

SUPPLEMENTARY DATA

**Supplementary Table S1. Characteristics of cohort of patients with diabetes mellitus in the Mount Sinai Health System and Geisinger Replication Cohort, by SLGT-2 inhibitor use, prior to propensity matching.**

	Mount Sinai Cohort			Geisinger Cohort		
	User n = 388	Non-User n = 12316	P1	User n = 2560	Non User n = 53603	P2
<b>Demographics</b>						
Age	63.0 [55.0 – 70.0]	69.0 [61.0 – 77.0]	<0.001	58.0 (50.0-65.0)	63.0 (53.0-73.0)	<0.001
Male	219 (54.8)	6397 (51.9)	0.02	1406 (54.9)	26973 (50.3)	<0.001
<b>Race</b>			<0.001			0.14
White	170 (42.5)	3418 (27.8)		2459 (96.1)	51041 (95.2)	
Black	71 (17.8)	3679 (29.9)		66 (2.6)	1737 (3.2)	
Other	159 (39.8)	5211 (42.3)		35 (1.4)	825 (1.5)	
<b>Comorbidities</b>						
Smoker (ever)	40 (10.0)	3101 (34.9)	<0.001	1348 (52.7)	29818 (55.9)	<0.001
Heart Failure	63 (15.8)	3361 (27.3)	<0.001	98 (3.8)	1797 (3.4)	0.19
Coronary Artery Disease	138 (34.5)	5028 (40.8)	0.02	394 (15.4)	5589 (10.4)	<0.001
Hypertension	362 (90.5)	11342 (92.1)	0.21	1434 (56.0)	29598 (55.2)	0.48
Stroke	23 (5.8)	1470 (11.9)	<0.001	64 (2.5)	1113 (2.0)	0.14
<b>Vital Signs</b>						
Body Mass Index in kg/m <sup>2</sup>	31.7 [28.1 - 36.8]	29.7 [26.1 - 34.3]	<0.001	35.0 (30.6-40.3)	32.9 (28.7-38.2)	<0.001
Systolic Blood Pressure in mm of Hg	131.0 [123.3 – 141.6]	134.0 [125.0 – 143.7]	<0.001	128.0 (119.0-138.0)	128.0 (120.0-140.0)	0.02
Diastolic Blood Pressure in mm of Hg	74.8 [70.0 – 80.0]	72.2 [67.7 - 77.2]	<0.001	74.0 (68.0-80.0)	74.0 (68.0-80.0)	0.005
<b>Lab Values</b>						
Hemoglobin A1C in gm%	8.0 [7.3 - 9.0]	7.1 (6.4 - 8.2)	<0.001	8.2 (7.4-9.3)	6.8 (6.2-7.7)	<0.001
Total cholesterol in mg/dL	161.0 [141.0 - 187.5]	163.5 [139.2 – 191.3]	0.78	164.0 (141.0-194.0)	173.0 (148.0-204.0)	<0.001
Hemoglobin in gm/dL	13.2 (12.1 – 14.2)	12.1 (10.7 – 13.3)	<0.001	14.0 (12.9-15.1)	13.6 (12.5-14.8)	<0.001

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Estimated Glomerular Filtration Rate in ml/min/1.73 m <sup>2</sup>	63.7 [52.5 - 78.3]	54.6 [39.6 - 68.9]	<0.001	90.3 (72.6 - 102.0)	79.8 (60.0- 95.4)	<0.001
<b>Medications</b>						
Metformin	356 (89.0)	7388 (60.0)	<0.001	2149 (83.9)	11972 (22.3)	<0.001
Insulin	270 (67.5)	8234 (66.9)	0.24	719 (28.1)	3082 (5.7)	<0.001
Renin Angiotensin System Blockers	157 (39.3)	9343 (75.9)	0.83	1631 (63.7)	14579 (27.2)	<0.001
Other Anti-Hypertensive	345 (86.3)	11515 (93.5)	<0.001	1946 (76.0)	15814 (29.5)	<0.001
Diuretics	165 (41.3)	7462 (60.6)	<0.001	795 (31.1)	7269 (13.5)	<0.001
Non-Steroidal Anti Inflammatory Drugs	4 (1.0)	281 (2.3)	0.07	816 (31.9)	5996 (11.2)	<0.001
<b>Outcomes</b>						
AKI <sub>ICD</sub>	22 (5.5)	2462 (20.0)	<0.001	50 (2.0)	4678 (8.7)	<0.001
AKI <sub>KDIGO</sub> <sup>2</sup>	20 (5.2)	1304 (10.6)	0.001	82 (3.2)	6892 (12.9)	<0.001
Follow-Up in Days <sup>3</sup>	545.5 [336.5 – 778.5]	1248.0 [861.0 - 1385.0]	<0.001	454.0 (221.0- 688.0)	1501.0 (846.0- 1501.0)	<0.001

Continuous variables are recorded as median (IQR). Categorical variables are recorded as n (%).

P1 and P2 are P-values for primary and secondary analyses, respectively.

eGFR in (mL/min per 1.73m<sup>2</sup>) calculated by CKD-EPI equation.

Definitions:

1. AKI by ICD9/10 codes: codes 584.XX and ICD10 code N17.9.
2. AKI by KDIGO laboratory algorithm: increase in serum creatinine by  $\geq 0.3$  mg/dL within 48 hours, increase in serum creatinine to  $\geq 1.5$  times baseline known or presumed to have happened in prior 7 days.
3. In Geisinger, baseline was defined as outpatient mean serum creatinine, within a year to 7 days before admission when available, or the inpatient value within the prior 7 days. Follow-up in days defined as:
  - Users: Time from start of SGLT2 inhibitor prescription to last outpatient encounter
  - Non-users: Time from first outpatient visit occurring between 2013-2015 to last outpatient visit in 2016.
  - In Geisinger, Users: Time from start of SGLT2 inhibitor prescription to the first of event date or last observed date (Feb 10 2017) in our data.
  - Non-users: Start time is the date of first creatinine measure after 2013. End date as for users.