

A Low Cost Point of Care Testing (POCT) Device for Uric Acid/Gout Detection

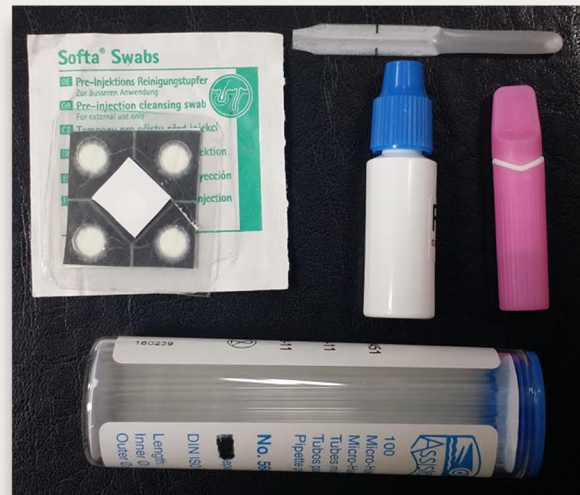
Technology Overview

This is an innovation paper-based technology used to develop a point of care testing (POCT) device for detection of uric acid level from finger-prick blood. The POCT device operates based on the activities of uricase and peroxidase enzymes which are immobilized on the paper device. The results are instantaneous and can be easily adopted for clinical or home use. It is anticipated that a diagnostic kit from this technology will simplify and reduce the cost of detection and monitoring for gout and hyperuricemia.

Features & Specifications

The point of care testing (POCT) kit comprises of the following technologies:

- Design and fabrication of paper-based device
- Immobilization and stabilization of uricase/peroxidase and substrates on paper
- Optimization of enzyme activities on paper
- Innovation method of detection
- The test kit is a 'Class B IVD Rule 4' device (HSA, Singapore)



Customer Benefits

- The POCT kit is cost-effective, user-friendly and does not require skilled personnel or any battery-operated equipment/reader to conduct the test.
- The results are instantaneous.
- The POCT kit is minimally invasive and accurate thus providing distinct advantages over standard-of-care automated methods using venepuncture.

Potential Applications

- A diagnostic kit which includes the paper-based device and all required accessories such as reagents, lancets, alcohol swab, etc. can be a product from this technology.
- The POCT kit can be used in the healthcare industry (hospitals, primary healthcare and diagnostic laboratory) and at home for detection and monitoring of gout and hyperuricemia.