OVERALL PROGRESSION-FREE SURVIVAL ACCORDING TO MSKCC SCORE IN FIRST-LINE SUINITIN TREATMENT OF METASTATIC RENAL CELL CARCINOMA (mRCC)

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BACKGROUND

Data on the efficacy and safety of all targeted therapies for metastatic renal cell carcinoma (mRCC), including sunitinib, were collected in the Czech RENIS registry (www.renis.cz). RENIS provides a unique, longitudinal sample enabling an analysis of long-term effectiveness and prognostic data of patients treated with various systemic targeted antiangiogenic adjuvant factors assessed using the Memorial Sloan Kettering Cancer Center (MSKCC) score. The aim of this study was to analyze the long-term overall (OS) and progression-free survival (PFS) of sunitinib, when used as a first-line treatment, based on MSKCC risk group score including MSKCC score for two intermediate subgroups. Secondly, the best overall response rate was explored.

METHODS

Data from mRCC patients treated with sunitinib as first-line treatment were collected in RENIS between 06/2007 and 01/2018 (export date 8th January 2018). Eligibility criteria included: mRCC patients initiated targeted therapy with sunitinib. OS those 300 patients were included due to prior systemic therapy (chemotherapy, targeted), 6 were exclusion due to diagnostic details necessary for the calculation of the MSKCC score, and 12 patients did not have the MSKCC score assessed and were excluded. OS and PFS were evaluated for subgroups defined by the MSKCC score as follows: (a) favorable risk (0 adverse factors (AF)), (b) intermediate-risk (pooled 1–2 AFs), and (c) poor risk (3+ AFs). The OS/PFS were evaluated for subgroups defined by the MSKCC score as follows: (a) favorable risk (0 adverse factors (AF)), (b) intermediate-risk (pooled 1–2 AFs), and (c) poor risk (3+ AFs). A detailed breakdown of MSKCC scores is shown in Table 1. All OS/PFS data were analyzed using Kaplan-Meier estimators. Differences in OS/PFS of risk groups were assessed using log-rank test. Subsequently, we assessed the best overall response rate and the OS/PFS for 1-, 3-, 5-, and 10-year survival.

RESULTS

Between the years 2006 and 2017, 2350 patients included first-line treatment using sunitinib with 806, 1450, and 134 patients in the favorable, intermediate, and poor MSKCC risk groups, respectively. Within the intermediate subgroup, 969 patients had 1 AF, and 481 patients had 2 AF. Table 1 presents patient characteristics, including a detailed breakdown of MSKCC score within the respective MSKCC risk groups.

Better MSKCC risk group had improved OS and PFS (p < 0.001). Regarding the MSKCC for the two intermediate subgroups, 1 AF was associated with improved survival compared to patients with 2 AFs (p < 0.001). Figure 1 and Table 2 show best overall response rate and the OS/PFS for 1-, 3-, 5-, and 10-year survival.

CONCLUSIONS

Better MSKCC risk scores were associated with significantly longer OS and PFS, and the best overall response rates to our knowledge, but the largest published sunitinib-treated mRCC cohort described in the context of MSKCC risk groups.