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Singapore leads S$10 M national effort to tackle muscle-loss due to ageing

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Singapore's first nationwide research initiative dedicated to sarcopenia aims to revolutionise diagnosis and treatment for Asian patients



To tackle the growing threat of muscle loss in Singapore's ageing population, SingHealth Duke-NUS Academic Medical Centre will spearhead a S$10 million research initiative into sarcopenia, marking the country's first comprehensive, large-scale programme focused on this condition marked by loss of muscle mass and strength.

Supported by the National Research Foundation, Singapore under the National Medical Research Council (NMRC) Research, Innovation and Enterprise 2025 Open Fund - Large Collaborative Grant (OF-LCG) programme and administered by the Singapore Ministry of Health through the NMRC Office, MOH Holdings Pte Ltd, the project, named MAGNET (Mechanistic Investigation and Clinical Innovation for Sarcopenia Diagnosis and Therapy), will position Singapore as a leader in sarcopenia research globally and is expected to bring critically needed innovations to how the condition is detected and treated, particularly among Asian patients.

To date, over 400 patients with sarcopenia from Sengkang General Hospital have been recruited for the studies (including clinical evaluation), and their relevant biological samples (e.g. blood cells and muscle tissues) have been collected for investigations.

Early studies have revealed new insights into how changes in the immune system and metabolism may be linked to the development of sarcopenia. The MAGNET initiative will incorporate cutting-edge AI, genomic and molecular technologies while leveraging the largest Asian-focused clinical cohort of sarcopenia patients, alongside a unique biobank of muscle and serum samples.