Colorectal cancer is the third most diagnosed cancer in the world, with population screening being recommended for early disease detection, however, the most optimal method to screen for the disease remains unknown.
In order to compare different screening methods for colorectal cancer, Lapo Sali, M.D., Ph.D., Department of Biomedical, Experimental and Clinical Sciences 'Mario Serio', University of Florence, and colleagues, in a study published December 30 in the JNCI: Journal of the National Cancer Institute, looked at a data from a single-center randomized controlled screening trial in Florence, Italy, with four parallel groups: biennial fecal immunochemical test (FIT) for three rounds, reduced (r-CTC,) and full cathartic preparation CT colonography (f-CTC,) and optical colonoscopy (OC) in patients aged 54-65 years (16,087 subjects).

The researchers found that participation was different across the four screening methods (50.4% for first-round FIT, 28.1% for r-CTC, 25.2%, for f-CTC, and 14.8% for OC), but detection rates (DRs) of advanced neoplasia were different only between CTC and FIT groups (1.7% for first-round FIT, 5.5% for r-CTC, 4.9% for f-CTC, and 7.2% for OC). They conclude that "The combination of lower attendance and higher DR of screening CTC as compared with FIT are key factors for the optimization of its role in population screening of CRC."

In an accompanying editorial, Ernst J. Kuipers, M.D., Ph.D., and Manon C. W. Spaander, M.D., Ph.D., Department of Gastroenterology and Hepatology, Erasmus University Medical Center, write that the differences in the types of screening for colorectal cancer make it so that there is no test or program design that makes one type of screening better than the other, but feel that follow-up to these types of screenings are essential, and therefore, find that the study is useful to identifying and combatting the disease. "The authors conclude that limitation of the bowel preparation increases the participation in CTC. This is an important new finding that is in line with previous observations that ease is an important determinant of screening uptake."
