BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Australia develops new AI tool to rapidly diagnose skin cancer

August 21, 2025 | News

A commercial-scale trial with MoleMap Australia begins in August



A new artificial intelligence (AI) tool developed at the University of Melbourne is helping transform how skin cancer is detected. The technology has the potential to save lives, reduce unnecessary biopsies and cut healthcare costs, while addressing long-standing equity gaps in diagnosis.

Research Fellow Dr Noor E Karishma Shaik is integrating AI with thermal multimodal imaging for point of care diagnosis to identify abnormal skin lesions in real time.

In a recent pilot study at the Skin Health Institute (SHI), the AI tool achieved 94 per cent diagnostic accuracy. Four medical clinicians and 30 patients endorsed the tool, praising its clinical value and ease of use.

Skin cancer affects two in three Australians by age 70, and one person dies from the disease every six hours. In 2024, more than 600,000 unnecessary skin biopsies were performed in Australia, costing over $400 million.

A commercial-scale trial with MoleMap Australia, which begins in August, aims to validate the device in real-world clinical settings and inform regulatory approval. Following the trial, commercial rollout is expected within two to three years.