



## Freezing cells for blood and marrow transplant saves lives

### Study helps people with cancer get life-saving transplants during pandemic

Research showing that cells can be carefully frozen and stored for blood and marrow transplant (BMT) will save lives during the COVID-19 pandemic and beyond.

BMT can cure leukemia, lymphoma, sickle cell disease and other problems.

During the coronavirus (COVID-19) pandemic, quarantines and travel restrictions make it harder for donors to get to a medical center to donate. It's also harder for couriers to deliver the fresh cells to the patient. Since patients prepare for BMT days beforehand, it is critical that the donated cells arrive on time.

To reduce the risk for patients, doctors wanted to use frozen cells instead of fresh cells.

It is possible to collect, preserve, and very slowly freeze the cells before transplant. This process is called cryopreservation. The frozen cells can be stored until needed, and then thawed.

However, doctors did not know whether frozen bone marrow and peripheral blood stem cells work as well as fresh cells.

The CIBMTR compared medical records of about 1,300 people who got BMT for leukemia, lymphoma and other cancers during 2013-2018. About 1 in 5 of these people got BMT with previously frozen cells; they were matched with similar people who got fresh cells.

About 2 years after transplant, **people who got fresh or frozen cells were equally likely to be alive and recovering.** They had about the same rates of acute graft-versus-host disease (GVHD), a complication of transplant.

The CIBMTR fast-tracked this study, analyzing the data and publishing it in about 1 month, which is about 10-15 times faster than the usual process. Although many clinical trials are paused during the COVID-19 pandemic, the CIBMTR can use its vast registry of medical records to continue research.



### Learn more about

- [COVID-19 FAQs](#), from BeTheMatch.org
- More [study summaries](#) at [cibmtr.org](#)

### About this research summary

This information is provided on behalf of the Consumer Advocacy Committee of the CIBMTR<sup>®</sup> (Center for International Blood and Marrow Transplant Research<sup>®</sup>).

### Source

Hamadani M, Zhang MJ, Tang XY, et al. [Graft cryopreservation does not impact overall survival allogeneic hematopoietic cell transplantation using post-transplant cyclophosphamide for GVHD prophylaxis](#). *Biology of Blood Marrow Transplant*. 2020 Apr 10. pii: S1083-8791(20)30209-3. doi:10.1016/j.bbmt.2020.04.001. [Epub ahead of print].

