RESEARCH



HLA informs risk predictions after haploidentical stem cell transplantation with post-transplantation cyclophosphamide

Insights into optimal mismatching and tool for ranking potential donors



The study showed that certain HLA matches and mismatches are associated with lower relapse, transplant-related mortality, GVHD and better overall survival and disease-free survival. Researchers

2008-2017

used this information to create a first-of-its-kind online calculator to prioritize potential haploidentical donors.

The <u>calculator</u> factors in patient and donor information and provides 1- and 2-year disease-free survival estimates for each potential donor, enabling transplant teams to rank them.

IMPACT

This study showed that in addition to considering traditional characteristics of potential haploidentical donors, including age, blood type and sex, transplant teams should consider specific HLA

matches and mismatches.

Choosing the best potential donors for haploidentical transplantation with PTCy is a complicated process that involves traditional and novel selection factors.

A newly developed online calculator makes the process faster and easier, allowing transplant teams to move more quickly toward optimal treatment.

FROM THE EXPERTS

"From the very beginning of bone" marrow transplantation, the central dogma of donor selection has been, "matching good, mismatching bad." Our research shows that, using post-transplantation cyclophosphamide, we may leverage selected mismatches to decrease relapse and improve cure rates without increasing the risk of severe graft-versus-host disease."



RESULTS

"This study highlights the patterns we retrospectively see for most successful haploidentical donor selection when using post-transplant cyclophosphamide and is accompanied by a handy tool where potential haploidentical donor options can be entered and compared against scenarios seen in this study cohort to help inform risks for similar cases."

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