

predetermined $\alpha=0.1$). Least squares (LS) mean% change in eGFR at 24 weeks from baseline was

-1.73% for verinurad/febuxostat vs +0.55% for placebo ($p=0.71$). LS mean% change in sUA was -57% in the verinurad/febuxostat vs an increase of 7% in the placebo group at 12 weeks ($p<0.0001$). This effect was sustained at 24 weeks (62% reduction with verinurad/febuxostat vs 5% increase with placebo; $p<0.0001$). Excluding patients with prior gout avoided the need to administer gout prophylaxis, and only one gout flare-up (3%) was reported in the verinurad/febuxostat group. Most adverse events (AEs) observed were mild to moderate. AEs reported in more than one patient on active treatment were diarrhoea, dizziness, and nasopharyngitis.

Conclusion: Treatment with verinurad + febuxostat significantly reduced hyperuricemia and albuminuria in patients with T2DM. The effect was rapid, and the improvement was sustained through Week 24, suggesting that an intensive urate-lowering strategy that combines a URAT1 inhibitor with a xanthine oxidoreductase inhibitor may protect against the progression of diabetic kidney disease. Further studies are planned to confirm the efficacy of a verinurad-led urate-lowering strategy in preventing CKD progression.

Disclosure of Interests: Robert Terkeltaub Consultant for: AstraZeneca, Horizon, SOBI, and Selecta, Nalina Dronamraju Employee of: AstraZeneca, Susanne A Johansson Employee of: AstraZeneca, Joanna Parkinson Shareholder of: AstraZeneca, Employee of: AstraZeneca, Eva Johnsson Employee of: AstraZeneca, Fredrik Erlandsson Employee of: AstraZeneca, Austin Stack Consultant for: AstraZeneca, Grunenthal, and Menarini

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OP0208

EFFECT OF SERUM URATE LOWERING WITH ALLOPURINOL ON BLOOD PRESSURE IN YOUNG ADULTS

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Background: The association between serum urate and hypertension continues to be controversial. Animal models and studies in adolescents provided strong support of urate-lowering therapy (ULT) efficacy to improve early hypertension (1), while one recent randomized-controlled study in adults failed to find benefit (2).

Objectives: To test the hypothesis that serum urate reduction with allopurinol would lead to blood pressure reductions in young adults with pre-hypertension.

Methods: Single center, double-blinded, crossover trial in which participants were randomly assigned to allopurinol (300 daily mg) or placebo for a period of one month each. Adults ages 18-40, with baseline systolic blood pressure (SBP) ≥ 120 and < 160 mm Hg or diastolic blood pressure ≥ 80 and < 100 mm Hg, and serum urate ≥ 5.0 mg/dL (>297.4 $\mu\text{mol/L}$) or ≥ 4.0 mg/dL (237.9 $\mu\text{mol/L}$) (men or women, respectively) were enrolled. Main exclusion criteria included chronic kidney disease, gout, or use of ULTs. The primary outcome was change from baseline in SBP assessed by 24 hour ambulatory blood pressure monitoring. Safety assessments were also conducted.

Results: 99 participants were randomized, and 82 completed study participation (Table 1). Serum urate decreased by -1.33 ± 1.21 mg/dL (-79.1 ± 72.0 $\mu\text{mol/L}$) during the allopurinol period ($p<0.001$) and by a non-significant -0.04 ± 0.75 mg/dL (2.4 ± 44.6 $\mu\text{mol/L}$) while taking placebo. SBP changed by -0.71 ± 8.21 mmHg during the period assigned to allopurinol versus -0.16 ± 7.33 mmHg during the period assigned to placebo. The difference between these changes in SBP was not significant ($p=0.52$) (Table 2). Changes in diastolic blood pressure and mean ambulatory blood pressure also were not significantly different during allopurinol and placebo exposure periods. In post hoc analyses, there was a trend towards significant blood pressure decreases in the small participant subgroup with serum urate of > 6.5 mg/dL (> 386.7 $\mu\text{mol/L}$) at baseline visit. No allopurinol hypersensitivity events or other serious adverse events were observed.

Conclusion: In the intention-to-treat analysis, urate-lowering therapy with allopurinol in young adults did not lead to reductions in blood pressure when compared with placebo. Blood pressure reductions with allopurinol may be limited only to participants with higher baseline serum urate levels.

REFERENCES:

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Table 1. Baseline characteristics of participants (n =99)

	Mean or frequency
Age (years)	28.0 \pm 7.0
Sex	62 (63%)
Men	37 (37%)
Women	
Race/Ethnicity	40 (40%)
African American	59 (60%)
Not African American	
Serum urate	6.4 \pm 1.0 mg/dL (380.7 \pm 59.5 $\mu\text{mol/L}$)
Men	4.9 \pm 0.7 mg/dL (291.5 \pm 41.6 $\mu\text{mol/L}$)
Women	
Blood pressure at screening	133.8 \pm 10.0
Mean systolic (mmHg)	84.3 \pm 8.8
Mean diastolic (mmHg)	

Table 2. Change in blood pressure parameters during allopurinol and placebo treatment phases (n=99). Mean (SD)

Outcomes (mmHg)	Placebo	Allopurinol	p
Systolic blood pressure	- 0.16 (7.33)	-0.71 (8.21)	0.52
Diastolic blood pressure	-0.22 (5.81)	-0.28 (6.58)	0.68
Mean arterial pressure	-0.43 (5.63)	-0.54 (6.86)	0.54

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Treatment is more than drugs

OP0209-PARE IMPROVING MENTAL WELLBEING - COACHING PEERS TO USE TOOLKIT FOR MIND

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Background: The theme for the Finnish Rheumatism Association for 2019 is Mind and Me. The Age Institute in Finland launched a project called Mental Wellbeing to Promote Older People's Knowhow to Face Life's Challenges and the project was piloted at the Finnish Rheumatism Association in 2018. During the pilot project, staff members from the Finnish Rheumatism Association and volunteers from its member organisations were trained as Tools for Mind Coaches. This training gave new tools for peer support targeting older people and their mental wellbeing. The Coaches may use the tools developed by the Age Institute, and these include Mind Tools, Senior Mind Pack of 52 cards, Nature Attraction Path, A Guide for Life Skills Coaches and a pocket book on Mental Wellbeing. The project especially targeted older people and their families in challenging life situations by promoting their mental wellbeing.

Objectives: To disseminate the theme and activities of mental wellbeing in member associations. To utilise the trained mental wellbeing coaches for tutoring in older people groups. To utilise the Tools for Mind in the activities of the Finnish Rheumatism Association and its member associations. To promote mental wellbeing to members

Methods: In the pilot project in 2018 the Age Institute organized three mental wellbeing training sessions for peer support group coaches, each lasted 1-2 days. The Finnish Rheumatism Association provided the coaches with some of the Tools for Mind. The training sessions included theory and practices. Participants were introduced how to use the Tools for Mind and they were encouraged to think for other applications of the tools. Also the themes discussed included elements of mental wellbeing, solution-focused approach, organising peer support groups for old people with chronic illnesses and ethical principles for group activities.

Results: There were altogether 11 people from the Finnish Rheumatism Association and its member associations that finished the training for Mind Coaches. Feedback from the participants was positive and the Tools for Mind were not only considered as useful practical tools but they also increased self-confidence and enthusiasm for peer led support groups. Senior Mind Pack of 52 cards were described as multipurpose and having good visual quality. All Tools for Mind were considered as thought-provoking tools to start conversation. Practical tools help