

16), mean body mass index was 33 kg/m² (SD, 10), 73% were male; 67% were white Americans, 25% were African Americans and 7% other/mixed race/ethnicity. Participants took a median of 35 minutes to complete study assessment.

Almost half of the participants were taking medications for the treatment of gout: allopurinol, 42%; febuxostat, 1%, probenecid, 0%; colchicine, 29%. Forty-five percent participant were taking none of these medications. 41% smoked ever, 27% were using a special diet and participants had alcohol use an average of 2 days in the last week. Average number of gout flares were four in the last year. Dietary assessments showed that average daily intakes were as follows: calories, 2005; carbohydrate, 221 gm; fat, 82 gm; fiber, 19 gm; caffeine, 197 ml. The HEI2010 score of 64 was comparable to what was observed with NHANES for people in the average age range of this study.

Conclusions: Patients recruited in an Internet gout study, successfully responded to assessments, and had patient characteristics similar to gout populations described previously. The dietary assessments in this provide may provide a unique insight to design interventions to improve diet to improve gout outcomes.

References:

[1] Singh JA, Bharat A, Edwards NL. An internet survey of common treatments used by patients with gout including cherry extract and juice and other dietary supplements. *J Clin Rheumatol.* 2015;21(4):225–226. doi:10.1097/RHU.0000000000000246. PubMed PMID: 26010189.

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AB0880 PHARMACODYNAMIC EFFECTS AND SAFETY OF VERINURAD (RDEA3170) IN COMBINATION WITH ALLOPURINOL VERSUS ALLOPURINOL ALONE IN ADULTS WITH GOUT: A PHASE 2A, OPEN-LABEL STUDY

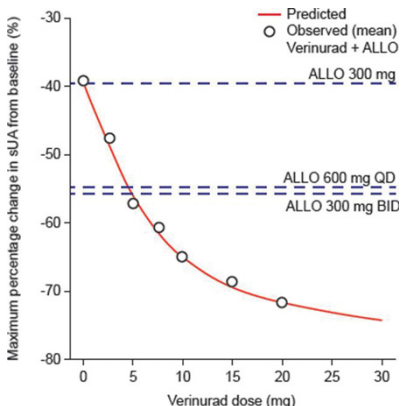
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Background: Verinurad (RDEA3170) is a high-affinity, selective URAT1 inhibitor in development for the treatment of gout and asymptomatic hyperuricemia.

Objectives: This Phase 2a, randomized, open-label, multicenter study investigated the multiple-dose pharmacodynamics (PD), pharmacokinetics (PK), and safety of oral verinurad in combination with allopurinol versus allopurinol alone in adults with gout (NCT02498652).

Methods: Patients aged ≥ 18 and ≤ 75 years with gout and serum uric acid (sUA) ≥ 8 mg/dL were randomized to 1 of 2 cohorts to receive allopurinol (300 mg) in combination with verinurad (dose range 2.5 mg to 20 mg) and allopurinol 300 mg or 600 mg alone (each treatment period was 7 days). Medications were administered once daily ~ 30 min after breakfast (for allopurinol 300 mg b.i.d. group, the second allopurinol dose was in the evening). Colchicine 0.6 mg for gout flare prophylaxis was initiated at approximately Day -14 (start of urate-lowering therapy [ULT]) washout) or Day -7 if not on ULT. Serial blood and urine samples were measured on Days -1, 1, 7, 14, 21, 28, and 35 for PD and PK endpoints. Safety assessments included adverse events (AEs) and laboratory, electrocardiogram, and vital sign parameters.

Results: Forty-one patients were randomized (n=20–21 per cohort). Serum PD data pooled across cohorts demonstrated maximal % decrease in sUA from baseline (Emax) at 6–10 h after verinurad and allopurinol combination treatment. Addition of verinurad (2.5 mg to 20 mg) to allopurinol decreased sUA in dose-dependent manner (Figure). Greater sUA reductions were observed for dose combinations of verinurad ≥ 5 mg with allopurinol 300 mg versus allopurinol 600 mg alone, while allopurinol 600 mg once daily was equivalent to allopurinol 300



b.i.d. Emax was 46.9%, 58.9%, 59.9%, 67.1%, 68.4%, and 74.3% for verinurad at doses of 2.5, 5, 7.5, 10, 15, and 20 mg in combination with allopurinol 300 mg, versus 39.7%, 53.8%, and 54.4% with allopurinol 300 mg, allopurinol 600 mg, and allopurinol 300 mg b.i.d. alone. No drug-drug interaction on verinurad and allopurinol plasma PK parameters was observed.

Conclusions: Verinurad coadministered with allopurinol dose-dependently decreased sUA. All dose combinations of verinurad and allopurinol in this study were generally well tolerated with no serious AEs or renal-related events during combination treatment.

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AB0881 ASSESSMENT OF SUDOMOTOR FUNCTION IN PATIENT WITH GOUT

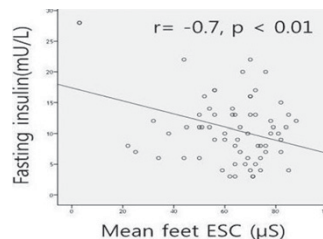
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Background: Sodorimetry is a non-invasive device measures sweat gland dysfunction using electrochemical skin conductance (ESC) of hands and feet and is useful for assessing peripheral small fiber nerve function. Little is known about the dysfunction of peripheral small fiber nerve in patients with gout.

Objectives: To evaluate the prevalence and characteristics of small fiber neuropath (SFN) in patients with gout compared with a healthy control group and to identify factors associated with SFN in gout.

Methods: 80 male patients with well symptom controlled gout (age: 58 \pm 12) and 80 healthy controls were enrolled. Each patient was required to fast over 8 hours before blood samples. Serum fasting glucose, fasting insulin, uric acid, serum 25-(OH) D, lipid profiles, Creatinine (Cr) and r-GTP were measured. Body mass index (BMI) and Homeostatic model assessment insulin resistance (HOMA IR) were calculated. Patients already diagnosed with hypertension and diabetes were excluded.

Results: The mean feet and hands ESC were significantly lower in the gout group than the control group. Mean Hands ESC was irrelevant to age, BMI, fasting glucose and insulin, HOMA-IR, vit D, uric acid, Cr, and lipids. However, mean feet ESC showed significant correlation with fasting glucose ($r=-0.7$, $p<0.01$) and HOMA-IR ($r=-0.25$, $p=0.03$).



Conclusions: Sudomotor function was significantly lower in patients with gout than the control group. Mean feet ESC was correlated with fasting glucose and insulin resistance in patients with gout. These results suggest that dysfunction of SFN in gout patients is associated with insulin resistance and impaired fasting glucose.

Disclosure of Interest: None declared

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AB0882 EFFICACY OF INTRALESIONAL SODIUM THIOSULFATE IN DISABLING TUMORAL CALCINOSIS: ABOUT TWO CASES

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Background: Tumoral Calcinosis (TC) is a difficult-to-treat complication that can occur during the course of several diseases such as dermatomyositis or genetic hyperphosphatemia. It is a painful and disabling condition that can give rise to local complications including joint mobility reduction, cutaneous ulceration and superinfection. Until now, many treatments have been used with inconstant efficacy.

Objectives: Intravenous sodium thiosulfate gives promising results in calciphylaxis and ectopic calcifications, and intra-lesional injections could be effective for tumoral calcinosis.