

Supplementary material

Reduced insulin clearance differently relates to increased liver lipid content and worse glycemic control in recent-onset type 2 and type 1 diabetes mellitus

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Supplementary Table 1. Antihypertensive, lipid-lowering and glucose-lowering medication of the study population comprising glucose tolerant people (CON) and people with type 1 (T1D) or type diabetes (T2D).

Variable	CON	T1D	T2D
Antihypertensive drugs	15 (0.7%)	26 (3%)	237 (16%)
Lipid-lowering drugs	2 (9%)	8 (9%)	85 (48%)
Glucose-lowering drugs			
Insulin	0 (0%)	261 (86%)	35 (6%)
Metformin	0 (0%)	32 (10%)	264 (54%)
Sulfonylureas	0 (0%)	2 (0.6%)	13 (3%)
GLP-1 receptor agonists	0 (0%)	0 (0%)	0 (0%)
DPP4 inhibitors	0 (0%)	1(0.3%)	30 (6%)
SGLT2 inhibitors	0 (0%)	0 (0%)	1 (0.2%)

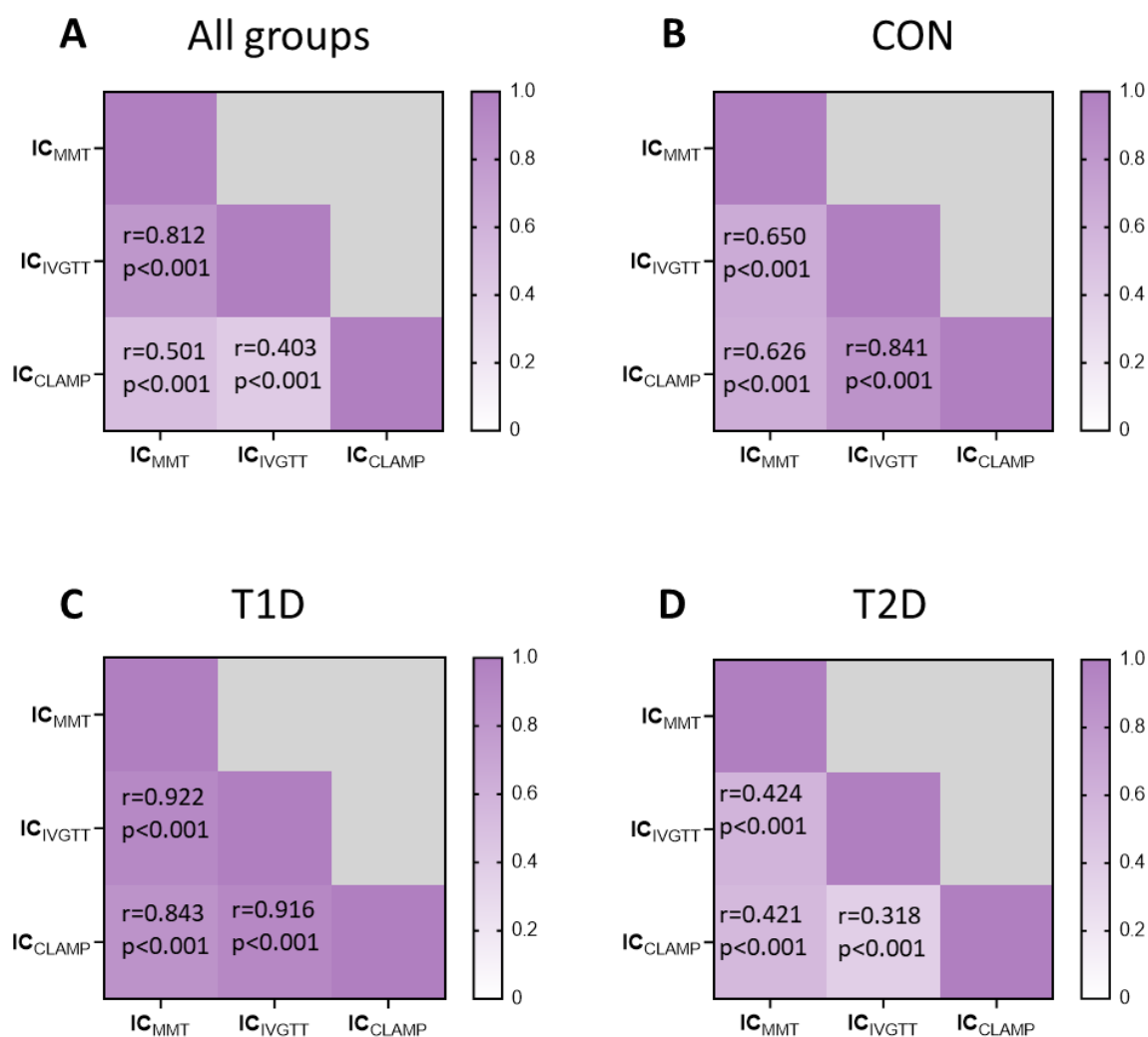
Data is given as n (%). Percentages refer to the number of participants with recorded data from each group.

Abbreviations: DPP4, Dipeptidyl-peptidase 4; GLP-1, Glucagon-like peptide-1; SGLT2, Sodium-glucose co-transporter 2;

Supplementary Figure 1. Correlations between different measures of insulin clearance

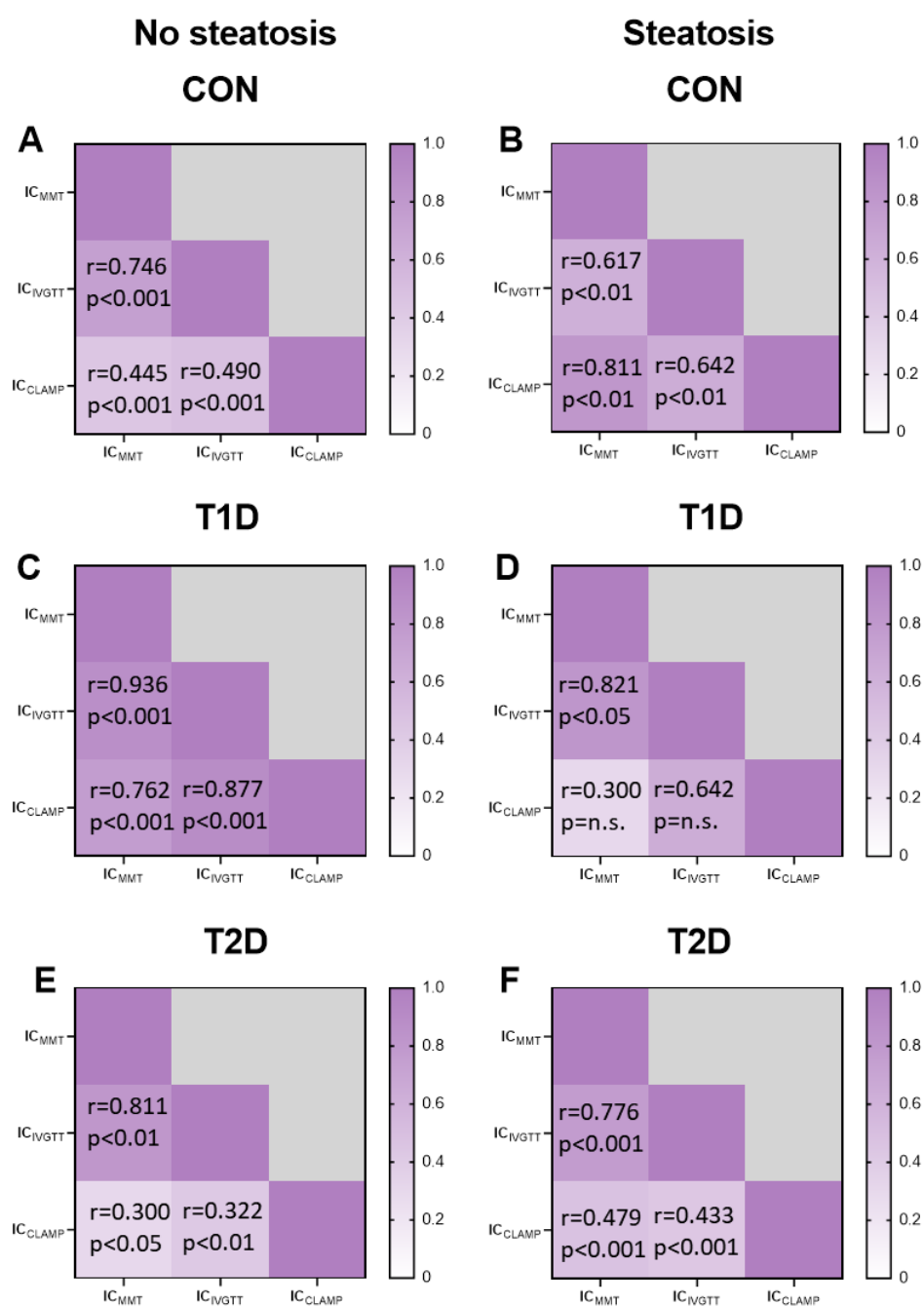
Heat map showing the correlation between insulin clearance derived from hyperinsulinemic-euglycemic clamp (IC_{CLAMP}), insulin clearance derived from intravenous glucose tolerance test (IC_{IVGTT}) and insulin clearance derived from mixed meal test (IC_{MMT}) in the study cohort (A) as well as group-specific for persons without diabetes (CON) (B), type 1 diabetes (T1D) (C) and type 2 diabetes (T2D) (D).

The scale 0-1 reflects the strength of the correlation (correlation coefficient r).



Supplementary Figure 2. Correlations between different measures of insulin clearance stratified by diabetes type and the presence of steatosis

Heat map showing the correlation between insulin clearance derived from hyperinsulinemic-euglycemic clamp (IC_{CLAMP}), insulin clearance derived from intravenous glucose tolerance test (IC_{IVGTT}) and insulin clearance derived from mixed meal test (IC_{MMT}) for persons without diabetes (CON) (A, B), type 1 diabetes (T1D) (C, D) and type 2 diabetes (T2D) (E, F) with and without steatosis. The scale 0-1 reflects the strength of the correlation (correlation coefficient r).



Supplementary Figure 3. Correlation between insulin clearance and metabolic parameters

Associations between insulin clearance derived from hyperinsulinemic-euglycemic clamp test (IC_{CLAMP}) insulin clearance derived from intravenous glucose tolerance test (IC_{IVGTT}) and insulin clearance derived from mixed meal test (IC_{MMT}) with metabolic parameters [hepatocellular lipids (HCL), (A, D, G); glycemic control (HbA1c) (B, E, H); whole-body insulin sensitivity (M-value) (D, F, I)] in persons without diabetes (CON), type 1 diabetes (T1D) and type 2 diabetes (T2D). Statistically significant correlations are depicted with linear regression lines and the respective correlation coefficients (r).

