

SCTIMST develops low-cost AG Chitra Tuberculosis kit

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The technology has been licensed to Kochi-based Agappe Diagnostics

Thiruvananthapuram-based Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) has developed a new low-cost AG Chitra Tuberculosis kit for the rapid detection of pulmonary tuberculosis at an early stage. The product was recently launched by Dr VK Saraswat, Member Science, NITI Aayog.

The method is similar to current DNA-based diagnostic methods like CB-NAAT and can be used with any qPCR machine. With a large infrastructure of qPCR machines already available in the country after the COVID-19 pandemic, this facility can be converted for screening large populations for Tuberculosis.

Up to 96 samples can be tested simultaneously, with the entire testing process taking approximately 1 hour from the sample DNA extraction to the final result. In comparison, commercially available GeneXpert and Truenat require around 3 hours and can only process 8 to 16 samples at a time. The cost per test is less than Rs 500, significantly lower than other tests in the market.

This innovative technology has been licensed to Agappe Diagnostics, a Kochi-based company, and is a unique example of collaborative efforts of medical and engineering talents.