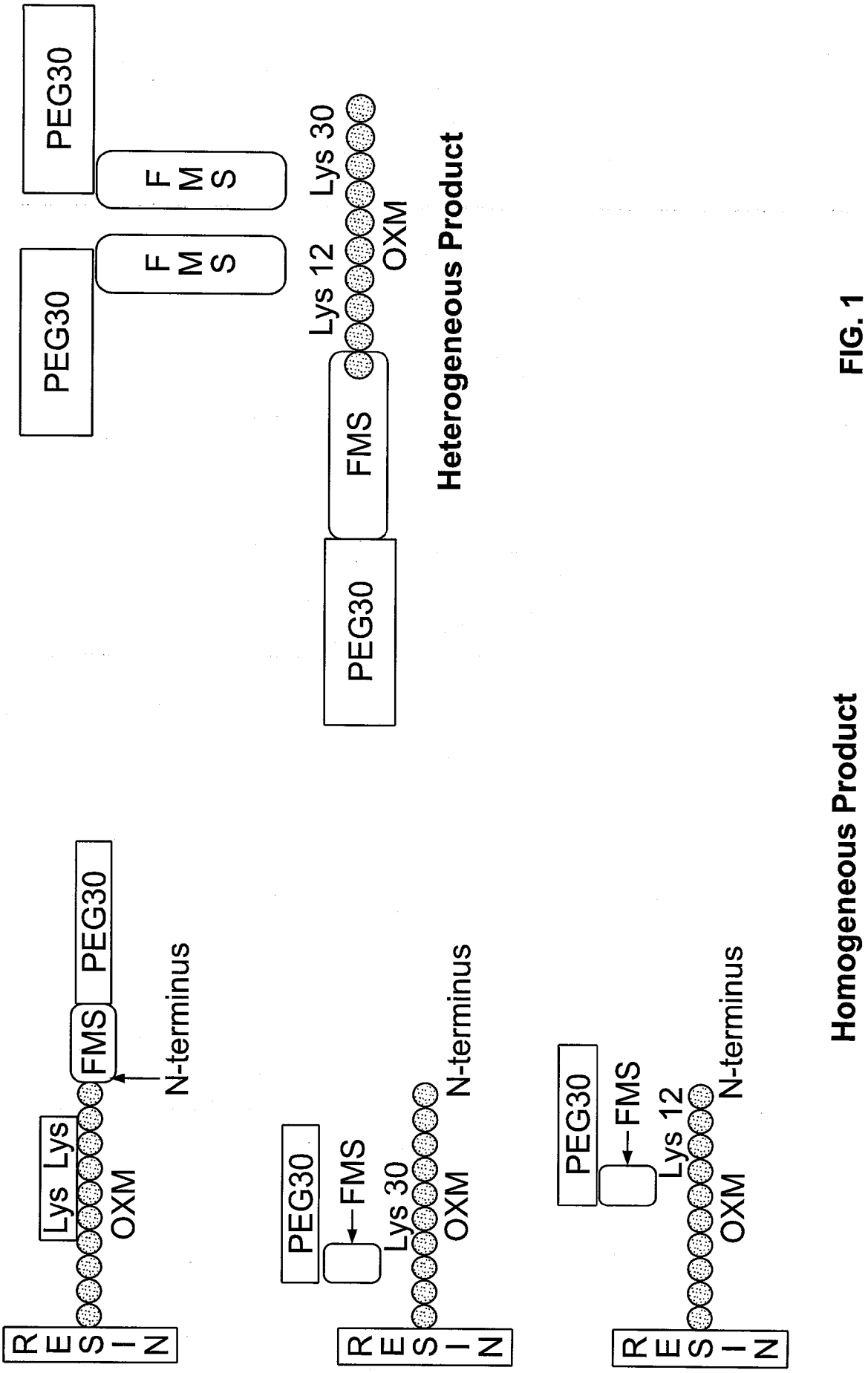

PEG30
FMS
PEG30
FMS
Lys 12
Lys 30
OXM
FMS
PEG30
Heterogeneous Product
Homogeneous Product
PEG30
FMS
Lys Lys
OXM
N-terminus
R E S I N
PEG30
FMS
Lys 30
OXM
N-terminus
R E S I N
PEG30
FMS
Lys 12
OXM
N-terminus
R E S I N

FIG. 1

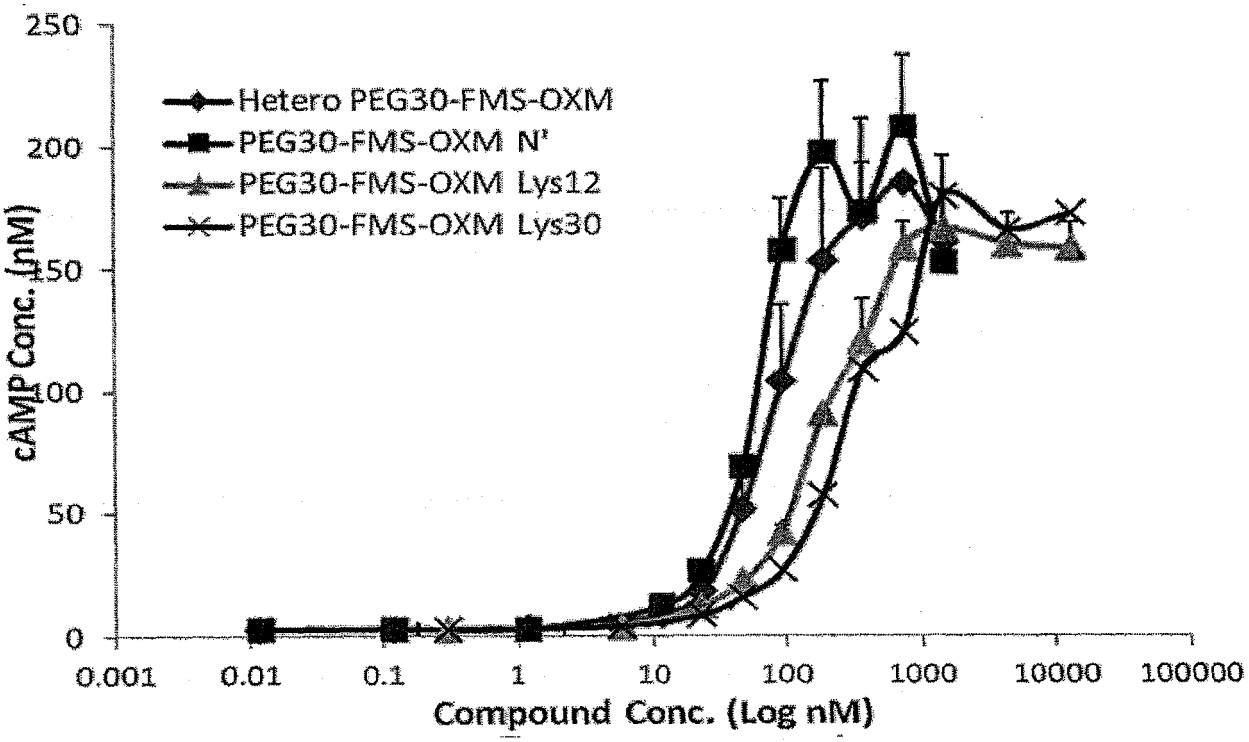

250
200
150
100
50
0
cAMP Conc. (nM)
Hetero PEG30-FMS-OXM
PEG30-FMS-OXM N'
PEG30-FMS-OXM Lys12
PEG30-FMS-OXM Lys30
0.001
0.01
0.1
1
10
100
1000
10000
100000
Compound Conc. (Log nM)

FIGURE 2

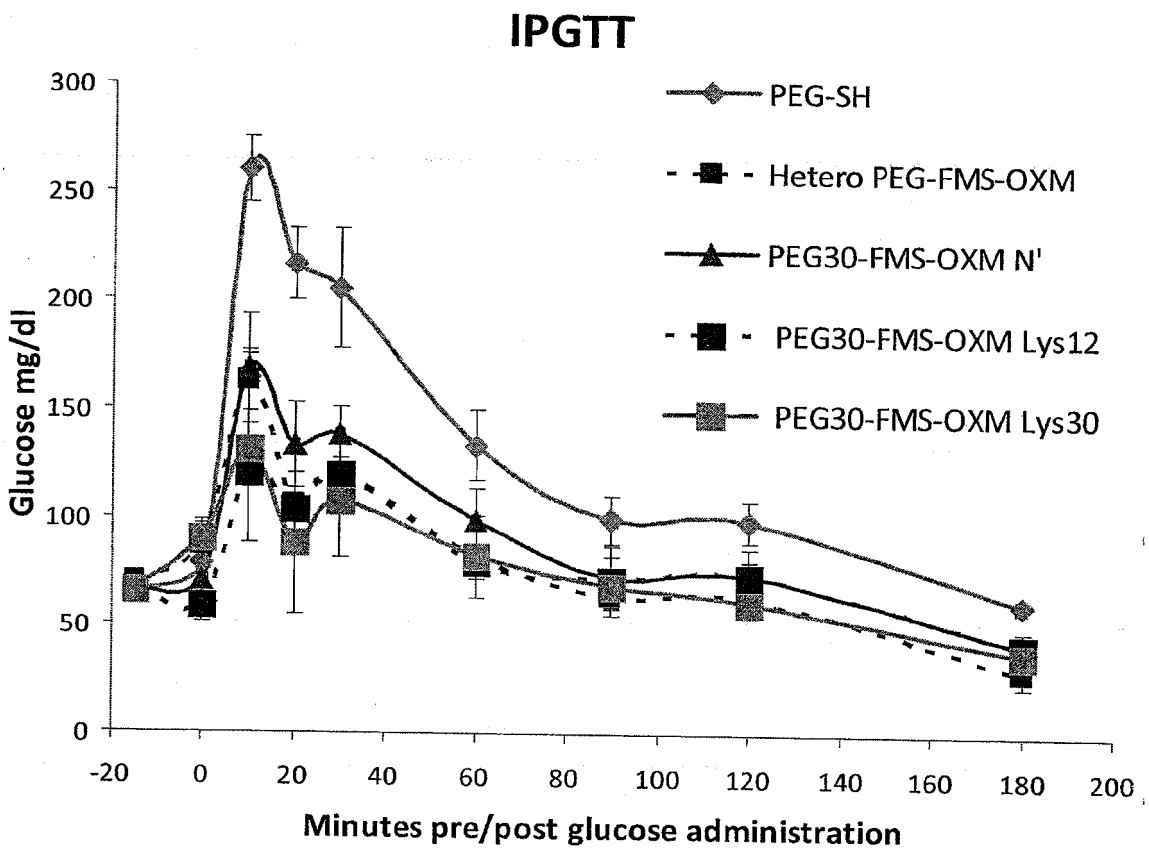

IPGTT
PEG-SH
Hetero PEG-FMS-OXM
PEG30-FMS-OXM N'
PEG30-FMS-OXM Lys12
PEG30-FMS-OXM Lys30
Glucose mg/dl
300
250
200
150
100
50
0
-20
0
20
40
60
80
100
120
140
160
180
200
Minutes pre/post glucose administration

FIGURE 3

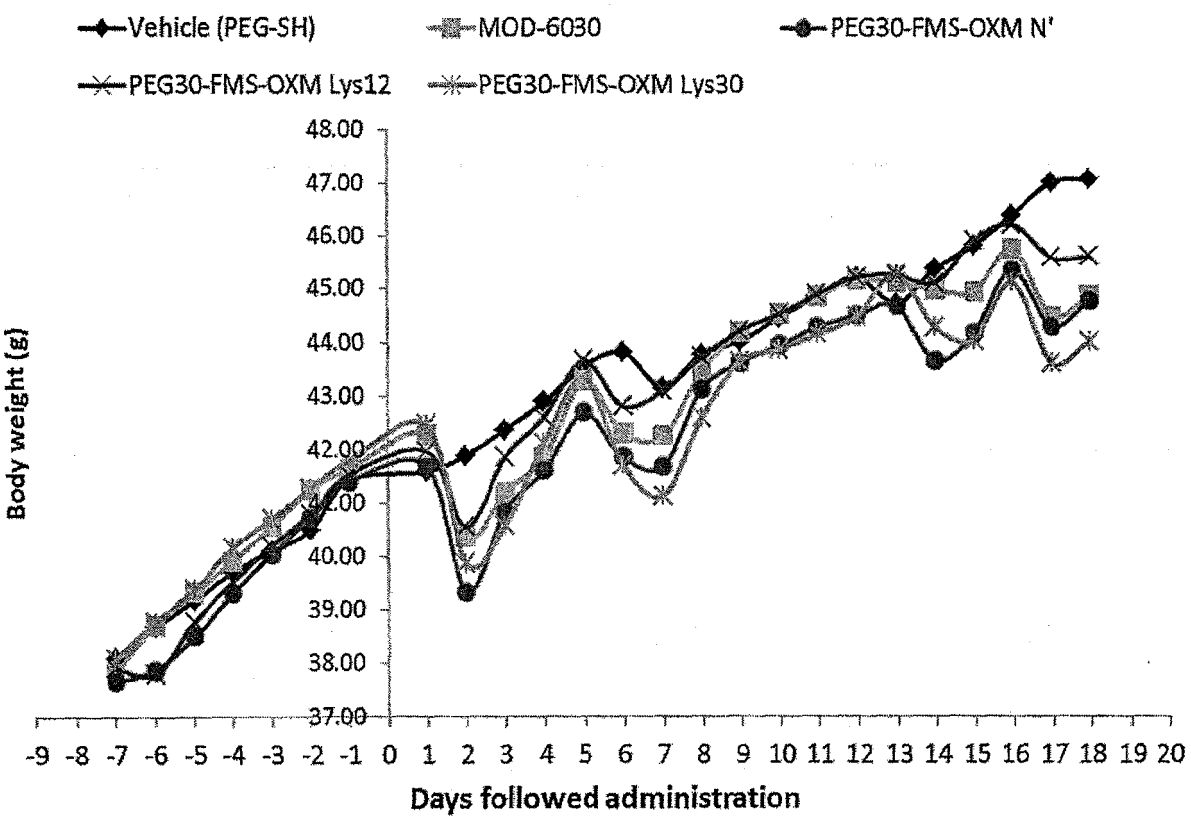

Vehicle (PEG-SH)
MOD-6030
PEG30-FMS-OXM N'
PEG30-FMS-OXM Lys12
PEG30-FMS-OXM Lys30
Body weight (g)
48.00
47.00
46.00
45.00
44.00
43.00
42.00
40.00
39.00
38.00
37.00
-9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Days followed administration

FIGURE 4

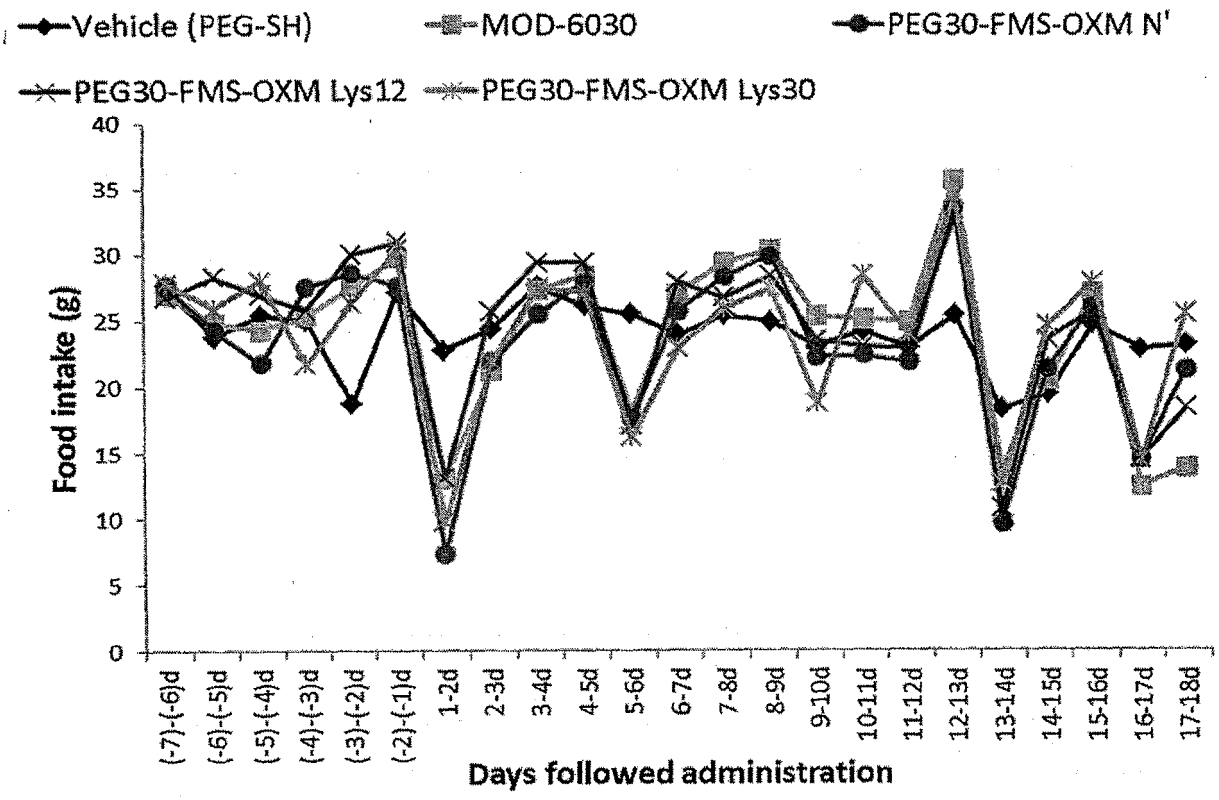
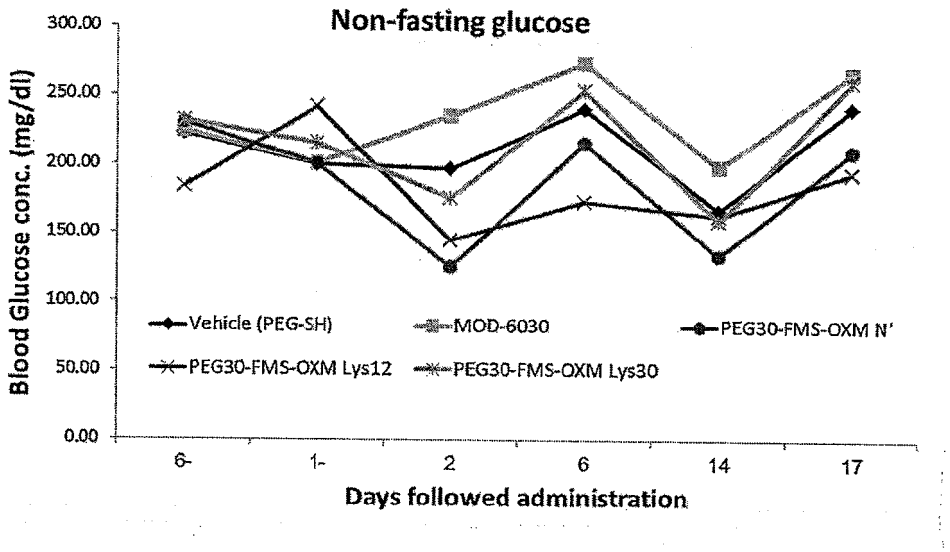

Vehicle (PEG-SH)
MOD-6030
PEG30-FMS-OXM N'
PEG30-FMS-OXM Lys12
PEG30-FMS-OXM Lys30
Food intake (g)
0
5
10
15
20
25
30
35
40
(-7)-(-6)d
(-6)-(-5)d
(-5)-(-4)d
(-4)-(-3)d
(-3)-(-2)d
(-2)-(-1)d
1-2d
2-3d
3-4d
4-5d
5-6d
6-7d
7-8d
8-9d
9-10d
10-11d
11-12d
12-13d
13-14d
14-15d
15-16d
16-17d
17-18d
Days followed administration

FIGURE 5

A


Non-fasting glucose
Blood Glucose conc. (mg/dl)
300.00
250.00
200.00
150.00
100.00
50.00
0.00
Vehicle (PEG-SH)
MOD-6030
PEG30-FMS-OXM N'
PEG30-FMS-OXM Lys12
PEG30-FMS-OXM Lys30
6-
1-
2
6
14
17
Days followed administration

B

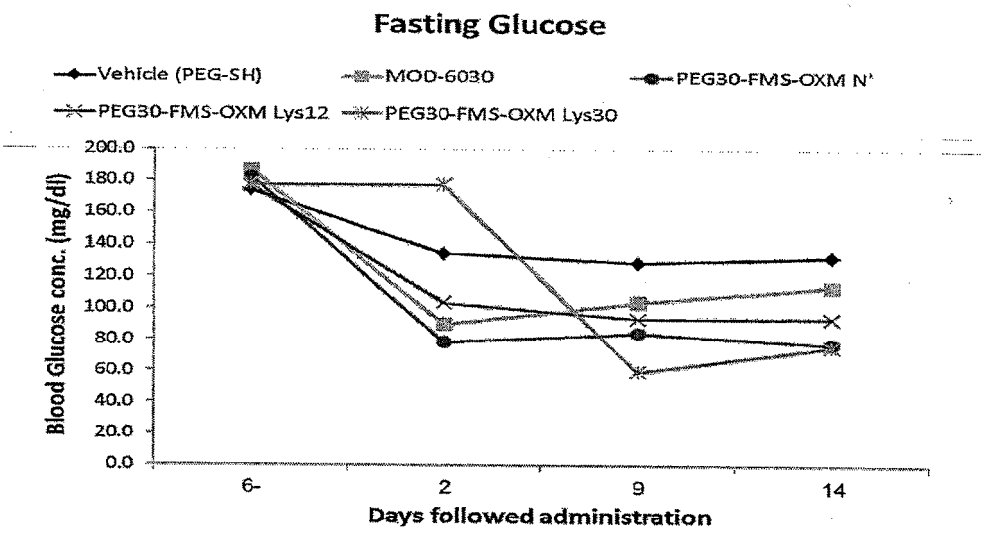

Fasting Glucose
Vehicle (PEG-SH)
MOD-6030
PEG30-FMS-OXM N'
PEG30-FMS-OXM Lys12
PEG30-FMS-OXM Lys30
Blood Glucose conc. (mg/dl)
200.0
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
6-
2
9
14
Days followed administration

FIGURE 6

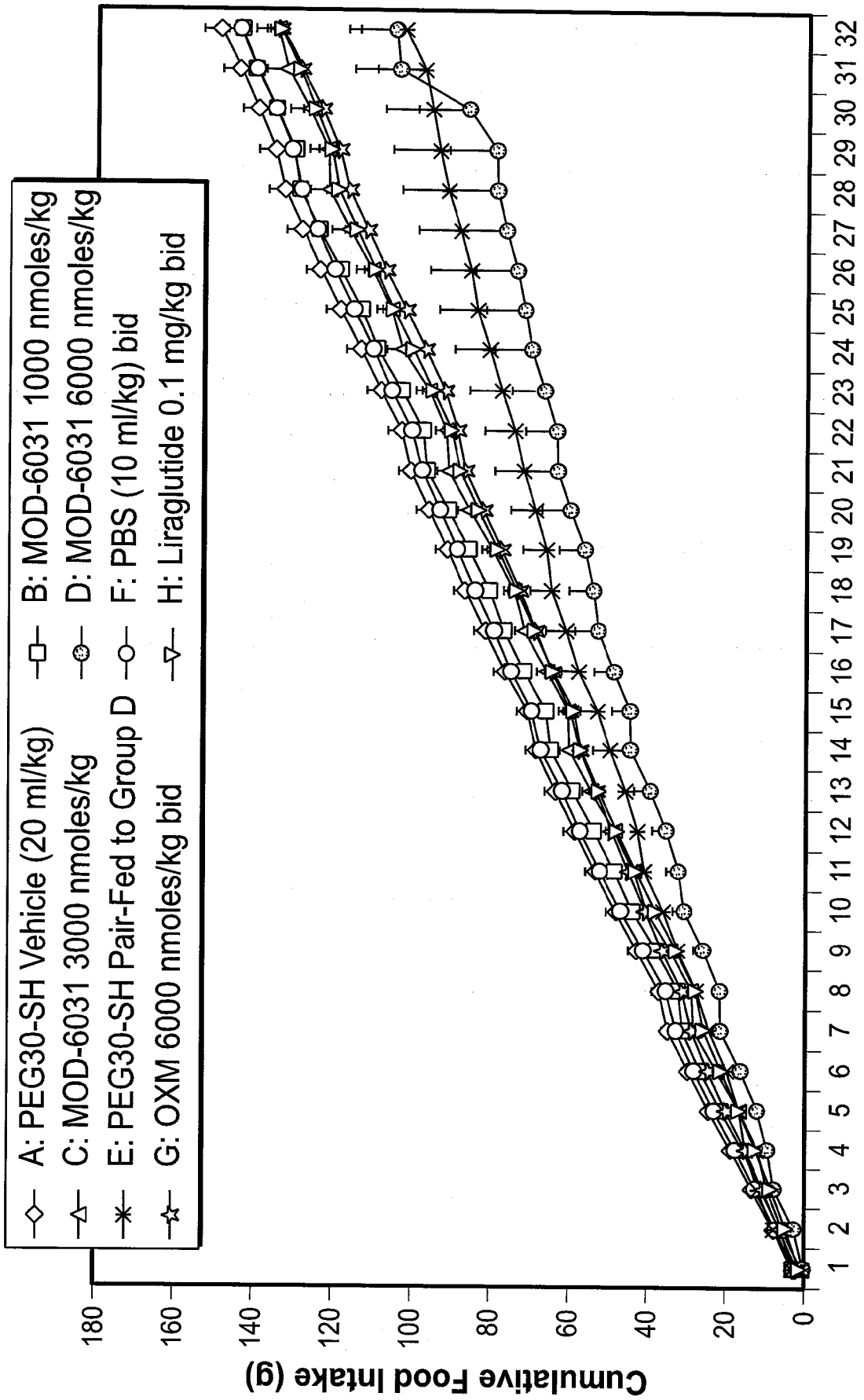

A: PEG30-SH Vehicle (20 ml/kg)
B: MOD-6031 1000 nmoles/kg
C: MOD-6031 3000 nmoles/kg
D: MOD-6031 6000 nmoles/kg
E: PEG30-SH Pair-Fed to Group D
F: PBS (10 ml/kg) bid
G: OXM 6000 nmoles/kg bid
H: Liraglutide 0.1 mg/kg bid
Cumulative Food Intake (g)
0
20
40
60
80
100
120
140
160
180
Day
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

FIG. 7

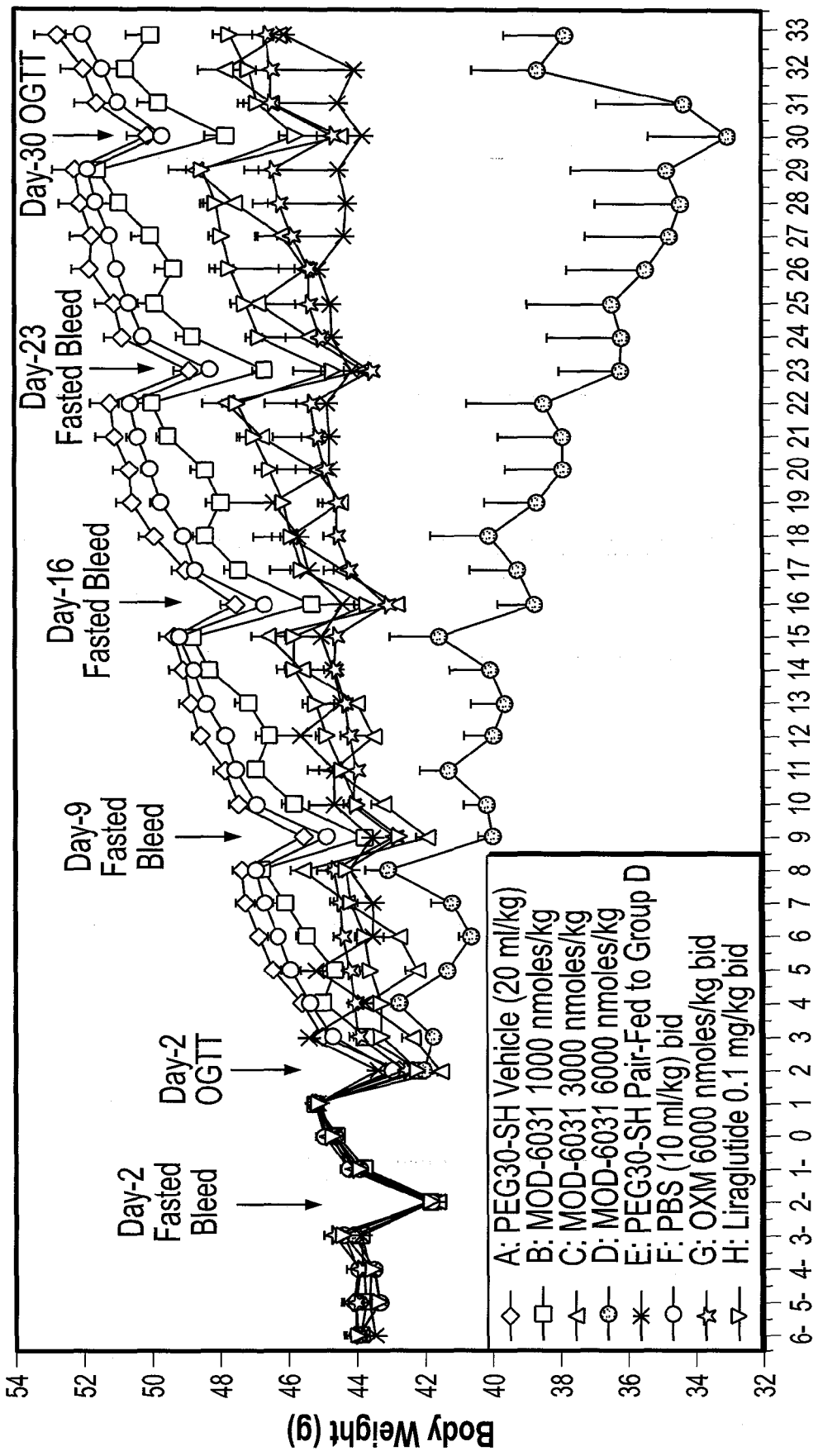

Body Weight (g)
Day
Day-2 Fasted Bleed
Day-2 OGTT
Day-9 Fasted Bleed
Day-16 Fasted Bleed
Day-23 Fasted Bleed
Day-30 OGTT
A: PEG30-SH Vehicle (20 ml/kg)
B: MOD-6031 1000 nmoles/kg
C: MOD-6031 3000 nmoles/kg
D: MOD-6031 6000 nmoles/kg
E: PEG30-SH Pair-Fed to Group D
F: PBS (10 ml/kg) bid
G: OXM 6000 nmoles/kg bid
H: Liraglutide 0.1 mg/kg bid

FIG. 8

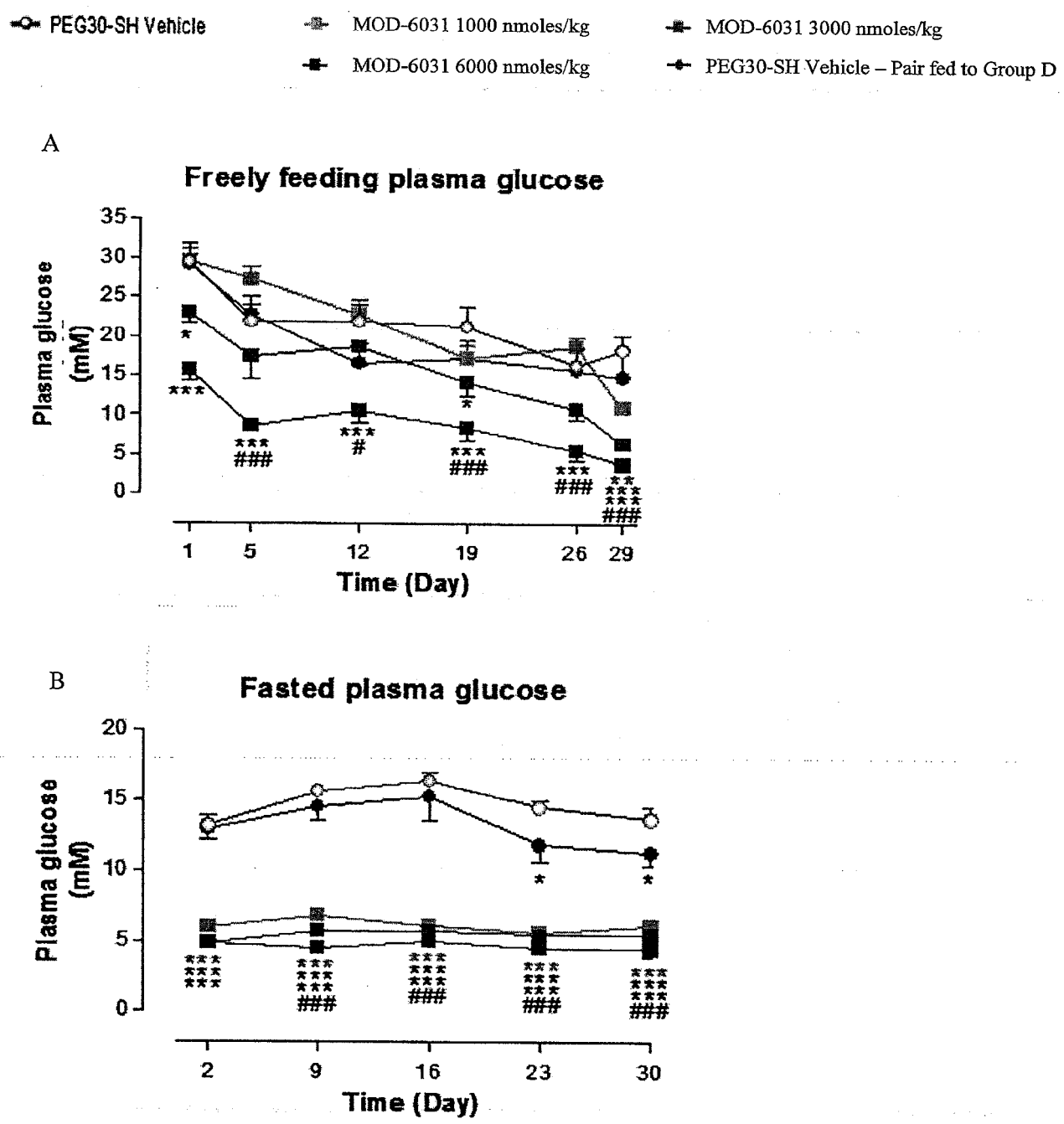

PEG30-SH Vehicle
MOD-6031 1000 nmoles/kg
MOD-6031 3000 nmoles/kg
MOD-6031 6000 nmoles/kg
PEG30-SH Vehicle – Pair fed to Group D
A
Freely feeding plasma glucose
Plasma glucose (mM)
35
30
25
20
15
10
5
0
1
5
12
19
26
29
Time (Day)
B
Fasted plasma glucose
Plasma glucose (mM)
20
15
10
5
0
2
9
16
23
30
Time (Day)

FIGURE 9

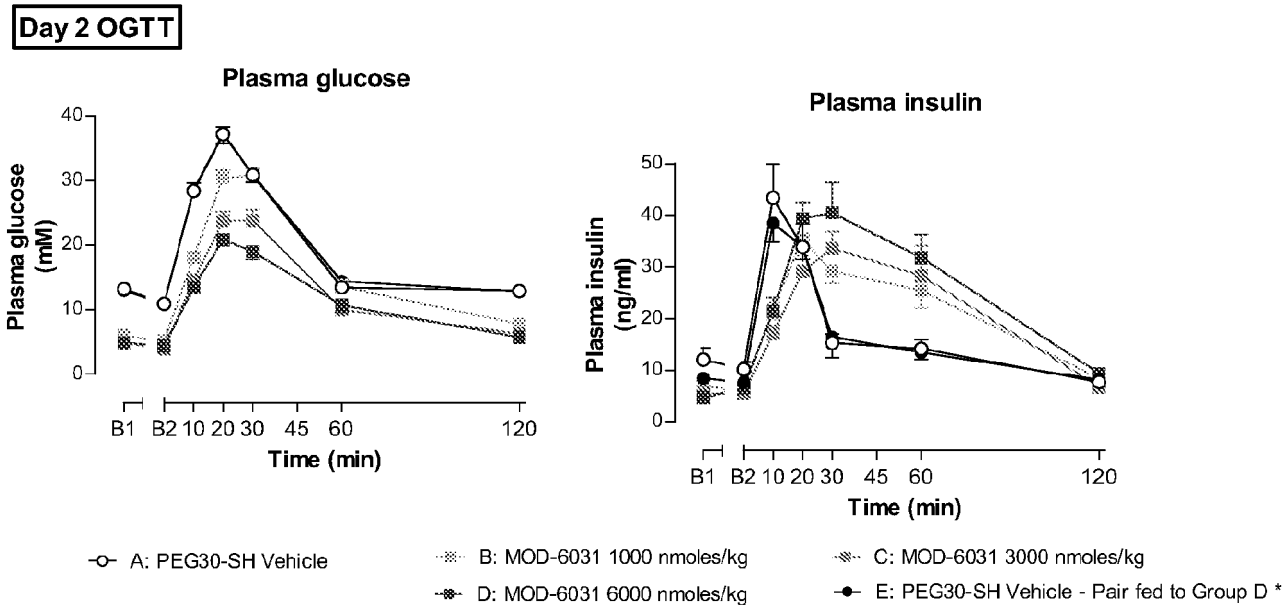

Day 2 OGTT
Plasma glucose
Plasma glucose (mM)
40
30
20
10
0
B1 B2 10 20 30 45 60 120
Time (min)
Plasma insulin
Plasma insulin (ng/ml)
50
40
30
20
10
0
B1 B2 10 20 30 45 60 120
Time (min)
A: PEG30-SH Vehicle
B: MOD-6031 1000 nmoles/kg
C: MOD-6031 3000 nmoles/kg
D: MOD-6031 6000 nmoles/kg
E: PEG30-SH Vehicle - Pair fed to Group D *

FIGURE 10

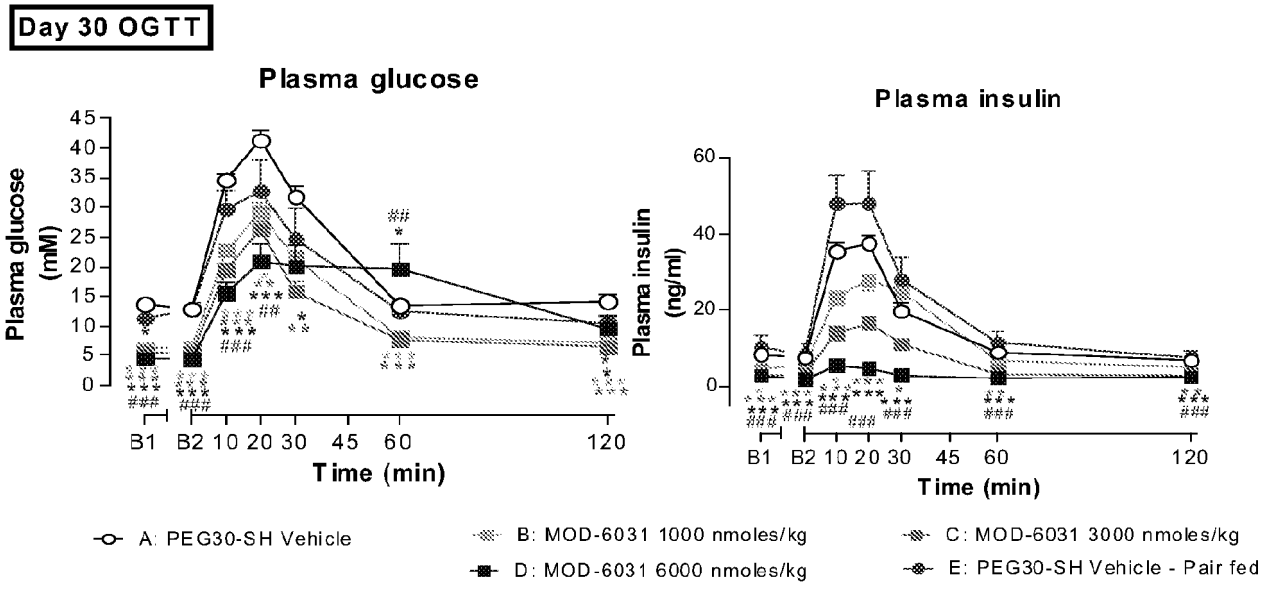

Day 30 OGTT
Plasma glucose
Plasma glucose (mM)
Time (min)
B1 B2 10 20 30 45 60 120
Plasma insulin
Plasma insulin (ng/ml)
A: PEG30-SH Vehicle
B: MOD-6031 1000 nmoles/kg
C: MOD-6031 3000 nmoles/kg
D: MOD-6031 6000 nmoles/kg
E: PEG30-SH Vehicle - Pair fed

FIGURE 11

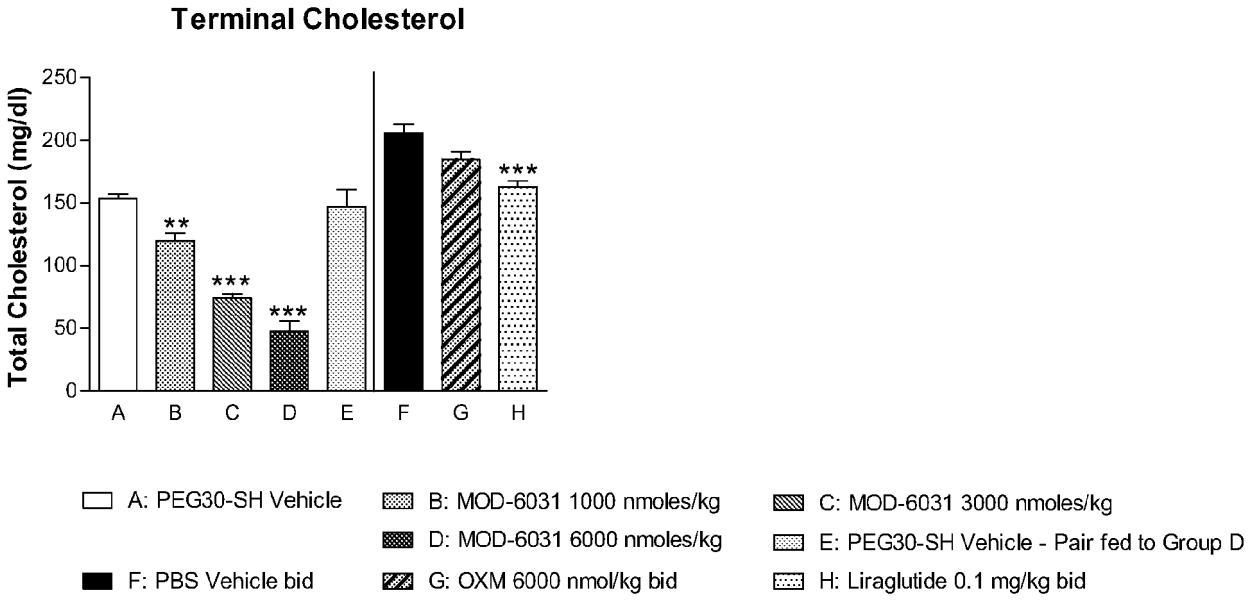

Terminal Cholesterol
Total Cholesterol (mg/dl)
250
200
150
100
50
0
**
***
***
***
A
B
C
D
E
F
G
H
A: PEG30-SH Vehicle
B: MOD-6031 1000 nmoles/kg
C: MOD-6031 3000 nmoles/kg
D: MOD-6031 6000 nmoles/kg
E: PEG30-SH Vehicle - Pair fed to Group D
F: PBS Vehicle bid
G: OXM 6000 nmol/kg bid
H: Liraglutide 0.1 mg/kg bid

FIGURE 12