

Evaluation of Search Summary Score Tool for Rapid Unrelated Bone Marrow Donor Search Assessment

WHY?

Not all patients in need of an unrelated donor allogeneic stem cell transplant (HCT) will have an 8/8 matched donor available. The likelihood of a match varies based on a patient's race/ethnicity.

Recent observational studies and clinical trials have highlighted the safe and effective use of human leukocyte antigen (HLA)-mismatched unrelated donors (MMUD) in the setting of post-transplant cyclophosphamide (PTCy) and other novel graft vs host disease (GVHD) prevention strategies that allow for expanded donor choice and optimization of other donor selection characteristics, including donor age.

Tools to rapidly assess unrelated donor search productivity can help guide clinical decision making by identifying those patients with a low likelihood of finding an 8/8 match and directing search efforts to mismatched donor sources.

WHAT?

Observational study to create a new rapid-assessment tool to determine unrelated donor availability to move forward to donation.

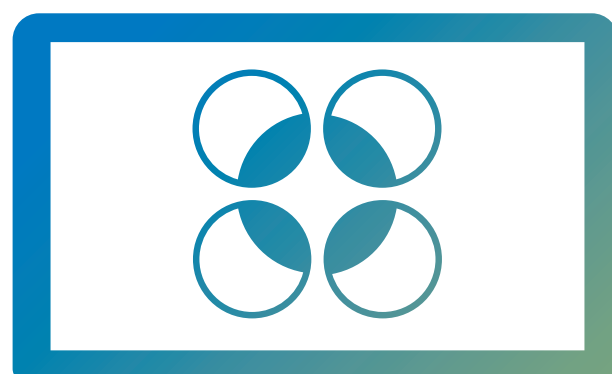
WHO?

Patients searching for an HLA matched unrelated donor on the Be The Match Registry®



WHERE?

Study leveraging the NMDP®/Be The Match® donor registry.



RESULTS

= 0.9 SSS

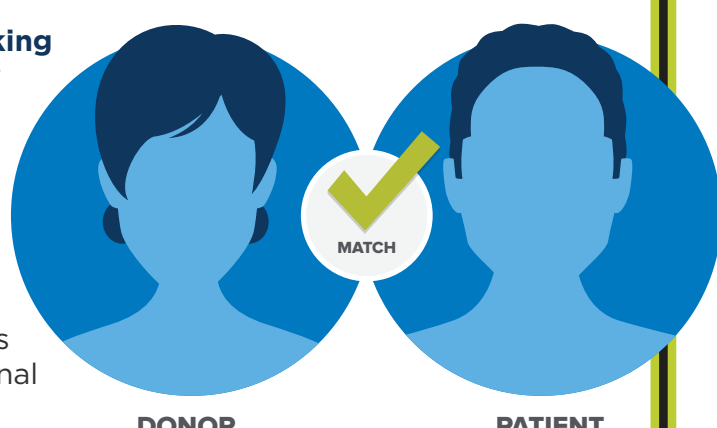
The Be The Match/CIBMTR study team created a **Search Summary Score**

(SSS) to serve as a rapid assessment for unrelated donor search productivity. The new score utilizes the Donor Readiness Score (DRS), an individualized prediction of a specific donor's availability to move forward to donation, with HapLogic match predictions to provide the cumulative probability of the search resulting in an 8/8, 7/8, 10/10, or 9/10 available donor. The resulting score is a value ranging from 0 to 1.

IMPACT/FINDINGS:

We believe this new clinical decision-making tool will be particularly helpful to quickly determine the likelihood of obtaining a matched donor and if not to pivot to alternative mismatched graft sources.

Research that produces more accurate, faster clinical decision-making tools in the stem cell transplant environment is much needed to ensure every patient finds a suitable donor. The Center for International Blood and Marrow Transplant Research (CIBMTR) and Blood and Marrow Transplant Clinical Trials Network (BMT CTN) are committed to advancing this type of research to move us closer to that goal.



FROM THE EXPERTS

What patients don't have a lot of is time...and options. The vision for Search Summary Score is to provide more of both... be a compass to guide how far to go in pursuit of different types of therapies or match levels. Incorporation to a future external facing tool can potentially not only save time and help the provider/physician to evaluate more options but also reduce overall costs on the path to a cure for the patient."



Yung-Tsi Bolon
Director, Bioinformatics and Immunobiology Research
CIBMTR

The search for an unrelated donor is fraught with uncertainty. The two main sources of uncertainty are the HLA match status and the availability of the donor to donate. Predictors of these factors, when combined, can provide an accurate, early assessment of the outcome of a search. This simple method can streamline the search process and reduce friction and delays by providing decision support for pursuing a mismatch or cord blood unit."



Martin Maers
Vice President, Innovation
National Marrow Donor Program®/Be The Match

Knowing the likelihood of finding a matched or mismatched unrelated donor at the onset of a search is critical to achieving the patient's preferred transplant timeline increasing transplant success. The Search Summary Score provides transplant centers with a quick analysis of the likelihood of having an available donor, which will help the transplant center decide early on whether to also pursue alternate sources (cord blood or haploidentical donors) for their patients."



Kim Wadsworth
Immunogenetic Specialist Team Lead
National Marrow Donor Program®/Be The Match

