CANCER SCIENCE INSTITUTE OF SINGAPORE

IN THE SPOTLIGHT

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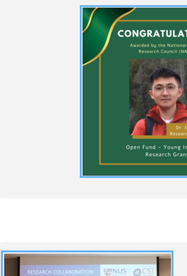
What's New?



Fun Day Out! CSI Staff Party 2025 @ Timezone

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CSI Singapore & Next&Bio Launch Joint Organoid Research Lab at NUS

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Back by Demand: CSI Core Facilities Roadshow 2025 (2nd Edition)!

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Upcoming Events

24 *CSI Health & Wellness Session*
24 October, 3pm - 4.30pm
NUS

27 *Distinguished Speakers' Series by Dr. Simon Boulton*
27 October, 11am - 12pm
NUS

29 *CSI Graduate Program Virtual Sharing Session*
29 October, 1pm - 2pm
Zoom

Research Highlight

Prospective Clinical Validation of a Combinatorial Functional Precision Medicine Platform in Relapsed/Refractory Non-Hodgkin's Lymphoma (JCO Precision Oncology, September 2025)

Treating patients whose non-Hodgkin's lymphoma (NHL) has come back or stopped responding to therapy remains very difficult. Many eventually run out of standard treatment options. A team led by **Dr. Anand Jeyasekharan** and Dr. Edward Chow (NCIS & CSI Singapore, NUS) tested a new approach using an artificial intelligence tool called the Quadratic Phenotypic Optimisation Platform (QPOP).

This tool takes a patient's cancer cells, tests them against different drug combinations outside the body, and then uses AI to predict which treatments are most likely to work. In one of the largest ex vivo drug testing studies to date, involving 117 patients, QPOP was able to correctly predict treatment response in about 3 out of 4 cases.

Patients who went on to receive QPOP-guided, personalised treatment had a 59% response rate, and about 60% of them stayed well for longer compared to their previous treatment. After two years, patients in the QPOP-guided group lived significantly longer without their disease worsening, with a 44% lower risk of progression compared to those who received standard salvage chemotherapy. These findings suggest that QPOP could become a powerful tool to help doctors match the right drug combinations to the right patients, bringing renewed hope to patients facing limited options.

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