

ONLINE-ONLY SUPPLEMENTARY MATERIAL

Supplementary Table 1. 24-hour Holter-monitoring data of patients with type 2 diabetes mellitus, stratified by presence or absence of MAFLD.

	Patients without MAFLD (n=129)	Patients with MAFLD (n=238)	P values
Heart rate (bpm)	70±12	72±11	0.296
Hourly APC count (n)	2 (0-11)	2 (0-14)	0.154
APCs >30 per hour (%)	13.9	19.9	0.230
Paroxysmal AF (%)	1.6	6.3	0.039
PSVT (%)	38.8	51.7	0.018
Hourly PVC count (n)	2 (0-17)	2 (0-21)	0.408
Ventricular tachyarrhythmias (%)*	20.2	31.9	0.016
PVCs >30 per hour (%)	15.5	23.2	0.054
Non-sustained VT (%)	3.1	15.1	<0.001

Sample size, $n=367$. Data are expressed as means \pm SD, medians and IQR (in parenthesis) or percentages. Differences between the two patient groups were tested by the unpaired Student's t test for normally distributed variables, the Mann-Whitney test for non-normally distributed variables, or the chi-squared test for categorical variables. *Ventricular tachyarrhythmias were defined as presence of non-sustained VT, >30 PVCs per hour, or both.

Abbreviations: AF: atrial fibrillation; APCs: atrial premature complexes; PVCs: premature ventricular complexes; PSVT: paroxysmal supraventricular tachycardia; VT: ventricular tachyarrhythmia.

Supplementary Table 2. Clinical and biochemical characteristics of patients with type 2 diabetes mellitus, stratified by presence or absence of paroxysmal supraventricular tachycardia (PSVT).

	Patients without PSVT (n=194)	Patients with PSVT (n=173)	P values
Age (years)	70±10	73±9	0.004
Men (%)	57.2	61.3	0.430
BMI (kg/m ²)	29.0±5.2	29.8±7.4	0.270
Obesity (%)	38.8	51.7	0.018
Diabetes duration (years)	10 (4-18)	11 (4-20)	0.363
Current smokers (%)	8.3	10.4	0.477
Systolic blood pressure (mmHg)	133±17	137±18	0.025
Diastolic blood pressure (mmHg)	77±10	76±9	0.131
Platelet count (x 100,000/mm ³)	240±81	229±60	0.163
Fasting glucose (mg/dL)	137±44	137±42	0.977
Hemoglobin A1c (%)	7.3±1.4	7.3±1.6	0.609
Total cholesterol (mg/dL)	147±41	152±37	0.187
LDL-cholesterol (mg/dL)	73±35	76±29	0.404
HDL-cholesterol (mg/dL)	47±13	50±17	0.028
Triglycerides (mg/dL)	121 (88-154)	120 (84-164)	0.888
AST (IU/L)	21 (16-26)	19 (15-25)	0.130
ALT (IU/L)	22 (16-32)	23 (17-30)	0.729
GGT (IU/L)	27 (16-48)	26 (16-47)	0.932
Creatinine (mg/dL)	1.1±0.5	1.1±0.5	0.572
e-GFR _{CKD-EPI} (mL/min/1.73 m ²)	66±25	67±23	0.949
Sodium (mmol/L)	140±3	140±3	0.917
Potassium (mmol/L)	4.2±0.4	4.2±0.5	0.410
Hypertension (%)	88.6	88.4	0.961
Ischemic heart disease (%)	41.2	33.1	0.110
Valvular heart disease (%)	16.0	11.2	0.189
CKD (%)	50.5	53.2	0.610
Abnormal albuminuria (%)	28.0	33.5	0.391
COPD (%)	38.8	51.7	0.018
Insulin therapy (%)	35.8	32.8	0.547
Metformin (%)	61.3	49.7	0.025
Sulphonylureas (%)	26.3	21.4	0.272
Pioglitazone (%)	2.6	2.9	0.854
DPP-4 inhibitors (%)	13.9	18.5	0.233
GLP-1 receptor agonists (%)	9.8	6.4	0.230
SGLT-2 inhibitors (%)	7.7	3.5	0.079
Anti-platelet drugs (%)	57.2	65.9	0.088
Beta-blockers (%)	52.6	46.3	0.226
ARB/ACE-inhibitors (%)	68.6	74.6	0.203
Calcium-channel blockers (%)	19.6	25.4	0.180
Diuretics (%)	59.8	48.6	0.031
Statins (%)	75.3	71.1	0.369
Antiarrhythmic agents (%)	8.3	9.8	0.598
LV ejection fraction (%) on echocardiography (n=244)	52±12	56±11	0.011
MAFLD (%)	59.3	71.1	0.018
MAFLD severity			
No MAFLD (%)	40.7	28.9	0.046
MAFLD and FIB-4 <1.3 (%)	35.6	39.3	
MAFLD and FIB-4 ≥1.3 (%)	23.7	31.8	

Sample size, n=367, except where indicated. Data are expressed as means ± SD, medians and IQR (in parenthesis) or percentages. Differences between the two patient groups were tested by using the unpaired Student's t test for normally distributed variables, the Mann-Whitney test for non-normally distributed variables (such as diabetes duration, serum triglycerides and liver enzymes), or the chi-squared test for categorical variables.

Abbreviations: ACE: angiotensin-converting-enzyme; ALT: alanine aminotransferase; ARB: angiotensin II receptor blocker; AST: aspartate aminotransferase; BMI: body mass index; CKD: chronic kidney disease; COPD: chronic obstructive pulmonary disease; DPP-4: dipeptidyl peptidase-4; e-GFR: estimated glomerular filtration rate; GGT: gamma-glutamyltransferase; GLP-1: glucagon-like peptide-1; LV: left ventricular; MAFLD: metabolic dysfunction-associated fatty liver disease; SGLT-2: sodium/glucose cotransporter-2.

Supplementary Table 3. Clinical and biochemical characteristics of patients with type 2 diabetes mellitus, stratified by presence or absence of ventricular tachyarrhythmias (defined as presence of non-sustained VT, >30 PVCs per hour, or both).

	Patients without ventricular tachyarrhythmias (n=265)	Patients with ventricular tachyarrhythmias (n=102)	P values
Age (years)	71±10	72±9	0.286
Men (%)	52.1	77.5	<0.001
BMI (kg/m ²)	29.1±6.8	30.0±4.8	0.265
Obesity (%)	43.0	50.0	0.228
Diabetes duration (years)	10 (4-18)	11 (4-20)	0.581
Current smokers (%)	9.1	9.8	0.825
Systolic blood pressure (mmHg)	135±18	134±18	0.436
Diastolic blood pressure (mmHg)	76±10	76±10	0.885
Platelet count (x 100,000/mm ³)	235±75	231±65	0.647
Fasting glucose (mg/dL)	138±44	136±40	0.711
Hemoglobin A1c (%)	7.3±1.5	7.4±1.6	0.759
Total cholesterol (mg/dL)	152±41	142±35	0.042
LDL-cholesterol (mg/dL)	76±33	70±30	0.160
HDL-cholesterol (mg/dL)	49±14	47±14	0.235
Triglycerides (mg/dL)	121 (87-159)	116 (89-151)	0.766
AST (IU/L)	20 (16-26)	20 (16-24)	0.745
ALT (IU/L)	22 (16-31)	23 (16-28)	0.959
GGT (IU/L)	26 (16-48)	27 (16-48)	0.784
Creatinine (mg/dL)	1.1±0.5	1.2±0.6	0.020
e-GFR _{CKD-EPI} (mL/min/1.73 m ²)	68±23	64±25	0.197
Na (mmol/L)	139±3	140±3	0.288
K (mmol/L)	4.1±0.5	4.2±0.5	0.429
Hypertension (%)	87.9	90.1	0.560
Ischemic heart disease (%)	34.7	44.6	0.082
Valvular heart disease (%)	11.7	18.8	0.077
CKD (%)	48.3	60.8	0.032
Abnormal albuminuria (%)	27.7	38.9	0.805
COPD (%)	20.2	31.9	0.016
Insulin therapy (%)	33.1	37.6	0.414
Metformin (%)	56.6	53.9	0.643
Sulphonylureas (%)	21.5	30.4	0.060
Pioglitazone (%)	3.8	0.0	0.049
DPP-4 inhibitors (%)	14.7	19.6	0.253
GLP-1 receptor agonists (%)	8.3	7.8	0.886
SGLT-2 inhibitors (%)	4.9	7.8	0.278
Anti-platelet drugs (%)	58.5	68.6	0.074
Beta-blockers (%)	47.6	54.9	0.207
ARB/ACE-inhibitors (%)	72.1	69.6	0.639
Calcium-channel blockers (%)	22.3	22.6	0.953
Diuretics (%)	51.7	61.8	0.083
Statins (%)	73.6	72.6	0.841
Antiarrhythmic drugs (%)	8.3	10.8	0.456
LV ejection fraction (%) (n=244)	55±12	52±13	0.043
MAFLD (%)	61.1	74.5	0.016
MAFLD severity			
No MAFLD (%)	38.9	25.5	0.021
MAFLD and FIB-4 <1.3 (%)	36.9	38.2	
MAFLD and FIB-4 ≥1.3 (%)	24.1	36.3	

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