

Singapore focuses on providing pre-emptive genetic testing for adverse drug reactions

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Aims to reduce side effects due to inappropriate medications



Raffles Medical Group (RMG) is collaborating with biotech startup NalaGenetics to offer pre-emptive pharmacogenomics testing at its hospital. It is the first hospital in Singapore to provide such a service.

Pharmacogenomics is the study of how genes affect a person's response to medication. Pre-emptive pharmacogenomics testing on a healthy person can be used to discover whether a person is likely to respond well or develop adverse drug reactions (ADRs) to certain medications. The test results could then be used to guide doctors on the choice and dosage of medicine to improve patient outcomes.

The collaboration between RMG and NalaGenetics involves the recruitment of 500 patients to participate in a pilot study on pre-emptive pharmacogenomics testing and covers a range of chronic prescriptions in cardiovascular, psychiatry and pain, among others. The study aims to better understand how doctors leverage such information, while providing research data on the potential benefits of large-scale implementation in Singapore. The study will take place over one year and the recruitment starts on 3 October.

Patients who suffer from or are prone to ten specified diseases will be eligible to take part in the study. Eligible participants will have their genetic samples collected via a non-invasive buccal swab at Raffles Hospital Singapore, which will then be tested by NalaGenetics in its laboratory. The test results will be integrated into the participants' electronic medical records at RMG. There is no cost involved to participate in the study.