Comparing costs and health outcomes in initial therapy with sunitinib versus pazopanib for advanced renal cell carcinoma

Background: Several targeted therapies are now available for renal cell carcinoma (RCC). Sunitinib and pazopanib are both approved, first-line options for advanced RCC, but clinical evidence and national guidelines do not differentiate between these therapies.1,2 Two comparative cost studies based on data from CONIPAQ and FIGES showed pazopanib was less costly and more cost-effective than sunitinib.3,4 Given the lack of differentiation in efficacy between sunitinib and pazopanib from NCCN or clinical trials, and economic evidence based solely on clinical trial data, comparative effectiveness studies can offer insights into clinical, reimbursement and policy decisions.

Objective: To compare treatment characteristics (treatment interruption, adherence, duration and discontinuation), survival and costs for new users of sunitinib and pazopanib for advanced RCC in an observational setting.

Methods: • Study Design: Observational retrospective cohort with up to 12 months of follow-up
• Data Source: Pharmacy and medical claims, and enrollment data, from the Humana Research Database, which is derived from approximately 27.1 million members nationwide across commercial, Medicaid Advantage and Medicare plans.
• Inclusion criteria: Included patients with index continuous eligibility or disenrollment due to death; **Medicare population only.
• Exclusion criteria: All causative survival, treatment characteristics, survival and discontinuation analysis.

Results: Table 1. Baseline Characteristics: The pazopanib group exhibited worse health status indicators (ReQoL-V score, number of pharmacy claims and pre-index total costs) at baseline.

Table 2. Treatment Characteristics: There were no differences in any of the treatment characteristics measured.

Table 3. Comparison of Annual Mean Healthcare Costs: Of all non-adherent patients, the sunitinib group had significantly higher total healthcare costs compared to the pazopanib group.

Conclusions: • Survival and treatment characteristics were similar for both index medications.
• Mediation and total healthcare costs trended higher with sunitinib treatment, despite higher pre-index total costs in the pazopanib group.
• Non-adherence with sunitinib was associated with significantly higher total healthcare costs, which may indicate tolerability/treatment intolerance with sunitinib treatment.
• The higher cost of sunitinib, with no proven improvement in clinical outcomes, was an important consideration in choice of treatment.

Limitations: • Patients taking sunitinib appeared to have better baseline health status than those on pazopanib, based on comorbidity scores, pharmacy claims and pre-index total healthcare costs, which may have biased the results against pazopanib.
• Patients may not have been RCC treatment naïve since prior treatment with RCC therapies other than the two index products was not a study exclusion.
• The study was subject to limitations inherent in administrative claims data, including coding errors and missing data.
• Patients with affective health outcomes, such as quality of life and tumor characteristics were not captured.
• Using claims as a proxy for adherence is limited since a claim does not ensure the patient consumed the medication.

References: