**005. Patiromer for Hyperkalemia Treatment in Resistant Hypertensive Patients on RAASi with Diabetic Kidney Disease**

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## Purpose

Emerging treatments for hyperkalemia (HK) may have favorable effect on the risk:benefit ratio for pts with HTN and diabetic kidney disease (DKD) treated with RAASi. HK develops in ~7-14% of pts with HTN and DKD, which can limit RAASi dosing and potential cardiorenal benefit. This post-hoc analysis from the 52-wk AMETHYST-DN study examined the potassium (K+)-lowering effect of patiromer, a sodium-free, non-absorbable K+-binding polymer approved for the treatment of HK, in resistant HTN (RTN) pts with HK and DKD.

## Methods

Hypertensive pts with mild (serum K+, >5.0-5.5 mEq/L) and moderate (serum K+, >5.5-<6.0 mEq/L) HK and DKD on RAASi were treated with patiromer in an 8-wk treatment initiation phase (TIP), followed by a 44-wk long-term maintenance phase (LTMP). Safety and efficacy were assessed/analyzed in a RTN cohort (defined at baseline [BL] as SBP >140 mmHg on ≥4 classes of antihypertensive medication including a diuretic).

## Results

In AMETHYST-DN, 79/306 pts (67±7 yrs, 51% male) had RTN on RAASI–– 64 with mild HK, mean ±SEM serum K+ 5.18 (±0.03) mEq/L, and 15 with moderate HK, serum K+ 5.77±0.04 mEq/L. Mean ±SD HR and SBP/DBP were 73±10 bpm and 156 ±10/83±12 mmHg at BL. At BL, CKD stage ≥3b was present in 51/79 pts (65%). Significant reductions in serum K+ from BL occurred at each time point over the 52 wks /end of therapy (ET). Investigators could add/modify non-RAASi anti-hypertensive medications, without known effect on serum K+, for BP control. Similar to the BP changes observed in the overall population, at ET the change in mean ±SD SBP/DBP was −18±17/−9.0±13 mmHg in the RTN group. Mean ±SD change in eGFR from BL was −2.1 ±12 mL/min/1.73m2. A total of 5/79 withdrew from study due to a patiromer-related AE (hypokalemia 3, constipation 2). Doubling of serum Cr occurred in 7 pts; 1 death occurred during LTMP.

## Conclusions

Patiromer effectively controlled HK throughout a 52-wk period in a high-risk cohort of RTN pts.