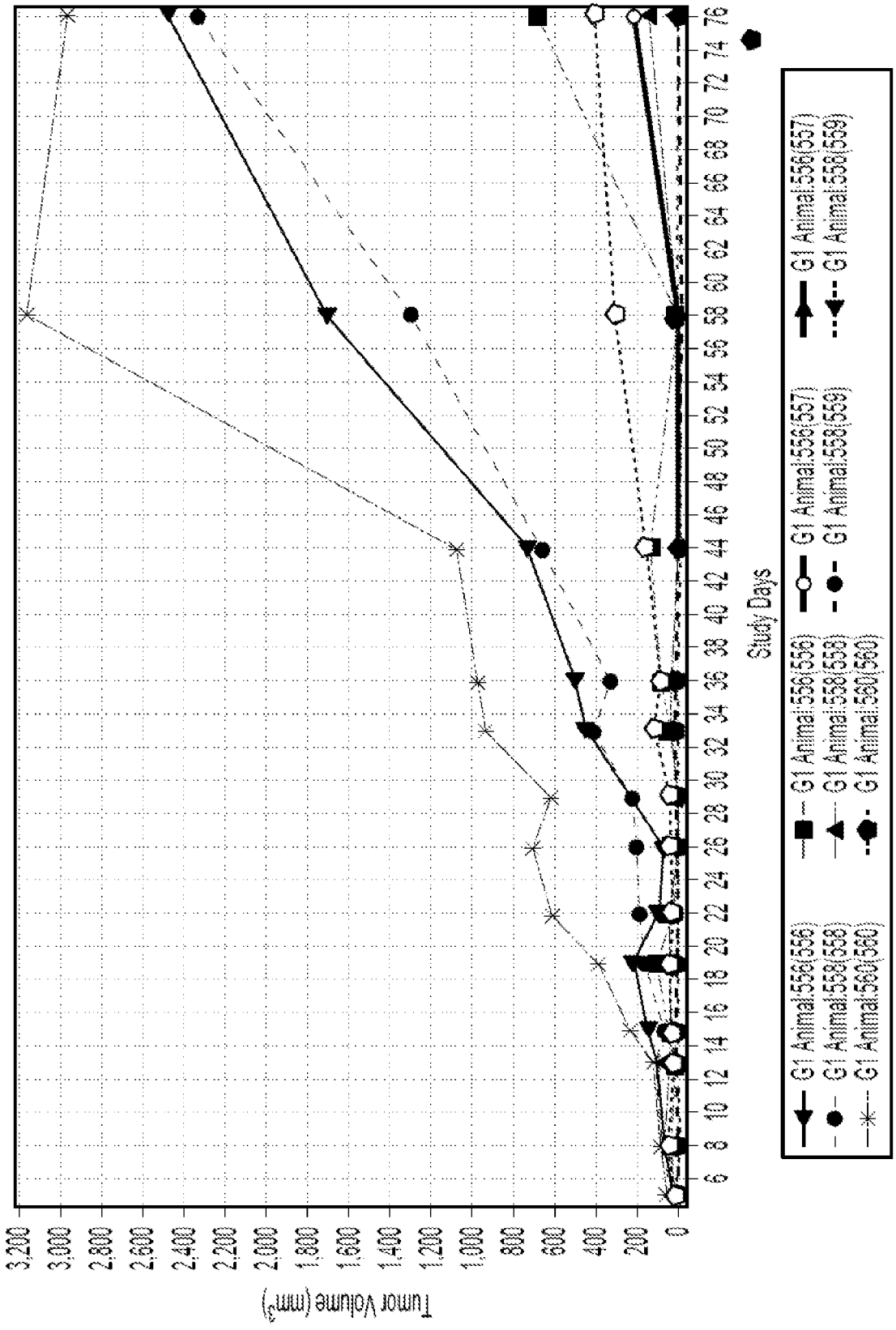

Tumor Volume (mm³)
3,200
3,000
2,800
2,600
2,400
2,200
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76
Study Days
G1 Animal:556(556)
G1 Animal:558(558)
G1 Animal:560(560)
G1 Animal:556(557)
G1 Animal:558(559)
G1 Animal:556(557)
G1 Animal:558(559)

Fig. 1A

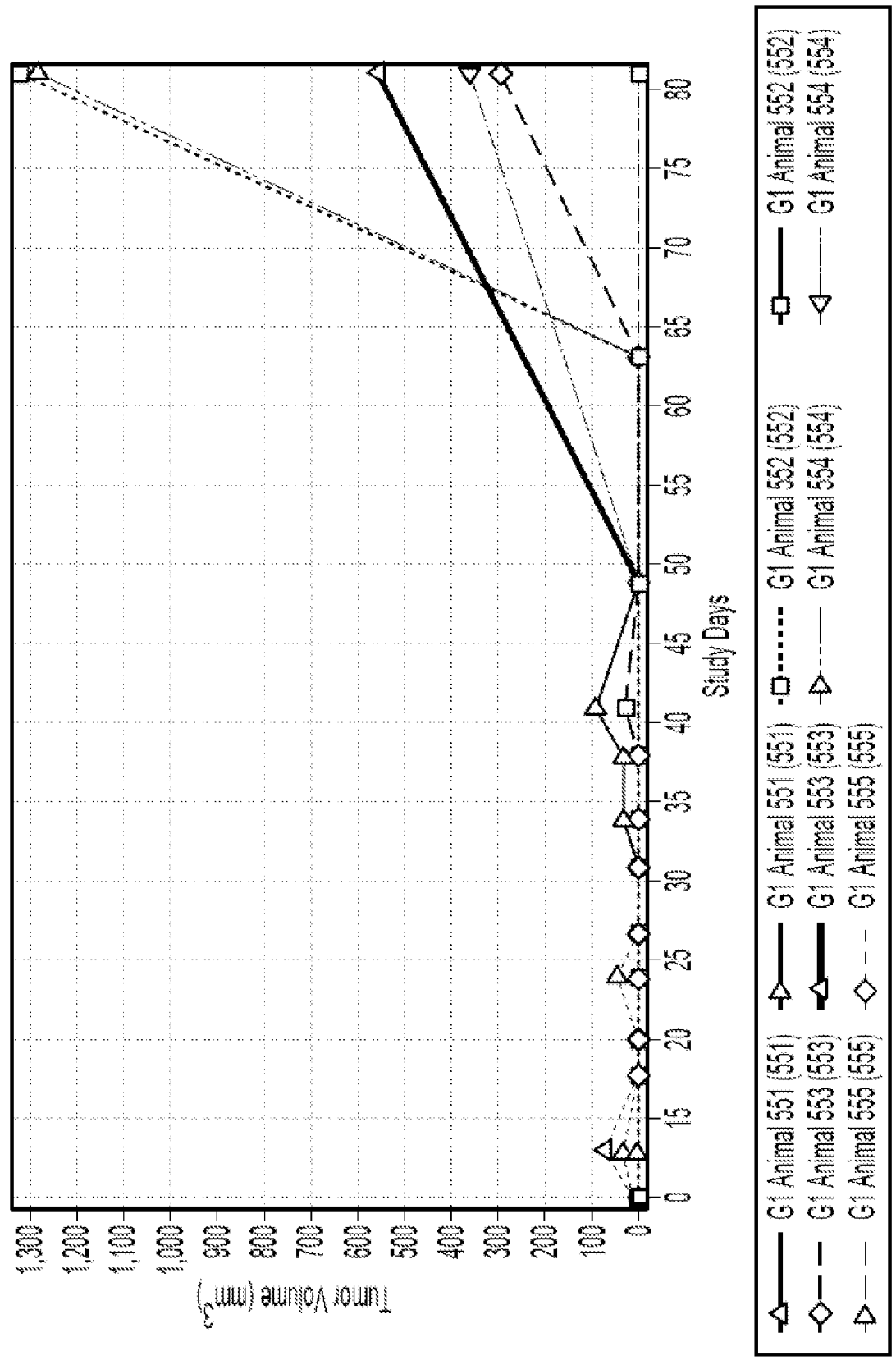

Tumor Volume (mm3)
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0
0
15
20
25
30
35
40
45
50
55
60
65
70
75
80
Study Days
G1 Animal 551 (551)
G1 Animal 552 (552)
G1 Animal 553 (553)
G1 Animal 554 (554)
G1 Animal 555 (556)
G1 Animal 555 (555)
G1 Animal 552 (552)
G1 Animal 554 (554)

Fig. 1B

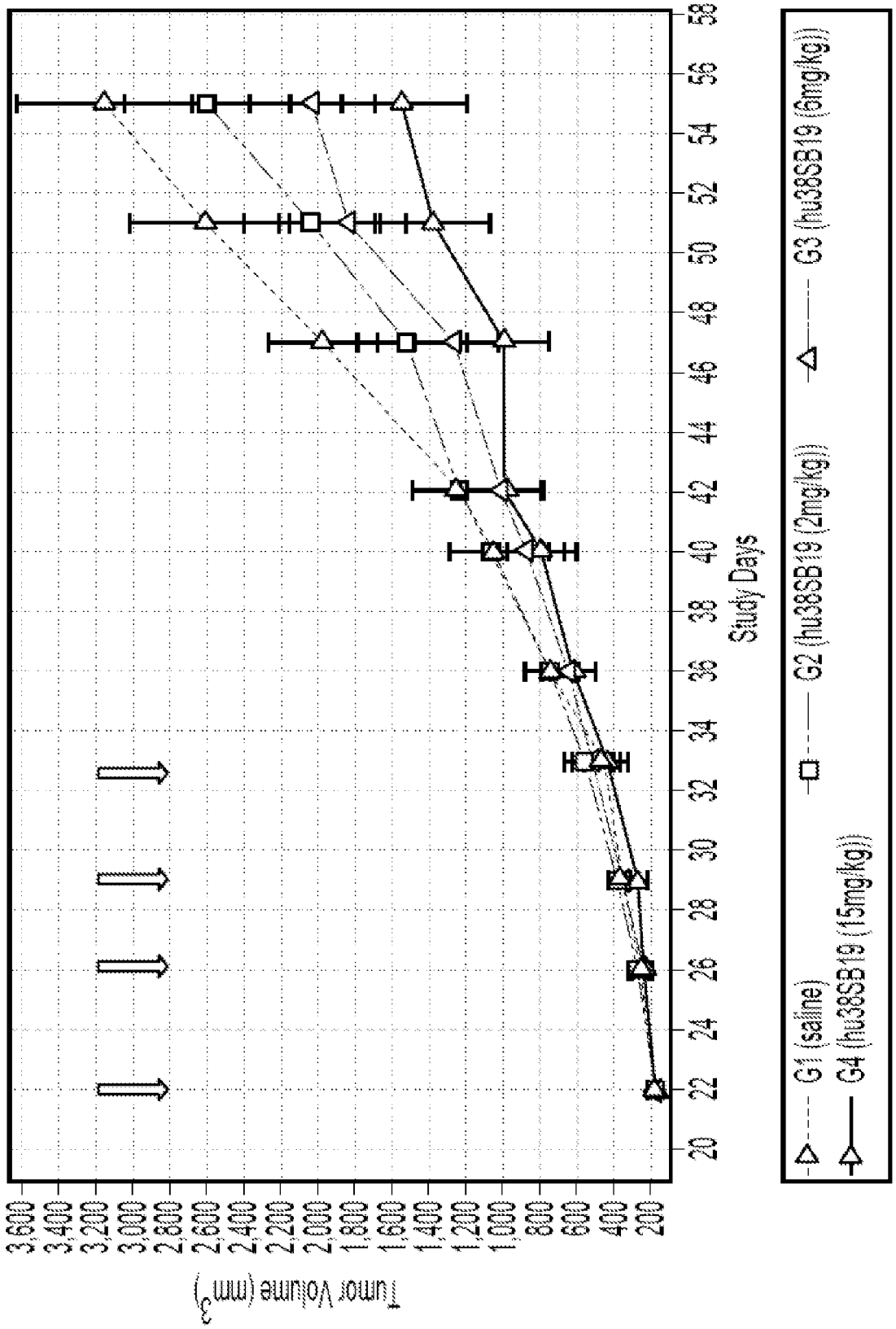

Tumor Volume (mm^3)
3,600
3,400
3,200
3,000
2,800
2,600
2,400
2,200
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58
Study Days
G1 (saline)
G2 (hu38SB19 (2mg/kg))
G3 (hu38SB19 (6mg/kg))
G4 (hu38SB19 (15mg/kg))

Fig. 2A

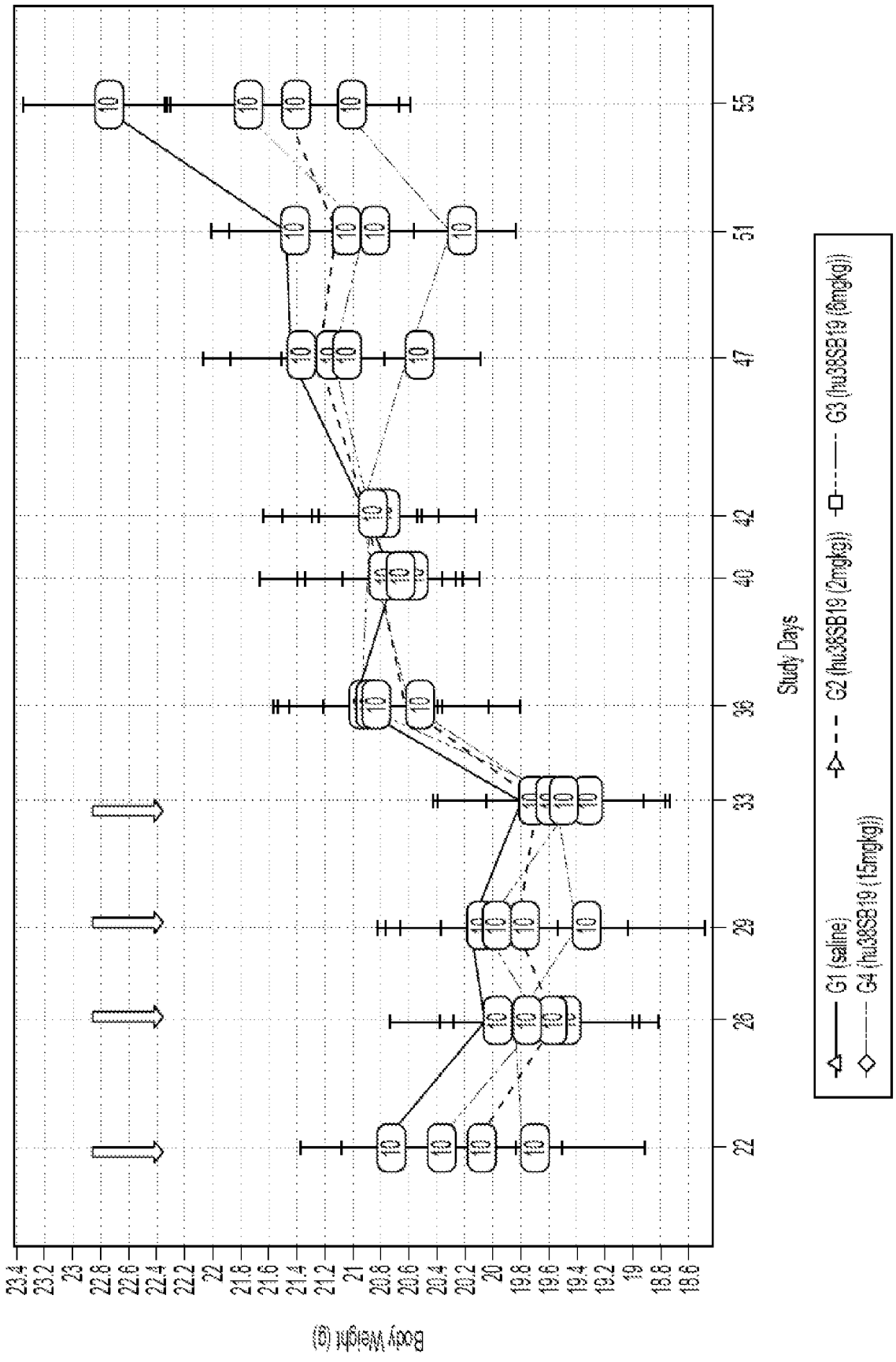

Body Weight (g)
Study Days
G1 (saline)
G2 (hu38SB19 (2mg/kg))
G3 (hu38SB19 (6mg/kg))
G4 (hu38SB19 (15mg/kg))

Fig. 2B

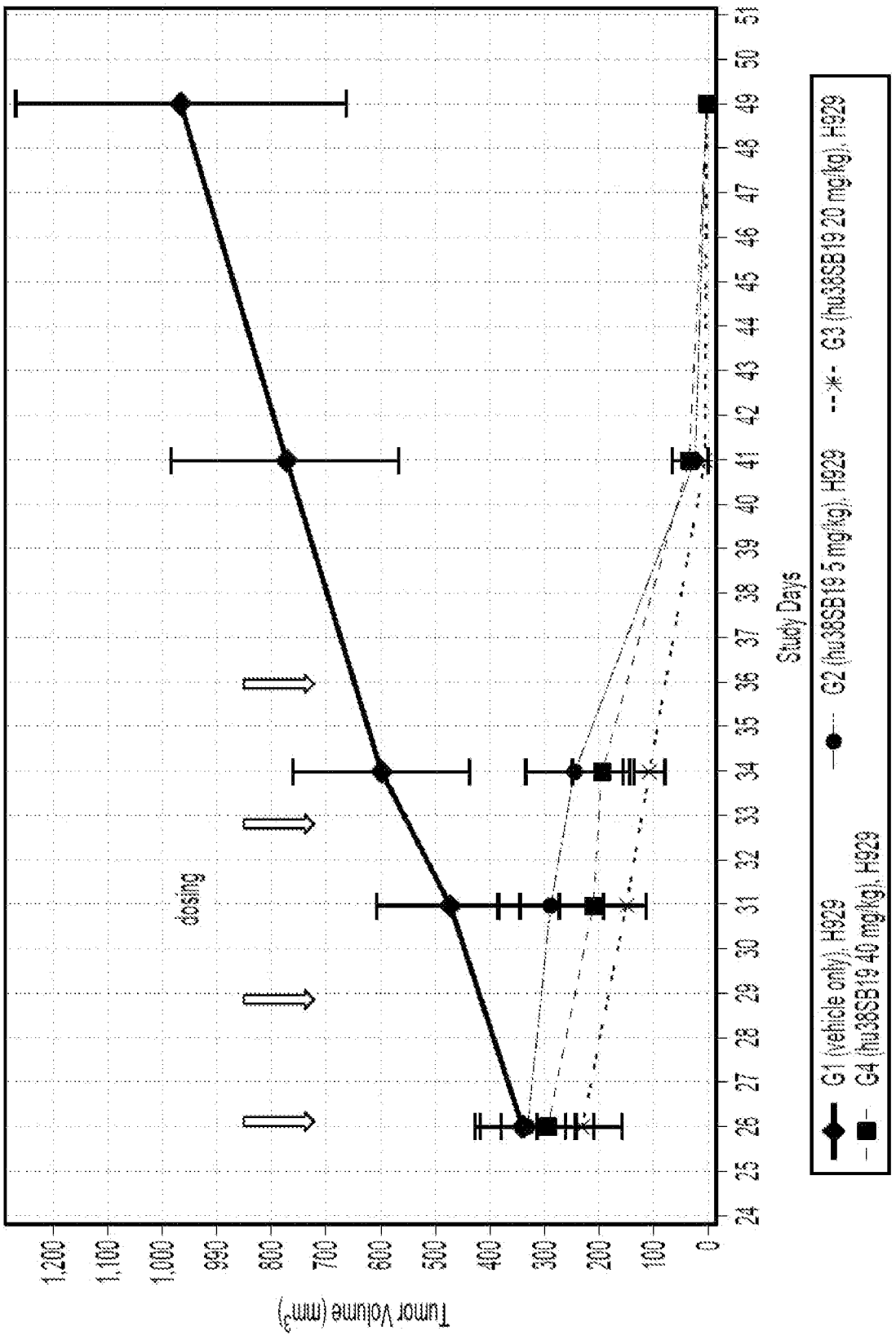

Tumor Volume (mm³)
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0
dosing
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51
Study Days
G1 (vehicle only), H929
G2 (hu38SB19 5 mg/kg), H929
G3 (hu38SB19 20 mg/kg), H929
G4 (hu38SB19 40 mg/kg), H929

Fig. 3A

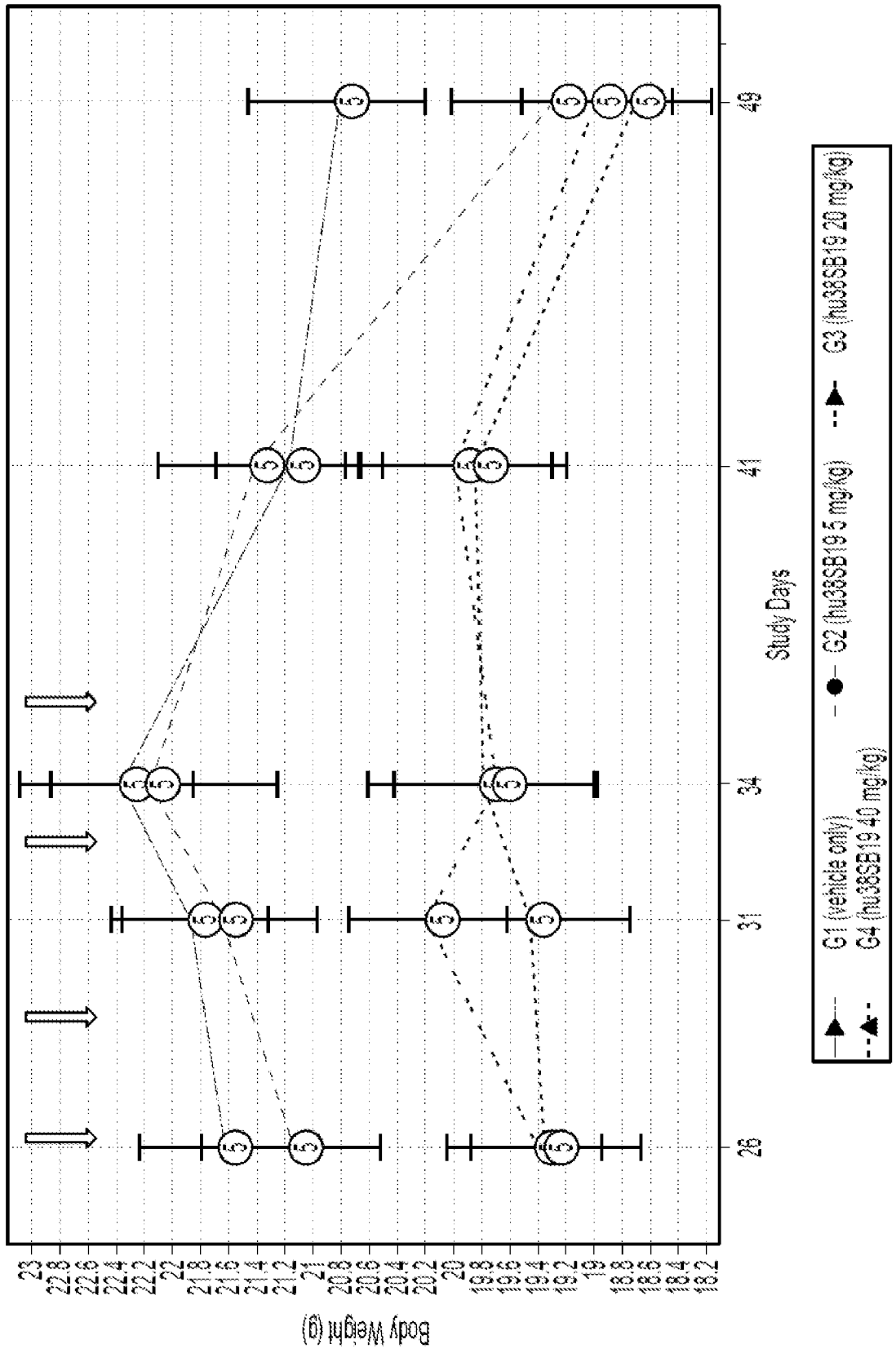

Body Weight (g)
23
22.8
22.6
22.4
22.2
22
21.8
21.6
21.4
21.2
21
20.8
20.6
20.4
20.2
20
19.8
19.6
19.4
19.2
19
18.8
18.6
18.4
18.2
26
31
34
41
49
Study Days
G1 (vehicle only)
G2 (hu38SB19 5 mg/kg)
G3 (hu38SB19 20 mg/kg)
G4 (hu38SB19 40 mg/kg)

Fig. 3B

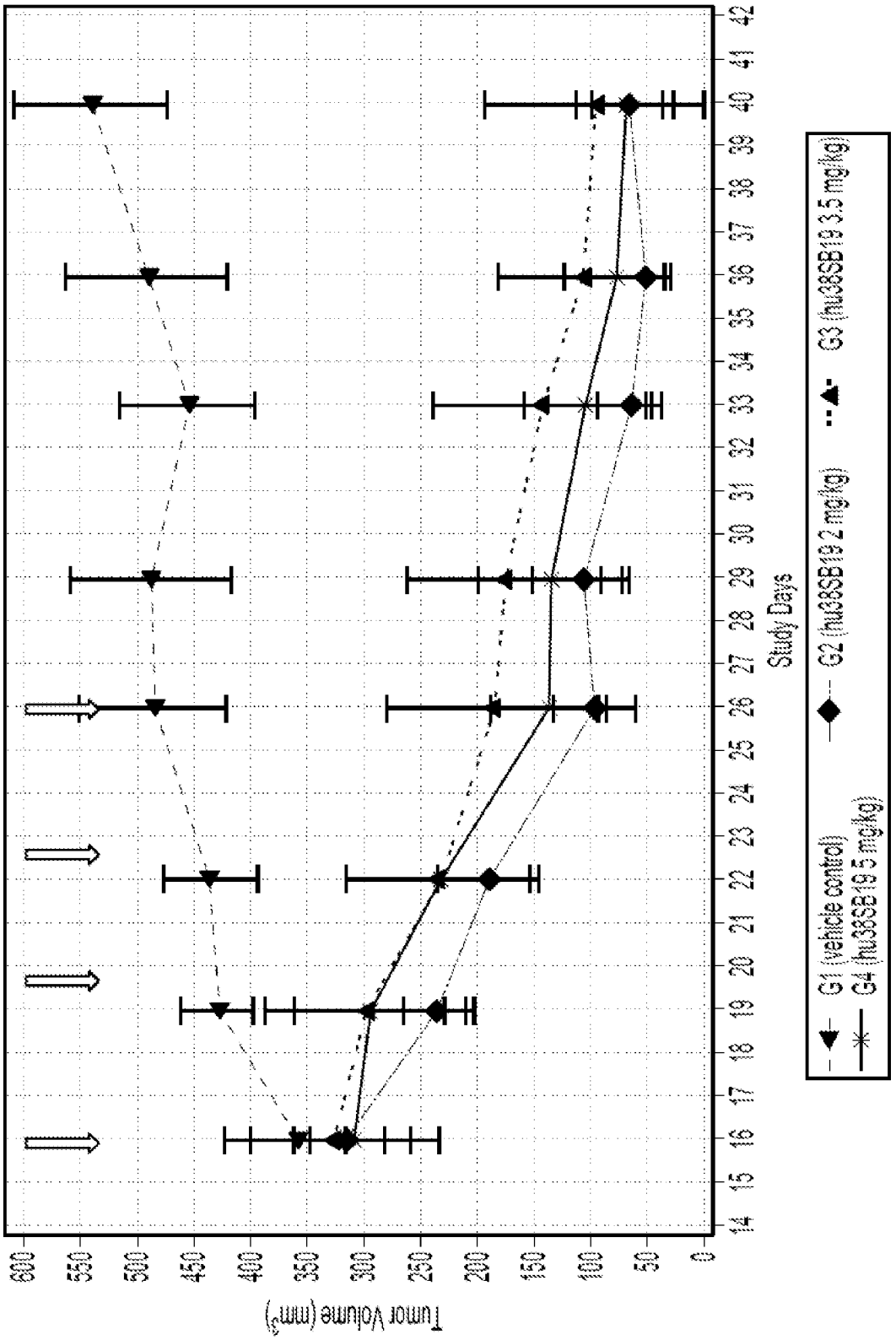

Tumor Volume (mm³)
600
550
500
450
400
350
300
250
200
150
100
50
0
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42
Study Days
G1 (vehicle control)
G2 (hu38SB19 2 mg/kg)
G3 (hu38SB19 3.5 mg/kg)
G4 (hu38SB19 5 mg/kg)

Fig. 4A

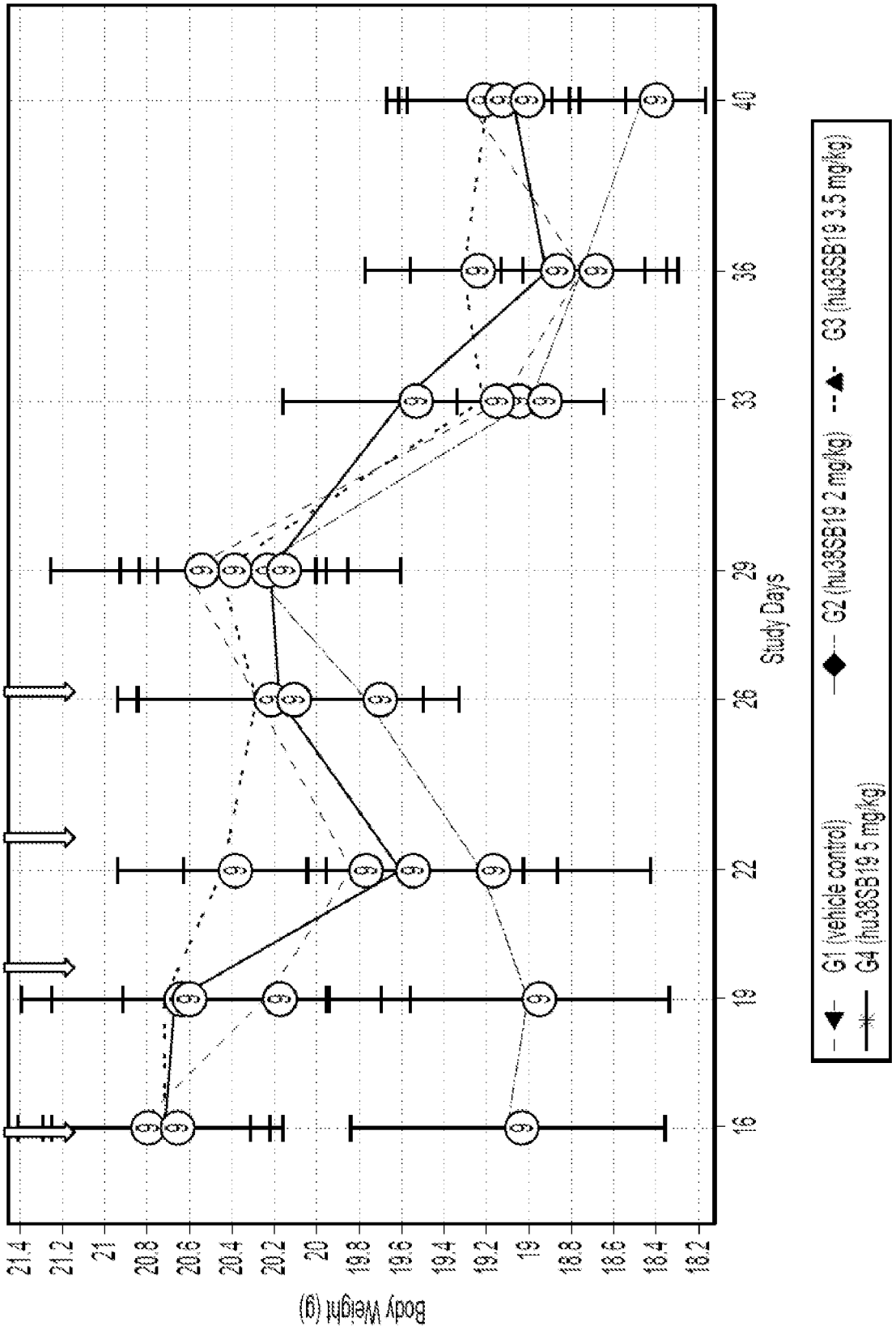

Body Weight (g)
21.4
21.2
21
20.8
20.6
20.4
20.2
20
19.8
19.6
19.4
19.2
19
18.8
18.6
18.4
18.2
16
19
22
26
29
33
36
40
Study Days
G1 (vehicle control)
G2 (hu38SB19 2 mg/kg)
G3 (hu38SB19 3.5 mg/kg)
G4 (hu38SB19 5 mg/kg)

Fig. 4B

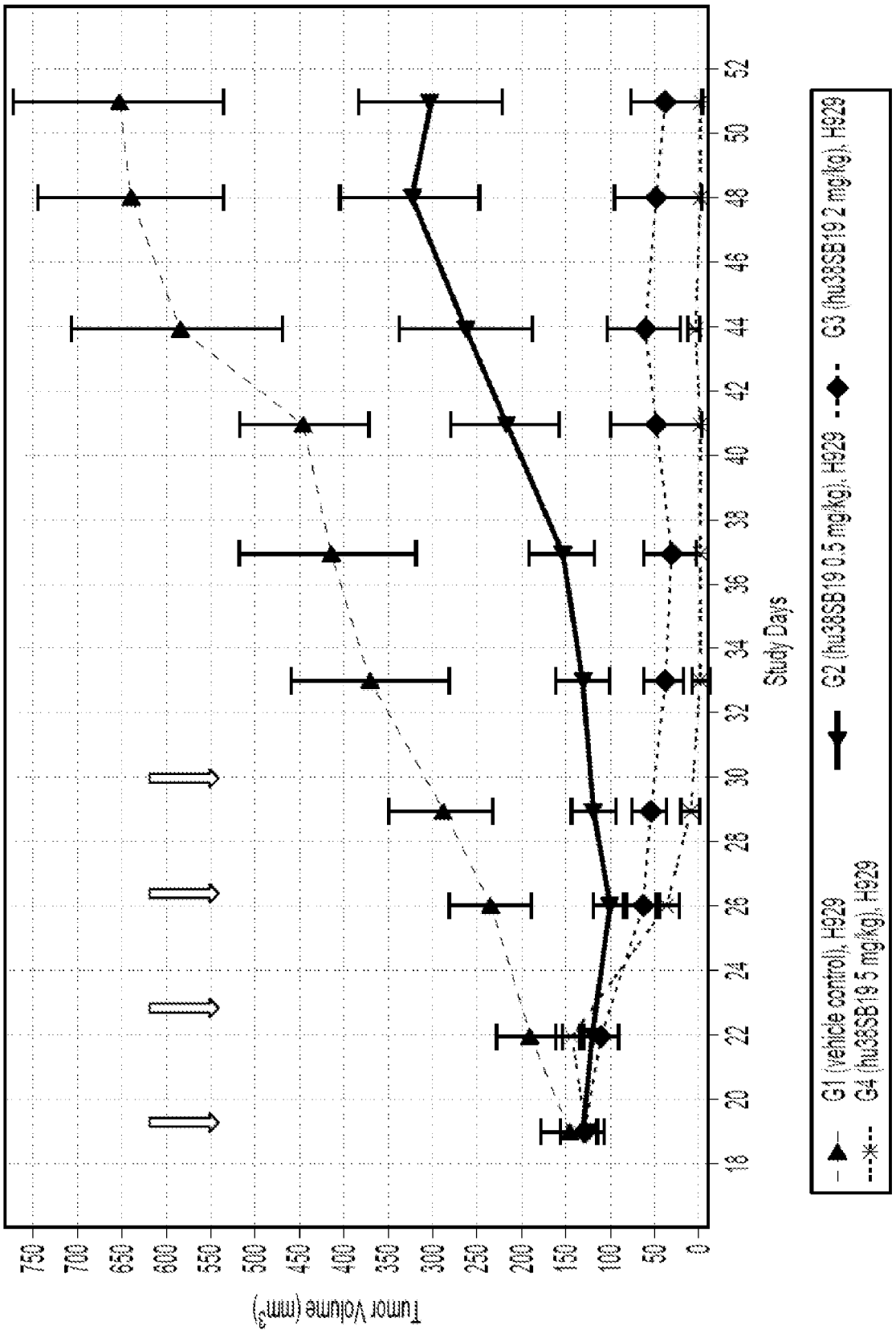

Tumor Volume (mm³)
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
Study Days
G1 (vehicle control), H929
G2 (hu38SB19 0.5 mg/kg), H929
G3 (hu38SB19 2 mg/kg), H929
G4 (hu38SB19 5 mg/kg), H929

Fig. 5A

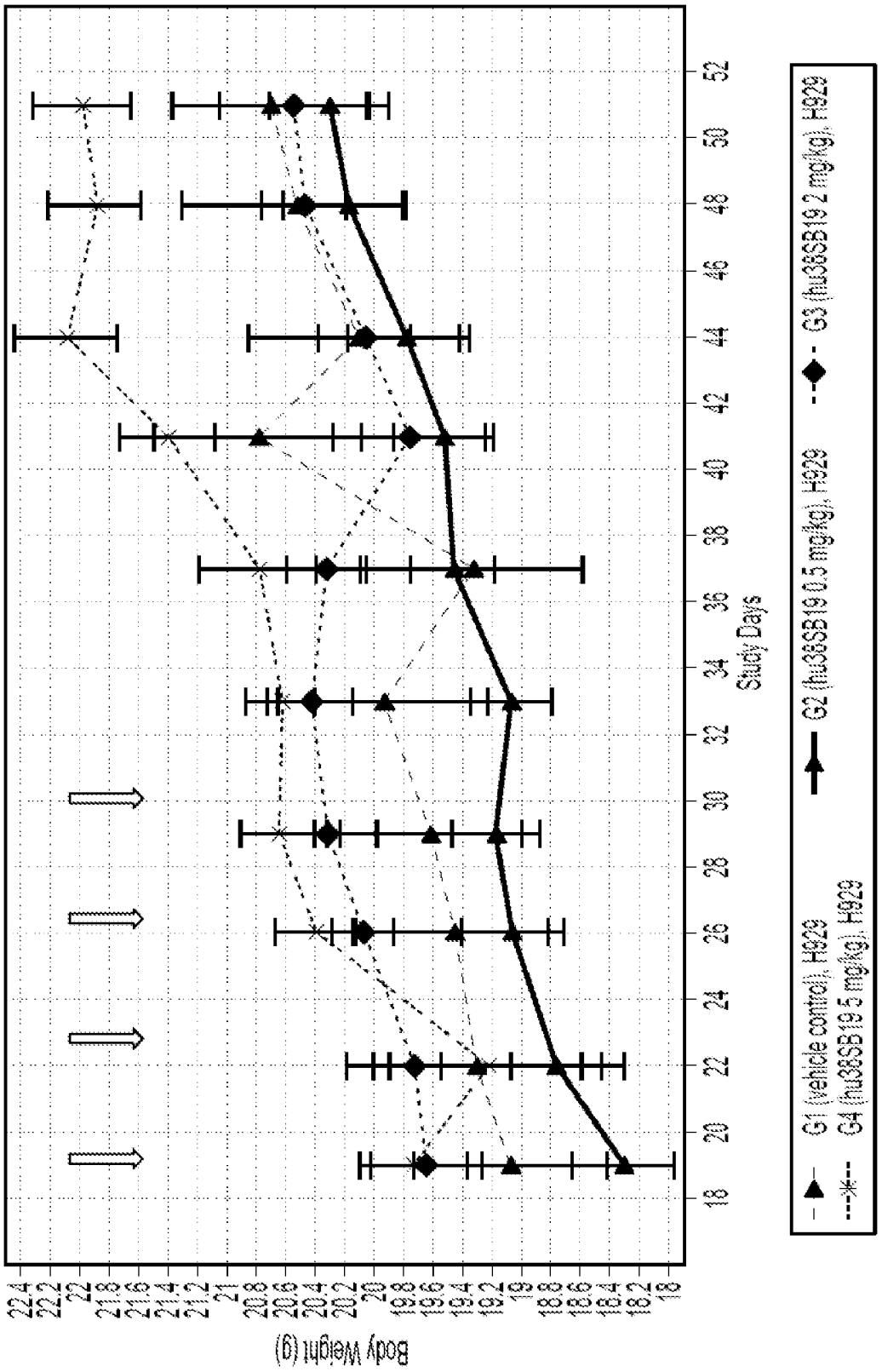

Body Weight (g)
Study Days
G1 (vehicle control), H929
G2 (hu38SB19 0.5 mg/kg), H929
G3 (hu38SB19 2 mg/kg), H929
G4 (hu38SB19 5 mg/kg), H929

Fig. 5B

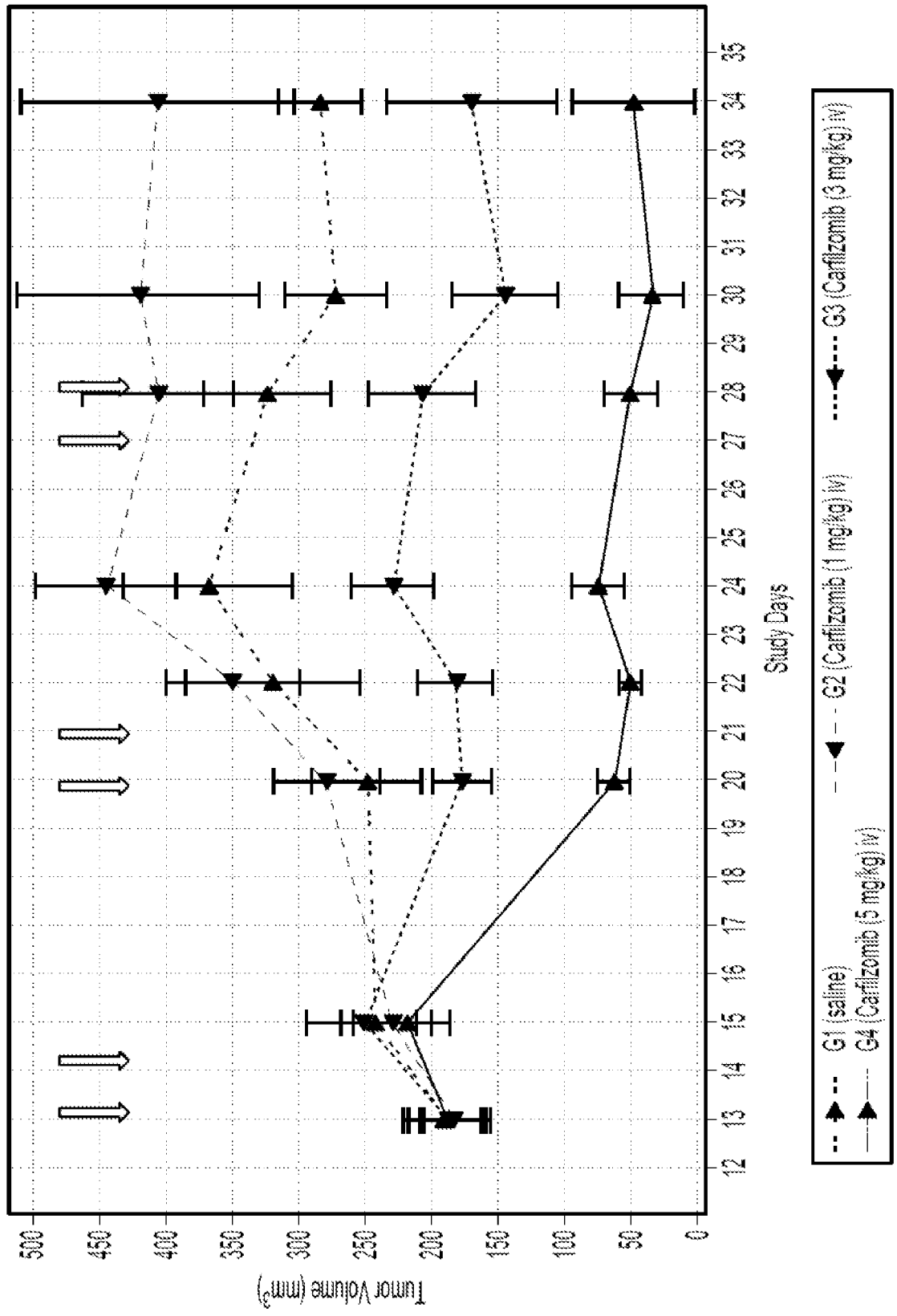

Tumor Volume (mm³)
0
50
100
150
200
250
300
350
400
450
500
Study Days
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
G1 (saline)
G2 (Carfilzomib (1 mg/kg) iv)
G3 (Carfilzomib (3 mg/kg) iv)
G4 (Carfilzomib (5 mg/kg) iv)

Fig. 6A

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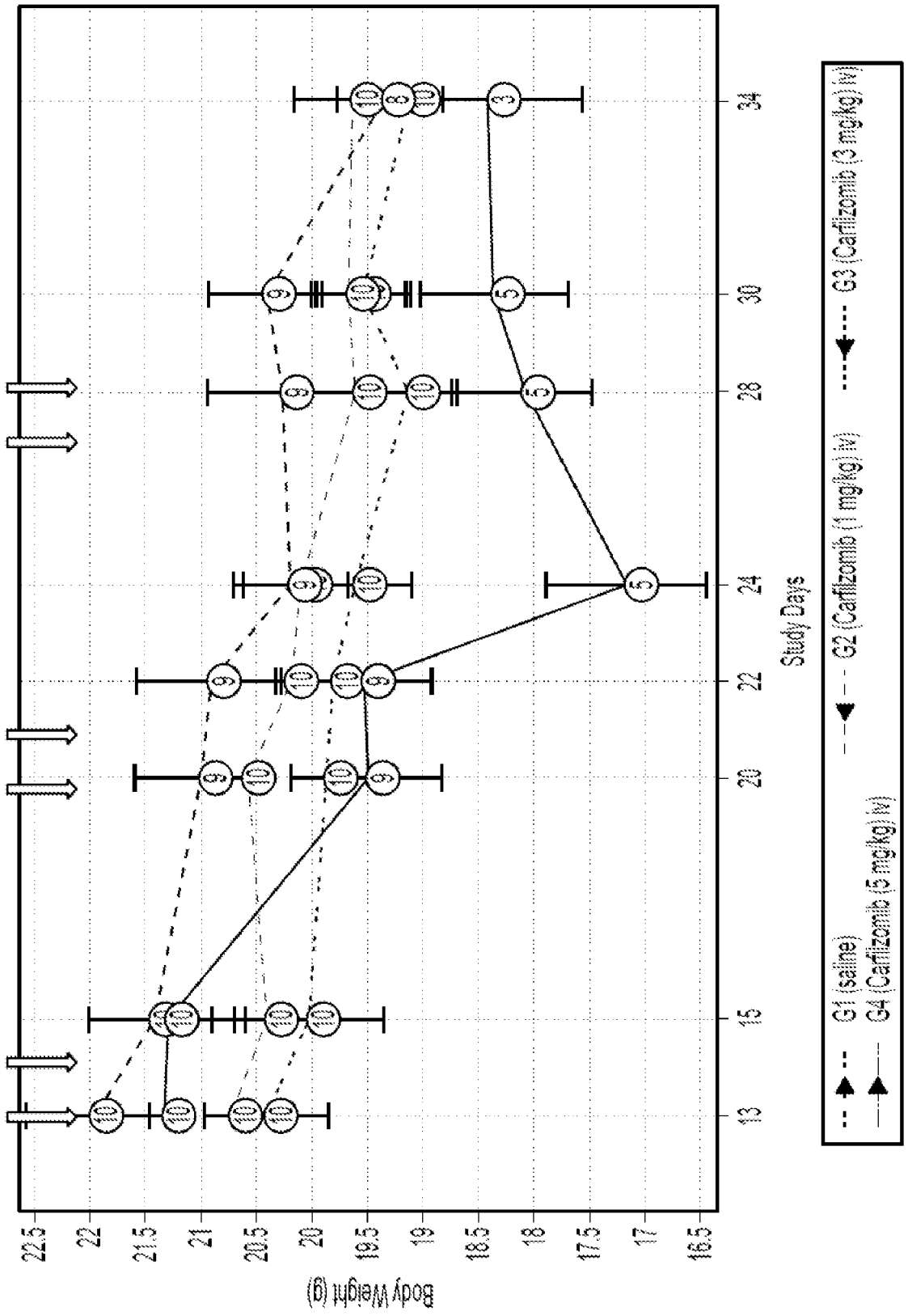

Body Weight (g)
22.5
22
21.5
21
20.5
20
19.5
19
18.5
18
17.5
17
16.5
Study Days
13
15
20
22
24
28
30
34
G1 (saline)
G2 (Carfilzomib (1 mg/kg) iv)
G3 (Carfilzomib (3 mg/kg) iv)
G4 (Carfilzomib (5 mg/kg) iv)

Fig. 6B

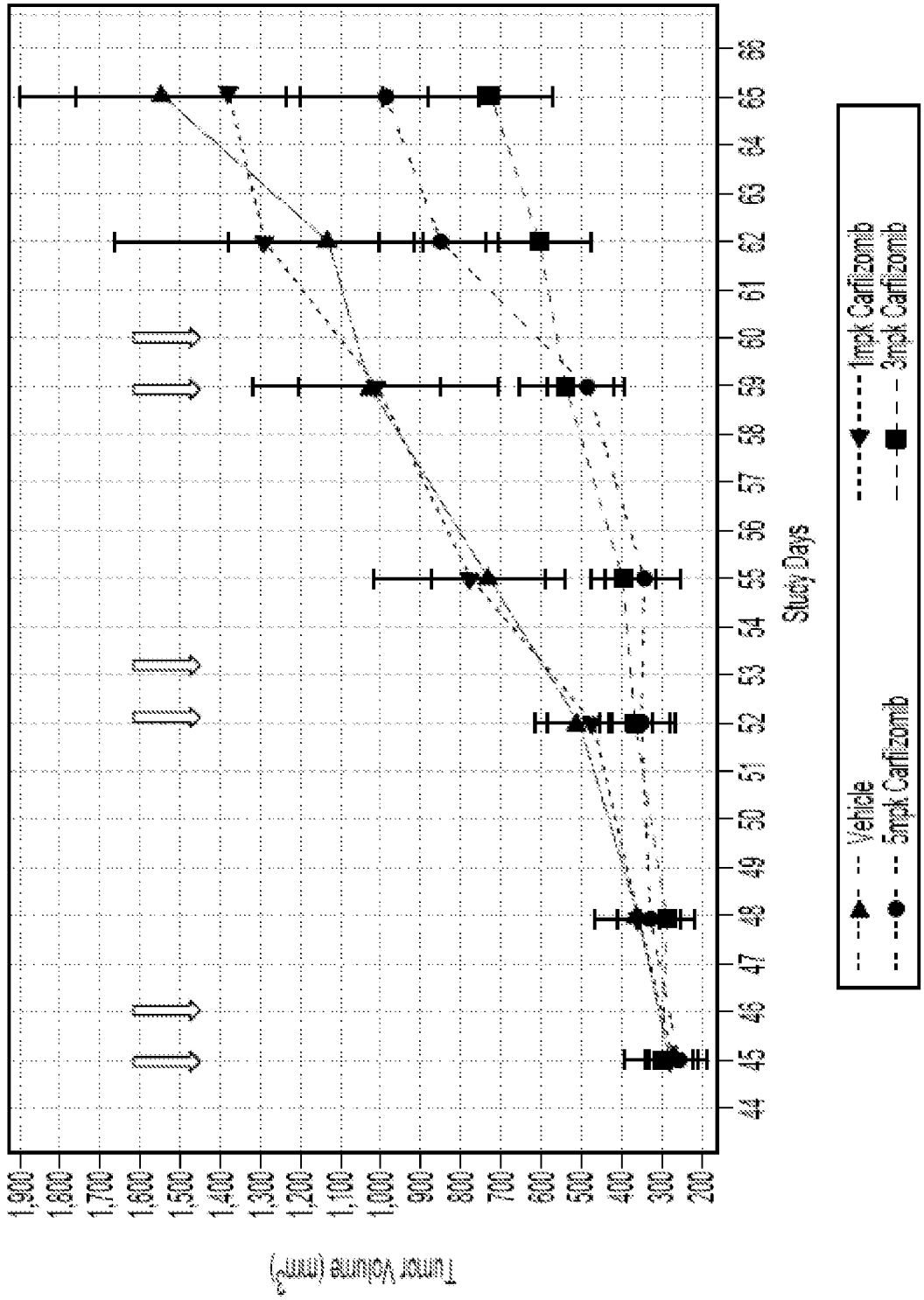

Tumor Volume (mm³)
1,900
1,800
1,700
1,600
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
Study Days
Vehicle
5mpk Carfilzomib
1mpk Carfilzomib
3mpk Carfilzomib

Fig. 7A

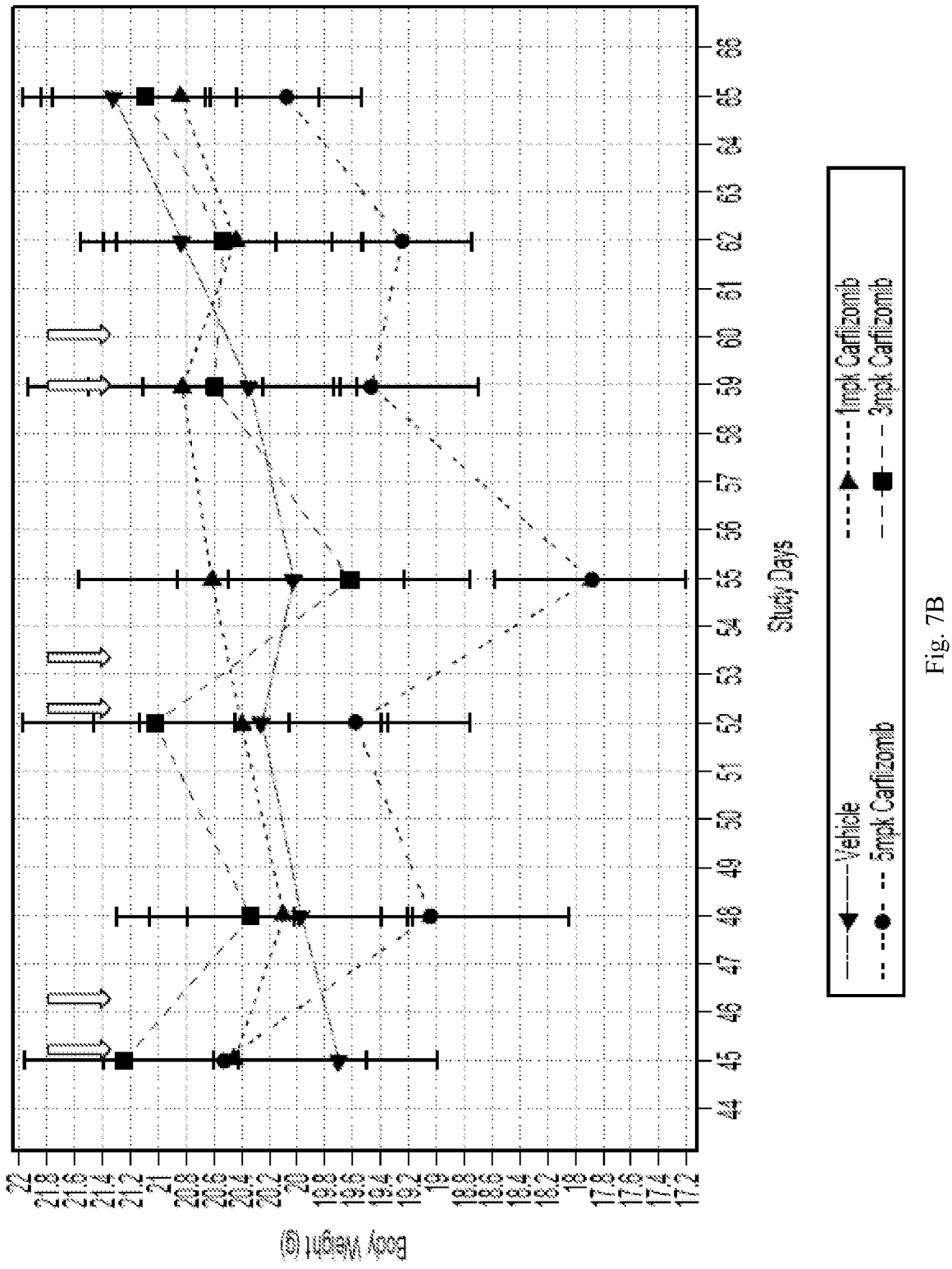

Body Weight (g)
Study Days
Vehicle
1mpk Carfilzomib
3mpk Carfilzomib
5mpk Carfilzomib

Fig. 7B

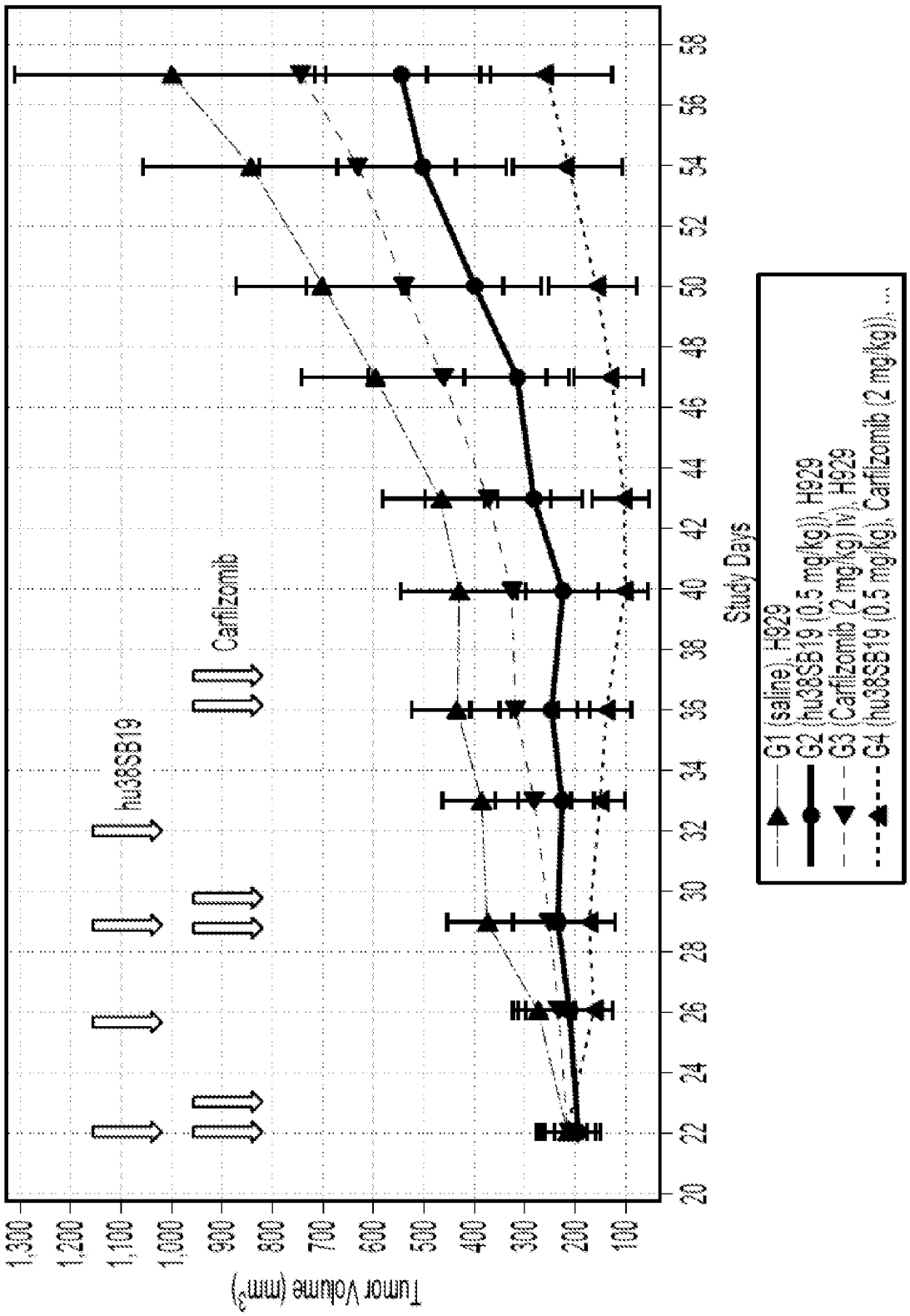

Tumor Volume (mm³)
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
Study Days
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
54
56
58
hu38SB19
Carfilzomib
G1 (saline), H929
G2 (hu38SB19 (0.5 mg/kg)), H929
G3 (Carfilzomib (2 mg/kg) iv), H929
G4 (hu38SB19 (0.5 mg/kg), Carfilzomib (2 mg/kg)), ...

Fig. 8A

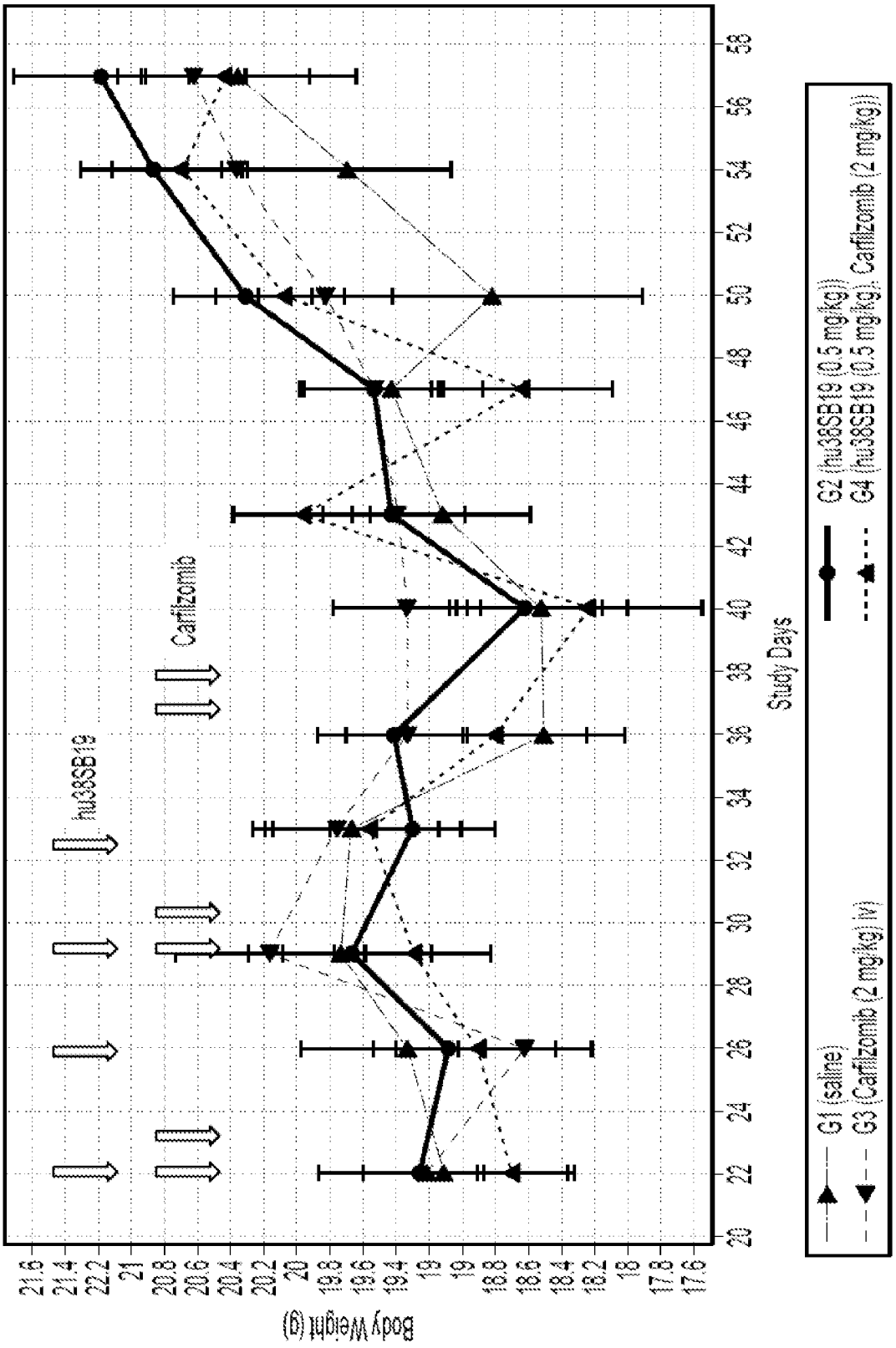

Body Weight (g)
Study Days
hu38SB19
Carfilzomib
G1 (saline)
G2 (hu38SB19 (0.3 mg/kg))
G3 (Carfilzomib (2 mg/kg) IV)
G4 (hu38SB19 (0.3 mg/kg), Carfilzomib (2 mg/kg))

Fig. 8B

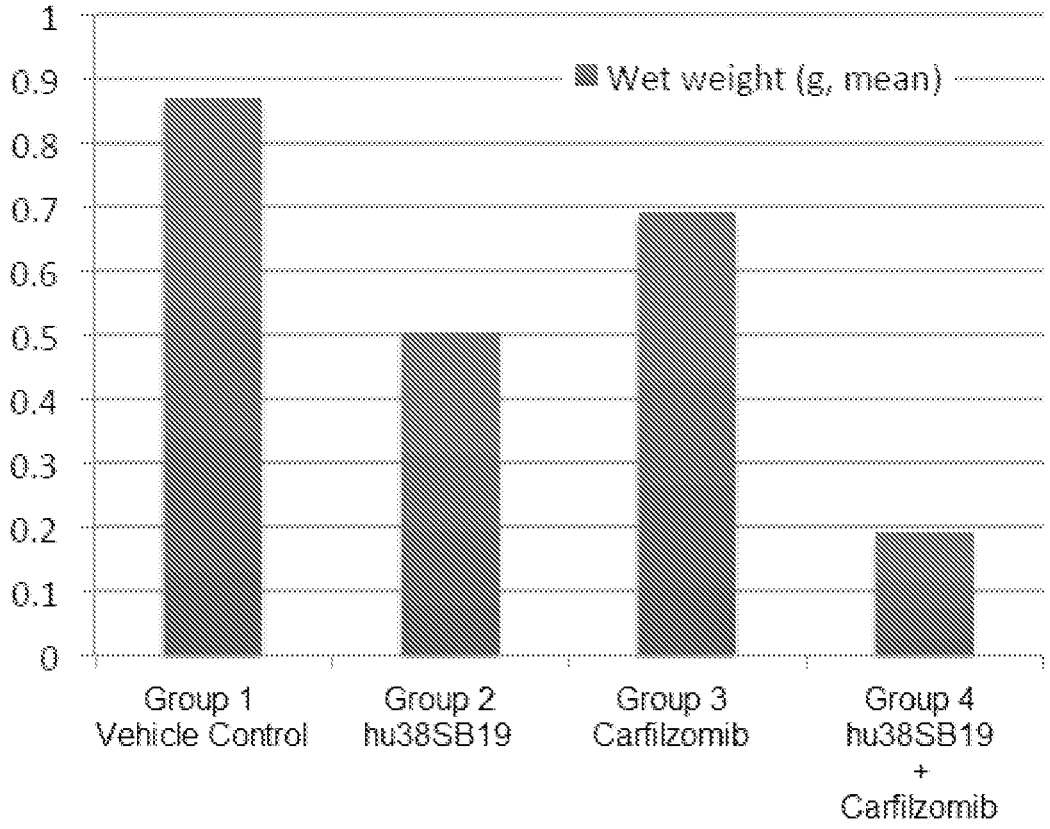

1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Wet weight (g, mean)
Group 1
Vehicle Control
Group 2
hu38SB19
Group 3
Carfilzomib
Group 4
hu38SB19
+
Carfilzomib

Fig. 9A

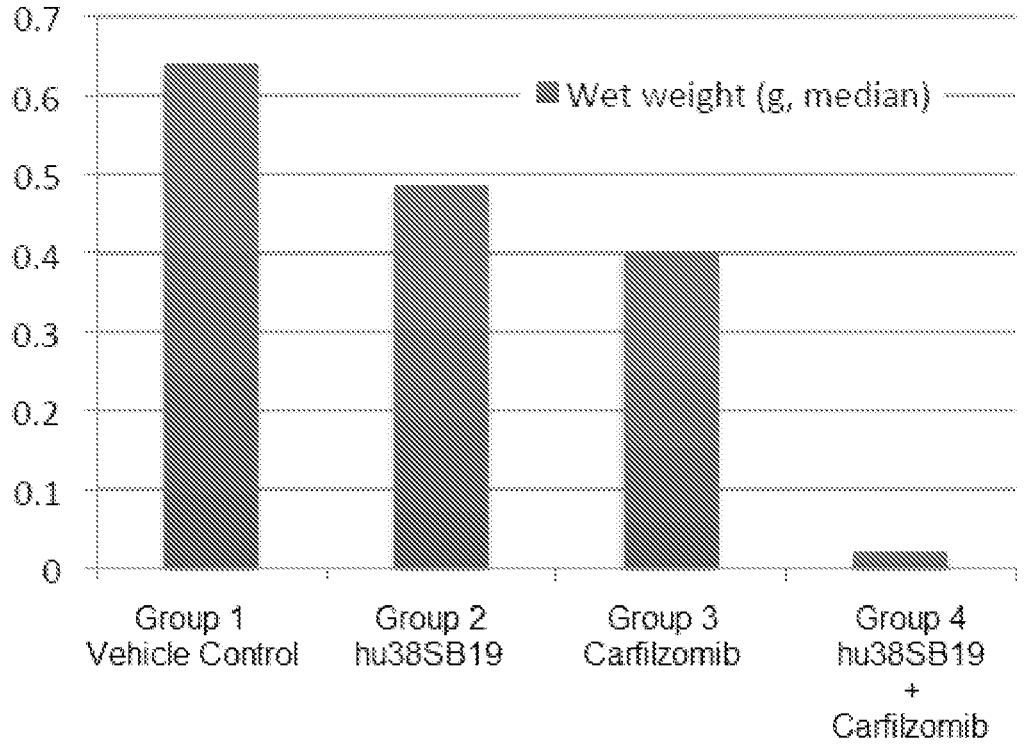

0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Wet weight (g, median)
Group 1
Vehicle Control
Group 2
hu38SB19
Group 3
Carfilzomib
Group 4
hu38SB19
+
Carfilzomib

Fig. 9B

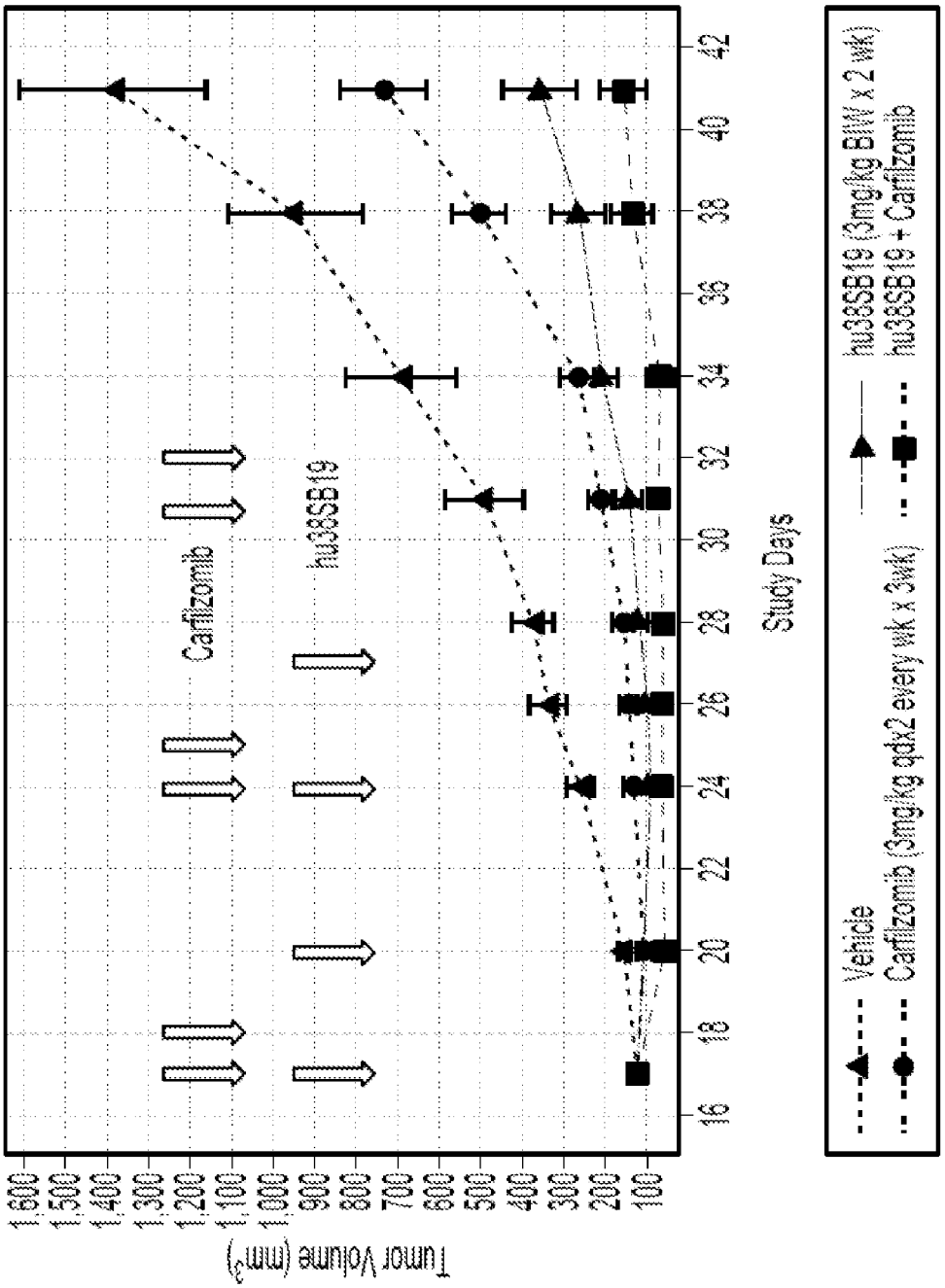

Tumor Volume (mm³)
100
200
300
400
500
600
700
800
900
1,000
1,100
1,200
1,300
1,400
1,500
1,600
16
18
20
22
24
26
28
30
32
34
36
38
40
42
Study Days
Carfilzomib
hu38SB19
Vehicle
Carfilzomib (3mg/kg qdx2 every wk x 3wk)
hu38SB19 (3mg/kg BIW x 2 wk)
hu38SB19 + Carfilzomib

Fig. 10A

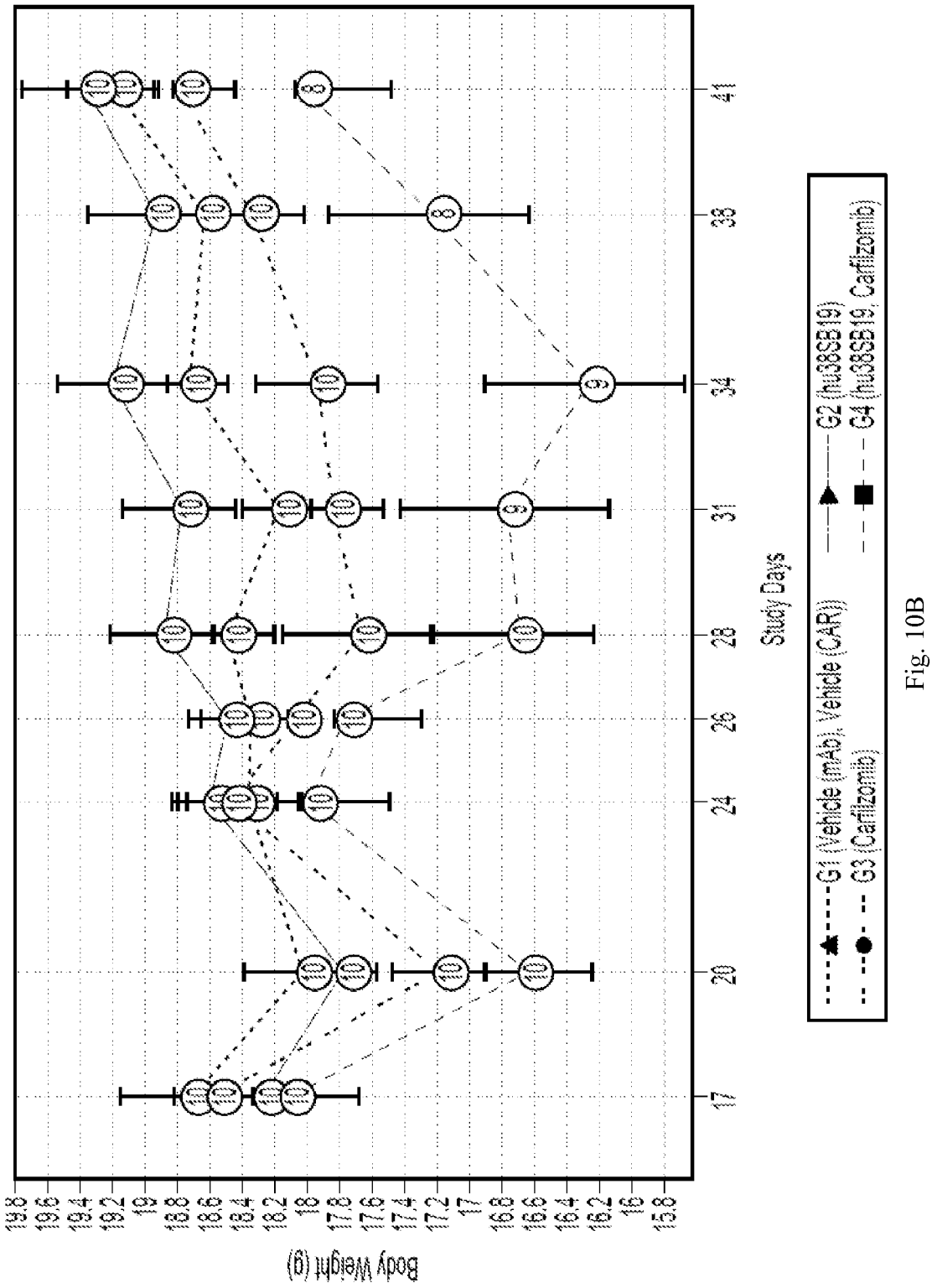

Body Weight (g)
19.8
19.6
19.4
19.2
19
18.8
18.6
18.4
18.2
18
17.8
17.6
17.4
17.2
17
16.8
16.6
16.4
16.2
16
15.8
17
20
24
26
28
31
34
38
41
Study Days
G1 (Vehicle (mAb), Vehicle (CAR))
G2 (hu38SB19)
G3 (Carfilzomib)
G4 (hu38SB19, Carfilzomib)

Fig. 10B

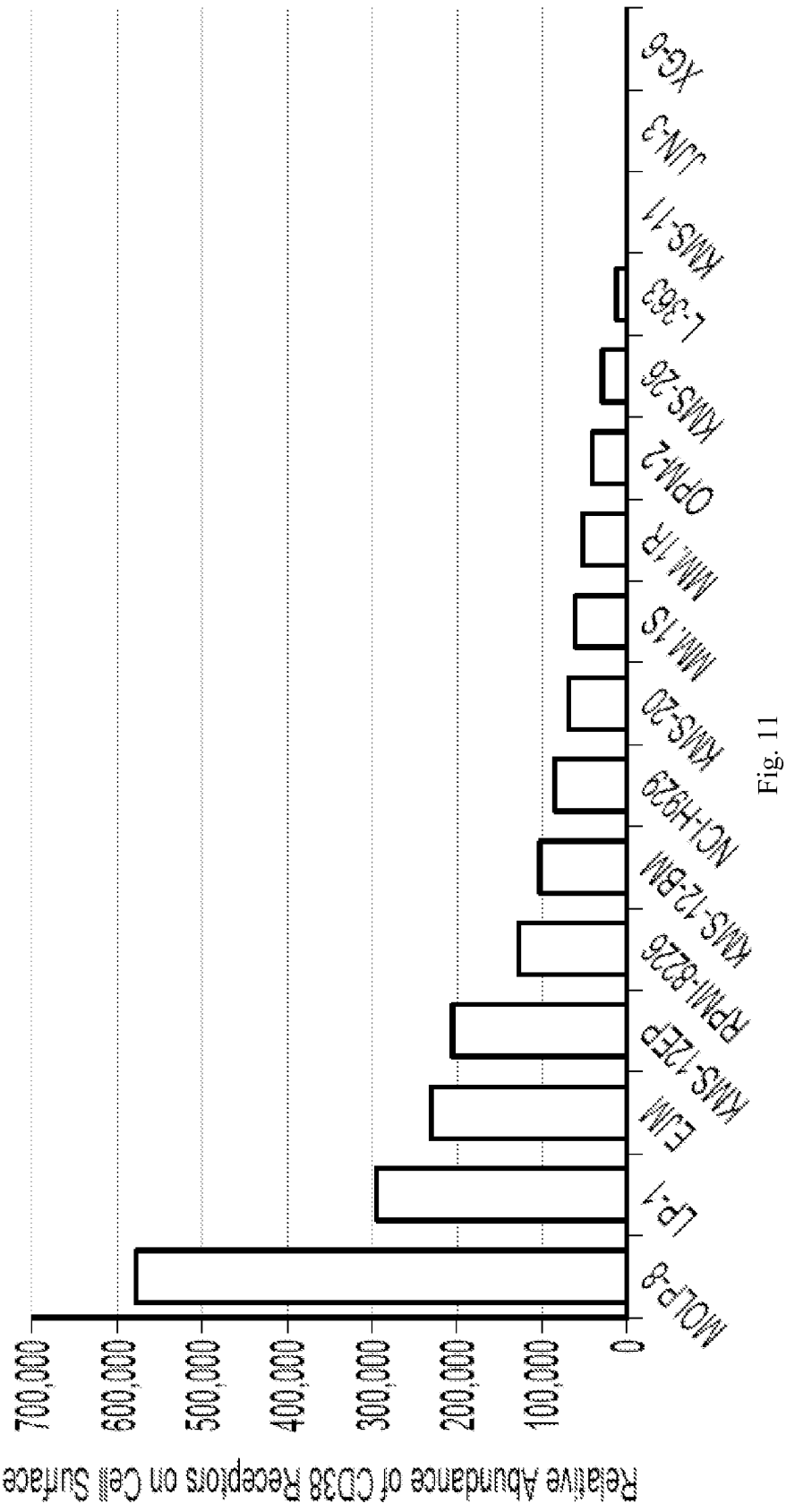

Relative Abundance of CD38 Receptors on Cell Surface
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
MOLP-8
LP-1
EJM
KMS-12PE
RPMI-8226
KMS-12BM
NCI-H929
KMS-20
MM.1S
MM.1R
OPM-2
KMS-26
L-363
KMS-11
JJN-3
XG-6

Fig. 11

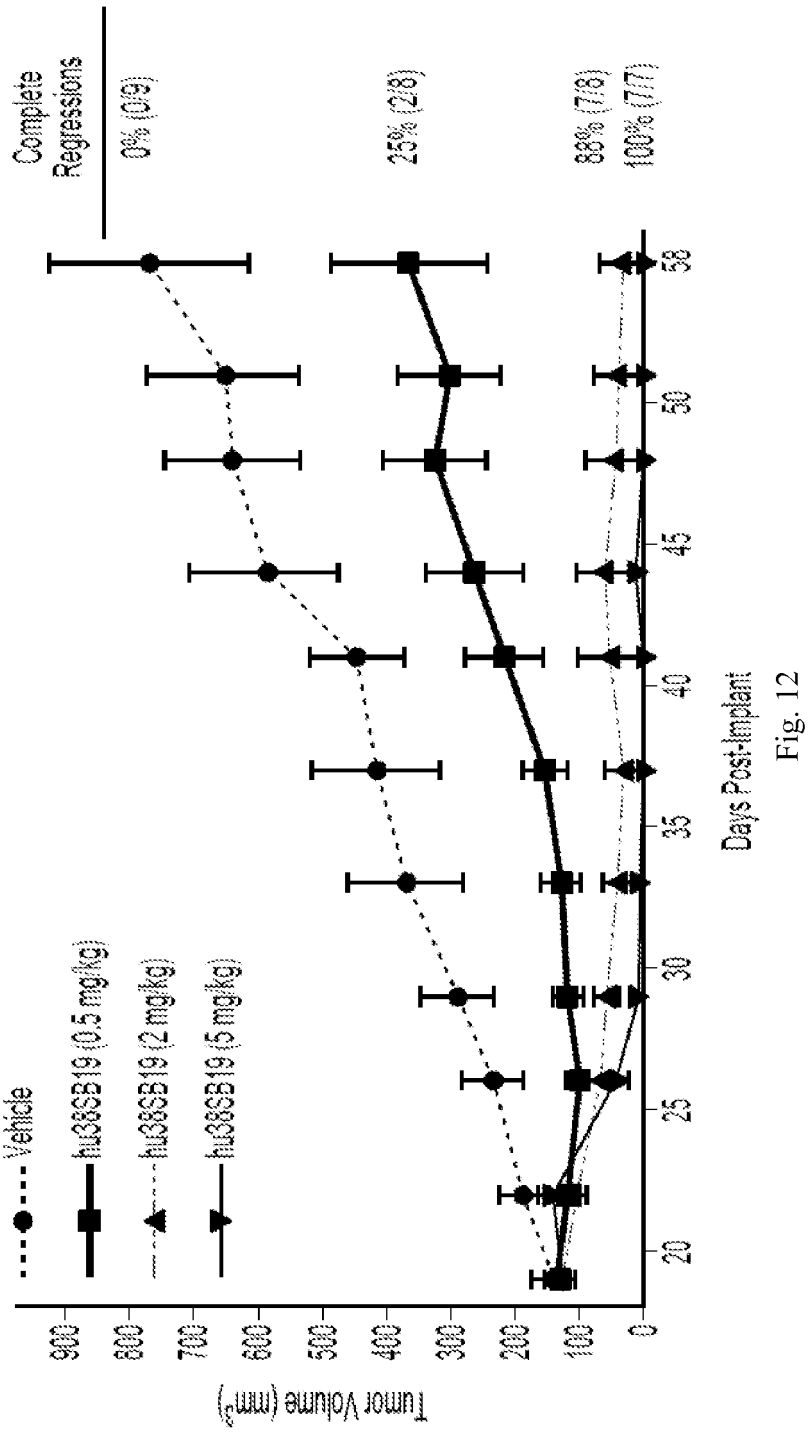

Complete Regressions
0% (0/9)
25% (2/8)
88% (7/8)
100% (7/7)
Vehicle
huB38SB19 (0.5 mg/kg)
huB38SB19 (2 mg/kg)
huB38SB19 (5 mg/kg)
Tumor Volume (mm³)
Days Post-Implant
0
100
200
300
400
500
600
700
800
900
20
25
30
35
40
45
50
58

Fig. 12

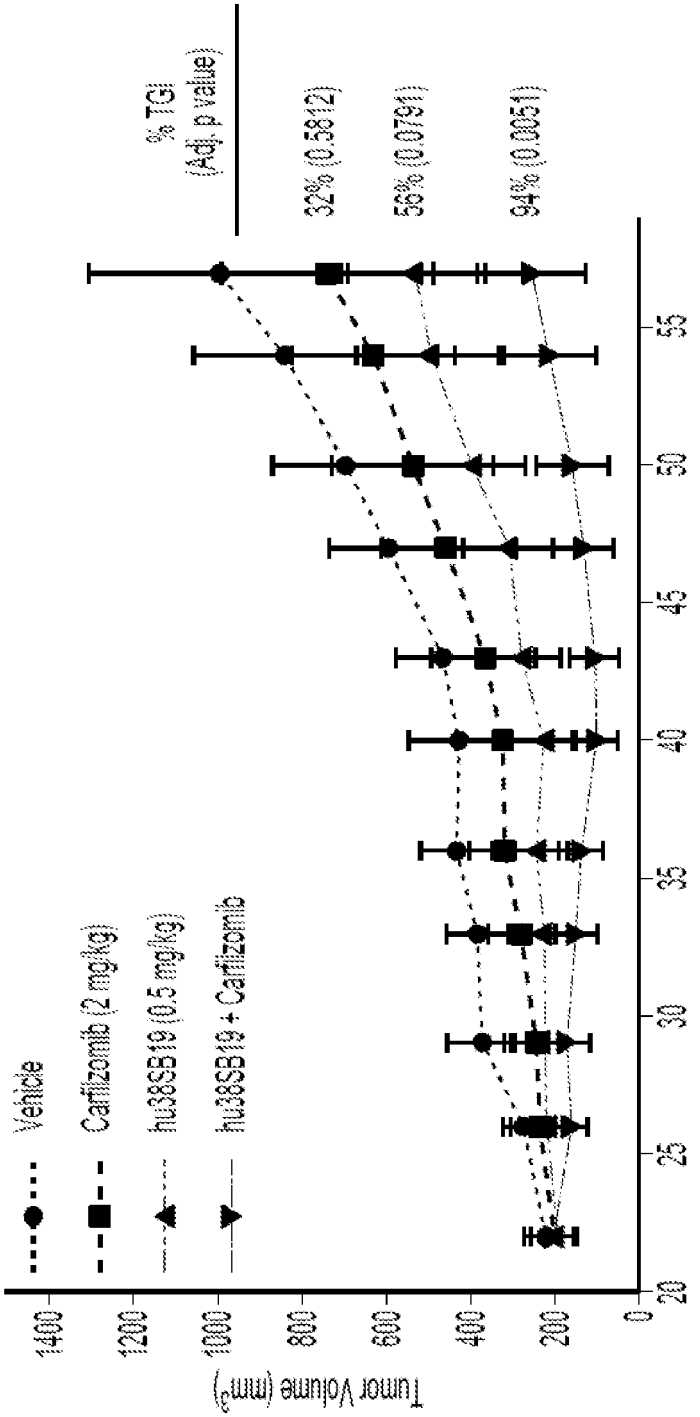

% TGI
(Adj. p value)
32% (0.5812)
56% (0.0791)
94% (0.0051)
Vehicle
Carfilzomib (2 mg/kg)
hu38SB19 (0.5 mg/kg)
hu38SB19 + Carfilzomib
Tumor Volume (mm³)
Days Post-Implant
0
200
400
600
800
1000
1200
1400
20
25
30
35
40
45
50
55

Fig. 13