GASTROINTESTINAL STROMAL TUMOR

Adjuvant imatinib mesylate therapy improves recurrence-free survival

The results of a new trial indicate that adjuvant therapy with imatinib mesylate is safe and seems to improve recurrence-free survival (RFS) in patients who have undergone resection of a primary gastrointestinal stromal tumor (GIST).

Imatinib mesylate, a small molecule that inhibits activation of KIT and PDGFR- α proteins, was first recognized as an effective primary treatment for metastatic GIST in 2000. This finding led Ronald DeMatteo and his colleagues from the Memorial Sloan-Kettering Cancer Center, NY to immediately design their trial. The standard-of-care for patients with primary GIST is to perform surgery alone. The team wanted to test the value of this agent as an adjuvant to the resection of primary GIST. 713 patients were randomly allocated to placebo or imatinib mesylate for 1 year. Patients on imatinib mesylate had significantly improved RFS compared with those on placebo, and therapy was well-tolerated. “This is the first time that the efficacy of adjuvant imatinib mesylate has been proven in primary GIST,” says DeMatteo. These results led to the recent FDA approval of the agent in this setting.

“We feel that our findings will be relevant to the adjuvant use of other molecularly-targeted [sic] agents for

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other cancers,” explains DeMatteo. The authors now plan to examine the optimal duration of adjuvant imatinib mesylate therapy and identify subgroups of patients who will benefit most from this treatment.

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Original article Brennan, M. F. *et al.* Adjuvant mesylate after resection of localised, primary gastrointestinal stromal tumor: a randomised, double-blind, placebo-controlled trial. *Lancet* 373, 1097–1104 (2009).