Figure 1

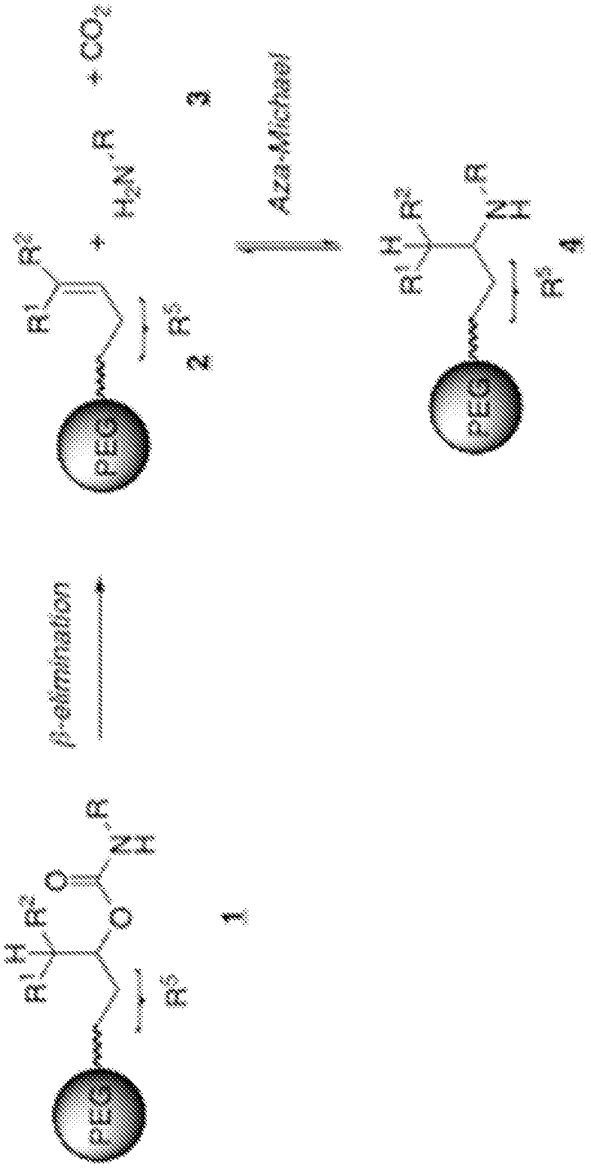


Figure 2

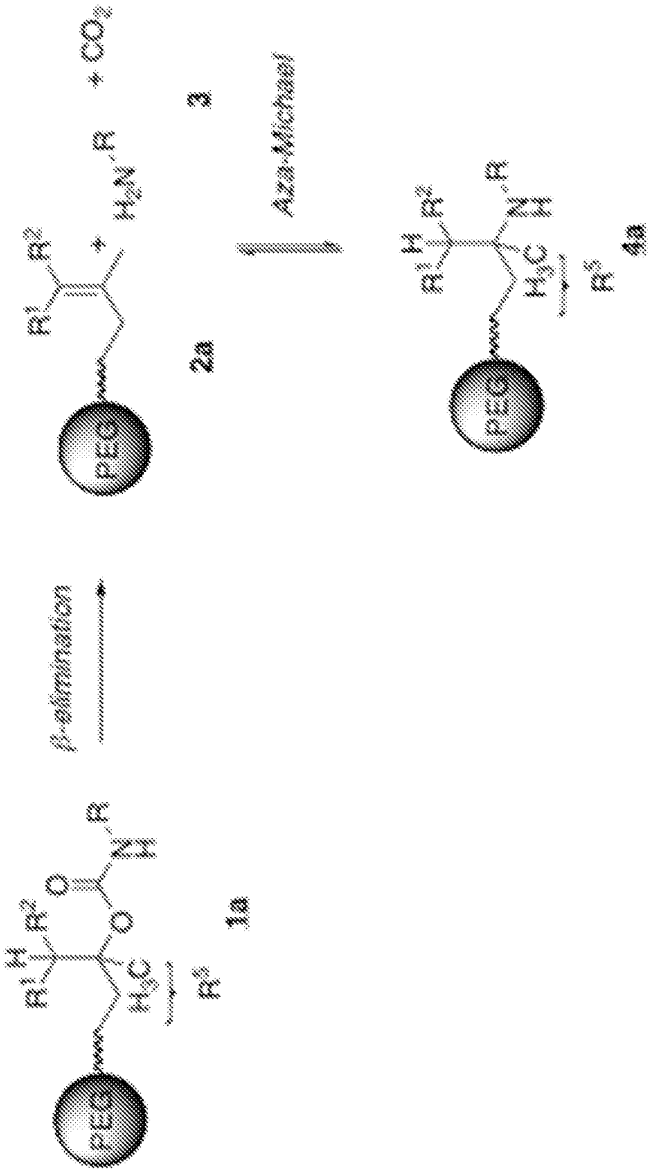


Figure 3

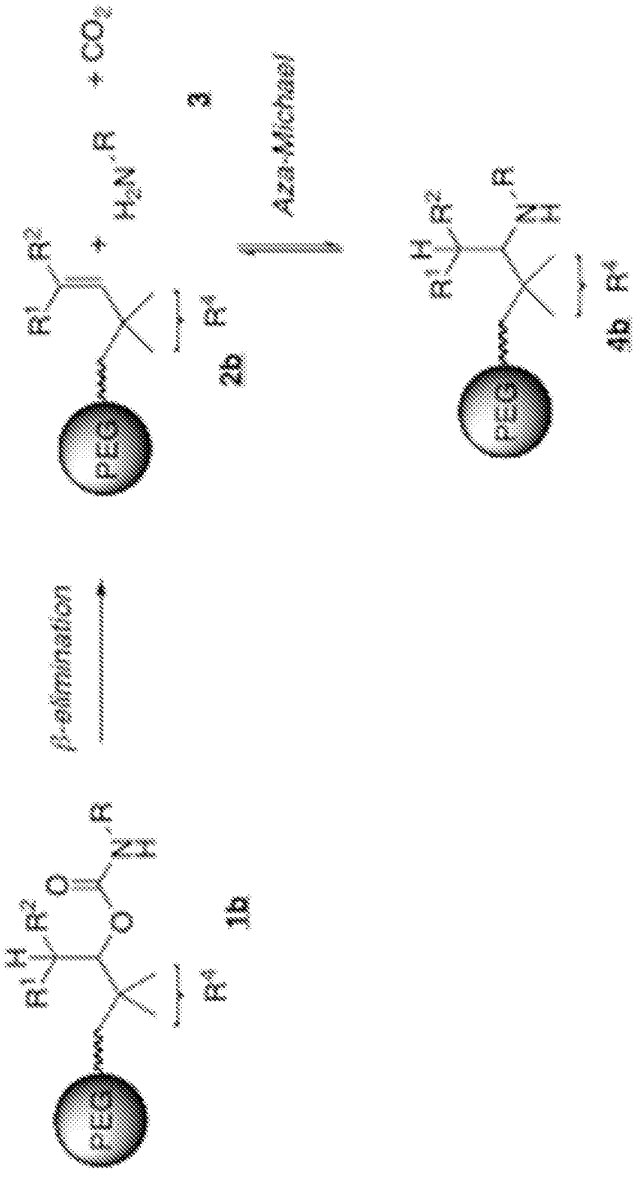
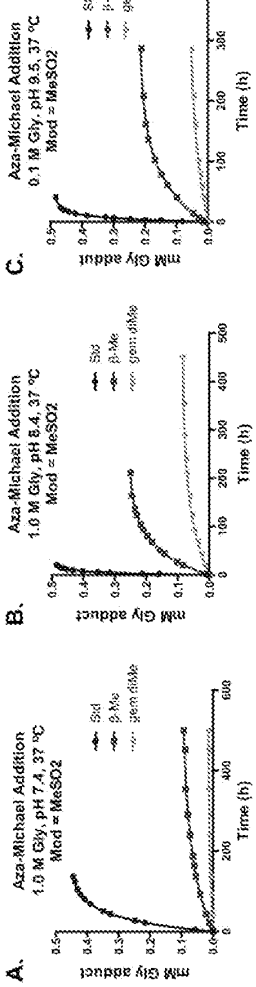


Figure 4



pH	Linker	[Gly] (M)	k_f ($M^{-1}h^{-1}$)	k_r (h^{-1})	K_{eq} (M^{-1})	$K_{eq\text{-}Std}/K_{eq}$
7.4	Std	1.0	0.0263	0.0027	9.64	1
	β-Me	1.0	0.00113	0.0046	0.243	40
	gem diMe	1.0	0.00015	0.0044	0.0348	277
8.4	Std	1.0	0.216	0.0053	40.7	1
	β-Me	1.0	0.0094	0.0090	1.05	39
	gem diMe	1.0	0.00143	0.0068	0.209	195
9.5	Std	0.1	1.45	0.0051	284	1
	β-Me	0.1	0.0602	0.0078	7.73	37
	gem diMe	0.1	0.00833	0.0057	1.45	196

Figure 5

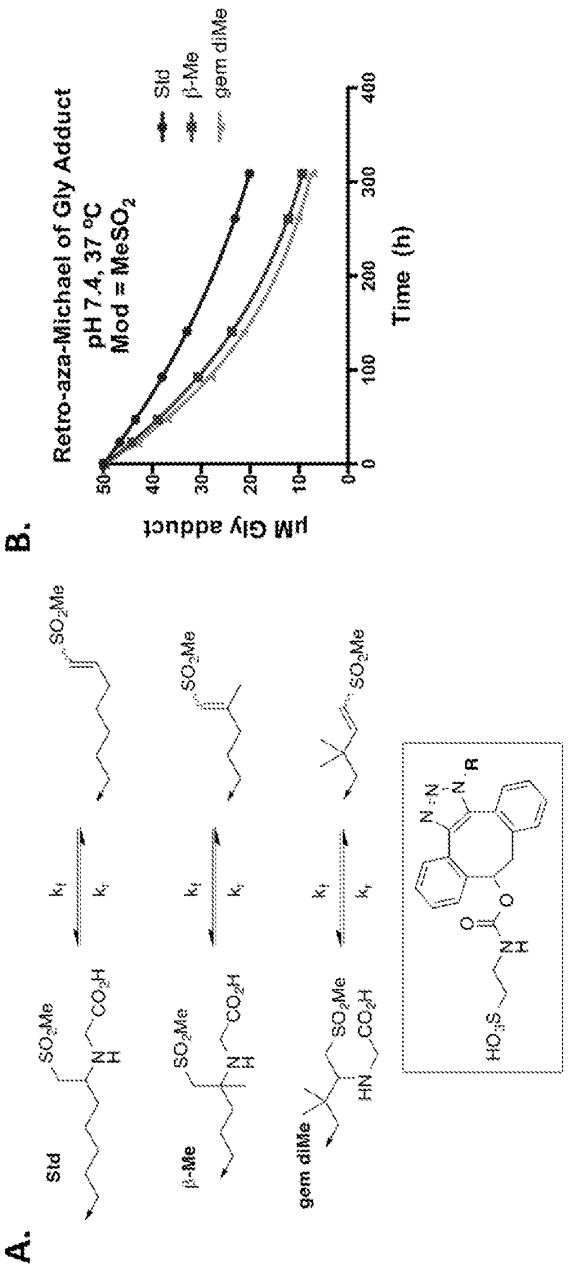

A.
Std
β-Me
gem diMe
B.
Retro-aza-Michael of Gly Adduct
pH 7.4, 37 °C
Mod = MeSO2
Std
β-Me
gem diMe
μM Gly adduct
Time (h)

Figure 6

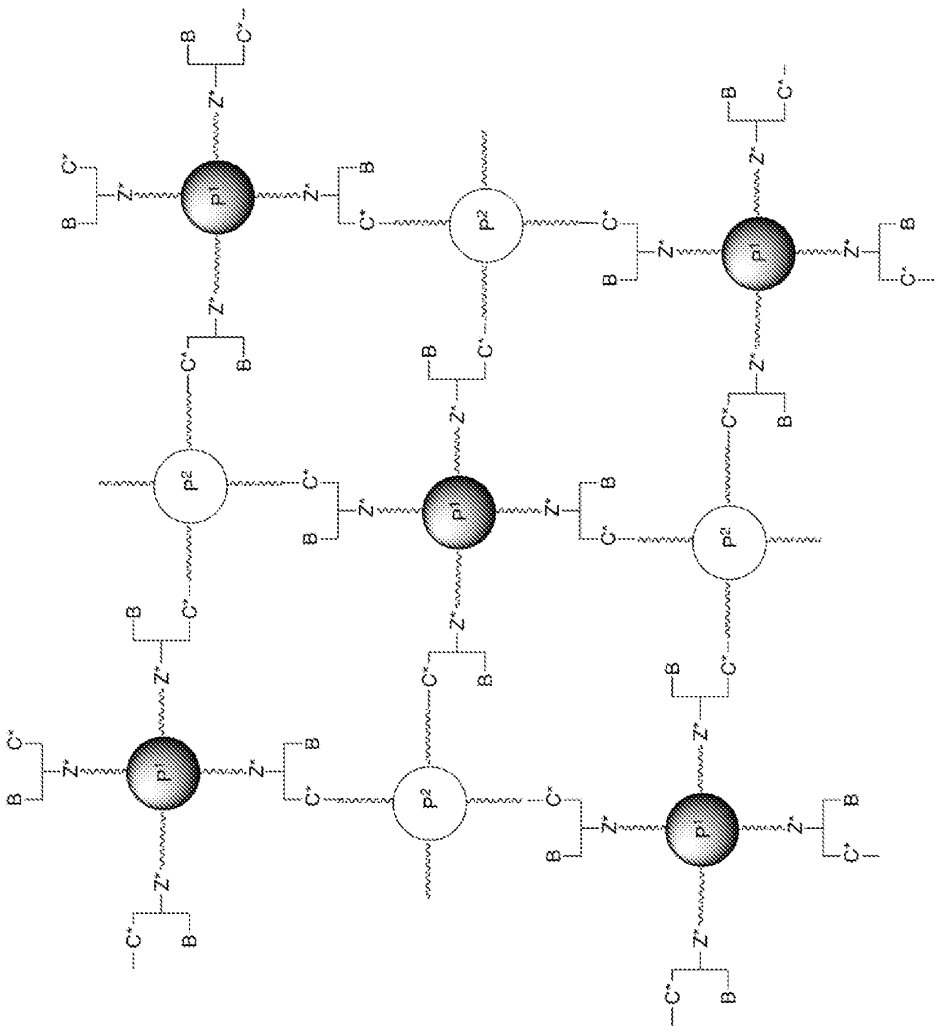


Figure 7

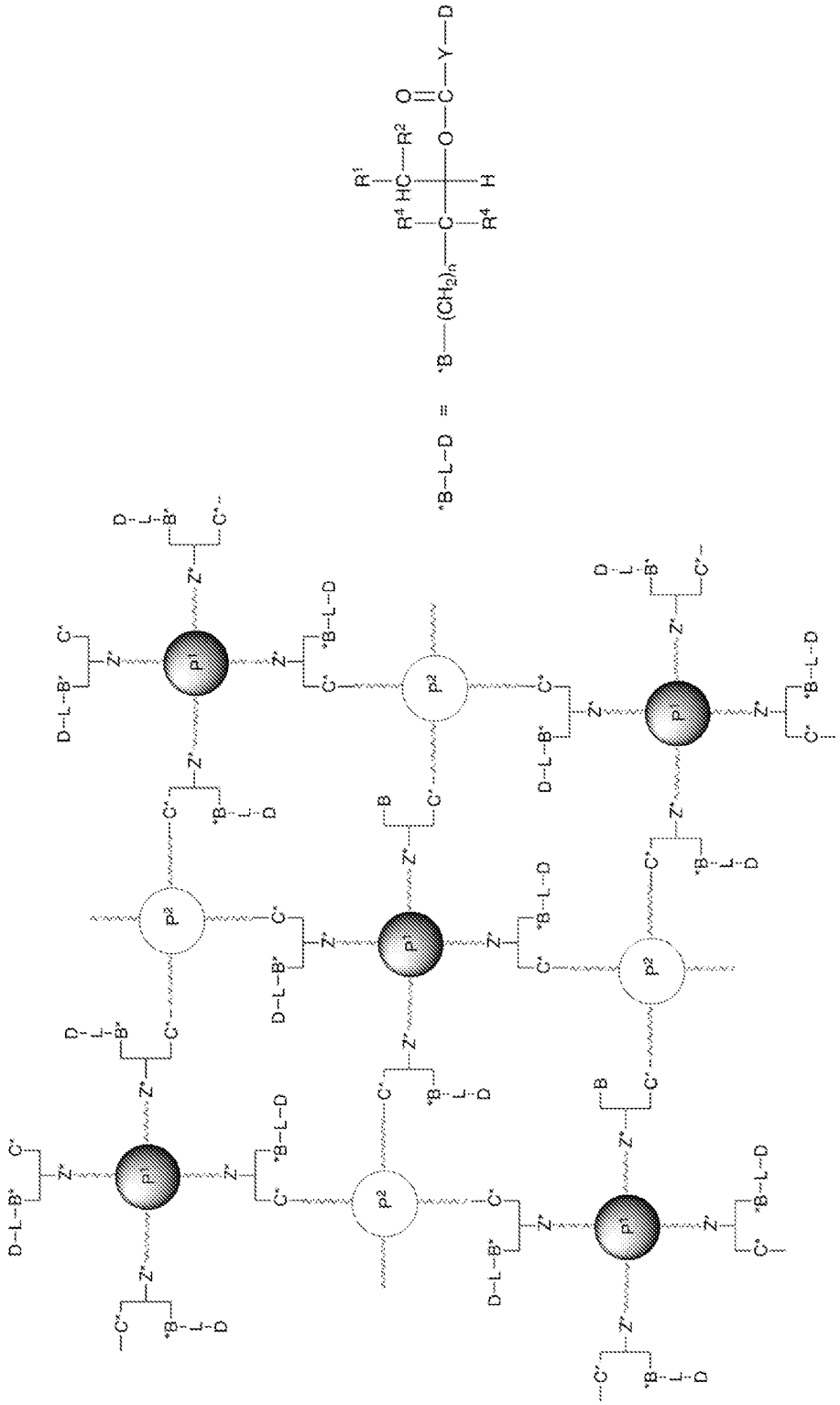


Figure 8

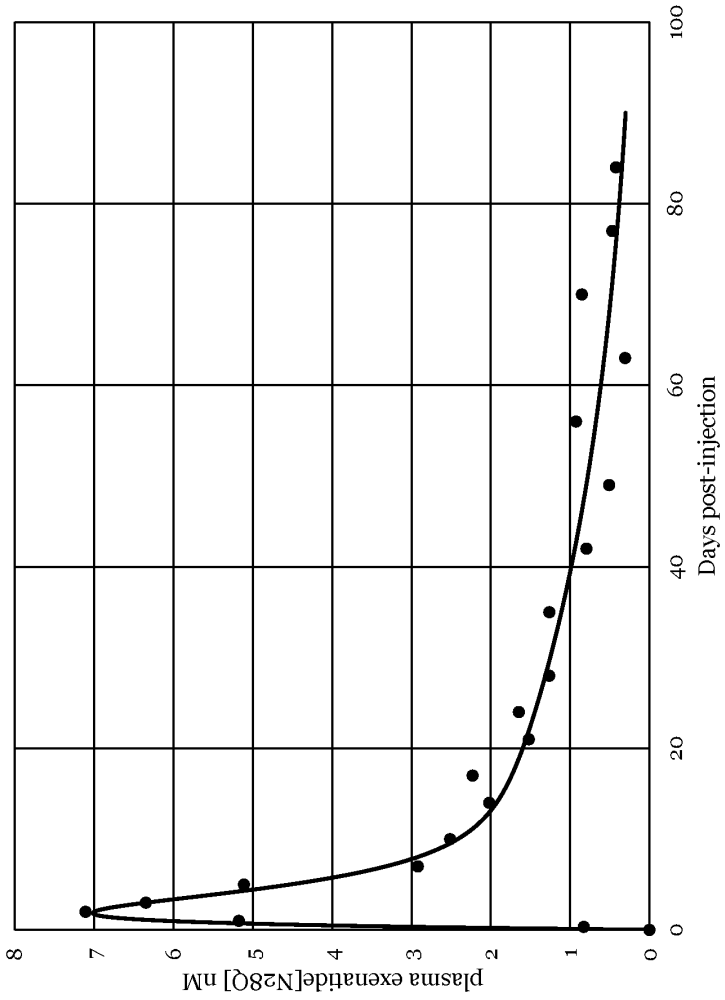

plasma exenatide[N28Q] nM
0
1
2
3
4
5
6
7
8
Days post-injection
0
20
40
60
80
100

Figure 9

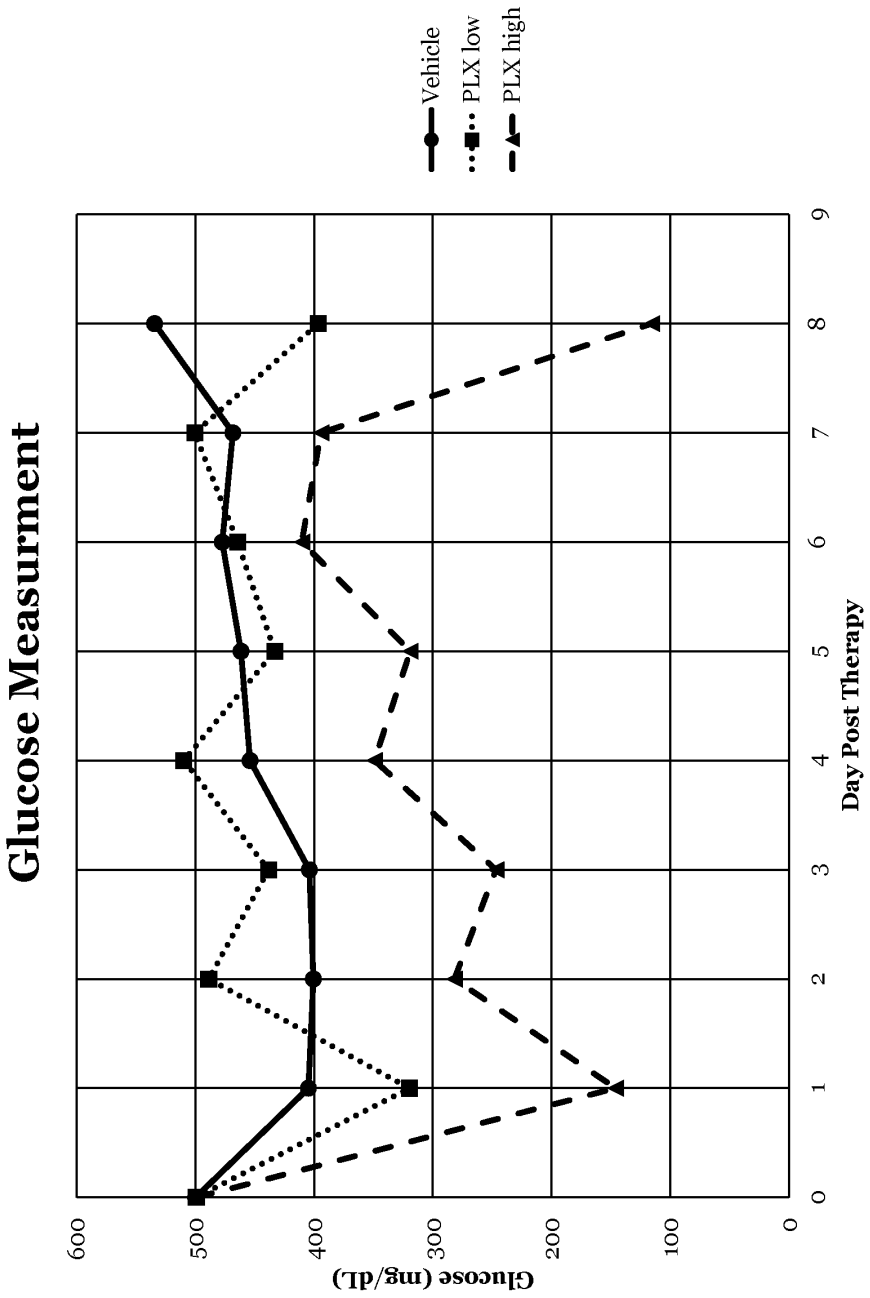
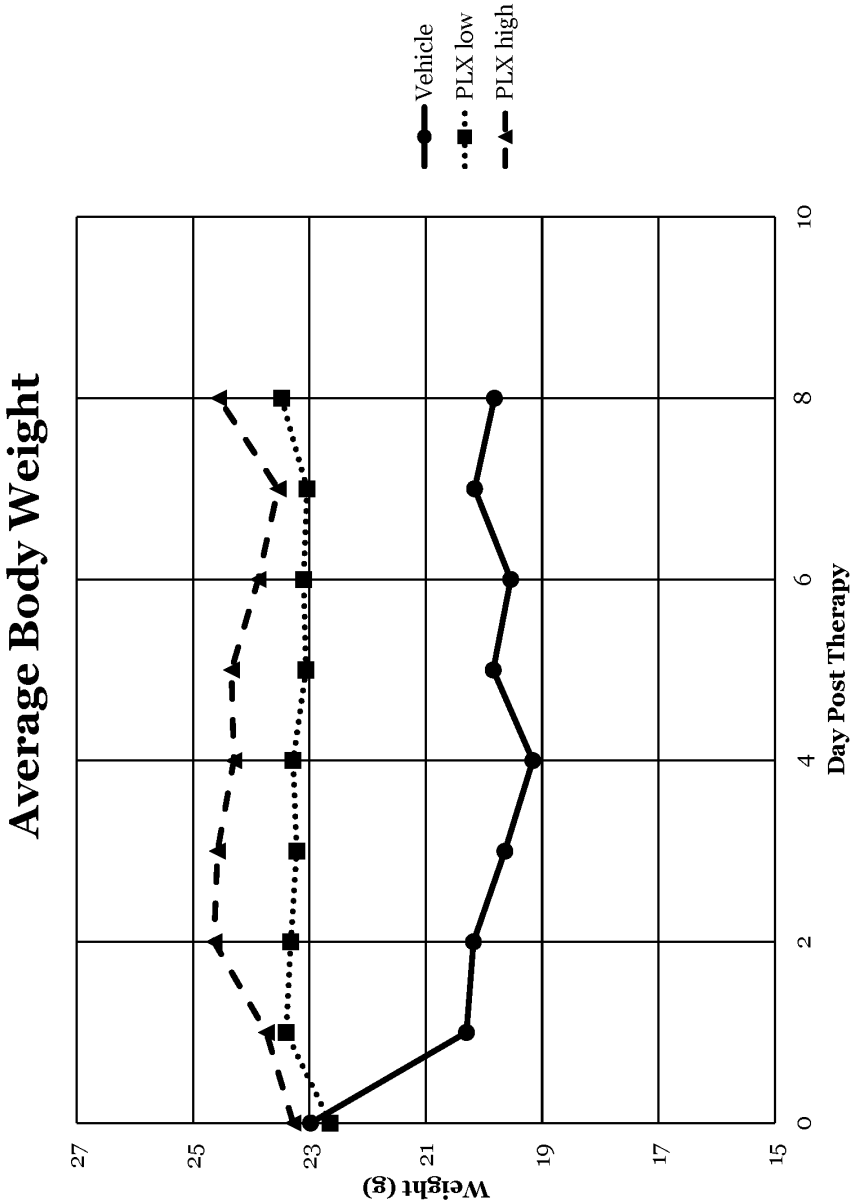

Glucose Measurment
Vehicle
PLX low
PLX high
Glucose (mg/dL)
0
100
200
300
400
500
600
Day Post Therapy
0
1
2
3
4
5
6
7
8
9

Figure 10


Average Body Weight
Vehicle
PLX low
PLX high
Weight (g)
27
25
23
21
19
17
15
0
2
4
6
8
10
Day Post Therapy