

ASBMT eNews

AMERICAN SOCIETY FOR BLOOD AND MARROW TRANSPLANTATION

October 2012

CLINICAL RESEARCH

Early Posttransplantation iNKT-Cell Recovery Can Predict GVHD and Survival

The recovery of invariant natural killer T (iNKT) cells following hematopoietic stem cell transplantation (HSCT) in 71 allografted patients was compared to conventional T- and NK-cell recovery. The results were correlated with graft-versus-host disease (GVHD), relapse and survival. Researchers of this study appearing in *Blood* discovered that posttransplantation donor-derived iNKT cells recovered independently of T and NK cells within 90 days after HSCT. In addition, iNKT cells were more likely to reach greater levels in patients younger than 45 years of age and following a reduced-intensity conditioning regimen. Posttransplantation iNKT/T ratios less than 10^{-3} were linked to a greater likelihood of acute GVHD, but reaching iNKT/T ratios greater than 10^{-3} before 90 days was associated with reduced nonrelapse mortality. The higher ratio within 90 days also appeared to be a predictor for improved overall survival. Finally, there was a 94% reduction in the risk of acute GVHD if the iNKT/T ratio was greater than 0.58×10^{-3} on day 15. [More...](#)

Prognostic Factors for ALL Survival Identified

Researchers performed a retrospective analysis of 547 patients undergoing salvage therapy for their first relapse of acute lymphoblastic leukemia to identify prognostic factors and options to improve treatment. The goal of salvage therapy was to attain complete remission followed by stem cell transplantation (SCT). The complete remission rates were 42% for the entire group, with patients relapsing late having a higher response rate (58%) than those relapsing early (36%). In relapse after SCT performed in first remission for high-risk disease, the complete remission rate after first salvage was 23%. The median overall survival after relapse was 8.4 months and survival was 24% at three years. The prognostic factors for survival discovered in this study published in *Blood* were relapse localization, salvage response, SCT and age. [More...](#)

Continues on page 3

IN THIS ISSUE

- 1, 3 Clinical Research
- 2 A Word From the President
- 3 BMT Tandem Meetings
- 4, 5 Association News
- 5 Basic Science Studies
- 6 Calendar of Events

SEE ALSO

[Job & Fellowship Connections](#)

[BBMT Journal](#)

[ASBMT Home](#)

BMT Tandem Meetings

Salt Lake City, UTAH

February 13-17, 2013

ASBMT American Society for Blood and Marrow Transplantation
CIBMTR Center for International Blood and Marrow Transplantation Research



A WORD FROM PRESIDENT ELIZABETH SHPALL, MD

Changes May Help Transplant Field Sustainability

What attracts physicians to our field? Identifying the answer to this question becomes increasingly important as we continue to project record growth in transplant therapies, coupled with too few physicians to keep up with the demand. Information gleaned from the System Capacity Initiative sponsored by the National Marrow Donor Program (NMDP), which recently met for the third year in Minneapolis, suggests that for most of us the answers are:

- the rewards of caring for the patients we serve;
- contributing new knowledge through basic, translational and clinical research;
- to be part of the great transplant teams in our centers; and
- to be associated with the really talented folks who are part of our specialty.

Previous newsletters have highlighted a number of ASBMT initiatives targeted toward attracting new physicians. These include our hugely successful Clinical Research Training Course, our New Investigator Awards and our sponsorship of fellows to join ASBMT.

While compensation appears to be a secondary consideration for physicians in selecting transplant as a career, pressures to meet clinical production levels to maintain compensation, coupled with the associated decrease in time available for research, other academic activities and work-life balance, are clearly growing sources of dissatisfaction. Nearly a quarter of the ASBMT membership will be eligible for retirement by the end of this decade so it seems intuitive that establishing realistic models for workload and fair compensation for providers of transplant care is important for our sustainability.

The ASBMT, along with our colleagues at NMDP, have been working to improve reimbursement for some time. The Committee on Reimbursement has partnered with NMDP to address the need for new CPT codes as well as to establish the relative value of new and existing codes. We thank those of you who participated in the sometimes tedious but extremely important surveys needed to achieve improvements in these areas. We are also extremely grateful for the support of NMDP, especially Stephanie Farnia and Michael Boo, in developing educational programs and posting available tools on the NMDP website.

While these endeavors have met with some success, it is clear they are not sufficient. In large measure, this is because the evaluation and management codes and associated work RVUs do not adequately reflect the enormous amount of work required of providers to deliver care to our patients. Additionally, there is some evidence that this methodology may create barriers to physicians and advanced practice clinicians forming efficient teams for provision of care.

James Gajewski has been instrumental in leading the reimbursement initiatives for our society, and we owe him much for his efforts. We have now asked him to use his extensive experience in health policy to establish a task force examining provider compensation. This effort will certainly be both challenging and time consuming but has the potential to have an enormous impact on our future.

We look forward to the recommendations of this task force to be delivered by the 2014 BMT Tandem Meetings in Dallas.

*-Elizabeth Shpall and
President-Elect
Fred LeMaistre*



BMT TANDEM MEETINGS

Early Registration Discount Deadline is Oct. 11 for BMT Tandem Meetings

Online registration and housing is now open for the 2013 BMT Tandem Meetings Feb. 13-17 in Salt Lake City, Utah. Links to meeting registration, housing reservations, a preliminary program, abstract submission and parallel conferences can all be found in one convenient location. [More...](#)

Abstract Submission Deadline is Oct. 11 for BMT Tandem Meetings

Abstracts for the BMT Tandem Meetings in Salt Lake City, Utah, will be accepted through Oct. 11. Invitations for oral

presentation will be offered to more than 100 authors whose abstracts receive the highest scores from the review committees. Many others will be accepted for poster presentation.

[More...](#)

Travel Grants Available for Hem/Onc Fellow

ASBMT members can nominate hematology and oncology fellows for travel grants to attend the 2013 BMT Tandem Meeting in Salt Lake City, Utah. Ten grants of \$1,000 each will be awarded to introduce young clinicians and investigators to the field of hematopoietic cell transplantation. [More...](#)

CLINICAL RESEARCH (CONTINUED FROM PAGE 1)

Peripheral Blood Stem Cells More Effective for Salvage Transplantation

Researchers analyzed data on 220 patients who developed graft failure after cord blood transplantation (CBT) and who subsequently received a second hematopoietic stem cell transplantation (HSCT) within three months to compare the different stem cell sources – cord blood, peripheral blood stem cells and bone marrow – used in the salvage transplantation. The cumulative incidence of neutrophil engraftment 30 days after the second HSCT was 39% with cord blood, 71% with peripheral blood stem cells and 75% with bone

marrow. Peripheral blood stem cells and bone marrow grafts were also associated with higher engraftment rates than cord blood. The peripheral blood stem cell group was more likely to experience acute graft-versus-host disease than the cord blood group, but one-year nonrelapse mortality rate was lower and the one-year overall survival rate was higher in the patients who received peripheral blood stem cell transplantation, suggesting that peripheral blood stem cells are the preferable source for salvage HSCT for graft failure after cord blood transplantation. [More...](#)

ASSOCIATION NEWS

Free ASBMT Membership for Trainees

Postdoctoral fellows and physicians-in-training for blood and marrow transplantation are eligible for free membership in the American Society for Blood and Marrow Transplantation. From August through October, annual dues are being waived for new trainees who apply for membership in the Society. The program is made possible through a grant from Otsuka America Pharmaceuticals, Inc. [More...](#)

Continues on page 5

BASIC SCIENCE STUDIES

Donor KIR2SD1 Allografts Play a Role in Preventing AML Relapse

A study published in the *New England Journal of Medicine* assessed clinical data, HLA genotyping results and donor cell lines or genomic DNA of more than 1,200 acute myeloid leukemia (AML) patients who had received hematopoietic stem cell transplants (HSCT) from unrelated donors to determine if donor-derived natural killer (NK) cell reactivity controlled by KIR2DS1 and HLA could benefit AML patients who received allogeneic HSCT. Patients who received allografts from donors who were positive for KIR2DS1 were less likely to experience relapse (26.5%) compared to those who received allografts from KIR2DS1-negative donors (32.5%). KIR2SD1-positive allografts played a key role in antileukemic effect when donors were also homozygous or heterozygous for HLA-C1 antigens. There were also lower relapse rates when the allografts mismatched for a single HLA-C locus were compared to relapse rate in recipients of KIR2DS1-negative allografts. KIR3DS1 was associated with decreased mortality but had no effect on leukemic relapse. [More...](#)

IL-22 Prevents ISC Damage and GVHD Tissue Sensitivity

According to a study appearing in *Immunity*, intestinal interleukin-22 (IL-22) was produced after bone marrow transplant by IL-23-responsive innate lymphoid cells (ILCs) from

the transplant recipients, and intestinal IL-22 increased in response to pretransplant conditioning. However, graft-versus-host disease (GVHD) decreased the ILC frequency and IL-22 amounts. Decreased IL-22 resulted in elevated crypt apoptosis, depletion of intestinal stem cells (ISCs) and loss of epithelial integrity, suggesting that IL-22 is an important regulator of tissue sensitivity to GVHD and protects ISCs from inflammatory intestinal damage. [More...](#)

TK⁺ Cells After HSCT Can Lead to Thymic Renewal and Immune Recovery

In the TK007 clinical trial, immune recovery was studied in 22 adults with hematologic malignancies after they received T cell-depleted hematopoietic stem cell transplantations (HSCT) and infusions of purified donor T cells expressing the HSV thymidine kinase suicide gene (TK⁺ cells). After an initial wave of TK⁺ cells, most of the T cells supporting long-term immune reconstitution did not carry the suicide gene and had high naïve lymphocyte numbers. This suggests that thymus-dependent recovery of T cells was dependent on engraftment of the TK⁺ cells. The researchers for this study published in *Blood* also noted an increase in circulating TCR excision circles and CD31⁺ thymic emigrants, an expansion of the active thymic tissue on chest scans, and a peak in the IL-7 serum level following each infusion of TK⁺ cells. The findings from this study suggest that infusing patients with genetically modified donor T cells after HSCT can lead to thymic renewal and immune reconstitution. [More...](#)

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ASSOCIATION NEWS (CONTINUED FROM PAGE 3)

New! Read BBMT on Your Smartphone

Click [here](#) to download Elsevier's HealthAdvance mobile app for your iPhone or Android then log in with your bbmt.org password to gain access to full articles. If you have not yet registered with a username/password on bbmt.org, click [here](#) to register and activate your subscription. Enter your ASBMT member or subscriber number when activating for the first time. This password will give you full access to the BBMT website and mobile apps on repeat visits.

BMT Transplant Research Fund

Recently, you received a mailing about *The ASBMT Transplant Research Fund* and the passing of our dear friend and colleague, Thea M. Friedman, Ph.D. Our transplant community, and especially the Amy Program family, has suffered a tragic loss, and we are deeply saddened by this news. We ask that you join us in honoring Thea's life and legacy. As you know, ASBMT is partnering with Be The Match Foundation and the National Marrow Donor Program to increase the number of investigators who are able to pursue their promising research through the Amy Strelzer Manasevit Research Program for the Study of Post-Transplant Complications. With your help and the help of our membership, the first Amy Scholar awarded through our recently established *ASBMT Transplant Research Fund* will be named in Thea's honor. Together, we can offer this tribute to her memory. [More...](#)

ASM Research Program

Be The Match Foundation® and the National Marrow Donor Program® (NMDP) are pleased to announce that the Amy Strelzer Manasevit (ASM) Research Program for the Study of Post-Transplant Complications is now open for applications. The ASM Research Program is directed toward scientists and clinicians early in their careers and is intended to advance the

understanding of events occurring after allogeneic hematopoietic cell transplantation. One award will be made for a maximum of \$240,000 over a three-year period. Proposals must be submitted by Friday, November 4. [More...](#)

Draft 5th Edition Cord Blood Standards Available for Public Comment

The Foundation for the Accreditation of Cellular Therapy (FACT) and the International NetCord Foundation (NetCord) have published the [draft 5th Edition of the NetCord-FACT International Standards for Cord Blood Collection, Banking, and Release for Administration](#) and its accompanying [Accreditation Manual](#) for inspection and public comment for a 90-day period. Comments will be accepted from September 7, 2012, through December 6, 2012.

Please review the [Request for Public Review and Comment](#) for a description of the documents available for review and a discussion of changes made to the Standards. To submit comments:

1. Download the [comment form](#).
2. Type in your contact information and comments on the form. Be sure to fill in all fields so that the Standards Committee fully understands your position.
3. Save the comment form to your computer.
4. Email the comment form to fact@unmc.edu (Attention: Kara Wacker)

The final Standards will be published on July 1, 2013, and will become effective on September 29, 2013.

CALENDAR OF EVENTS

•OCTOBER

2nd World Congress on Controversies in Hematology

October 4-7
Istanbul, Turkey

American Association of Blood Banks

2012 Annual Meeting
October 6-9
Boston, Massachusetts

European Society of Gene & Cell Therapy

20th Anniversary Congress
October 26-29
Versailles, France

American Society for Histocompatibility and Immunogenetics

38th Annual Meeting
October 8-12
San Juan, Puerto Rico

•NOVEMBER

GVHD National Symposium

November 2
Independence, Ohio

National Institutes of Health

2nd International Workshop: Biology, Prevention, and Treatment of Relapse After Hematopoietic Stem Cell Transplantation
November 5-6
Bethesda, Maryland

•NOVEMBER (CONT.)

2012 National Marrow Donor Program Council Meeting

November 8-10
Minneapolis, Minnesota

International Conference on Regenerative & Functional Medicine

November 12-14
San Antonio, Texas

Neoplastic Hematology Update

November 15-17
Palm Beach, Florida

European Association of Tissue Banks

21st Annual Congress of the Association of Tissue Banks
November 21-23
Vienna, Austria

•DECEMBER

American Society of Hematology

54th Annual Meeting
December 8-11
Atlanta, Georgia

•JANUARY

Cell & Gene Therapy Forum

January 28-30
Washington, D.C.

•FEBRUARY

BMT Tandem Meetings

Combined ASBMT and CIBMTR Annual Meetings
February 13-17
Salt Lake City, Utah

•MARCH

Association of Community Cancer Centers

39th Annual National Meeting
March 6-8
Washington, D.C.

Canadian Society of Transplantation

Annual Scientific Conference
March 14-16
Lake Louise, Canada

National Comprehensive Cancer Network

18th Annual Conference
March 14-17
Hollywood, Florida

Regenerative Medicine: Technologies Enabling Novel Therapies

17th Annual Hilton Head Workshop
March 20-23
Hilton Head Island, South Carolina

•2014

BMT Tandem Meetings

Combined ASBMT and CIBMTR Annual Meetings
February 26-March 2
Dallas, Texas

•2015

BMT Tandem Meetings

Combined ASBMT and CIBMTR Annual Meetings
February 11-15
San Diego, California

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