**Supplements**



**Supplementary Figure 1 Insulin requirement. A)** Daily basal insulin dose at baseline, 3 and 6 months after treatment switch. **B)** Daily prandial insulin dose at baseline, 3 and 6 months after treatment switch.Graphically represented are median values and interquartile range. CI = confidence interval, \*\*\* = p-value < 0.005, \*\*\*\* = p-value < 0.0001.

**Supplementary Table 1 Adverse events.** Adverse events documented in the patient record forms and doctor letters during the observational period of six months after switching to semaglutide.

|  |  |
| --- | --- |
| **Adverse event** | **n (%)** |
| **Total patients** | 28 (36 %) |
| **Deaths****Hospitalization**gastrointestinal symptoms (1 gastritis, 1 biliary cholangitis) infections (1 pneumonia, 1 flu, 1 osteomyelitis, 1 ear infection) musculoskeletal (1 abdominal hernia, 2 traumatic accidents) psychiatric (1 depression)**Cardiovascular events**  1 myocardial infarction**Discontinuation of semaglutide** | 0 (0 %)10 (12.3 %)2 (2.4 %)4 (4.9 %)3 (3.7 %)1 (1.2 %)1 (1.2 %)3 (3.7 %) |
| **Hypoglycaemia** | 3 (3.7 %) |
| **Gastrointestinal symptoms**nausea vomitus reflux meteorism diarrhea obstipation abdominalgia | 11 (14.2 %)5 (6.4%)4 (5.2 %)1 (1.2 %)1 (1.2 %)5 (6.4 %)2 (2.4 %)2 (2.4 %) |
| **Other symptoms** fatigue asymptomatic increase of lipase musculoskeletal problems urological problems dizziness other (hyposphagma, dysphonia, atheroma) | 17 (18.5 %)3 (3.7 %)1 (1.2 %)7 (8.6 %)2 (2.4 %)1 (1.2 %)3 (3.7 %) |

**Supplementary table 2 Subgroup analyses.** Data were analyzed for sex, without concomitant SGLT2-inhibitor treatment, according to GLP-1 analogue treatment and without previous study participation or co-medication changes respectively. Data are presented as stated below apart for the exenatide-pre-treated (\*) patients due to the low number of patients. Data of these patients are presented as median and interquartile range.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **subgroup**  | **age**mean (95 CI) | **baseline**mean (95 % CI) | **6 months**mean (95 % CI) | **p-value** |
| **female (n=27)**HbA1c (%) | 62 (57-66) | 8.6 (8.1-9.2) | 7.4 (7.0-7.9) | < 0.001 |
| weight (kg) |  | 88 (82-93) | 85 (79-90) | 0.039 |
| **male (n=50)** | 64 (61-67) |  |  |  |
|  HbA1c (%) weight (kg) |  | 8.4 (8.0-8.7)108 (101-115) | 7.5 (7.1-7.9)105 (98-113) | < 0.001< 0.001 |
| **without SGLT2 inhibitor treatment (n=69)**  HbA1c (%) weight (kg)  | 63 (61-69) | 8.6 (8.3-8.9)98 (93-103) | 7.5 (7.2-7.8)95 (90-101) | < 0.001< 0.001 |
|  |  |  |  |  |
| **liraglutide-pre-treated (n=61)** | 64 (62-67) |  |  |  |
|  HbA1c (%) weight (kg) |  | 8.6 (8.3-8.9)104 (97-110) | 7.6 (7.3-7.9)101 (94-108) | < 0.001< 0.001 |
|  |  |  |  |  |
| **dulaglutide-pre-treated (n=11)** HbA1c (%) weight (kg) | 63 (57-70) | 8.1 (7.4-8.7)91 (85-98) | 7.1 (6.5-7.7)90 (82-97) | 0.0270.001 |
| **exenatide-pre-treated (n=3)** HbA1c (%) weight (kg)  | 41 (32-67)\* | 9.0 (7.4-9.3)\*100 (87-105)\* | 6.5 (6.3-7.3)\*87 (79-94)\* | 0.250.25 |
| **without co-medication changes, SGLT2 inhibitor and previous study participation (n=64)** HbA1c (%) weight (kg) | 63 (60-65) | 8.5 (8.2-8.9)100 (95-105) | 7.5 (7.2-7.9)97 (93-101) | < 0.001< 0.001 |