added value

XN-DIFF

BE CONFIDENT YOU DO NOT MISS ANY REACTIVE OR MALIGNANT CONDITIONS

10 DIFF PARAMETERS
INCLUDING IG%, #

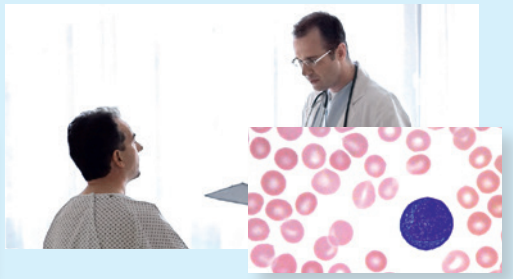
HIGHLY SENSITIVE,
3-DIMENSIONAL FLAGGING

SPECIAL 'LOW WBC' MODE
FOR CRITICALLY LOW CELL COUNTS

Keep your smear rate under control

The parameter IG (immature granulocytes) already enables many of our customers to significantly reduce the number of smears – depending on the individual threshold values.

Sensitively detect abnormal blood count results



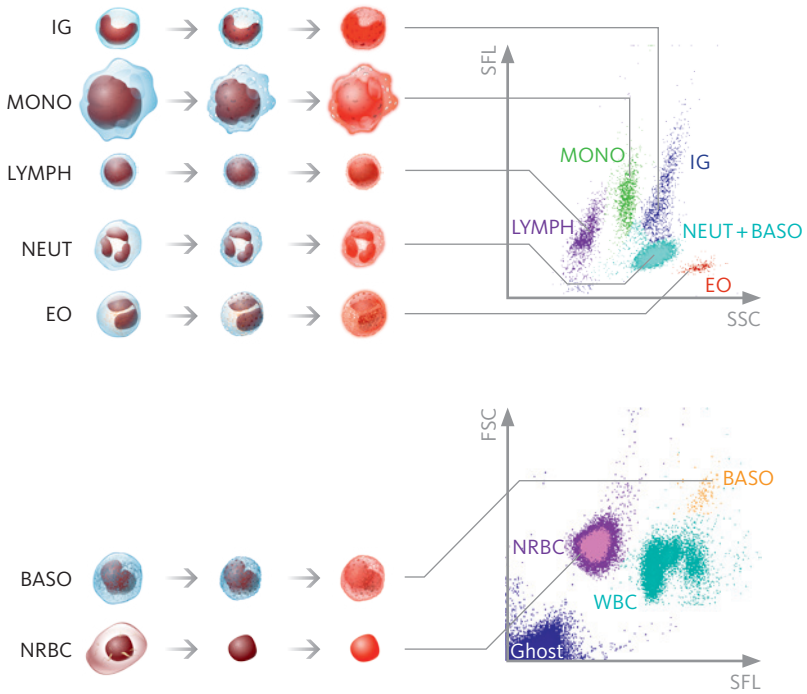
The 3-dimensional DIFF flagging by the XN-Series detects white blood cell abnormalities with great sensitivity thanks to the special shape recognition of the sub-population clusters, and delivers additional diagnostic information, e.g. for infections.

YOUR BENEFITS IN DAILY ROUTINE

- Excellent sensitivity – enabled by 3-dimensional recognition of cell populations in the WDF scattergram – to ensure malignant and reactive conditions are identified, since failing to do so would have grave implications for patients' health and the laboratory workflow.
- Comprehensive range of parameters and messages – such as the flagging message for reactive lymphocytes ('Atypical Lympho?') or the count of immature granulocytes (IG) – that provides valuable diagnostic information for the treating physician for the diagnosis and monitoring of infections and other reactive conditions.
- Significant smear rate reduction due to the availability of an IG count.

Diagnostic parameters	NEUT%, NEUT#, LYMPH%, LYMPH#, MONO%, MONO#, EO%, EO#, BASO%, BASO#, IG%, IG#
Selected research parameters	High-fluorescence lymphocyte count (HFLC%, HFLC#) Neutrophil side scatter (NE-SSC) and fluorescence (NE-SFL) Lymphocyte side scatter (LY-X), fluorescence (LY-Y) and forward scatter (LY-Z) Monocyte fluorescence (MO-Y)

Technologies for WBC differentiation



■ Fluorescence flow cytometry	The specially developed lysis reagent initially perforates the cell membranes while leaving the cells largely intact. The fluorescence marker labels the intracellular nucleic acids (mostly RNA) in the second step. The composition of these two reagents effects a mild reaction with the blood cells, so that almost all of the blood cell structure remains intact. Thus, optimal separation is achieved, particularly of the lymphocytes and monocytes. Cells are differentiated according to their fluorescence signal, their size and their internal structure. The intensity of the fluorescence signal is directly affected by the nucleic acid content and membrane composition of the cell. Some of the strongest fluorescence signals are shown by immature and activated cells, so that these are successfully detected and can even be counted.
■ Adaptive cluster analysis system (ACAS)	The flexible gating algorithm does not use rigid gating areas. Instead it takes the biological variability into consideration when evaluating the measured signals. Therefore, the results are assessed individually, independently of the ethnic origin or other characteristics of the patient.
■ Flagging	The 3-dimensional shape recognition analysis of the WBC sub-population clusters leads to a very high sensitivity for the detection of WBC abnormalities. Excellent flagging performance is provided due to both the precise recognition of abnormal cell cluster shapes and the detection of abnormal cells in the respective areas of the scattergram.
Measurement modes	A WBC differential count can be obtained in the standard whole blood mode as well as in the pre-diluted mode.
■ 'Low WBC' mode	In case the WBC count is low and a neutrophil count cannot be obtained, samples will be re-measured in the specific 'Low WBC' mode as an automatic reflex test. With an increased counting volume, the reliability of the results increases for all WBC differentiation parameters.
Further specifications	
■ Sample stability	Up to 48 hours for the differential counts

For references to peer-reviewed publications, please visit www.sysmex-europe.com/academy/library/publications/white-blood-cells or contact your local Sysmex representative.

Design and specifications may be subject to change due to further product development.
Changes are confirmed by their appearance on a newer document and verification according to its date of issue.

You will find your local Sysmex representative's address under www.sysmex-europe.com/contacts

www.sysmex-europe.com/xn

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