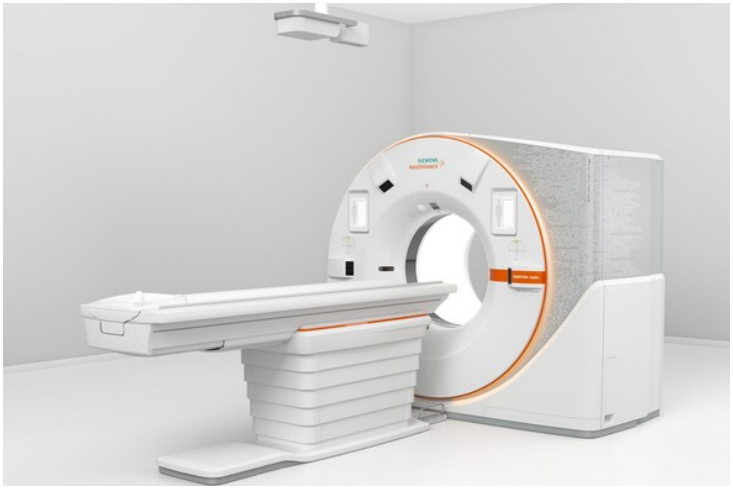
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ASIA EDITION

Mount Elizabeth Hospital first in Southeast Asia to offer photon-counting technology

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Naeotom Alpha is world's first CT scanner with photon-counting technology



Mount Elizabeth Hospital (MEH) has become the first hospital in Southeast Asia to acquire Naeotom Alpha, the world's first photon-counting computed tomography (CT) with the aim to optimise diagnostic and treatment pathways for patients in Singapore.

Naeotom Alpha is a photon-counting Dual-Source Computed Tomography (DSCT) system that utilises cadmium telluride crystals in its CT detector which convert X-ray photons directly into electrical signals instead of first converting it into visible light as with conventional CT imaging.

This overcomes the loss of information from standard energy integrating detectors used in conventional CT systems, and produces sharper, clearer and higher-detailed images without the need for higher radiation doses.

A CT scan allows doctors to view images of body tissues, including lungs, bones, soft tissue, and blood vessels at the same time, in order to make an appropriate diagnosis. The new photon-counting DSCT system produces high-resolution images through spectral imaging technology. This is particularly useful for patients who are breathless, and for paediatric patients without the need for sedation.

The new photon-counting DSCT system counts toward one of the several major equipment and technology upgrades planned under MEH's "Project Renaissance", the hospital's first major infrastructure refurbishment since its establishment in 1979. The S$350 million endeavour will transform the medical institution into a modern and integrated multiservice hub that provides patients with seamless care upon its completion in 2025.