

New combo of medicines helps transplants succeed

Results of clinical trial will change treatments for leukemia and lymphoma



Blood and marrow transplant (BMT) can cure blood cancers such as leukemia and lymphoma. But many people have a serious side effect called graft-versus-host disease (GVHD). Now, researchers have found a new combination of medicines that helps fight both cancer and GVHD.

About 420 adults who got BMT for leukemia or lymphoma participated in a clinical trial. The trial compared 2 combinations of medicines:

- New combination: cyclophosphamide, tacrolimus and mycophenolate mofetil
- Standard combination: tacrolimus and methotrexate

A year after BMT, people who got the new medicines were more likely to be free of both cancer and GVHD compared to people who got the standard medicines:

- 53% of people who got the new medicines were free of cancer and GVHD
- 35% of people who got standard medicines were free of cancer and GVHD

Researchers said the new medicines should replace the standard medicines.

Keep in mind

This applies only to adults who are getting matched BMT with reduced-intensity preparation.

About GVHD

GVHD occurs when the donated BMT cells attack a person's organs. There are 2 types of GVHD: acute and chronic. Acute GVHD can affect the skin,

stomach, intestines and liver. Chronic GVHD can affect those organs as well as joints, muscles, eyes, mouth, lungs and genitals. The new medicines reduced both acute and chronic GVHD.

Learn more about

- [Video summary](#) of this study at NEJM.org (requires free account)
- [GVHD basics](#) at BeTheMatch.org
- [Clinical trials for GVHD](#) at CTsearchsupport.org
- More [study summaries](#) at CIBMTR.org

Source

Bolaños-Meade J, Hamadani M, Wu J, et al. [Post-Transplantation Cyclophosphamide-Based Graft-versus-Host Disease Prophylaxis](#). New England Journal of Medicine. 2023 Jun 22;388(25):2338-2348. doi: 10.1056/NEJMoa2215943.

Clinical Trial IDs: [BMT CTN 1703](#); [ClinicalTrials.gov NCT03959241](#)

Sponsor: **Blood and Marrow Transplant Clinical Trials Network (BMT CTN)**

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BMT CTN is a collaboration of The Center for International Blood and Marrow Transplant Research (CIBMTR); The Medical College of Wisconsin; The National Marrow Donor Program /Be The Match; and The Emmes Company.

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This plain-language summary was written by Jennifer Motl at the Medical College of Wisconsin and reviewed by an author of the full article. © 2023 by CIBMTR, license [CC BY-SA 4.0](#).