## TARGETED THERAPIES

## **Another option for metastatic RCC**

Although several VEGFR-targeted treatments exist for metastatic renal cell carcinoma (RCC), most are associated with skin rash and hand-foot syndrome; thus, more-specific targeted agents with improved adverse-effect profiles are needed. Tivozanib is a highly potent and selective anti-VEGFR inhibitor that has now been compared with sorafenib in the first-line setting in a phase III trial.

In this open-label, randomized study, 517 patients from 15 countries were randomly assigned to tivozanib or sorafenib. The primary end point of progression-free survival (PFS) was significantly longer in those receiving tivozanib (11.9 months) compared with sorafenib (9.1 months). In the subgroup of patients who were treatment naive, the median PFS was 12.7 months for tivozanib versus 9.1 months for sorafenib. The overall response rate was also improved for patients receiving tivozanib (33.1% versus 23.3%). Overall survival showed a trend that favoured sorafenib, but this

outcome is likely due to an imbalance in second-line therapy between the two arms. Robert Motzer, lead author of the study, explains: "patients randomized to sorafenib received tivozanib through a separate open extension protocol, whereas patients randomized to tivozanib received second-line agents based on availability of the standard targeted drugs."

More patients experienced hand–foot syndrome and diarrhoea with sorafenib, whereas hypertension and dysphonia were more common with tivozanib. Although other treatment options exist, this study illustrates the challenges of developing a tyrosine kinase inhibitor in the crowded RCC treatment landscape.

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Original article Motzer, R. J. et al. Tivozanib versus sorafenib as initial targeted therapy for patients with metastatic renal cell carcinoma: results from a phase III trial. J. Clin. Oncol. doi:10.1200/JC0.2012.47.4940