

BMT CTN study establishes new standard of care for GVHD prevention

WHAT?

A study from the Blood and Marrow Transplant Clinical Trials Network (BMT CTN) comparing two different treatment methods before reduced-intensity allogeneic (cells from a donor) blood or marrow transplant (BMT) to prevent graft-versus-host disease (GVHD).

Standard care: tacrolimus and methotrexate (Tac/MTX) vs. a newer treatment: post-transplant cyclophosphamide, tacrolimus and mycophenolate mofetil (PTCy/Tac/MMF). Patients were randomly assigned to receive either Tac/MTX or PTCy/Tac/MMF, and their outcomes after BMT were compared.

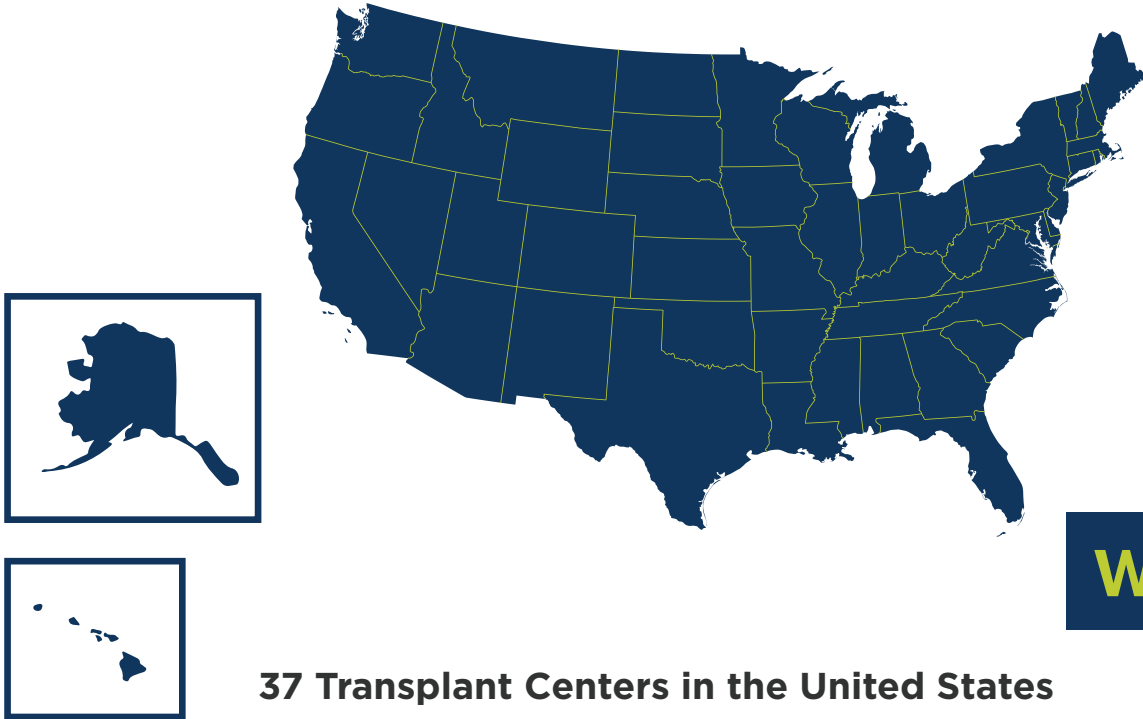


WHY?

Controlling GVHD after BMT is essential for safe and effective outcomes. Many treatments in the past have done a good job at controlling GVHD but at the expense of relapse (the cancer coming back). New treatments are needed to prevent GVHD and disease relapse.

WHEN?

July 2019 – June 2021



WHERE?

WHO?

431 adults getting a reduced-intensity BMT to treat blood cancer

- 128 with a 6/6 matched related donor
- 288 with a 8/8 matched unrelated donor
- 15 with a 7/8 mismatched unrelated donor

RESULTS

214 patients received PTCy/Tac/MMF and 217 patients received Tac/MTX. Other than the GVHD prevention they were assigned, the characteristics of the patients in the two groups were similar (for example, age, disease, other treatments received, etc.).

The patients who received PTCy/Tac/MMF had lower risk of GVHD than those who were treated with standard care of Tac/MTX. Both groups had similar rates of relapse. In other words, treatment with PTCy/Tac/MMF prevented GVHD better than Tac/MTX without increasing the risk of relapse. The adjusted 1-year GVHD-free and relapse-free survival rate was 53% for those who got PTCy/Tac/MMF and 35% for those treated with Tac/MTX.

IMPACT

These results provide clear support that GVHD prevention with PTCy/Tac/MMF should be the new standard of care for adults receiving well-matched reduced intensity allogeneic BMT to treat blood cancer. The use of PTCy/Tac/MMF was associated with lower rates of both acute and chronic GVHD without increasing the risk of disease relapse. Adoption of this new approach will increase the likelihood of event-free survival post-transplant allowing more patients to survive and thrive.

FROM THE EXPERTS

The results of this large randomized clinical trial show a clear new standard of care for the prevention of graft versus host disease (GVHD) following matched and minimally mismatched allogeneic transplant. Use of post-transplant cyclophosphamide represents a significant advance by reducing life threatening GVHD without increasing the risk of disease relapse."



Stephen Spellman
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National Marrow Donor Program – Be The Match