Henry Ford Health

Henry Ford Health Scholarly Commons

Nephrology Meeting Abstracts

Nephrology

2-1-2022

POS-255 EFFECT OF DAPAGLIFLOZIN ON BLOOD PRESSURE IN PATIENTS WITH CKD: A PRE-SPECIFIED ANALYSIS FROM DAPA-CKD

M. Provenzano

R. D. Toto

P. Vart

Kausik Umanath Henry Ford Health, KUMANAT1@hfhs.org

J. Luis Górriz

See next page for additional authors

Follow this and additional works at: https://scholarlycommons.henryford.com/nephrology_mtgabstracts

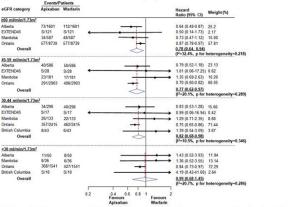
Recommended Citation

Provenzano M, Toto RD, Vart P, Umanath K, Luis Górriz J, Mark PB, Mann JFE, Chertow GM, McMurray JJV, Correa-Rotter R, Rossing P, Langkilde AM, Stefánsson BV, Wheeler DC, and Lambers Heerspink H. POS-255 EFFECT OF DAPAGLIFLOZIN ON BLOOD PRESSURE IN PATIENTS WITH CKD: A PRE-SPECIFIED ANALYSIS FROM DAPA-CKD. Kidney Int Rep 2022; 7(2):S112.

This Conference Proceeding is brought to you for free and open access by the Nephrology at Henry Ford Health Scholarly Commons. It has been accepted for inclusion in Nephrology Meeting Abstracts by an authorized administrator of Henry Ford Health Scholarly Commons.

Authors M. Provenzano, R. D. Toto, P. Vart, Kausik Umanath, J. Luis Górriz, P. B. Mark, J. F. E. Mann, G. M. Chertow, J. J. V. McMurray, R. Correa-Rotter, P Rossing, A. M. Langkilde, B. V. Stefánsson, D. C. Wheeler, and H. Lambers Heerspink						
This conference was sading in specific by the set Harmy Found Harlet Cabalanty Commences						

Figure 1: HRs (95% CIs) for the ischemic outcome (composite of ischemic stroke, TIA and all-cause mortality)



*Within each eGFR category, warfarin initiation was considered as the reference category in estimating the hazard ratios and their 95% CIs; S=the number of outcome events were <5 and cells were suppressed

Figure 2: HRs (95% CIs) for the bleeding outcome (composite of intracranial, upper or lower gastrointestinal and other bleeding)

	Events/Patients						
eGFR category	Apixaban	Warfarin				Hazard Ratio (95% CI)	Weight (%)
≥60 ml/min/1.73m		5.50.000					
Alberta	12/1601	27/1601	_			0.44 (0.22-0.87)	11.60
Manitoba	8/587	16/587	_	•	_	0.51 (0.22-1.16)	8.09
Ontario	94/8739	164/8739		-		0.57 (0.44-0.74)	80.31
Overall				\diamond		0.55 (0.43, 0.69) (12-0.0%, p for he	eterogeneity=0,769)
45-59 ml/min/1.73	m²						
Alberta	12/586	10/586		- t	+	1.19 (0.51-2.77)	15.56
Manitoba	S/181	S/181	4	-	→	0.49 (0.09-2.71)	3.86
Ontario	48/2903	70/2903				0.68 (0.47-0.99)	80.59
Overall						0.73 (0.52-1.02) (12=0.0%, p for he	eterogeneity=0.449)
30-44 ml/min/1.73	n ²						
Alberta	S/296	9/296	-			0.11 (0.01-0.85)	6.91
Manitoba	S/133	S/133	_		-	1.07 (0.26-4.42)	13.80
Ontario	46/2415	83/2415				0.55 (0.38-0.79)	75 37
British Columbia	S/43	S/43	-		-	1.02 (0.06-16.70)	3.91
Overall					7.50	0.55 (0.31-0.97)	
				COMMUNICATION OF THE PARTY OF T		(12-13.2%, p for I	heterogeneity-0.327
<30 ml/min/1.73m	2						
Alberta	\$/50	S/50	←		→	0.52 (0.05-6.07)	2.35
Ontario	43/1541	63/1541				0.68 (0.46-0.99)	95.84
British Columbia	S/18	S/18	-	- +	\rightarrow	0.94 (0.06-15.43)	1.81
Overall						0.68 (0.47-0.99)	7 (4) (4)
						(1*=0.0%, p for he	eterogeneity=0.953)
			0.2	0.4 0.6 0.8 1	2		
			**	Favours Apixaban	Favours Warfarin		

*Within each eGFR category, warfarin initiation was considered as the reference category in estimating the hazard ratios and their 95% CIs; S=the number of outcome events were <5 and cells were suppressed

Conclusions: Apixaban initiation was associated with lower or similar risk of ischemic and bleeding outcomes across all eGFR categories. Our results suggest apixaban therapy offers a favourable risk-benefit ratio in patients with atrial fibrillation independent of eGFR.

No conflict of interest

POS-255

EFFECT OF DAPAGLIFLOZIN ON BLOOD PRESSURE IN PATIENTS WITH CKD: A PRE-SPECIFIED ANALYSIS FROM DAPA-CKD



Provenzano, M¹, Toto, RD², Vart, P³, Umanath, K^{4,5}, Luis Górriz, J⁶, Mark, PB^{7,8}, Mann, JFE^{9,10}, Chertow, GM¹¹, McMurray, JJV⁷, Correa-Rotter, R¹², Rossing, P^{13,14}, Langkilde, AM¹⁵, Stefánsson, BV¹⁵, Wheeler, DC¹⁶, Lambers Heerspink, H*^{3,17}

¹University of Naples, Department of Nephrology, Naples, Italy; ²University of Texas Southwestern Medical Center, Department of Internal Medicine, Dallas, United States; ³University Medical Center Groningen, Department of Clinical Pharmacy and Pharmacology, Groningen, Netherlands; ⁴Henry Ford Hospital, Department of Internal Medicine, Detroit, United States; ⁵Wayne State University, Department of Internal Medicine, Detroit, United States; ⁶Universidad de Valencia, Nephrology Department, Valencia, Spain; ⁷University of Glasgow, Institute of Cardiovascular and Medical Sciences, Glasgow, United Kingdom; ⁸Queen Elizabeth University Hospital, Renal & Transplant Unit, Glasgow, United Kingdom; ⁹University of Erlangen-Nuremberg, Department of Medicine, Erlangen, Germany; ¹⁰KfH Kidney Center, KfH Kidney Center, Medicine and Epidemiology and Population Health, Stanford, United States; ¹²The National Medical Science and Nutrition Institute Salvador Zubiran, The National Medical Science and Nutrition Institute Salvador Zubiran, Mexico city, Mexico; ¹³Steno Diabetes Center Copenhagen, Steno Diabetes Center Copenhagen, Gentofte, Denmark; ¹⁴University of Copenhagen, Department of Clinical Medicine, Copenhagen, Denmark; ¹⁵AstraZeneca, Late-Stage Development-

Cardiovascular- Renal- and Metabolism- BioPharmaceuticals R&D, Gothenburg, Sweden; ¹⁶University College London, Department of Renal Medicine-, London, United Kingdom, ¹⁷The George Institute for Global Health, The George Institute for Global Health, Sydney, Australia

Introduction: Hypertension is common in patients with chronic kidney disease (CKD). Sodium-glucose cotransporter 2 inhibitors decrease blood pressure in patients with type 2 diabetes, but the consistency and magnitude of blood pressure lowering with dapagliflozin in patients with CKD is unknown. We performed a pre-specified analysis of the DAPA-CKD trial to investigate the effect of dapagliflozin on systolic blood pressure in patients with CKD, with and without type 2 diabetes.

Methods: We randomized 4,304 adults with baseline eGFR 25–75 mL/min/1.73m²and urinary albumin-to-creatinine ratio (UACR) 200–5,000 mg/g to either dapagliflozin 10 mg or placebo once daily; median follow-up was 2.4 years. The primary outcome was a composite of sustained ≥50% eGFR decline, end-stage kidney disease, or death from a kidney or cardiovascular cause. Change in systolic blood pressure was a pre-specified endpoint. Subgroup analyses were performed according to baseline type 2 diabetes status.

Results: Baseline mean (SD) systolic blood pressure was 137.1 mmHg (17.4); in participants with and without type 2 diabetes 139.2 mmHg (17.3) and 132.6 mmHg (16.7), respectively. By week 2, dapagliflozin compared to placebo reduced systolic blood pressure by 3.6 mmHg (95%CI 2.8, 4.4; p<0.001), an effect maintained over the duration of the trial, with similar reductions in patients with and without type 2 diabetes (Table). The reduction in systolic blood pressure with dapagliflozin explained 7.6% (95%CI 1.8, 20.9) of the effect on the primary composite outcome, with similar proportions explained in patients with and without type 2 diabetes.

Table: Changes with dapagliflozin versus placebo in systolic blood pressure (SRP)

	Difference in SBP (mmHg) at week 2 (95%CI)	Difference in SBP (mmHg) over the duration of the trial (95%CI)	Proportion explained (95%CI)
Overall (N=4304)	-3.6 (-4.4, -2.8)	-2.9 (-3.6, -2.3)	7.6% (1.8, 20.9)
Type 2 diabetes (N=2906)	-4.2 (-5.1, -3.2)	-3.2 (-4.0, -2.5)	8.6% (1.3, 33.0)
No diabetes (N=1398)	-2.5 (-3.9, -1.1)	-2.3 (-3.4, -1.2)	3.6% (-9.9, 31.7)

'Proportion explained' indicates the percentage of the benefit of dapagliflon on the primary outcome explained by the reduction in systolic blood pressure at week 2.

Conclusions: In participants with CKD, dapagliflozin lowered systolic blood pressure with a consistent effect in participants with and without type 2 diabetes. The modest reduction in blood pressure explained a small proportion of the benefit of dapagliflozin on the primary outcome.

Conflict of interest

Potential conflict of interest:

HLH received grant funding and honoraria for consultancy as a member of the steering committee of the DAPA-CKD trial from Astra-Zeneca. Honoraria for steering committee membership paid to his institution from Janssen, Gilead, Bayer, Chinook, CSL Pharma honoraria for consultancy paid to his institution from Abbvie, Boehringer Ingleheim, Retrophin, Novo Nordisk honoraria for advisory board participation paid to his institution from Janssen, Merck, Mitsubishi Tanabe and Munipharma lecture fees received from AstraZeneca and Mitsubishi Tanabe and grant support received from Boehringer Ingelheim.

POS-256

EFFECTS OF HIGH ALTITUDE EXPOSURE ON SERUM HEMOGLOBIN LEVELS IN PATIENTS WITH CHRONIC KIDNEY DISEASE ON HEMODIALYSIS



LIMACHI VALENCIA, JC*1, Guzman Ochoa, K2

¹Hospital Obrero N°8 Trinidad - Bolivia, Servicio de Nefrologia, Trinidad, Bolivia, ²Hospital Obrero N°1 CNS La Paz - Bolivia, Servicio de Nefrologia, La Paz, Bolivia