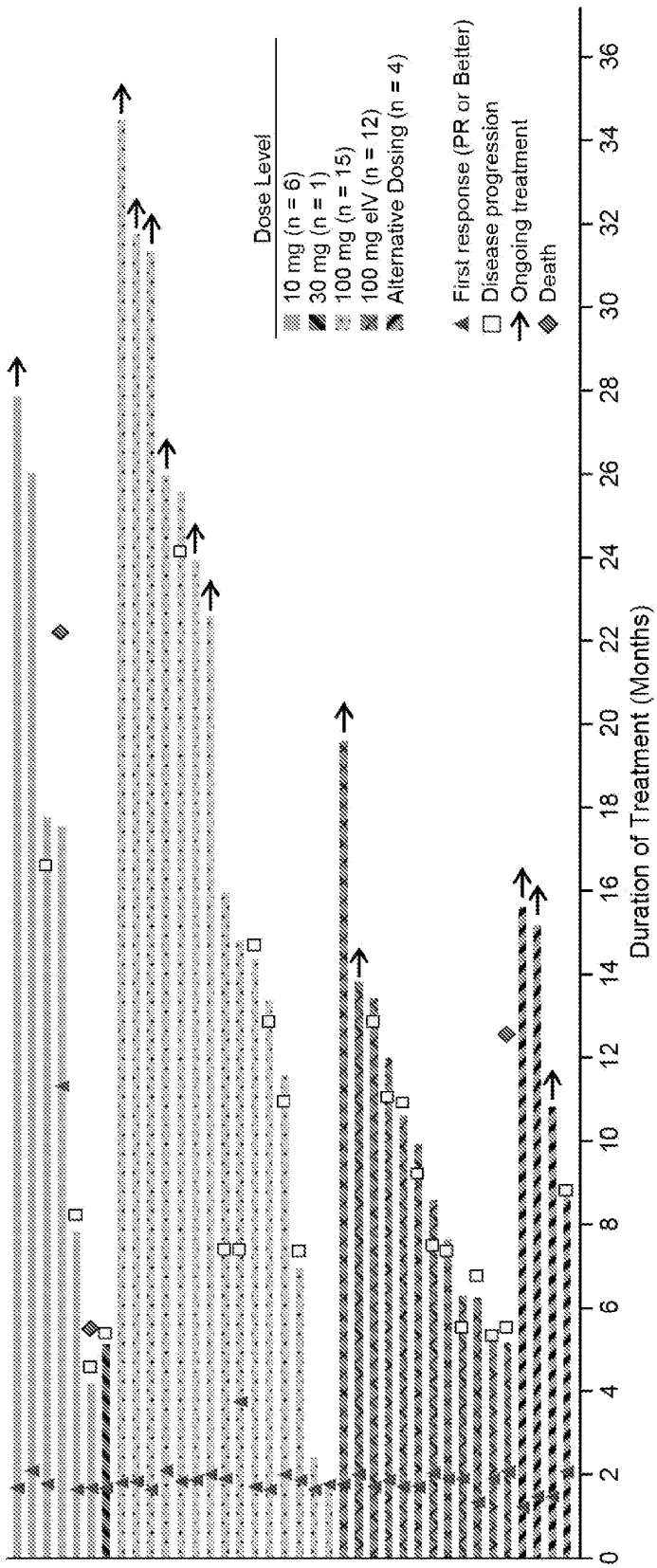

Dose Level
10 mg (n = 6)
30 mg (n = 1)
100 mg (n = 15)
100 mg elV (n = 12)
Alternative Dosing (n = 4)
First response (PR or Better)
Disease progression
Ongoing treatment
Death
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
Duration of Treatment (Months)

FIG. 1

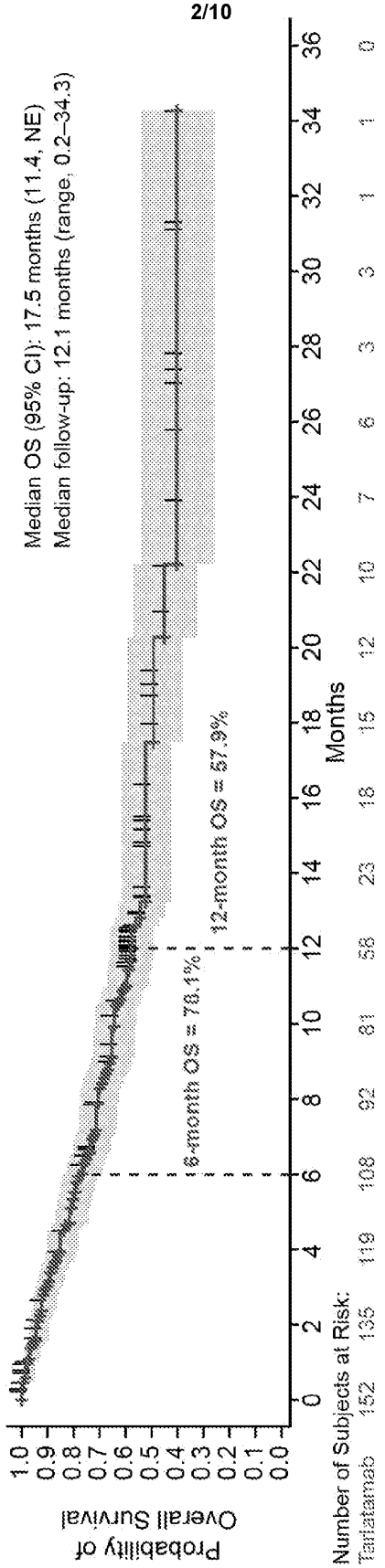

Median OS (95% CI): 17.5 months (11.4, NE)
Median follow-up: 12.1 months (range, 0.2–34.3)
6-month OS = 78.1%
12-month OS = 57.9%
Probability of Overall Survival
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36
Months
Number of Subjects at Risk:
Tarlatamab 152 135 119 108 92 81 58 23 18 15 12 10 7 6 3 3 1 1 0

FIG. 2

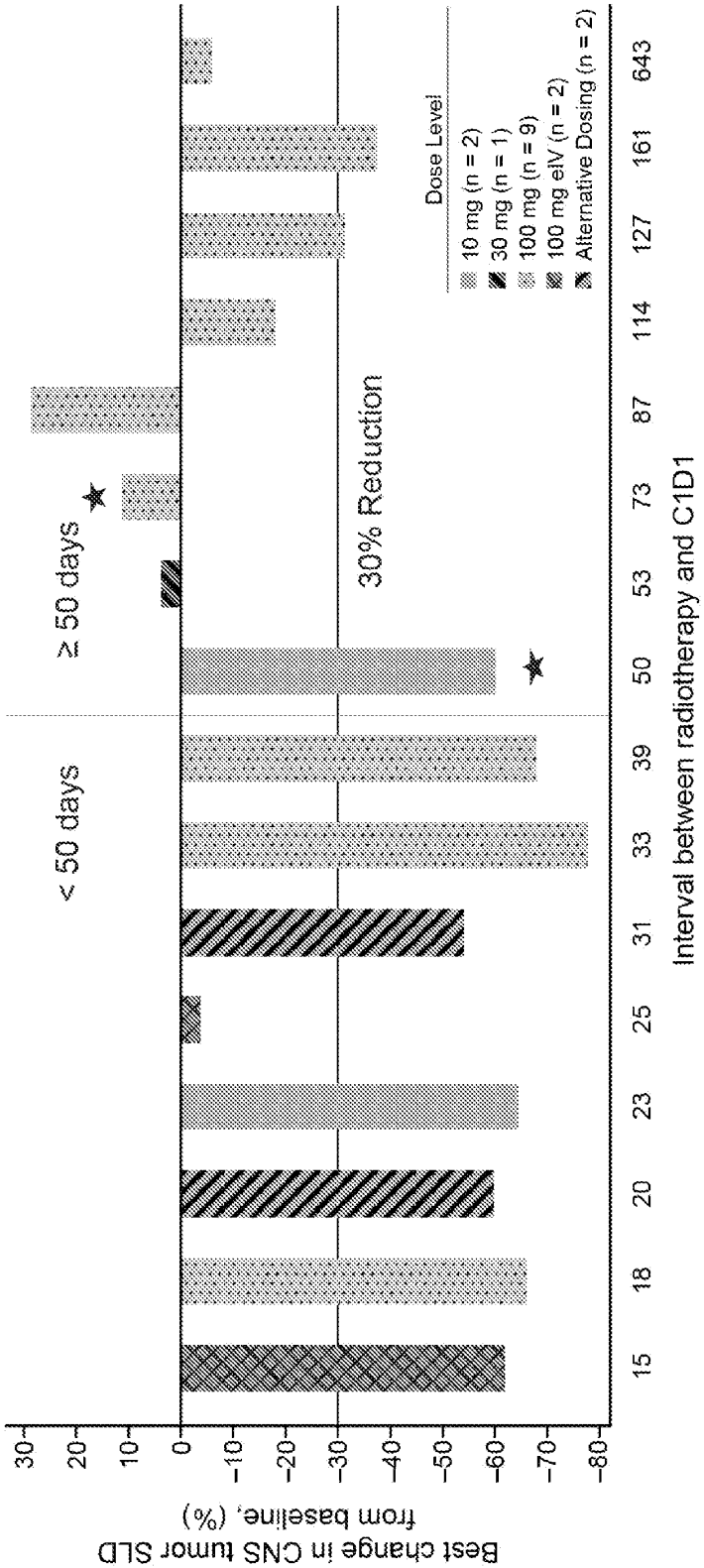

Best change in CNS tumor SLD from baseline, (%)
30
20
10
0
−10
−20
−30
−40
−50
−60
−70
−80
< 50 days
≥ 50 days
30% Reduction
Dose Level
10 mg (n = 2)
30 mg (n = 1)
100 mg (n = 9)
100 mg eIV (n = 2)
Alternative Dosing (n = 2)
15
18
20
23
25
31
33
39
50
53
73
87
114
127
161
643
Interval between radiotherapy and C1D1

FIG. 3

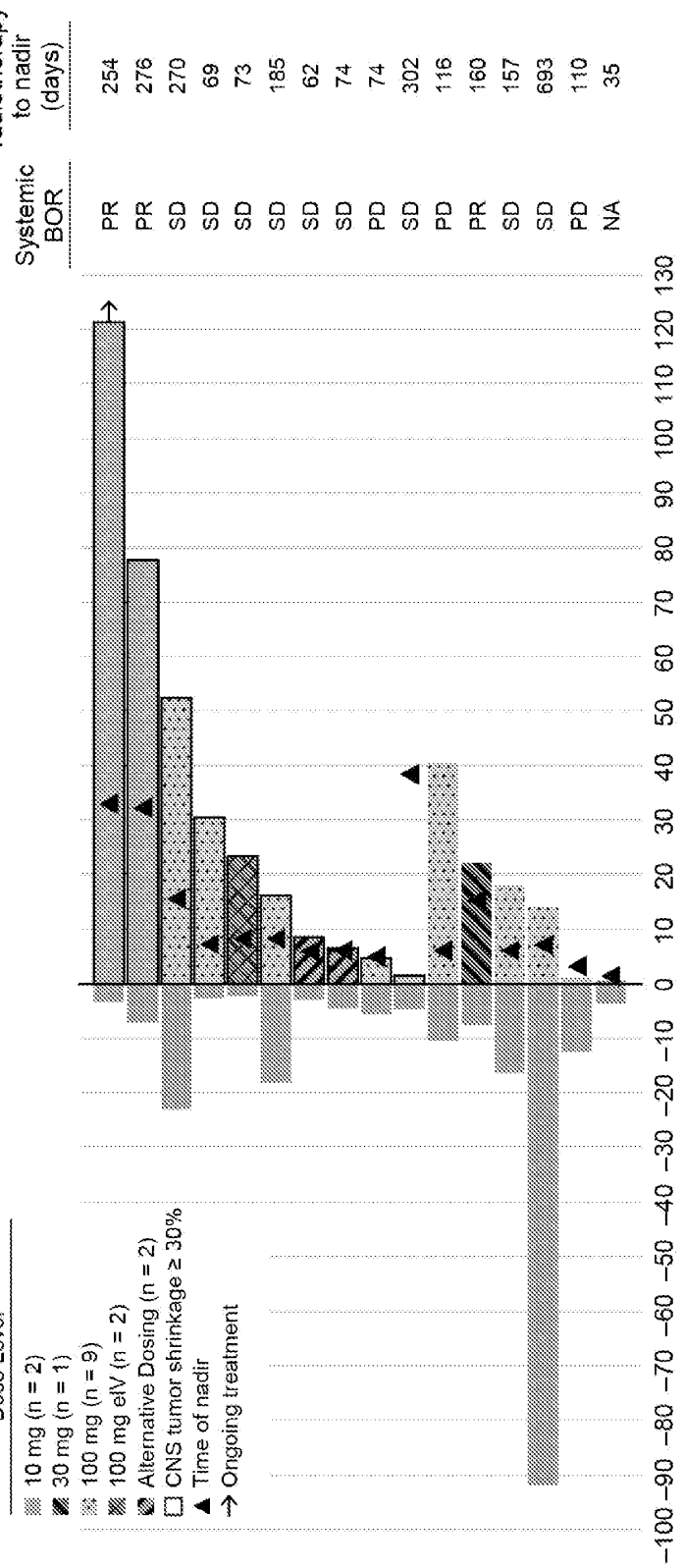

Dose Level
10 mg (n = 2)
30 mg (n = 1)
100 mg (n = 9)
100 mg eIV (n = 2)
Alternative Dosing (n = 2)
CNS tumor shrinkage ≥ 30%
Time of nadir
Ongoing treatment
Systemic BOR
Time from radiotherapy to nadir (days)
PR 254
PR 276
SD 270
SD 69
SD 73
SD 185
SD 62
SD 74
PD 74
SD 302
PD 116
PR 160
SD 157
SD 693
PD 110
NA 35
−100 −90 −80 −70 −60 −50 −40 −30 −20 −10 0 10 20 30 40 50 60 70 80 90 100 110 120 130
Time elapsed between last radiotherapy and C1D1 (weeks)
Duration of treatment (weeks)

FIG. 4

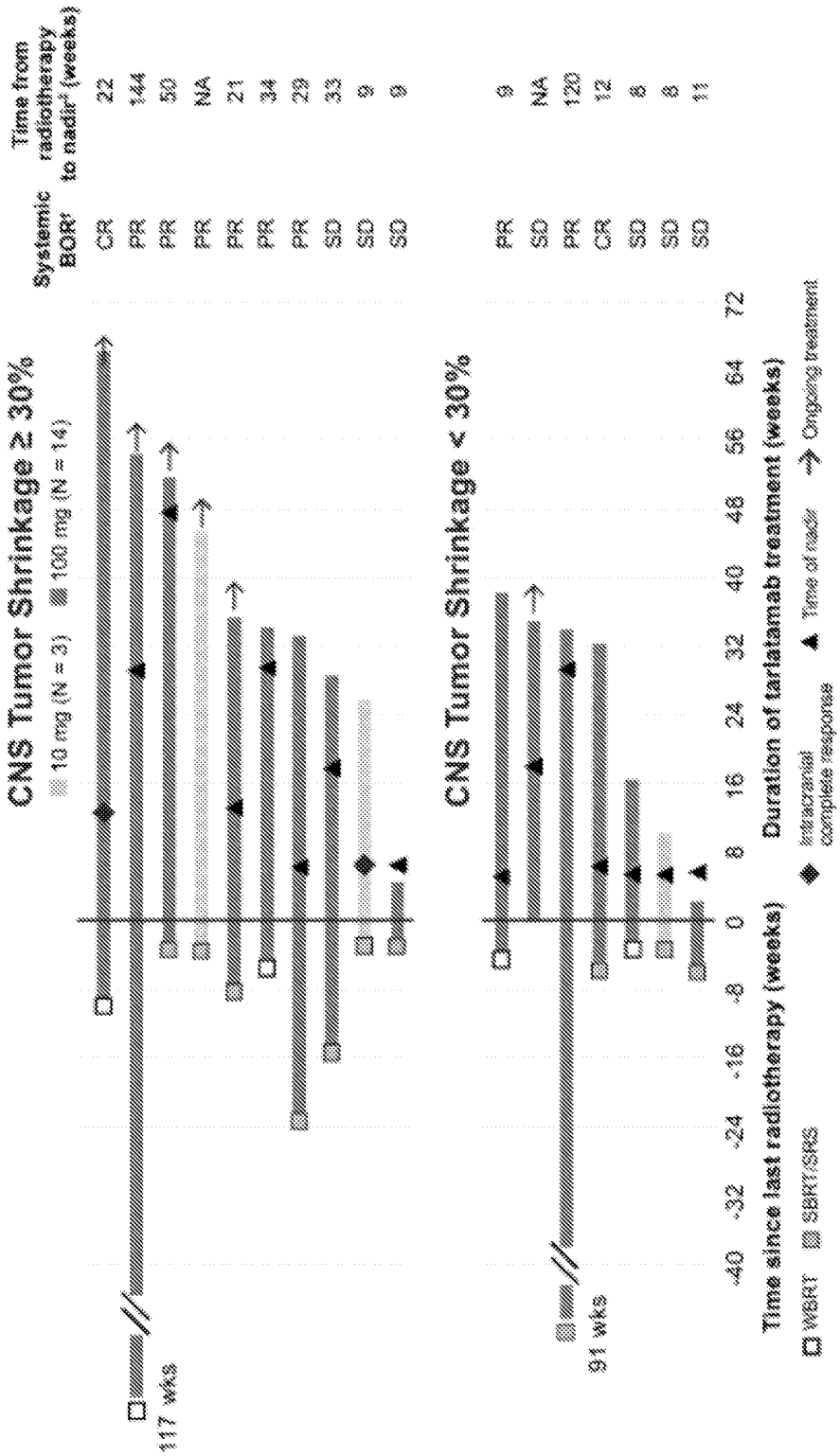

CNS Tumor Shrinkage ≥ 30%
10 mg (N = 3)
100 mg (N = 14)
Systemic BOR[1]
Time from radiotherapy to nadir[2] (weeks)
CR 22
PR 144
PR 50
PR NA
PR 21
PR 34
PR 29
SD 33
SD 9
SD 9
117 wks
CNS Tumor Shrinkage < 30%
PR 9
SD NA
PR 120
CR 12
SD 6
SD 6
SD 11
91 wks
-40 -32 -24 -16 -8 0 8 16 24 32 40 48 56 64 72
Time since last radiotherapy (weeks)
Duration of tarlatamab treatment (weeks)
WBRT
SBRT/SRS
Intracranial complete response
Time of nadir
Ongoing treatment

FIG. 5

	10 mg (n = 2)	30 mg (n = 1)	100 mg (n = 9)	100 mg eIV (n = 2)	Alternative dosing (n = 2)	Overall (N = 16)[a]
Sex - n (%)						
Male	0 (0.0)	1 (100.0)	5 (55.6)	2 (100.0)	2 (100.0)	10 (62.5)
Female	2 (100.0)	0 (0.0)	4 (44.4)	0 (0.0)	0 (0.0)	6 (37.5)
Age (years)						
n	2	1	9	2	2	16
Mean	55.5	64.0	58.3	60.0	62.5	59.1
SD	17.7	-	11.2	4.2	10.6	10.1
Median	55.5	64.0	62.0	60.0	62.5	62.0
Q1, Q3	43.0, 68.0	64.0, 64.0	51.0, 62.0	57.0, 63.0	55.0, 70.0	53.0, 66.0
Min, Max	43, 68	64, 64	41, 76	57, 63	55, 70	41, 76
Number of prior lines of therapy						
n	2	1	9	2	2	16
Mean	4.0	1.0	2.4	1.5	2.5	2.4
SD	0.0	-	1.8	0.7	0.7	1.5
Median	4.0	1.0	2.0	1.5	2.5	2.0
Q1, Q3	4.0, 4.0	1.0, 1.0	1.0, 4.0	1.0, 2.0	2.0, 3.0	1.0, 4.0
Min, Max	4, 4	1, 1	1, 6	1, 2	2, 3	1, 6
Liver metastases - n (%)						
Yes	1 (50.0)	0 (0.0)	3 (33.3)	1 (50.0)	1 (50.0)	6 (37.5)
No	1 (50.0)	1 (100.0)	6 (66.7)	1 (50.0)	1 (50.0)	10 (62.5)
History of treated brain metastases - n (%)						
Yes	2 (100.0)	1 (100.0)	9 (100.0)	2 (100.0)	2 (100.0)	16 (100.0)
No	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Time from prior brain radiation to first tarlatamab treatment (days)						
n	2	1	9	2	2	16
Mean	36.5	53.0	143.9	20.0	25.5	94.5
SD	19.1	-	193.0	7.1	7.8	152.6
Median	36.5	53.0	87.0	20.0	25.5	44.5
Q1, Q3	23.0, 50.0	53.0, 53.0	39.0, 127.0	15.0, 25.0	20.0, 31.0	24.0, 100.5
Min, Max	23, 50	53, 53	18, 643	15, 25	20, 31	15, 643

[a]Includes patients who had at least two brain scans (one at baseline and one post-baseline) and were identified per mRANO-BM by blinded reviewer as having at least one brain lesion ≥ 10 mm in size at baseline.
Abbreviations: CNS, central nervous system; eIV, extended intravenous; mRANO-BM, modified Response Assessment in Neuro-Oncology Brain Metastases; N, number of patients in the analysis set; n, number of patients with observed data; Q1, first quartile; Q3, third quartile; SD, standard deviation.

FIG. 6

	10 mg (n = 2)	30 mg (n = 1)	100 mg (n = 9)	100 mg eIV (n = 2)	Alternative dosing (n = 2)	Overall (N = 16)[a]
Prior local therapy for brain						
Radiotherapy	2 (100.0)	1 (100.0)	9 (100.0)	2 (100.0)	2 (100.0)	16 (100.0)
Surgery	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Radiotherapy and surgery	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Number of CNS lesions identified on baseline MRI by blinded reviewer						
n	2	1	9	2	2	16
Mean	3.0	1.0	3.8	3.5	4.5	3.6
SD	1.4	-	2.3	3.5	3.5	2.3
Median	3.0	1.0	4.0	3.5	4.5	4.0
Q1, Q3	2.0, 4.0	1.0, 1.0	1.0, 6.0	1.0, 6.0	2.0, 7.0	1.0, 6.0
Min, Max	2, 4	1, 1	1, 7	1, 6	2, 7	1, 7
Systemic Best Overall Response (Modified RECIST 1.1) - n (%)						
Confirmed complete response (CR)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Confirmed partial response (PR)	2 (100.0)	1 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (18.8)
Stable disease (SD)	0 (0.0)	0 (0.0)	6 (66.7)	1 (50.0)	2 (100.0)	9 (56.3)
Progressive disease (PD)	0 (0.0)	0 (0.0)	3 (33.3)	0 (0.0)	0 (0.0)	3 (18.8)
Not evaluable (NE)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
No post-baseline scan	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	1 (6.3)

[a]Includes patients who had at least two brain scans (one at baseline and one post-baseline) and were identified per mRANO-BM by blinded reviewer as having at least one brain lesion ≥ 10 mm in size at baseline.

Abbreviations: CNS, central nervous system; eIV, extended intravenous; mRANO-BM, modified Response Assessment in Neuro-Oncology Brain Metastases; N, number of patients in the analysis set; n, number of patients with observed data; Q1, first quartile; Q3, third quartile; SD, standard deviation.

FIG. 6, cont.

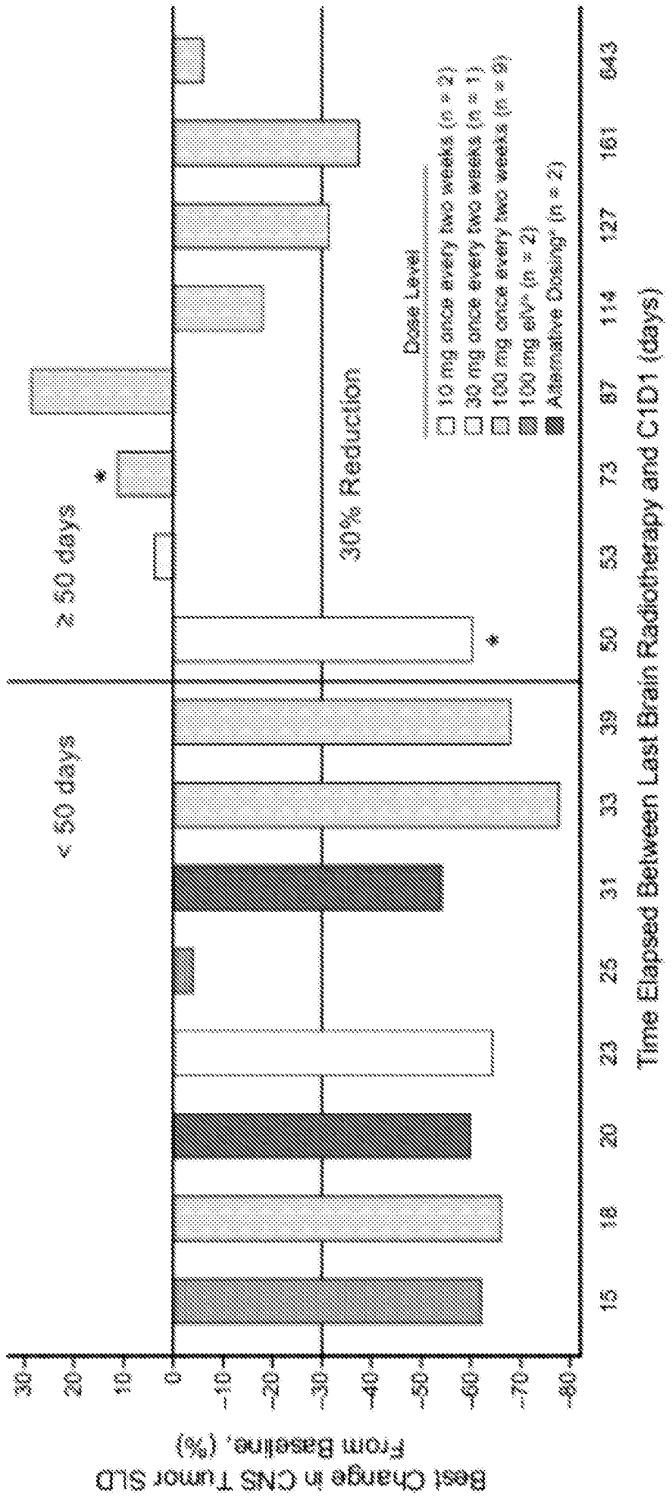

Best Change in CNS Tumor SLD From Baseline, (%)
30
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
< 50 days
≥ 50 days
30% Reduction
*
*
Dose Level
10 mg once every two weeks (n = 2)
30 mg once every two weeks (n = 1)
100 mg once every two weeks (n = 9)
100 mg eIVᵃ (n = 2)
Alternative Dosingᵇ (n = 2)
15
18
20
23
25
31
33
39
50
53
73
87
114
127
161
643
Time Elapsed Between Last Brain Radiotherapy and C1D1 (Days)

FIG. 7A

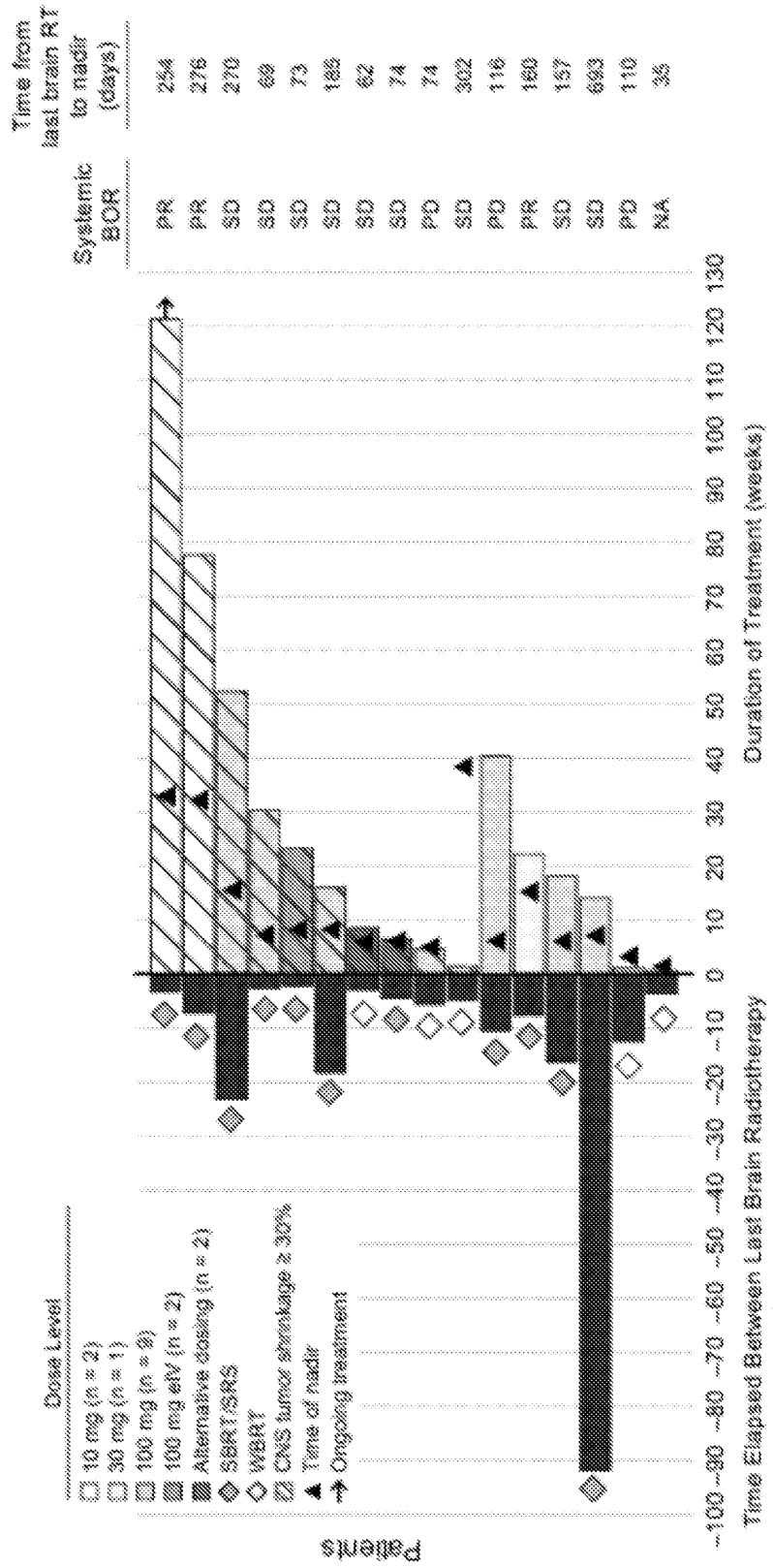

Dose Level
10 mg (n = 2)
30 mg (n = 1)
100 mg (n = 9)
100 mg eAV (n = 2)
Alternative dosing (n = 2)
SBRT/SRS
WBRT
CNS tumor shrinkage ≥ 30%
Time of nadir
Ongoing treatment
Systemic BOR
Time from last brain RT to nadir (days)
PR 254
PR 276
SD 270
SD 68
SD 73
SD 185
SD 62
SD 74
PD 74
SD 302
PD 116
PR 160
SD 157
SD 693
PD 110
NA 35
Patients
−100 −90 −80 −70 −60 −50 −40 −30 −20 −10 0 10 20 30 40 50 60 70 80 90 100 110 120 130
Time Elapsed Between Last Brain Radiotherapy and C1D1 (weeks)
Duration of Treatment (weeks)

FIG. 7B

	10 mg (n = 2)	30 mg (n = 1)	100 mg (n = 9)	100 mg eIV (n = 2)	Alternative dosing (n = 2)	Overall (N = 16)[a]
Best overall response - n (%)						
Confirmed complete response (CR)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Non-CR/Non-PD	2 (100.0)	1 (100.0)	8 (88.9)	1 (50.0)	2 (100.0)	14 (87.5)
Progressive disease (PD)	0 (0.0)	0 (0.0)	1 (11.1)	0 (0.0)	0 (0.0)	1 (6.3)
Not evaluable (NE)	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	1 (6.3)
Disease control rate - n (%)	2 (100.0)	1 (100.0)	8 (88.9)	1 (50.0)	2 (100.0)	14 (87.5)
95% CI (for DCR %)	(15.8, 100.0)	(2.5, 100.0)	(51.8, 99.7)	(1.3, 98.7)	(15.8, 100.0)	(61.7, 98.4)
Any tumor shrinkage						
Yes	2 (100.0)	0 (0.0)	7 (77.8)	2 (100.0)	2 (100.0)	13 (81.3)
At least 30% tumor shrinkage	2 (100.0)	0 (0.0)	5 (55.6)	1 (50.0)	2 (100.0)	10 (62.5)
No	0 (0.0)	1 (100.0)	2 (22.2)	0 (0.0)	0 (0.0)	3 (18.8)
Duration of disease control (KM) (months)						
25th percentile (95% CI)	7.4 (7.4, NE)	5.4 (NE, NE)	3.2 (2.4, 4.5)	NE (NE, NE)	NE (NE, NE)	3.9 (2.4, 5.4)
Median (95% CI)	NE (7.4, NE)	5.4 (NE, NE)	4.2 (2.4, NE)	NE (NE, NE)	NE (NE, NE)	7.4 (2.8, NE)
75th percentile (95% CI)	NE (7.4, NE)	5.4 (NE, NE)	12.3 (3.5, NE)	NE (NE, NE)	NE (NE, NE)	12.3 (5.4, NE)
Min, Max (+ for censored)	7.4, 26.0+	5.4, 5.4	2.4, 12.3	5.7+, 5.7+	2.1+, 2.7+	2.1+, 26.0+

[a]Includes patients who had at least two brain scans (one at baseline and one post-baseline) and were identified per mRANO-BM by blinded reviewer as having at least one brain lesion ≥ 10 mm in size at baseline.

Abbreviations: CI, confidence interval; CNS, central nervous system; DCR, disease control rate; eIV, extended intravenous; KM, Kaplan-Meier; mRANO-BM, modified Response Assessment in Neuro-Oncology Brain Metastases; N, number of patients in the analysis set; n, number of patients with observed data.

FIG. 8