

## SUPPLEMENTARY DATA

**Supplementary Table 1. Time domain parameters of heart rate variability during hypoglycemia and euglycemia**

Data are Mean $\pm$ SD. EU – euglycemia; HYPO – hypoglycemia; SDNN – standard deviation of NN; RMSSD – root mean square of successive differences in NN

**DM**

|                   | Time<br>(min) | 0               | 30              | 60              | 90              | 120             |
|-------------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>SDNN (ms)</b>  | <b>EU</b>     | 33.0 $\pm$ 12.5 | 29.1 $\pm$ 12.6 | 29.1 $\pm$ 13.0 | 29.4 $\pm$ 14.5 | 29.2 $\pm$ 12.9 |
|                   | <b>HYPO</b>   | 31.0 $\pm$ 14.9 | 33.9 $\pm$ 16.8 | 30.3 $\pm$ 14.7 | 34.0 $\pm$ 18.1 | 40.4 $\pm$ 26.9 |
| <b>RMSSD (ms)</b> | <b>EU</b>     | 18.6 $\pm$ 9.7  | 15.6 $\pm$ 8.2  | 15.6 $\pm$ 6.9  | 17.7 $\pm$ 11.4 | 16.8 $\pm$ 7.7  |
|                   | <b>HYPO</b>   | 20.0 $\pm$ 13.0 | 19.6 $\pm$ 14.2 | 15.0 $\pm$ 8.2  | 16.2 $\pm$ 13.4 | 22.9 $\pm$ 22.2 |

**nonDM**

|                   | Time<br>(min) | 0               | 30              | 60              | 90              | 120             |
|-------------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>SDNN (ms)</b>  | <b>EU</b>     | 48.7 $\pm$ 19.7 | 61.8 $\pm$ 27.7 | 53.2 $\pm$ 19.1 | 53.7 $\pm$ 10.8 | 59.3 $\pm$ 23.4 |
|                   | <b>HYPO</b>   | 55.9 $\pm$ 26.7 | 57.6 $\pm$ 16.2 | 47.1 $\pm$ 17.4 | 51.0 $\pm$ 19.7 | 59.2 $\pm$ 40.4 |
| <b>RMSSD (ms)</b> | <b>EU</b>     | 30.6 $\pm$ 18.2 | 33.3 $\pm$ 16.0 | 32.0 $\pm$ 15.8 | 28.9 $\pm$ 10.8 | 30.9 $\pm$ 12.4 |
|                   | <b>HYPO</b>   | 35.0 $\pm$ 18.9 | 34.1 $\pm$ 17.3 | 28.7 $\pm$ 17.4 | 33.7 $\pm$ 21.2 | 36.0 $\pm$ 36.2 |

## SUPPLEMENTARY DATA

**Supplementary Table 2. Respiratory frequencies during heart rate variability recordings**

Respiratory frequencies (Hz) Mean $\pm$ SD during euglycemic and hypoglycemic clamp studies in diabetic (DM) and nondiabetic (nonDM) groups

| Time (min)   |             | 0               | 30              | 60              | 90              | 120             |
|--------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>DM</b>    | <b>EU</b>   | 0.25 $\pm$ 0.05 | 0.27 $\pm$ 0.07 | 0.26 $\pm$ 0.05 | 0.29 $\pm$ 0.06 | 0.24 $\pm$ 0.05 |
|              | <b>HYPO</b> | 0.25 $\pm$ 0.06 | 0.25 $\pm$ 0.07 | 0.26 $\pm$ 0.08 | 0.31 $\pm$ 0.06 | 0.29 $\pm$ 0.05 |
| <b>NonDM</b> | <b>EU</b>   | 0.24 $\pm$ 0.03 | 0.25 $\pm$ 0.05 | 0.24 $\pm$ 0.04 | 0.26 $\pm$ 0.05 | 0.26 $\pm$ 0.07 |
|              | <b>HYPO</b> | 0.24 $\pm$ 0.04 | 0.26 $\pm$ 0.04 | 0.27 $\pm$ 0.06 | 0.30 $\pm$ 0.08 | 0.27 $\pm$ 0.08 |