

Microsatellite instability testing (and alternative technologies identified during scoping) for Lynch syndrome in people diagnosed with colorectal cancer

Lynch syndrome (also known as hereditary non-polyposis colorectal cancer [HNPCC]) is an inherited genetic condition that is associated with an increased risk of colorectal cancer. Microsatellite instability testing by polymerase chain reaction (PCR) is used to detect microsatellite instability (expansion or reduction in the length of repetitive DNA sequences (microsatellites) in tumour DNA compared to normal DNA), which is a distinguishing characteristic of Lynch syndrome tumours. Currently, microsatellite instability testing is only offered to people considered to be at high risk of having Lynch syndrome. It is proposed that it may be both clinically and cost effective to expand the population eligible for microsatellite instability testing to all people with colorectal cancer rather than those identified as high risk of Lynch syndrome. It is claimed that testing all people with colorectal cancer will improve identification of people who are at high risk of colorectal cancer leading to increased surveillance and earlier diagnosis, reduce morbidity and mortality from colorectal and other cancers in pre symptomatic people by increased surveillance and improve tailoring of therapy and management decisions. It may also improve consistency and quality of testing for Lynch syndrome across the NHS, reduce the incidence of advanced colorectal cancer and associated treatment costs, reduce the costs of inappropriate testing inappropriate therapy and reduce the cost of chemotherapy treatment in colorectal patients with better prognosis. The NICE Diagnostics Assessment Programme will assess the clinical and cost-effectiveness of microsatellite instability testing (and alternative technologies identified during scoping) in all people with colorectal cancer in order to make recommendations on their use in the NHS.

Stakeholders

To be confirmed

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