KIDNEY CANCER

Sunitinib has similar efficacy irrespective of age in mRCC

An exploratory retrospective analysis of data from six key trials in patients with metastatic renal cell carcinoma (mRCC) has revealed that sunitinib has comparable efficacy regardless of patient age.

The analysis by Hutson and colleagues incorporated data from a total of 1,059 patients, with sunitinib used as the first-line agent in 783 or after IFN- α therapy in 276. These patients were stratified by age at baseline, with 857 aged <70 years and 202 aged $\geq$ 70 years (median of 57 years and 73 years, respectively). Importantly, proportions of patients in each age group and their baseline characteristics were similar, irrespective of treatment exposure.

Although discontinuation of therapy and the general severity of adverse events were increased in older patients compared with the younger cohort, these issues did not affect overall efficacy of sunitinib therapy. Interestingly, a tendency towards increased median progression-free survival was observed in the older cohort compared with the younger cohort across treatment settings (10.9 months versus 9.0 months),

with similar trends observed within each treatment group. Overall survival was also prolonged slightly in older patients compared with younger patients treated with sunitinib (25.6 months versus 23.6 months), but not after prior treatment with IFN- α (15.8 months versus 20.2 months).

Together, these results suggest that sunitinib has at least comparable efficacy before and after the age of 70 years. These findings are in keeping with suggestions that responsiveness to therapies with antiangiogenic activity,

such as sunitinib, might be increased in elderly patients, which could reflect increases in tumour microvascular density observed in such individuals or age-related pharmacokinetic differences.

Importantly, these findings could modify treatment paradigms in mRCC, a disease predominantly diagnosed after the age of 60 years. Indeed, Hutson *et al.* concluded that old age alone should not preclude sunitinib therapy in patients with mRCC. However, they also acknowledged that their study was not powered to reveal statistically significant differences between the age groups assessed. Thus, further studies are required, ideally in 'real-world' populations of elderly patients that probably have characteristic differences compared with clinical trial cohorts.

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This article has also been published in *Nature Reviews Urology* (doi:10.1038/nrurol.2014.20).

Original article Hutson, T. E. *et al.* Efficacy and safety of sunitinib in elderly patients with metastatic renal cell carcinoma. *Br. J. Cancer* doi:10.1038/bjc.2013.832