

## Screening and diagnosis for colorectal cancer: present and future

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### ABSTRACT

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**Aims and background.** Colon cancer is the third most common cause of cancer diagnosed in the United States, and the second leading cause of cancer death. Although rates of the disease have been going down in recent years, results can be further improved. About 90% of people whose colon cancer is caught before it has spread to nearby lymph nodes or organs survive more than 5 years after diagnosis. However, only 10% of patients whose cancer has spread to distant parts of the body survive 5 years. Diagnosis at an early stage aims to reduce the incidence of tumors in an advanced stage and hence mortality.

**Methods and study design.** We analyzed the literature to understand what new tests to use and new directions to take.

**Results.** There is evidence to support the screening of average-risk individuals over the age of 50 years to detect and prevent colon cancer. Screening of these people can only reduce mortality rates, not incidence, identifying cancer at an early stage and through the removal of clinically significant adenomas. Patient preferences and availability of resources play an important role in the selection of screening tests, because each test presents specific risks and specific benefits.

**Conclusions.** The American Cancer Society has added two new screening methods, CT colonography, also known as virtual colonoscopy, and stool DNA tests to the list of options. A small revolution in screening for colon cancer is in the making. The availability of these less invasive tests should increase the number of people who undergo regular screening. Free full text available at [www.tumorionline.it](http://www.tumorionline.it)

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**Key words:** colonoscopy, CT colonography, double-contrast barium enema, fecal immunochemical test, fecal occult blood test, flexible sigmoidoscopy, stool DNA tests, virtual colonoscopy.

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