Govt. of India Innovation



SICKLECELL DIAGNOSIS

India's first & only indigenous POCT for diagnosis of sickle-cell

- ✓ POCT
- ✓ EASY
- ✓ ECONOMIC
- ✓ INSTANT
- **✓** ANYWHERE

HIGH-PERFORMANCE OPTICAL SPECTROSCOPY (HPOS)

ONE PAINLESS PRICK • 03 INSTANT TESTS HEMOGLOBIN • SCREENING • DIAGNOSIS

R & D at Govt. of India institute



Indian Institute of Science (IISc)

ICMR validated, CDSCO licensed, proudly showcased at agnii portal.









HOW DOES IT WORK?

With nearly painless prick 03 tests can be performed.



- PoCT (Point of care test) No more sending it to lab in cities.
- No more painful drawing of 2-3 ml blood.
- No more blood spoilage/wastage.



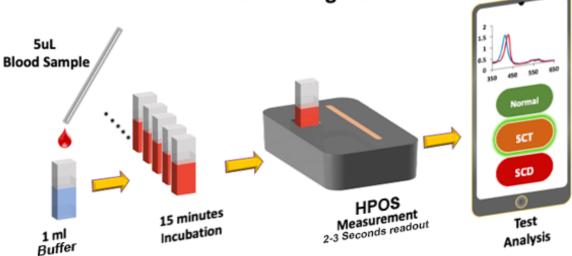
Add reagent. Place in HPOS



- World's first Digital Solubility test:
 No more subjective guess work as in solubility test.
- Diagnostic test: Use accurate Digital HPOS for diagnosis. No more HPLC/Electrophoresis.
- Hemoglobinometer: Never miss out on Sickle cell/ Thalassemia detection.
- No need to wait for days for the report to arrive.
- Upload to cloud.
- Estimate hemoglobin level for severity assessment, for planning immediate intervention.

Save time, effort & money. Instantly diagnose sickle cell trait vs disease at the village itself. Presenting small palmtop chargeable HPOS for diagnosing Sickle cell trait/carrier Vs Disease at the PoC (Point of care).

High-Performance Optical Spectroscopy (HPOS) Testing for Sickle Cell Diagnosis



100's of sample can be incubated in 15 minutes and then the sample processing needs just 2-3 seconds.

BENEFITS



Same accuracy as HPLC tests



Faster Turn-around time compared to HPLC



Available at point of need



Lower total costs compared to current tests



Technology developed at Indian Institute of Science Bangalore



Simple and easy Procedure



Patent filed

FEATURES & SPECIFICATIONS



40 Tests / Kits



Results within 15 minutes



ML integrated testing method



Mobile app for digital access



Absorbance based readout







"...HPOS SickleCert results are comparable to HPLC..."



- "...HPOS offers an average accuracy 97.6%, sensitivity 96.9%, and specificity 98.6%...."
 - International Peer review Journal Molecular and Biomolecular Spectroscopy



"...first and the only Indian cost effective PoC test for Indian conditions..."

- IISc



"...SickleCert is a confirmatory test kit for distinguishing between sickle cell trait (SCT) and sickle cell disease (SCD)..."

- CDSCO



"...The testing process is simple and rapid and does not need skilled personnel to operate..."

- CDSCO approved NABL Lab clinical validation

Manufactured & Marketed By:



ShanMukha Innovations Pvt Ltd Bangalore, Karnataka Call: +91 974 225 5674 www.sminnovations.in