Intratumoural immune signature to identify patients with primary colorectal cancer who do not require follow-up after resection: an observational study

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Plain English summary

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Bowel cancer (also known as colorectal cancer) is the fourth commonest cancer in the UK. When the cancer is confined to the bowel and/or the surrounding lymph nodes (early bowel cancer), it is typically treated with an operation to remove the cancer with or without the addition of chemotherapy. Following this treatment, many patients will be cured, but in approximately one in five patients the cancer may come back (recur) either in the bowel or in another organ (e.g. the liver). Consequently, after treatment of early bowel cancer, clinicians often follow up patients in the hope of detecting any recurrent cancer at an early and treatable stage. For the four out of five patients whose cancer will never recur, this follow-up is unnecessary and burdensome on both the NHS and the patients. Better markers are needed to inform which patients do and do not need to undergo this surveillance.

Over the last decade, evidence has accumulated to show that the way that a patient's immune system responds to a cancer influences the likelihood of the cancer recurring. It is plausible that those with the most immune cells in their cancer have such a small chance of recurrence that follow-up is not necessary. To validate this in an accurately followed-up population of patients with bowel cancer, we collected cancer tissue specimens from 701 patients in the Follow-up After Colorectal Surgery (FACS) trial and developed methods to count the number of immune cells in their cancers. At present, methods are still under development to automate the process. Indeed, if this were ever to become part of routine practice in NHS laboratories, then automation would be essential.

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This report

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