

FIRM ABOUT TO BEGIN CLINICAL TRIALS

# Startup builds portable device to detect early stage breast cancer

## Canscan probes exhaled breath to detect presence of disease in body

DIPANITA NATH  
PUNE, SEPTEMBER 12

BREAST CANCER is one of common cancers that affect women of all ages, with the National Centre for Disease Informatics and Research reporting that breast and cervical cancers made up 39.4 per cent of cancer cases in 2020. A Pune-based

startup, Kozhnosys, is now developing a device, called Canscan, that will help detect cancer at an early stage. This can help women get timely intervention and thus reduce disease progression or deaths.



PUNE  
INC

"We analyse a few compounds, called volatile organic compounds, which are produced normally by body cells as a part of metabolism. These volatile compounds are present in blood and urine too, but we use Canscan to collect them using exhaled breath. The device will then detect if the disease is present in the body," says Jilma Peruvangat, co-founder and CEO of Kozhnosys.

The company has been extensively working on detecting breast cancer. A prototype of Canscan is ready and the company is in the process of beginning clinical trials at Sahyadri Hospital in Pune, after which



Jilma Peruvangat, co-founder & CEO of Kozhnosys. *Express*

pan-India trials will begin.

Once the device, which has taken six years to create, has been clinically validated, it will be available in the market. Canscan is a portable device that can be taken to rural areas for screening of diseases.

In India, breast cancer is

mostly screened using mammography, which is available only in a few hospitals in big cities. "But, breast cancer is not limited to cities. In the current scenario cases of breast cancer are found equally in cities and rural areas. We will be able to offer our device at one-tenth the

cost of a mammography device. This will enable more hospitals, including small ones, to have a device at their centre," says Peruvangat.

With a biomedical engineering background, Peruvangat, during her last job at Fortis Hospital in Mumbai, realised that almost 80 per cent of medical devices in India were imported and were designed by US and European companies for their populations. "It was also very costly, so all diagnostic procedures cost a lot. I looked upon this as a huge opportunity to design something for our own people," she says.

The startup has received funding of Rs 3 crore in the form of government grant, private funding and CSR support, which is taking care of clinical trials. Villgro, an incubator of social enterprises, is helping Kozhnosys across areas of business development and is raising awareness

among patients and medical communities.

"We are also helping the team build a strong go-to-market (GTM) strategy to prepare them for commercialisation in the coming year. The programme provides structured mentorship from industry experts, financial support, and access to a network of GTM partners," says Savitha Ananth, Lead, Market Partnerships and Technology Commercialisation, Healthcare, Villgro.

Kozhnosys will raise funds for the next phase of manufacturing and marketing for which it will require around Rs 6 crore. Once the device is ready, Kozhnosys expects to clock a revenue of Rs 100 crore within three years from hospitals, medical labs and diagnostic centres.

"We will be targeting India, the US and Europe. These account for 70 per cent of the medical device market," she says.