BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Thailand-based SiPH collaborates with IBM to enhance pathology information system

November 19, 2024 | News

Computational advances and AI to support patients in Thailand and ASEAN



Siriraj Piyamaharajkarun Hospital (SiPH), operating under Faculty of Medicine Siriraj Hospital in Thailand, has announced a successful transformation of its Pathology Information System (PIS) using advanced computational technologies and artificial intelligence.

In collaboration with IBM, the system now integrates laboratory workflows, image scanning systems, and centralised data processing, establishing a cohesive approach for pathological cancer diagnosis and laying the foundation for SiPH's future advancements in cancer diagnostics.

Developed by IBM Supply Chain Industry 4.0 team in Singapore, the system simplifies data entry using smart forms and speech-to-text AI models, seamlessly integrating tissue specimen information with high-resolution images from slide scanners. These images undergo artificial intelligence (AI)-powered analysis using algorithms from SiPH and AI inferencing capabilities of IBM Power10 MMA. This streamlined process gives pathologists real-time access to integrated data, allowing them to quickly and accurately diagnose potential cancer cases.

SiPH's newly transformed PIS system now empowers pathologists to focus on critical aspects of cancer diagnosis. The system's automated workflows and AI-driven slide image analysis, currently piloted for prostate cancer, streamlines the identification of potential cancerous tissues. By automatically processing and feeding diagnostic results back into the system, the platform enables doctors to concentrate on high-risk cases, significantly improving diagnostic accuracy and efficiency.