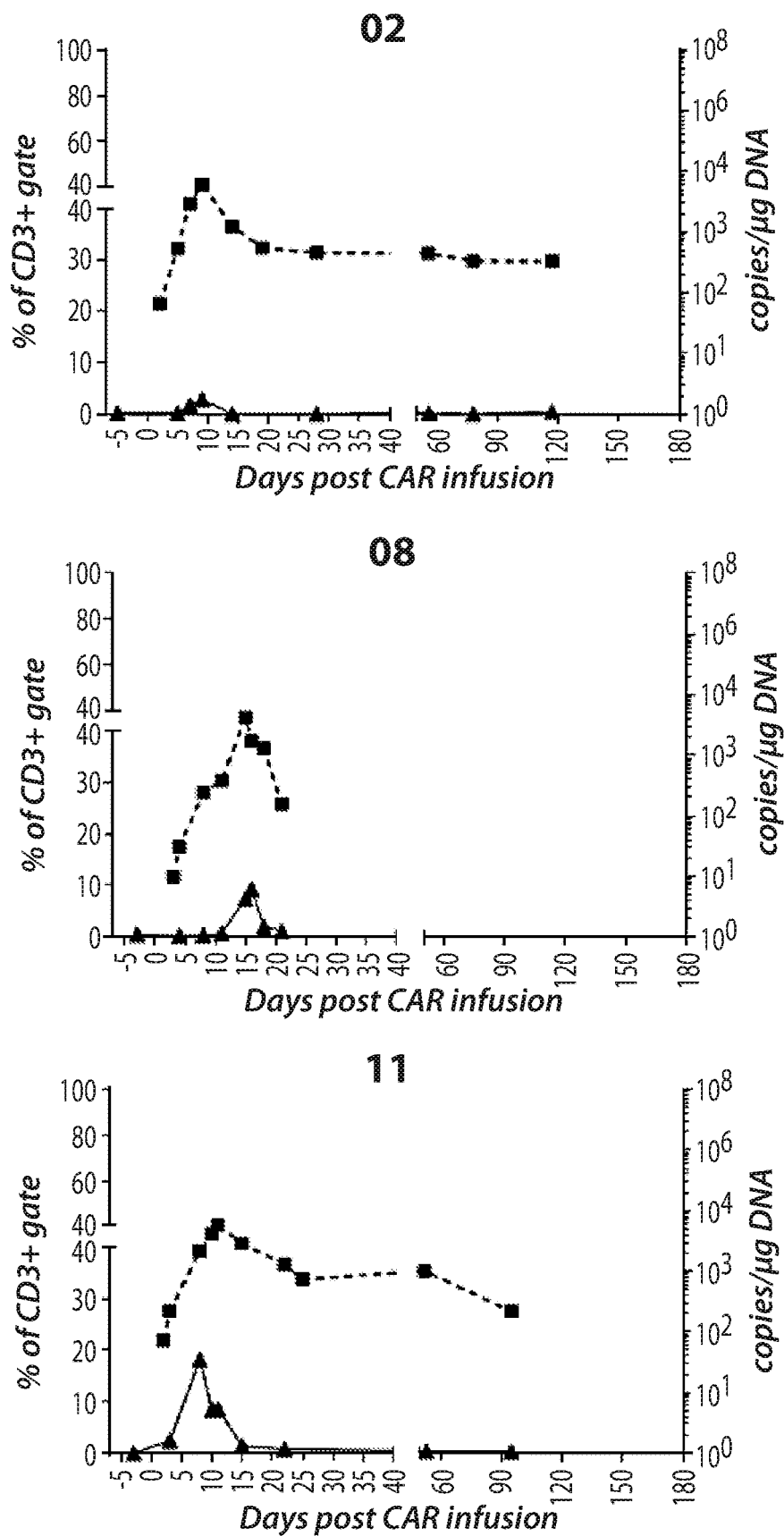


FIG. 33A-2

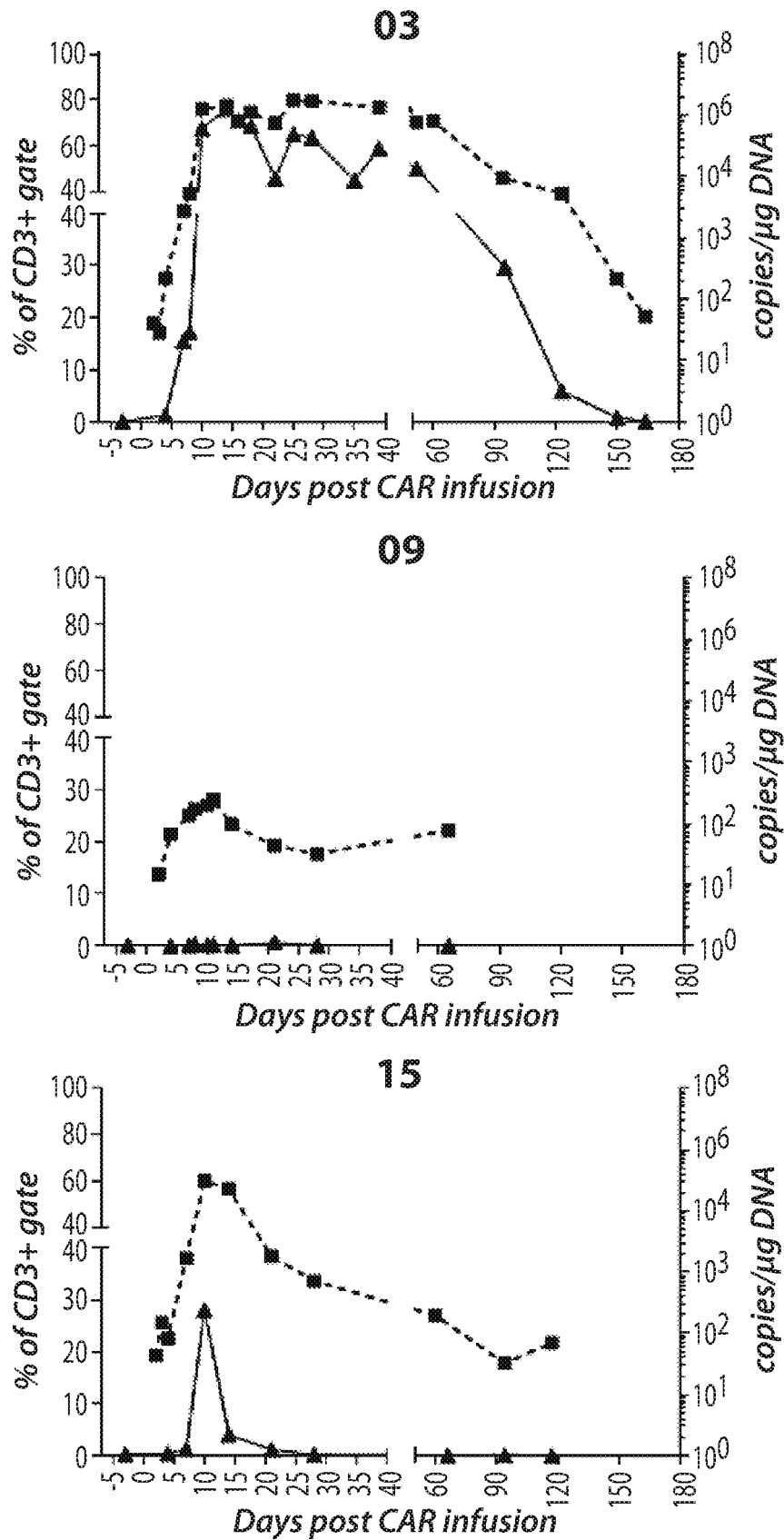


FIG. 33A-3

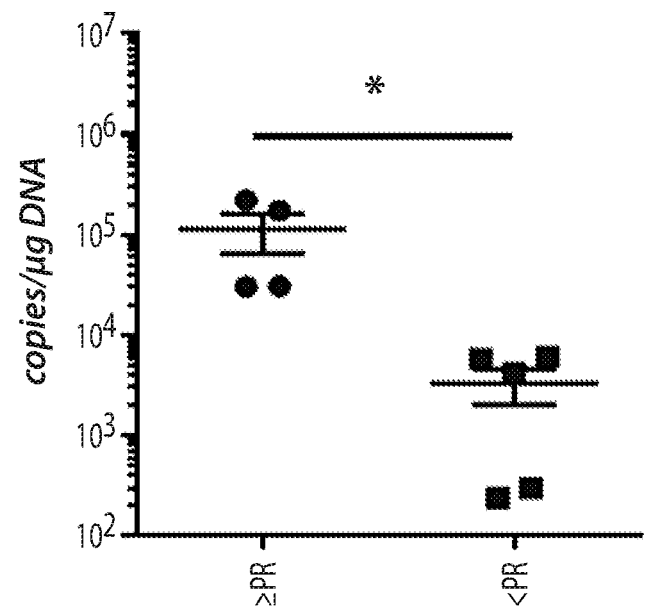


FIG. 33B

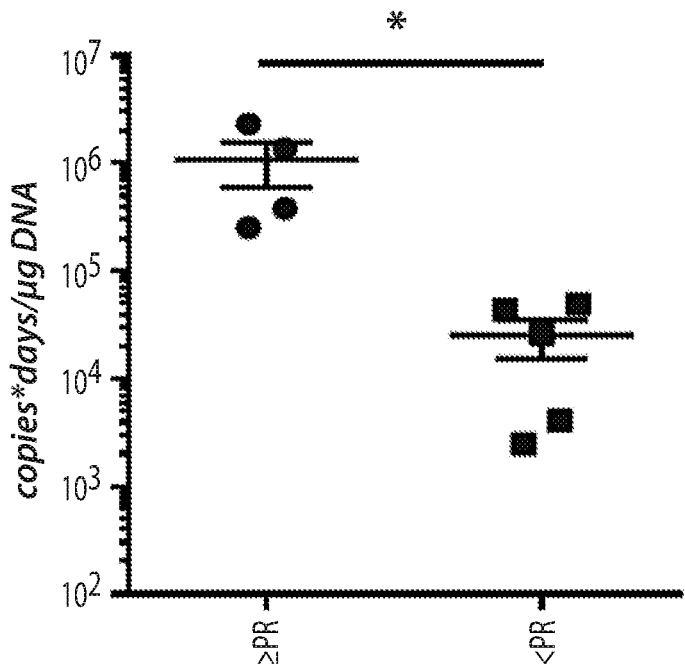


FIG. 33C

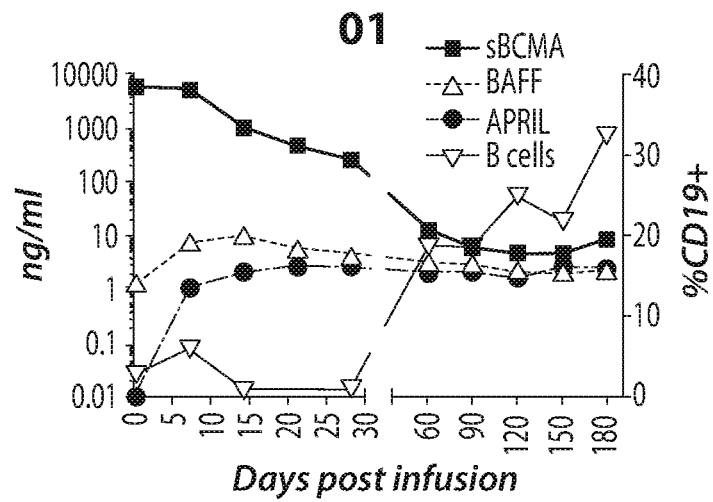
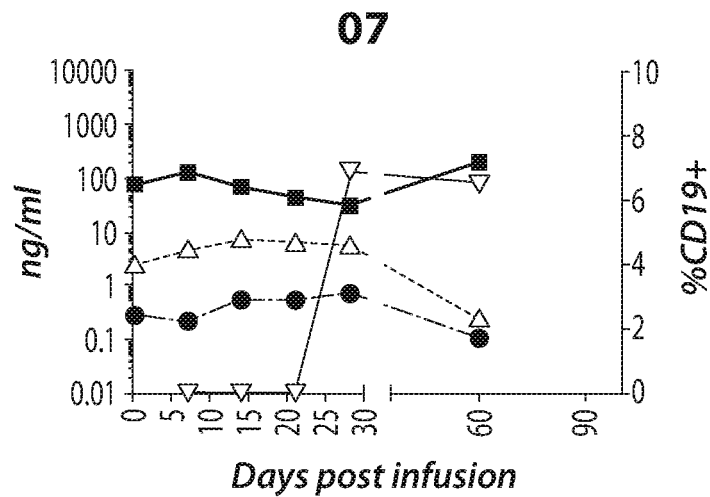
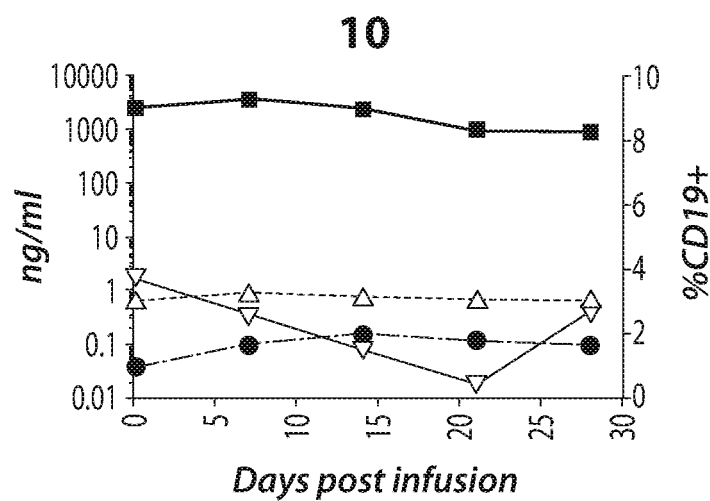


FIG. 34-1

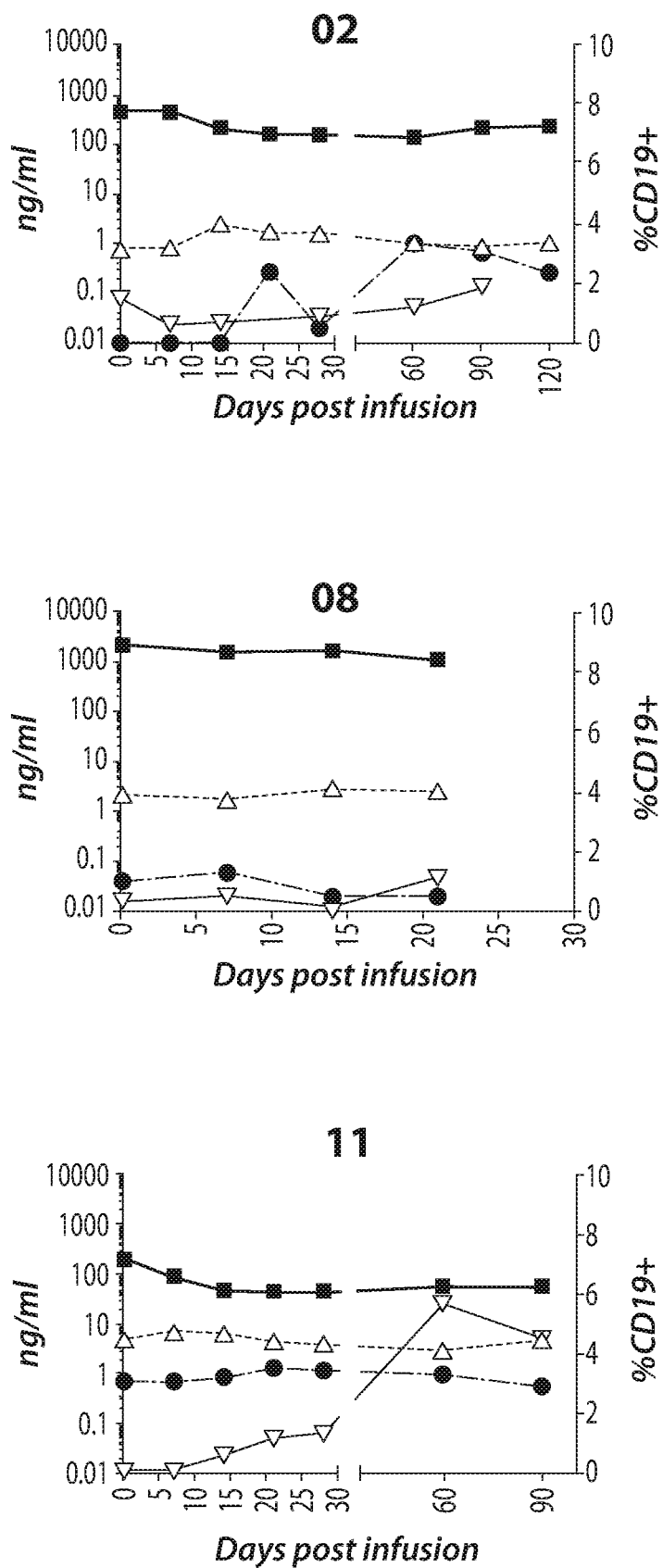


FIG. 34-2

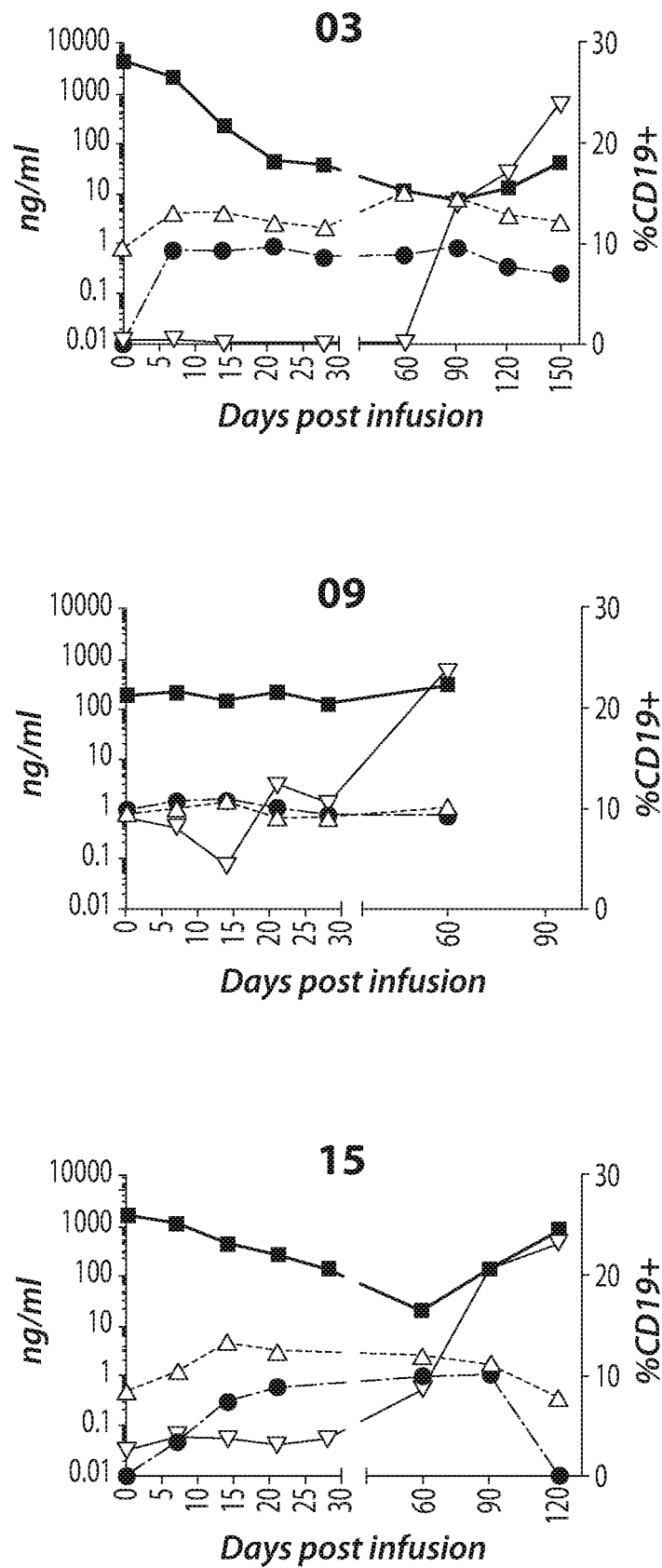


FIG. 34-3

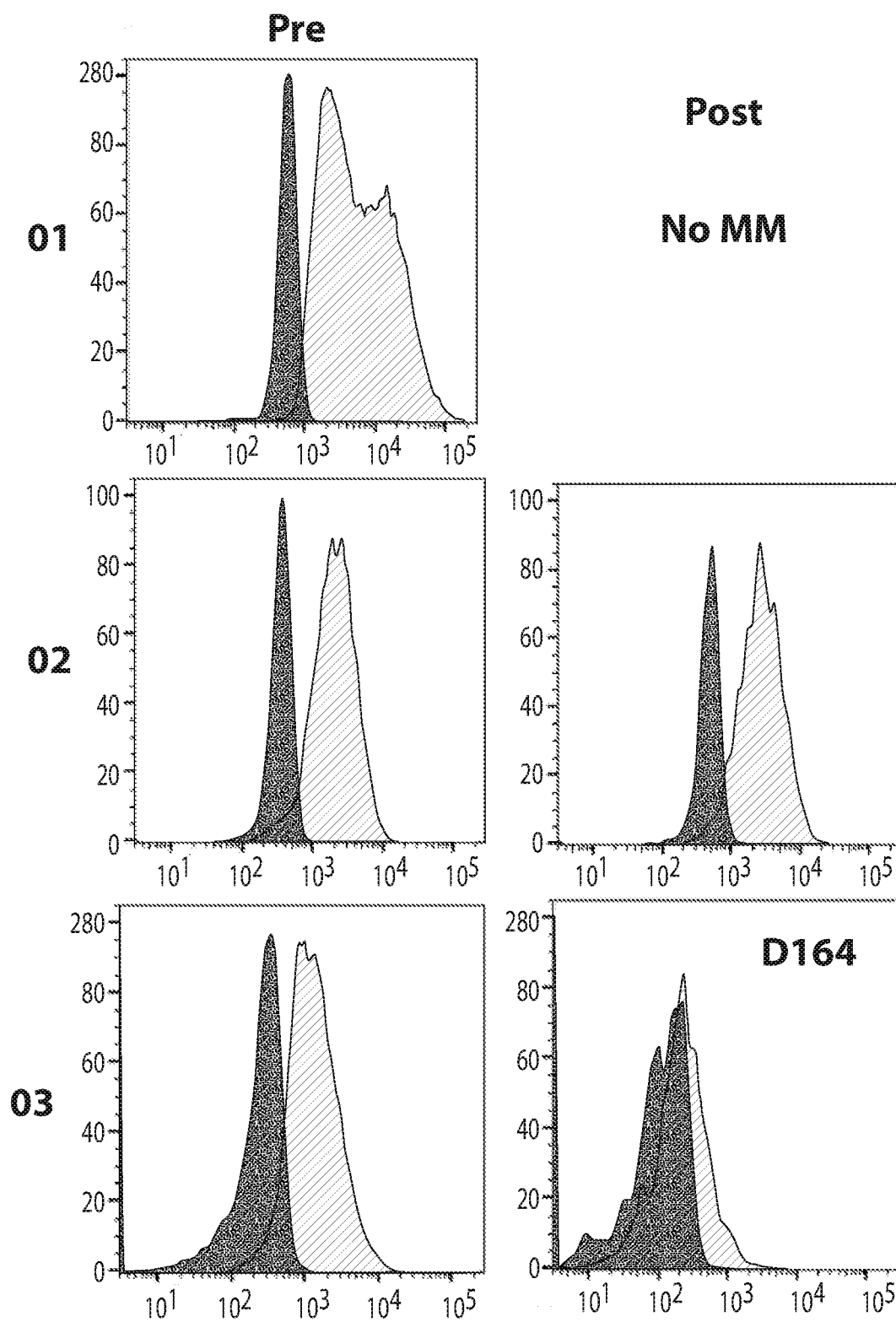


FIG. 35-1

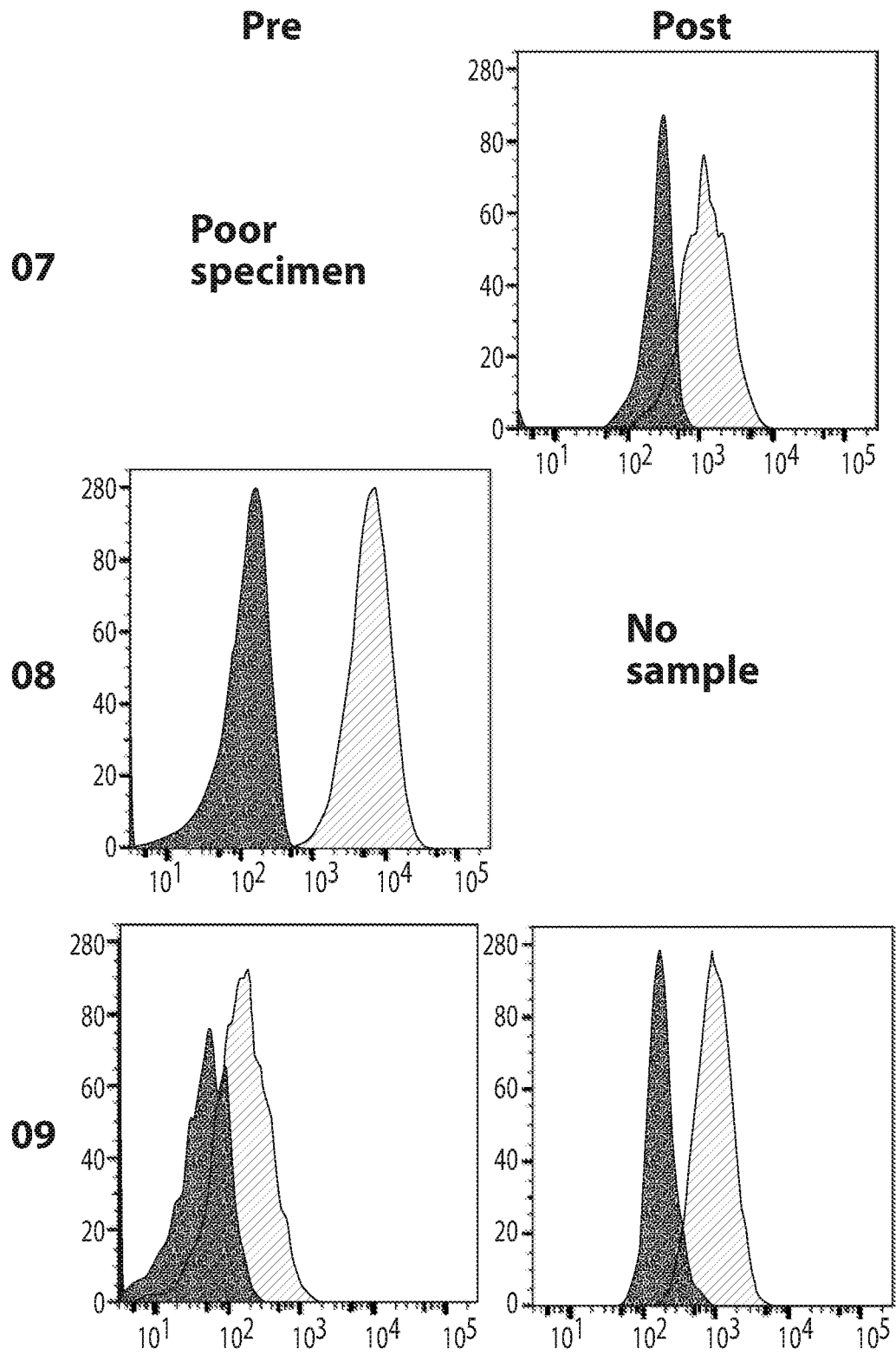


FIG. 35-2

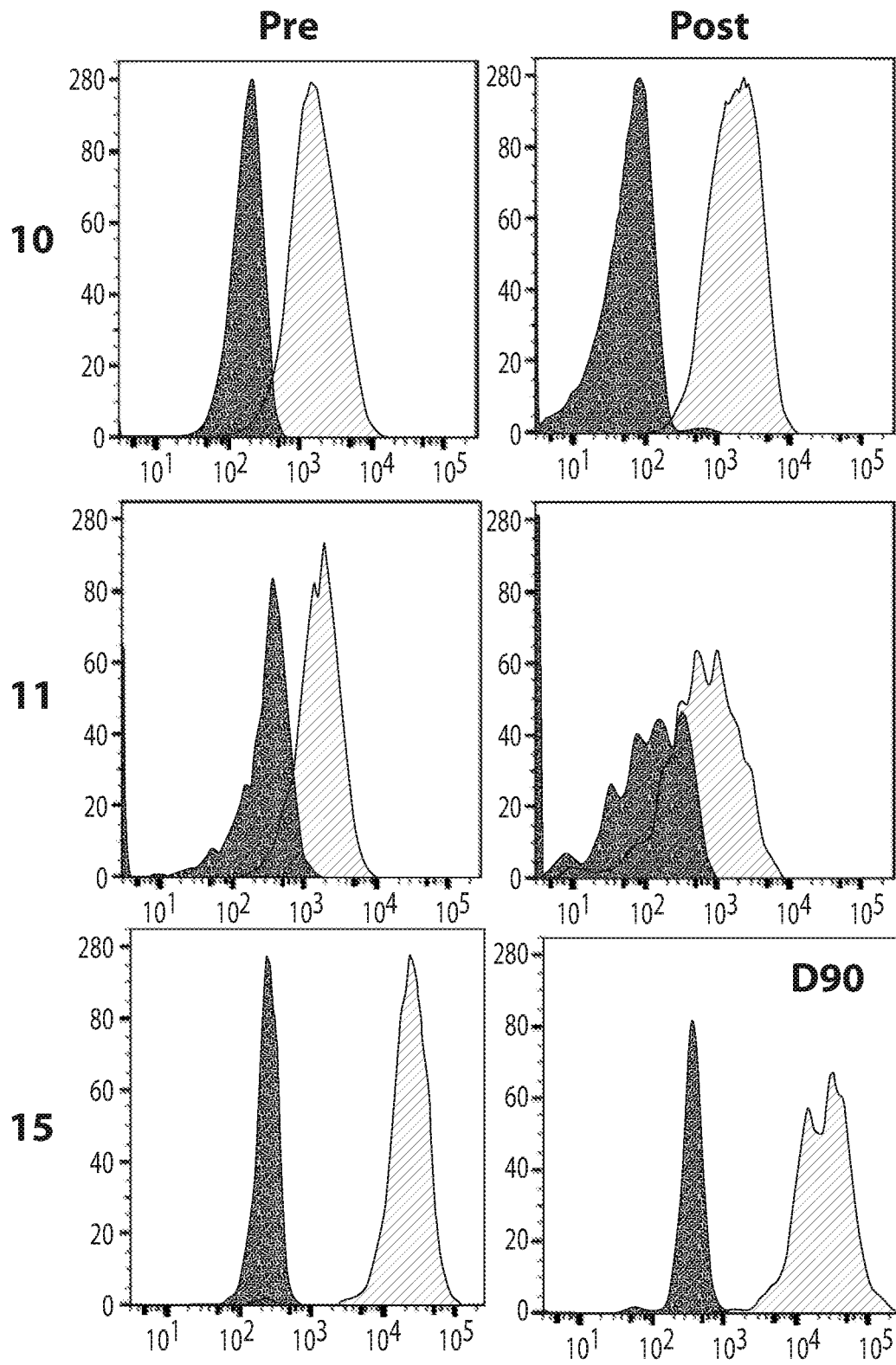


FIG. 35-3

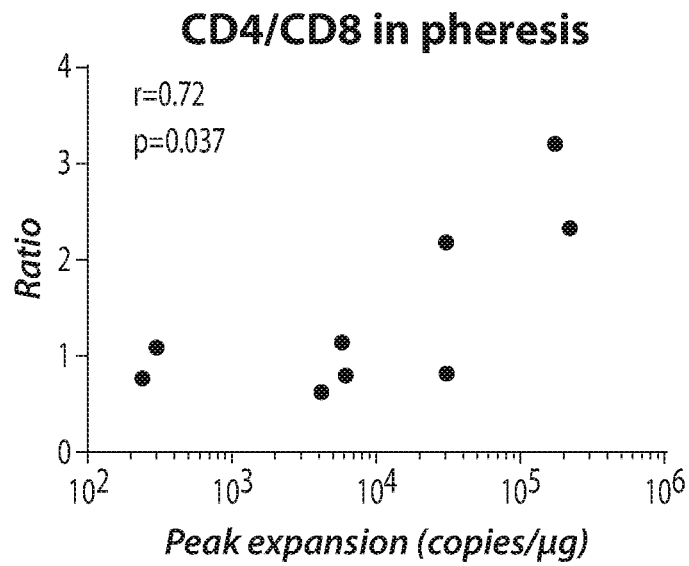


FIG. 36A

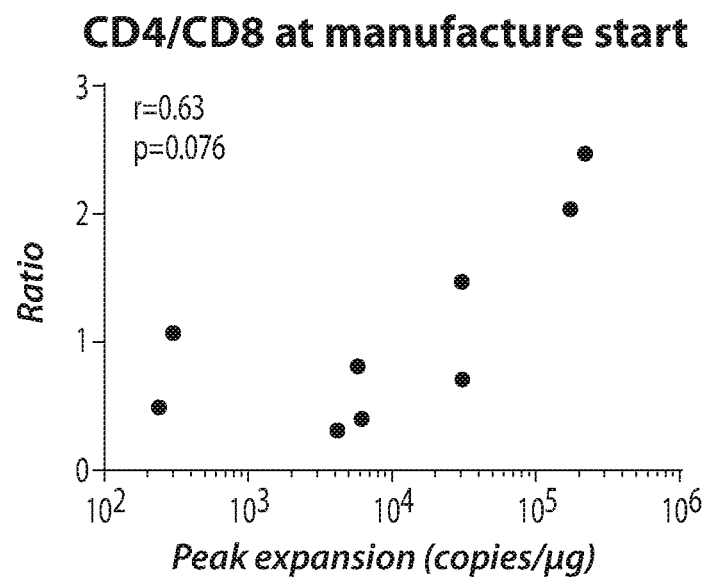


FIG. 36B

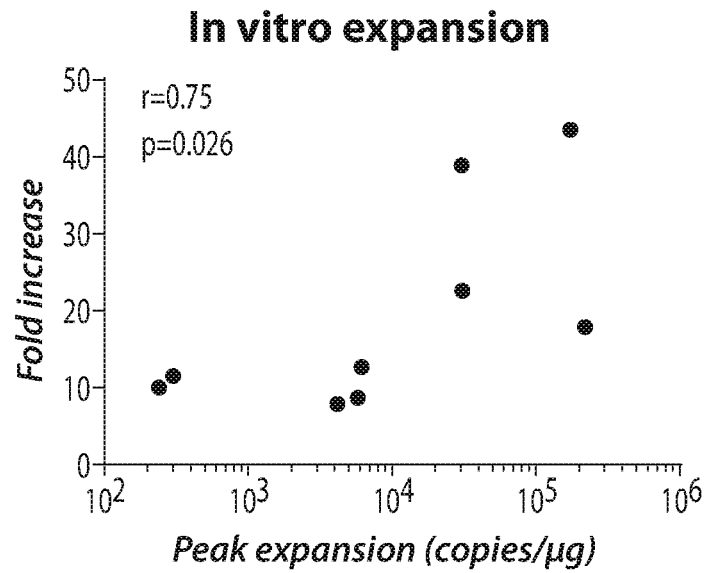


FIG. 36C

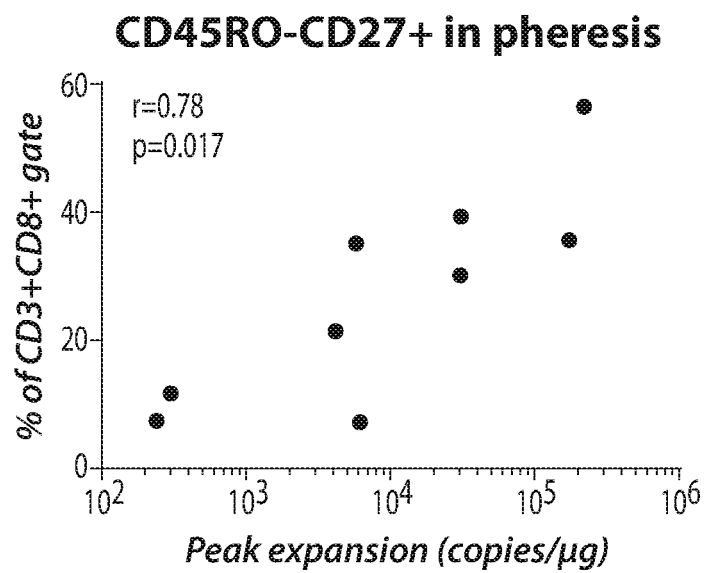


FIG. 36D

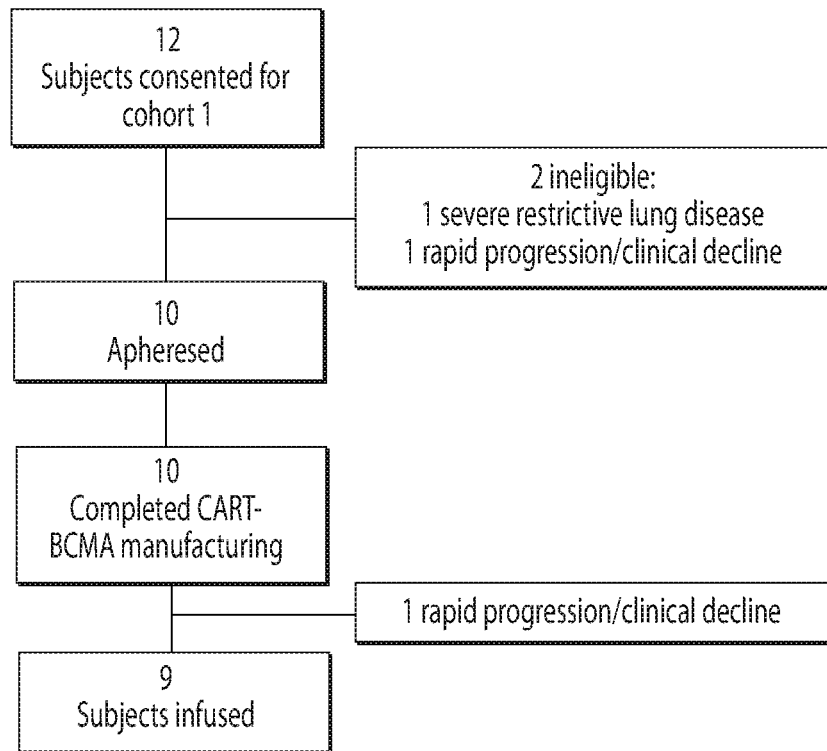


FIG. 37

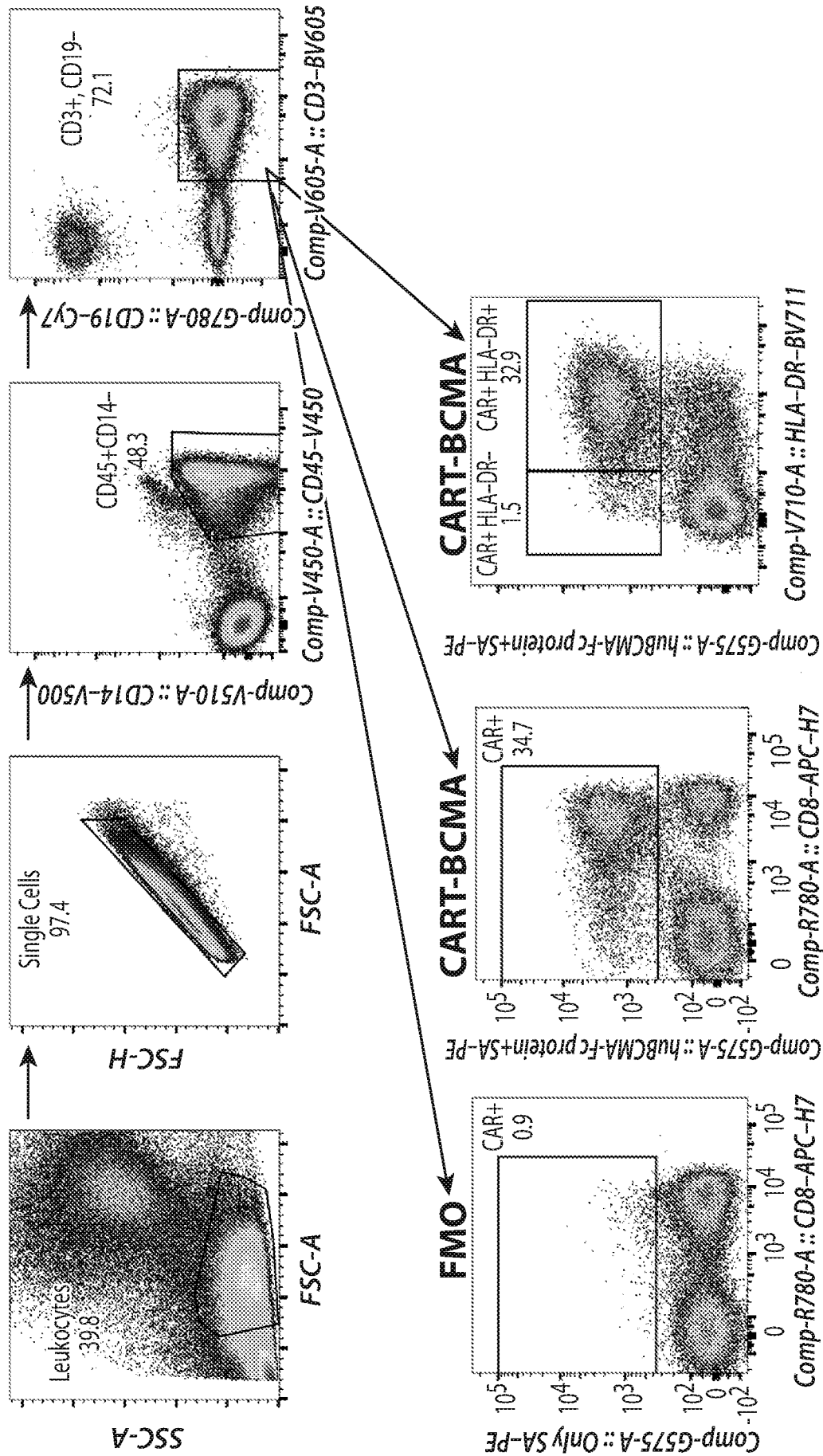


FIG. 38

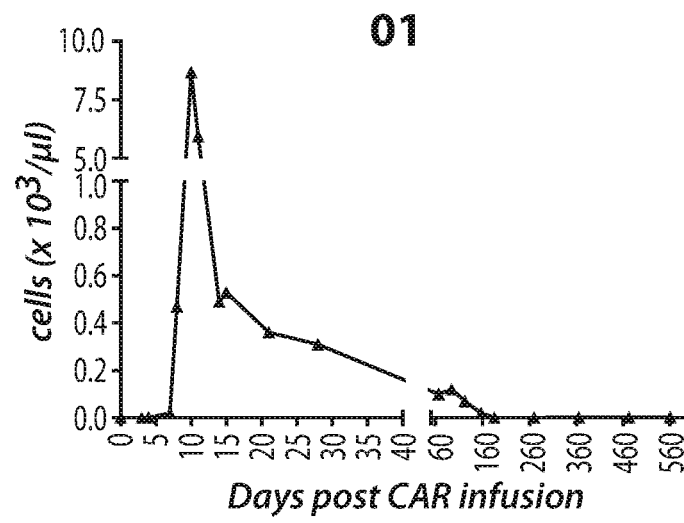
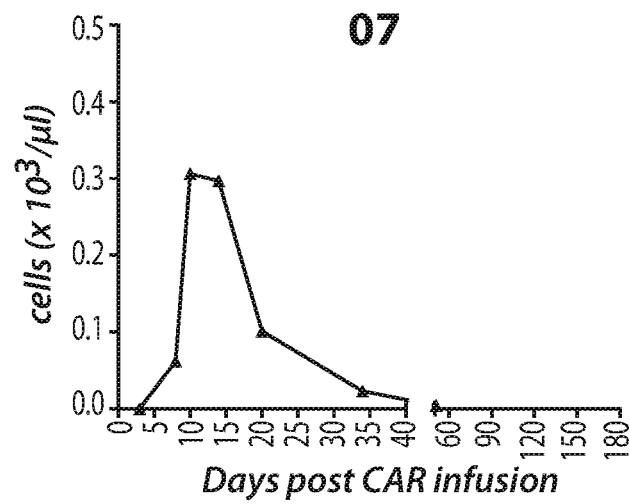
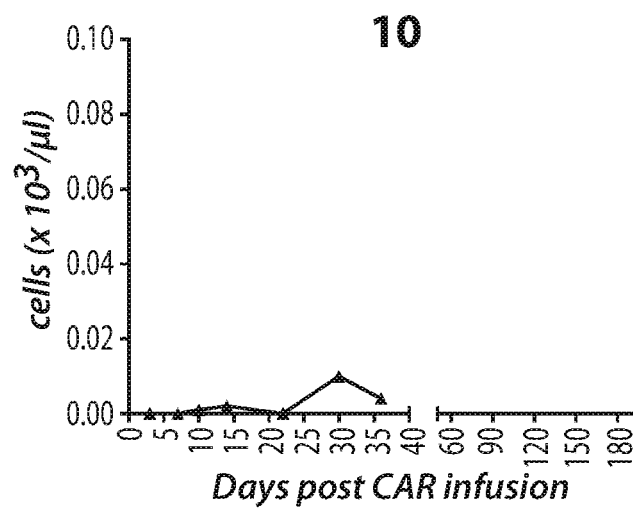


FIG. 39-1

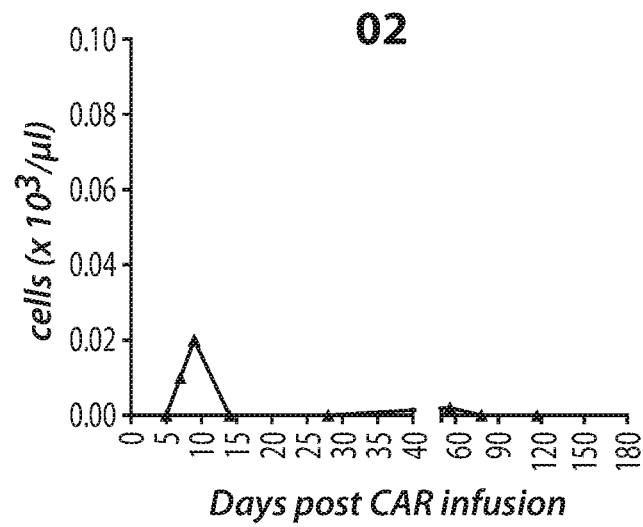
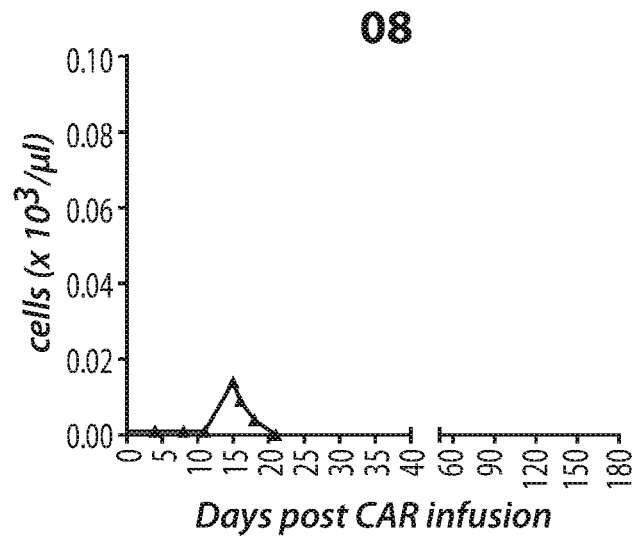
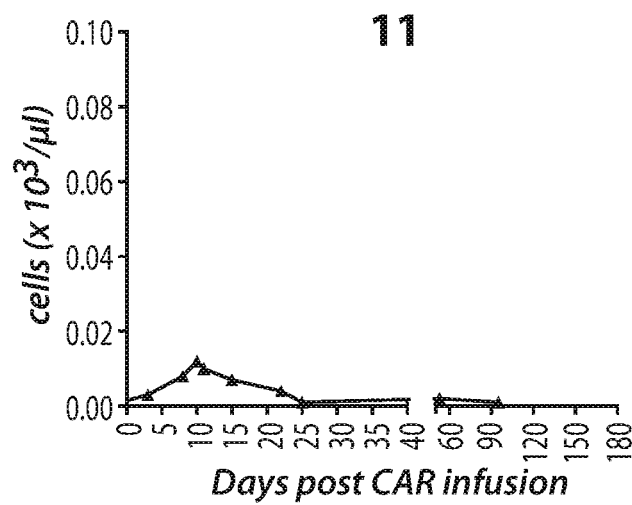


FIG. 39-2

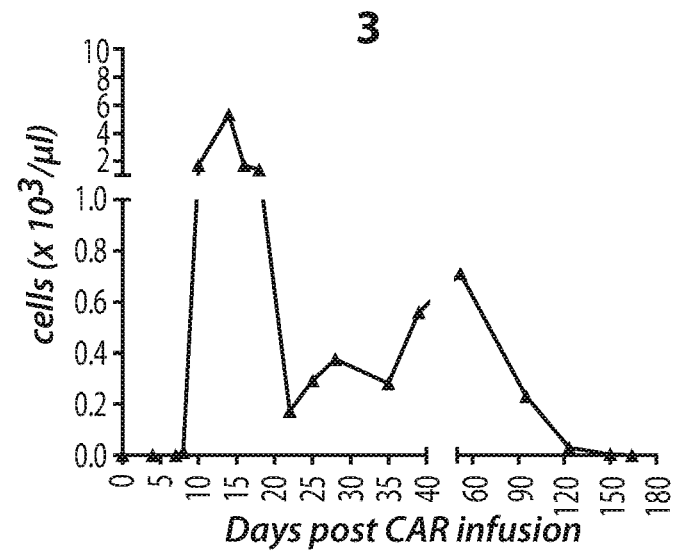
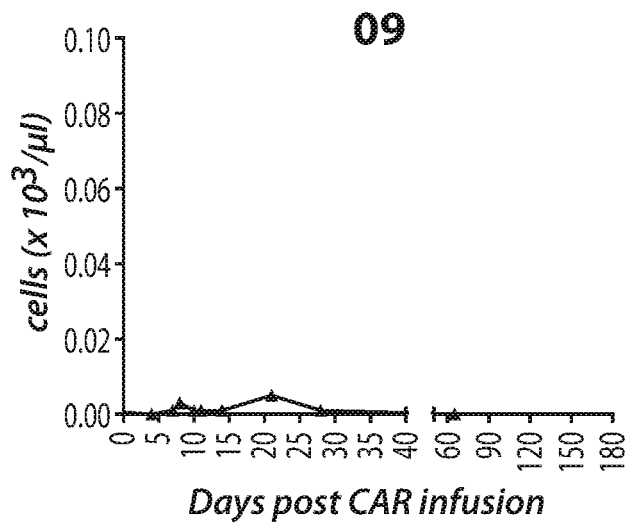
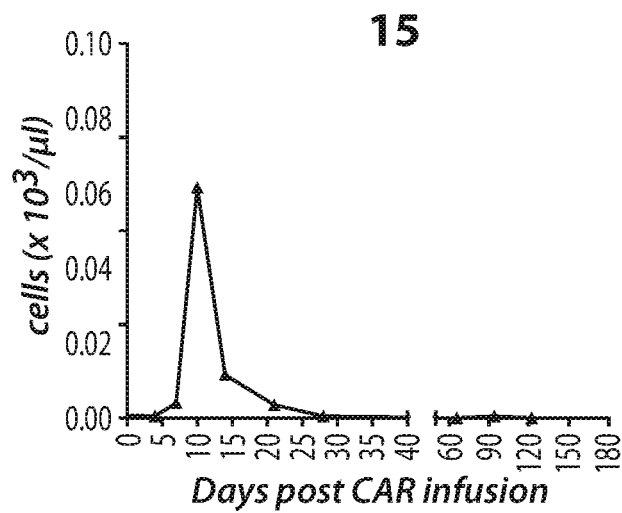


FIG. 39-3

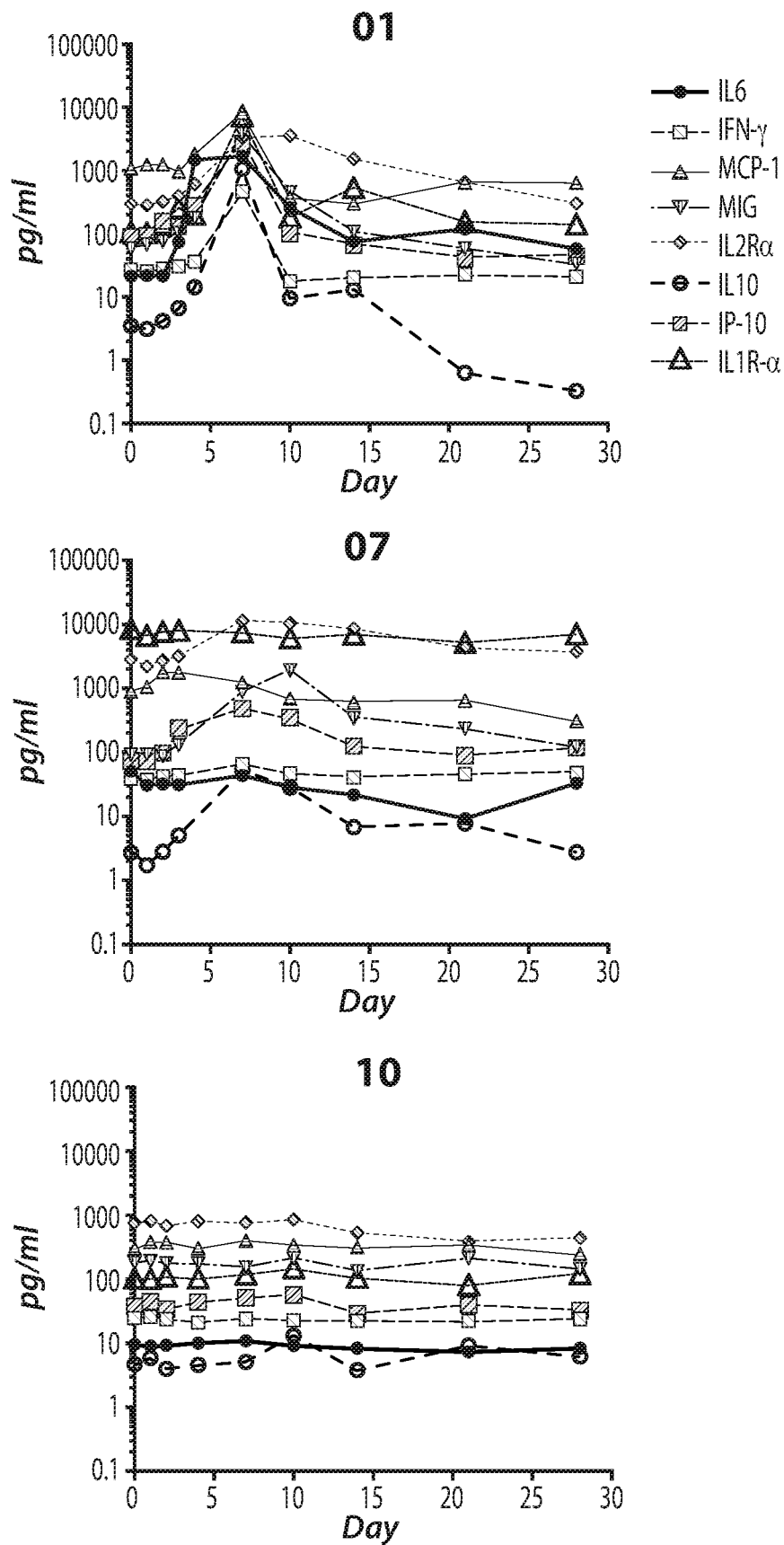


FIG. 40-1

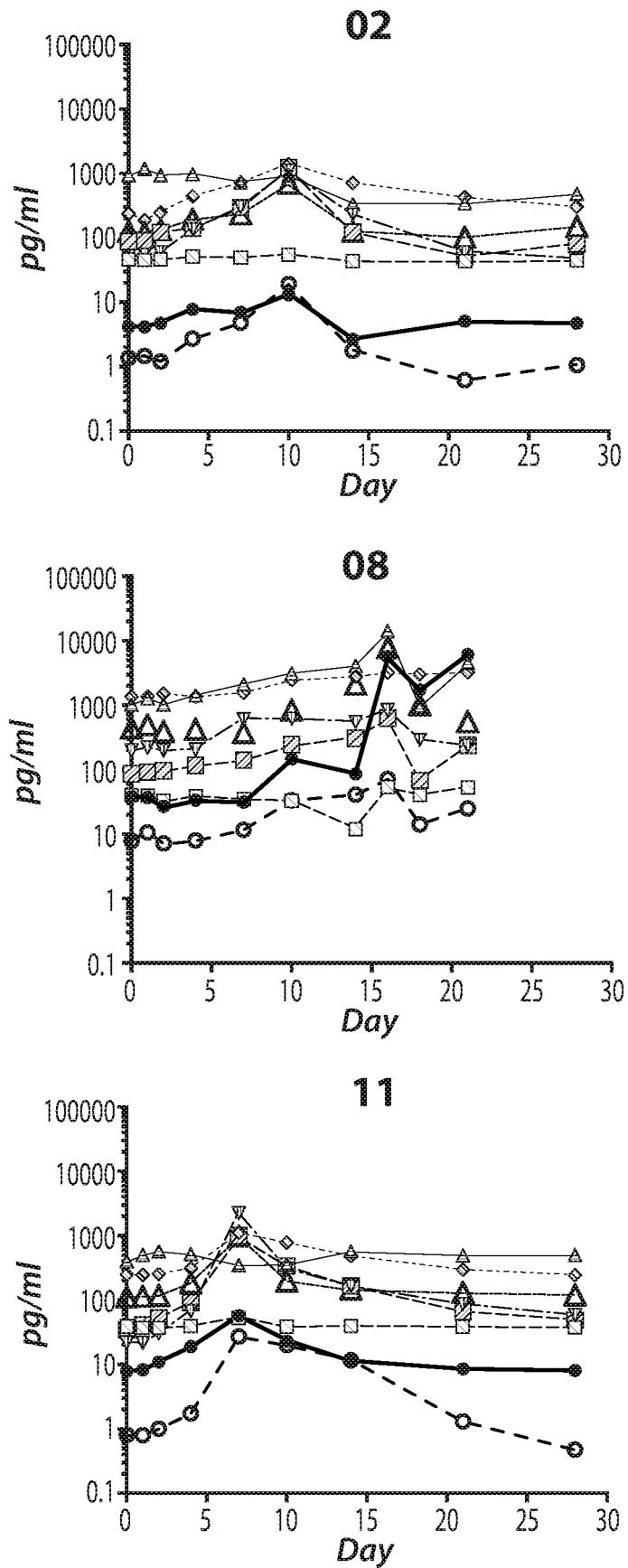


FIG. 40-2

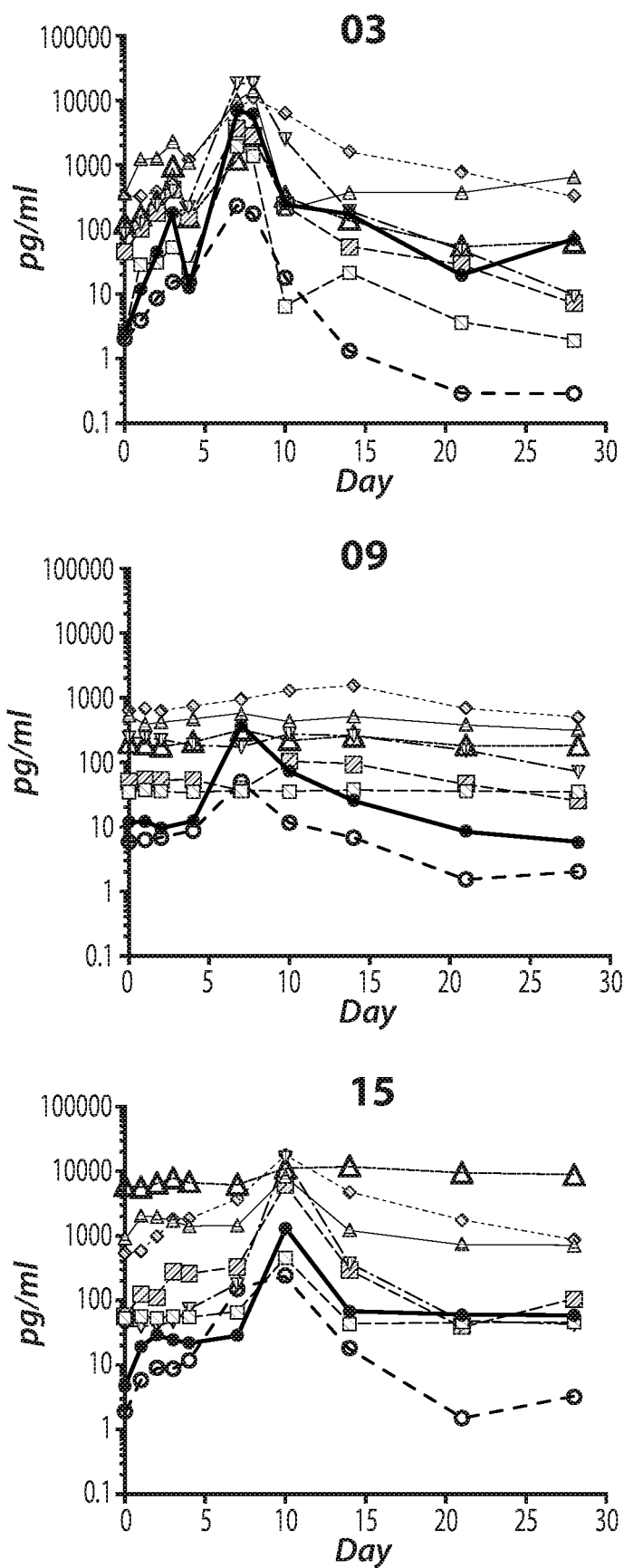


FIG. 40-3

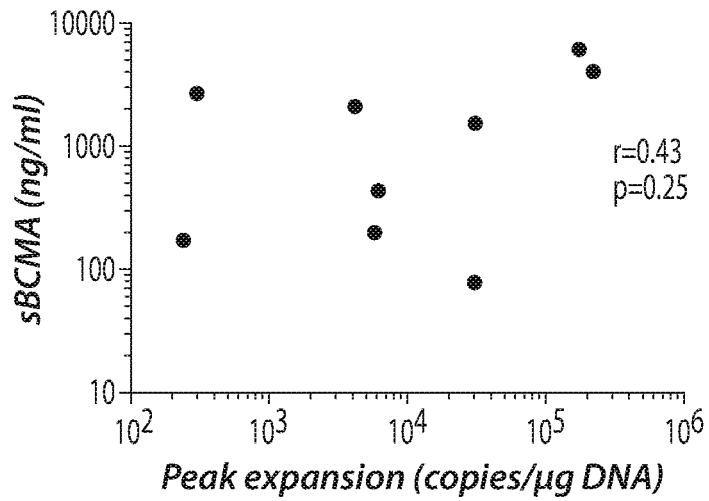
Baseline blood sBCMA v expansion

FIG. 41A

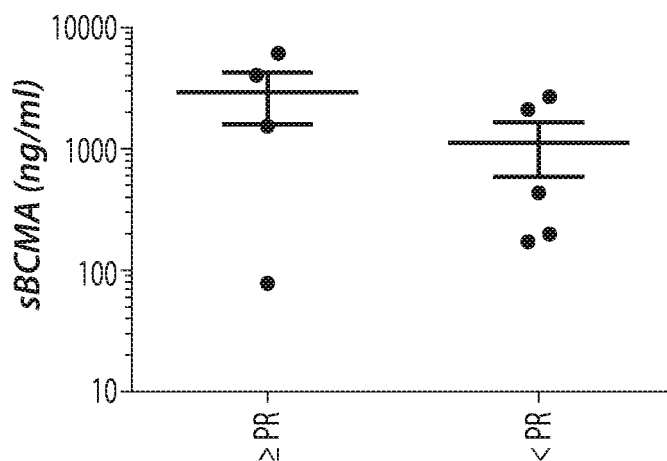
Baseline blood sBCMA v response

FIG. 41B

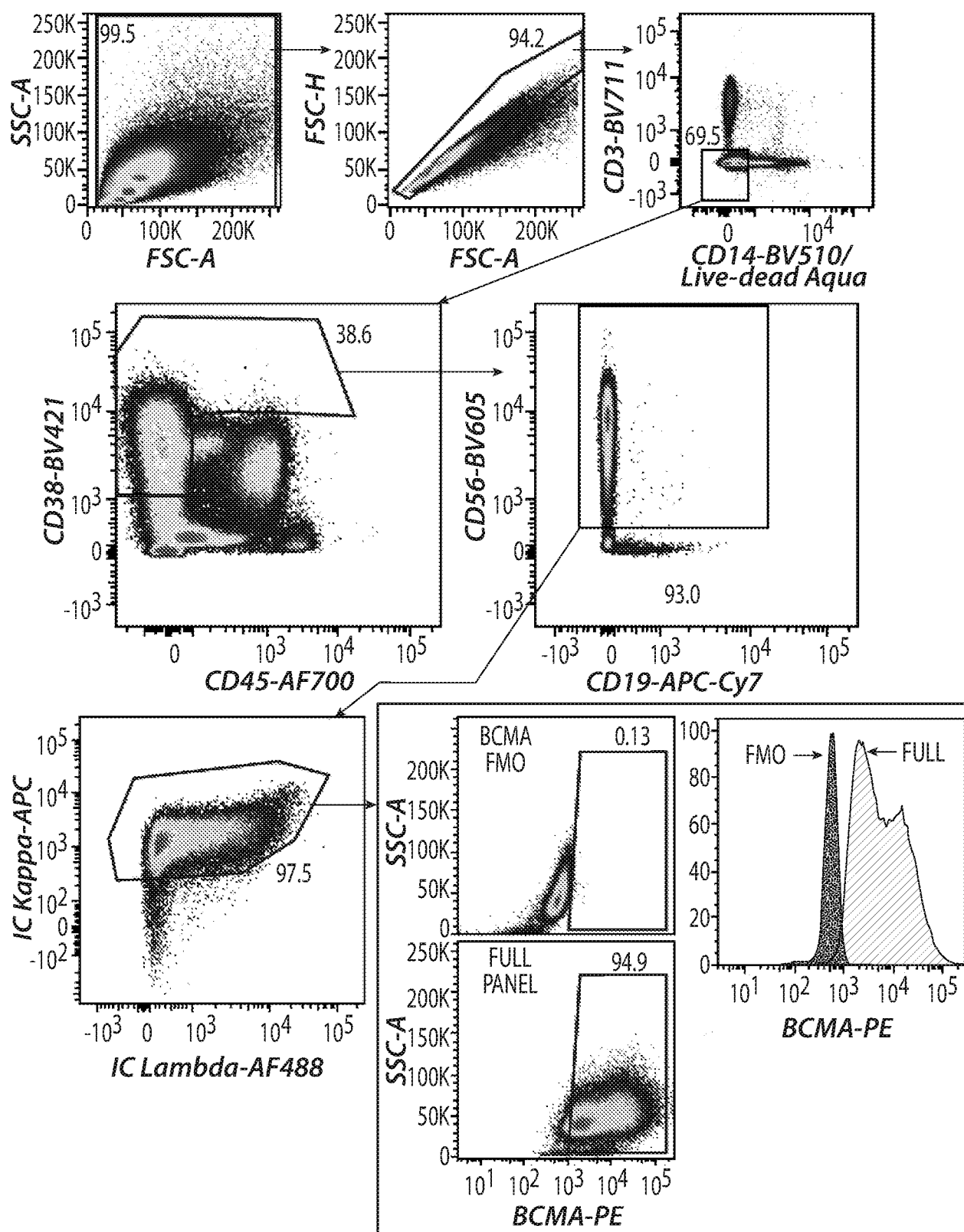


FIG. 42

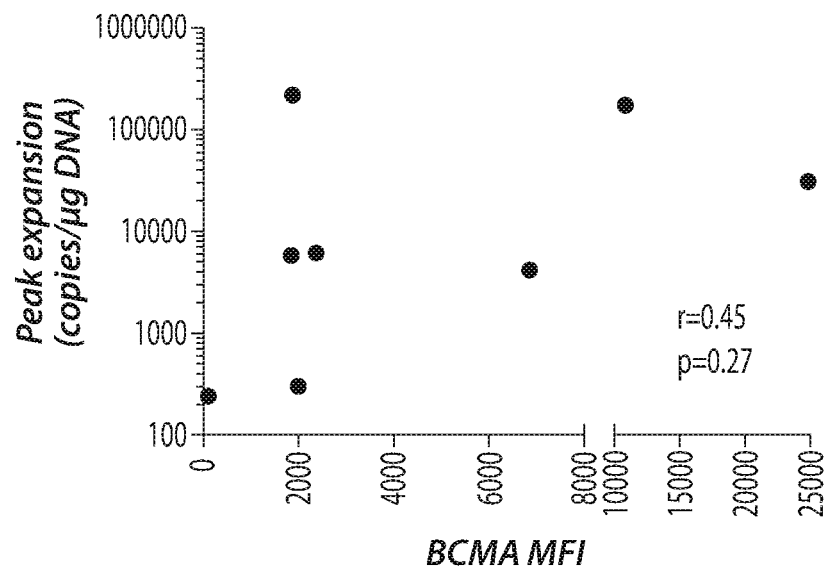


FIG. 43A

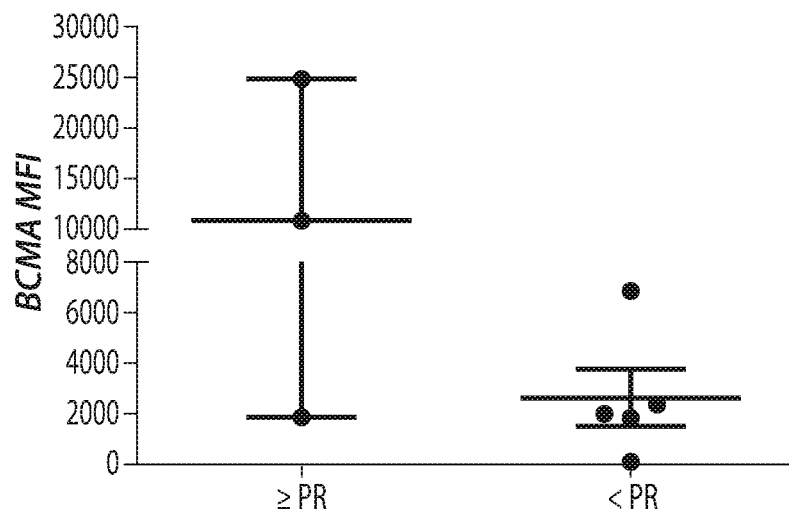


FIG. 43B

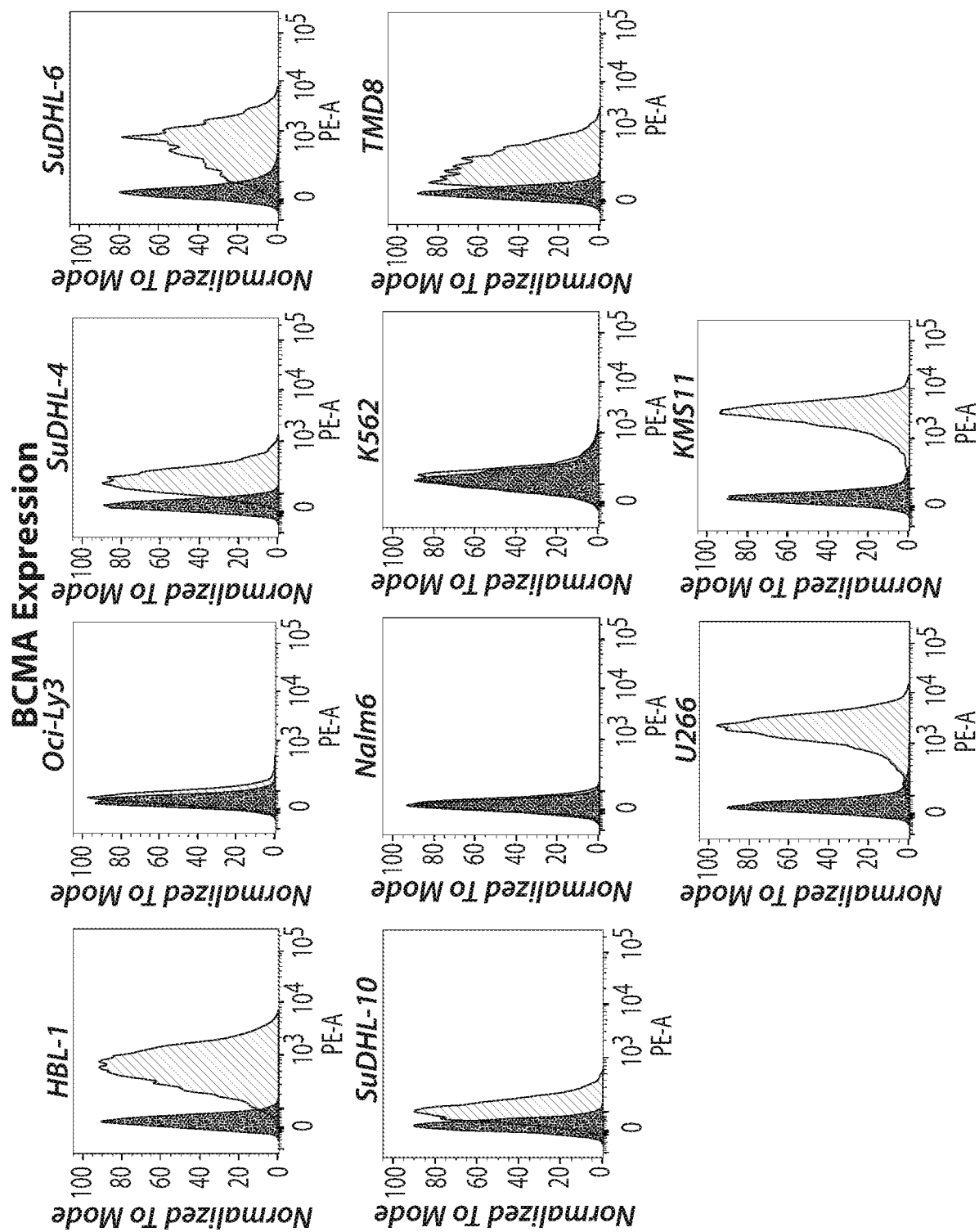


FIG. 44A

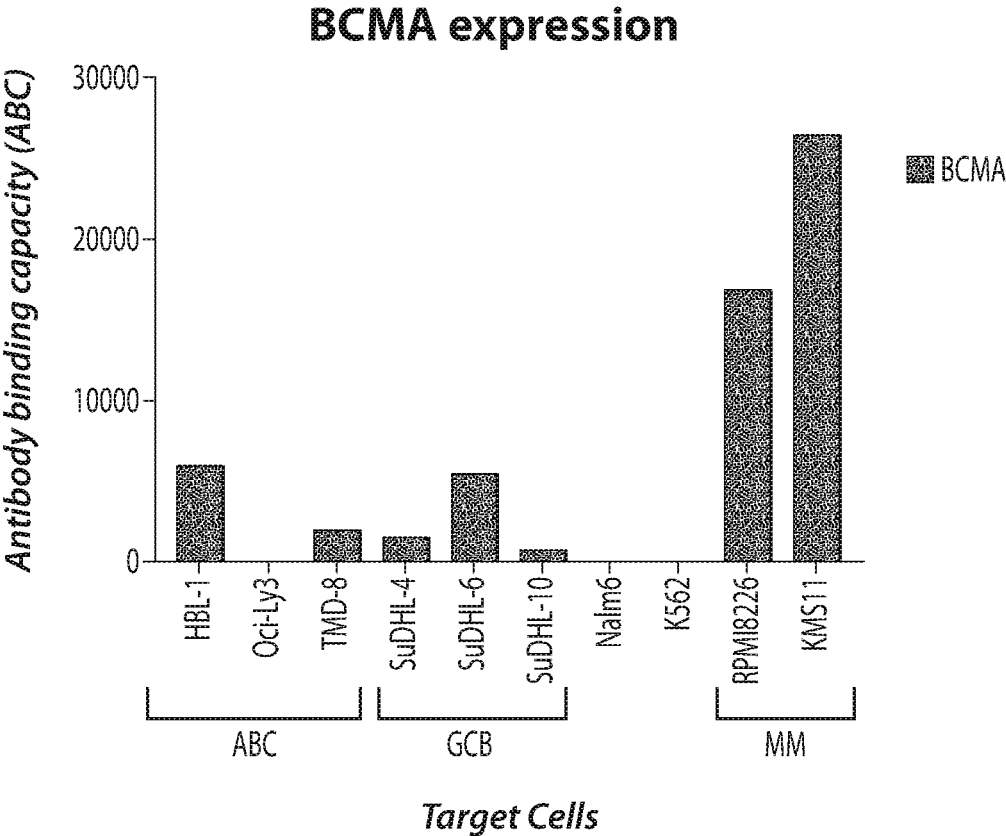


FIG. 44B

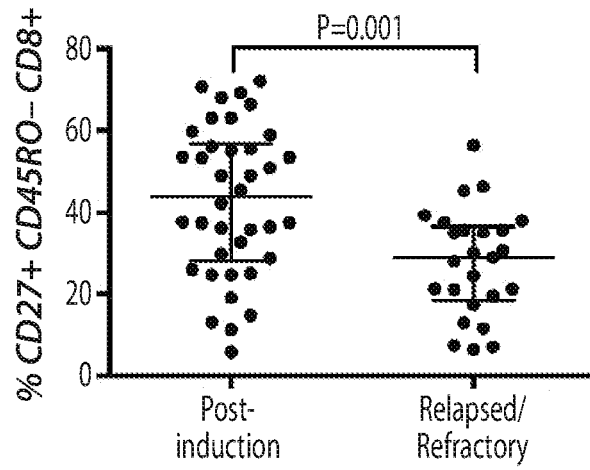


FIG. 45A

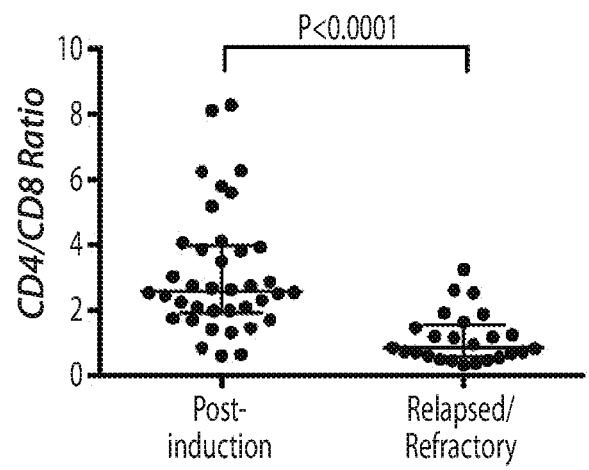


FIG. 45B

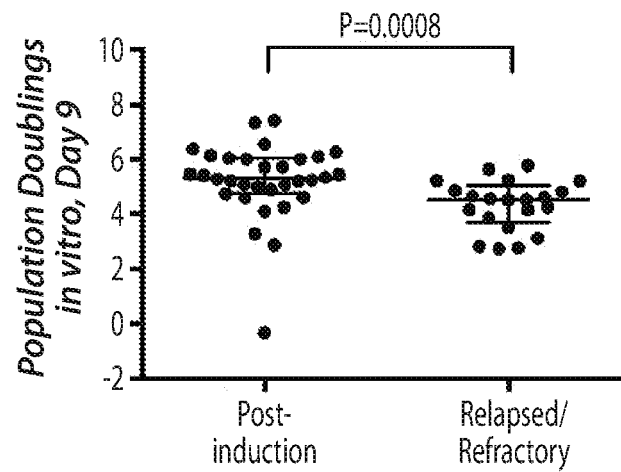
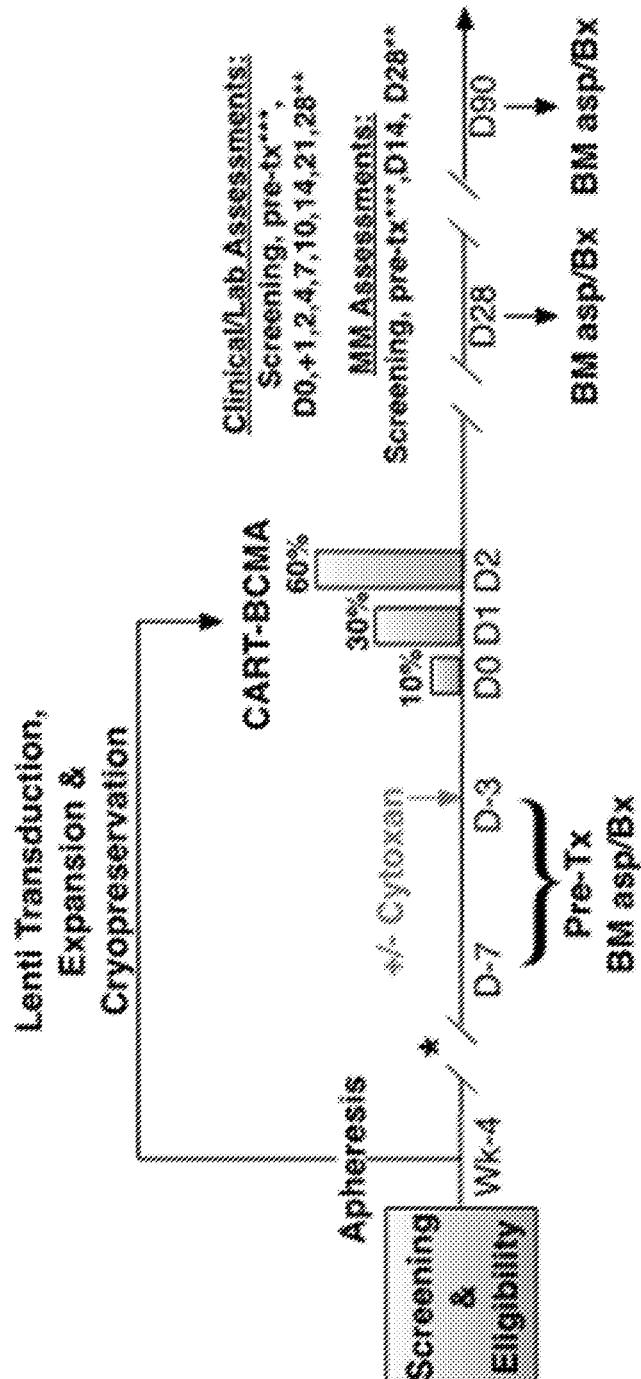


FIG. 45C

FIG. 46



* Patients may receive therapy during manufacturing to maintain disease control

** After first 28 days, follow-up is q4 wks up to 6 mos., then q3 mos. up to 2 years

*** Pre-tx = pre-treatment, 3 to 7 days before CAR T cell infusion

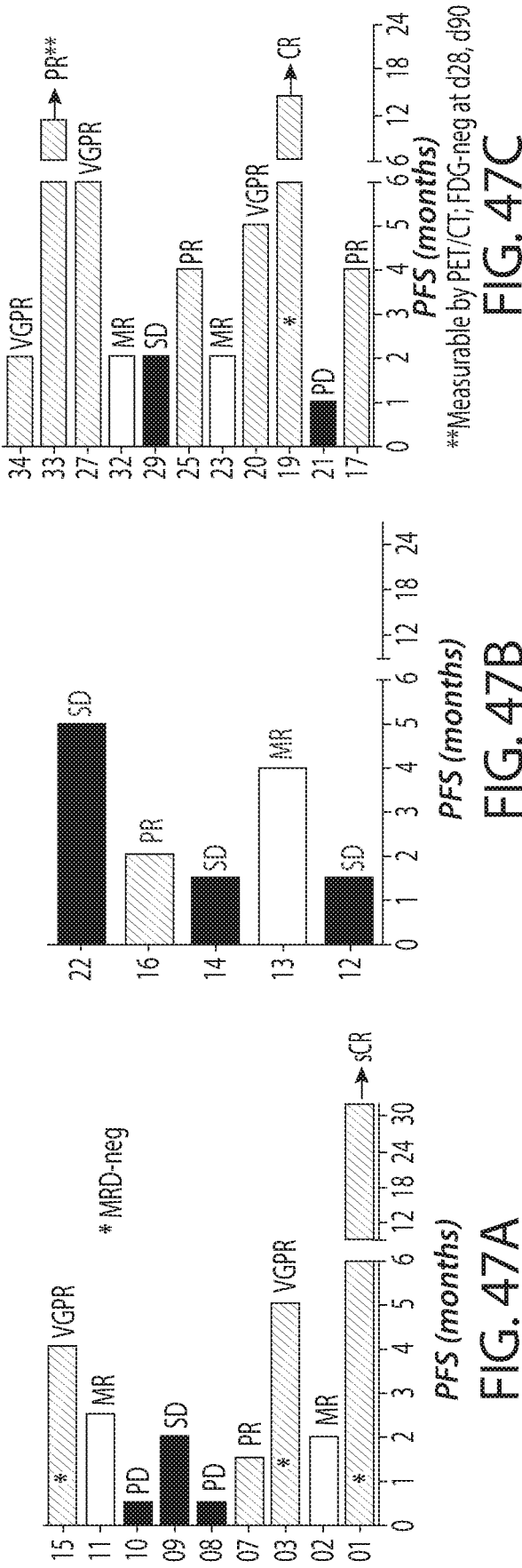
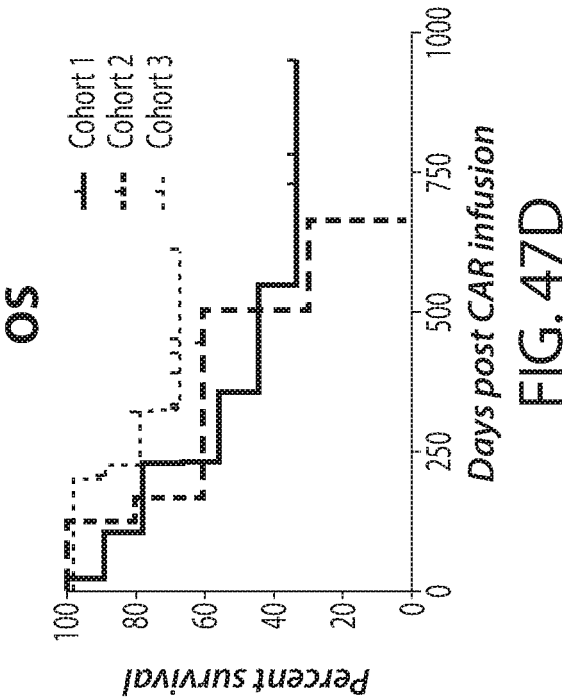


FIG. 48A

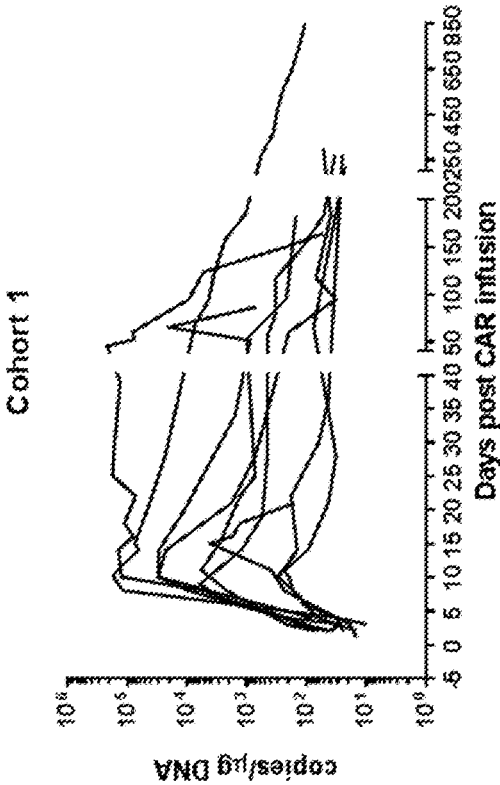


FIG. 48B

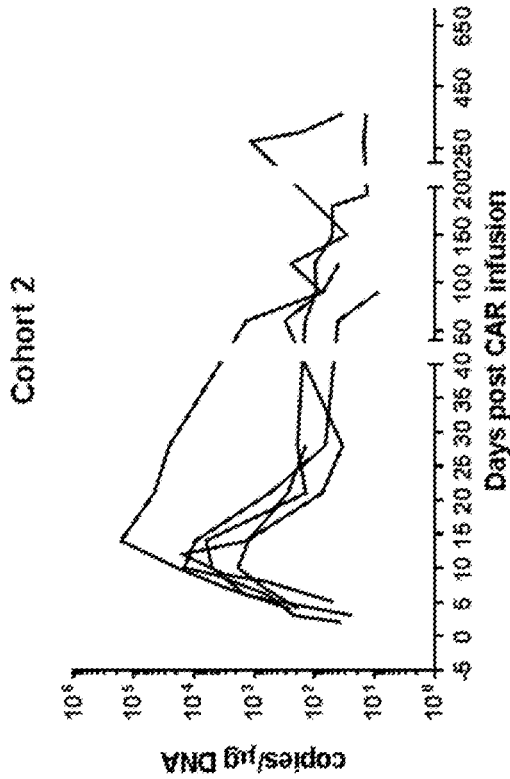


FIG. 48C

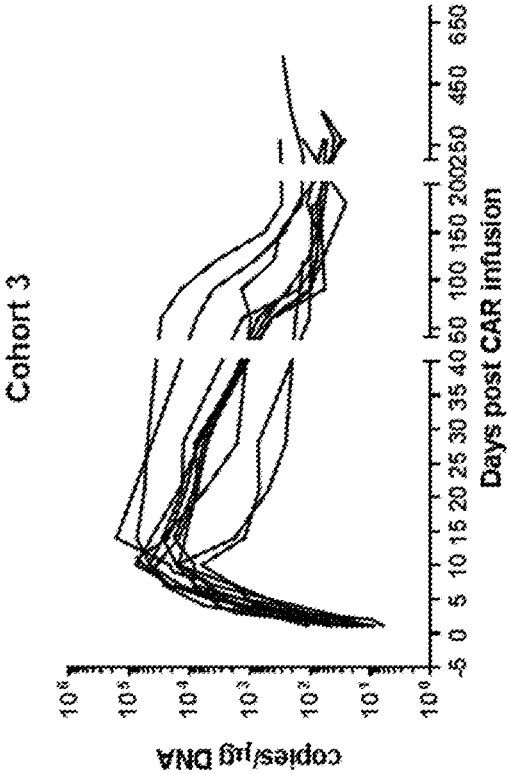


FIG. 48D

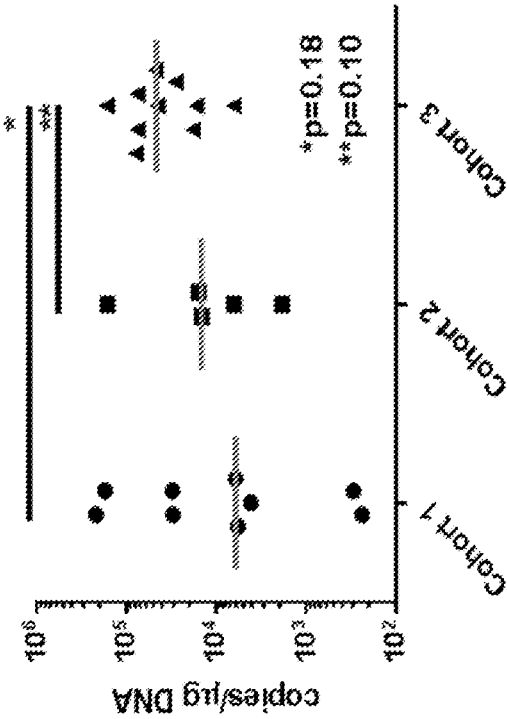


FIG. 49A

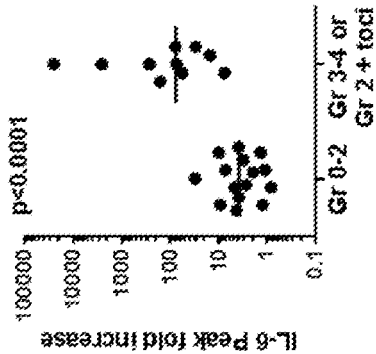


FIG. 49B

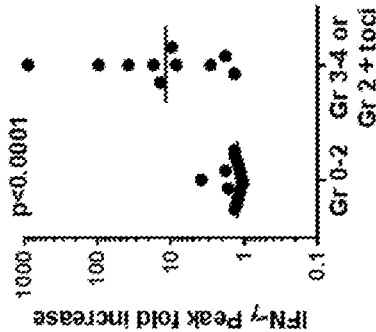


FIG. 49C

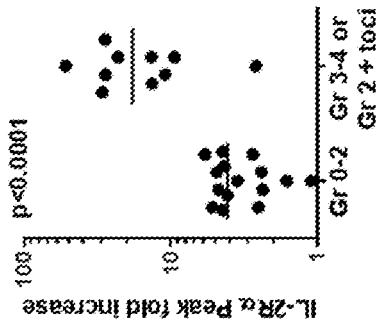


FIG. 49D

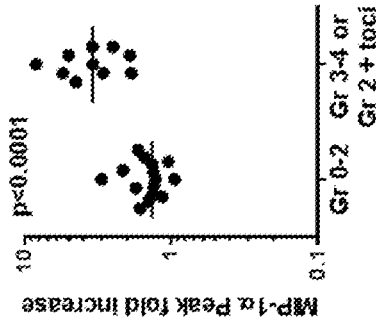


FIG. 49E

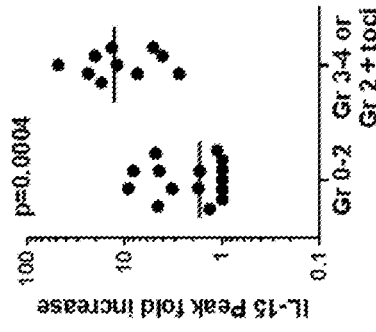


FIG. 49F

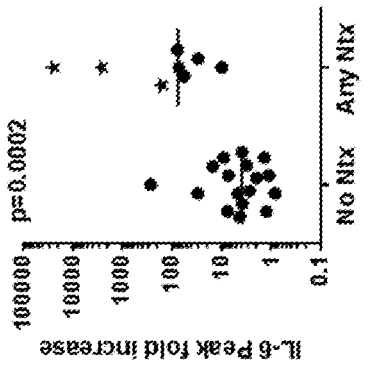


FIG. 49G

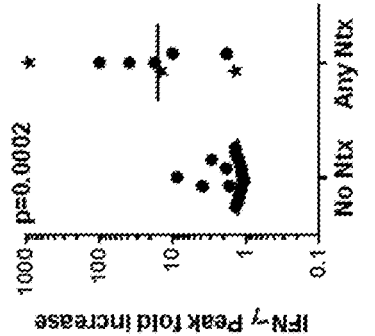


FIG. 49H

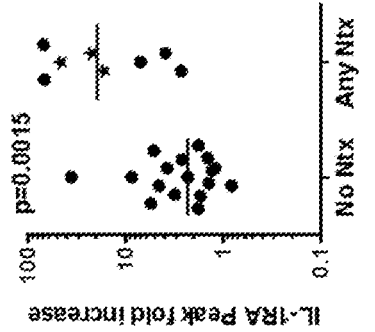
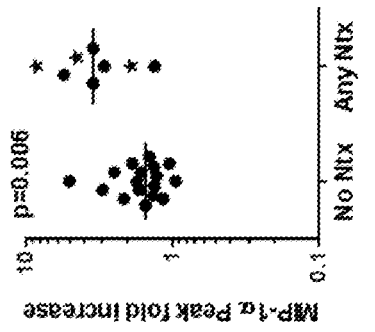


FIG. 49I



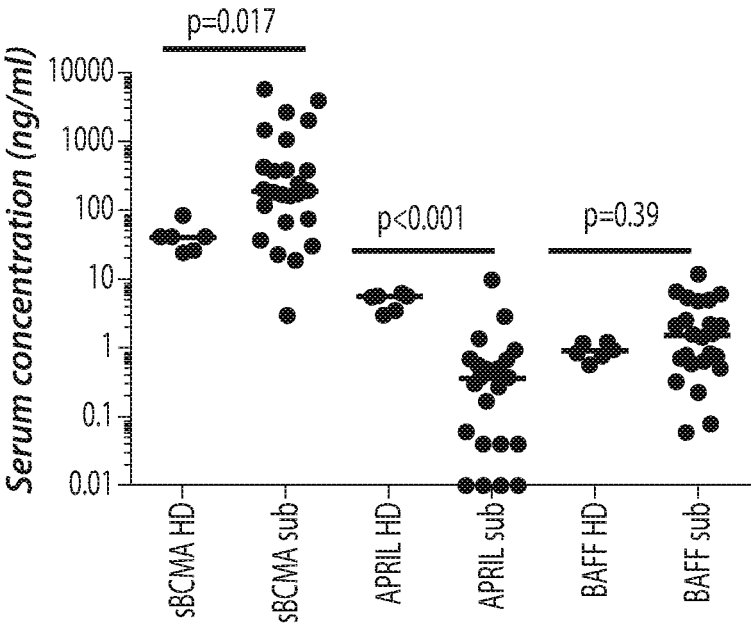


FIG. 50A

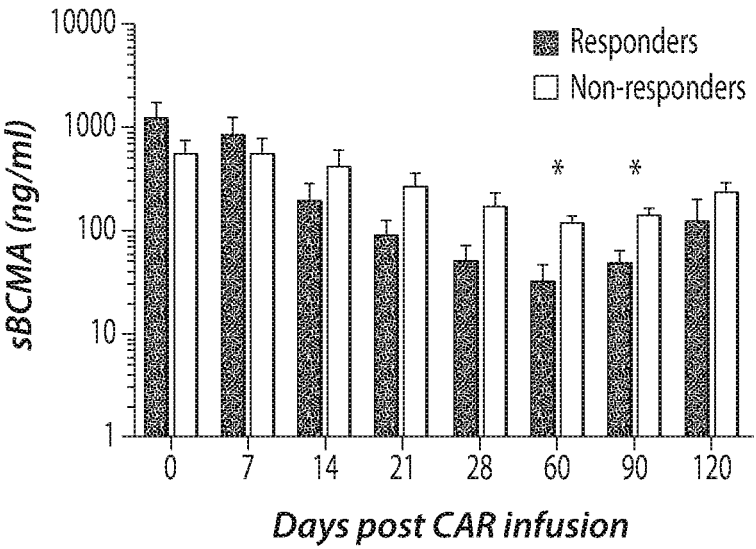


FIG. 50B

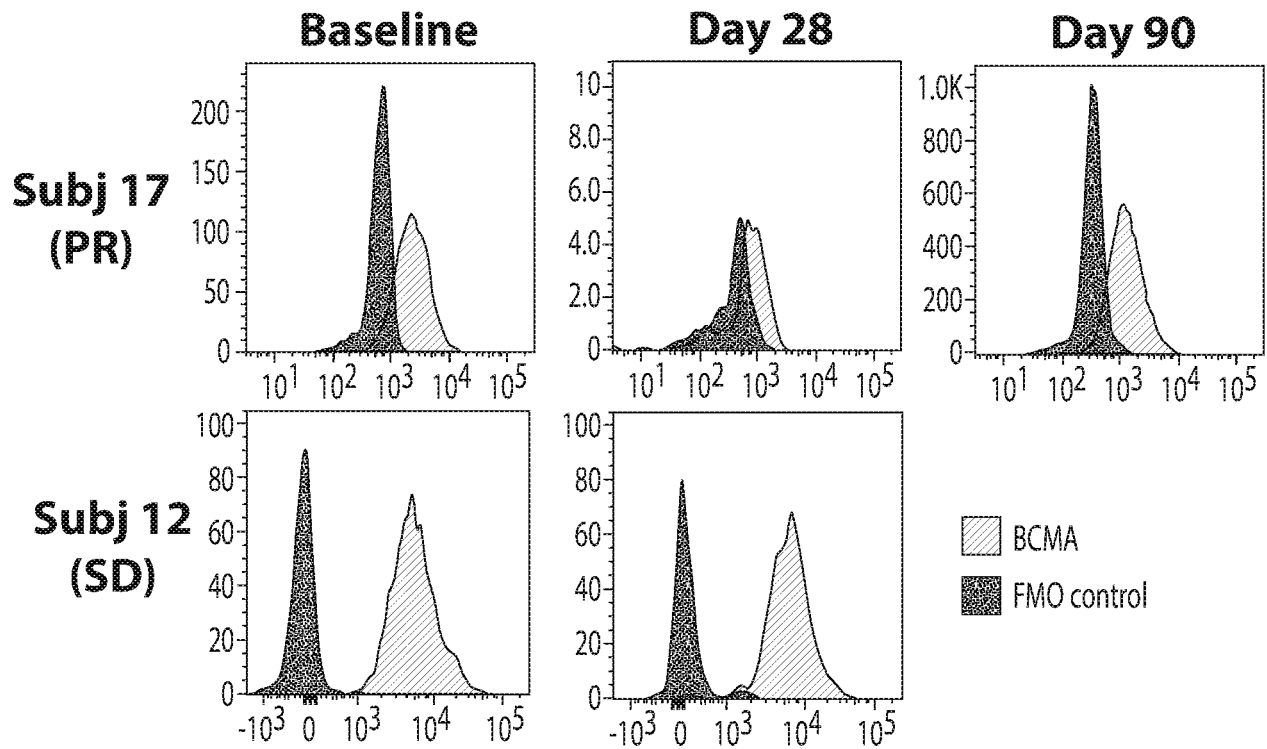


FIG. 50C

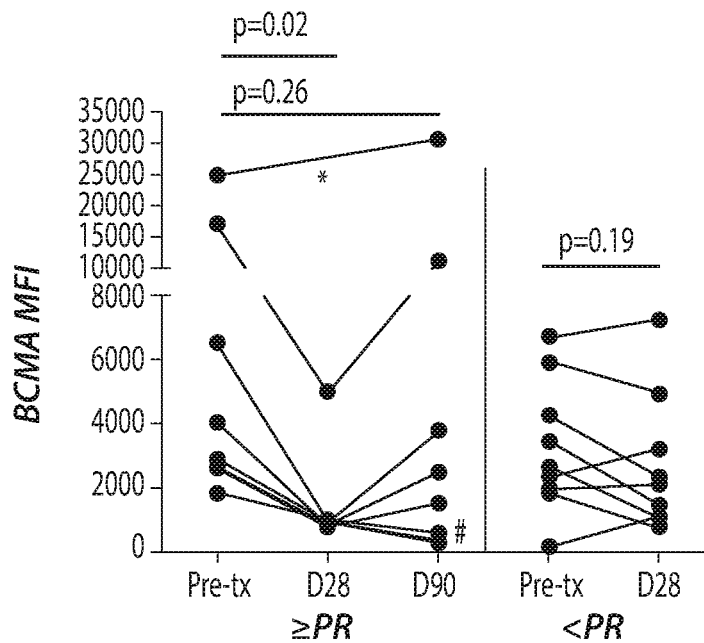


FIG. 50D

FIG. 51A

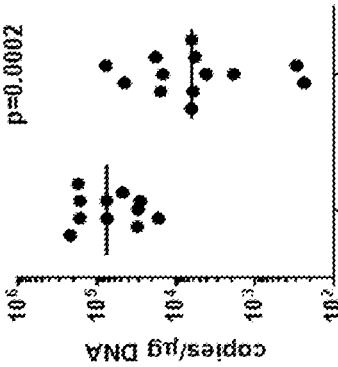


FIG. 51B

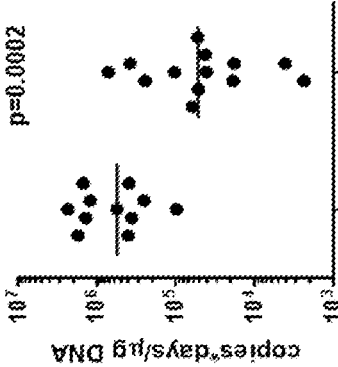


FIG. 51C

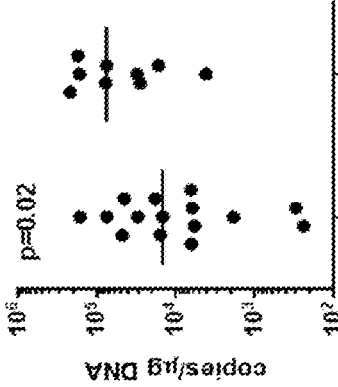


FIG. 51D

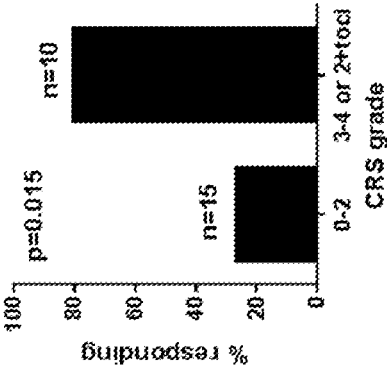


FIG. 51E

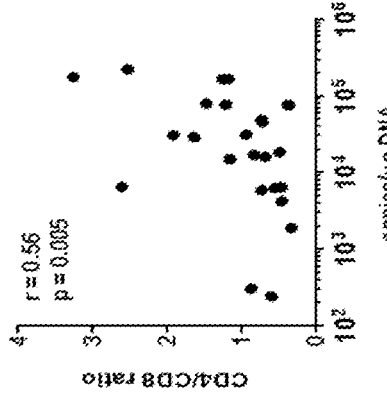


FIG. 51F

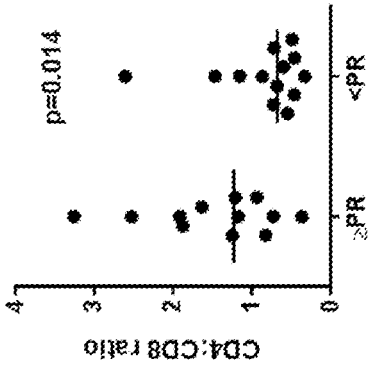


FIG. 51G

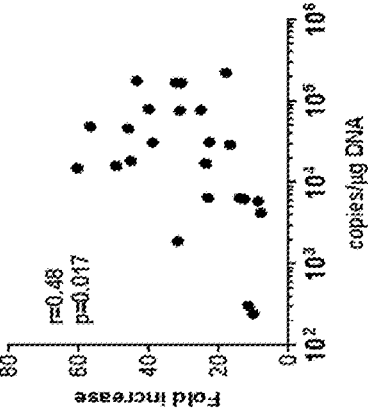


FIG. 51H

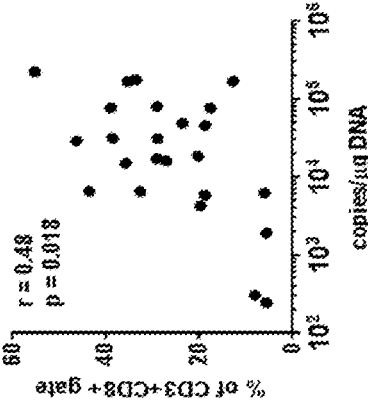


FIG. 51I

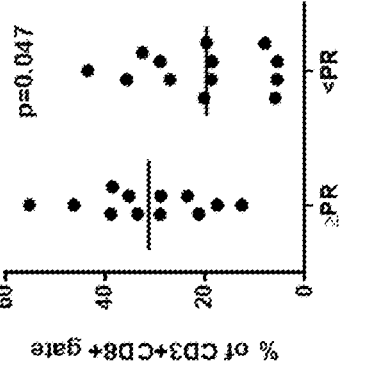


FIG. 52

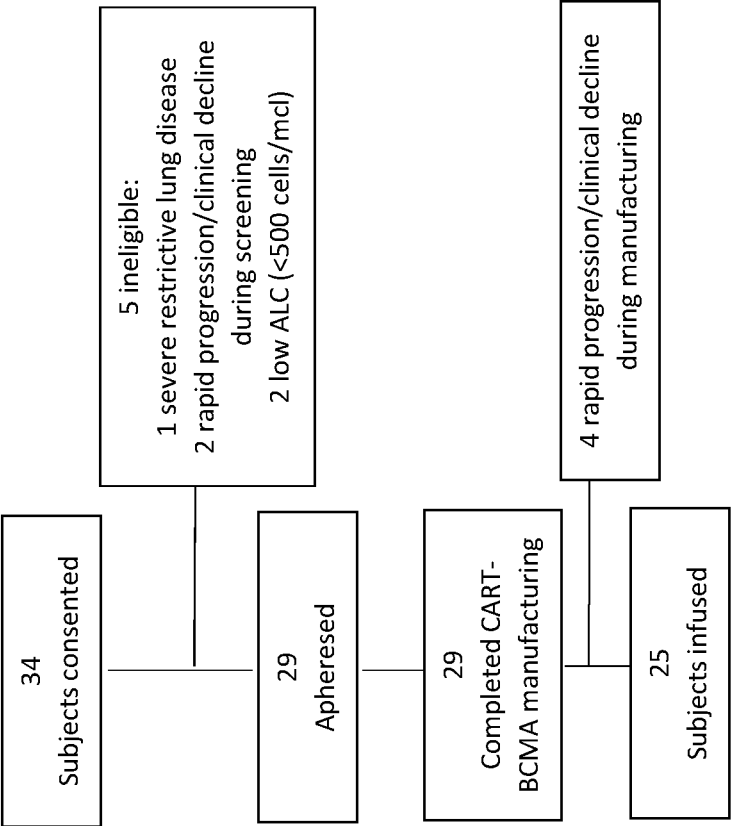


FIG. 53A

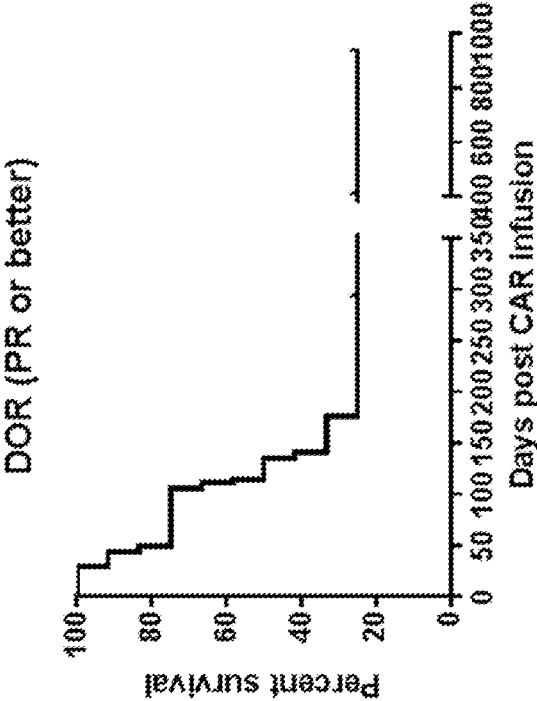


FIG. 53B

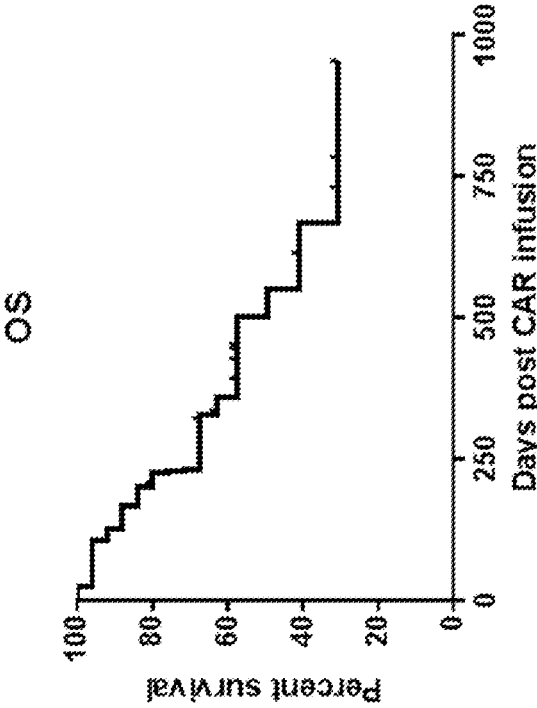


FIG. 53C

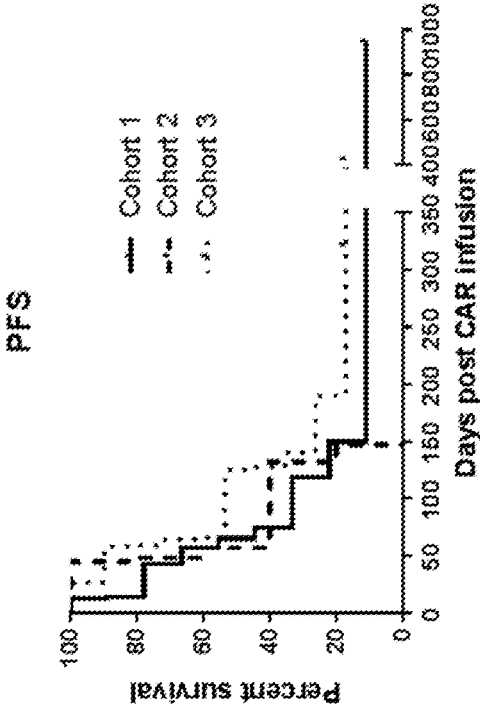


FIG. 53D

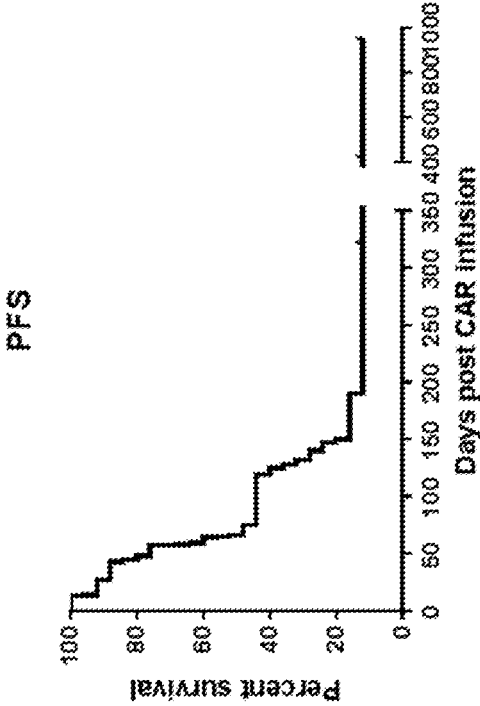


FIG. 54A

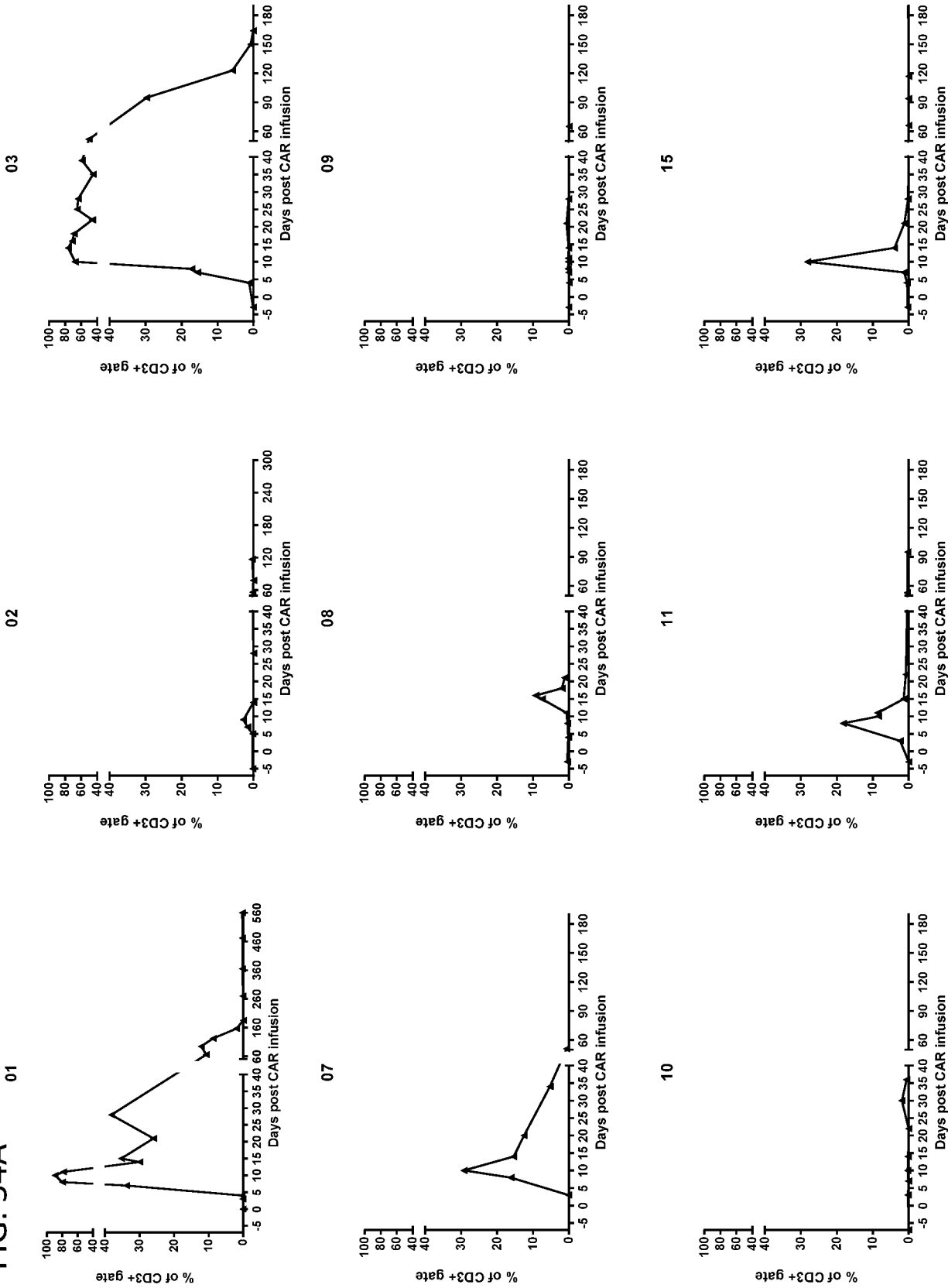


FIG. 54B

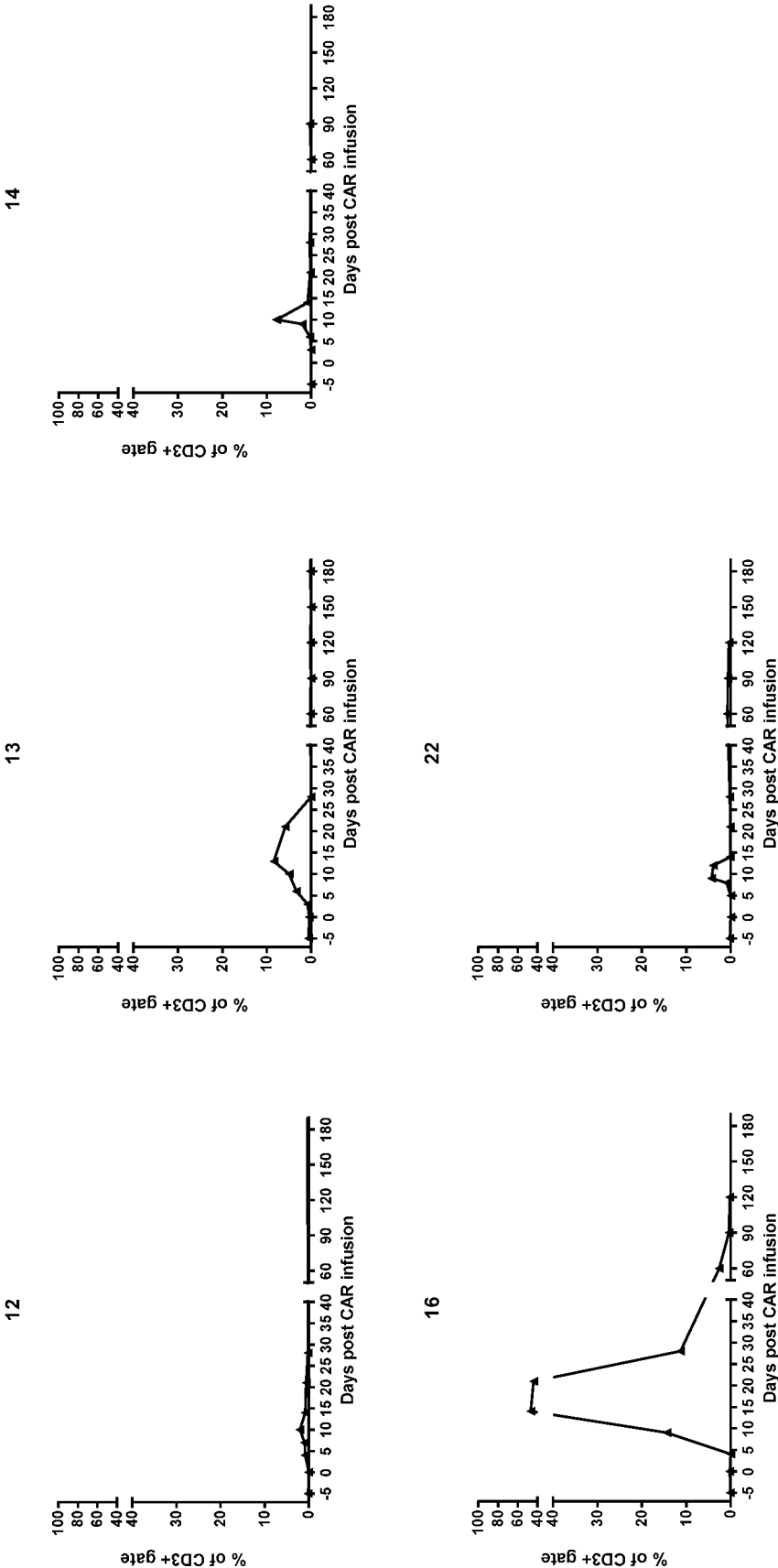


FIG. 54C

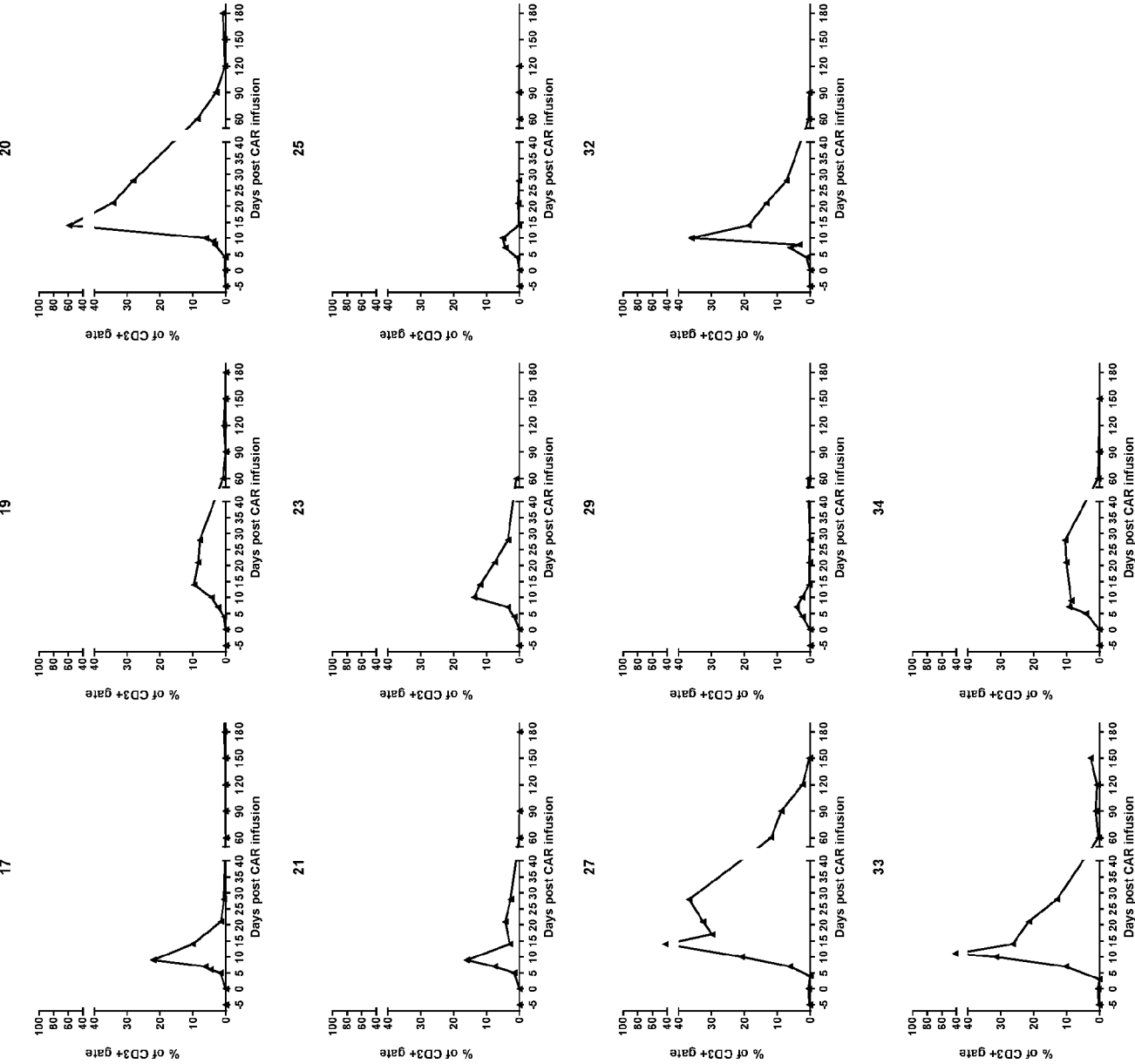
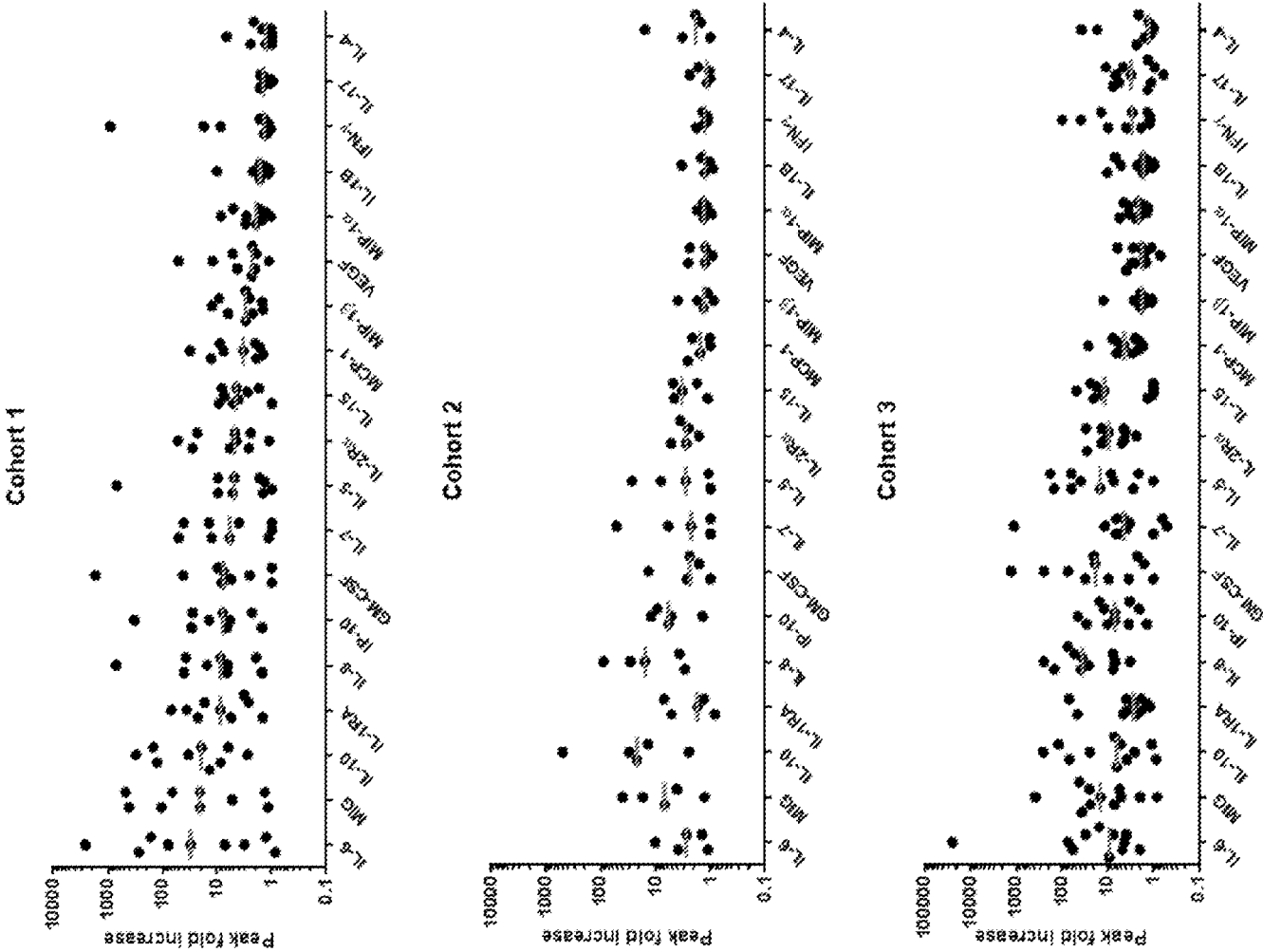
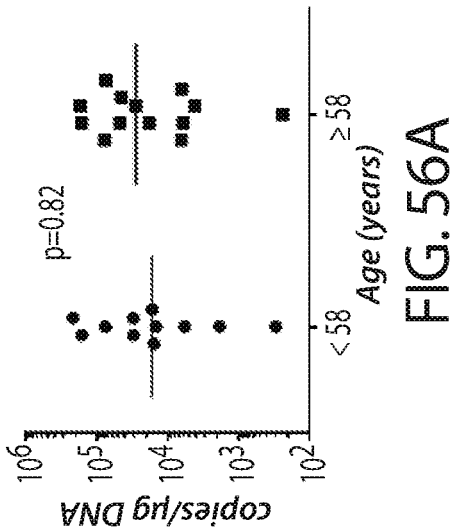
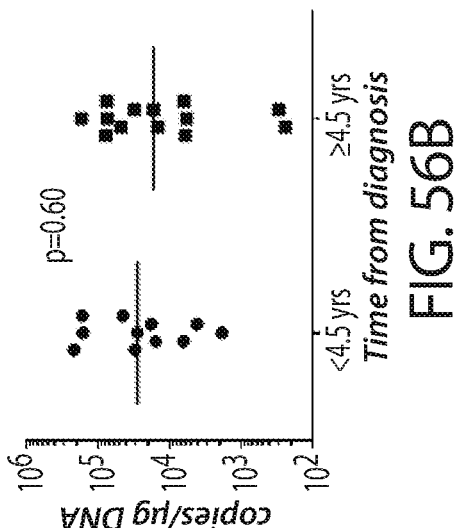
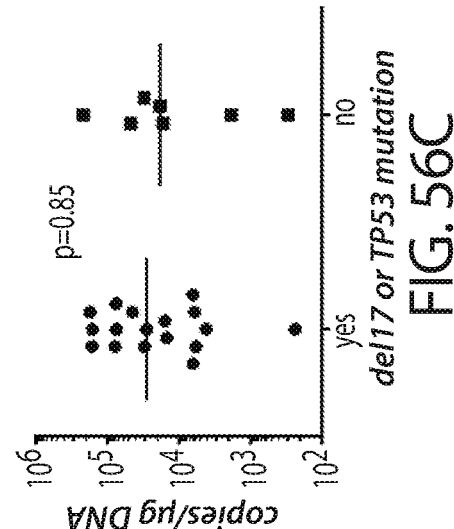
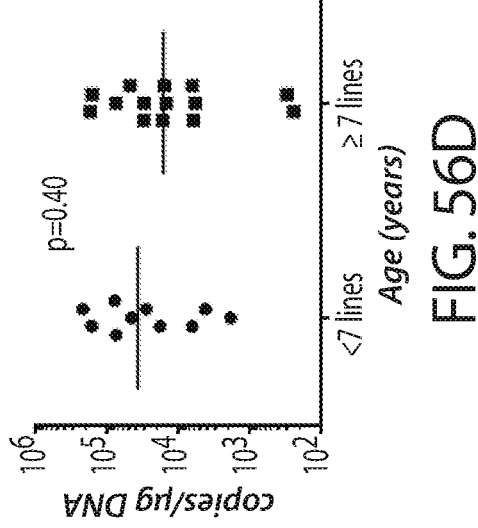
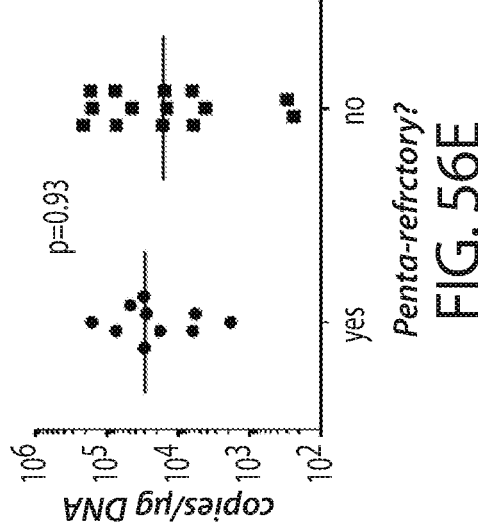
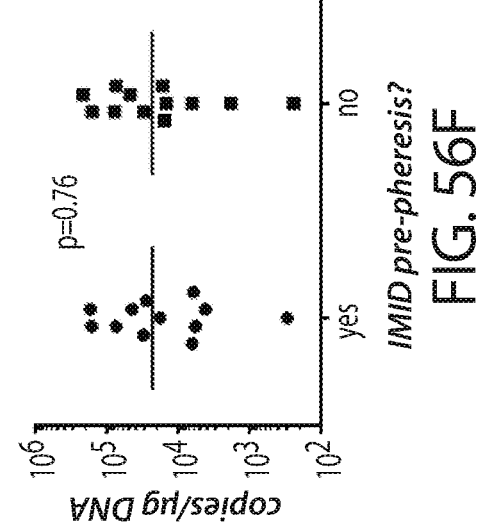


FIG. 55





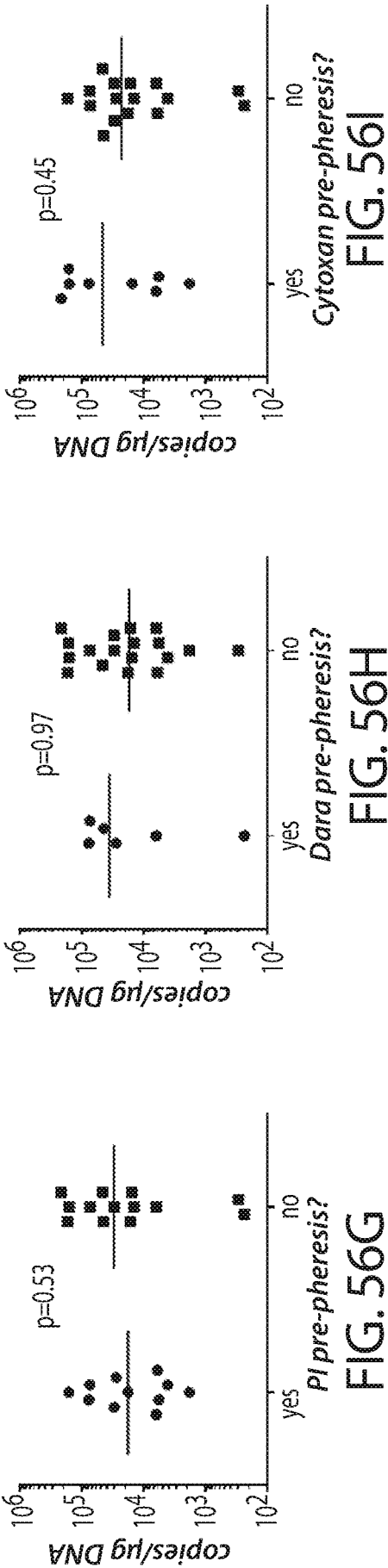
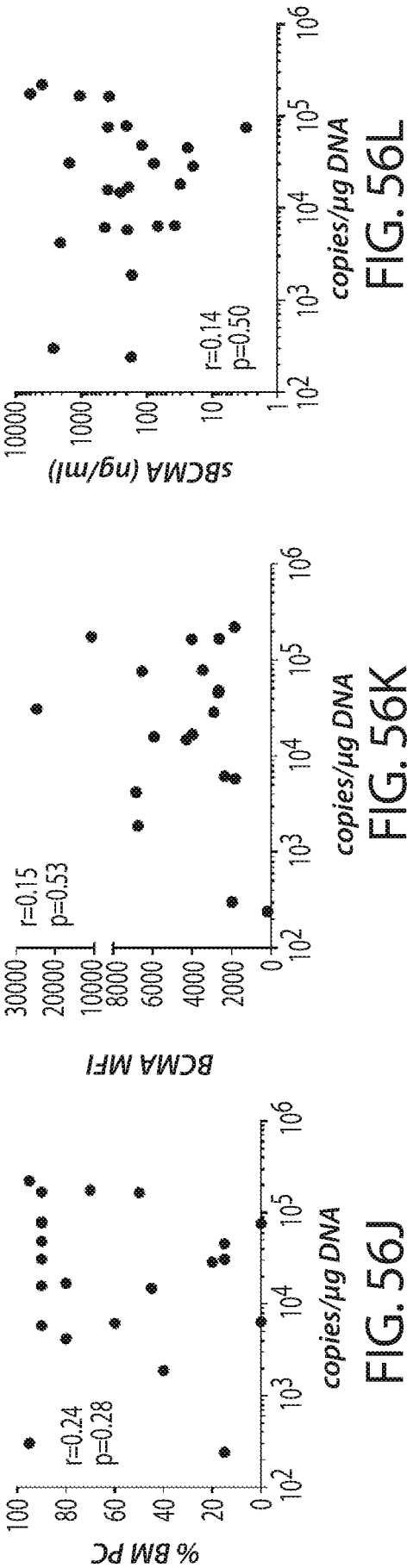


FIG. 57A

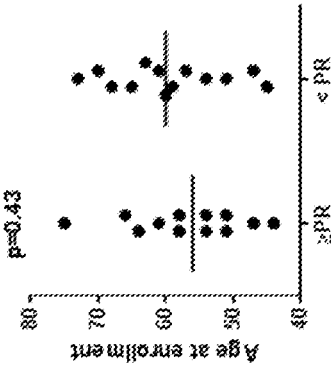


FIG. 57B

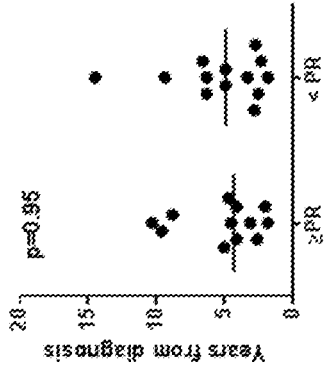


FIG. 57C

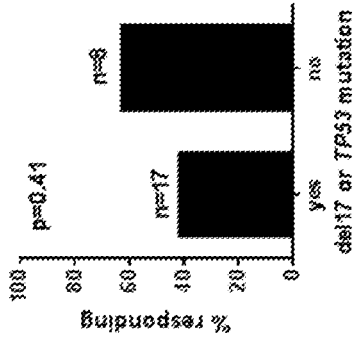


FIG. 57D

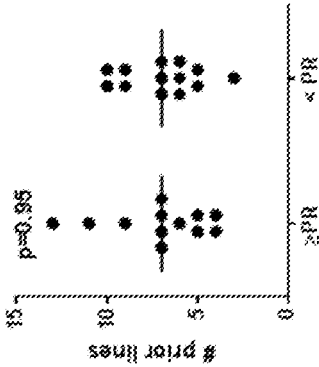


FIG. 57E

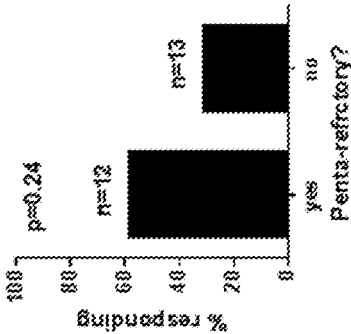


FIG. 57F

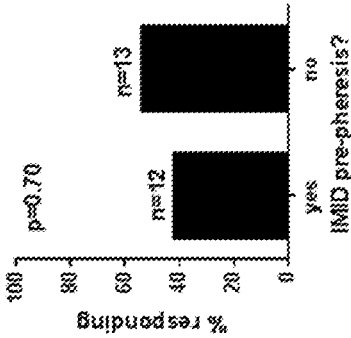


FIG. 57I

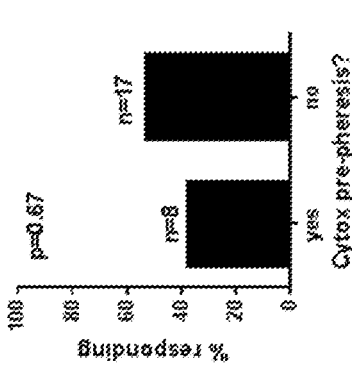


FIG. 57H

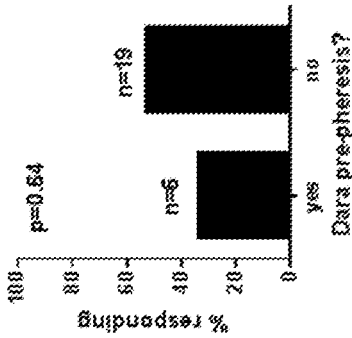


FIG. 57G

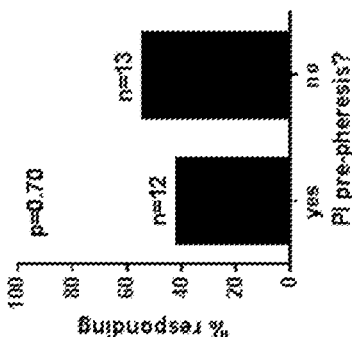


FIG. 57L

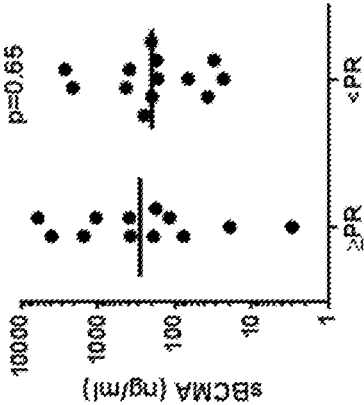


FIG. 57K

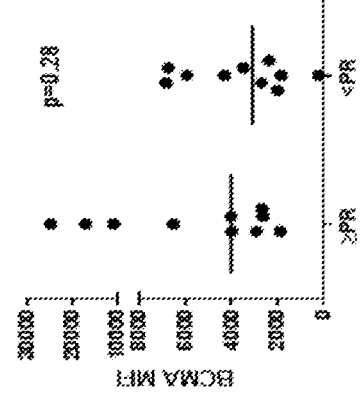


FIG. 57J

