

NTU develops AI biochip to detect genetic markers in 20 minutes

TechinAsia, 15 Apr

Nanyang Technological University Singapore (NTU) researchers said they built an AI-powered biochip that detected three microRNAs linked to diseases such as heart disease.

The platform can cut detection time to as fast as 20 minutes, according to a study in [Advanced Materials](#).

The system combines nanophotonic structures with AI image analysis to read multiple signals in a single snapshot.

It can detect targets without amplification, unlike PCR, the researchers said.

In lab tests on synthetic microRNAs and human lung cancer cell extracts, the system achieved more than 99% target identification accuracy across channels, the study said.

The team has built a prototype with a camera and phone app and plans further trials with clinicians and industry to test other markers.

Read story here: <https://www.techinasia.com/news/ntu-develops-ai-biochip-detect-genetic-markers>