Maastricht, Netherlands - A six-minute breath test accurately identified women with early stage breast cancer or an abnormal screening mammogram.

The Maastro Clinic and the Maastricht University Medical Center (MUMC) in Maastricht, the Netherlands, along with two breast cancer centers in the USA: Newark Beth Israel hospital in Newark, NJ, and Swedish Medical Center in Seattle, in close collaboration with Menssana Research, participated in a study of 244 women, published in the scientific journal PLoS One.

Breast cancer is the most commonly diagnosed cancer in women and it is second only to lung cancer in overall cancer deaths, necessitating the importance of international collaborations. The Maastricht University Medical Center is a well-known and highly respected university in the Netherlands.

The National Cancer Institute estimated that more than 232,000 women would be diagnosed with breast cancer in 2014 and nearly 40,000 would die of the disease in the US. To reduce the number of breast cancer deaths, many countries have established screening mammography programs to detect early-stage disease when it is easiest to cure.

If the inner surface of the lungs could be stretched out flat, they would cover an area of around 100 square meters – about the size of half of a tennis court. This surface produce volatile compounds and this give us an opportunity to detect disease and treatment complications non invasively” explained Prof. Philippe Lambin who initiated the project in Maastricht.

Menssana Research CEO Dr. Michael Phillips (www.menssanaresearch.com) said: “Researchers discovered 20 years ago that women with breast cancer have abnormal volatile chemicals in their breath. But only recently have we learned how to use these chemicals for early screening”.

“A negative result on the breath test was especially useful”, said Prof. Philippe Lambin”because it ruled out both breast cancer and an abnormal screening mammogram with almost 100% accuracy. Most normal healthy woman will have a negative breath test result, and they would probably not need a routine screening mammogram.”

Dr Roy Lalisang, medical oncologist and the principal investigator at MUMC, said: “Mammograms are often uncomfortable, painful, and require a dose of potentially hazardous radiation. In contrast, a screening breath test is safe, painless, non-invasive and does not expose patients to any radiation”. Overall test accuracy for breast cancer was around 80%, so women with a positive breath test should have additional investigations, including a mammogram.

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EINDE PERSBERICHT

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