

# INTERNATIONAL GUIDELINES OR SURVEILLANCE AFTER CURATIVE TREATMENT OF COLORECTAL CANCER

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Colorectal cancer is the second leading cause of cancer death in most developed countries, including Belgium (more than 6000 new cases per year). Seventy to 80% of patients have tumors that, at diagnosis, can be resected with curative intent. Most recurrences occur by five years. Surveillance strategies will aim at improving survival through the earlier identification of recurrences that are still amenable to surgery with curative intent.

Several national and international societies have published guidelines that recommend surveillance strategies that sometimes display strong discrepancies. These proposals take into account cost-effectiveness, with wide variations of cost between various countries. Several parameters are also of matter, such as quality of life, disease-free survival, toxicity reduction, and also compliance and information.

The most consensual recommendations concern colonoscopy. Most guidelines propose a perioperative cleaning of the colon of any synchronous adenoma or adenocarcinoma, by preoperative colonoscopy, or in the early postoperative if complete obstruction. Then, colonoscopy will be performed at one year, to detect local recurrence or metachronous lesions, which appear to be frequent during the first year (.35% of metachronous cancer per year) If normal, colonoscopy should then be proposed according to the guidelines of post-adenoma resection surveillance guidelines. Interval should be shortened if HNPCC. There is no benefit of more intensive endoscopic surveillance. Special attention is required for rectal cancer, in which local recurrences is 10 times more frequent. Surveillance by recto-sigmoidoscopy every 6 months should be recommended. But the local recurrence rate has considerably decreased, due to neoadjuvant radiation and chemotherapy, and surgical total mesorectal excision. Other promising new technologies are not recommended by guidelines yet, because of lack of evidence. These are virtual endoscopy, positron-emission tomography, or even chromoendoscopy or magnification endoscopy.

Besides endoscopy, several plans of surveillance are proposed, including periodic history taking and physical examination, laboratory tests such as carcinoembryonic antigen, and imaging studies like chest x-ray, liver CT, ultrasound or MRI. These proposals are much less consensual, mostly because of lack of studies of individual components, many relapses are first signaled by symptoms, lack of evaluation of outcomes other than survival or disease control, and probably most of all, because of unnecessary cost. The literature provides only 6 prospective studies and 3 meta-analysis comparing low to high intensity strategies. All show recurrences found earlier and more likely to be asymptomatic, but only one study shows a significant improvement in recurrence rate and 5-year survival. So neither the ASCO, nor the ESMO consider evidence-based recommendations of strategies including CEA, chest x-ray and liver imaging.

So there are still many areas of uncertainty. Are they specific surveillance tests? What is the optimal frequency of various strategies? What is their cost-effectiveness? What will be the role of new technologies? What is the impact on the quality of life and psychosocial benefits? Which practitioners should be involved? What role plays the heterogeneity of colorectal cancer? What is the influence of more effective therapies?

**References**      PFISTER DG et al. N. Engl. J. Med. 2004 ; 350 : 2375-2382.  
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