Understanding Predictors of Reaching Serum Uric Acid Goal in Febuxostat Utilizers

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INTRODUCTION

- Objective: To identify clinical characteristics of febuxostat utilizers in order to develop and validate a prediction model for achieving serum uric acid (sUA) goal.<p>•</p>

METHODS

- Study design: Retrospective database analysis
- Data source: Humana Research Database (Louisville, KY)
- Inclusion criteria: Members having a cancer diagnosis, without any other gout medications, at any time during the 24-month pre-index period.
- Exclusion criteria: Members with an all-cause death or index date.
- Study sample: From the Humana Research Database (Louisville, KY)
- Statistical analysis: Used to compare demographic and baseline clinical characteristics between the two cohorts.

RESULTS

- Table 1: Patient Demographic and Baseline Clinical Characteristics
- Table 2: Parameter estimates for multivariate logistic and linear model of sUA goal
- Table 3: Performance measures for predicting sUA goal attainment

DISCUSSION

- Febuxostat adherence, baseline sUA level and prior allopurinol use were the main predictors of achieving sUA goal in both logistic and linear models. Age and presence of DM were found to be significant predictors in the linear model.
- Findings from the clinical studies have implications for treatment in gout. This research suggests the importance of adherence on achieving sUA goal, even after controlling for other notable demographic and clinical factors that have shown to influence sUA attainment. The effect of adherence over time, including dose adjustments in this population is needed to be examined in further studies.

LIMITATIONS

- Among eligible members, the first valid sUA result was not available in 365 days, and a 365-day positive profile was used to determine whether members attained a goal of sUA <6 mg/dL. The study sample was then divided into two groups: members who achieved sUA <6 mg/dL and those who did not achieve a goal.

CONCLUSIONS

- Determined from administrative claims data, demographic and clinical characteristics significantly influence sUA goal attainment in febuxostat users.
- These findings indicate that febuxostat users with high baseline sUA levels and prior allopurinol use are more likely to achieve sUA goal.
- The model developed in this study may help in selecting patients who are most likely to benefit from febuxostat treatment, and underscore the importance of medication adherence in this challenging patient population.

REFERENCES