Suggested statistical reappraisal of data from comparative study of febuxostat and allopurinol in chronic kidney disease

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To the Editor:

Tsuruta et al. [1] have called attention to the potential value of febuxostat in the management of hyperuricemia in patients with chronic kidney disease (CKD). Their important contribution augments existing literature regarding the safety and efficacy of febuxostat in this population [2] as we await results from prospective studies on the utility of the drug in slowing the progression of CKD in hyperuricemic individuals without gout [3].

In their retrospective study, Tsuruta et al. conclude that uric acid levels are lower and glomerular filtration rate are better preserved among patients taking febuxostat as compared to allopurinol (Tables 3 and 4 of [1]). However, their statistical analysis is based on a repeated Student's *t* test but without adjustment for associated multiple comparisons via Bonferroni, Sidak-Holm, or related corrections [4]. Might the authors apprise interested readers of the relevant corrected statistical values?

More compelling still would be an analysis with a random-effects model or perhaps a survival analysis (perhaps utilizing percent of patients maintaining some level of glomerular

filtration rate (GFR)), as these approaches would fully take into the time-series nature of their data.

Disclosures None

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