except for transient and reversible serum creatinine elevations in the LESU groups. (table 1).

Abstract SAT0374 – Table 1

Variable	Group receiving Diuretics			Group not receiving Diuretics		
	PBO	LESU	LESU	PBO	LESU	LESU
	+ALLO	200 mg	400 mg	+ALLO	200 mg	400 mg
	[n=64]		+ALLO	[n=343]	+ALLO	+ALLO
		[n=79]	[n=78]		[n=326]	[n=323]
Efficacy , proportion of PT achieving [number (%)]:						
sUA<6.0 mg/dL at m-6	19 (29.7)	48 (60.8)*	57 (73.1)*	85 (24.8)	174 (53.4)*	195 (60.4)*
sUA<6.0 mg/dL at m-12	17 (26.6)	48 (60.8)*	48 (61.5)*	88 (25.7)	155 (47.5)*	163 (50.5)*
Safety , proportion of PT reporting [number (%)]:						
Any TEAEs	45 (70.3)	62 (78.5)	65 (83.3)	239 (69.7)	237 (72.7)	252 (78.0)
←Serum creatinine by ≥1.5	2 (3.1)	2 (2.5)	11 (14.1)	5 (1.5)	17 (5.2)	47 (14.6)

† p=0.0003, *p<0.0001 versus PBO+ALLO (Cochran-Mantel Haenszel test)

Conclusions: LESU +ALLO doubled the number of PT reaching sUA target of <6.0 mg/dL at m-6 and sustained at m-12, irrespective of TTLD use. Adjunctive therapy with LESU +ALLO is safe and efficacious even in PT subgroups using concomitant TTLD.

REFERENCES:

- [1] Zurampic® (lesinurad) SmPC. Grünenthal GmbH, February 2016.
- [2] Bruderer S, et al. *Arthritis Rheumatol* 2014 Jan;66(1):185–96.
- [3] Saag KG, et al. *Arthritis Rheumatol* 2017;69:203–12.
- [4] Bardin T, et al. *Ann Rheum Dis* 2017;76:811–20.

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SAT0375 IMPACT OF FEBUXOSTAT ON RENAL FUNCTION AMONG GOUT PATIENTS WITH DIFFERENT RENAL FUNCTION

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Background: Febuxostat is a new xanthine oxidase inhibitor which is effective in the treatment of hyperuricemia. Its use in people with different levels of renal function has not been thoroughly assessed.

Objectives: To assess the risk of renal function deterioration in gout patients using febuxostat and compare it with patients using allopurinol and other uricosuric agents.

Methods: We included 5882 adult patients with gout diagnosed between 2012 and 2015. We divided patients into three groups by usage of urate-lowering drugs used (allopurinol, febuxostat and uricosuric agents including benzbromarone, probenecid and sulfinpyrazone). The primary outcome was a progress of one chronic kidney disease (CKD) stage. The index date was the first date of urate-lowering drugs used. We follow each patient to the date of event, death, switch to other drug or the end of the study. The Cox proportional hazards model was used to estimate the adjusted hazard ratios (HRs), adjusted for age, sex, baseline eGFR, baseline serum uric acid, comorbidity, co-medication.

Results: The incident rate of the renal function deterioration was 2.37 (95% CI, 1.75–3.14) per 1000 person-days in allopurinol users, 1.54 (95% CI, 1.30–1.81) per 1000 person-days in febuxostat users and 1.43 (95% CI, 1.32–1.56) per 1000 person-days in uricosuric agent users. The HRs of progression of CKD stage in febuxostat and uricosuric agent users were 0.98 (95% CI, 0.70–1.38) and 0.80 (95% CI, 0.59–1.09) compared with allopurinol. Among febuxostat users, the HRs were 1.80 (95% CI, 0.85–3.98) in patients with an estimated glomerular filtration rate (eGFR) ≥90 ml/min/1.73 m², 1.06 (95% CI, 0.56–2.03) for patients with an

eGFR 60–89 ml/min/1.73 m², 0.78 (95% CI, 0.45–1.42) for patients with an eGFR 30–59 ml/min/1.73 m² and 0.73 (95% CI, 0.22–3.52) for patients with an eGFR 15–29 ml/min/1.73 m². Among uricosuric agent users, the HRs were 0.94 (95% CI, 0.52–1.88) in patients with an eGFR ≥90 ml/min/1.73 m², 0.88 (95% CI, 0.55–1.50) in patients with an eGFR 60–89 ml/min/1.73 m², 0.71 (95% CI, 0.41–1.28) in patients with an eGFR 30–59 ml/min/1.73 m² and 0.71 (95% CI, 0.19–3.62) in patients with an eGFR 15–29 ml/min/1.73 m².

Conclusions: Renal function deterioration is not uncommon after initiation of urate-lowering treatment and febuxostat has a similar renal safety profile as allopurinol and uricosuric agents.

Disclosure of Interest: None declared

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SAT0376 THE INCIDENCE, PREVALENCE AND USE OF URATE LOWERING AGENTS IN HONG KONG: A POPULATION STUDY FROM 2006 TO 2016

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Background: The prevalence of gout has increased significantly over the past decade, especially in developed countries and Oceanic populations. The estimated prevalence of gout in the US, Canada and European countries was 3%. Asian countries, except Taiwan, were considered to have a lower prevalence of gout due to differences in ethnicity and lifestyle.

Since there are no recent epidemiological data on gout in Hong Kong, we conducted this population study to determine the incidence and prevalence of gout in Hong Kong as well as the utilisation of urate lowering agents among patients with gout.

Objectives: To determine the incidence, prevalence of gout and use of urate lowering agents in Hong Kong

Methods: Data were retrieved from the Clinical Data Analysis and Reporting System (CDARS) of the Hospital Authority. The Hospital Authority is the only public healthcare provider in Hong Kong. Since treatment is heavily subsidised and available to all residents, it covers more than 90% of all medical care for the general population in Hong Kong.

Clinical data including demographic, diagnosis of gout, serum urate levels and prescriptions of urate lowering agents were retrieved from CDARS from 2006 to 2016. For inclusion, subjects must have attended any out-patient clinics or accident and emergency department (with or without hospitalisation) in 2005. Subjects with a diagnosis of gout who died before 2006 were excluded. All subjects were followed until the cut-off date or death.

Gout was defined as the physician diagnosis and coding in CDARS. The serum urate levels achieved after prescribing urate lowering agents were the means of all serum urate levels 6 months after prescriptions.

Results were analysed by R statistics version 3.3.3. with package 'prevalence' version 0.4.0.

Results: 2741862 participants were included in the analysis. Both the incidence and prevalence of gout in Hong Kong have increased over the past 10 years. In 2016, the crude and age-standardised prevalence of gout were 2.92% and 1.44%, respectively. 6.26% of the general population aged 80 years or older was diagnosed to have gout.

Despite the increase in incidence and prevalence of gout in Hong Kong, the utilisation of urate lowering agents remained low. In 2016, only 25.55% of patients with gout were prescribed urate lowering agents. More importantly, only 35.8% of those could achieve the therapeutic target of serum urate level <6 mg/dL.

Conclusions: Population ageing has led to increases in incidence and prevalence of gout in Hong Kong. In 2016, the crude prevalence of gout in Hong Kong was 2.92%, which is similar to figures reported in western countries. Despite an