

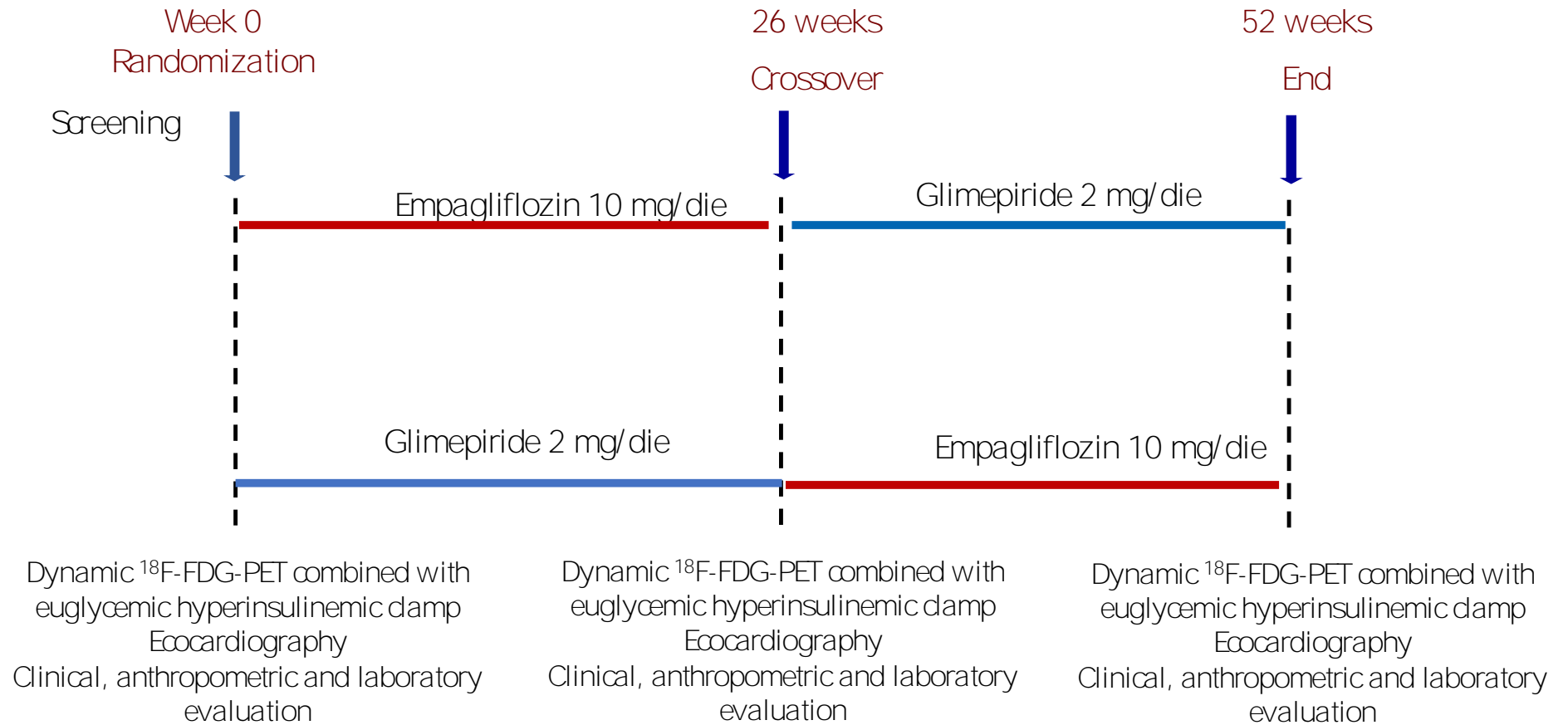
Supplemental Table S1—Changes in myocardial glucose metabolic rate, insulin sensitivity and clinical and metabolic parameters after treatment for 26 weeks after first period

| | Empagliglozin n = 12 | | | | Glimepiride n = 11 | | | | Adjusted difference between groups (95% CI) | | P value |
|--|-------------------------|--------------------------------|-------------------------|---------|-----------------------|--------------------------------|-------------------------|---------|--|-----------------|---------|
| | Before treatment | After 26 weeks treatment | Treatment difference | P value | Before treatment | After 26 weeks treatment | Treatment difference | P value | | | |
| BMI (Kg/m^2) | 30±3.4 | 28.8±4.4 | -1.05±2.01 | 0.09 | 32.7±4.6 | 32.3±4.5 | -0.39±0.7 | 0.1 | -1.008 | (-1.99, -0.02) | 0.4 |
| Waist circumference (cm) | 105±8 | 103±8 | -1.92±2.6 | 0.02 | 110±10 | 109.9±9 | -0.36±1.8 | 0.5 | -1.98 | (-3.41, -0.56) | 0.1 |
| Systolic blood pressure (mmHg) | 126±10 | 117±12 | -8.16±11 | 0.03 | 130±15 | 133.8±14 | 3.63±8.9 | 0.2 | -8.78 | (-14.9, -2.65) | 0.006 |
| Diastolic blood pressure (mmHg) | 79±10 | 77±6 | -2.16±8.7 | 0.4 | 81±12 | 84.4±11 | 3.18±11.5 | 0.3 | -2.72 | (-7.43, 1.99) | 0.06 |
| Heart Rate (bpm) | 75.4±8 | 69.5±8 | -5.9±9.5 | 0.055 | 72.3±10 | 77.7±14 | 5.27±5.02 | 0.006 | -5.71 | (-10.43, -0.99) | 0.004 |
| Fasting Glucose (mg/dL) | 155±30 | 128±22 | -24.9±18 | 0.001 | 142±19 | 124.7±15 | -20.3±24 | 0.01 | -22.8 | (-32.6, -12.97) | 0.9 |
| HbA1c (%/mmol/mol) | 7.8±1 (62±7.6) | 6.9±0.8 52±5.6 | -0.85±0.7 -5.95±4.9 | 0.001 | 7.3±0.8 (56±5.9) | 6.6±0.7 49±4.9 | -0.65±0.8 -4.55±5.6 | 0.02 | -0.74 | (-1.08, 0.40) | 0.9 |
| Fasting β-hydroxybutyrate (mmol/l) | 0.10±0 | 0.25±0.06 | 0.15±0.06 | <0.0001 | 0.10±0 | 0.104±0.01 | 0.001 ±0.001 | 0.9 | 0.15 | (0.12, 0.17) | <0.0001 |
| Insulin-stimulated glucose disposal corrected for fat-free mass and urinary glucose loss (mg/min x Kg FFM) | 3.65±2.4 | 6.18±3.8 | 2.53±4.1 | 0.07 | 4.08±2.5 | 3.36±1.7 | -0.7±2.4 | 0.3 | 2.38 | (0.50, 4.25) | 0.03 |

| | | | | | | | | | | | |
|--|--------------|-------------|-----------------|-------|---------------|---------------|----------------|-----|-------|----------------|-------|
| Myocardial MrGlu ($\mu\text{mol}/\text{min}/100\text{g}$) | 14.7 \pm 8 | 8.4 \pm 6 | -6.36 \pm 6.2 | 0.007 | 13.5 \pm 12 | 15.4 \pm 10 | 1.99 \pm 5.8 | 0.3 | -6.19 | (-9.62, -2.75) | 0.003 |
|--|--------------|-------------|-----------------|-------|---------------|---------------|----------------|-----|-------|----------------|-------|

Data are means \pm SD, unless otherwise indicated and analyzed using ANCOVA adjusting for baseline. BMI=Body Mass Index. MrGlu: glucose metabolic rate

Supplemental Figure S1: Study design



Supplemental Figure S2: Flowchart of the study participants

