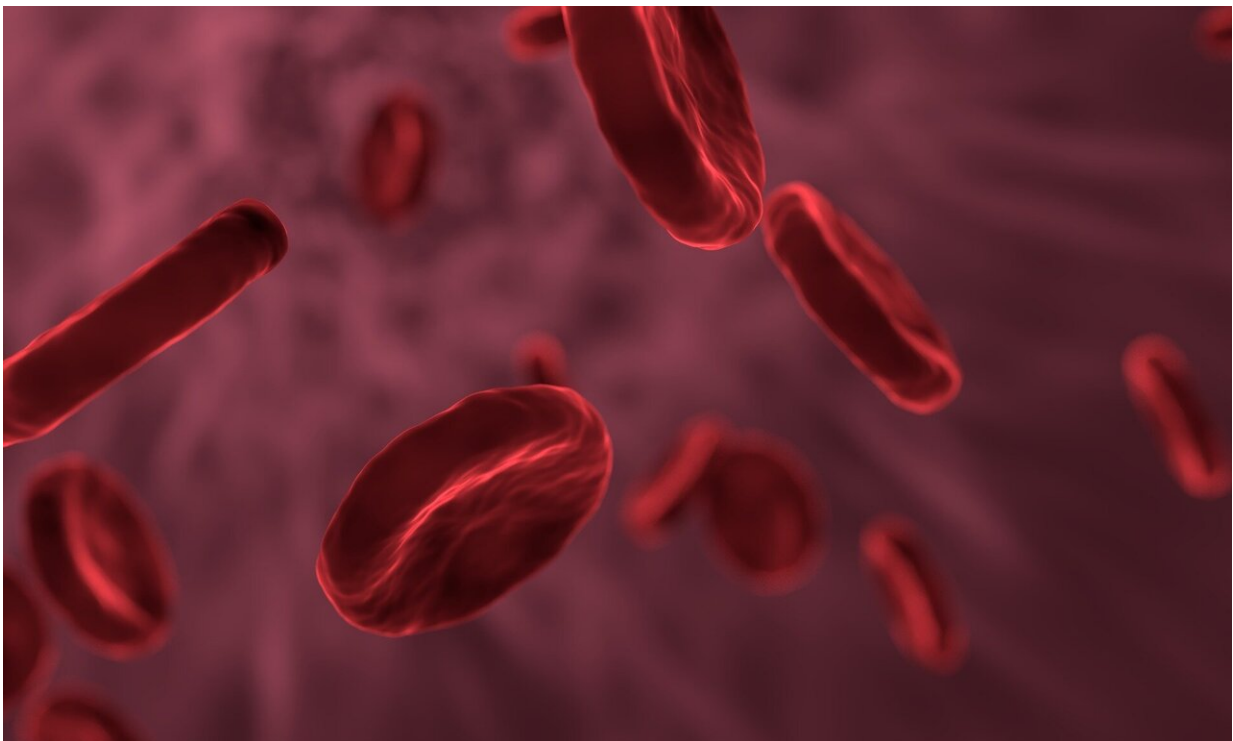


# **New method for early detection of relapse in the blood cancer disease myelodysplastic syndrome**

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Researchers at the Department of Medicine, Huddinge (MedH), Magnus Tobiasson and Eva Hellström-Lindberg have, together with the Nordic MDS group, developed a method that makes it possible to detect early relapse of the blood cancer myelodysplastic syndrome after stem cell transplantation. The method makes it possible to initiate early treatment and, thus, hopefully, prevent relapse. The study has been [published](#) in the *Journal of Clinical Oncology*.

"We used a technique called digital droplet PCR to track the mutations found in the sick cells, and we showed that this method can detect residual cells early before the patient gets a full clinical relapse," says Magnus Tobiasson, associate professor at the Department of Medicine, Huddinge at Karolinska Institutet.

"Relapse after a [stem cell transplantation](#) is common for patients with [myelodysplastic syndrome](#), and the prognosis after a relapse is poor. We have now developed a method to detect remaining sick cells, which makes it possible to give early treatment and hopefully prevent [relapse](#)."

"We included 266 patients from transplant hospitals in Sweden, Norway, Denmark, and Finland. We collected [bone marrow](#) and blood regularly from these patients and performed our PCR analyses. Data from the study show that we were able to detect residual sick cells on average 71 days before the patient relapsed."

"We have now started the next study where this method of detecting remaining sick cells is used to guide treatment after transplantation. The treating physician gets results on whether there are remaining sick cells and can adapt the treatment accordingly," Tobiasson concludes.

**More information:** Magnus Tobiasson et al, Patient-Specific

Measurable Residual Disease Markers Predict Outcome in Patients With Myelodysplastic Syndrome and Related Diseases After Hematopoietic Stem-Cell Transplantation, *Journal of Clinical Oncology* (2024). [DOI: 10.1200/JCO.23.01159](https://doi.org/10.1200/JCO.23.01159)

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