

## TARGETED THERAPIES

**Can sunitinib use be expanded to other cancers?**

The success of sunitinib as first-line therapy for advanced renal cell carcinoma has led investigators to test for benefit in other neoplasms, with mixed results. Phase II trial data from two studies published in the December issue of *Annals of Oncology*, reveal modest activity in new clinical scenarios.

**“...reported response rates are lower than for the standard chemotherapy regimens...”**

For the first study, researchers from centers across Spain evaluated the use of first-line sunitinib in patients with advanced urothelial carcinoma deemed unfit for cisplatin therapy. “We adopted the ‘window period’ strategy—testing a new drug for 1 month in untreated patients to assess the pure activity of the drug,” says Joaquin Bellmunt, lead author.

The study cohort comprised 38 patients with locally advanced or metastatic

transitional cell carcinoma of the urinary tract, who were unable to receive cisplatin owing to impaired renal function (creatinine clearance 30–60 ml/min) and poor performance status. Sunitinib was administered at 50 mg per day for 4 weeks followed by 2 weeks of rest, in a 6-week cycle. Patients who did not derive any benefit after 1 month were switched to a carboplatin-based regimen.

No patients in the trial achieved a complete response, only 8% demonstrated partial response and disease stabilization was reported in 50% of the cohort.

Similar results were obtained in the second study, which investigated the use of sunitinib to treat cisplatin-refractory germ cell tumors (GCT). Preclinical experiments showed promise, demonstrating that sunitinib could reduce the proliferation of three cultured GCT cell lines, at different levels of cisplatin resistance.

However, only modest activity was reported in patients. 33 men with

relapsed GCT (after cisplatin treatment or salvage high-dose chemotherapy) received the sunitinib regimen described above; similarly only 9% achieved partial response and 41% reported stable disease.

Although the reported response rates are lower than for the standard chemotherapy regimens for each malignancy, the authors of both studies are hopeful that the demonstration of any activity at all is enough to warrant further investigation of angiogenesis as a therapeutic target.

*Sarah Payton*

**Original articles** Bellmunt, J. *et al.* Phase II study of sunitinib as first-line treatment of urothelial cancer patients ineligible to receive cisplatin-based chemotherapy: baseline interleukin-8 and tumor contrast enhancement as potential predictive factors of activity. *Ann. Oncol.* **22**, 2646–2653 (2011) | Oechsle, K. *et al.* Preclinical and clinical activity of sunitinib in patients with cisplatin-refractory or multiply relapsed germ cell tumors: a Canadian Urologic Oncology Group/German Testicular Cancer Study Group cooperative study. *Ann. Oncol.* **22**, 2654–2660 (2011)