**SUPPLEMENTARY MATERIALS**

# Effects of early vs delayed progression on clinical and economic outcomes in patients with metastatic renal cell carcinoma treated with tyrosine kinase inhibitors as first-line therapy: results from the IMPACT RCC claims data analysis

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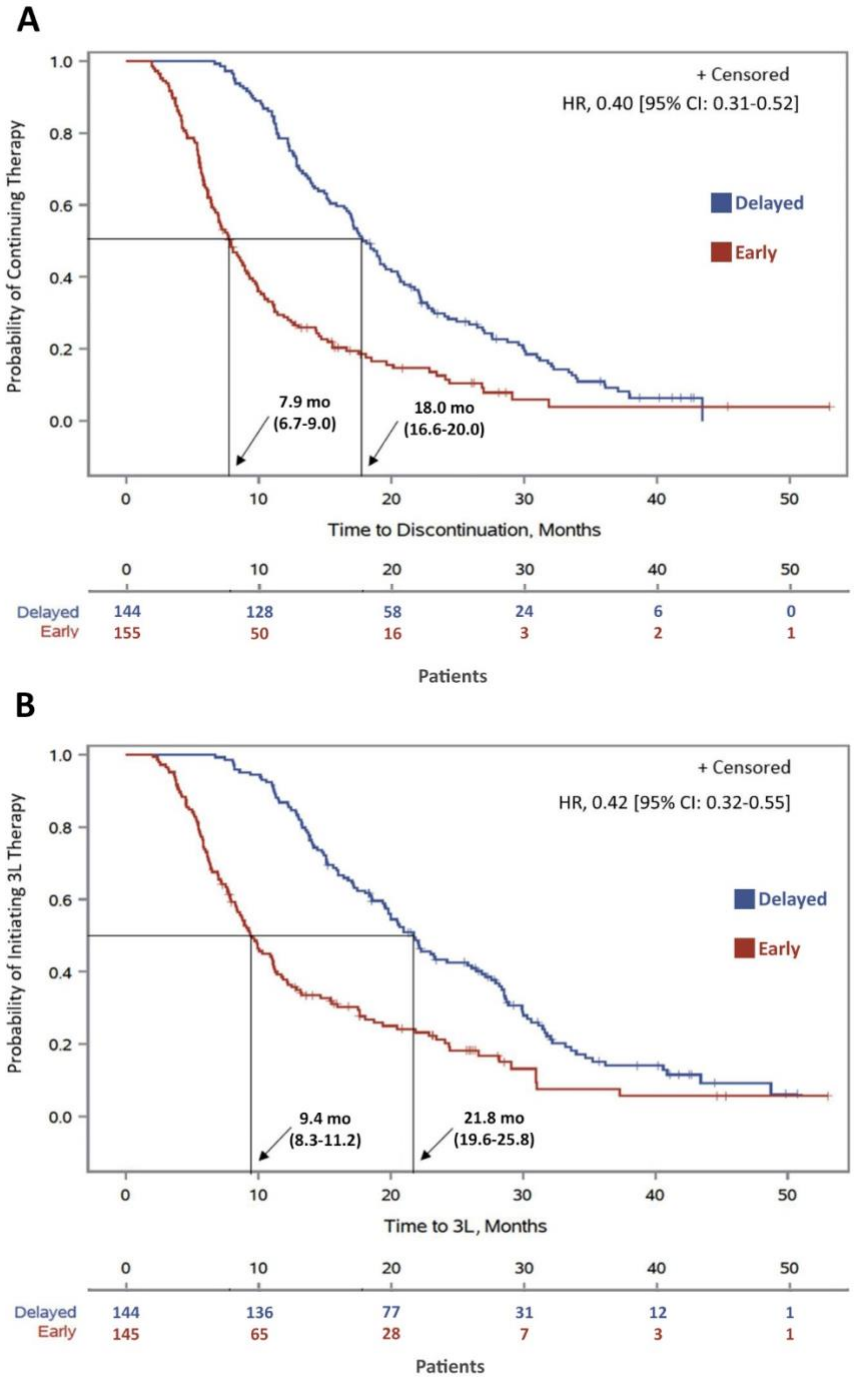
**Supplementary Figure 1. Kaplan-Meier curves by progression status**

Data are shown for (A) time to second-line therapy discontinuation and (B) time to third-line (3L) therapy initiation. Dotted lines indicate median values.



*Notes: All patients included in the study received 2L treatment; among those in the early and delayed cohorts, respectively, 52% and 57% advanced to 3L treatment.*

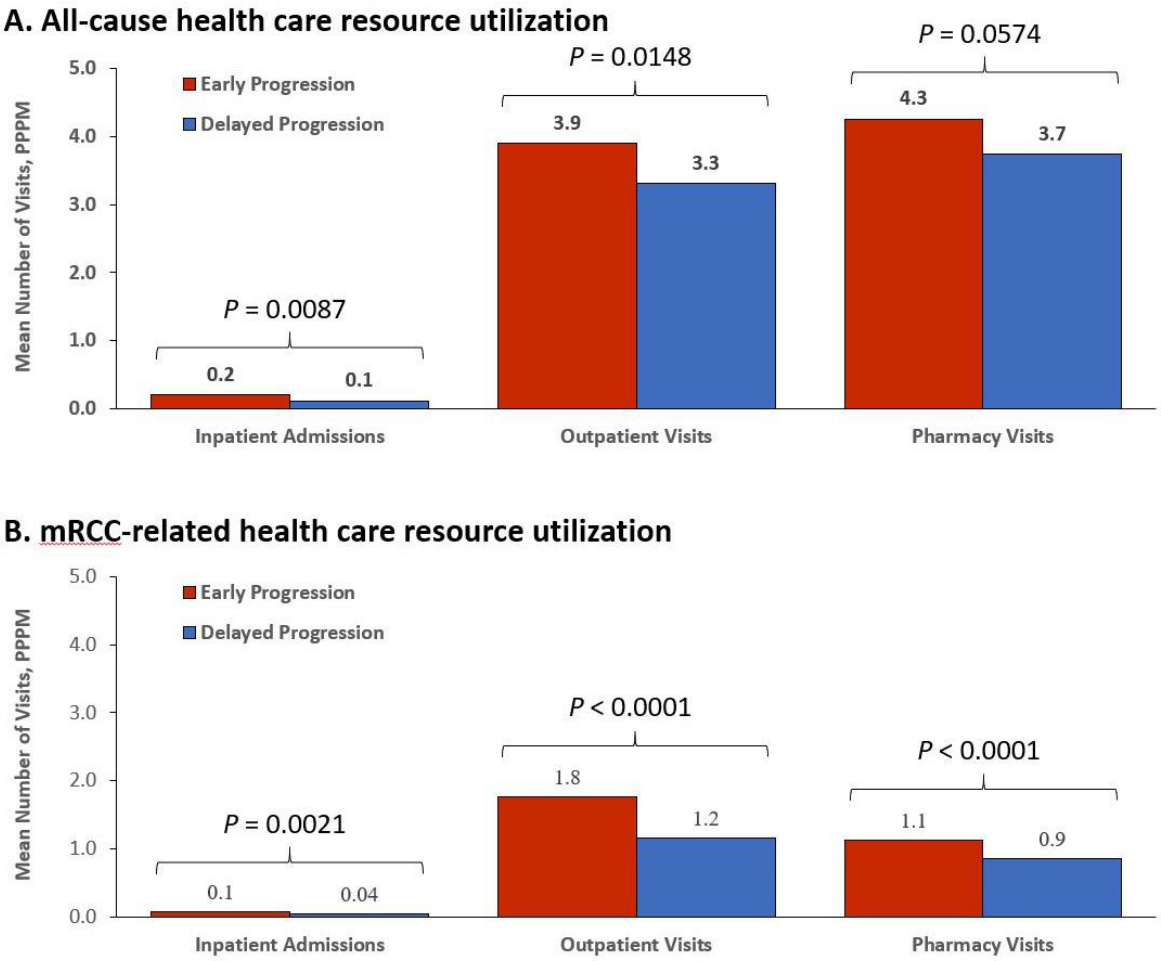
*Times to 2L and 3L initiation were calculated from the index date (1L initiation).*

**Supplementary Figure 2. Predictors of clinical outcomes**

Adjusted hazard ratios (HRs) and 95% confidence intervals (CIs) are shown for factors assessed for associations with (A) time to second-line therapy (2L) discontinuation, (B) time to third-line therapy (3L) initiation, and (C) death. CCI, Charlson comorbidity index; HCRU, health care resource utilization.

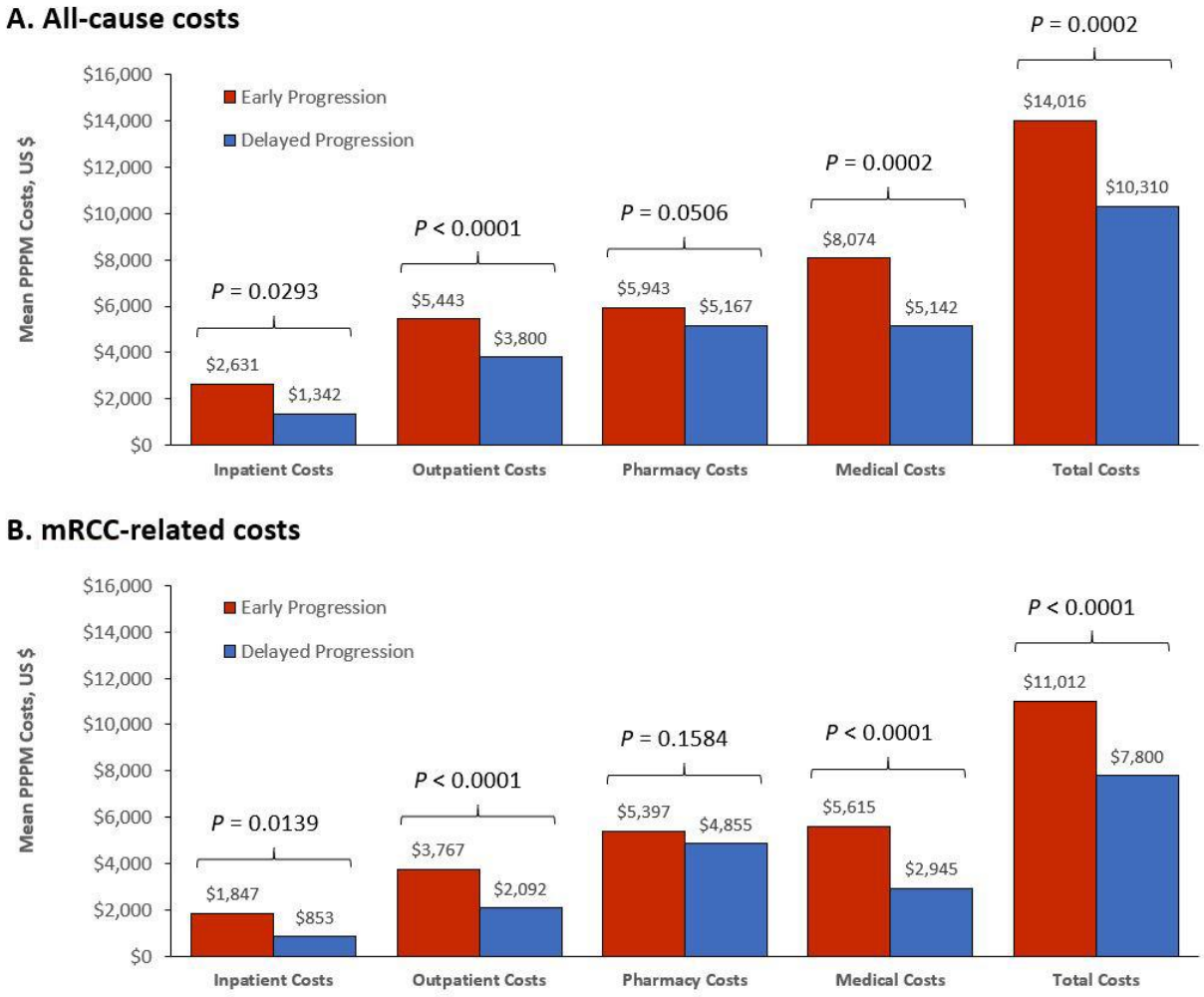
**Supplementary Figure 3. Unadjusted mean health care resource utilization by progression status**

Data are shown for (A) all-cause health care resource utilization and (B) metastatic renal cell carcinoma (mRCC)–related health care resource utilization. Medical claims were considered mRCC related if they had an *International Classification of Disease, Ninth/Tenth Revision, Clinical Modification* diagnosis code for renal cell carcinoma in any position on the inpatient or outpatient claim. Data include the time from first-line therapy initiation through end of follow-up (death or end of study). PPPM, per patient per month.



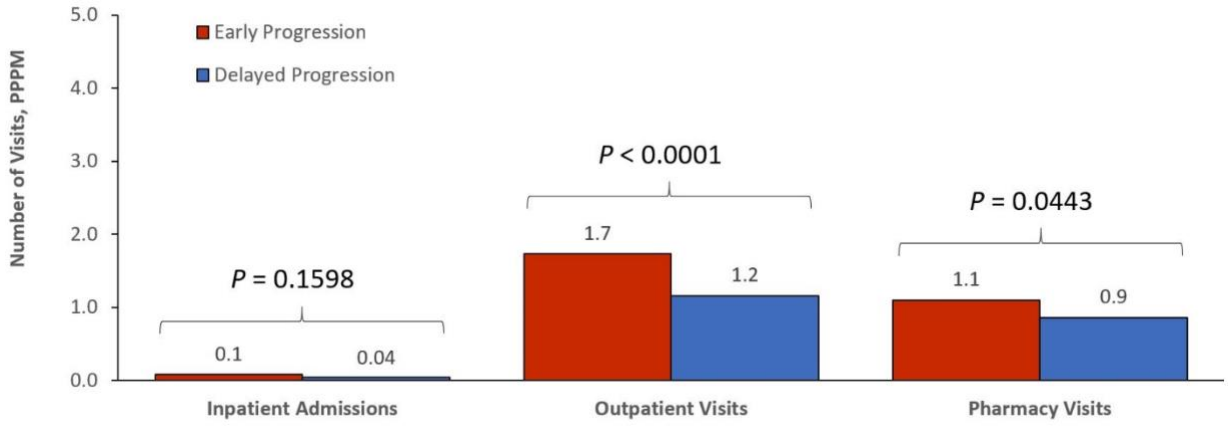
**Supplementary Figure 4. Unadjusted health care costs by progression status**

Data are shown for (A) all-cause health care costs and (B) metastatic renal cell carcinoma (mRCC)–related health care costs. Medical claims were considered mRCC related if they had an *International Classification of Disease, Ninth/Tenth Revision, Clinical Modification* diagnosis code for renal cell carcinoma in any position on the inpatient or outpatient claim. mRCC-related pharmacy costs included only the costs for systemic therapies. Data include the time from first-line therapy initiation through end of follow-up (death or end of study). Medical costs include inpatient and outpatient costs, and total costs are medical costs plus pharmacy costs. PPPM, per patient per month.



**Supplementary Figure 5. Adjusted metastatic renal cell carcinoma (mRCC)–related health care resource utilization**

The generalized linear model adjusted for covariates of index age; race; sex; Quan-Charlson comorbidity index score; time from mRCC diagnosis to index date; and number of all-cause inpatient, outpatient, and pharmacy visits. Medical claims were considered mRCC related if they had an *International Classification of Disease, Ninth/Tenth Revision, Clinical Modification* diagnosis code for renal cell carcinoma in any position on the inpatient or outpatient claim. Data include the time from first-line therapy initiation through end of follow-up (death or end of study). PPPM, per patient per month.



**Supplementary Figure 6. Adjusted metastatic renal cell carcinoma (mRCC)–related costs**

The generalized linear model adjusted for covariates of index age; race; sex; Quan-Charlson comorbidity index score; time from mRCC diagnosis to index date; and number of all-cause inpatient, outpatient, and pharmacy visits. Medical claims were considered mRCC related if they had an *International Classification of Disease, Ninth/Tenth Revision, Clinical Modification* diagnosis code for renal cell carcinoma in any position on the inpatient or outpatient claim. mRCC-related pharmacy costs included only the costs for systemic therapies. Data include the time from first-line therapy initiation through end of follow-up (death or end of study). Medical costs include inpatient and outpatient costs, and total costs are medical costs plus pharmacy costs. PPPM, per patient per month.