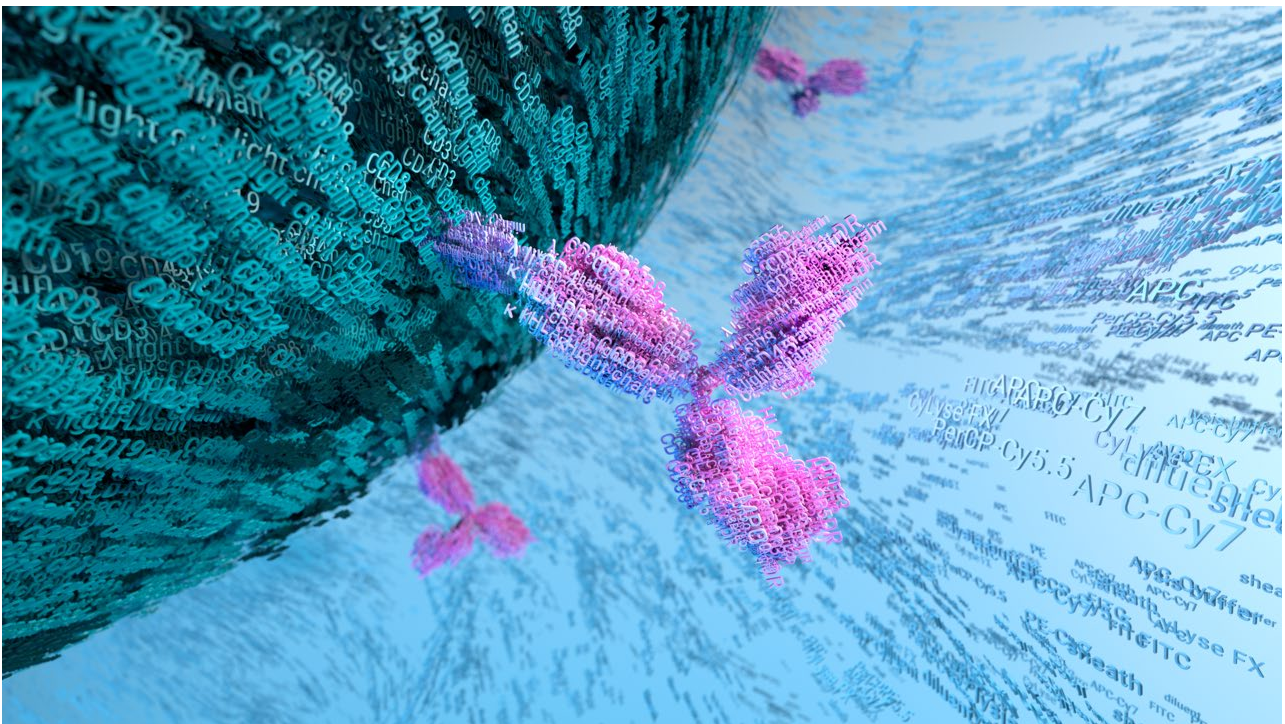


# Literature List – Clinical Flow Cytometry

## Customer Information

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**Note:** Whether references are given in British or American English depends on the original.

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The following list of research study publications is provided exclusively for scientific purposes.

- The studies may relate to the diagnostic use of the analytical parameters offered by Sysmex instruments. The diagnostic use is not validated by Sysmex and is therefore not in the scope of the Intended Purpose of the instruments. Details on the Intended Use can be found in the Sysmex Instructions For Use.
- Summaries of the study results are provided for convenience only and are not intended to convey any views of Sysmex on the study or the products used therein.
- Sysmex cannot be held liable for the accuracy of the study results or the summaries of the study results.
- The information provided in the literature list is intended only for health care professionals.

## Peer-reviewed publications

### **Salvia R et al. (2024)**

Clinical Utility of the XF-1600 Flow Cytometer for MRD Assessment in Multiple Myeloma.

Biomed J Sci & Tech Res 55(5)-2024. BJSTR. MS.ID.008774.

<https://dx.doi.org/10.26717/BJSTR.2024.55.008774>

**Summary:** This study presents a standardized and a reproducible panel for MRD detection of multiple myeloma patients in the XF-1600. It shows a strong correlation between the MRD assessment in the XF-1600 versus DxFlex and Navios EX Flow Cytometers from Beckman Coulter.

### **Ward R et al. (2023)**

Can Metrological Traceability for Lymphocyte Subsets be achieved: A Technical Assessment of the Sysmex XF-1600.

Int J Lab Hematol. 2023 Dec 19. doi: 10.1111/ijlh.14219. Epub ahead of print.

<https://doi.org/10.1111/ijlh.14219>

**Summary:** This study compared a bead-based technique (BD Multitest™ 6-colour TBNK assay using Trucount™ tubes on a BD FACSLyric flow cytometer) with a volumetric method on the Sysmex XF-1600 flow cytometer using Exbio Kombitest 6-colour TBNK reagent. A high degree of correlation was found for results from both methodologies and observed bias was within the limits of clinical acceptability for all populations. The authors conclude that the metrologically traceable lymphocyte subset absolute counts produced by the Sysmex XF-1600 are robust within clinically required limits.

## International poster publications

### **Weir C et al. (2023)**

Evaluation of a dry monoclonal antibody lymphocyte subset kit using the XF-1600 flow cytometer.

Poster presentation at ESCCA 2023 conference.

[https://www.sysmex-europe.com/fileadmin/media/f100/Business\\_Lines/Clinical\\_Flow\\_Cytometry/Scientific\\_Poster\\_TBnk\\_Dry\\_Tubes.pdf](https://www.sysmex-europe.com/fileadmin/media/f100/Business_Lines/Clinical_Flow_Cytometry/Scientific_Poster_TBnk_Dry_Tubes.pdf) [https://sysmexemea.sharepoint.com/sites/ExtCFCM/\\_layouts/15/DocIdRedir.aspx?ID=SDP-920467045-3212](https://sysmexemea.sharepoint.com/sites/ExtCFCM/_layouts/15/DocIdRedir.aspx?ID=SDP-920467045-3212)

**Summary:** In this poster, Sysmex Europe SE (SEU) evaluated the use and comparability between DryFlowEx TBNK 6-color dry tubes (DFE) tubes and KOMBITEST™ TBNK 6-color liquid cocktail (Exbio, Prague) using XF-1600 flow cytometer TBNK automated volumetric counting software. All parameter results were comparable and statistical analysis showed no significant difference.

### **Rico LG et al. (2023)**

Cross-validation of standardized EuroFlow 8-color protocols on the XF-1600 flow cytometer.

Poster presentation at ESCCA 2023 conference.

[https://www.sysmex-europe.com/fileadmin/media/f100/Business\\_Lines/Clinical\\_Flow\\_Cytometry/ESCCA2023\\_Euro\\_Flow\\_poster\\_Rico\\_et\\_al.pdf](https://www.sysmex-europe.com/fileadmin/media/f100/Business_Lines/Clinical_Flow_Cytometry/ESCCA2023_Euro_Flow_poster_Rico_et_al.pdf)

**Summary:** The objective of this study was the development of a setup procedure based on EuroFlow guidelines for the XF-1600 flow cytometer to define reference fluorescence values comparable to those of a cross-calibration instrument, the Navios™ EX flow cytometer (Beckman Coulter). It could be shown that the standardized EuroFlow approach based on specific target MFIs can be used on the XF-1600.

### **Woodhead L *et al.* (2021)**

Comparing antibody expression and staining intensity between bd FACSCanto II and Sysmex XF-1600 in follicular lymphoma progressing to B-lymphoblastic leukaemia/lymphoma.

Poster presentation at ESCCA 2021 conference.

[https://www.sysmex-europe.com/fileadmin/media/f100/Business\\_Lines/Clinical\\_Flow\\_Cytometry/Poster-Follicular\\_lymphoma\\_progression\\_Woodhead\\_Stevens\\_RHH\\_at\\_ESCCA\\_2021.pdf](https://www.sysmex-europe.com/fileadmin/media/f100/Business_Lines/Clinical_Flow_Cytometry/Poster-Follicular_lymphoma_progression_Woodhead_Stevens_RHH_at_ESCCA_2021.pdf)

**Summary:** This poster assessed the antibody expression pattern and staining intensity (SI) between two flow cytometers; the BD FACSCanto II and the XF-1600 in a case of FL progressing to B-ALL. Both flow cytometers allowed detection of the two malignant cell populations with comparable immunophenotyping results with regards to the antigen expression pattern and staining intensity.

### **Williams G *et al.* (2019)**

Evaluation of Sysmex Kappa and Lambda Alexa Fluor™488 Conjugated Monoclonal Antibodies for the Determination of B-Cell Surface Light Chains.

Poster presentation at ESCCA 2019 conference.

[https://www.sysmex-europe.com/fileadmin/media/f100/Business\\_Lines/Clinical\\_Flow\\_Cytometry/Evaluation\\_of\\_Sysmex\\_Kappa\\_and\\_Lambda\\_Alexa\\_Fluor\\_TM\\_488\\_Conjugated\\_Monoclonal\\_Antibodies\\_for\\_the\\_Determination\\_of\\_B-Cell\\_Surface\\_Light\\_Chains.pdf](https://www.sysmex-europe.com/fileadmin/media/f100/Business_Lines/Clinical_Flow_Cytometry/Evaluation_of_Sysmex_Kappa_and_Lambda_Alexa_Fluor_TM_488_Conjugated_Monoclonal_Antibodies_for_the_Determination_of_B-Cell_Surface_Light_Chains.pdf)

**Summary:** This poster showed that the use of the tested Sysmex AF488 monoclonal kappa antibody gave higher stain indices (SI) compared to the Dako polyclonal FITC antibody with the conclusion that it may be a suitable alternative to FITC polyclonal antibodies.

### **Williams G *et al.* (2019)**

Evaluation of Sysmex Kappa and Lambda PE Conjugated Monoclonal Antibodies for the Determination of B-Cell Surface Light Chains. Poster presentation at ESCCA 2019 conference.

[https://www.sysmex-europe.com/fileadmin/media/f100/Business\\_Lines/Clinical\\_Flow\\_Cytometry/Evaluation\\_of\\_Sysmex\\_Kappa\\_and\\_Lambda\\_PE\\_Conjugated\\_Monoclonal\\_Antibodies\\_for\\_the\\_Determination\\_of\\_B-Cell\\_Surface\\_Light\\_Chains.pdf](https://www.sysmex-europe.com/fileadmin/media/f100/Business_Lines/Clinical_Flow_Cytometry/Evaluation_of_Sysmex_Kappa_and_Lambda_PE_Conjugated_Monoclonal_Antibodies_for_the_Determination_of_B-Cell_Surface_Light_Chains.pdf)

**Summary:** In this study, assessing normal and BLPD cases, Sysmex monoclonal reagents gave comparable expression patterns in terms of flow cytometric analysis to those seen with the Dako polyclonal reagent. The results demonstrated that Sysmex monoclonal reagents gave a higher stain index (SI) in the majority of all samples tested.

## Sysmex calendar case

### **Sysmex Europe SE (2023)**

Identifying a typical CLL by means of two complementary technologies.

Case report 9-2023.

[https://www.sysmex-europe.com/fileadmin/media/f100/Academy/Documents/Case\\_report\\_Classic\\_CLL\\_with\\_two\\_complementary\\_methods.pdf](https://www.sysmex-europe.com/fileadmin/media/f100/Academy/Documents/Case_report_Classic_CLL_with_two_complementary_methods.pdf)

**Summary:** In accordance with publications, this Sysmex calendar case shows the importance of immunophenotyping to reliably identify the lymphocyte lineage in a case of B-CLL.