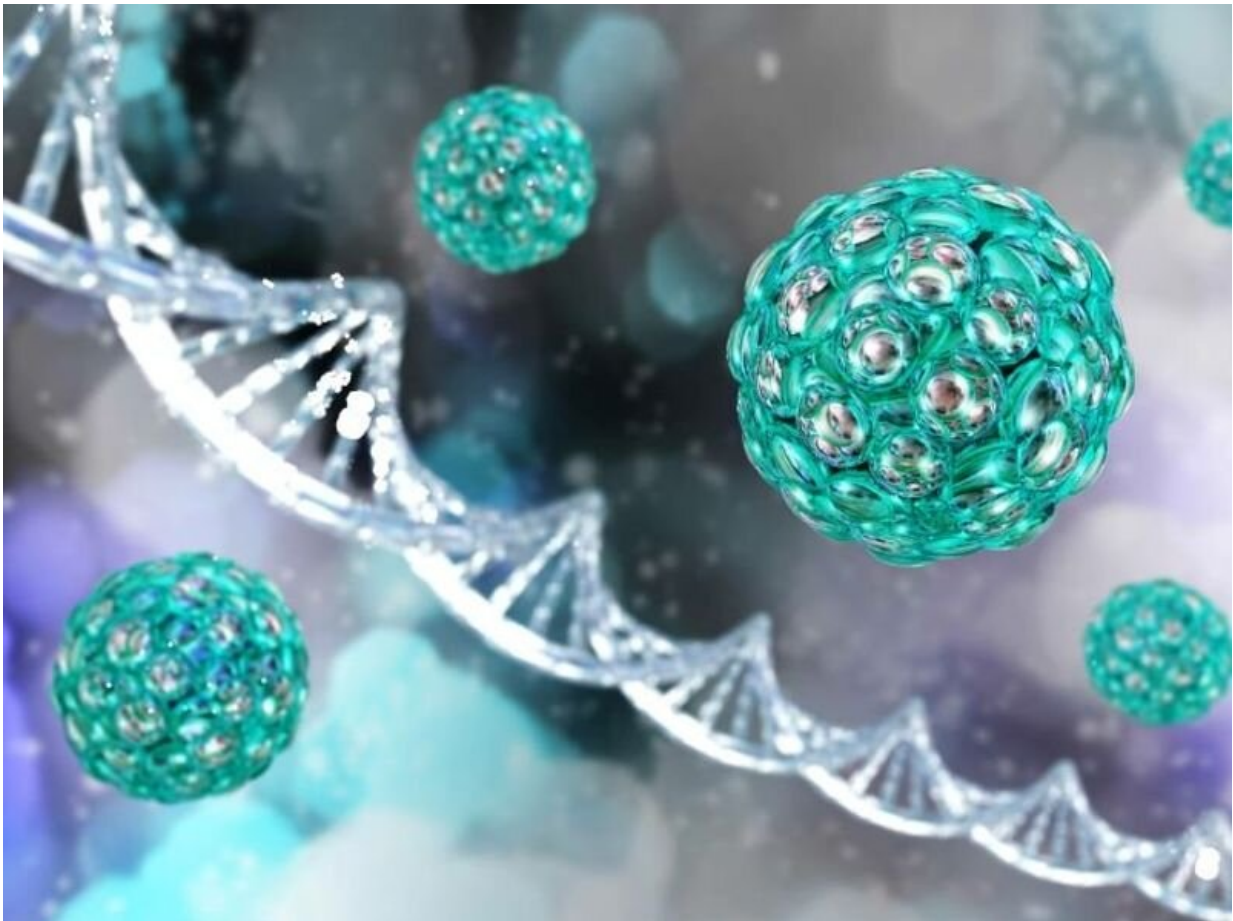


# Allogeneic hematopoietic cell transplant outcomes improved from 2005 to 2019: Study

June 16 2023, by Lori Solomon

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Outcomes of allogeneic hematopoietic cell transplantation (allo-HCT) in

patients with acute myeloid leukemia (AML) and second complete remission (CR2) have significantly improved over time, according to a study published online June 2 in *Cancer*.

Rama Al Hamed, M.D., from Sorbonne University in Paris, and colleagues investigated changes in patient- and transplant-related characteristics and posttransplant outcomes over time among 3,955 [adult patients](#) with AML receiving allo-HCT.

The researchers found that 725 patients were transplanted between 2005 and 2009, 1,600 between 2010 and 2014, and 1,630 between 2015 and 2019. Across time, there was a significant increase observed in patient age (from 48.7 to 53.5 years), use of a haploidentical donor (from 4.6 to 26.4 percent), and use of posttransplant cyclophosphamide (from 0.4 to 29 percent).

Over the same time period, there was a significant decrease observed in total body irradiation and in vivo T-cell depletion. Transplants performed more recently had better outcomes, with leukemia-free survival (hazard ratio [HR], 0.79) and overall survival (HR, 0.73) increasing over time and nonrelapse mortality decreasing over time (HR, 0.64). Graft-versus-host disease (GVHD) rates also improved (acute GVHD II-IV: HR, 0.78; GVHD-free, relapse-free survival: HR, 0.69).

"The best outcomes were with the use of a matched unrelated donor, given better leukemia-free survival, overall survival, and nonrelapse mortality, which helps to highlight that in the absence of a matched sibling donor, a matched unrelated donor could be a viable option for this patient population," the authors write.

Several authors disclosed ties to the [pharmaceutical industry](#).

**More information:** Rama Al Hamed et al, Unrelated or haploidentical

allogeneic hematopoietic cell transplantation in second complete remission for acute myeloid leukemia—Improved outcomes over time: A European Society for Blood and Marrow Transplantation Acute Leukemia Working Party study, *Cancer* (2023). DOI: [10.1002/cncr.34843](https://doi.org/10.1002/cncr.34843)

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