**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) | 0.027  0.001 |
| **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)\* | 0.25  0.25 |
| **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 |