Surufatinib in neuroendocrine tumours

In patients with advanced neuroendocrine tumours, treatment with surufatinib—an orally active small molecule tyrosine kinase inhibitor—shows encouraging antitumour activity with manageable toxic effects, according to a recent study.

Jian Ming Xu (General Hospital of People's Liberation Army, Beijing, China) and colleagues did a single-arm, multicentre, phase 1b/2 trial to assess the activity and safety of surufatinib in 81 patients with low-grade or intermediate-grade metastatic or inoperable neuroendocrine tumours. 42 (52%) of 81 patients had pancreatic tumours and 39 (48%) patients had extrapancreatic neuroendocrine tumours. The patients were given 300 mg oral surufatinib once daily, which continued for every 28-day cycle, until intolerable toxic effects, progression of the disease, or withdrawal of consent. The primary endpoints were safety and the proportion of patients achieving an objective response and secondary endpoints included progression-free survival, and the proportion of patients achieving disease control.

The median follow-up time was 14·7 months (range 0·6–30·2). In patients with pancreatic and extrapancreatic neuroendocrine tumours, 19% (eight of 42 patients; 95% CI 9–34) and 15% (six of 39 patients; 6–31) achieved an overall response with surufatinib treatment. Median progression-free survival was 21·2 months (95% CI 15·9–24·8) in patients with pancreatic neuroendocrine tumours and 13·4 months (7·6–19·3) in patients with extrapancreatic neuroendocrine tumours, and 91% (38 of 42 patients; 95% CI 77–97) and 92% (36 of 39 patients; 79–98) achieved disease control, respectively. The most frequent treatment-related grade 3 or worse adverse events were hypertension (27 [33%] of 81 patients), proteinuria (ten [12%]), hyperuricemia (eight [10%]), hypertriglyceridemia (five [6%]), and diarrhoea (five [6%]).

Xu said, "This study provided clinical evidence that surufatinib might be [a] promising therapeutic candidate for patients with well differentiated advanced neuroendocrine tumours including extrapancreatic neuroendocrine tumours." Eva Selfridge (University Hospitals Seidman Cancer Center, Cleveland, OH, USA) commented, "This study overall shows promise for surufatinib as a much-needed treatment for metastatic neuroendocrine tumours, and I look forward to the results of the phase 3 clinical study to evaluate the medication in a larger population."

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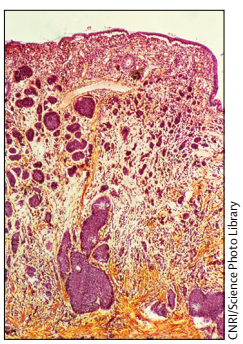

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For the **study by Xu and colleagues** see *Clin Cancer Res* 2019; published online March 4. DOI:10.1158/1078-0432.CCR-18-2994