

SigTuple announces launch of AI-enabled digital morphology analyser

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AS76 launches with peripheral blood smear capabilities



Bengaluru-based SigTuple has announced the launch of AS76, an AI-enabled digital morphology analyser designed to automate peripheral blood smear (PBS) microscopic review.

AS76 combines automated digital microscopy with on-device, edge-AI computing to deliver faster, more consistent results while preserving data privacy.

Powered by NVIDIA RTX, the AS76 analyser will perform high-throughput image analysis using advanced AI models, all running locally on the device. This allows the system to deliver near-instant results even for large sample batches, without dependence on internet connectivity.

An AI-powered automated digital microscope with built-in computing, AS76 system can load up to six PBS slides simultaneously, scan them in full diagnostic detail, and generate an AI-assisted report for expert review — with all processing performed entirely on the device. The system automates key elements of manual PBS review, including generation of a 200-cell leukocyte differential, highlighting red blood cell morphology, and flagging platelet morphology, including detection of platelet aggregates.

Equipped with 20x, 40x, and 100x objectives on an automated turret, AS76 launches with peripheral blood smear capabilities and is designed for future software upgrades to support tissues, fluids, bone marrow, and microbiology slides. This multi-

application readiness positions AS76 as a digital replacement for the analog microscope in the laboratory.

By applying AI-driven cell pre-classification, AS76 standardises smear review at scale and surfaces atypical findings quickly for expert confirmation. The system reduces manual effort and turnaround time.