

Automated Hematology Analyzer

# XN-20™

Enhanced WBC  
differential



Together for a better  
healthcare journey

# The Sysmex XN-20

## Build the hematology analyzer your laboratory needs

As a leader in hematology, Sysmex offers a range of analyzers designed to address the needs of your patients as well as fit the flow of your lab. The XN-20 analyzer provides expanded WBC flagging, and when combined with Sysmex's advanced parameters, leads to improved workflow efficiency. It's an approach that allows all facilities to build a high-performance lab, regardless of size.

## Gain efficiency even with abnormal samples

White Precursor Cell (WPC) testing on the XN-20 hematology module offers automated, next-level analysis of white blood cells, giving highly skilled laboratory scientists sensitive and specific flagging for the crucial identification of abnormal cells.

## Expanded clinical information for improved patient care

The XN-20's proprietary WPC channel specific reagents (Lysercell™ WPC™ and Fluorocell™ WPC™) allow for separation of blast cells and abnormal lymphocytes from the normal, mature cells to provide more accurate and meaningful differential flagging. Efficiency can be gained when WPC testing is reflexed using the XN analyzer's onboard rules or Caresphere™ Workflow Solution (WS).

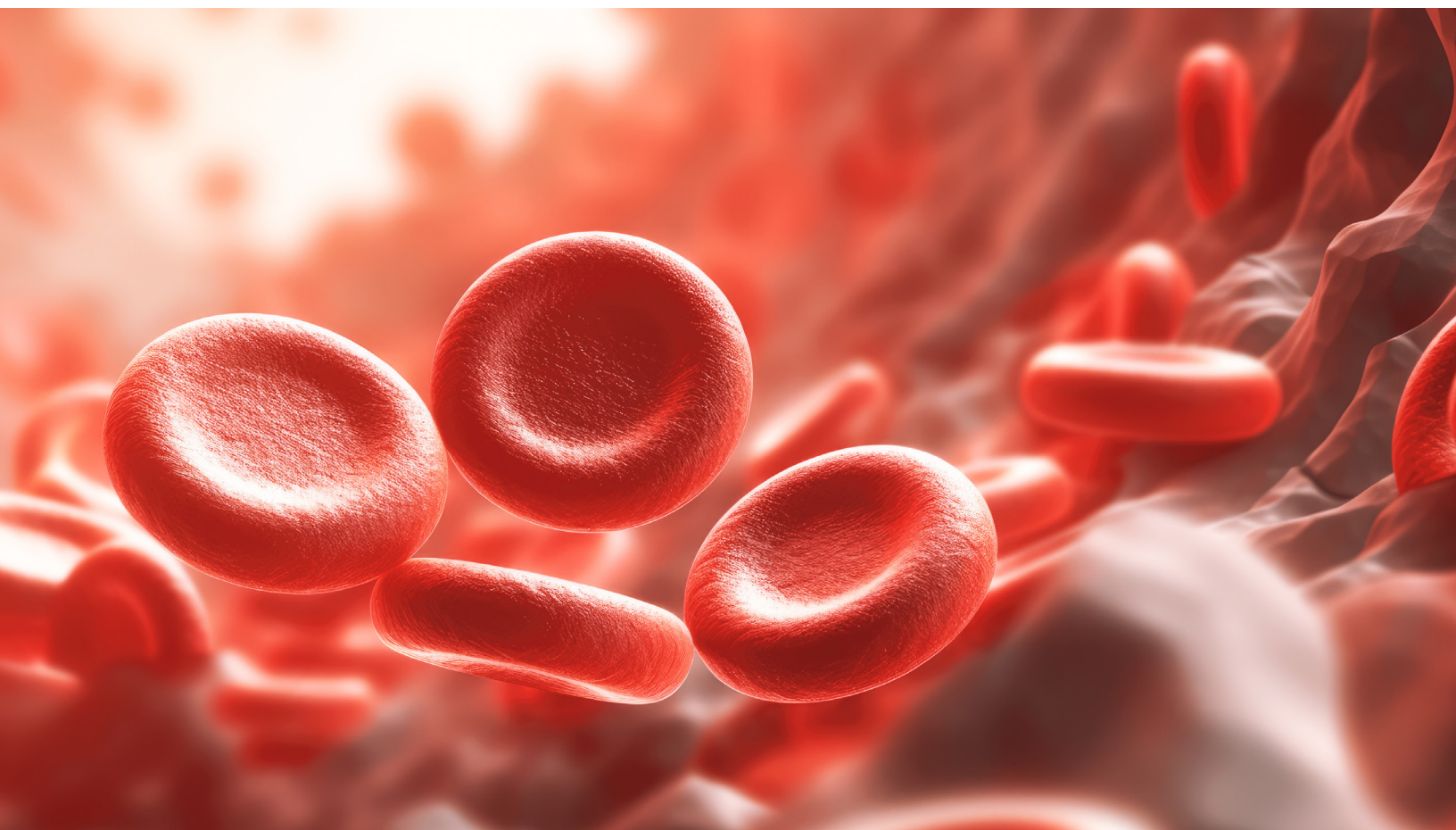
## Analysis in the WPC channel can provide greater lab efficiency in one of two ways:

- Advanced algorithms in the WPC scattergram provide more specific flagging, giving better information to laboratorians and pathologists reviewing smears
- Specific reagents allow for better identification of cells, to potentially eliminate the differential flags and allow the automated WBC diff results to be released with no manual review



### XN-3100™

Components shown (from right): XN-10™ analyzer, XN-20 analyzer, SP-50™ Slidemaker/Stainer, DI-60™ Digital Image Analyzer



### Abnormal Lymphocytes:

Lysercell WPC reagent efficiently perforates the cell membrane of abnormal lymphocytes, allowing Fluorocell WPC reagent to effectively stain the cell nuclei; this results in higher side fluorescence detected in the flow cell.

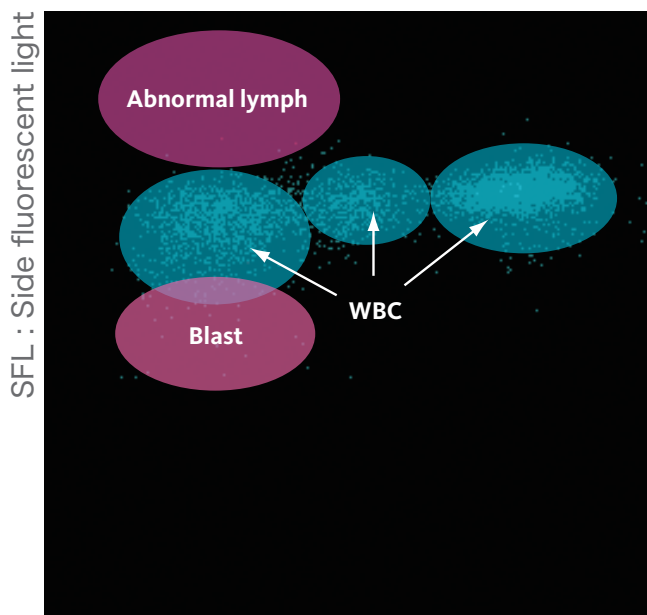
### No abnormal cells detected:

When abnormal patterns in the WDF (WBC Differential) scattergram generate the “Blasts/Abn Lympho?” suspect flag, reflex WPC testing can be performed by the XN-20; if reflex testing clears this differential flag, the results can be released with no additional review.\*

### Blasts:

Immature progenitor cells such as stem cells and blasts are not effectively perforated by the Lysercell WPC reagent; consequently, the cells have lower side fluorescence than other WBCs.

## WPC scattergram



SSC : Side scattered light

\*Additional flags generated by the XN-20 would require verification of results based on laboratory policy

# Instrument Specifications

## Throughput:

- CBC/ CBC+DIFF 100 samples/hour
- CBC+DIFF+WPC 88 samples/hour

## Quality control

- XN CHECK™
  - One material for QC of all Whole Blood Parameters
  - Complete tri-level QC product for all CBC, Diff, WPC, PLT and reticulocyte parameters
- XN CHECK™ BF
  - One material for QC of all Body Fluid parameters
  - Complete bi-level QC product for TNC, WBC, RBC and reportable 2-part diff parameters

## Integrated rules for result management:

- Pre-loaded template within the XN-Series IPU (PC)
  - Customer editable/adjustable
  - Easily enabled/disabled
- Caresphere™ Workflow Solution (WS)

## Integration:

- Available as a standalone module or can be combined with XN-10™ CBC analyzer, SP-50™ Slidemaker/Stainer and/or DI-60™ Digital Imaging Analyzer

## Sample Requirements:

- Aspiration volume: 88µL

## Reportable parameters by channel



WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT (PLT-I), NRBC%, NRBC#, RDW-SD, RDW-CV, MPV



NEUT%, LYMPH%, MONO%, EO%, BASO%, IG%, NEUT#, LYMPH#, MONO#, EO#, BASO#, IG#



Provides improved differentiation of blast cell and abnormal lymphocyte flagging; no reportable parameters



WBC-BF, RBC-BF, MN%, MN#, PMN%, PMN#, TC-BF# (Body Fluids, B License)



PLT (PLT-F), IPF (Platelets, P License)



RET%, RET#, IRF, RET-H<sub>e</sub> (Reticulocytes, R License)

**Sysmex Corporation**  
1-5-1-Wakinohama-Kaigandori Chuo-ku, Kobe 651-0073, Japan · Phone +81 78 265-0521 · [www.sysmex.co.jp](http://www.sysmex.co.jp)

**Sysmex America, Inc.**  
577 Aptakisic Road, Lincolnshire, IL 60069, U.S.A. · Phone +1 800 379-7639 · [www.sysmex.com/us](http://www.sysmex.com/us)

**Sysmex Canada, Inc.**  
5700 Explorer Drive Suite 200, Mississauga, ON L4W0C6 Canada · Phone +1 905 366-7900 · [www.sysmex.ca](http://www.sysmex.ca)

**Sysmex Latin America and the Caribbean**  
Rua Joaquim Nabuco 615 - Bairro Cidade Jardim, São José dos Pinhais Paraná - Brasil - CEP 83040-210 · Phone +55 41 2104-1314 · [www.sysmex.com.br](http://www.sysmex.com.br)