

Breath temperature test could identify lung cancer

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The temperature of exhaled breath could be used to diagnose lung cancer, according to a new study.

The research, presented at the European Respiratory Society (ERS) International Congress in Munich today (8 September 2013), suggests that testing the temperature of breath could be a simple and noninvasive method to either confirm or reject the presence of lung cancer.

Many research teams have been looking at the possibility of using breath tests for a number of cancers. This is the first study looking at breath temperature as a marker in lung cancer.

The researchers enrolled 82 people in the study who had been referred for a full diagnostic test after an x-ray suggested the presence of lung cancer. 40 [patients](#) received a positive diagnosis, while 42 patients had the diagnosis rejected. Researchers measured the temperature of [exhaled breath](#) in all patients using a breath thermometer device, known as an X-Halo device.

The results demonstrated that the patients with lung cancer had a higher breath temperature than those without. The temperature also increased with the number of years a person had smoked and the stage at which their lung cancer had developed.

The researchers also identified a cut-off value in the measurement of temperature, which they proved could identify lung cancer with a high

level of accuracy.

Professor Giovanna Elisiana Carpagnano, lead author of the study from the University of Foggia, Italy, said: "Our results suggest that lung cancer causes an increase in the exhaled temperature. This is a significant finding and could change the way we currently diagnose the disease. If we are able to refine a test to diagnose [lung cancer](#) by measuring breath [temperature](#), we will improve the diagnostic process by providing patients with a stress-free and simple test that is also cheaper and less intensive for clinicians."

More information: Abstract: Exhaled breath temperature in NSCLC: Could be a new non-invasive marker? Monday 8 September, 10.45-11.45

Provided by European Lung Foundation

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