CHEMOTHERAPY Have a break

Although treatment of advanced-stage colorectal cancer (CRC) has improved in the past decade, most patients still spend the rest of their lives under harsh therapy from the moment they are diagnosed. First-line treatment usually involves 6 months of continuous chemotherapy resulting in severe toxic effects, mainly sensory neuropathy and hand-foot syndrome caused by oxaliplatin and fluoropyrimidines, respectively. Allowing the patients a break by interrupting treatment after short cycles and re-starting it upon disease progression, could help to improve their quality of life. However, intermittent administration can reduce the efficacy of the treatment and may render tumors resistant to therapy.

To assess this, Richard Kaplan and his collaborators enrolled 1,630 patients to receive two different chemotherapy regimens (oxaliplatin plus capecitabine or oxaliplatin plus 5-fluorouracil) in a continuous fashion or in an intermittent way. Patients in the continuous arm received treatment until they developed progressive disease, cumulative toxic effects or chose to stop. Patients in the intermittent arm received treatment



for 12 weeks, after which treatment was stopped and re-started on confirmation of progressive disease. During the treatmentfree interval, the patients were assessed clinically and radiologically. The study did not reach the primary end point of non-inferiority (overall survival was 15.8 months in the continuous arm versus 14.4 months in the intermittent arm), and patients with a high platelet count did particularly poorly (reduction in overall survival of 5 months). However, there were significant benefits for intermittent therapy after two rounds of treatment with fewer side effects such as nausea, fatigue, or interference with daily life. Importantly, there was no reduction, but an increase, in reported pain in the intermittent arm.

Further research is needed to establish when intermittent therapy is suitable, but for now, it seems that patients with advanced-stage CRC might be able to have a break.

M. Teresa Villanueva

Original article Adams, R. *et al.* Intermittent versus continuous oxaliplatin and fluoropyrimidine combination chemotherapy for first-line treatment of advanced colorectal cancer: results of the randomised phase 3 MRC COIN trial. *Lancet Oncol.* doi:10.1016/S1470-2045 (11) 7003-4