

SUPPLEMENTAL MATERIAL

Supplementary Table 1: Steady-State Insulin, Glucose Infusion Rate and M/I

| Variables | Baseline | | 3 months | |
|---|----------------|---------------|---------------|---------------|
| | Placebo | Metformin | Placebo | Metformin |
| Steady-State Insulin (uIU/uL) | 171.3±62.9 | 192.9±93.6 | 224.9±159.3 | 175.5±71.3 |
| GIR (mg/kg/min) | 7.5±3.7 | 7.7±3.7 | 9.0±5.3 | 8.0±3.5 |
| GIR (mg/lean kg/min) | 11.2±4.9 | 11.8±4.8 | 13.4±6.9 | 12.3±4.9 |
| M/I (mg/kg/min)/uIU/uL | 3.9 (2.1-8.5) | 3.5 (2.4-6.3) | 3.6 (2.9-5.2) | 4.5 (3.1-6.0) |
| M/I Lean (mg/lean kg/min)/uIU/uL | 6.2 (3.6-10.9) | 6.0 (3.8-8.7) | 5.7 (4.4-7.6) | 6.8 (5.4-8.7) |

Data are presented as mean ± SD, or median (p25, p75) as appropriate

GIR = glucose infusion rate, M = steady-state glucose infusion rate, I = steady-state insulin

Supplementary Table 2: The Effects of Metformin on Change in Glycemia, Blood Pressure and Lipids

| Variables | Metformin | Placebo | Metformin vs. Placebo |
|-------------------|------------------|------------------|-----------------------|
| | LSM±SE | LSM±SE | P-value |
| ΔHbA1c (mmol/mol) | -0.01±0.22 | 0.02±0.23 | 0.91 |
| ΔSBP (mm Hg) | -0.7±1.7 | -1.7±1.8 | 0.69 |
| ΔDBP (mm Hg) | -2.2±1.4 | -0.2±1.5 | 0.33 |
| ΔTotal-C (mmol/L) | -0.1036±0.09842 | 0.06475±0.10878 | 0.26 |
| ΔLDL-C (mmol/L) | -0.27972±0.13986 | -0.17612±0.14763 | 0.62 |
| ΔHDL-C (mmol/L) | 0.01036±0.03885 | 0.00259±0.04144 | 0.88 |
| ΔTG (mmol/L) | 0.06±0.07 | 0.092±0.063 | 0.74 |

Delta (Δ) value = 3-month value – baseline value.

Results are adjusted for baseline values

SBP = systolic blood pressure, DBP = diastolic blood pressure, Total-C = total cholesterol, LDL-C = low-density lipoprotein cholesterol, HDL-C = high-density lipoprotein cholesterol, TG = triglycerides

Data are presented as least square means (LSM) and standard errors (SE) from generalized linear regression models