

Supplementary file – Hösli et al.

**Assessing the use of sodium-glucose cotransporter 2 inhibitor in patients with  
type 2 diabetes mellitus and chronic kidney disease in tertiary care  
- a SwissDiab study**

**Supplementary Material**

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**Table S1.** Univariate associations between patient characteristics and treatment with SGLT2 inhibitor.

Characteristic	SGLT2i		
	OR	95% CI	P
Age, yrs	0.97	(0.94, 1.00)	0.05
Female sex	1.00	(0.48, 2.09)	1
Diabetes duration, yrs	0.97	(0.94, 1.01)	0.15
Current smoker	1.33	(0.58, 3.05)	0.50
HbA1c, % <sup>a</sup>	1.19	(0.89, 1.60)	0.24
BMI, kg/m <sup>2</sup>	0.98	(0.92, 1.05)	0.56
BMI >28 kg/m <sup>2</sup>	0.54	(0.26, 1.12)	0.10
Hypertension <sup>b</sup>	0.96	(0.17, 5.43)	0.97
SBP, mmHg	0.99	(0.97, 1.01)	0.28
DBP, mmHg	0.99	(0.96, 1.04)	0.79
eGFR, ml/min/1.73 m <sup>2</sup>	1.02	(1.01, 1.03)	0.006
ACR, mg/mmol <sup>c</sup>	1.00	(1.00, 1.01)	0.35
Blood lipids, mmol/L			
Total cholesterol <sup>d</sup>	1.16	(0.89, 1.53)	0.28
Triglycerides	1.09	(0.87, 1.37)	0.44
HDL-cholesterol <sup>d</sup>	0.46	(0.16, 1.37)	0.16
LDL-cholesterol <sup>d</sup>	1.40	(0.97, 2.02)	0.07
Retinopathy <sup>d</sup>	0.51	(0.20, 1.25)	0.14
Neuropathy	0.60	(0.30, 1.20)	0.15
CVD	0.86	(0.45, 1.64)	0.65
CKD definition			0.08*
Both	ref		
Reduced eGFR	0.56	(0.22, 1.40)	0.21
Persistent albuminuria	1.50	(0.72, 3.11)	0.28
KDIGO risk stratification			0.22*
Moderately increased	ref		
High	0.80	(0.38, 1.71)	0.57
Very high	0.47	(0.20, 1.10)	0.08
Medication			
Insulin	4.22	(1.67, 10.70)	0.002
Metformin	3.13	(1.44, 6.82)	0.004
Classic OADs	2.81	(1.21, 6.54)	0.02
Antihypertensives	0.96	(0.17, 5.43)	0.97
RAASi	1.93	(0.61, 6.11)	0.26

Data are odds ratios (OR) with 95% confidence interval (CI) in brackets from univariate logistic regression analysis; ACR, albumin creatinine ratio; BMI, body mass index; CKD, chronic kidney disease; CVD, cardiovascular disease; DBP, diastolic blood pressure; eGFR, estimated glomerular filtration rate; GLP-1 RA, glucagon-like peptide-1 receptor agonist; HbA1c, Hemoglobin A1c; HDL, high-density lipoprotein; KDIGO, Kidney Disease Improving Global Outcomes; LDL, low-density lipoprotein; OAD, oral antidiabetic drugs (sulfonylurea, biguanides, alpha-glucosidase inhibitors and dipeptidyl peptidase-4 inhibitors); RAASi, renin-angiotensin-aldosterone system inhibitors; RPADM, renoprotective antidiabetic medication; SBP, systolic blood pressure; SGLT2i, sodium-glucose cotransporter 2 inhibitor. <sup>a</sup> Information missing for two patients, <sup>b</sup> Defined by either systolic blood pressure >140 mmHg and diastolic blood pressure >90 mmHg and/or treated with antihypertensive medications, <sup>c</sup> Information missing for 23 patients, <sup>d</sup> Information missing for one patient, <sup>e</sup> Wald Chi-Squared test (2 df).

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				Persistent albuminuria categories		
				A1	A2	A3
				Normal to mildly increased (<3 mg/mmol)	Moderately increased (3-30 mg/mmol)	Severely increased (>30 mg/mmol)
eGFR categories (ml/min/1.73 m <sup>3</sup> )	G1	Normal or high	≥90	na na	22 (12.8%) 9 (40.9%)	3 (1.7%) 1 (33.3%)
	G2	Mildly decreased	60-89	na na	38 (22.1%) 14 (36.8%)	8 (4.7%) 5 (62.5%)
	G3a	Mildly to moderately decreased	45-59	25 (14.5%) 9 (36.0%)	22 (12.8%) 9 (40.9%)	7 (4.1%) 2 (28.6%)
	G3b	Moderately to severely decreased	30-44	13 (7.6%) 0	10 (5.8%) 4 (40.0%)	9 (5.2%) 3 (33.3%)
	G4	Severely decreased	15-29	3 (1.7%) 0	5 (2.9%) 0	2 (1.2%) 0
	G5	Kidney failure	<15	3 (1.7%) 0	1 (0.6%) 0	1 (0.6%) 0

**Figure S1.** SGLT2i treatment by risk of disease progression in accordance with the KDIGO categorization [1] among the 172 patients with type 2 diabetes mellitus and chronic kidney disease. Upper left corner = the number of patients (%) in each category. Lower right corner = the number of patients (%) in each category prescribed SGLT2i. Green, low risk; yellow, moderately increased risk; orange, high risk; red, very high risk of disease progression. eGFR, estimated glomerular filtration rate; SGLT2i, sodium-glucose cotransporter 2 inhibitor.

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**References**

1. Kidney Disease: Improving Global Outcomes (KDIGO) CKD Work Group. KDIGO 2012 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease. *Kidney inter., Suppl.* 2013; 3: 1-150.