



## The Need for Standardized Technical Validation of the Hematology Workflow

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Usually hematology analyzers are equipped with a bi-directional online connection to communicate with the laboratory information System (LIS). The main function of this online link is to receive test requests and to pass the results to the LIS. After providing the results the technical validation is performed either using the LIS and or at a data management terminal supplied within the analyzer software. The increased number of available blood samples and parameters and, at the same time, the need for cost constraint especially in terms of laboratory personnel, is, nowadays a great challenge to handle the huge amounts of information without a decrease in efficiency over day and in night and weekend shifts.

The work area manager SIS (Sysmex Information System) is a clinical laboratory information system, and has the scalability to interface multiple analyzers to one connection to the LIS. All relevant patient-demographic Information (age, sex, ward, doctor, diagnoses etc) and analyzer results (numeric dates, interpretation references, graphical data etc) can be combined in a rule-based system with an order or result real time data check for technical Validation. The Sysmex Information System is software which simulates the knowledge of the expert for technical validation and guarantees that the complex blood count parameters occurring in the laboratory can be handled with consistently high quality resulting in standardized technical validation of the haematological data. The recently publish evaluation" *Comparison of Technical Validation before and after Implementation of the Work Area Manager SIS with Standard Rule Package*" from Luzern Switzerland showed the consistently high quality of the standardized technical validation of the haematological data. They showed a significant improvement ( $P < 0,0001$ ) in turn-around time (TAT) of validated results, and a very user-friendly, standardized, more specified positive results and actions with no loss of sensitivity.