

New tests for colon, prostate cancer show promise

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A pair of experimental tests could help doctors detect colon or prostate

cancer with just a sample of blood or saliva.

One [test](#) examines a person's blood for four biomarkers linked to inflammation. In a small study, it outperformed the fecal blood test now used in [colon cancer screening](#), said lead researcher Dr. Mona Eldeeb, of Alexandria University Medical Research Institute in Egypt.

"These combined blood base markers could detect early [cancer](#) [of the] colon, especially if applied in a screening program," she said.

The other test uses a man's saliva to look for genetic material linked to prostate tumor growth, according to the Iranian researchers who developed it.

If approved in the United States, the tests could make screening and diagnosis for these cancers easier on patients, without the need for needle biopsy or colonoscopy, experts said.

"The exciting part of this study is that the [prostate cancer] test truly is noninvasive, requiring no need for needles as it relies on saliva that can be easily and repeatedly obtained," said Dr. Corey Speers, a radiation oncologist at the University of Michigan's Rogel Cancer Center in Ann Arbor.

The colon cancer test uses microscopic, color-coded beads to capture four inflammatory proteins from a blood sample. Laser technology then provides a count of the beads.

Eldeeb and her team tried the test with 35 patients with colon cancer and 52 people who were cancer-free.

They found that the proteins were at higher levels in the cancer patients, indicating that they could be used to screen for colon cancer without

resorting to colonoscopy, Eldeeb said.

"This new test showed higher accurate results than the routinely used stool-based noninvasive test, and if used in combination with the fecal occult blood test gives very strong and accurate sensitivity with less need for colonoscopy," she said.

The prostate cancer test searches saliva for eight RNA samples that indicate whether a man has developed prostate cancer or is simply suffering from age-related enlarged prostate. The research was led by Jamal Amri and Mona Alaei, from Tehran University of Medical Sciences in Iran.

The researchers tried the test on 180 men between the ages of 45 and 50, including 60 diagnosed with prostate cancer and 60 with enlarged prostate.

The study found that the saliva panel accurately sorted the men with [prostate cancer](#) from those with an enlarged [prostate](#)—something that up to now has required a needle biopsy.

"Of course, with all such preliminary studies questions still remain as to the accuracy and reliability of the test when you expand to a larger group of patients, and it isn't yet ready for general adoption, but this represents an exciting first step," said Speers, a spokesman for the American Society for Clinical Oncology.

He said future studies would seek to confirm these initial findings in a larger and more diverse set of men. They will also seek to determine appropriate cutoffs for levels of RNA in the saliva samples.

"We look forward to these confirmatory studies being completed," Speers said.

Both reports were presented this week at the American Association for Clinical Chemistry (AACC) annual meeting, in Atlanta. Findings presented at medical meetings are considered preliminary until published in a peer-reviewed journal.

"These reports are very interesting early observations, and it will be exciting to see how they perform in follow-up studies," AACC President Dr. Stephen Master said in a statement. "Of course, it's important to note that both of these studies are preliminary, and both tests will need to be validated in larger studies before we can really know if they can be used in clinical practice or not."

More information: The U.S. National Cancer Institute has more about [cancer screening](#).

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