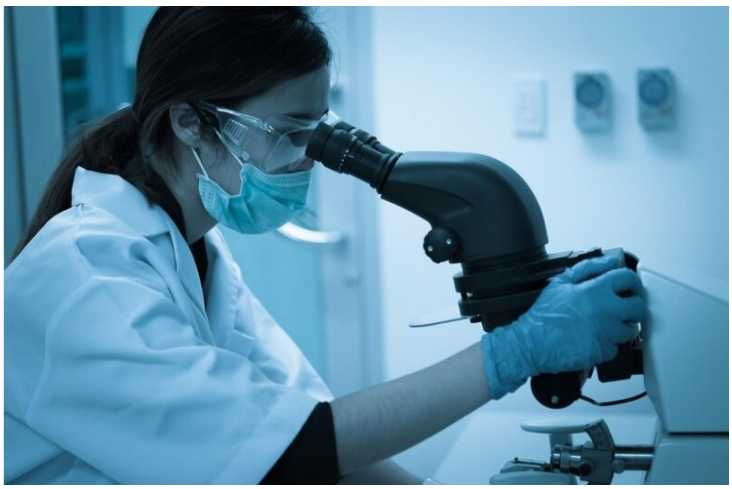
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Thailand explores use of stool DNA as non-invasive alternative for colorectal cancer screening

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To provide a viable non-invasive alternative to colonoscopy



A recent prospective cross-sectional study in Thailand demonstrates that multi-target stool DNA testing is highly sensitive and specific for detecting colorectal cancer (CRC) among Thai individuals.

Researchers believe that this testing method could serve as a viable non-invasive alternative to colonoscopy, especially in settings where colonoscopy is less accessible or less accepted by patients.

This study was conducted by BGI Genomics, in collaboration with Professor Varut Lohsiriwat's team from the Faculty of Medicine, Siriraj Hospital, Mahidol University, Thailand.

Researchers focused on evaluating the diagnostic performance of the multi-target stool DNA testing for detecting CRC and advanced adenoma, using colonoscopy as the reference standard. The study included both asymptomatic and symptomatic patients who underwent stool DNA testing followed by colonoscopy. The multi-target stool DNA test targeted methylation statuses of *SDC2, ADHFE1*, and *PPP2R5C* genes. Sensitivity, specificity, and other diagnostic parameters were analysed.

BGI Genomics' COLOTECT stool DNA testing kits were used for sample and raw data collection. COLOTECT is a non-invasive tool for early colorectal cancer detection based on DNA methylation testing, targeting the methylation profile of colorectal exfoliated cells to assess the risk of colorectal cancer and advanced adenomas. This tool requires no special equipment, imposes no dietary restrictions, and is entirely non-invasive. In recent years, DNA methylation-based colorectal cancer detection has gained recognition, being incorporated into multiple CRC screening guidelines and expert consensus worldwide.

The study results indicate that multi-target stool DNA testing is highly sensitive and specific for CRC detection among Thai individuals. This testing could provide a viable non-invasive alternative to colonoscopy, especially in settings where colonoscopy is less accessible or less accepted by patients.