## TKIs strike back: complete remission in kidney cancer

Before the advent of effective targeted therapies, the standard treatment for patients with metastatic renal-cell carcinoma (mRCC) was cytokine therapy with IFN- $\alpha$  and IL-2. Durable complete remissions beyond 3 years have been noted in a few patients with these agents but relapse is common. In recent years, however, targeted therapy with tyrosine kinase inhibitors (TKIs) including sunitinib and sorafenib has become the standard of care, owing to substantially improved outcomes, with some complete remissions reported.

The characteristics of patients who achieve a complete remission are not well defined, and it is unclear whether patients who achieve remission should continue TKI treatment or not. Therefore, Laurence Albiges and colleagues carried out a retrospective, multicenter study of patients with a complete response to sunitinib or sorafenib treated with or without local treatment to assess the characteristics of this patient population. As Albiges highlights, "the idea of this work was to confirm that complete remission can be obtained in patients treated with a TKI for mRCC, and to assess the outcome of such patients." She continues, "one important question is whether treatment should be continued or stopped when complete remission occurs. Our study supports the possibility to stop treatment when careful follow up is given. With this approach, relapse will occur in only half of the patients, and importantly, most of these patients will remain responsive to further rechallenge. This is a new observation."

Although most patients who responded had favorable-risk or intermediate-risk disease, remarkably, three patients with a poor-risk profile also achieved complete remission. At a median of 13 months following complete remission, 53 patients discontinued TKI therapy, and 29 of these remain disease free. No clinical or biological parameters associated with



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complete remission were identified in this analysis, although the study had a limited number of patients.

Albiges's team are currently launching a nationwide prospective study of patients with mRCC who achieve complete remission following sunitinib treatment. Albiges comments, "it is hoped that this study will allow us to better characterize this situation as well as to investigate biological features of these patients."

## Lisa Hutchinson

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