

# Blood test shows promise for cancer detection, study finds

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Check for early stage lung and prostate malignancies isn't 'perfect', but could prove useful, clinicians say.

(HealthDay)—Researchers say they've developed a blood test that can detect some cases of early stage lung and prostate cancer.

Although the test has limited accuracy and only a small number of people have tried it, it potentially could provide doctors more information when they suspect a patient has a tumor.

"[This is] one more tool doctors can use to help guide clinical decisions," said study co-author Dr. Daniel Sessler, professor and chairman of the department of outcomes research at the Cleveland Clinic. "It is also potentially important because the only current routine diagnostic method for [lung cancer](#) is CT scanning, which is both expensive and requires radiation exposure."

Researchers have spent a decade or more trying to develop a blood test to detect cancer, said Dr. Len Lichtenfeld, deputy chief medical officer of the American Cancer Society. Tests would be especially useful if they detect cancer in its early stages when treatment is most effective. Some scientists dream of a test people could take at home using drops of blood from a finger prick, he said.

The prostate specific androgen, or PSA, test can detect signs of [prostate cancer](#), but its usefulness is the subject of much debate because it is sometimes inaccurate, leading to unnecessary treatment. A blood test like the one developed for this study could be a useful addition to prostate cancer screenings, the researchers said.

For now, studies into cancer tests continue, Lichtenfeld said, but they remain challenging to develop because signs of cancer in the blood can be minuscule. "We're getting closer to the possibility but we're there not there yet," he said.

In the new study, which Lichtenfeld described as "very early" research, the authors examined [blood samples](#) from 95 cancer patients and compared them to samples from healthy people. They also examined blood samples from 24 patients before and after they had surgery for lung cancer.

The researchers found that the cancer patients had up to six times the level of serum-free [fatty acids](#) and their metabolites (which are produced during metabolism) as the cancer-free participants. Also, within a day after lung cancer surgery, the levels of fatty acids decreased by between three and 10 times.

Sessler said the fatty acids are necessary for cancer cells to grow, and some cancers release them.

The findings were scheduled for presentation Tuesday at the annual meeting of the American Society of Anesthesiologists in San Francisco.

How effective is the test itself? Sessler said it correctly identifies [cancer patients](#) 70 percent of the time and patients without cancer 70 percent of the time.

"It is thus by no means perfect, but may provide information to guide clinicians, especially in high-risk patients," he said.

Sessler said the results could help physicians figure out what to do about a suspicious-looking nodule. "And it might help evaluate the response to surgery and whether or not cancer has recurred," he said.

"Like all tests, there will be both false positives and false negatives," Sessler said. "Using it in the right patients and interpreting the results in context with other clinical data will be necessary."

What about the cost? "The test is nowhere near being commercial, so cost can't yet be determined," Sessler said.

The next step for the researchers is to keep track of [blood test](#) results after surgery to see if they pick up recurrences of [cancer](#).

Data and conclusions presented at meetings typically are considered preliminary until published in a peer-reviewed medical journal.

**More information:** For more about [cancer](#), see the U.S. National Library of Medicine.

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