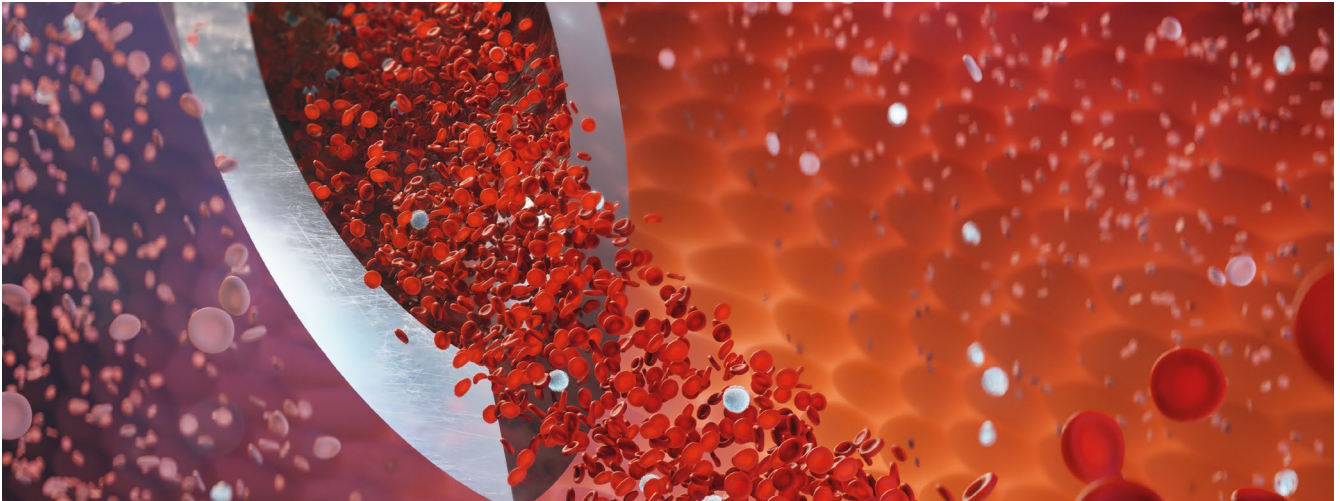


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Sysmex XN analyser for transfusion centres ensures quality and safety through residual cell count



A blood transfusion is a routine medical procedure in which blood components from donors are transferred to patients. This potentially life-saving procedure is used for many indications, including certain types of anaemia, thrombocytopenia and platelet function, bleeding disorders and chemotherapy.

Blood transfusion products are not only a vital and life-saving component, but also a scarce resource. Transfusion centres face the challenge of ensuring adequate availability of blood products while maintaining high standards of donor and recipient safety. Ensuring the safety of blood donors and the safety and quality of blood products is, therefore, of paramount importance to blood transfusion centres.

Advances in blood counting technology offer new ways to ensure both the safety and quality of blood donors, as well as blood products. Several studies have shown that Sysmex's XN technology adds value for both blood donors and recipients.

Studies in blood donors have demonstrated the state-of-the-art quality displayed in the Sysmex XN-Series complete blood count and haemoglobin determination, especially when compared to various alternative techniques used [1,2]. In addition, other parameters from the complete blood count, such as the reticulocyte haemoglobin equivalent (RET-He), have shown potential as a supportive parameter to detect latent iron deficiency in blood donors [3].

The Sysmex XN Blood Bank mode is the first haematology application specifically designed to measure blood products for quality and safety testing through residual cell detection. The quality of blood products has been evaluated in two studies [2,4,9]. The safety of detecting residual WBC counts in the analysis of red cell, platelet and plasma products compared to flow cytometry [4-6], ADAM™ rWBC [7] or manual cell counting [2] has been extensively investigated. Residual PLT counts in plasma products have also been studied [2]. Furthermore, the research parameter, residual RBC, has been investigated and compared to alternative methods with excellent results [2,4,8,9].

List of references

Publications



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