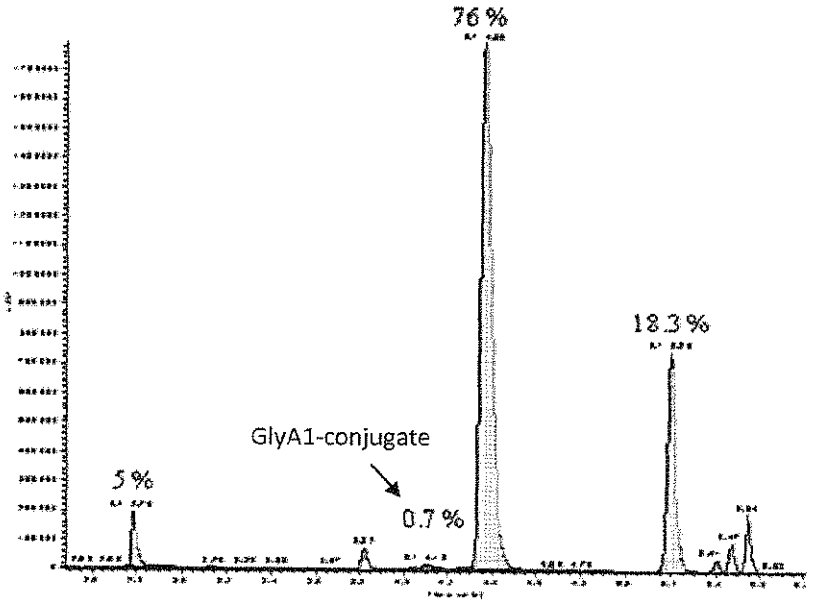


Fig. 1a

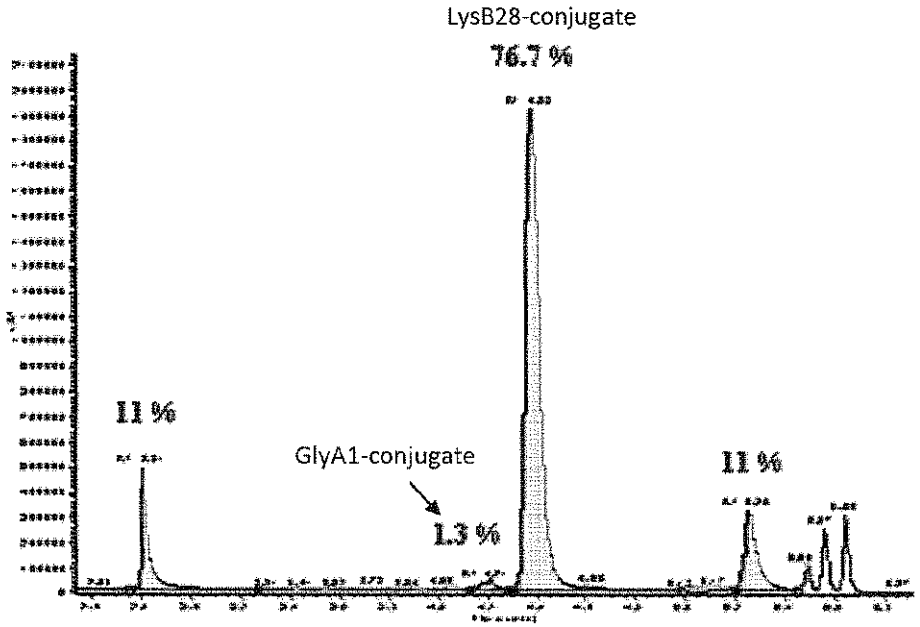


Fig. 1b

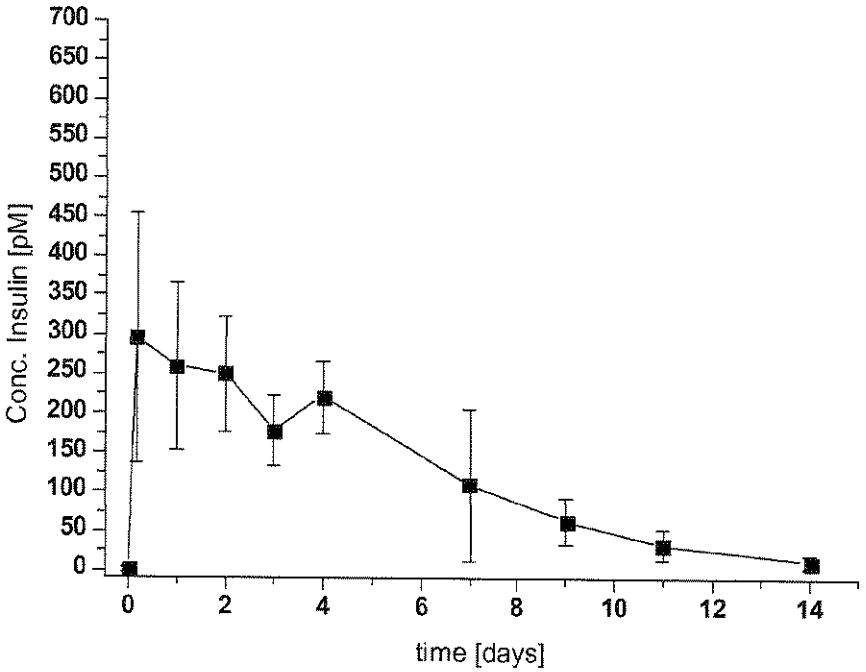

Conc. Insulin [pM]
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
0
2
4
6
8
10
12
14
time [days]

Fig. 2

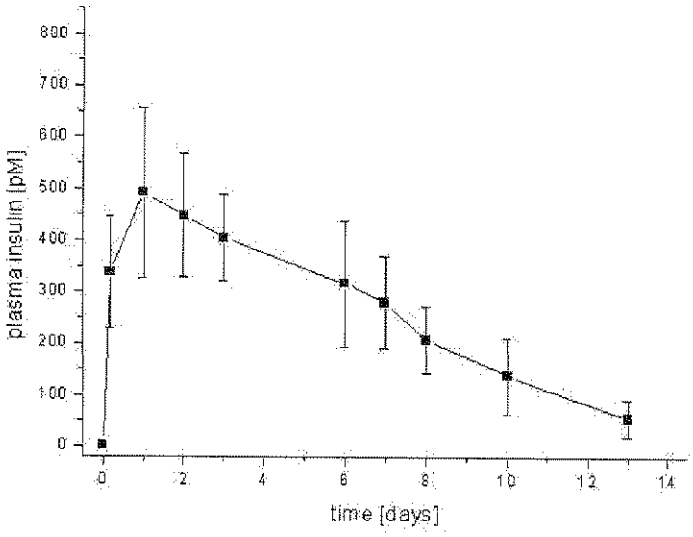

plasma insulin [pM]
800
700
600
500
400
300
200
100
0
0
2
4
6
8
10
12
14
time [days]

Fig. 3

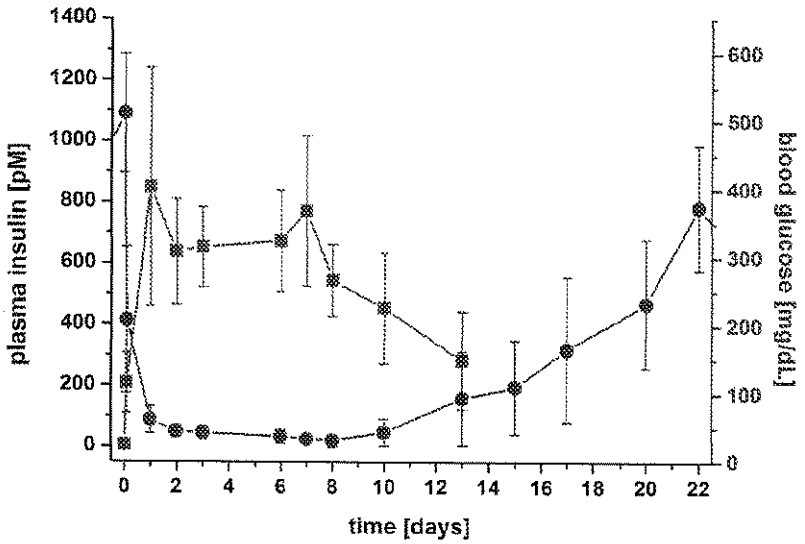

plasma insulin [pM]
blood glucose [mg/dL]
time [days]
0
200
400
600
800
1000
1200
1400
0
100
200
300
400
500
600
0
2
4
6
8
10
12
14
16
18
20
22

Fig. 4

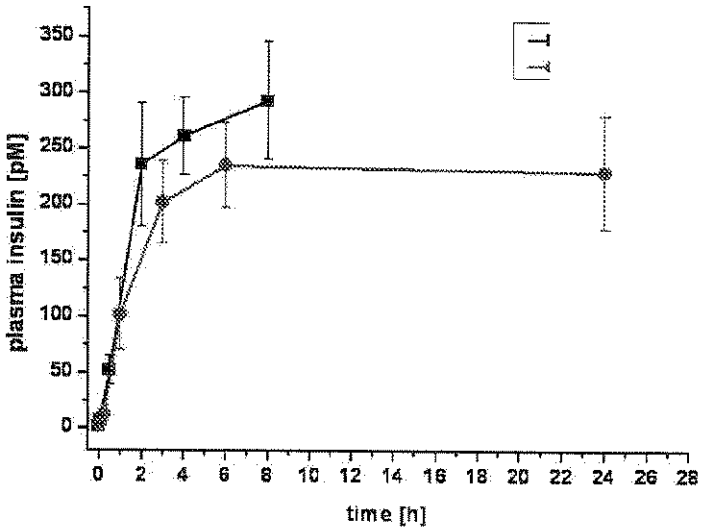

plasma insulin [pM]
time [h]
T1
T2
0
50
100
150
200
250
300
350
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28

Fig. 5

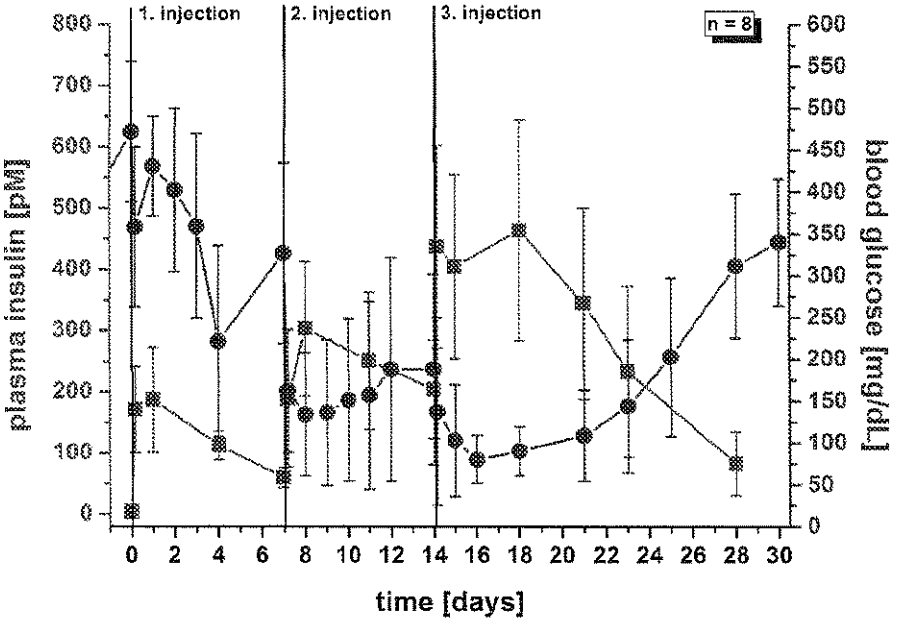

1. injection
2. injection
3. injection
n = 8
plasma insulin [pM]
blood glucose [mg/dL]
time [days]
0
100
200
300
400
500
600
700
800
0
50
100
150
200
250
300
350
400
450
500
550
600
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

Fig. 6

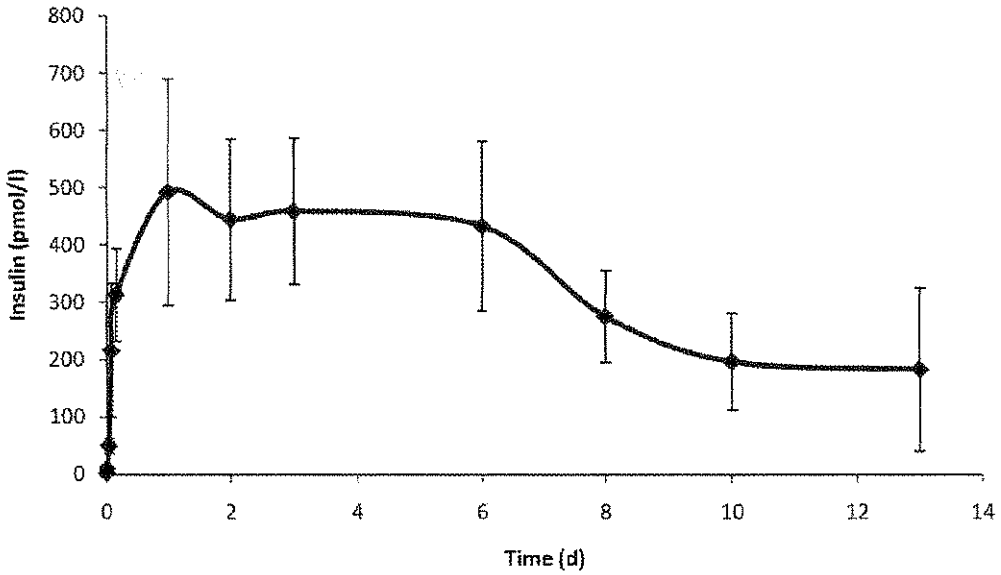

800
700
600
500
400
300
200
100
0
Insulin (pmol/l)
0
2
4
6
8
10
12
14
Time (d)

Fig.7

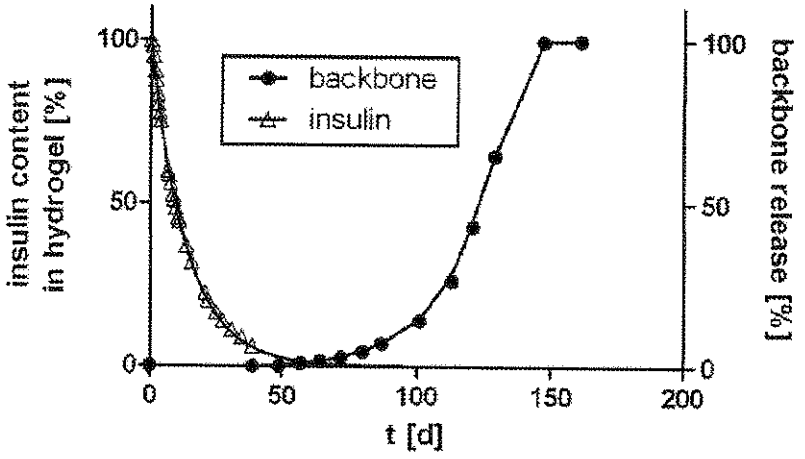

insulin content in hydrogel [%]
100
50
0
backbone
insulin
100
50
0
backbone release [%]
0
50
100
150
200
t [d]

Fig. 8

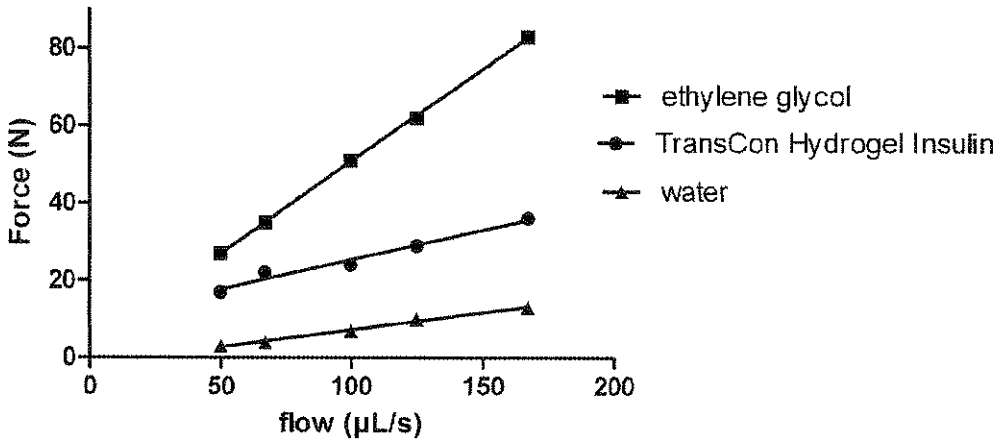

Force (N)
80
60
40
20
0
0
50
100
150
200
flow (µL/s)
ethylene glycol
TransCon Hydrogel Insulin
water

Fig. 9