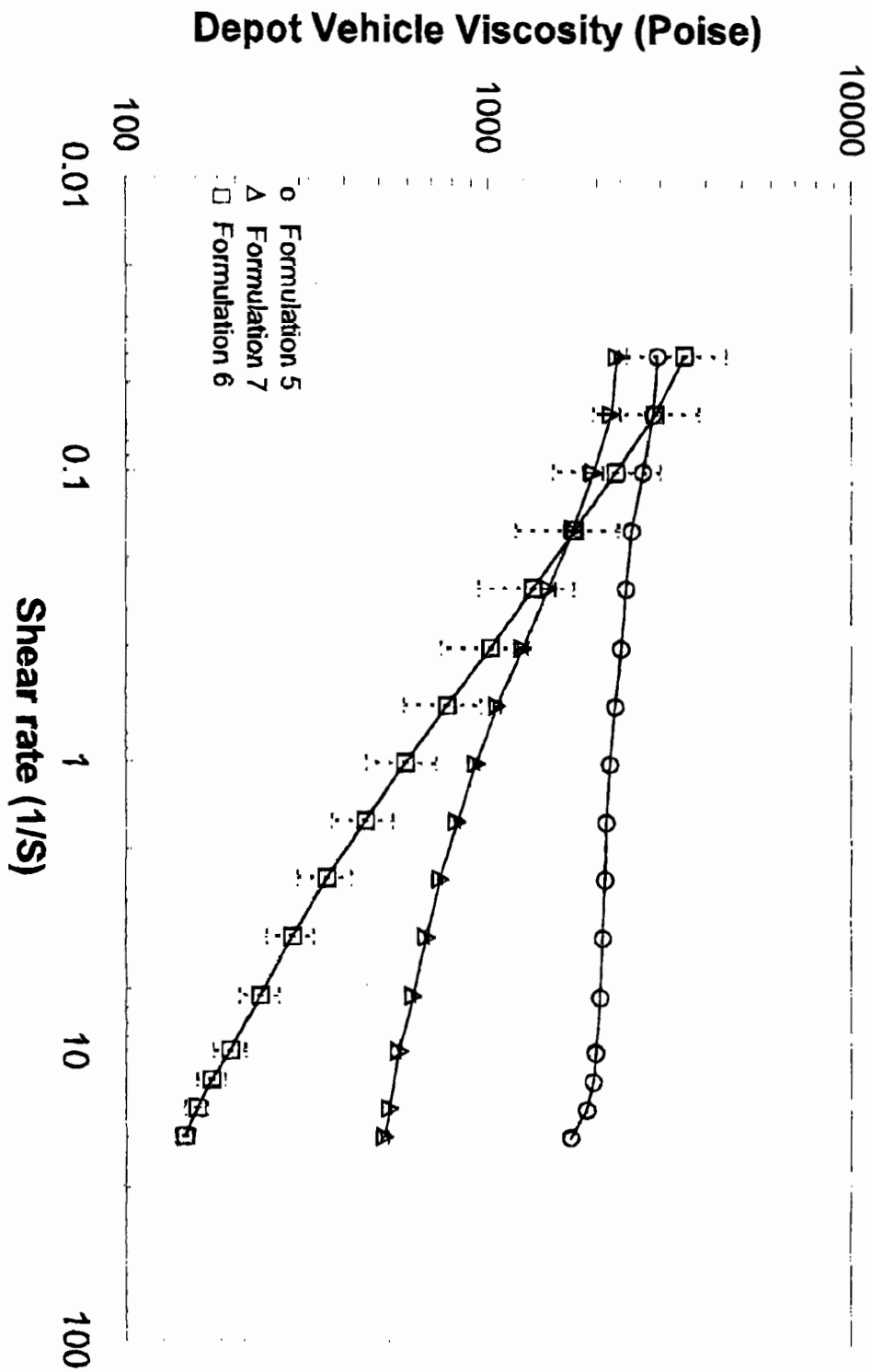

Depot Vehicle Viscosity (Poise)
100
1000
10000
0.01
0.1
1
10
100
Shear rate (1/S)
o Formulation 5
Δ Formulation 7
□ Formulation 6

FIG. 1

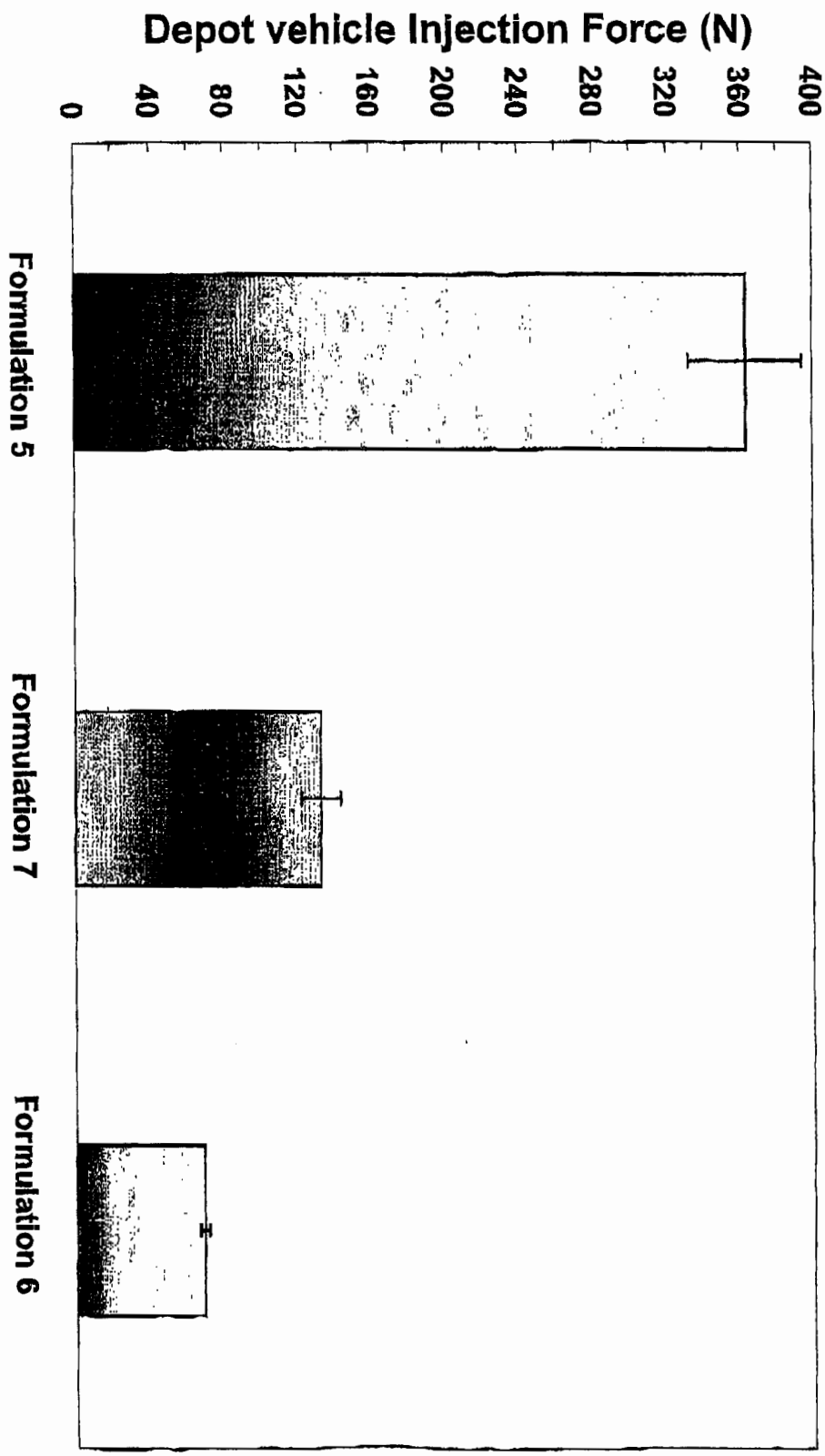

Depot vehicle Injection Force (N)
0
40
80
120
160
200
240
280
320
360
400
Formulation 5
Formulation 7
Formulation 6

FIG. 2

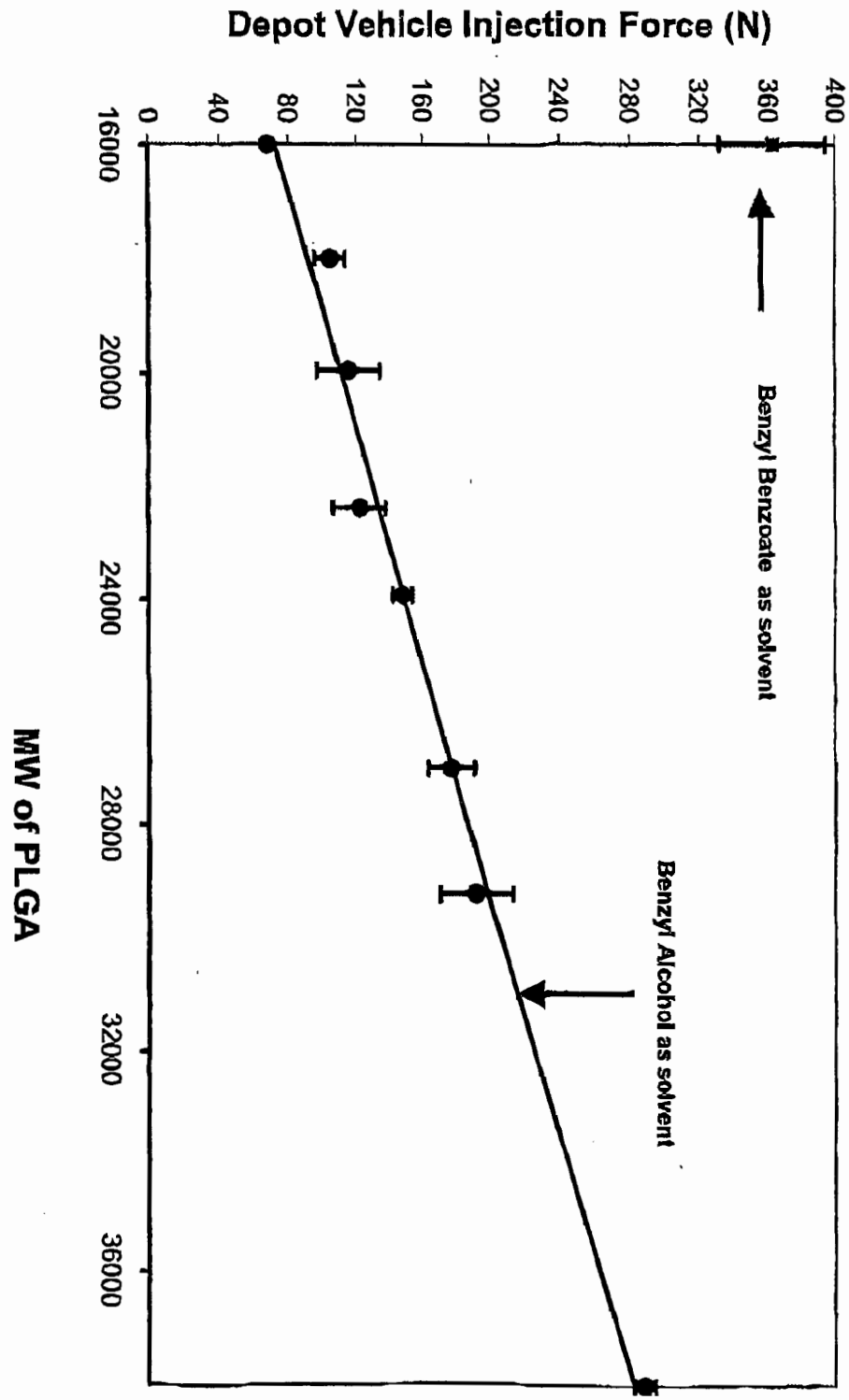

Depot Vehicle Injection Force (N)
0
40
80
120
160
200
240
280
320
360
400
16000
20000
24000
28000
32000
36000
MW of PLGA
Benzyl Benzoate as solvent
Benzyl Alcohol as solvent

FIG. 3

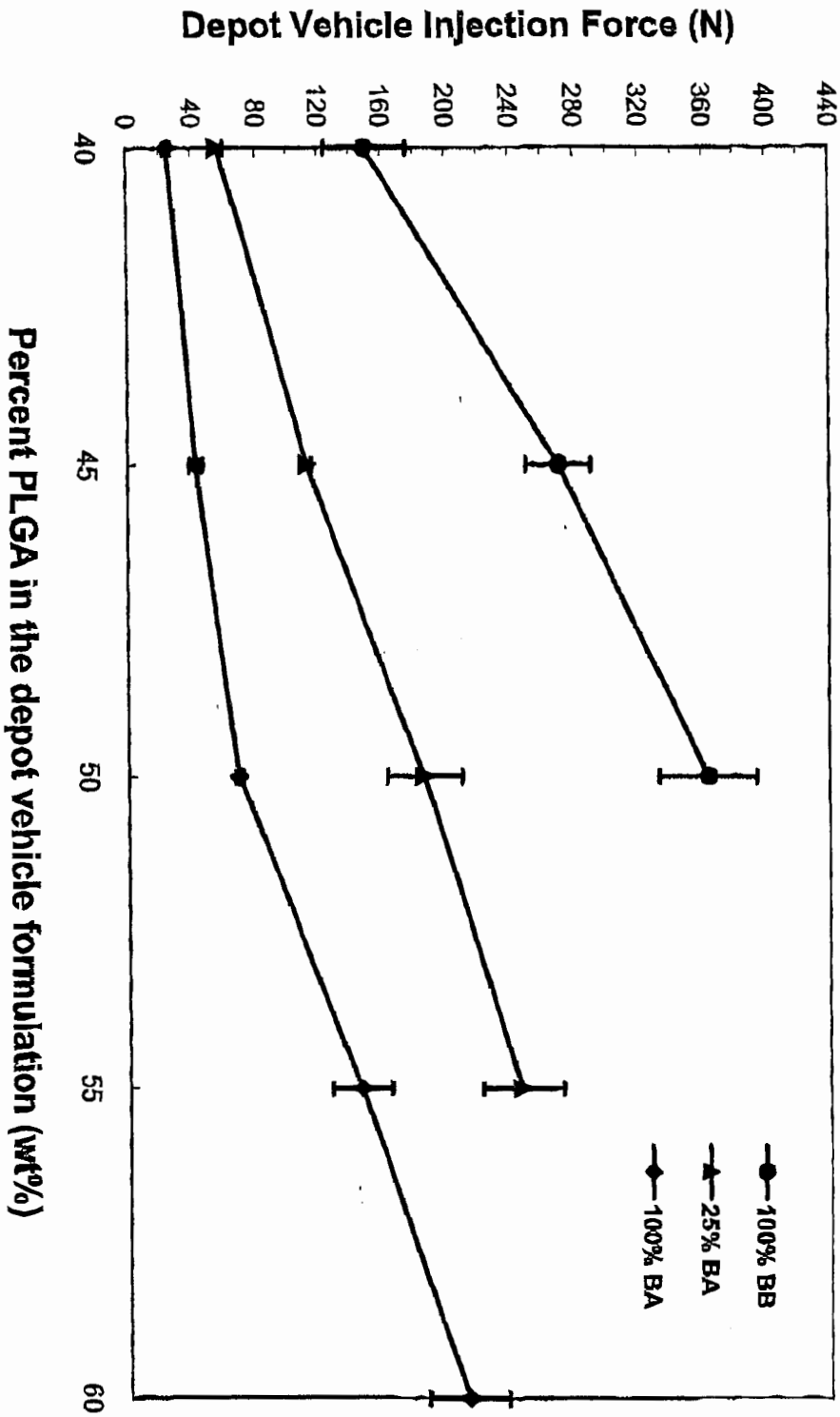

Depot Vehicle Injection Force (N)
0
40
80
120
160
200
240
280
320
360
400
440
40
45
50
55
60
Percent PLGA in the depot vehicle formulation (wt%)
100% BB
25% BA
100% BA

FIG. 4

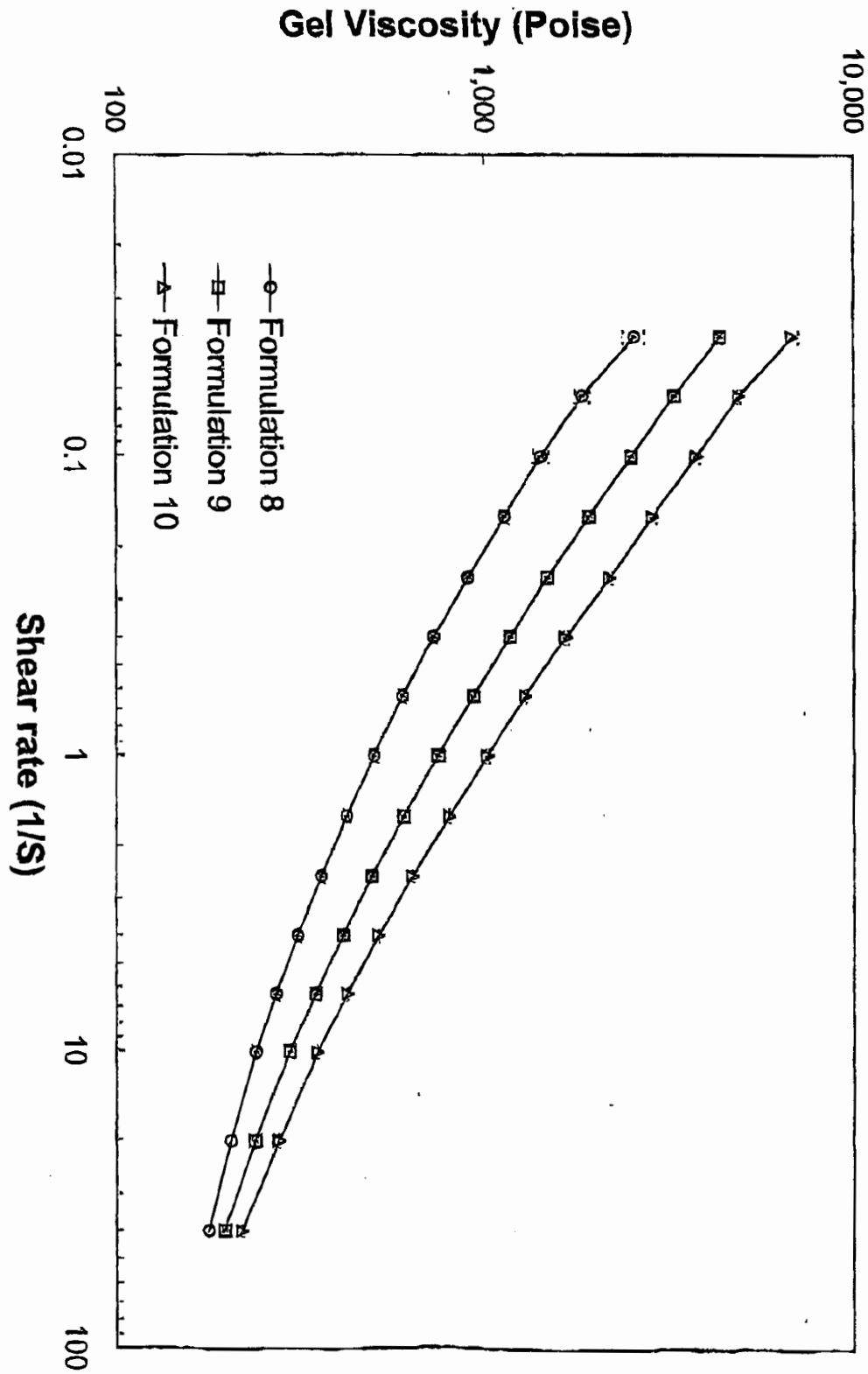

Gel Viscosity (Poise)
100
1,000
10,000
0.01
0.1
1
10
100
Shear rate (1/S)
Formulation 8
Formulation 9
Formulation 10

FIG. 5

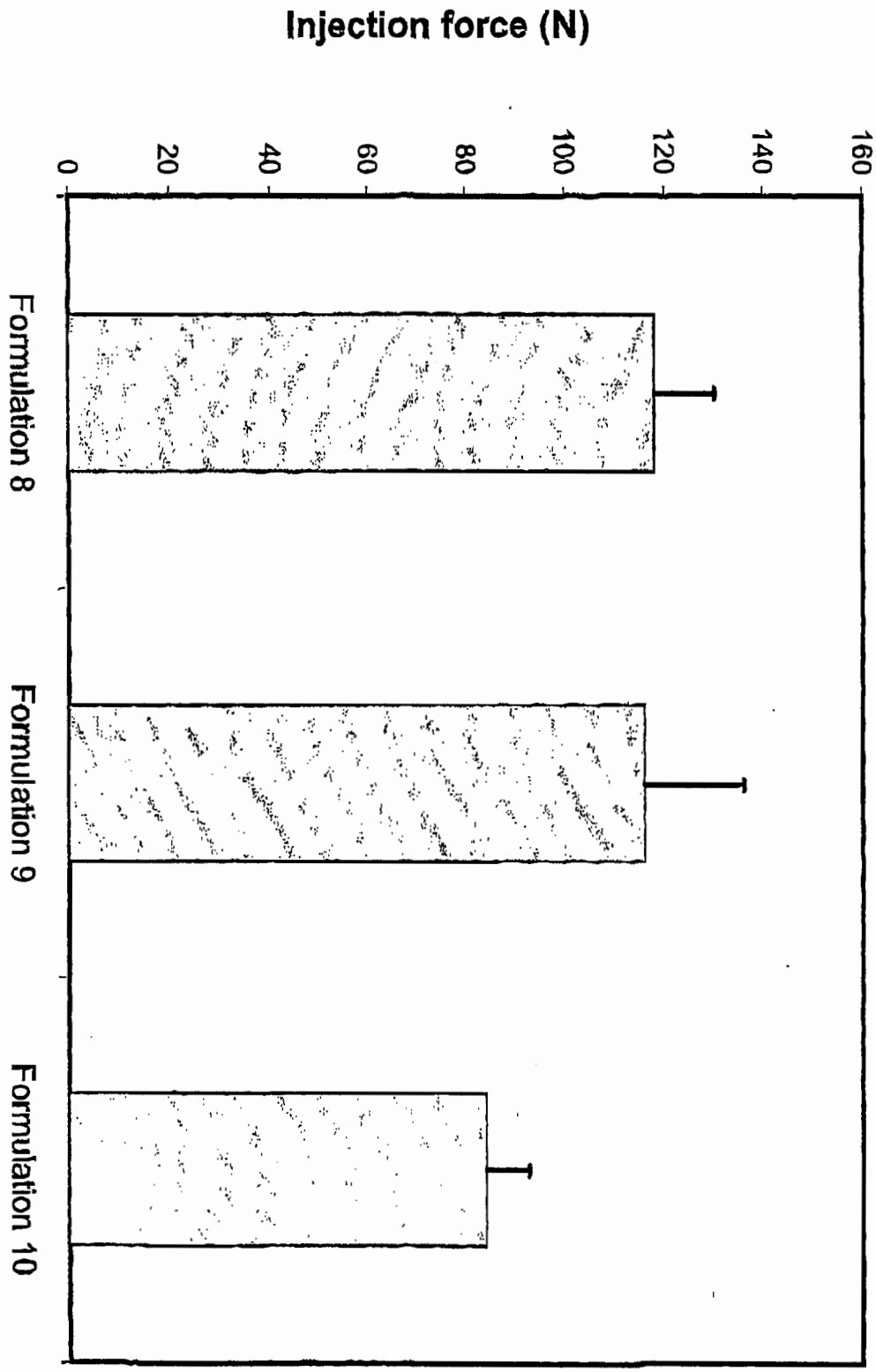

Injection force (N)
0
20
40
60
80
100
120
140
160
Formulation 8
Formulation 9
Formulation 10

FIG. 6

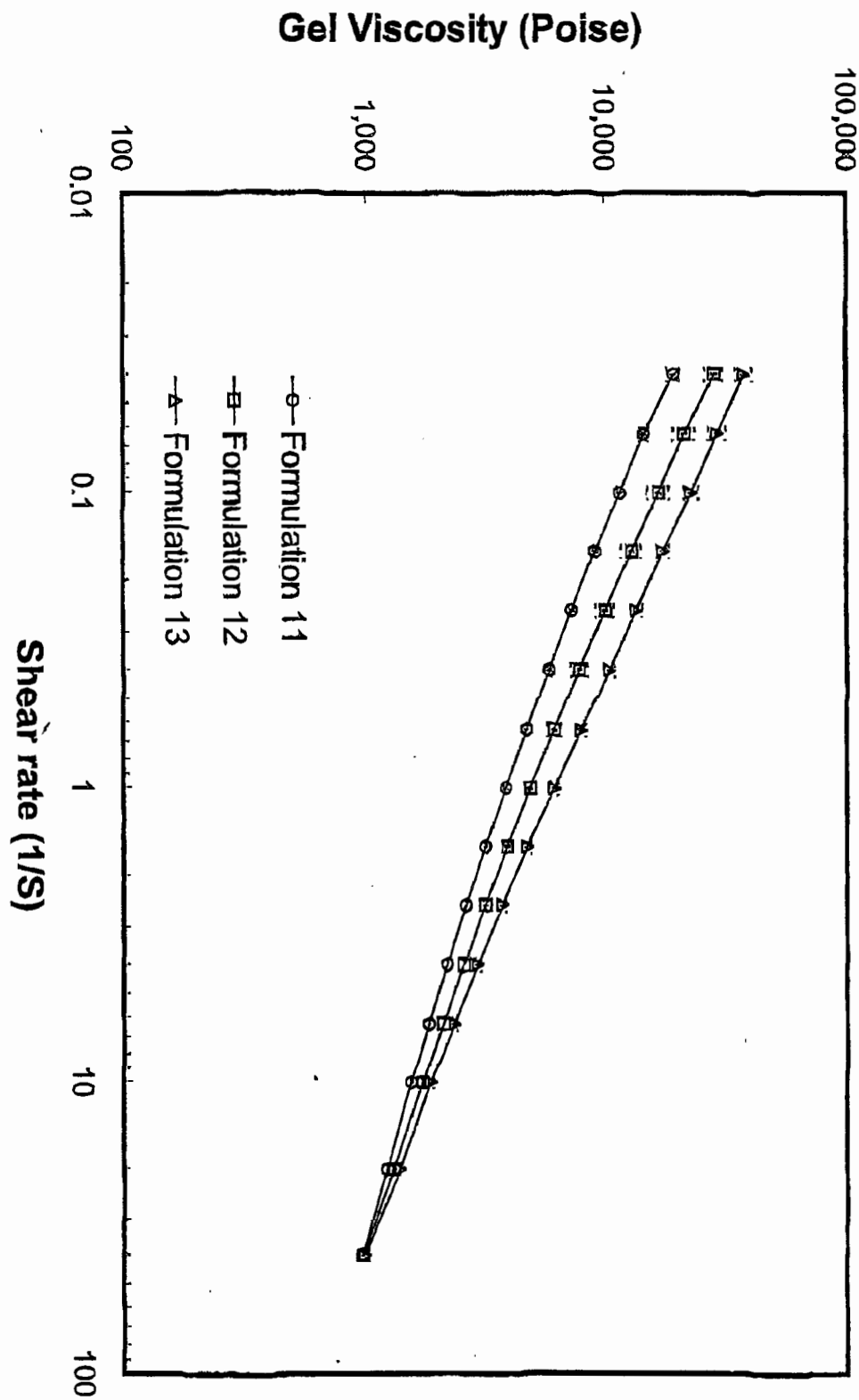

Gel Viscosity (Poise)
100,000
10,000
1,000
100
0.01
0.1
1
10
100
Shear rate (1/S)
Formulation 11
Formulation 12
Formulation 13

FIG. 7

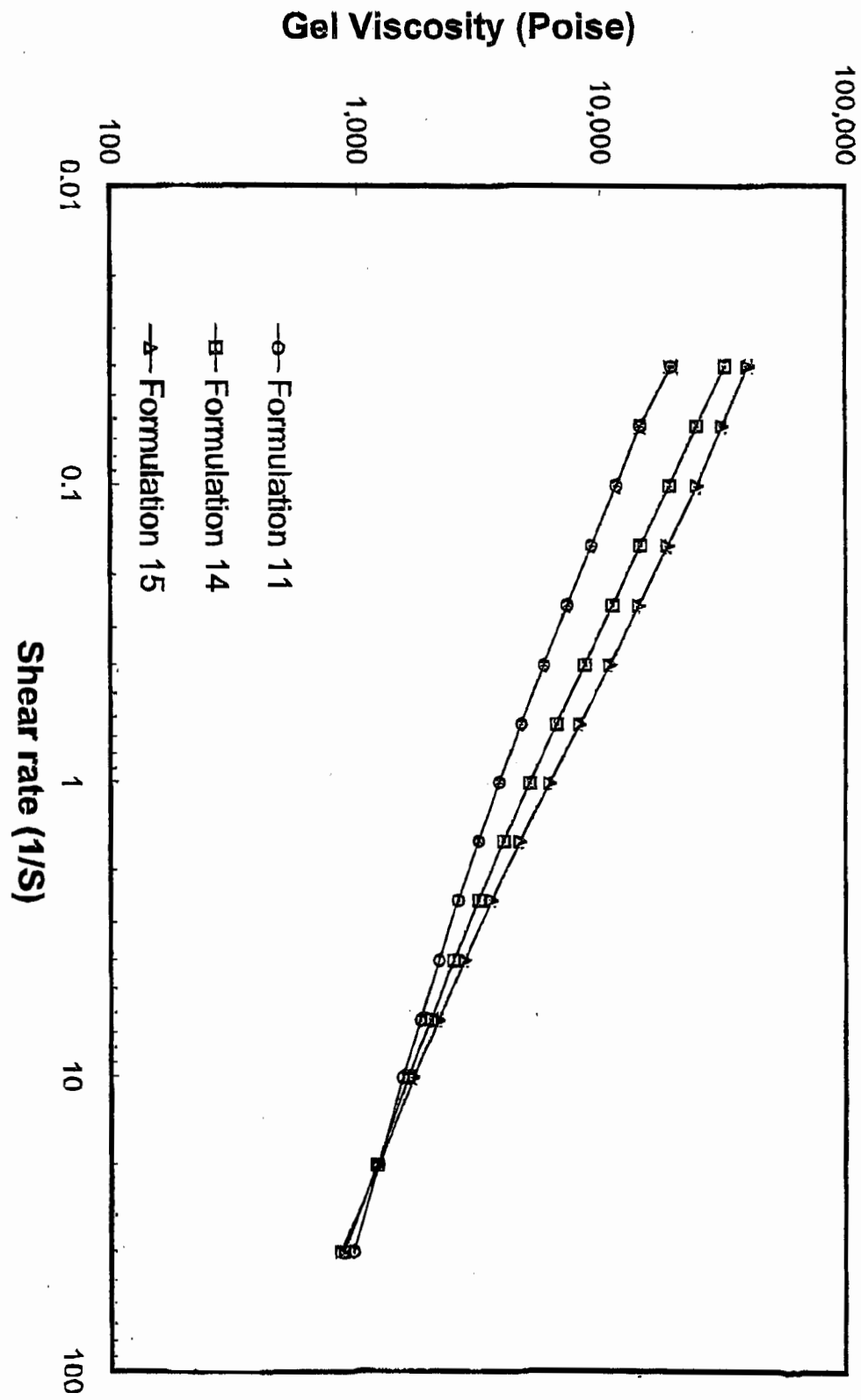

Gel Viscosity (Poise)
100
1,000
10,000
100,000
0.01
0.1
1
10
100
Shear rate (1/S)
Formulation 11
Formulation 14
Formulation 15

FIG. 8

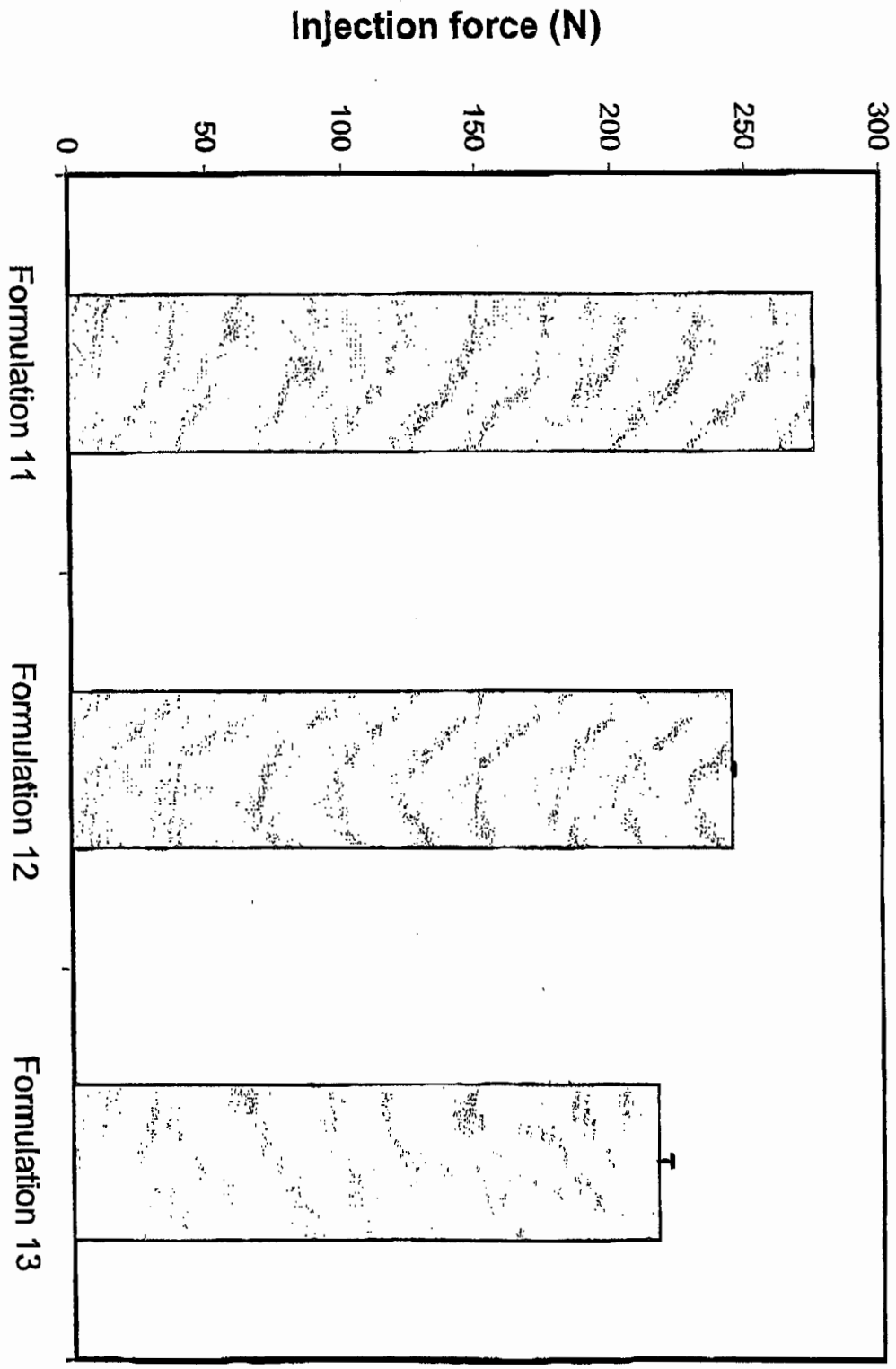

Injection force (N)
0
50
100
150
200
250
300
Formulation 11
Formulation 12
Formulation 13

FIG. 9

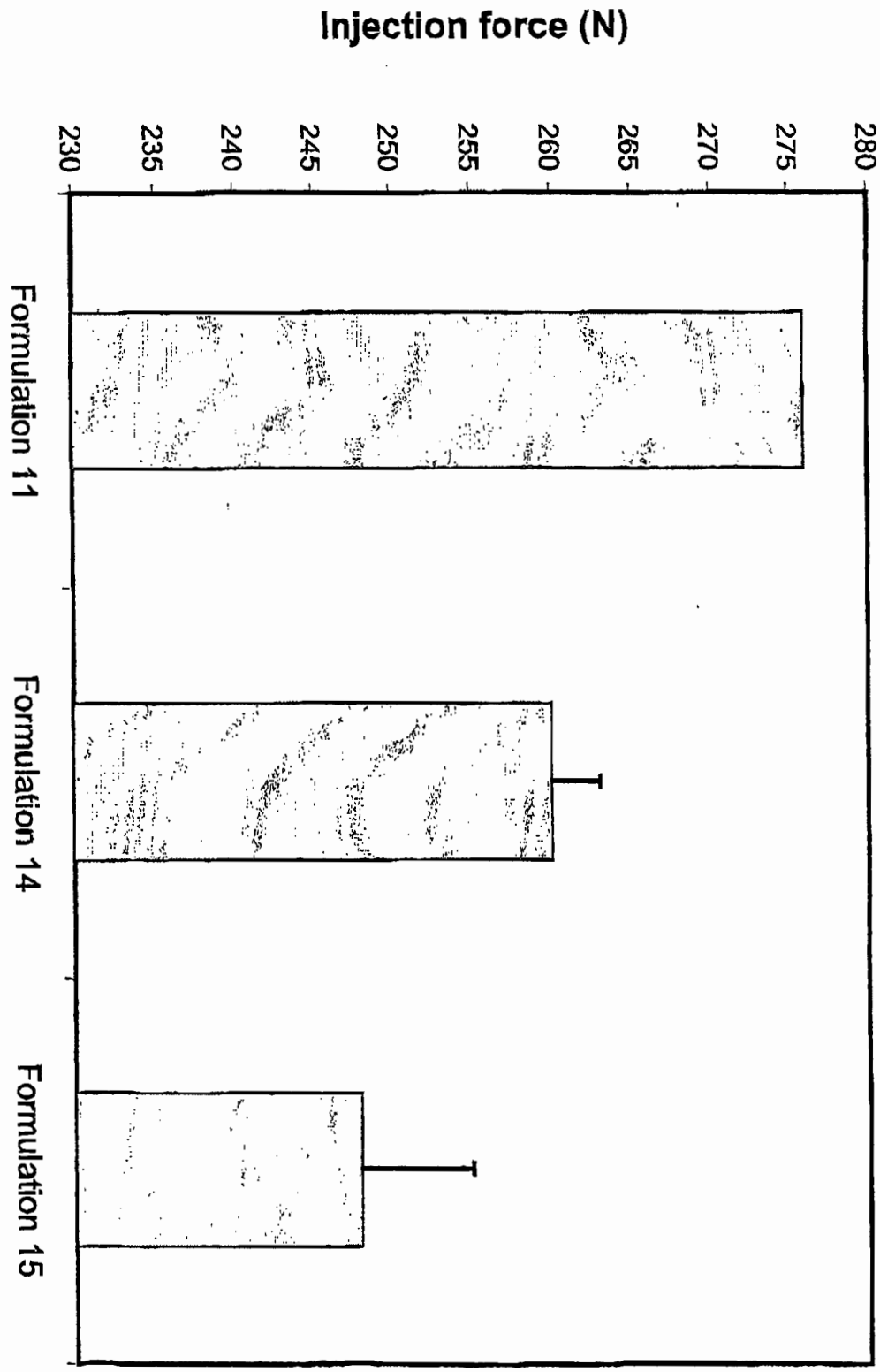

Injection force (N)
230
235
240
245
250
255
260
265
270
275
280
Formulation 11
Formulation 14
Formulation 15

FIG. 10

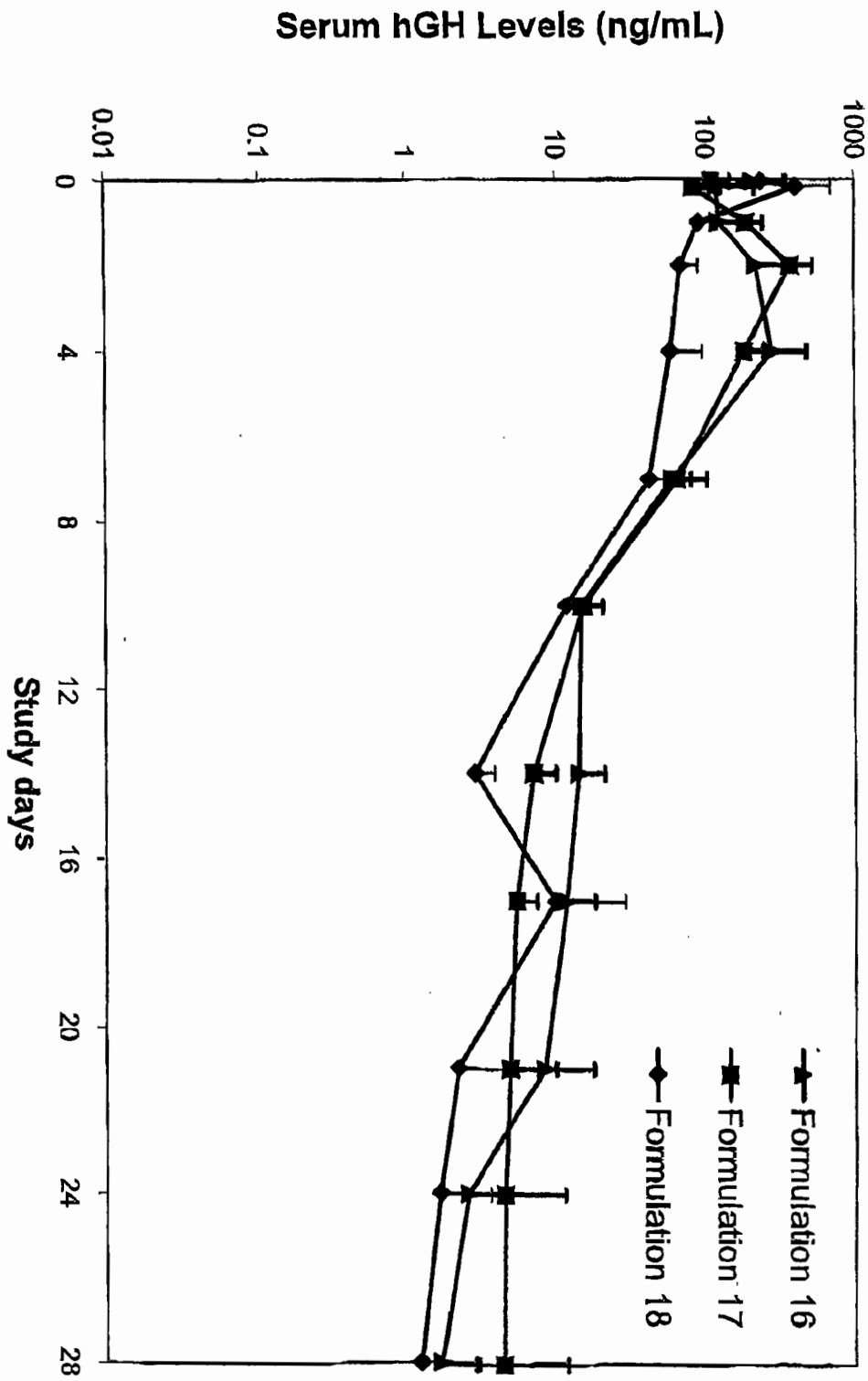

Serum hGH Levels (ng/mL)
0.01
0.1
1
10
100
1000
0
4
8
12
16
20
24
28
Study days
Formulation 16
Formulation 17
Formulation 18

FIG. 11

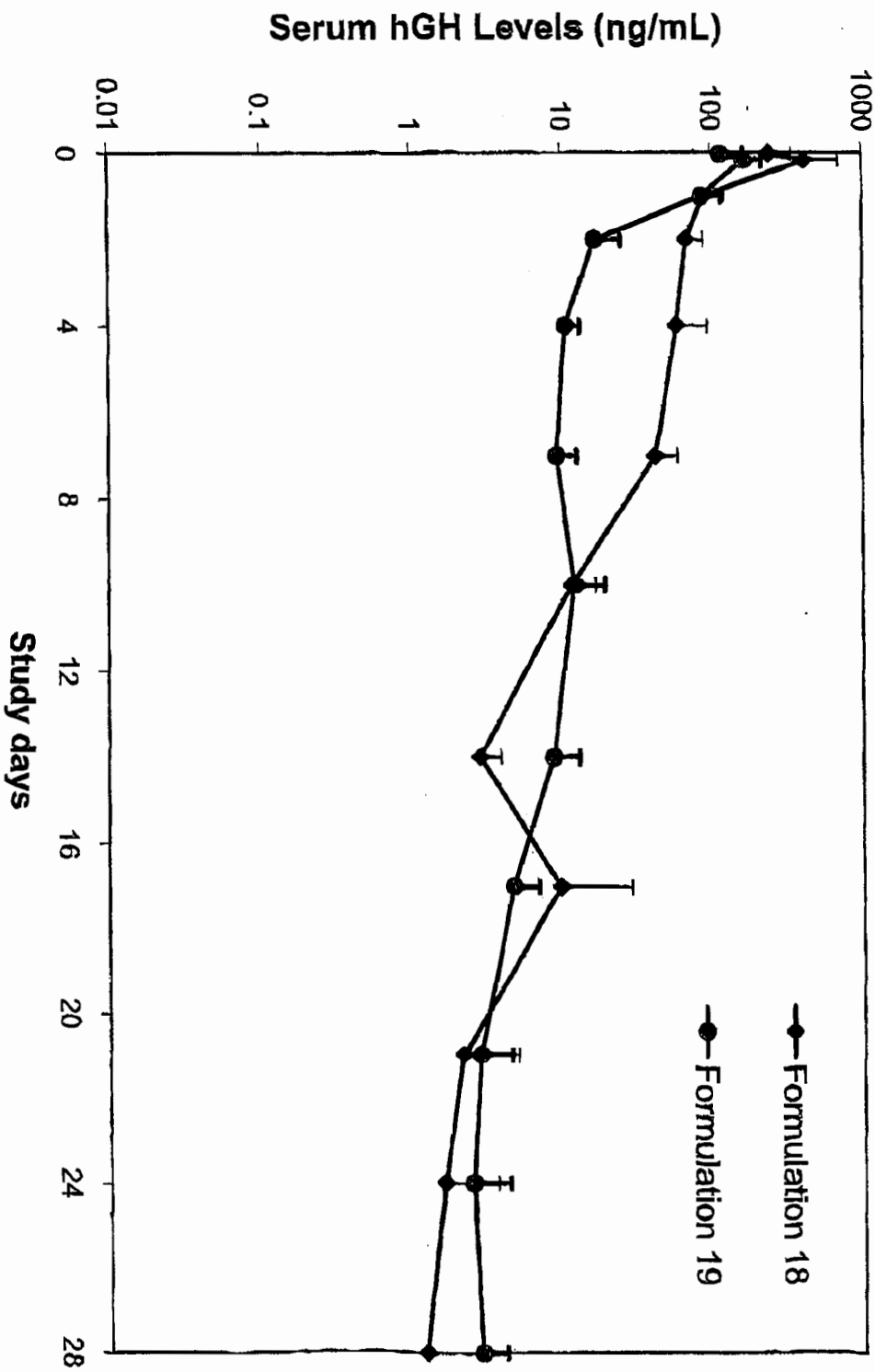

Serum hGH Levels (ng/mL)
0.01
0.1
1
10
100
1000
0
4
8
12
16
20
24
28
Study days
Formulation 18
Formulation 19

FIG. 12

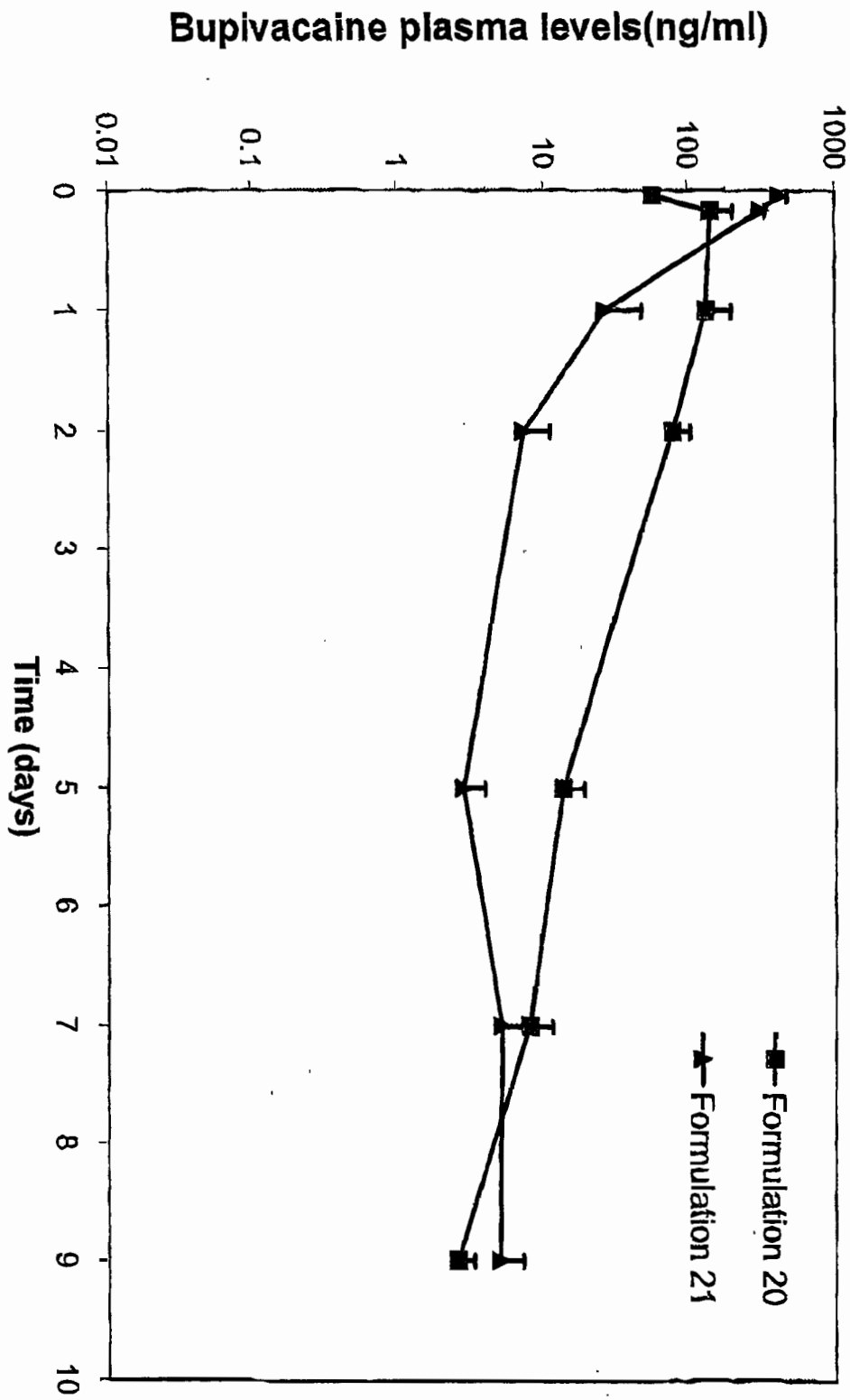

Bupivacaine plasma levels(ng/ml)
0.01
0.1
1
10
100
1000
Time (days)
0
1
2
3
4
5
6
7
8
9
10
Formulation 20
Formulation 21

FIG. 13

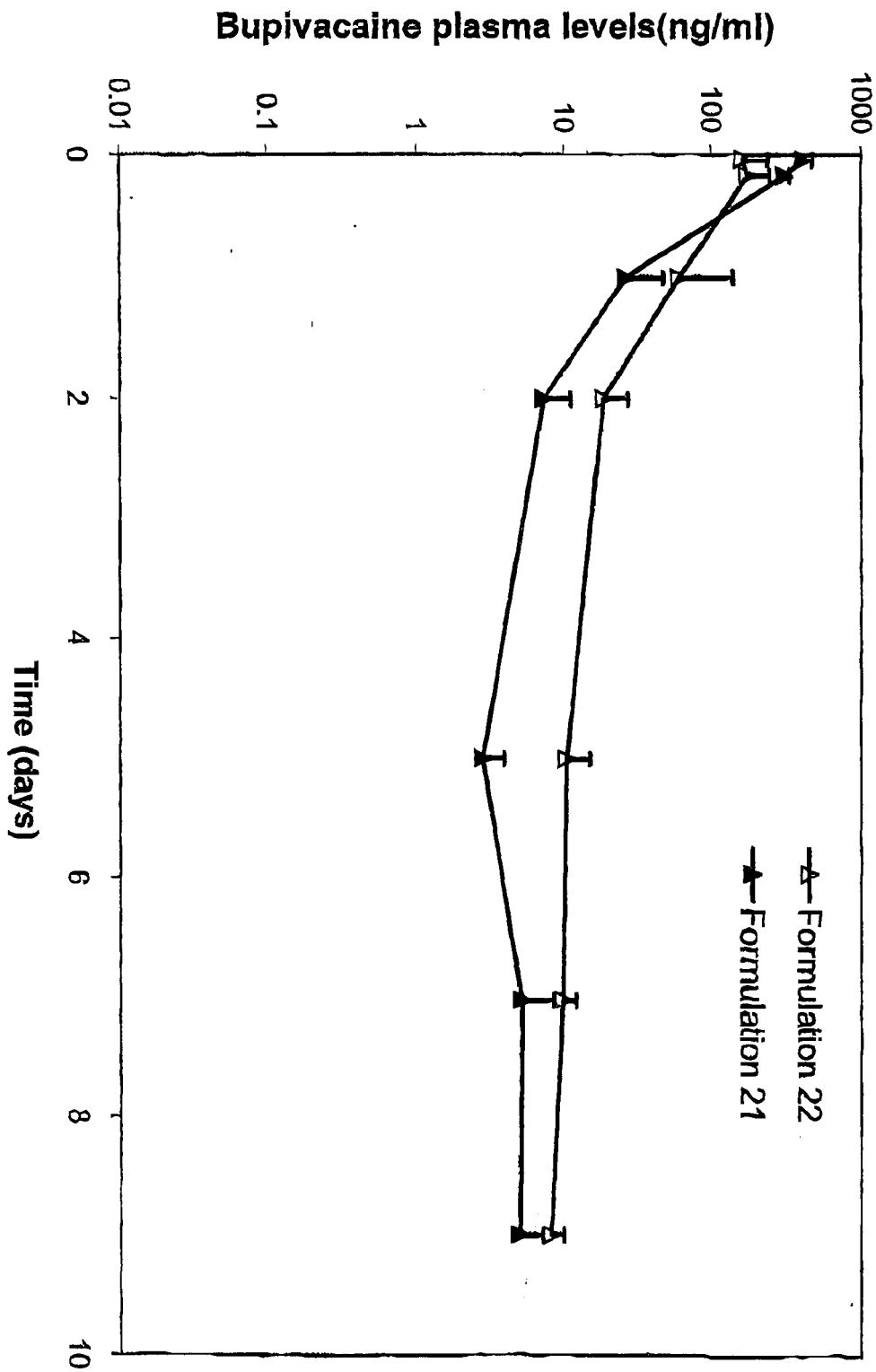

Bupivacaine plasma levels(ng/ml)
0.01
0.1
1
10
100
1000
0
2
4
6
8
10
Time (days)
Formulation 22
Formulation 21

FIG. 14

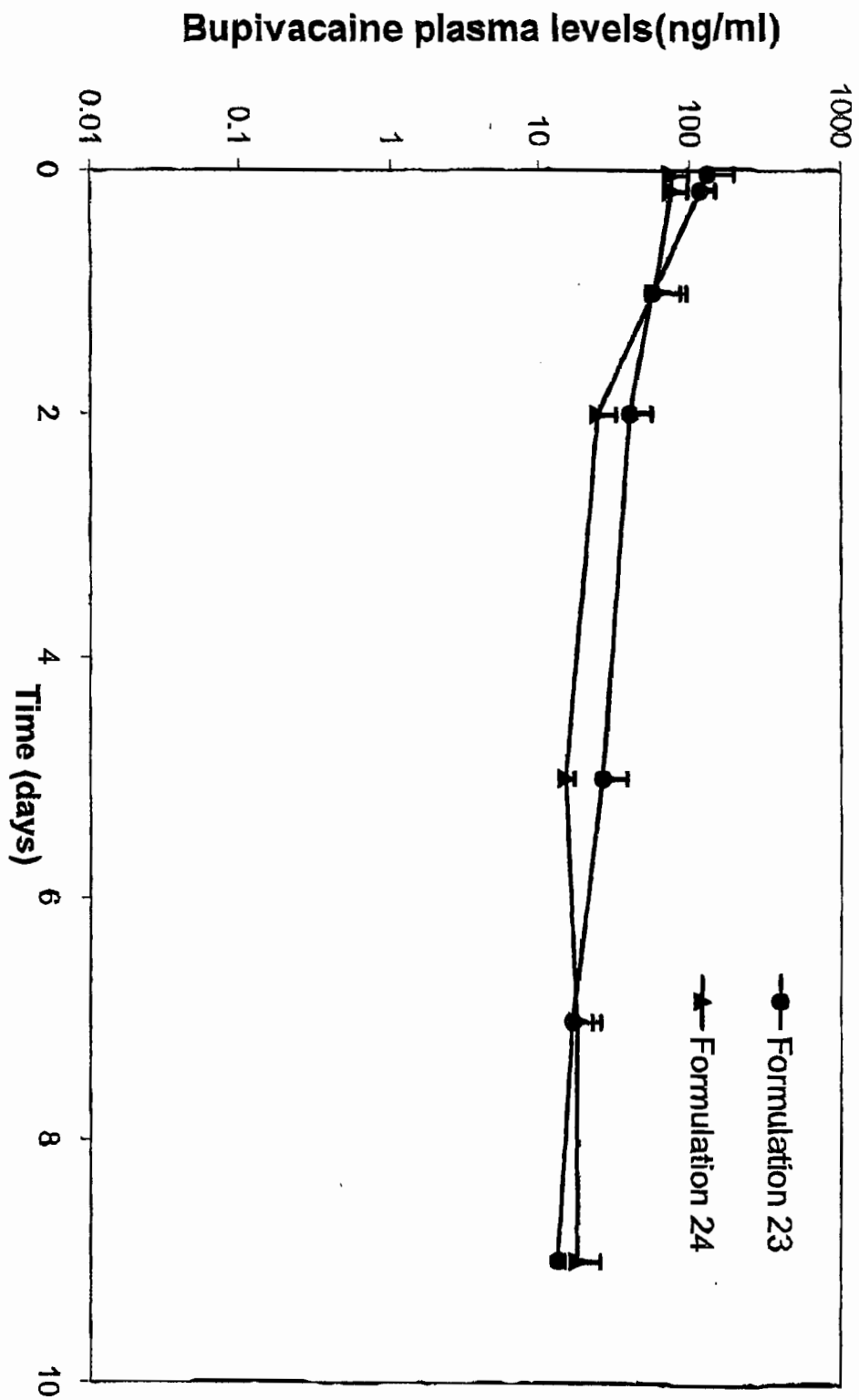

Bupivacaine plasma levels(ng/ml)
0.01
0.1
1
10
100
1000
0
2
4
6
8
10
Time (days)
Formulation 23
Formulation 24

FIG. 15

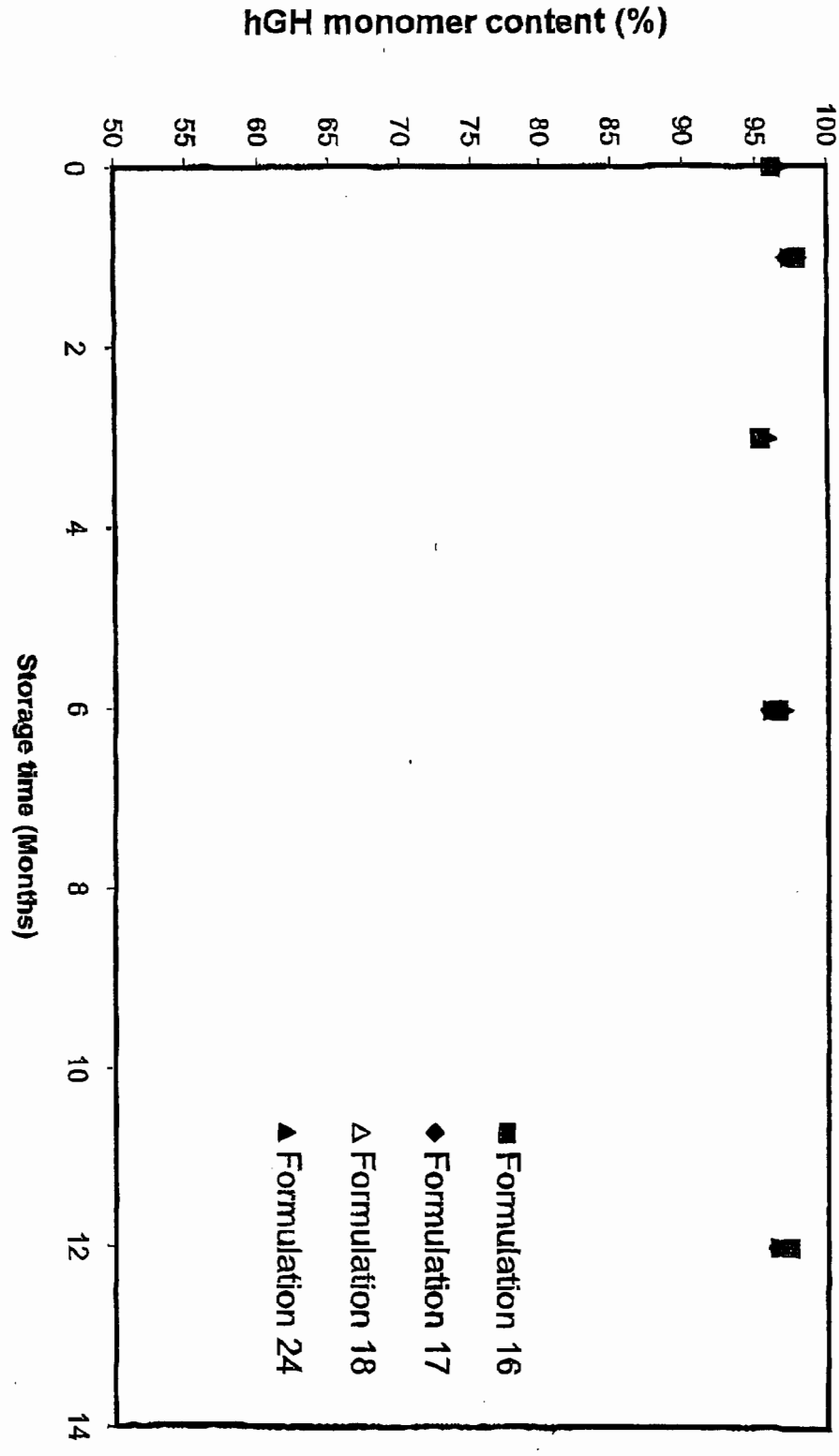

hGH monomer content (%)
100
95
90
85
80
75
70
65
60
55
50
0
2
4
6
8
10
12
14
Storage time (Months)
■ Formulation 16
◆ Formulation 17
Δ Formulation 18
▲ Formulation 24

FIG. 16

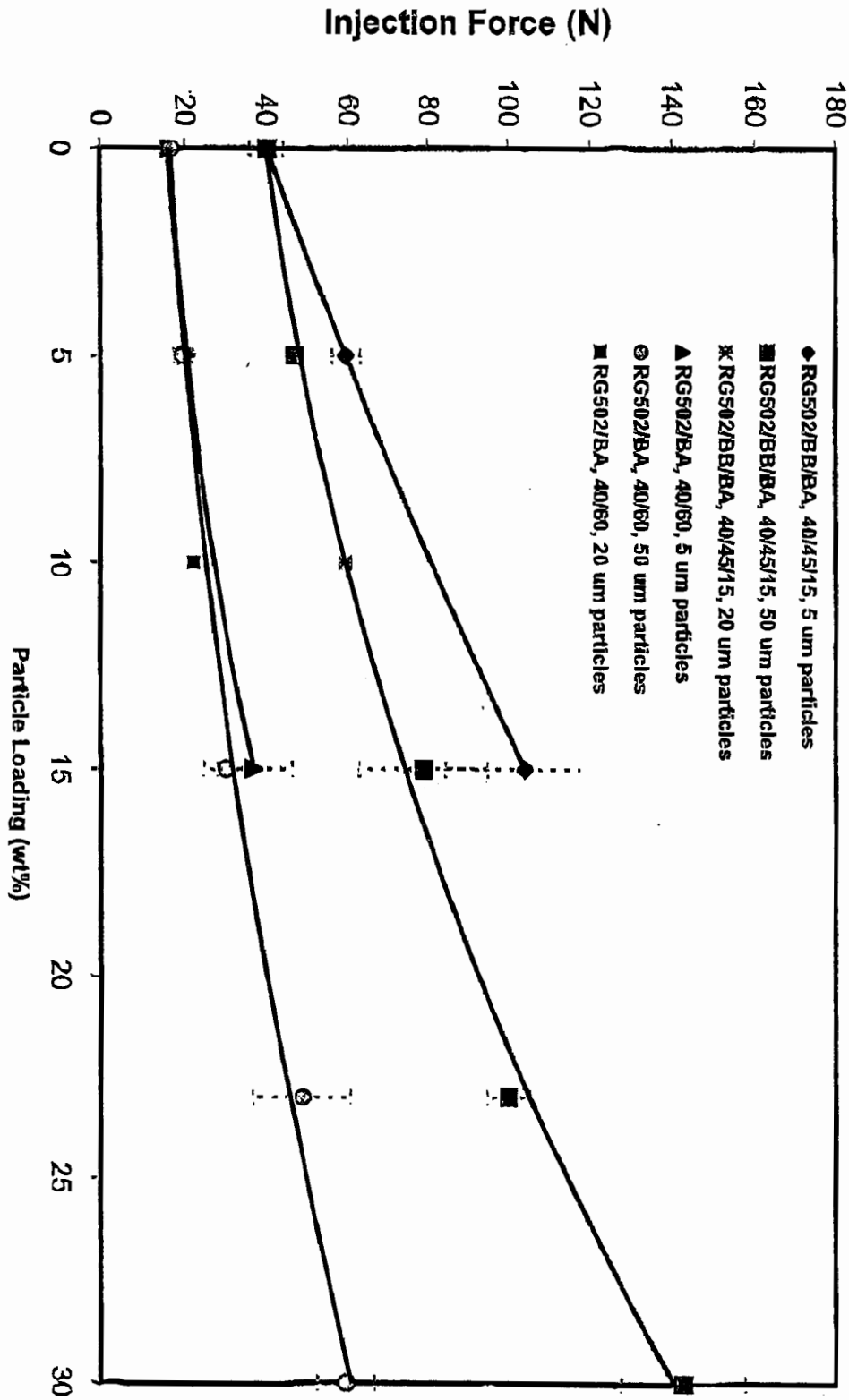

Injection Force (N)
0
20
40
60
80
100
120
140
160
180
Particle Loading (wt%)
0
5
10
15
20
25
30
RG502/BB/BA, 40/45/15, 5 um particles
RG502/BB/BA, 40/45/15, 50 um particles
RG502/BB/BA, 40/45/15, 20 um particles
RG502/BA, 40/60, 5 um particles
RG502/BA, 40/60, 50 um particles
RG502/BA, 40/60, 20 um particles

FIG. 17

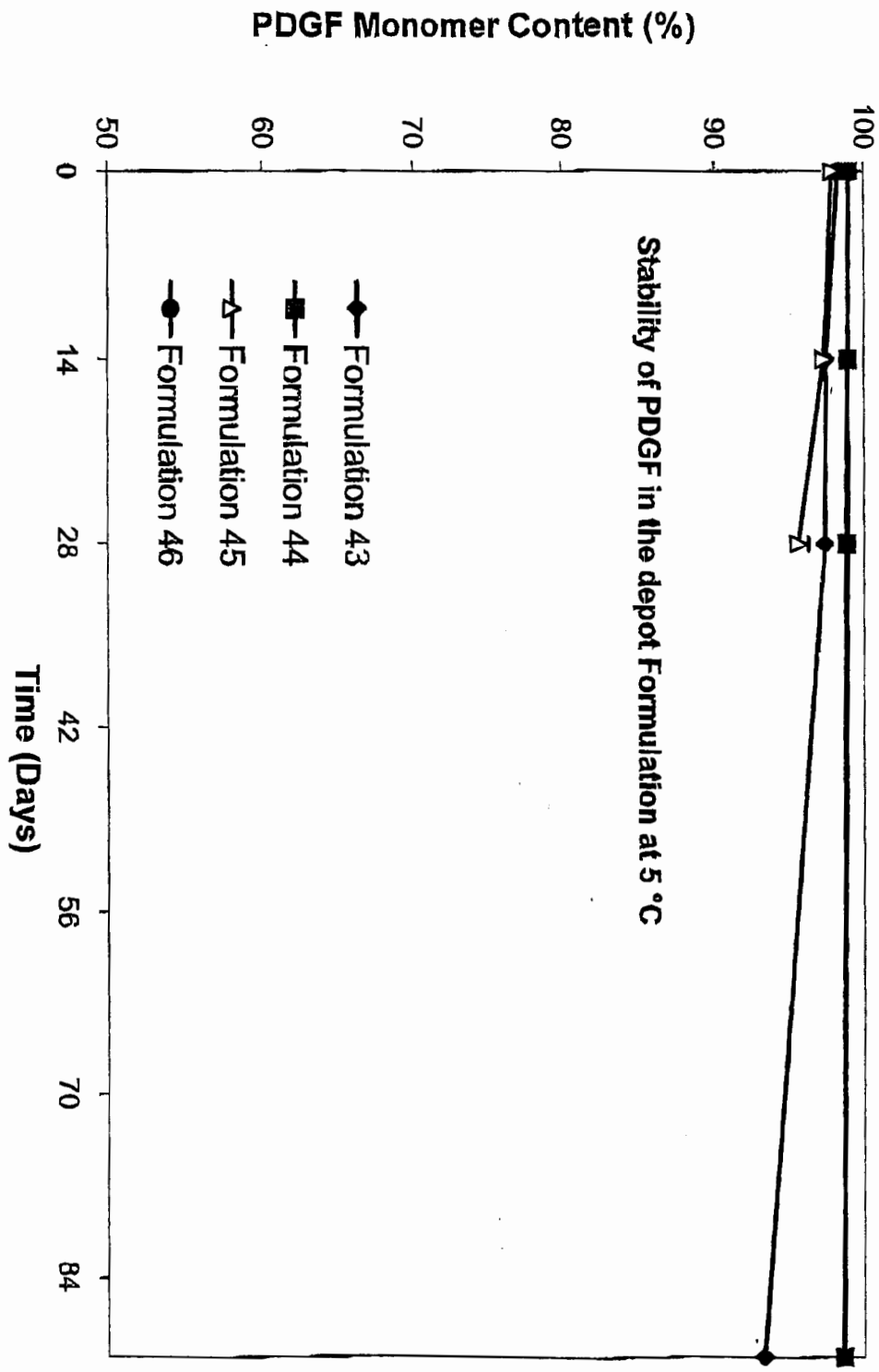

PDGF Monomer Content (%)
100
90
80
70
60
50
0
14
28
42
56
70
84
Time (Days)
Stability of PDGF in the depot Formulation at 5 °C
Formulation 43
Formulation 44
Formulation 45
Formulation 46

FIG. 18

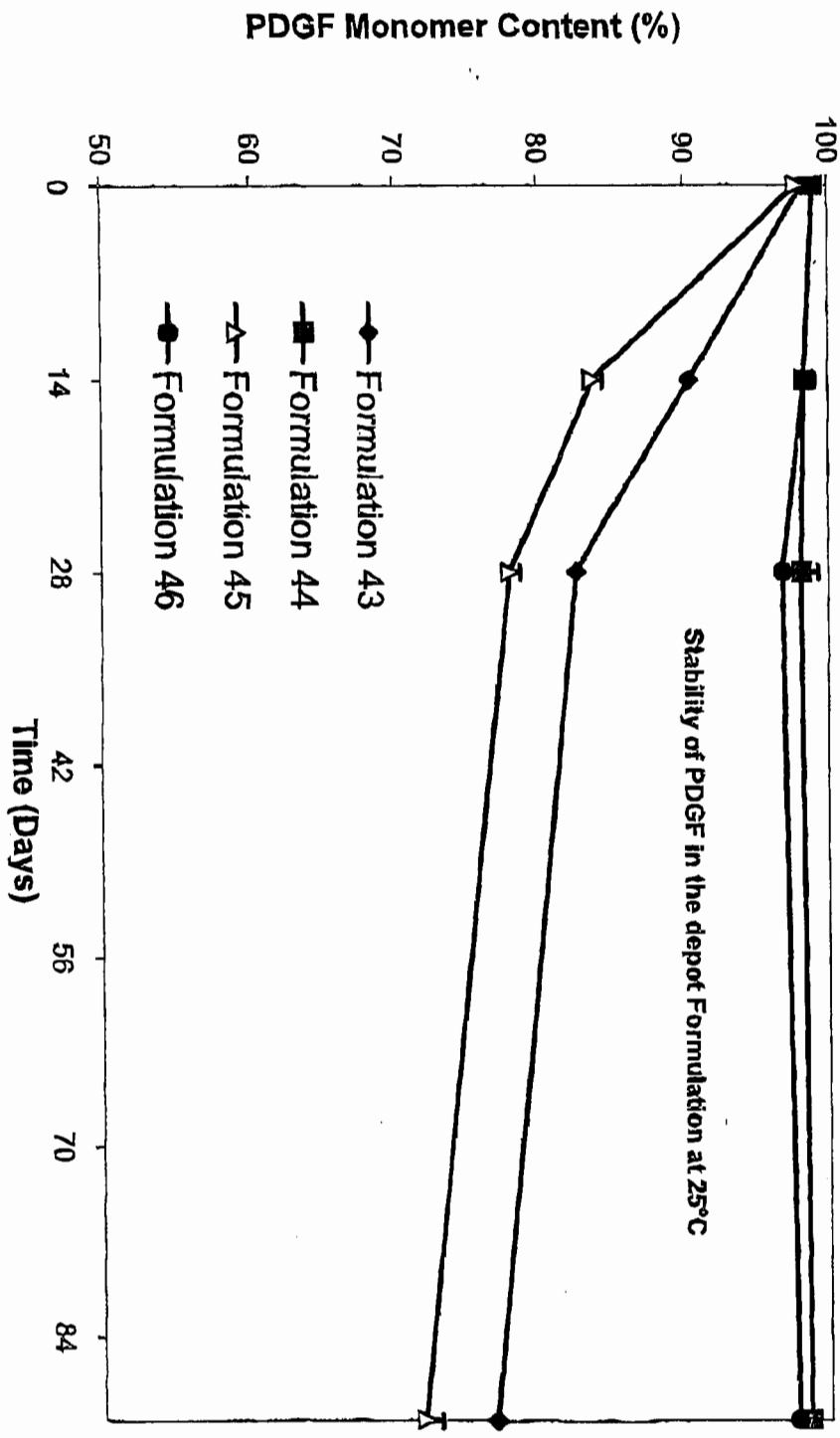

PDGF Monomer Content (%)
50
60
70
80
90
100
0
14
28
42
56
70
84
Time (Days)
Formulation 43
Formulation 44
Formulation 45
Formulation 46
Stability of PDGF in the depot Formulation at 25°C

FIG. 19

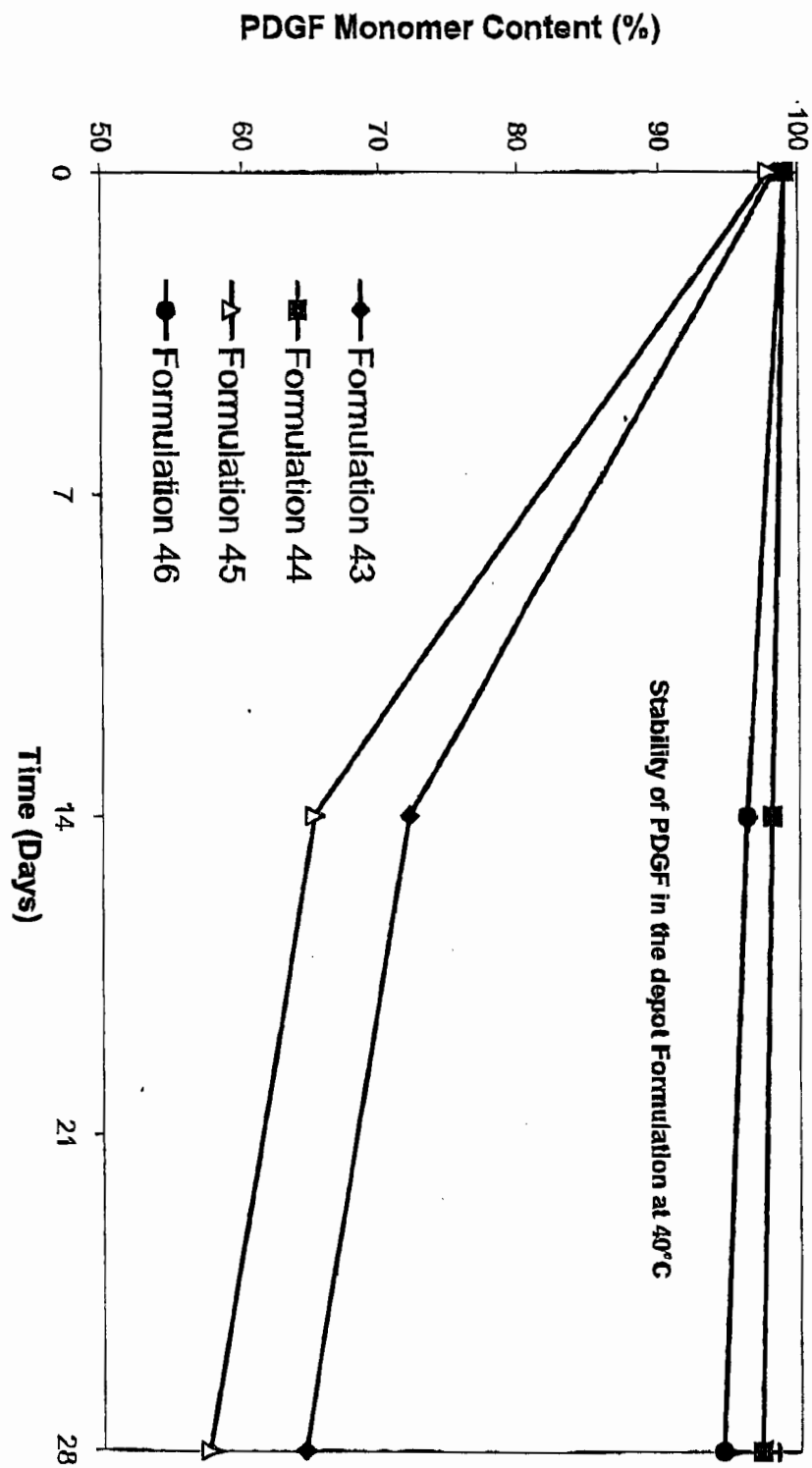

PDGF Monomer Content (%)
100
90
80
70
60
50
0
7
14
21
28
Time (Days)
Formulation 43
Formulation 44
Formulation 45
Formulation 46
Stability of PDGF in the depot Formulation at 40°C

FIG. 20

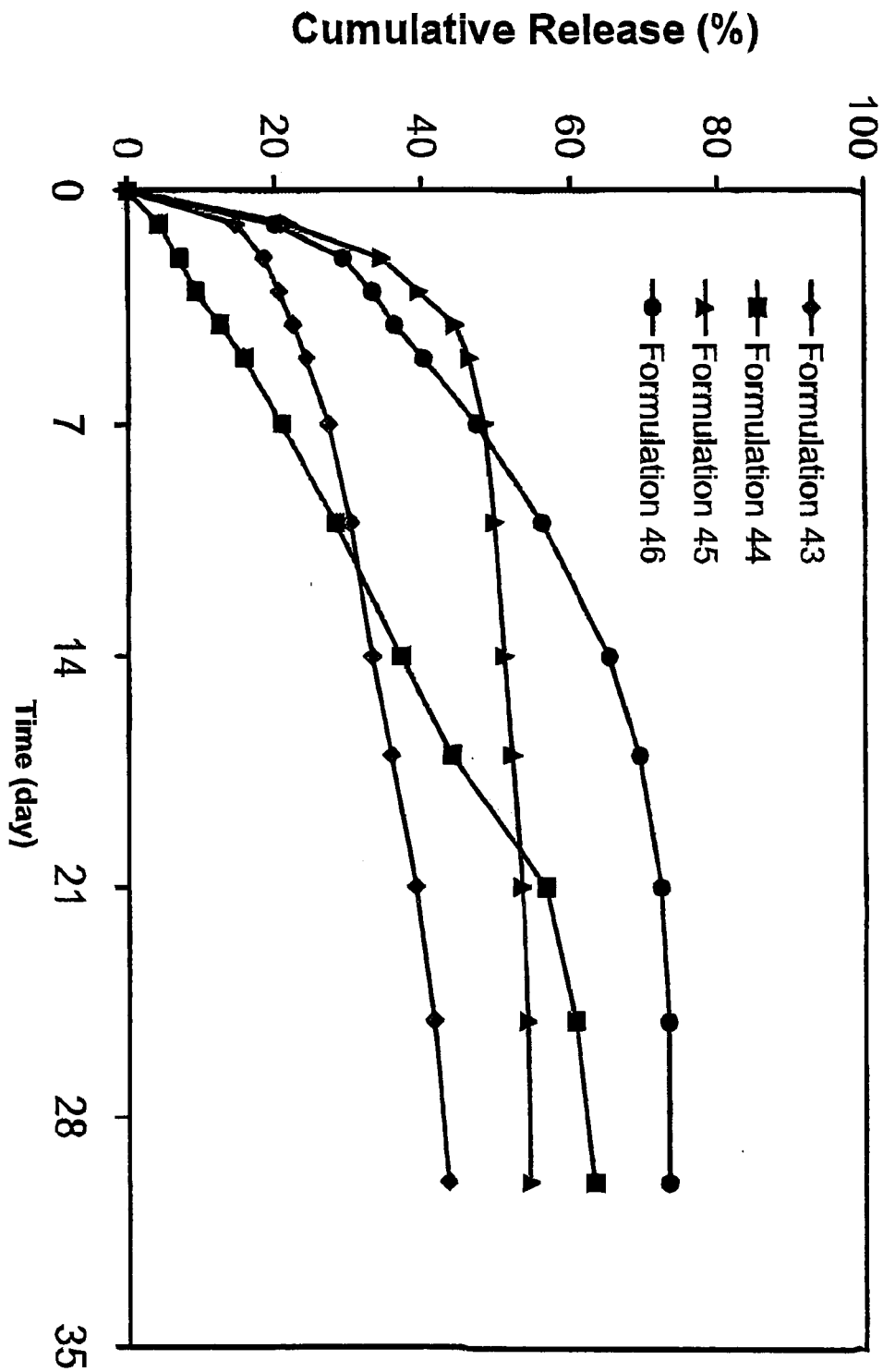

Cumulative Release (%)
0
20
40
60
80
100
Time (day)
0
7
14
21
28
35
Formulation 43
Formulation 44
Formulation 45
Formulation 46

FIG. 21

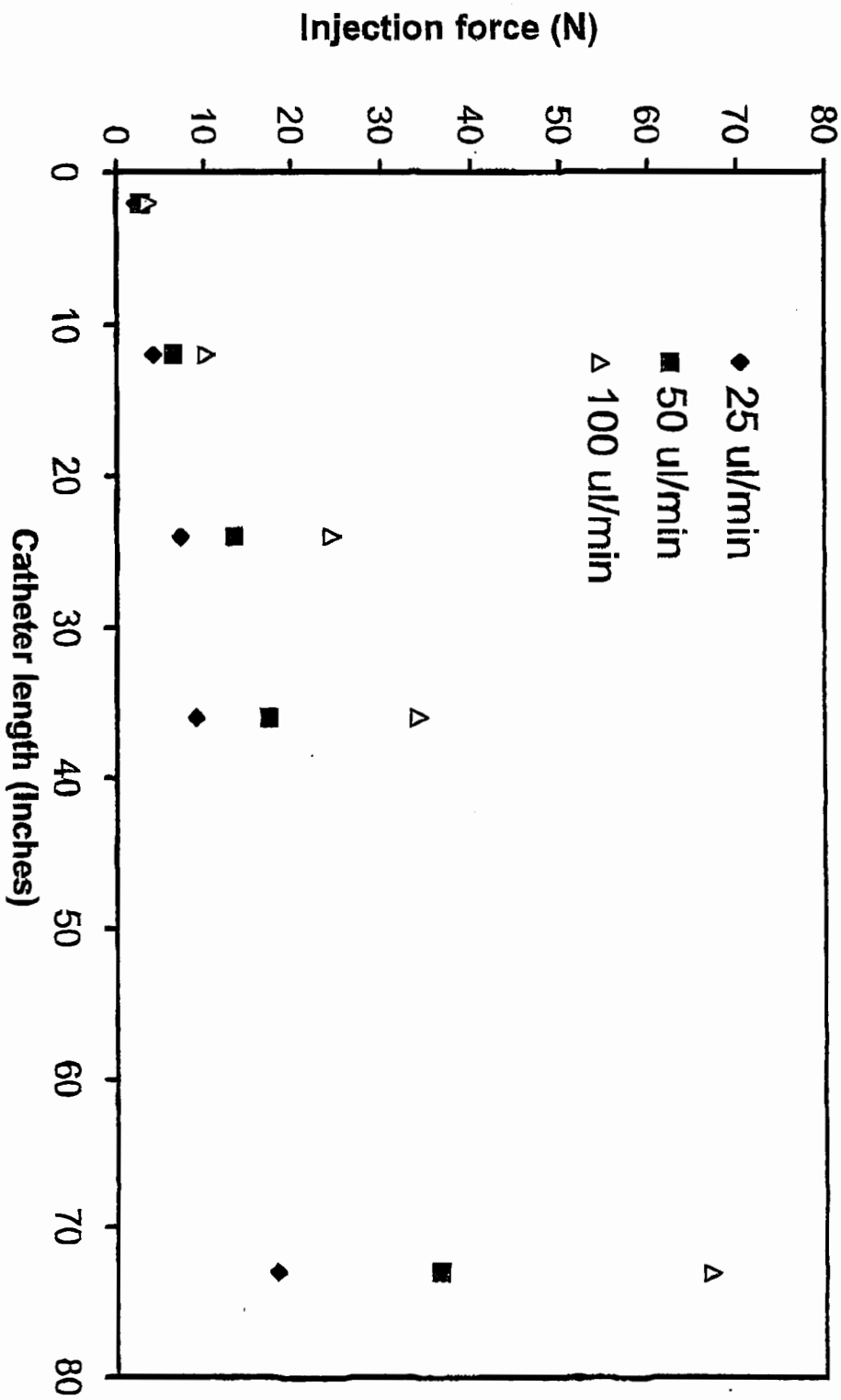

Injection force (N)
0
10
20
30
40
50
60
70
80
Catheter length (Inches)
0
10
20
30
40
50
60
70
80
◆ 25 ul/min
■ 50 ul/min
Δ 100 ul/min

FIG. 22