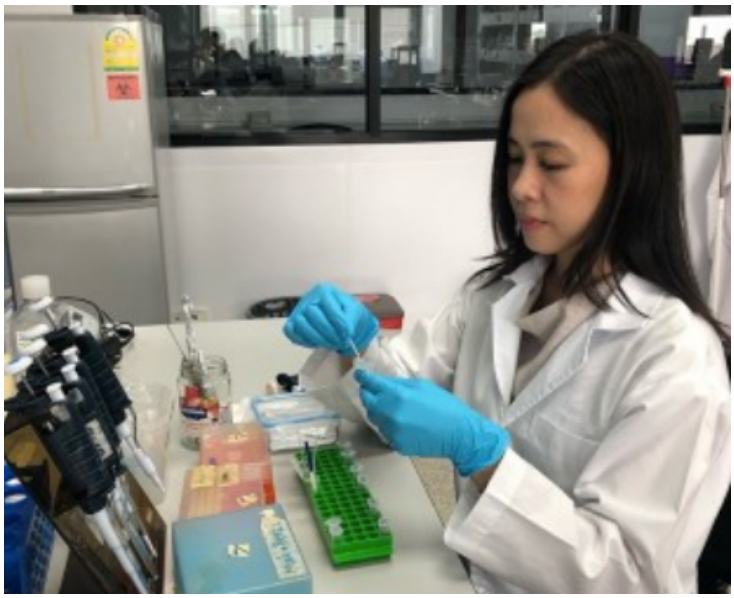
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Thailand develops rapid MTB strip test for tuberculosis detection

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The MTB Strip Test prototypes have already been administered at Umphang Hospital



Researchers of the Faculty of Allied Health Sciences, Chulalongkorn University in Thailand have developed MTB Strip Test Kit for Tuberculosis (TB) diagnosis that's accurate and easy to use, guaranteed by the 2023 Invention Award from the National Research Council of Thailand (NRCT) — another hope to reduce the spread of tuberculosis in Thailand.

Thailand is one of the 14 countries with the most severe TB incidence. Fortunately, drug-resistant tuberculosis in Thailand has been removed from the WHO's list of highest-incidence countries. Only ordinary tuberculosis cases remain.

The MTB Strip Test Kit consists of 2 main parts: 1. Genetic amplification using isothermal amplification with specifically modified and designed primers. 2. Genetic materials detection using developed test strips, which are manufactured from ISO13485-certified industrial plants for medical device manufacturing.

The key feature of the MTB Strip test is its sensitivity to tuberculosis. With a small amount of tuberculosis in the sputum, the test can detect it and display the result. In addition, the test process takes less than an hour and does not require any special tools.

The researchers plan to expand the testing of TB and related diseases by developing an easier-to-use DNA extraction kit and TB test kit that can identify drug-resistant variants of TB right from the outset, so that more specific treatment guidelines can be set.