

NUS scientists develop new technology to treat myeloma patients

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A multidisciplinary team of scientists from the National University of Singapore (NUS) has developed an artificial intelligence (AI) technology platform that could potentially change the way drug combinations are being designed, hence enabling doctors to determine the most effective drug combination for a patient quickly.

The AI technology platform, Quadratic Phenotypic Optimisation Platform (QPOP), has been developed to speed up drug combination design and to identify the most effective drug combinations targeted at individual patients using small experimental data sets. With just a small amount of blood or bone marrow sample from patients, the platform is able to map the drug response that a set of drug combinations will have on the specific patient's cancer cells.

The other NUS research institutes involved in the development of QPOP include the Singapore Institute for Neurotechnology (SINAPSE) and the Biomedical Institute for Global Health Research and Technology (BIGHEART). The research was conducted in collaboration with the Agency for Science, Technology and Research, the National University Cancer Institute, Singapore, and the University of California, Los Angeles.