

Patients with myelodysplastic syndromes (MDS) or acute myeloid leukemia (AML) may benefit from a standard preparative regimen

What were researchers trying to learn?

Researchers wanted to know whether patients with myelodysplastic syndrome (MDS) or acute myeloid leukemia (AML) do better after transplant if they have a standard preparative regimen or a reduced-intensity regimen.

The preparative regimen is the treatment given to prepare a patient's body to receive new blood-forming cells from the donor. There are 2 main types of preparative regimens:

- Standard intensity – Uses high doses of chemotherapy and sometimes radiation
- Reduced-intensity – Uses relatively lower doses of chemotherapy with or without radiation

High doses of chemotherapy and radiation can have serious side effects. But lower doses can lead to relapse. So researchers did not know which would be better.

Researchers studied more than 250 patients. Half got a standard regimen, and half got a reduced-intensity regimen.

What did they find?

Patients who got a standard regimen were more likely to be cancer-free a year and a half after transplant than patients who got a reduced-intensity regimen. About 70% of patients (7 out of 10) who got a standard regimen were cancer-free. About 50% (5 out of 10) of patients who got a reduced-intensity regimen were cancer-free.

With either type of preparative regimen, most patients survived for at least a year and a half after transplant. About 80% of patients (8 out of 10) who got a standard regimen and about 70% (7 out of 10) who got a reduced-intensity regimen were alive a year and a half after transplant.

Important Point:

Patients who got a standard preparative regimen were more likely to be cancer-free a year and a half after transplant than patients who got a reduced-intensity regimen.

Why is this important?

Researchers confirmed that a standard preparative regimen before transplant is still the standard of care for patients with MDS or AML. Transplant doctors can now give up-to-date information about the risks and benefits of a standard preparative regimen compared to a reduced-intensity regimen.

What else should I keep in mind about this study?

The results of research studies are always limited in what they can and can't tell you. In this study, researchers randomly assigned patients aged 18-65 to one type of preparative regimen. But not all patients are healthy enough for a standard preparative regimen. While it may be the best option for some patients, it might not be the best option for you. Talk to your doctor about your particular situation.

Questions to ask your doctor

If you have MDS or AML and are considering transplant, you may want to ask:

- Am I a candidate for a standard preparative regimen? What about a reduced-intensity regimen?
- What are the risks and benefits of the different preparative regimens?

Learn more about

- [This research study from its publication](#)
- [This research study on ClinicalTrials.gov](#)
- [Myelodysplastic syndromes \(MDS\)](#)
- [Acute myelogenous leukemia \(AML\)](#)
- [Preparative regimens](#)

Source:

Scott BL, Pasquini MC, Logan BR, et al. Myeloablative versus reduced-intensity hematopoietic cell transplantation for acute myeloid leukemia and myelodysplastic syndromes. *Journal of Clinical Oncology*. 2017 Apr 10; 35(11):1154-1161. Epub 2017 Feb 13. PMC5455603.

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