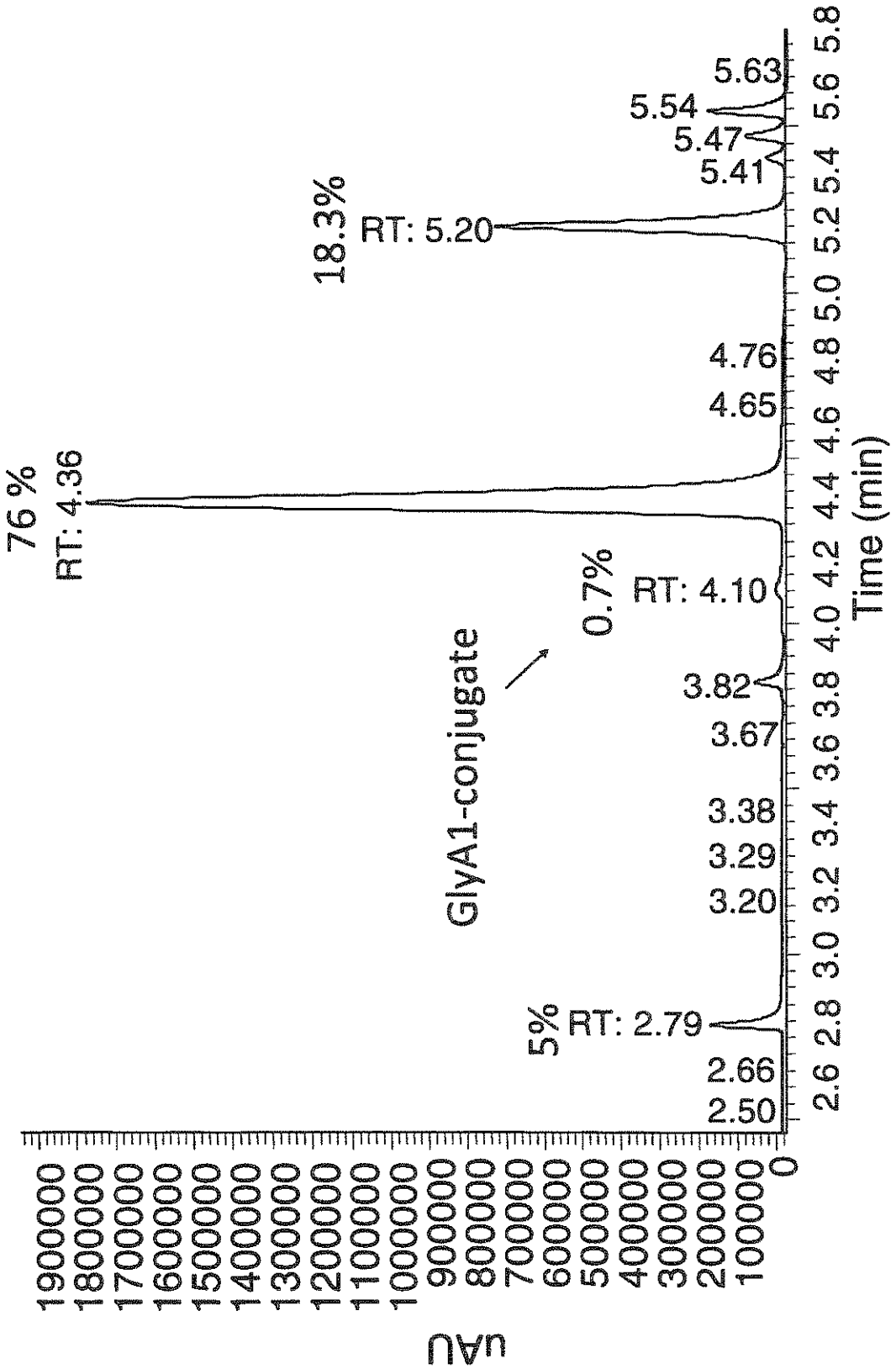

76 %
RT: 4.36
18.3%
RT: 5.20
0.7%
RT: 4.10
GlyA1-conjugate
5%
RT: 2.79
5.63
5.54
5.47
5.41
4.76
4.65
3.82
3.67
3.38
3.29
3.20
2.66
2.50
Time (min)
uAU

Fig. 1a

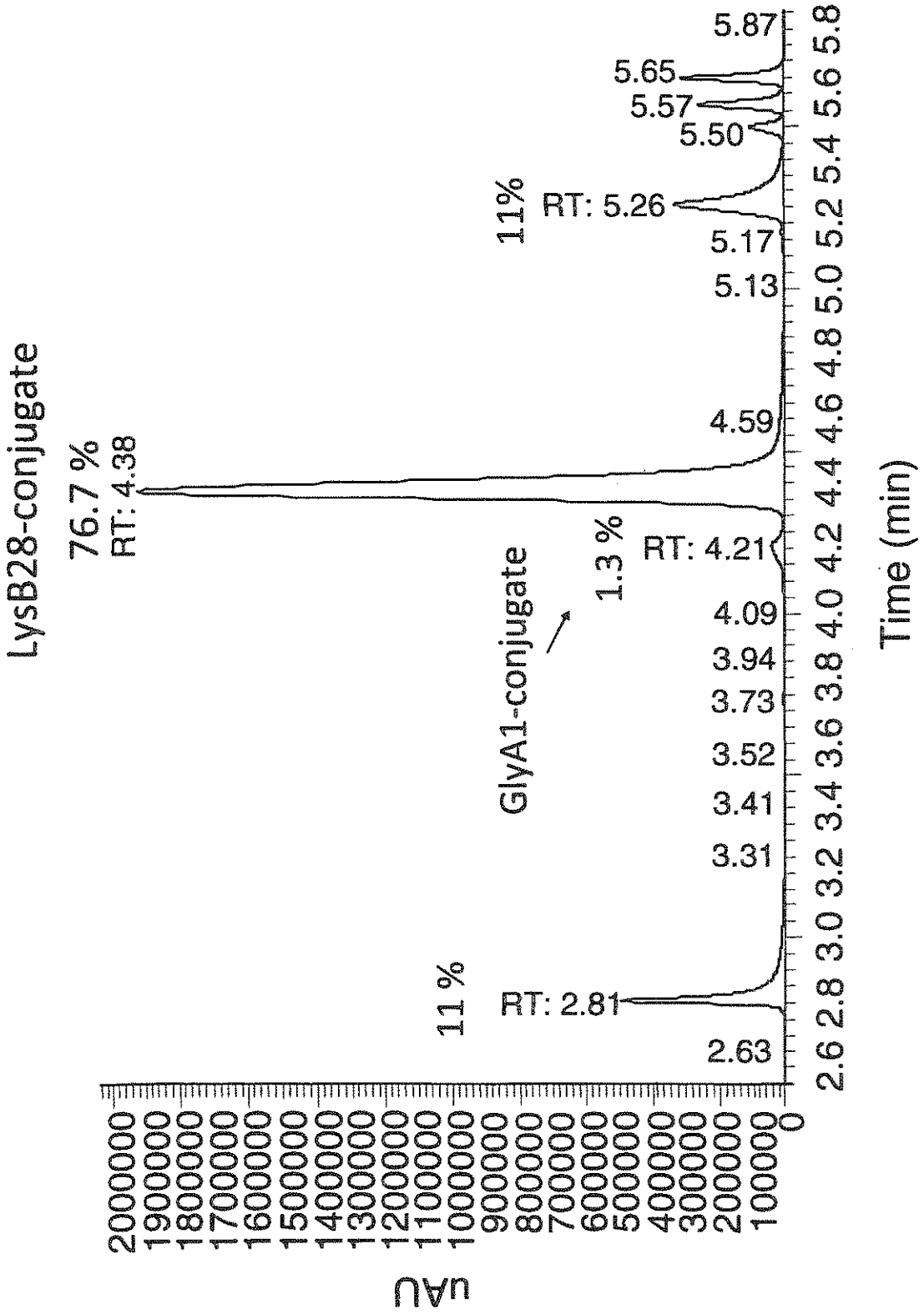

LysB28-conjugate
76.7 %
RT: 4.38
GlyA1-conjugate
1.3 %
RT: 4.21
11%
RT: 5.26
11 %
RT: 2.81
5.87
5.65
5.57
5.50
5.17
5.13
4.59
4.09
3.94
3.73
3.52
3.41
3.31
2.63
Time (min)
uAU

Fig. 1b

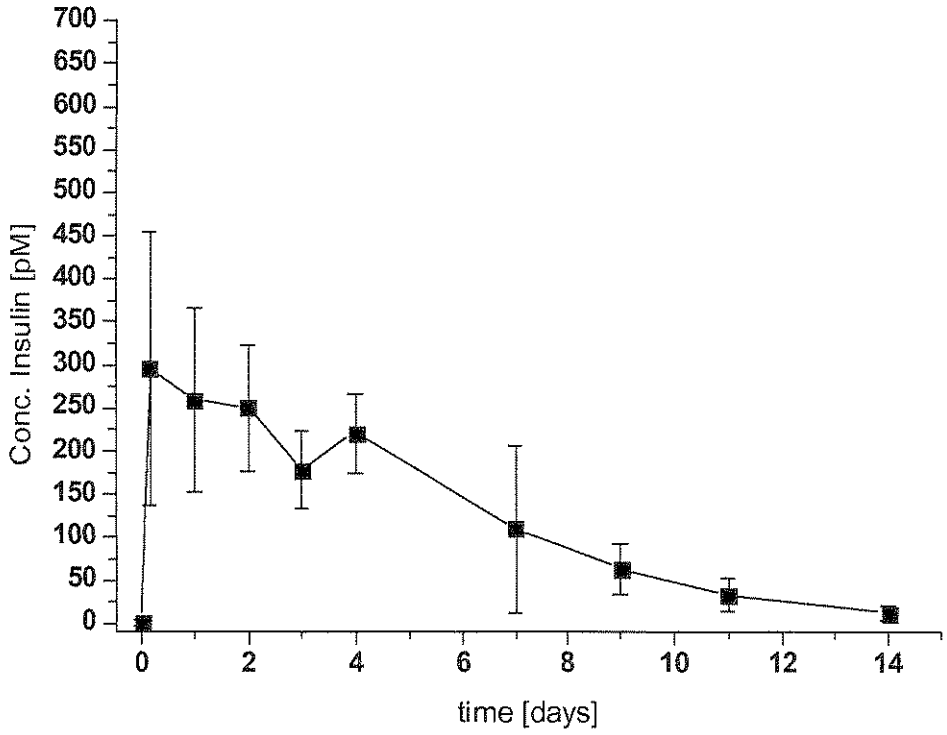

Conc. Insulin [pM]
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
0
2
4
6
8
10
12
14
time [days]

Fig. 2

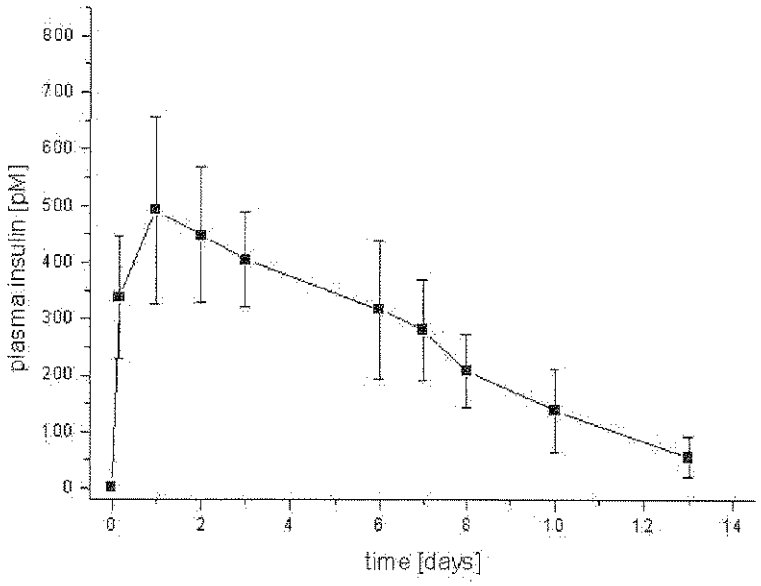

plasma insulin [pM]
800
700
600
500
400
300
200
100
0
0
2
4
6
8
10
12
14
time [days]

Fig. 3

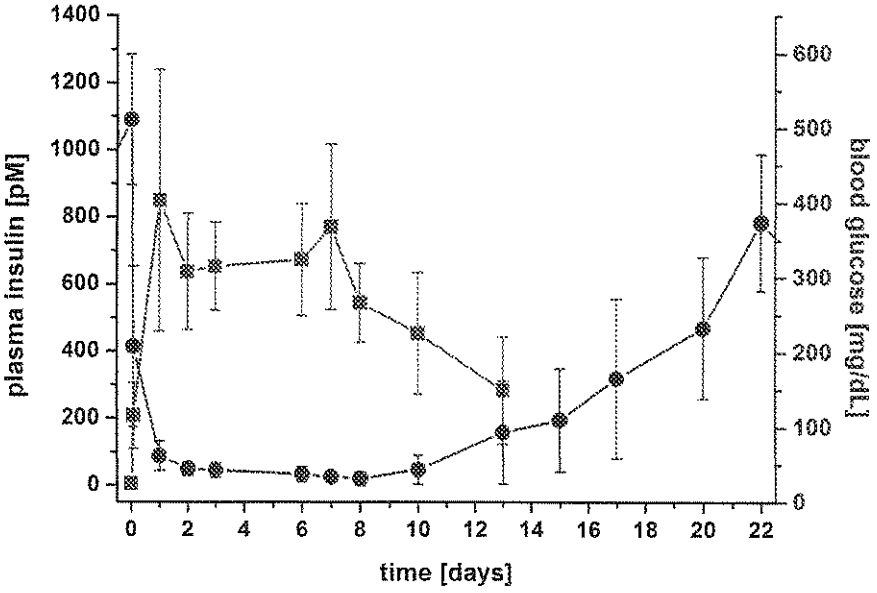

plasma insulin [pM]
blood glucose [mg/dL]
time [days]
0
200
400
600
800
1000
1200
1400
0
100
200
300
400
500
600
0
2
4
6
8
10
12
14
16
18
20
22

Fig. 4

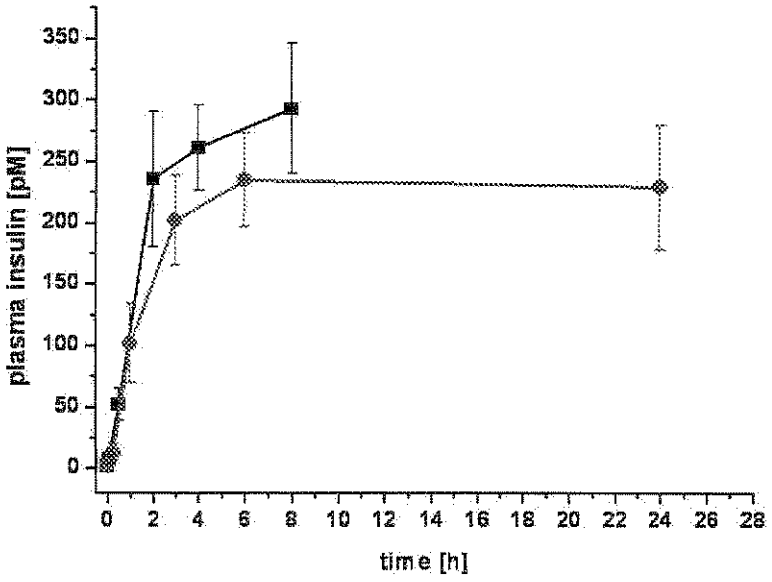

plasma insulin [pM]
350
300
250
200
150
100
50
0
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28
time [h]

Fig. 5

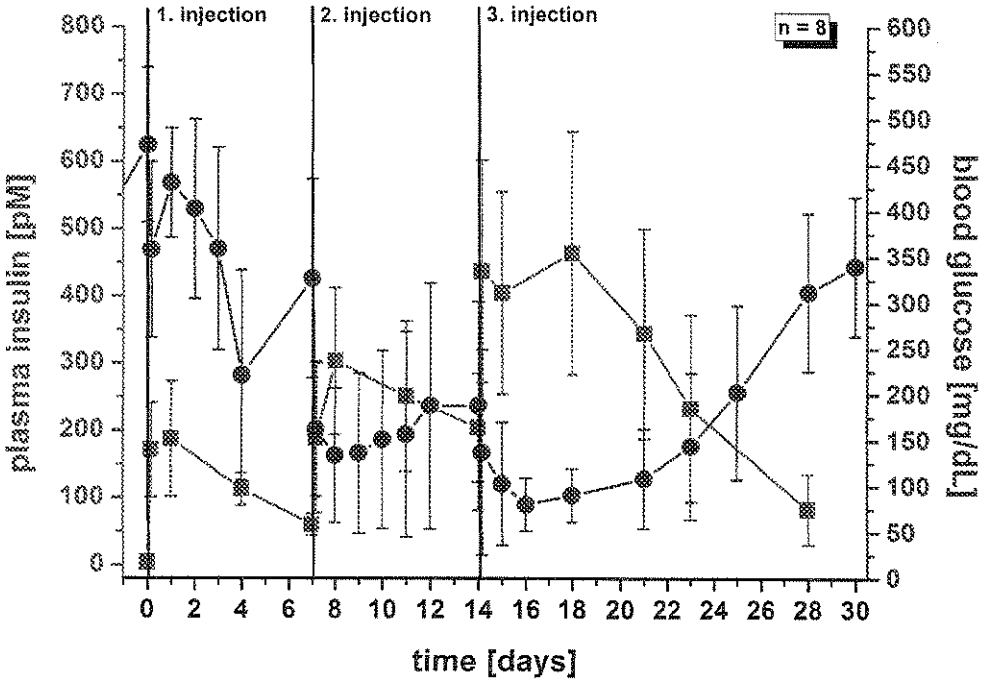

1. injection
2. injection
3. injection
n = 8
plasma insulin [pM]
blood glucose [mg/dL]
time [days]
0
100
200
300
400
500
600
700
800
0
50
100
150
200
250
300
350
400
450
500
550
600
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

Fig. 6

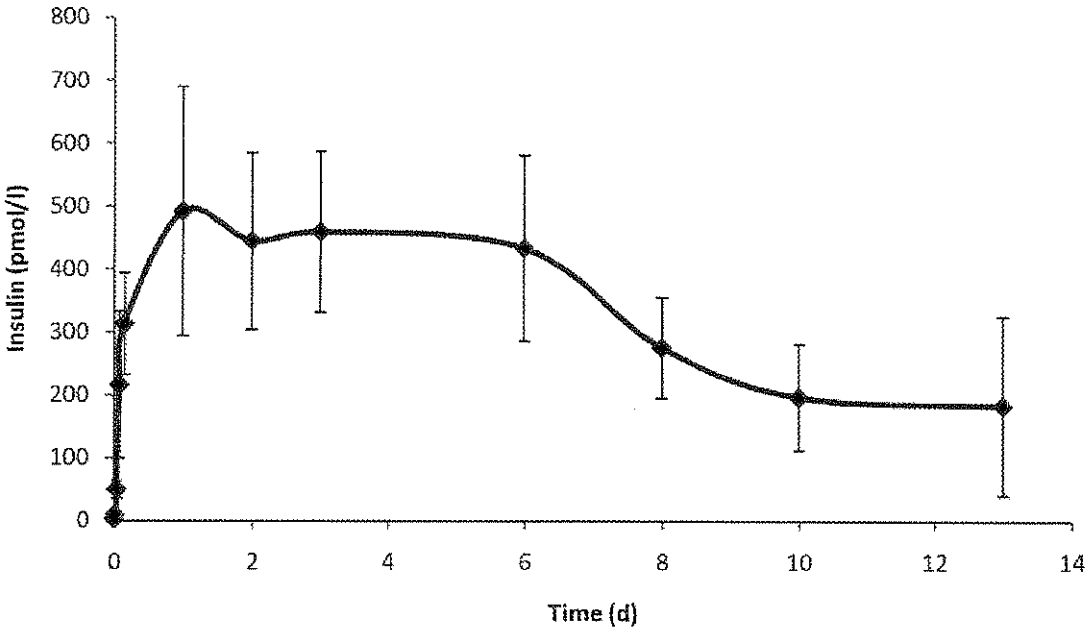

800
700
600
500
400
300
200
100
0
Insulin (pmol/l)
0
2
4
6
8
10
12
14
Time (d)

Fig. 7

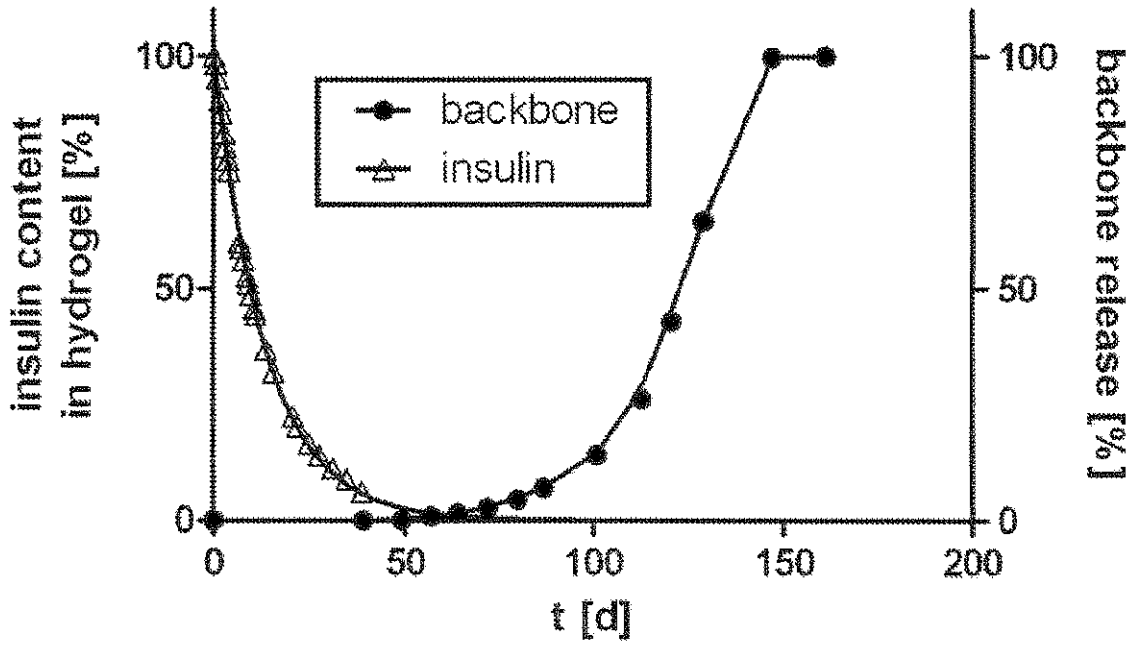

insulin content
in hydrogel [%]
backbone release [%]
backbone
insulin
100
50
0
0
50
100
150
200
t [d]

Fig. 8

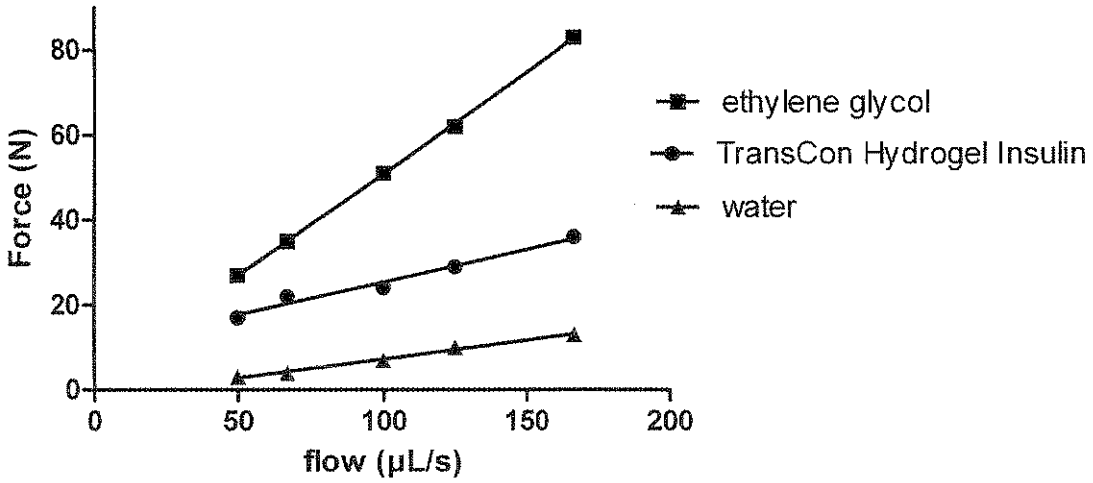

Force (N)
80
60
40
20
0
0
50
100
150
200
flow (µL/s)
ethylene glycol
TransCon Hydrogel Insulin
water

Fig. 9