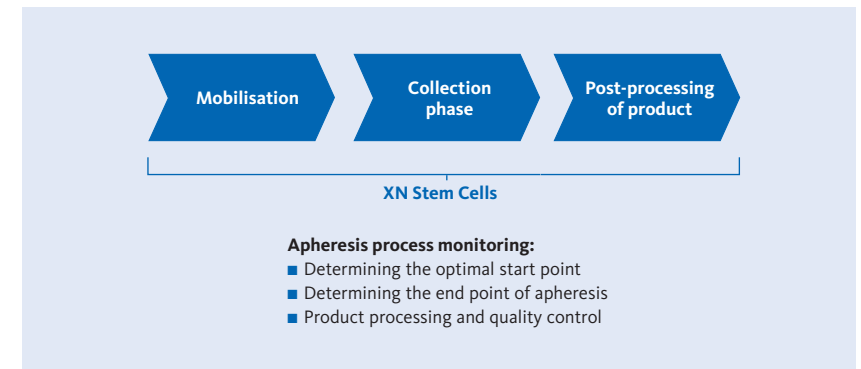


Stem cells count: apheresis can be managed more effectively

Optimising the current stem cell apheresis workflow

The number of haematopoietic stem cell transplantations performed worldwide has increased over recent years and continues to do so. Nowadays, mobilised peripheral blood is the most important source of haematopoietic stem cells. With this increasing demand, managing your workflow as effectively as possible becomes essential. 'XN Stem Cells' can help you do exactly that.



A 20-year old patient diagnosed with breast cancer expects an autologous HSCT. The patient has been receiving low-dose chemotherapy and G-CSF and her WBC count is elevated. When is the best point in time to start apheresis, and for how long should it last to get an optimal yield of stem cells in the transplant product?

XN Stem Cells

- A stem cell count readily available from a routine haematology analyser (XN-Series)
- Lets you optimise your stem cell apheresis workflow
- Strongly reduces uncertainties as to the optimal point in time when to start and stop the collection of stem cells
- Clearly improves your process quality through tighter monitoring of all phases at no extra expense

HSCT
MANAGEMENT

Know more.
Decide with confidence.
Act faster.

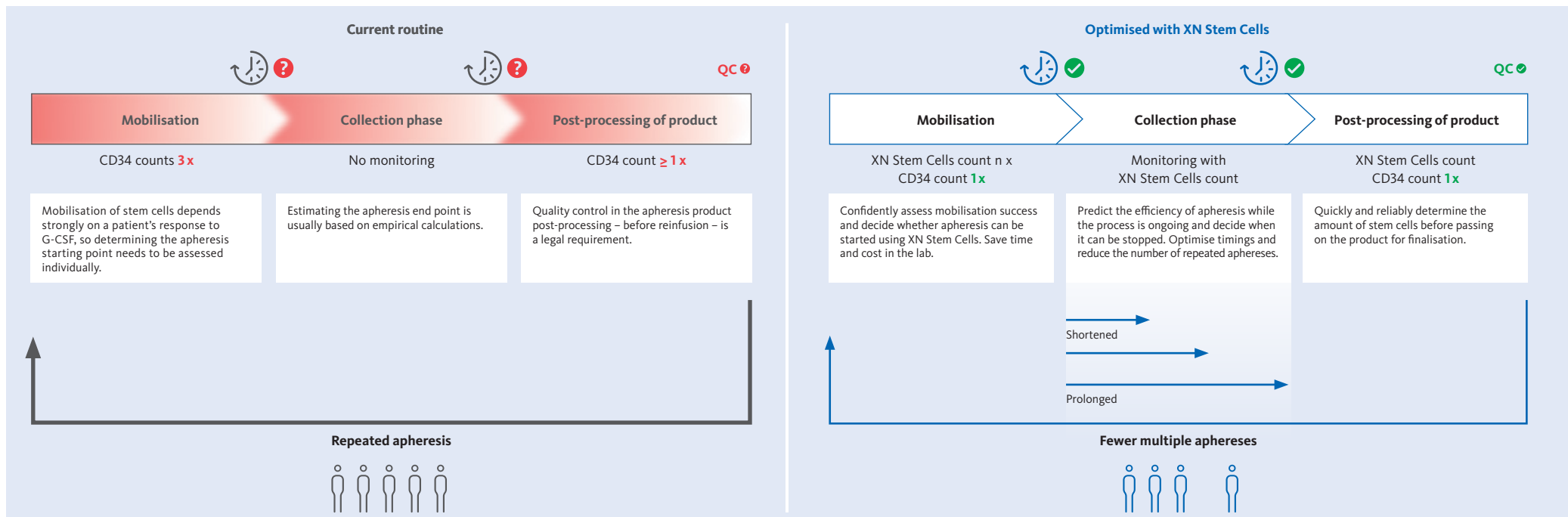


Fig. 1 XN Stem Cells is a simple, quick and affordable method for enumerating stem cells. It is easy to standardise and implement at any stem cell transplantation centre and leads to an optimised apheresis workflow in all phases. The illustration on the right shows the implementation points for XN Stem Cells in an improved workflow.

XN Stem Cells versus CD34 counts

The XN Stem Cells method has been shown* to be comparable with the CD34 count in mobilised peripheral blood. This means you can determine the optimal apheresis starting point while reducing the number of CD34 counts to the legally required minimum. Studies have shown* that reliable cut-off values can be determined for the XN Stem Cells count to be used alongside CD34. The reduced number of CD34 tests leads to an increased efficiency in the lab, plus XN Stem Cells results can be delivered faster, letting you extend your monitoring. The intermediate product can now be analysed quickly and reliably during apheresis to monitor the stem cell yield and optimise the collection time, since all it takes is a routine blood test. In the end, the XN Stem Cells count can be used to determine the stem cell concentration in the final apheresis product, reducing or possibly replacing CD34 testing in this phase.

Benefits of XN Stem Cells for managing stem cell apheresis

Thanks to an optimised apheresis workflow, you can expect an overall reduction in costs. This optimised workflow will also allow a higher turnaround of patients and better resource management on the apheresis ward since patients may be accepted for apheresis earlier or do not get turned down. Finally, the patient experience will improve in most cases as some patients can avoid repeated apheresis while others may leave earlier, with all of them knowing that collection has been successful.

The XN-Series analysers offer a holistic approach for infection, thrombocytopenia and engraftment monitoring with advanced clinical parameters throughout patients' entire haematopoietic stem cell transplantation. Dedicated information is available on other XN Stem Cells information cards: please contact your Sysmex representative.

*Benefit from more background information in our freely accessible white papers:

www.sysmex-europe.com/whitepapers