FIG. 1A

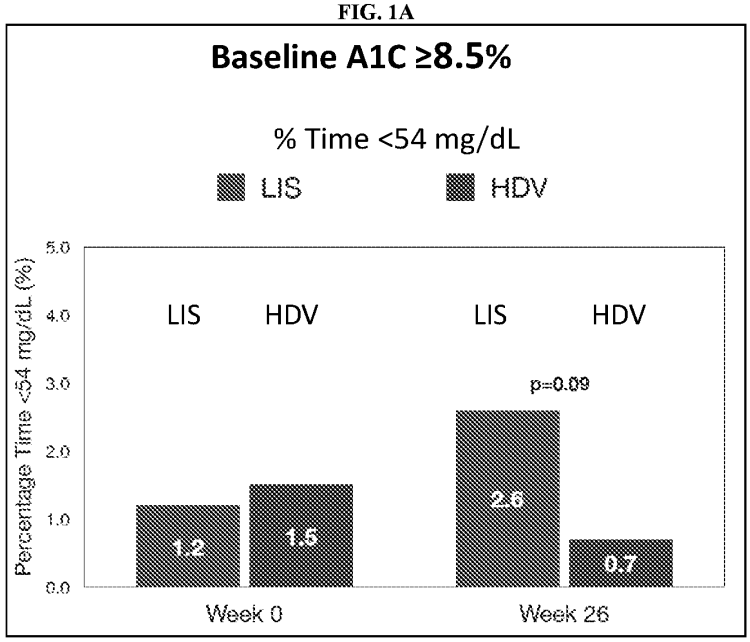

Baseline A1C ≥8.5%
% Time <54 mg/dL
LIS
HDV
Percentage Time <54 mg/dL (%)
5.0
4.0
3.0
2.0
1.0
0.0
LIS
HDV
LIS
HDV
p=0.09
1.2
1.5
2.6
0.7
Week 0
Week 26

FIG. 1B

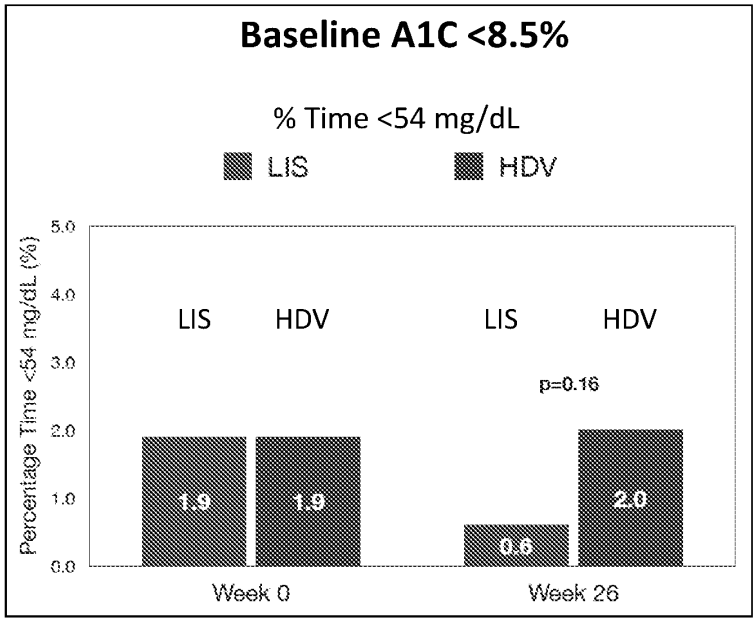

Baseline A1C <8.5%
% Time <54 mg/dL
LIS
HDV
Percentage Time <54 mg/dL (%)
5.0
4.0
3.0
2.0
1.0
0.0
LIS
HDV
LIS
HDV
p=0.16
1.9
1.9
0.6
2.0
Week 0
Week 26

FIG. 1C

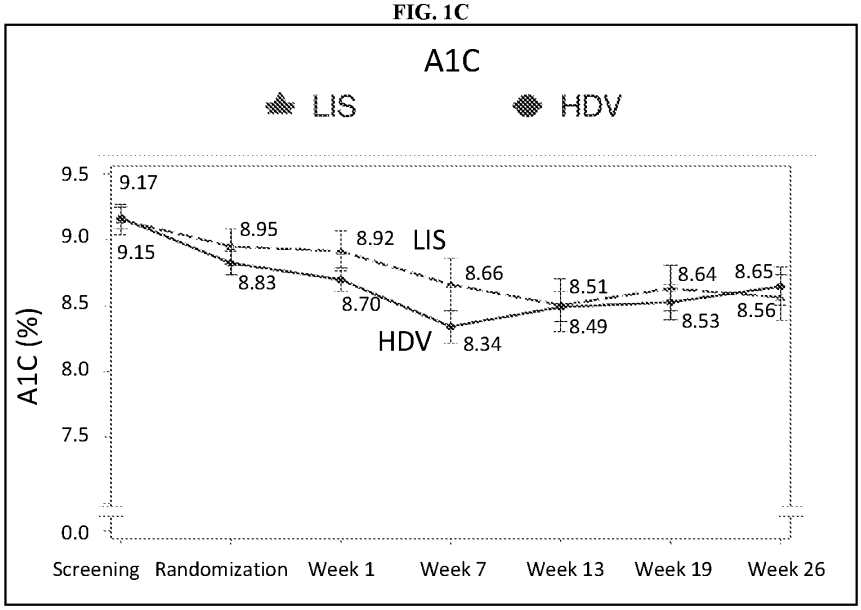

A1C
LIS
HDV
A1C (%)
9.5
9.0
8.5
8.0
7.5
0.0
9.17
9.15
8.95
8.83
8.92
8.70
LIS
HDV
8.66
8.34
8.51
8.49
8.64
8.53
8.65
8.56
Screening
Randomization
Week 1
Week 7
Week 13
Week 19
Week 26

FIG. 1 D

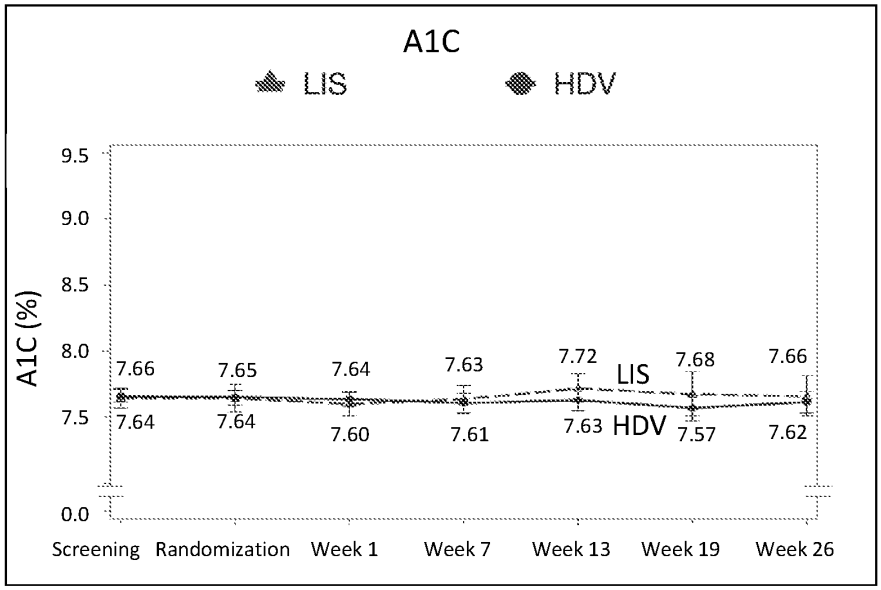

A1C
LIS
HDV
A1C (%)
9.5
9.0
8.5
8.0
7.5
0.0
7.66
7.64
7.65
7.64
7.64
7.60
7.63
7.61
7.72
7.63
LIS
HDV
7.68
7.57
7.66
7.62
Screening
Randomization
Week 1
Week 7
Week 13
Week 19
Week 26

FIG. 1E

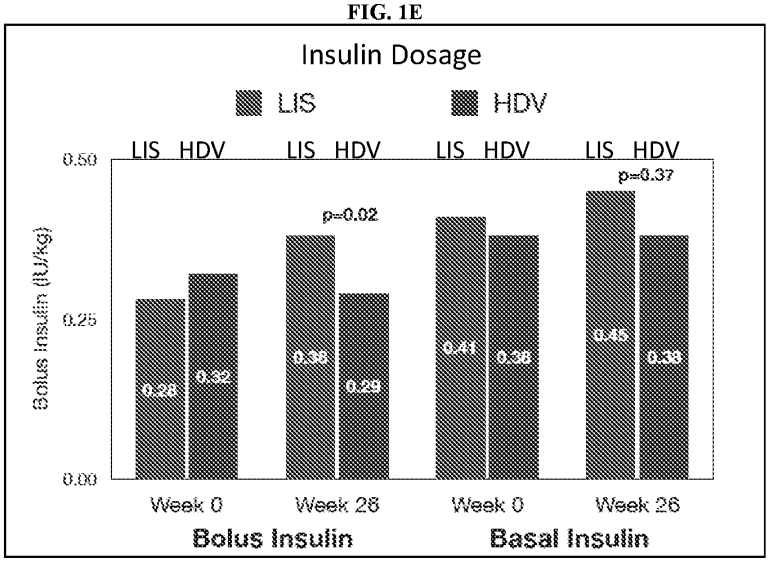

Insulin Dosage
LIS
HDV
LIS HDV LIS HDV LIS HDV LIS HDV
0.50
0.25
0.00
Bolus Insulin (IU/kg)
p=0.02
p=0.37
0.28
0.32
0.38
0.29
0.41
0.38
0.45
0.38
Week 0
Week 26
Week 0
Week 26
Bolus Insulin
Basal Insulin

FIG. 1F

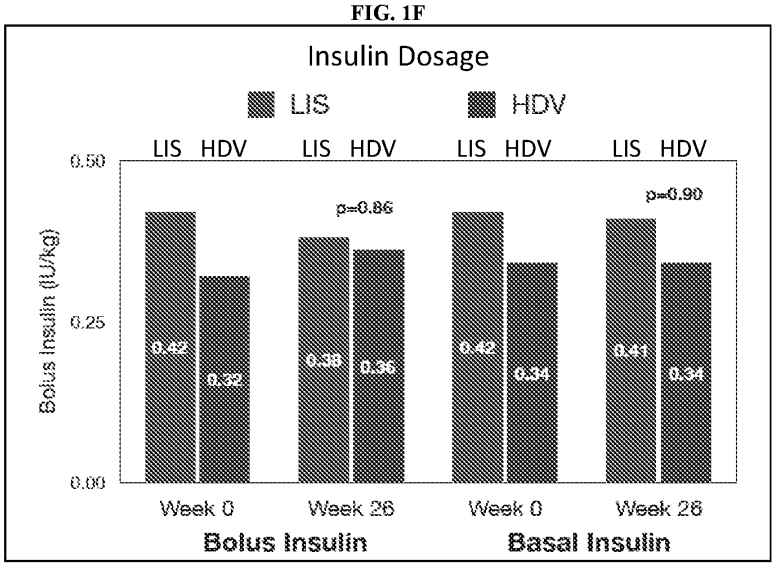

Insulin Dosage
LIS
HDV
LIS HDV LIS HDV LIS HDV LIS HDV
0.50
0.25
0.00
Bolus Insulin (IU/kg)
p=0.86
p=0.90
0.42
0.32
0.38
0.36
0.42
0.34
0.41
0.34
Week 0
Week 26
Week 0
Week 26
Bolus Insulin
Basal Insulin

FIG. 2A

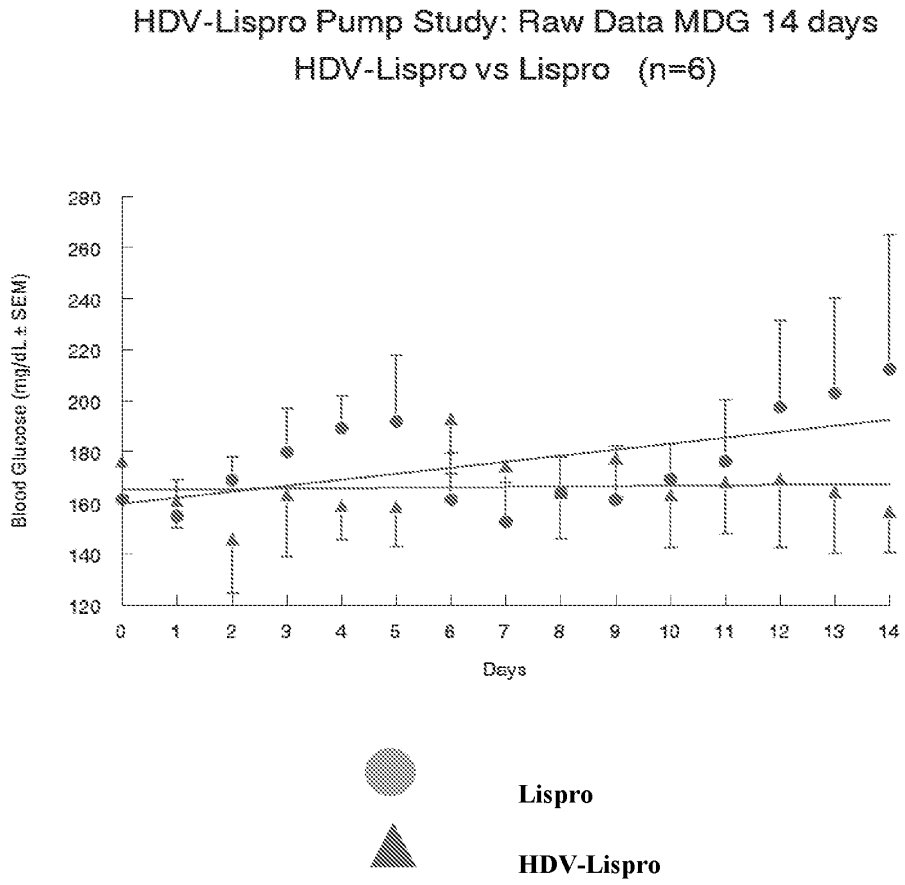

HDV-Lispro Pump Study: Raw Data MDG 14 days
HDV-Lispro vs Lispro (n=6)
Blood Glucose (mg/dL ± SEM)
280
260
240
220
200
180
160
140
120
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Days
Lispro
HDV-Lispro

FIG. 2B

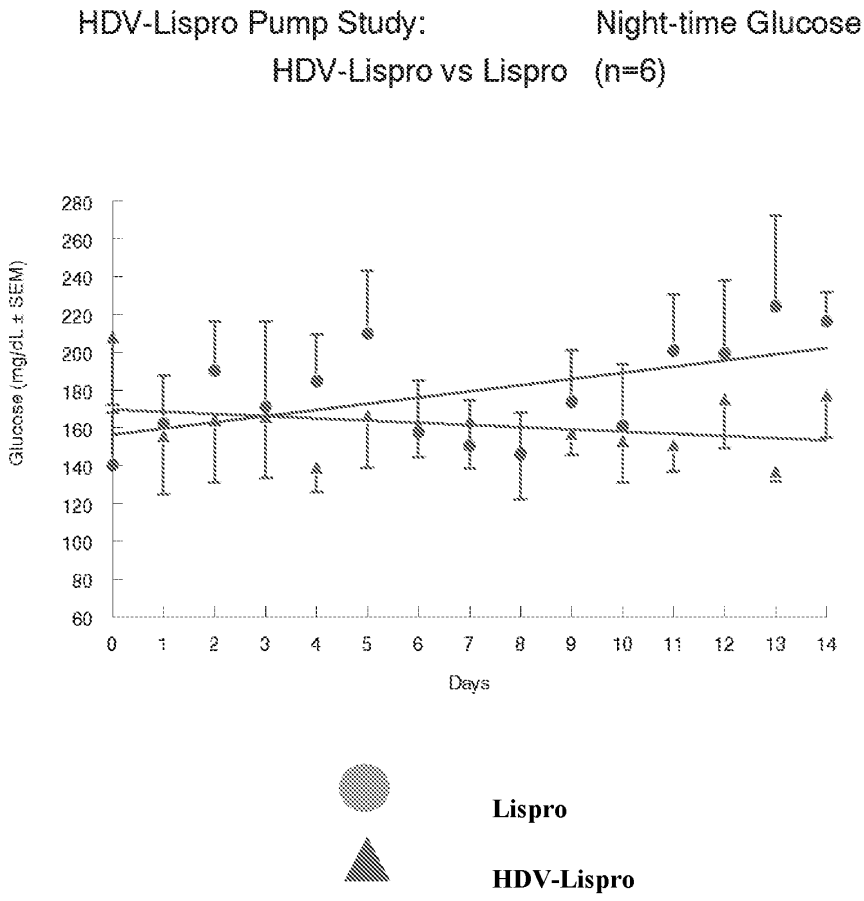
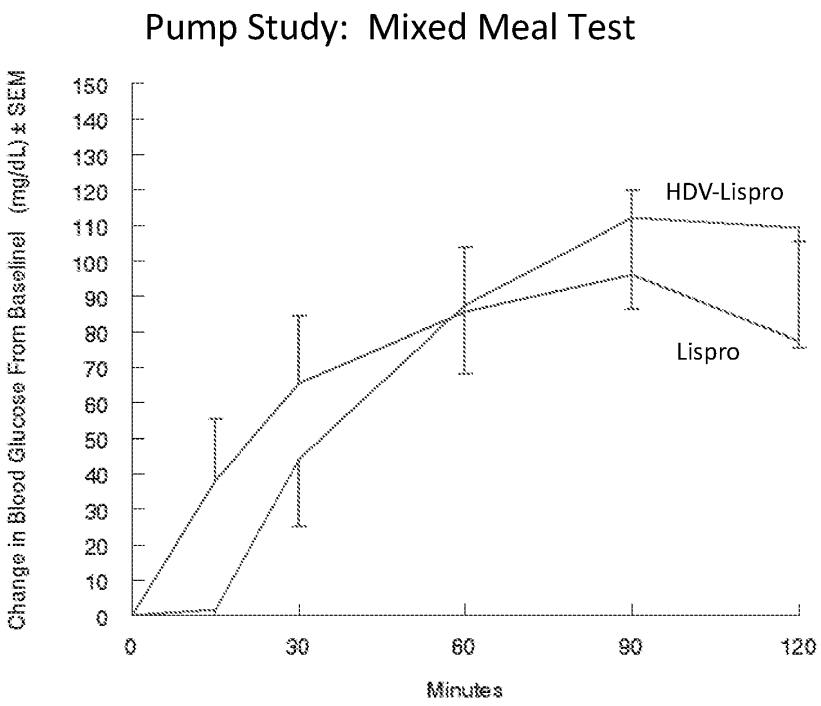

HDV-Lispro Pump Study: Night-time Glucose
HDV-Lispro vs Lispro (n=6)
Glucose (mg/dL ± SEM)
280
260
240
220
200
180
160
140
120
100
80
60
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
Days
Lispro
HDV-Lispro

FIG. 2C



Time (Min)	HDV AUC Reduction
0-15	-96%
0-30	-66%
0-60	-30%
0-90	-12%
0-120	-1%

FIG. 3A

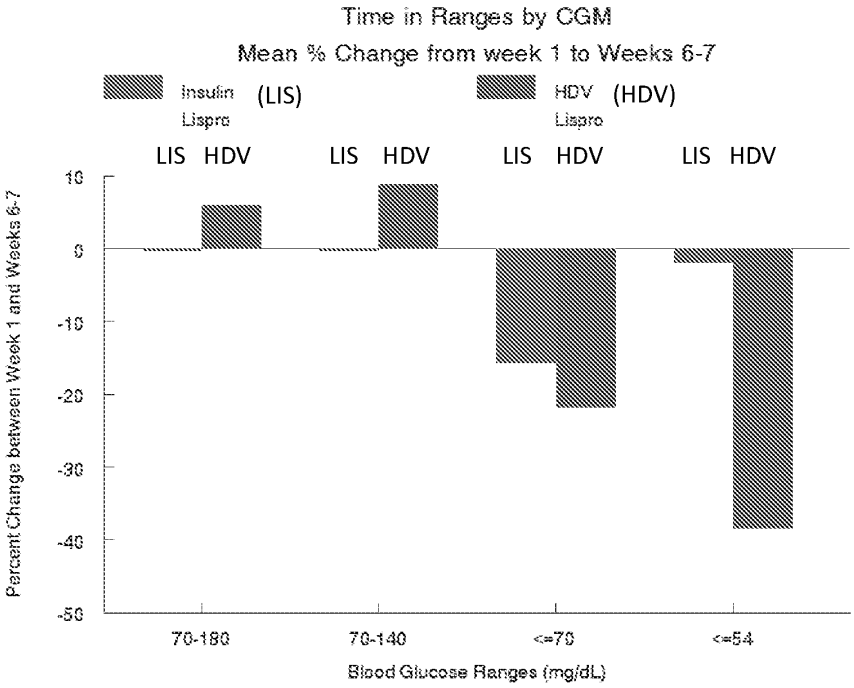

Time in Ranges by CGM
Mean % Change from week 1 to Weeks 6-7
Insulin Lispro (LIS)
HDV Lispro (HDV)
LIS HDV LIS HDV LIS HDV LIS HDV
10
0
-10
-20
-30
-40
-50
Percent Change between Week 1 and Weeks 6-7
70-180
70-140
<=70
<=54
Blood Glucose Ranges (mg/dL)

FIG. 3B

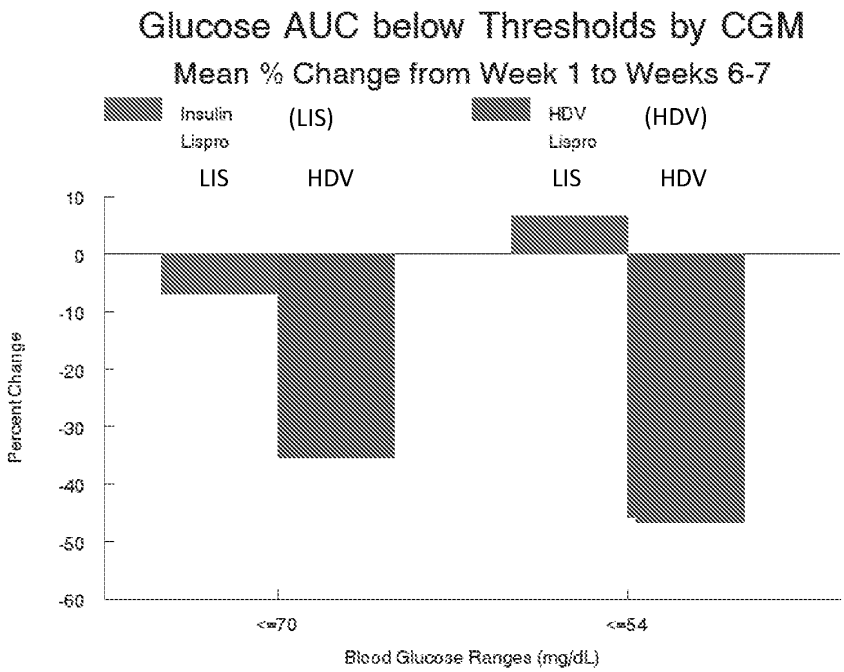

Glucose AUC below Thresholds by CGM
Mean % Change from Week 1 to Weeks 6-7
Insulin Lispro (LIS)
HDV Lispro (HDV)
LIS
HDV
LIS
HDV
10
0
-10
-20
-30
-40
-50
-60
Percent Change
<=70
<=54
Blood Glucose Ranges (mg/dL)

FIG. 3C

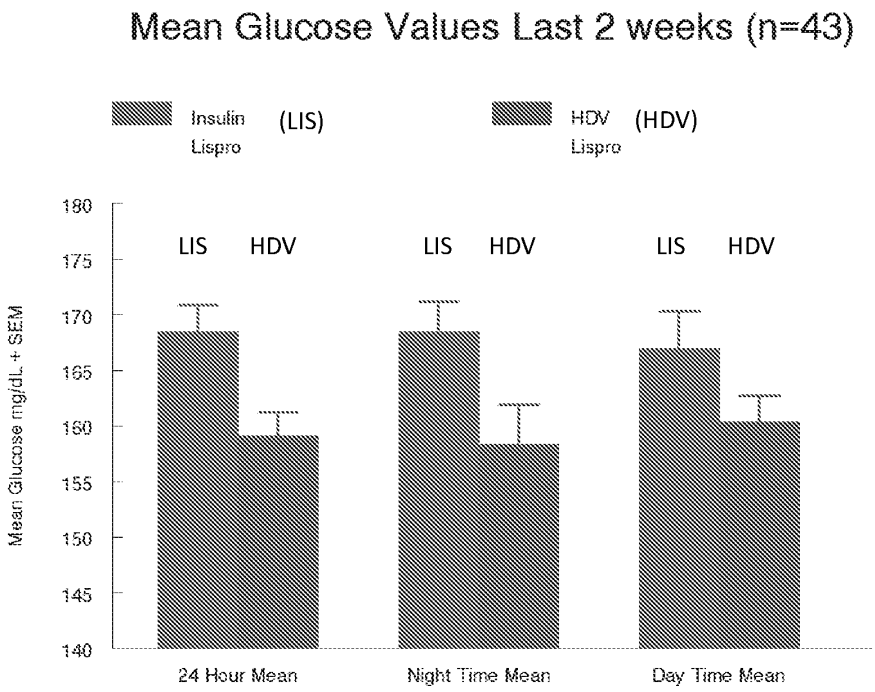

Mean Glucose Values Last 2 weeks (n=43)
Insulin Lispro (LIS)
HDV Lispro (HDV)
Mean Glucose mg/dL + SEM
180
175
170
165
160
155
150
145
140
LIS
HDV
LIS
HDV
LIS
HDV
24 Hour Mean
Night Time Mean
Day Time Mean

FIG. 4

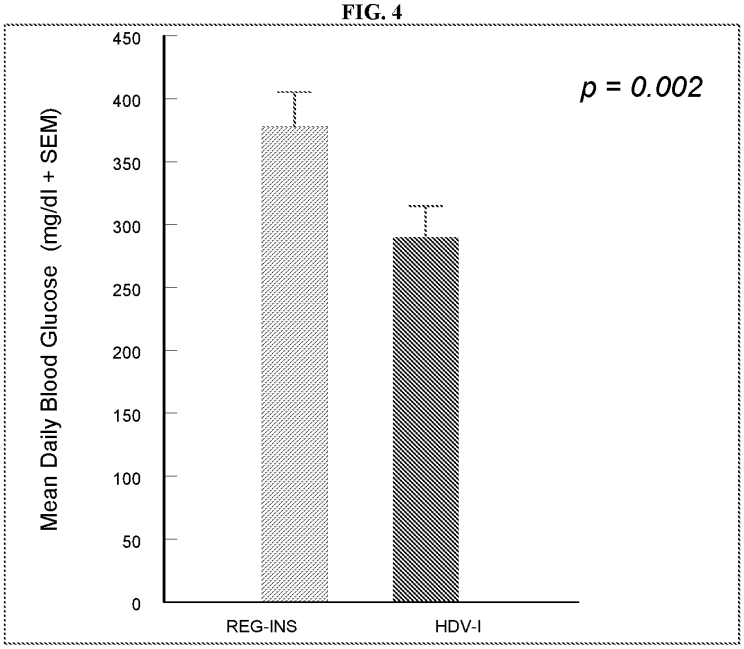
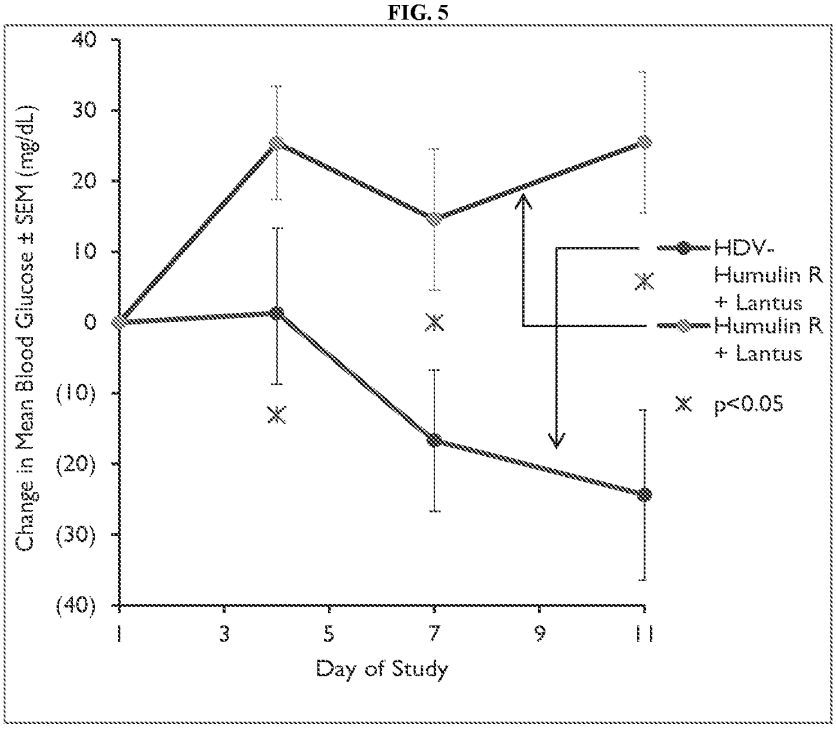

Mean Daily Blood Glucose (mg/dl + SEM)
450
400
350
300
250
200
150
100
50
0
p = 0.002
REG-INS
HDV-I

FIG. 5


Change in Mean Blood Glucose ± SEM (mg/dL)
40
30
20
10
0
(10)
(20)
(30)
(40)
1
3
5
7
9
11
Day of Study
HDV-Humulin R + Lantus
Humulin R + Lantus
p<0.05