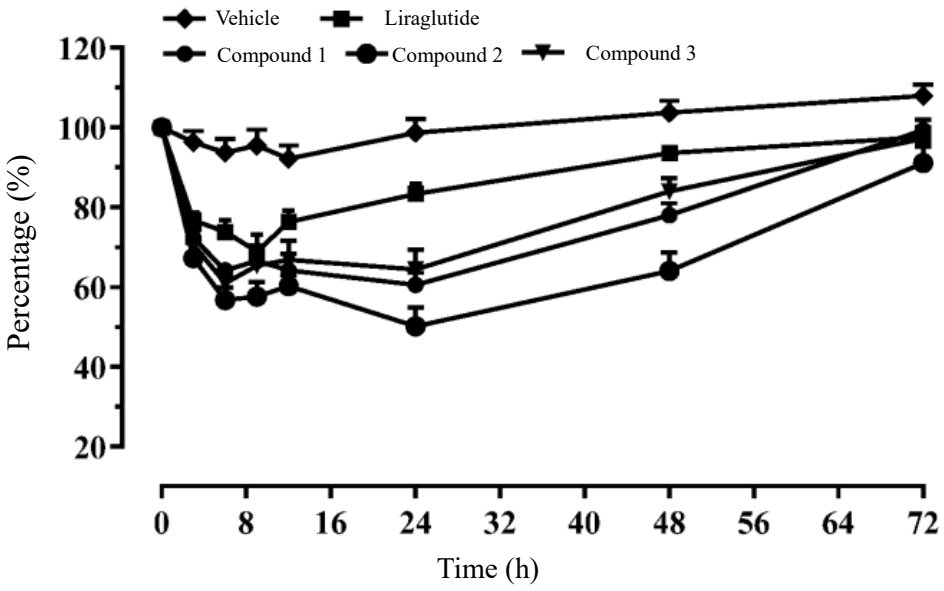

Vehicle
Liraglutide
Compound 1
Compound 2
Compound 3
Percentage (%)
120
100
80
60
40
20
0
8
16
24
32
40
48
56
64
72
Time (h)

FIG. 1a

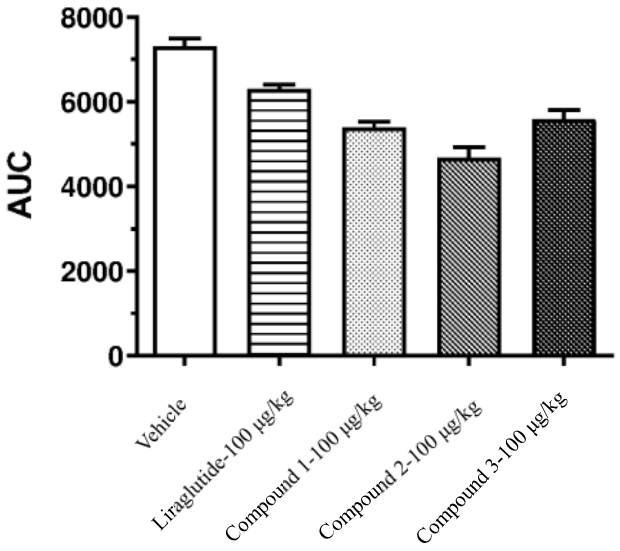
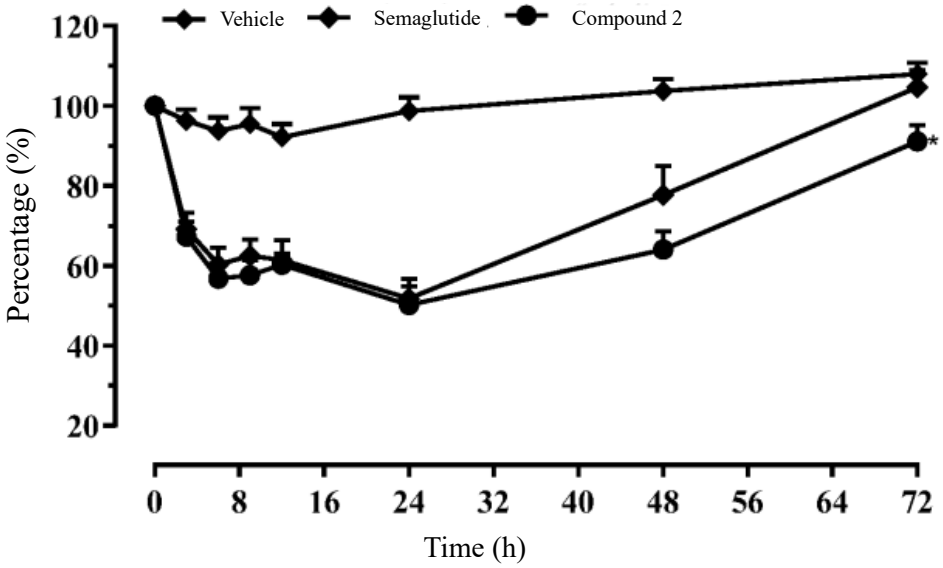

AUC
8000
6000
4000
2000
0
Vehicle
Liraglutide-100 μg/kg
Compound 1-100 μg/kg
Compound 2-100 μg/kg
Compound 3-100 μg/kg

FIG. 1b



*p < 0.05compound 2 compared to semaglutide

FIG. 2a

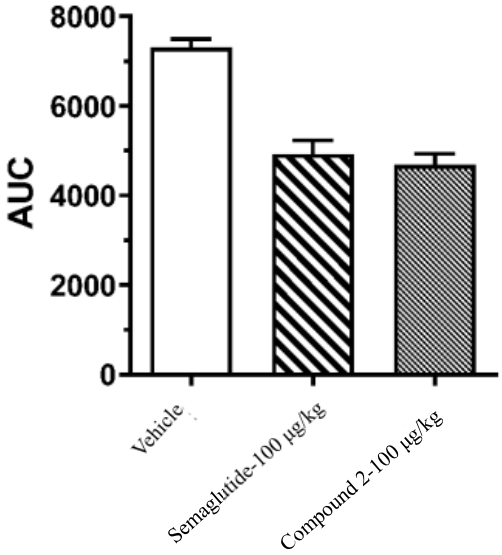


FIG. 2b

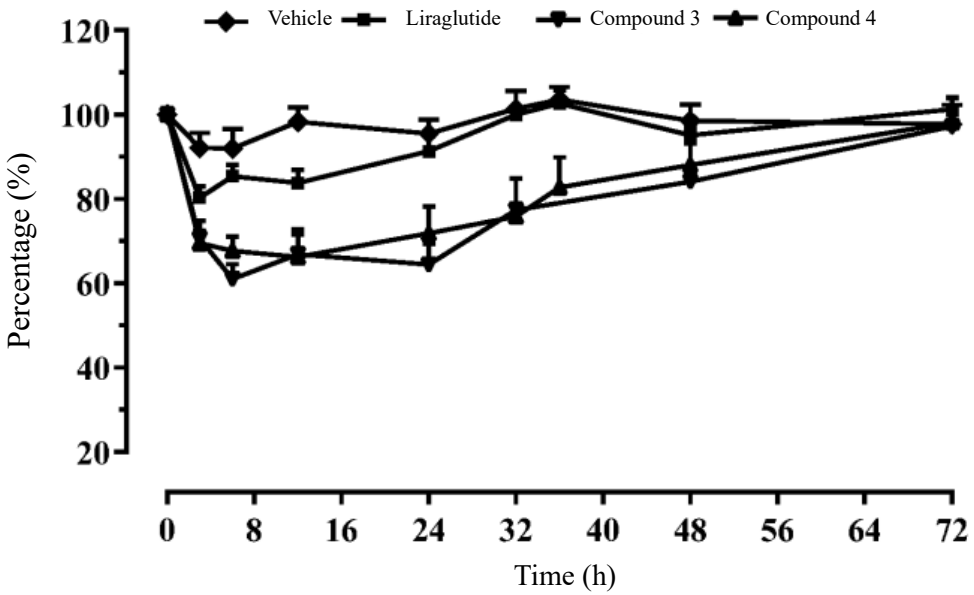

Vehicle
Liraglutide
Compound 3
Compound 4
120
100
80
60
40
20
Percentage (%)
0
8
16
24
32
40
48
56
64
72
Time (h)

FIG. 3a

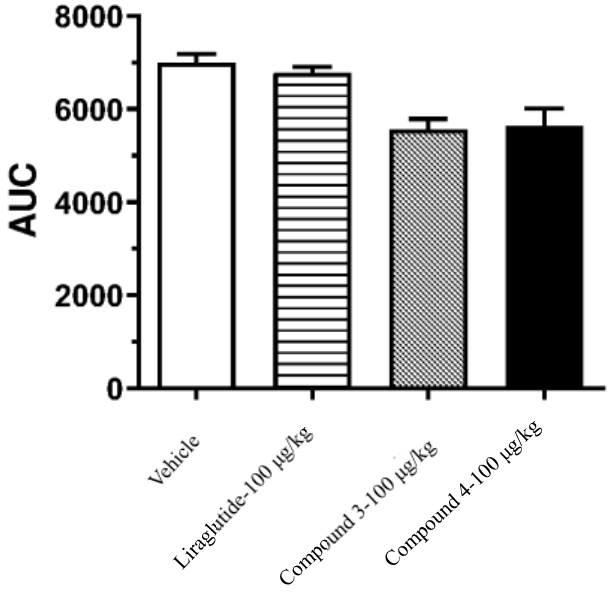

8000
6000
4000
2000
0
AUC
Vehicle
Liraglutide-100 μg/kg
Compound 3-100 μg/kg
Compound 4-100 μg/kg

FIG. 3b

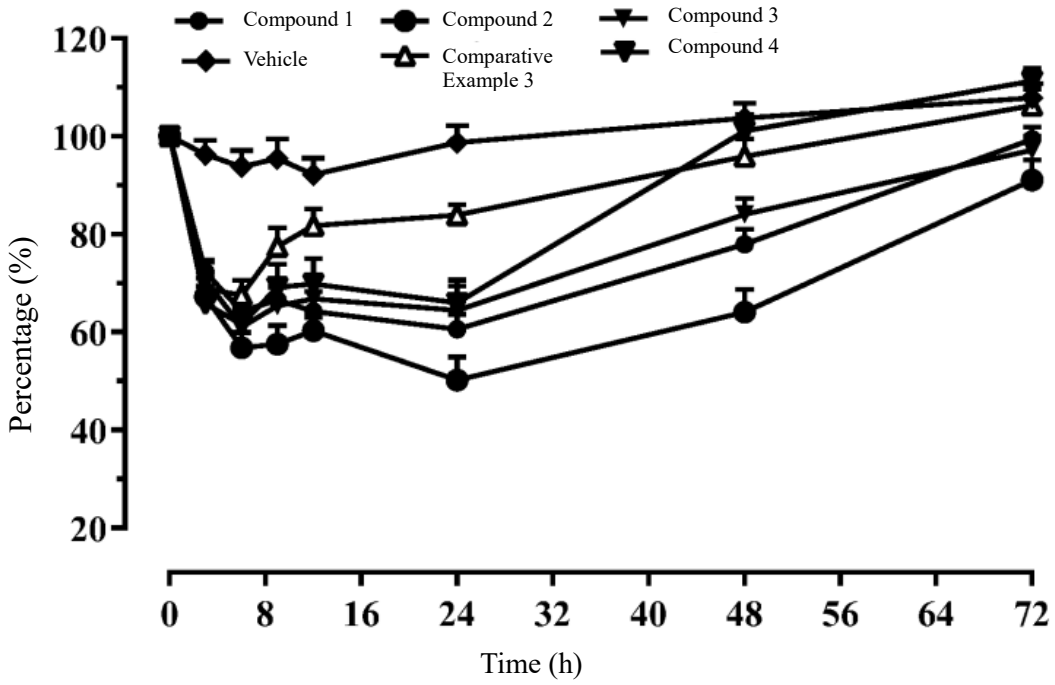

Compound 1
Compound 2
Compound 3
Vehicle
Comparative Example 3
Compound 4
Percentage (%)
120
100
80
60
40
20
0
8
16
24
32
40
48
56
64
72
Time (h)

FIG. 4a

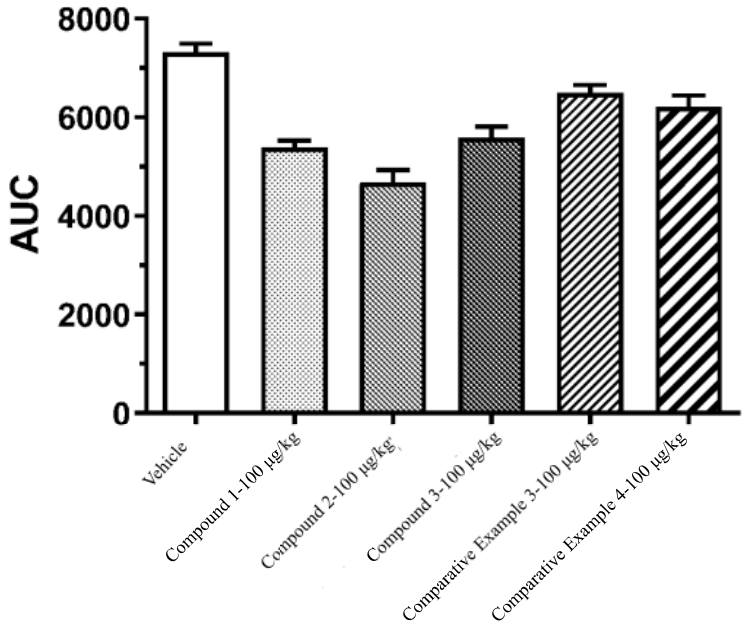

AUC
8000
6000
4000
2000
0
Vehicle
Compound 1-100 μg/kg
Compound 2-100 μg/kg
Compound 3-100 μg/kg
Comparative Example 3-100 μg/kg
Comparative Example 4-100 μg/kg

FIG. 4b

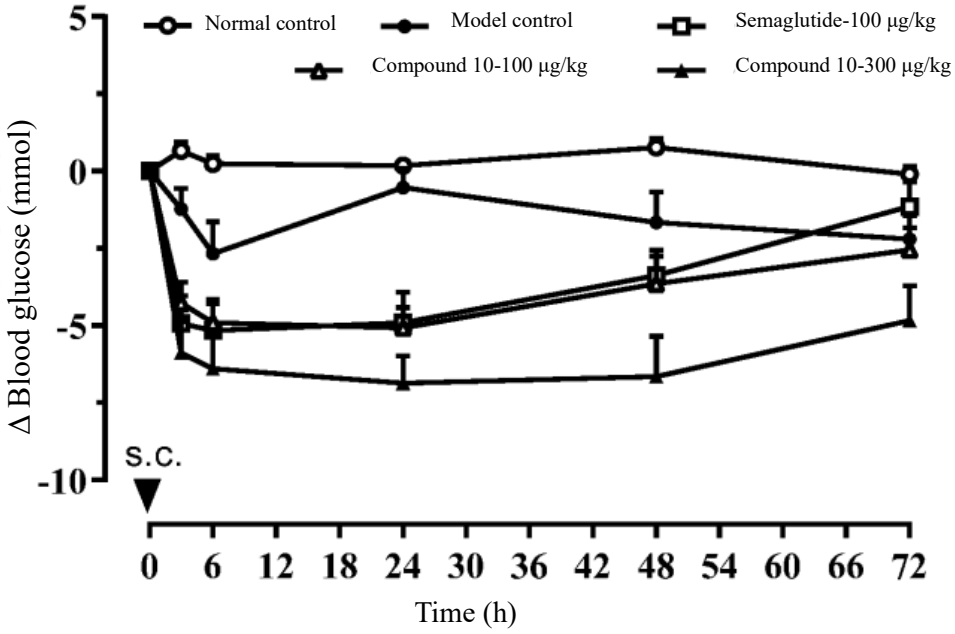

Normal control
Model control
Semaglutide-100 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg
Δ Blood glucose (mmol)
5
0
-5
-10
S.C.
0
6
12
18
24
30
36
42
48
54
60
66
72
Time (h)

FIG. 5a

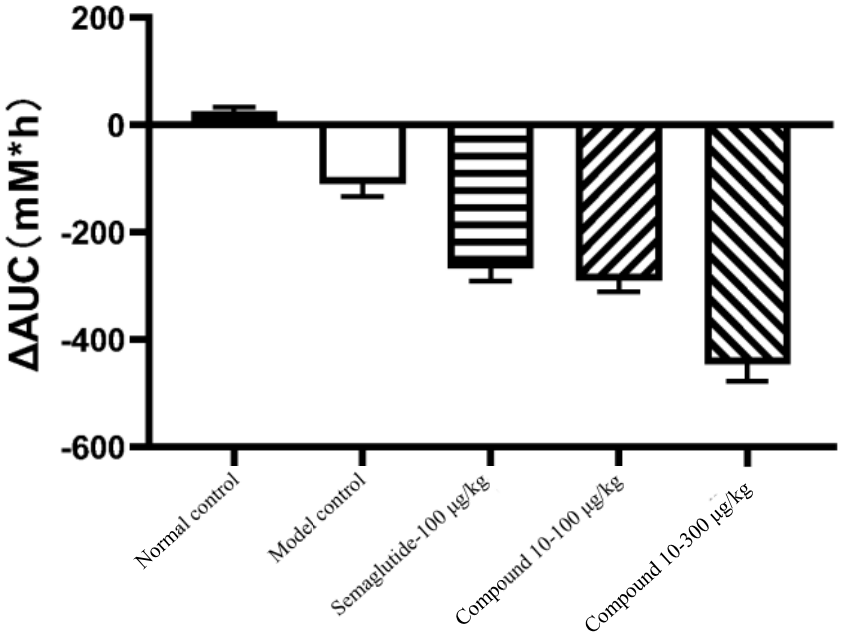

ΔAUC（mM*h）
200
0
-200
-400
-600
Normal control
Model control
Semaglutide-100 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg

FIG. 5b

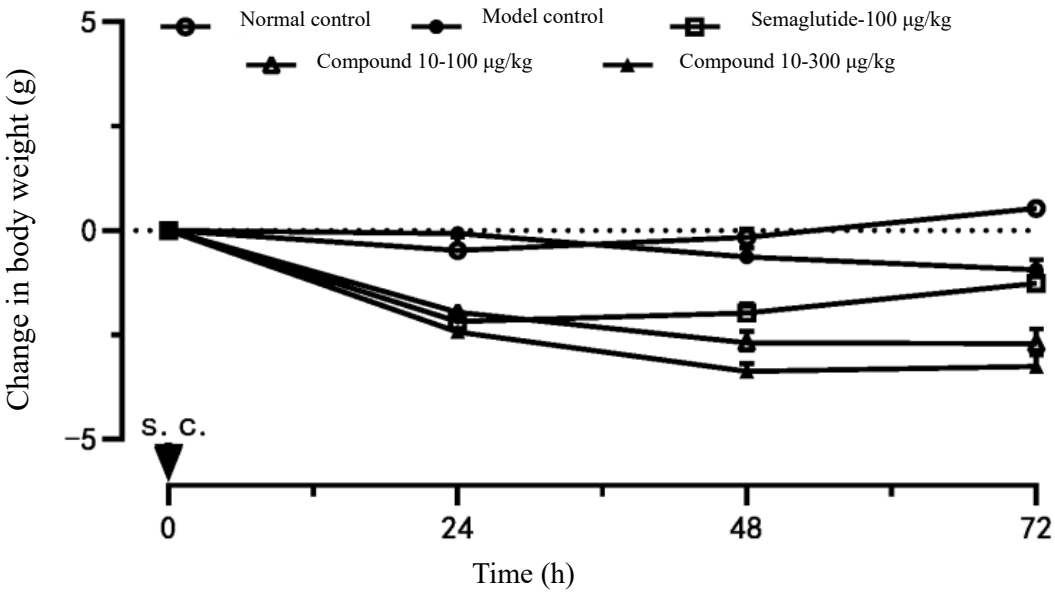

Normal control
Model control
Semaglutide-100 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg
Change in body weight (g)
5
0
−5
S. C.
0
24
48
72
Time (h)

FIG. 5c

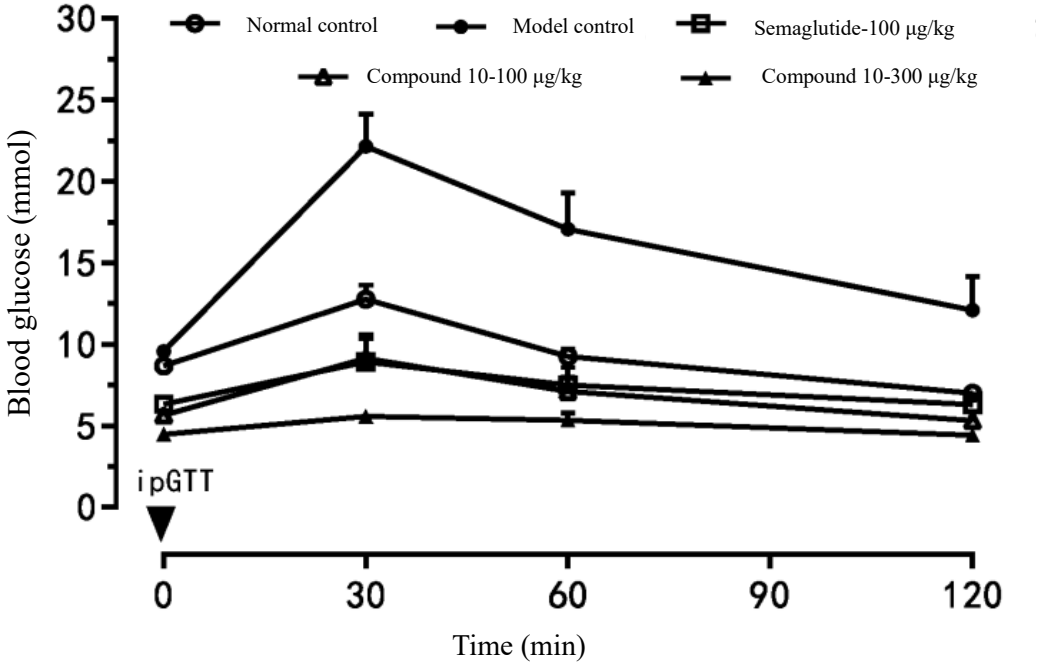
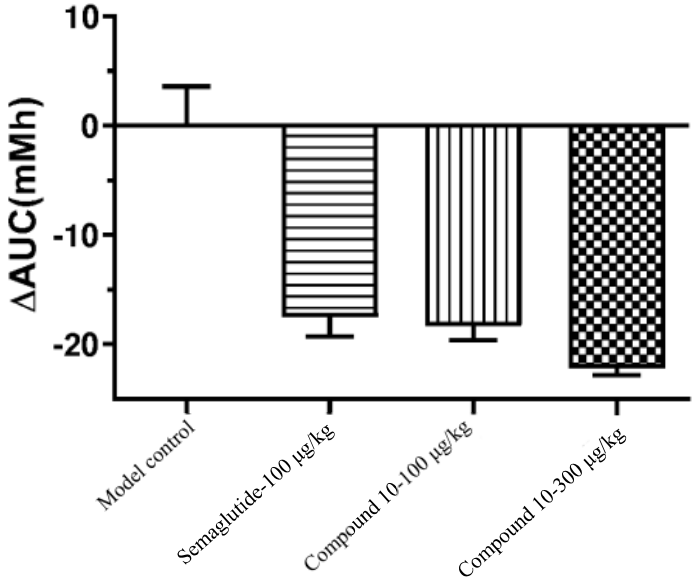

Normal control
Model control
Semaglutide-100 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg
Blood glucose (mmol)
30
25
20
15
10
5
0
ipGTT
0
30
60
90
120
Time (min)

FIG. 6a



Combined male and female mice n = 9–11

FIG. 6b

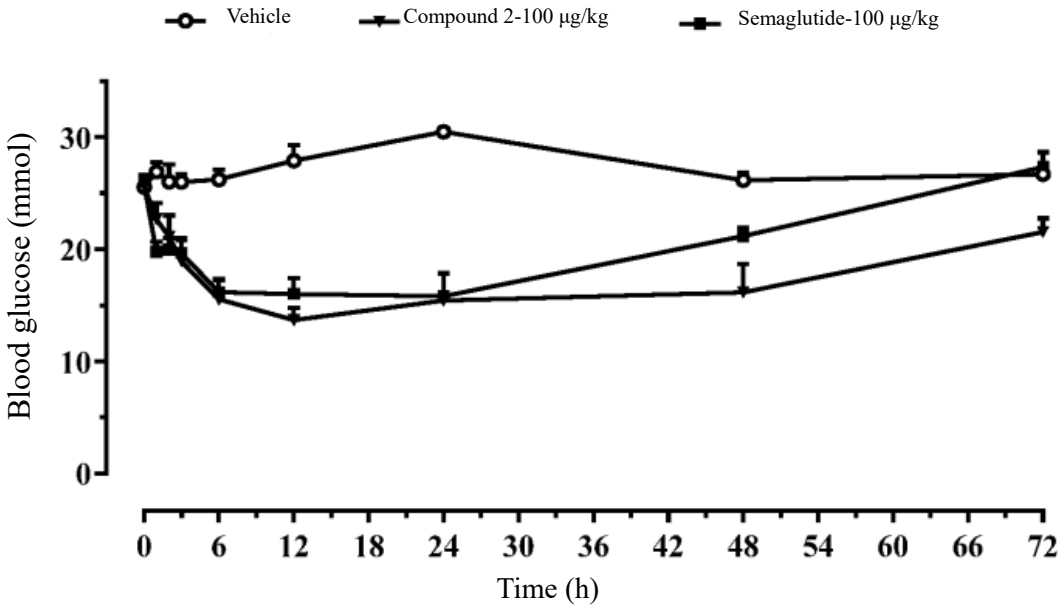


FIG. 7a

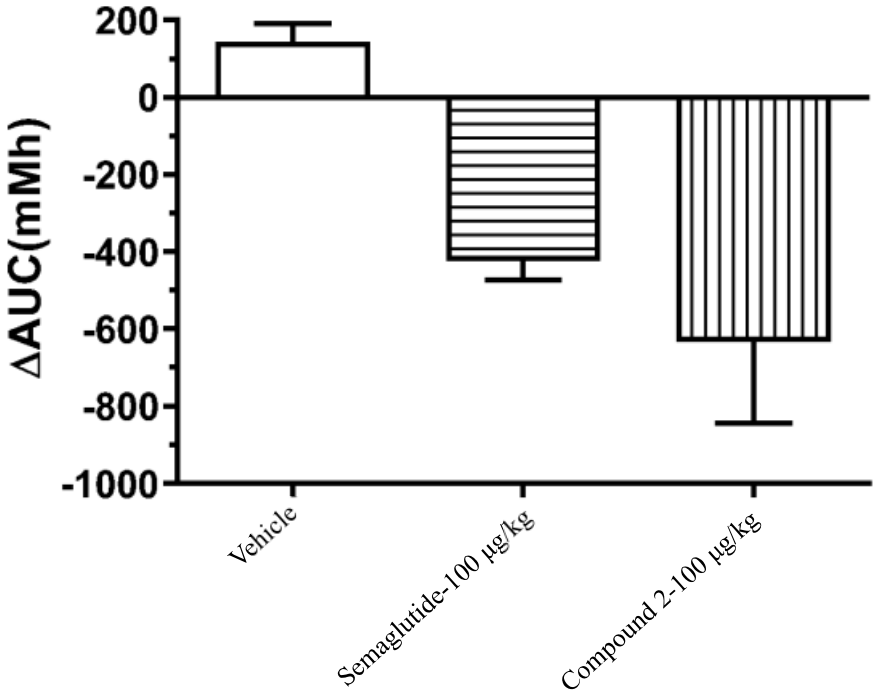

200
0
-200
-400
-600
-800
-1000
ΔAUC(mMh)
Vehicle
Semaglutide-100 μg/kg
Compound 2-100 μg/kg

FIG. 7b

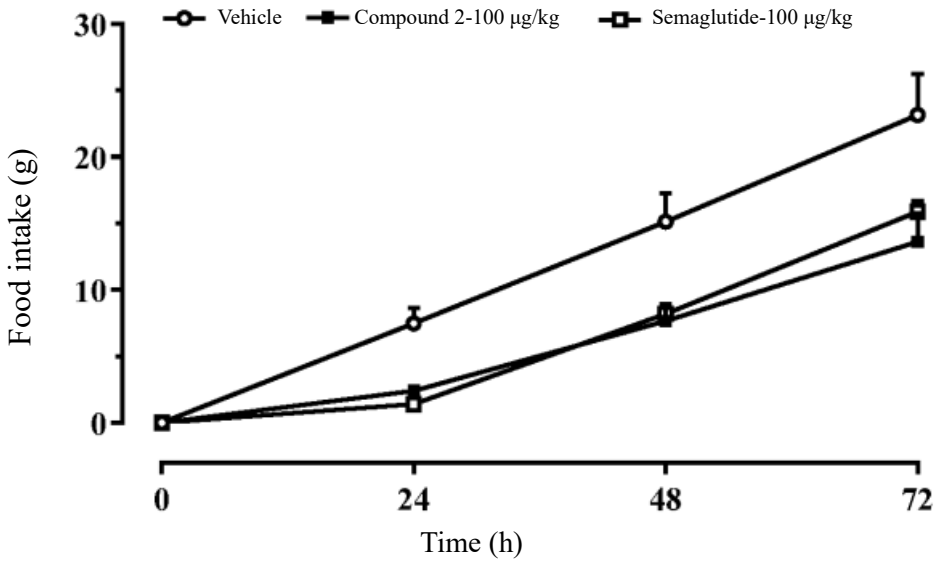

Vehicle
Compound 2-100 μg/kg
Semaglutide-100 μg/kg
30
20
10
0
Food intake (g)
0
24
48
72
Time (h)

FIG. 7c

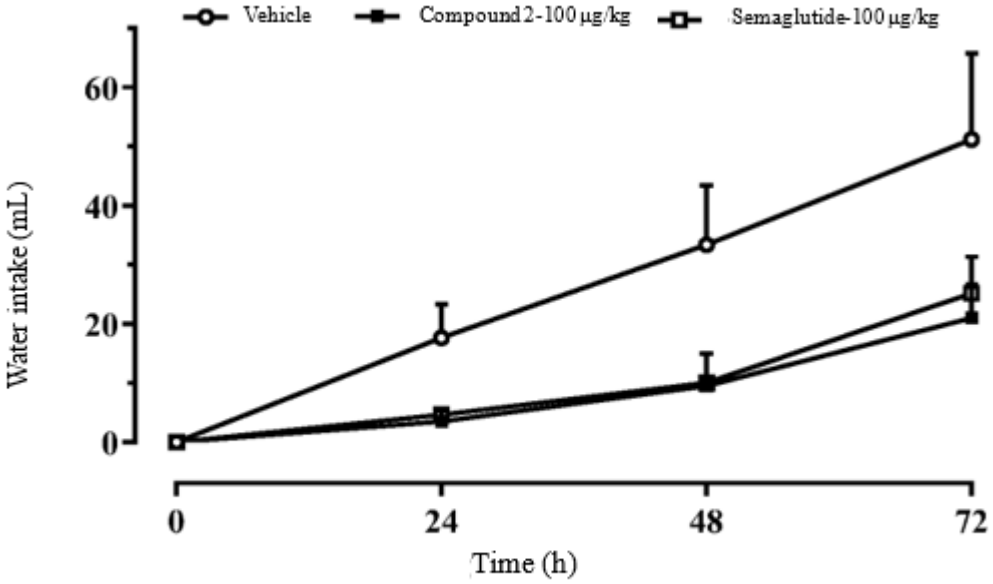

Vehicle
Compound 2-100 μg/kg
Semaglutide-100 μg/kg
Water intake (mL)
60
40
20
0
0
24
48
72
Time (h)

FIG. 7d

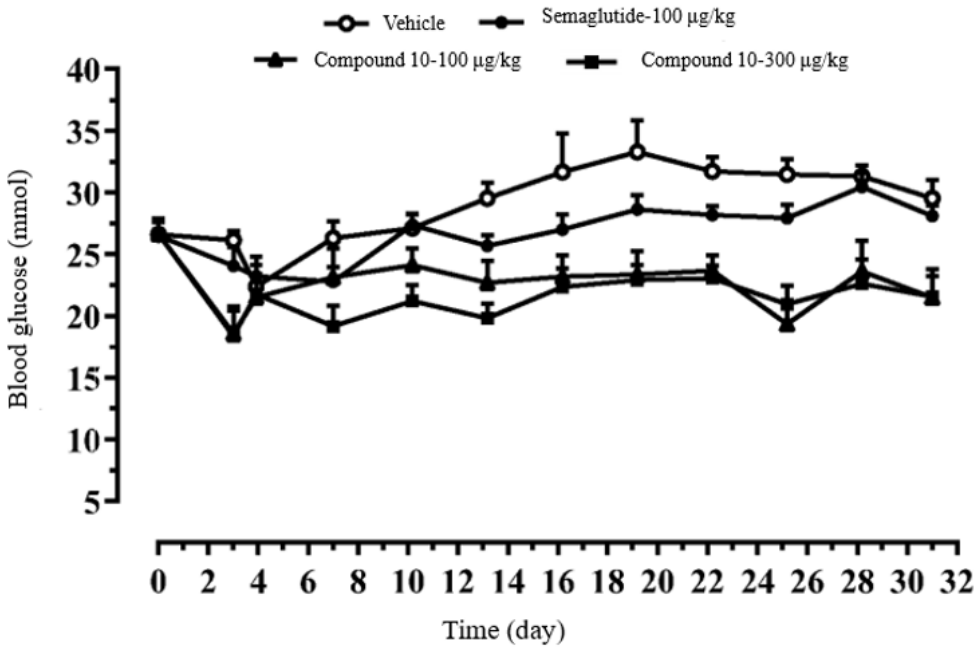

Vehicle
Semaglutide-100 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg
Blood glucose (mmol)
40
35
30
25
20
15
10
5
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32
Time (day)

FIG. 8a

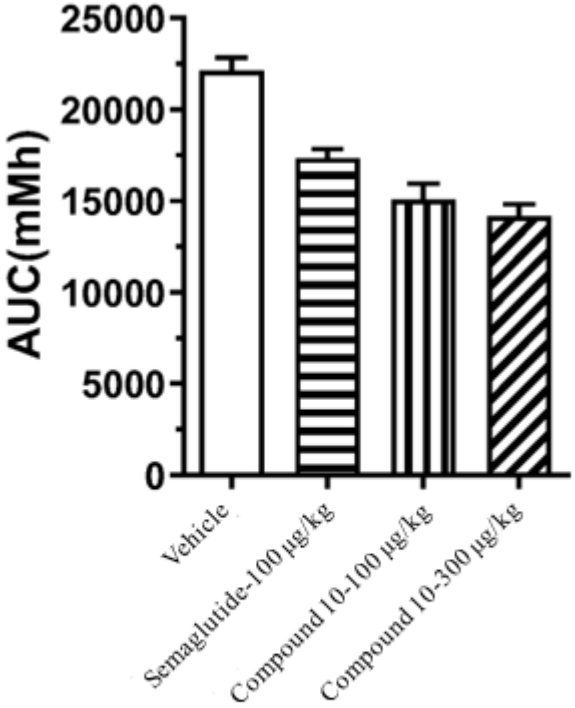

25000
20000
15000
10000
5000
0
AUC(mMh)
Vehicle
Semaglutide-100 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg

FIG. 8b

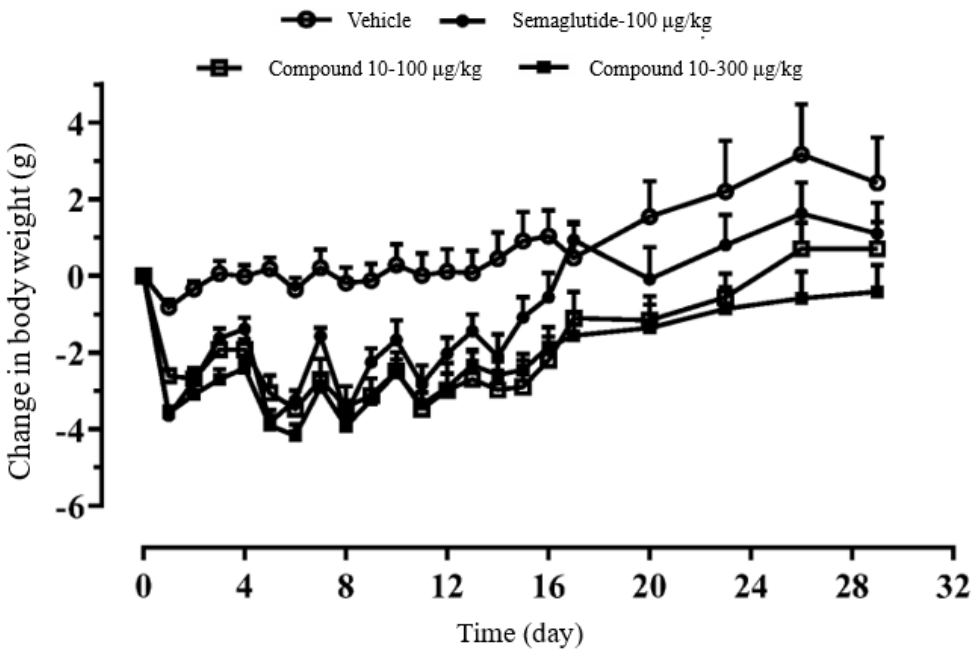

Vehicle
Semaglutide-100 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg
Change in body weight (g)
4
2
0
-2
-4
-6
0
4
8
12
16
20
24
28
32
Time (day)

FIG. 8c

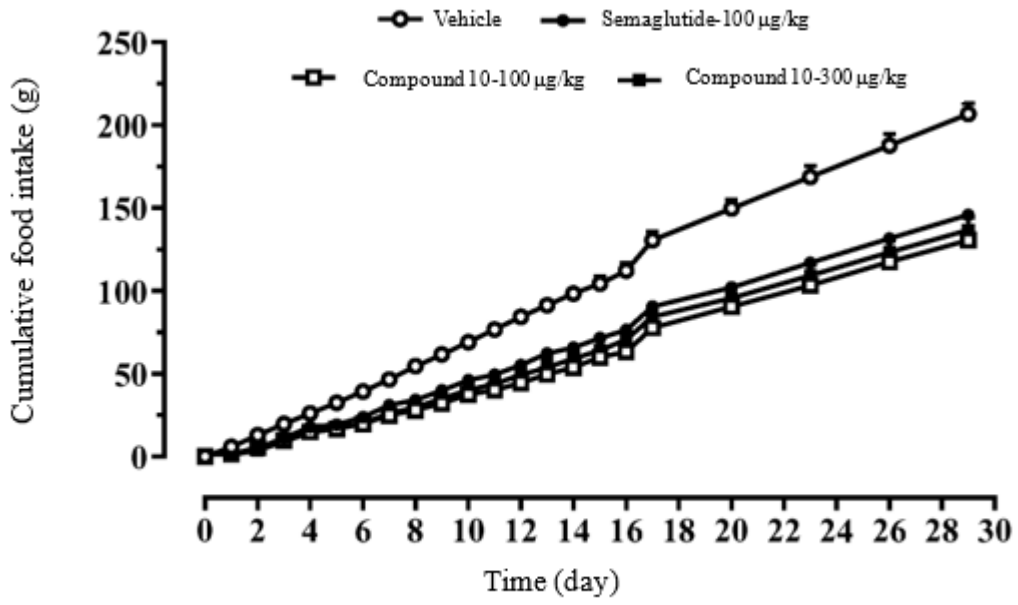

Vehicle
Semaglutide-100 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg
Cumulative food intake (g)
250
200
150
100
50
0
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
Time (day)

FIG. 8d

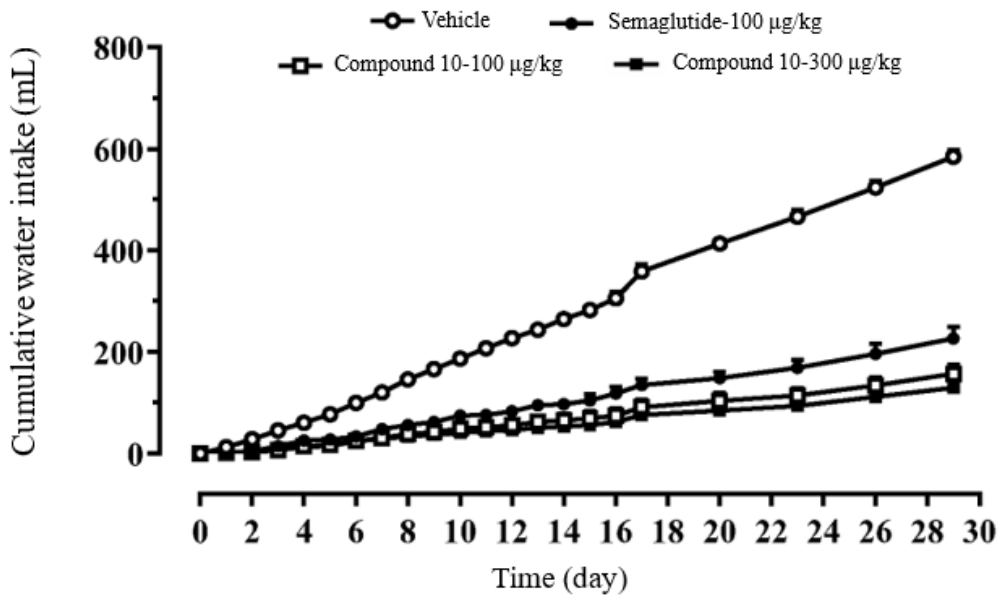

Vehicle
Semaglutide-100 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg
Cumulative water intake (mL)
800
600
400
200
0
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
Time (day)

FIG. 8e

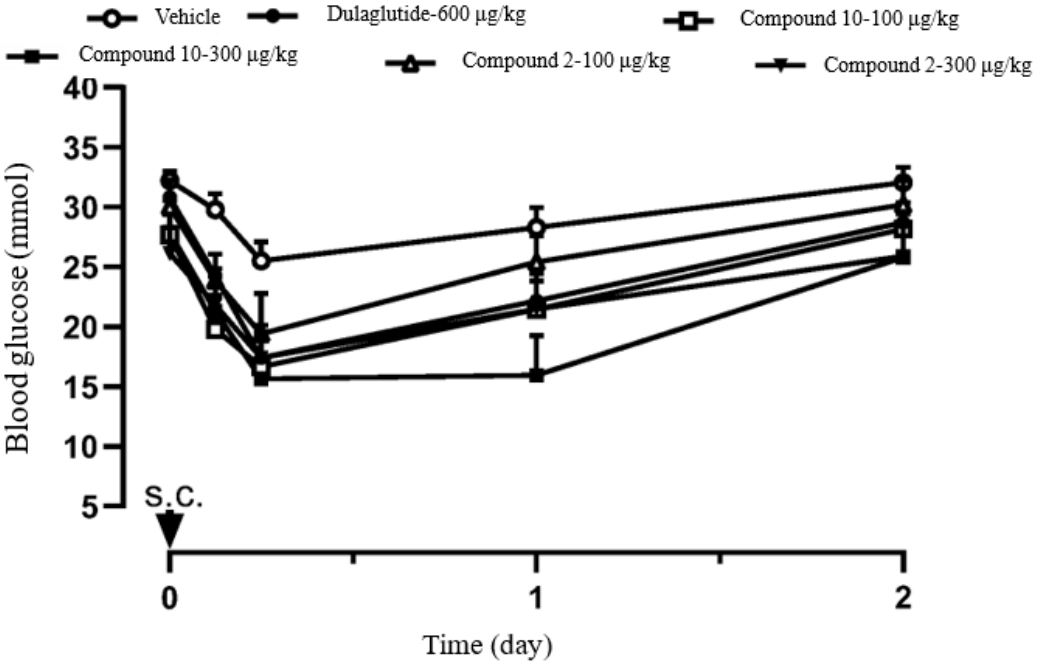

Vehicle
Dulaglutide-600 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg
Compound 2-100 μg/kg
Compound 2-300 μg/kg
Blood glucose (mmol)
40
35
30
25
20
15
10
5
S.C.
0
1
2
Time (day)

FIG. 9a

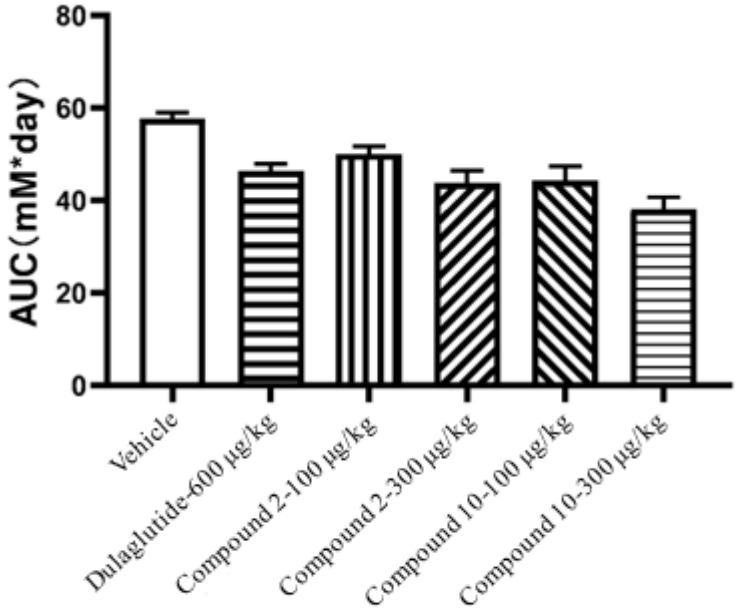

AUC（mM*day）
80
60
40
20
0
Vehicle
Dulaglutide-600 μg/kg
Compound 2-100 μg/kg
Compound 2-300 μg/kg
Compound 10-100 μg/kg
Compound 10-300 μg/kg

FIG. 9b

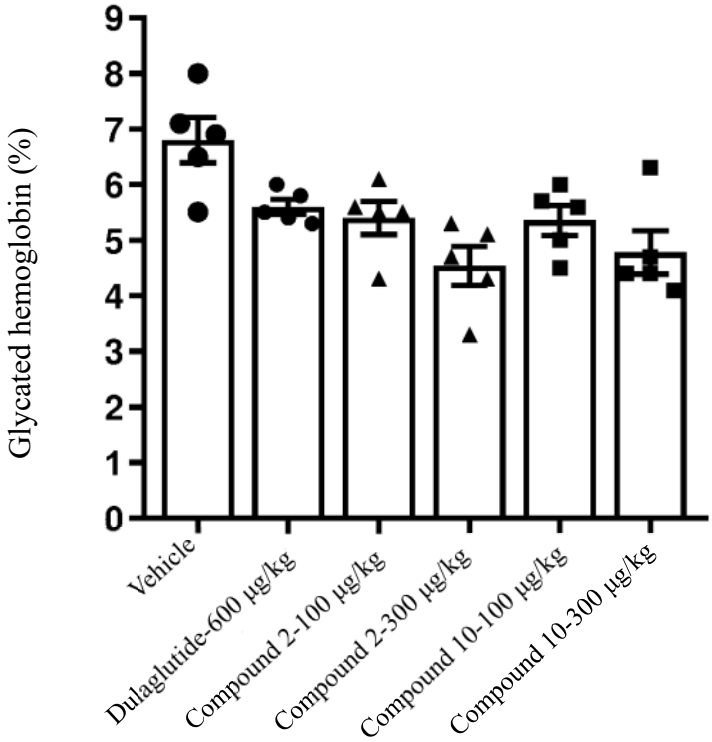


FIG. 9c

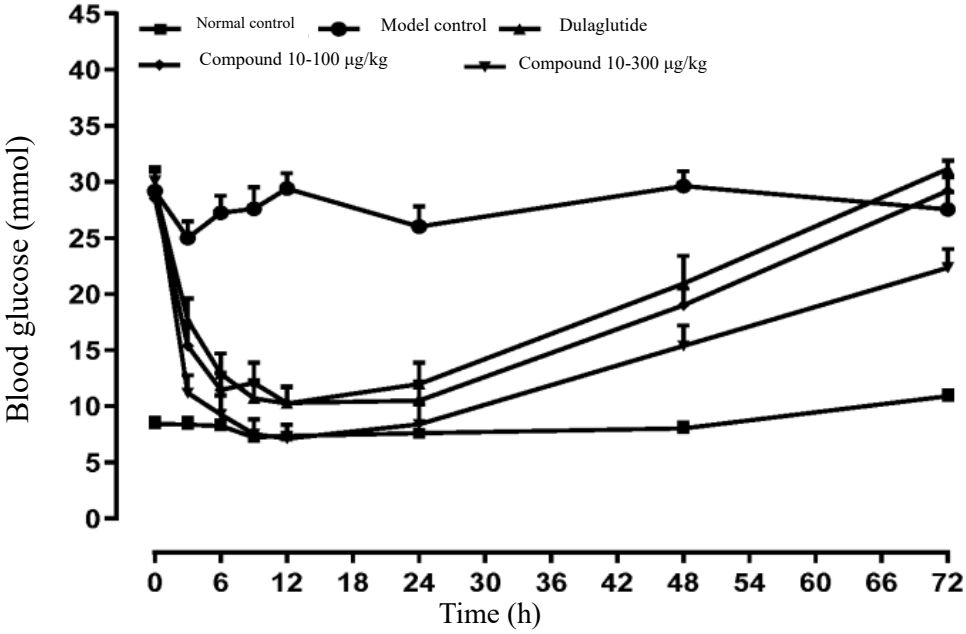


FIG. 10a

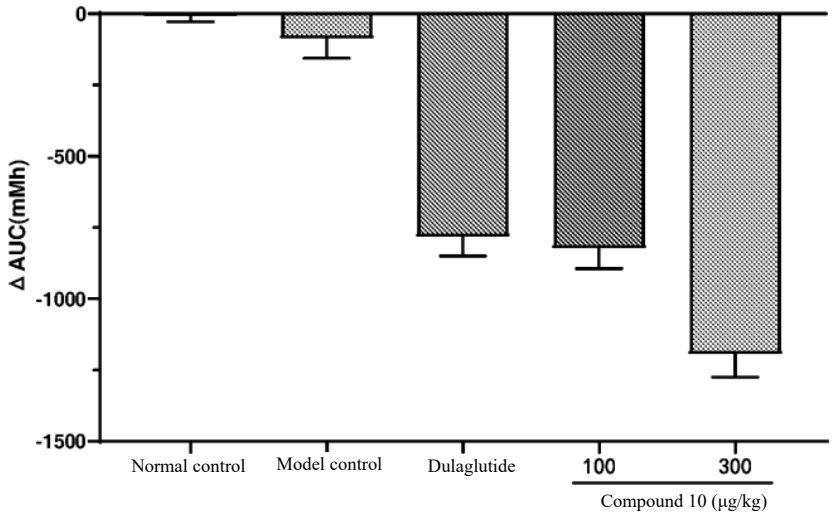


FIG. 10b

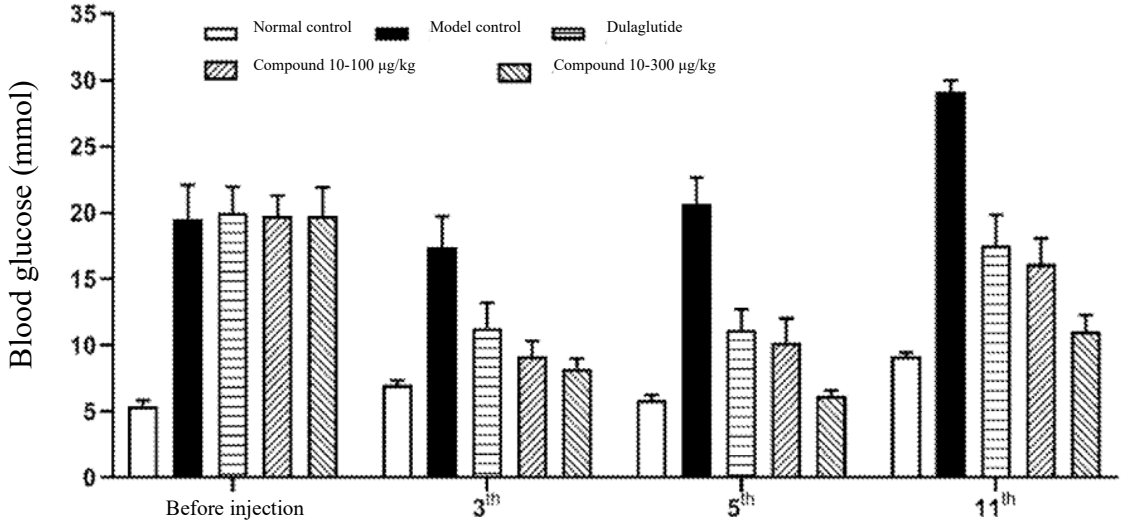


FIG. 10c

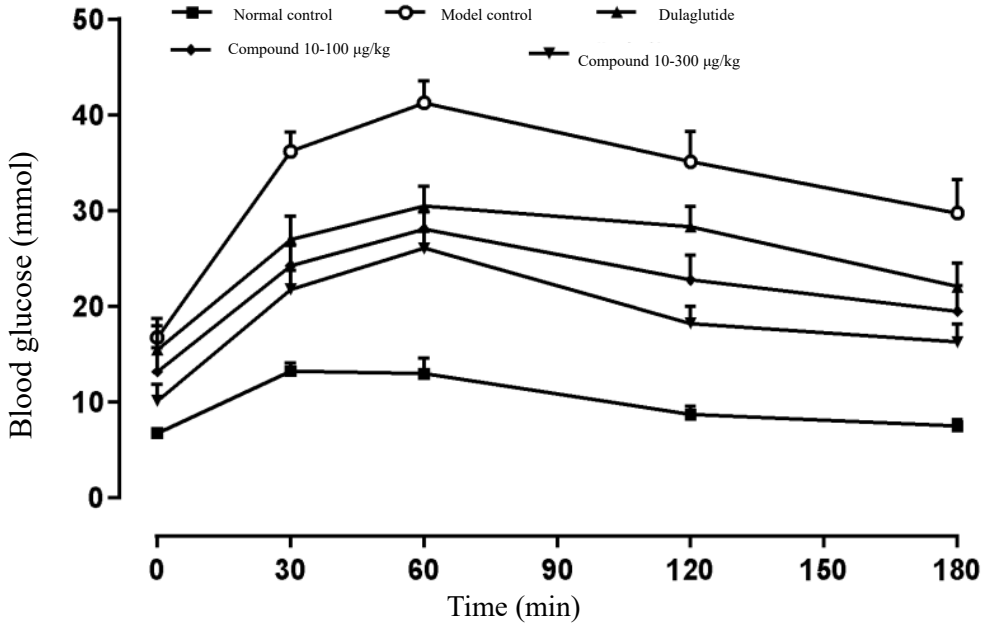


FIG. 10d

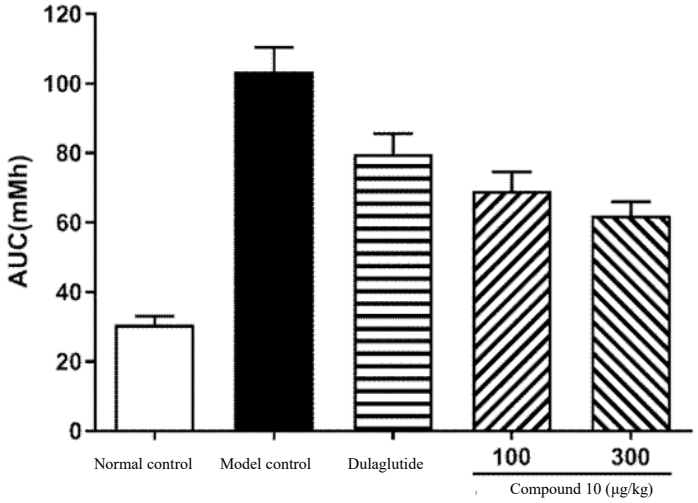


FIG. 10e

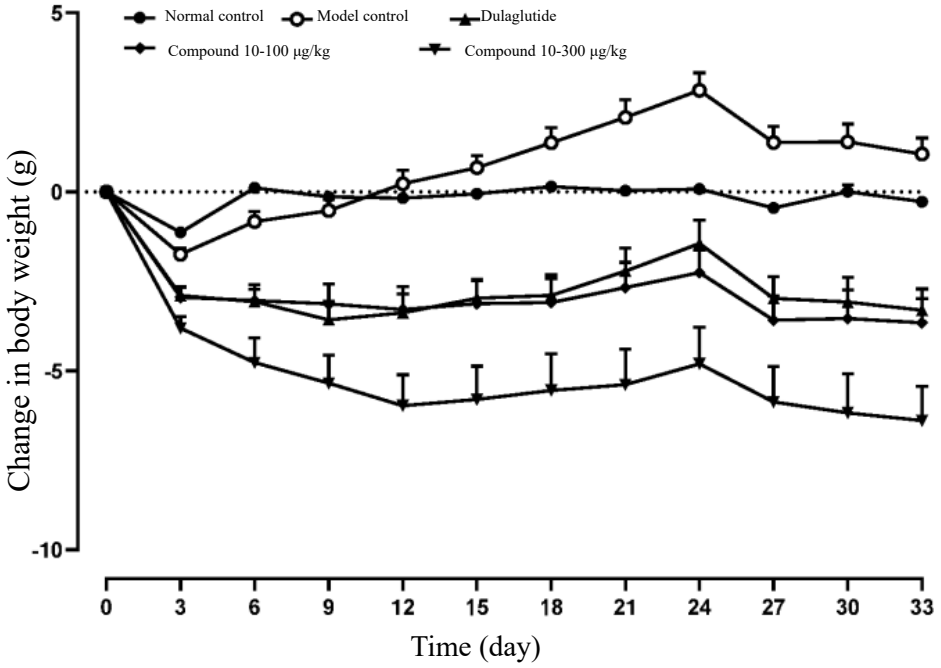


FIG. 11a

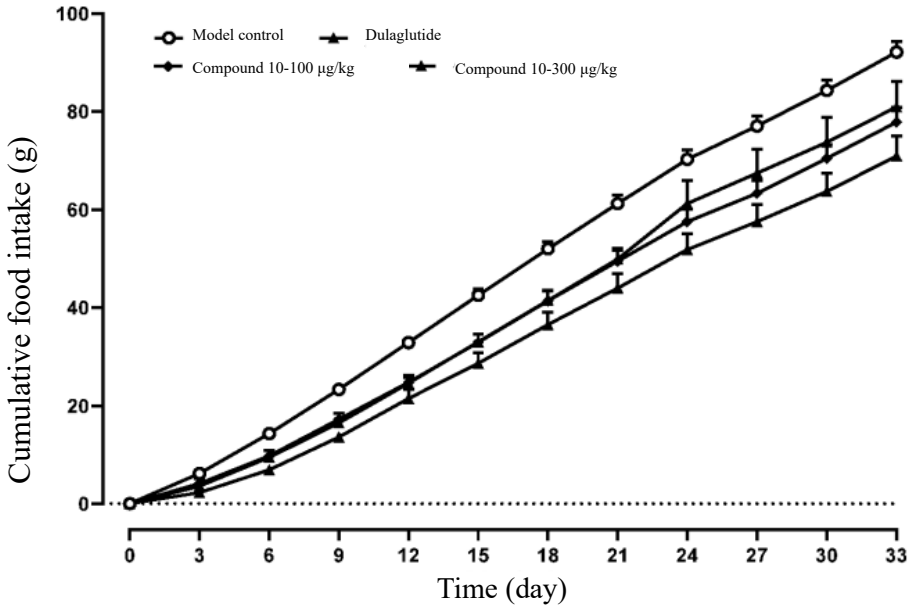


FIG. 11b

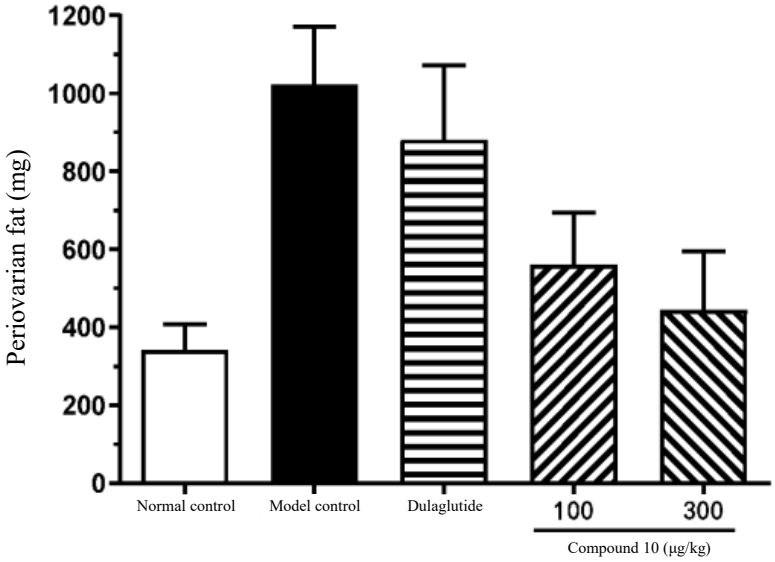


FIG. 11c

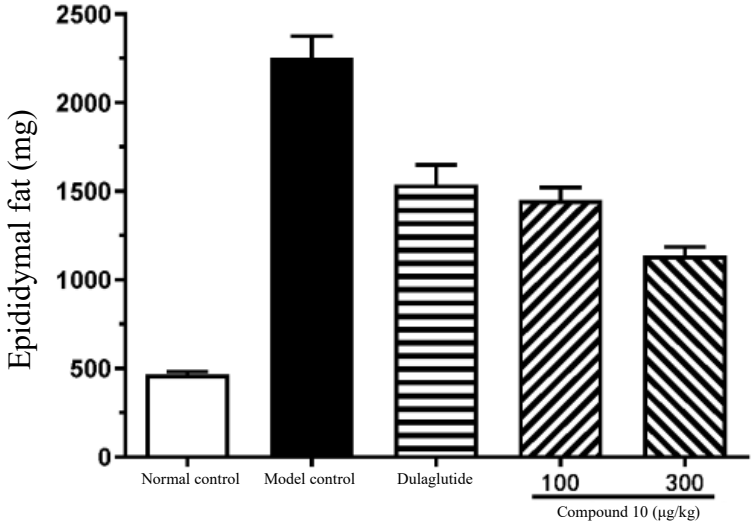


FIG. 11d