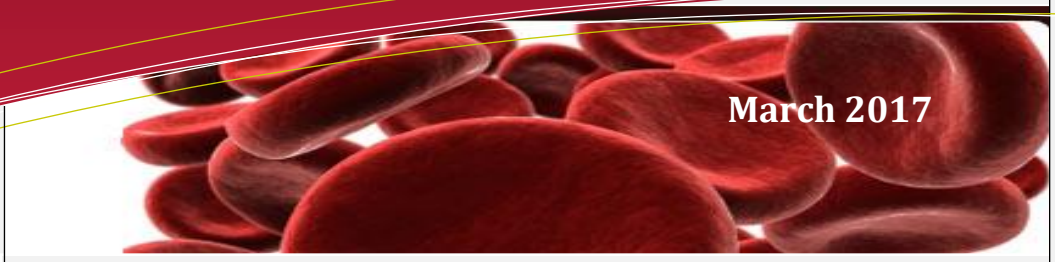
ASBMT eNews

American Society For Blood and Marrow Transplantation



March 2017

Clinical Research

Specific Genetic Mutations Linked to Shorter MDS Survival

Genetic profiling of multiple dysplastic syndrome (MDS) patients may be useful for predicting outcomes and choosing conditioning regimens, according to findings of a study published in the *New England Journal of Medicine*. Researchers analyzed genetic mutations on samples obtained from more than 1,500 MDS patients prior to allogeneic hematopoietic cell transplantation. They discovered that 19% of the patients had TP53 mutations, which were associated with shorter survival and time to relapse, compared to patients without the TP53 mutations. However, in patients 40 years of age or older, RAS pathway and JAK2 mutations were both linked to shorter survival, even in the absence of TP53 mutations. Conditioning regimens also played a role in outcomes, depending on the conditioning and mutation types. Finally, mutations in the p53 regulator PPM1D were five times more likely among patients with therapy-related MDS than those with primary MDS. More...

Transplantation with CTLA4 Genotype Cord Blood Associated with Worse Outcomes

Unrelated cord blood transplantations with CTLA4 genotype cord blood units are more likely to result in mortality than transplants of cord blood with other genotypes, reports a recent study from *Blood.* For the study, nearly 700 pretransplant DNA samples from malignant diseased cord blood were genotyped for NLRP1, NLRP2, NLRP3, TIRAP/Mal, IL10, REL, TNFRSF1B and CTLA4. The researchers discovered that patients who received cord blood units with CTLA4 genotype had worse neutrophil recovery, nonrelapse mortality and disease-free survival. These results were confirmed with a more homogenous subset of more than 300 patients, who received myeloablative conditioning and an unrelated cord blood transplantation for leukemia. These study findings suggest that cord blood units with a genotype other than CTLA4 should be considered for unrelated transplantation when available. More...

Continues on page 11

In This Issue

See Also

Job & Fellowship Connections

BBMT Journal

ASBMT Home

ASBMT™ American Society for Blood and Marrow Transplantation

YouTube

A Word From President Krishna Komanduri, M.D.

Dear ASBMT colleagues:

Regime change. If you're like many of us, the thought of yet another presidential transition is probably a bit unsettling. But just as February now brings us Groundhog's Day and the Super Bowl, it also brings us the BMT Tandem Meetings and with them, a new ASBMT president. My goal, via this first *eNews* of the new administration, is to introduce myself and to give you a sense of what I hope the ASBMT can accomplish in the coming year.

But first, I need to thank several key people. I want to thank our 2017 BMT Tandem co-chair, Marcel van den Brink, who along with his CIBMTR co-chair, David Marks, ran a spectacular scientific program that attracted record attendance and inspired us all. I've been extremely fortunate in the past year as president-elect to work closely with four remarkable past presidents of the Society. I first met Fred LeMaistre through our mutual efforts in health policy and finance and have benefited immensely from his diverse perspectives as a clinical leader, founder of the Foundation for the Accreditation of Cellular Therapy and astute health care administrator. Rarely have I met a better listener or someone who integrates diverse opinions to achieve consensus. I had the privilege of working with Sergio Giralt for many years on the MD Anderson Cancer Center faculty. I've never met a more talented clinician investigator, and he has been an advocate not only for clinical research, but for the crucial issue of patient access. Effie Petersdorf, in addition to being a gifted scientist, is an extraordinarily empathetic leader, and she has in many ways served as the conscience of the ASBMT in recent years. I cannot thank each of them enough for their service to the Society and for their personal mentorship and support.

Beyond all that I learned from Fred, Sergio and Effie, it has been an extraordinary privilege to work so closely with your outgoing president, Chris Bredeson. Chris and I zigzagged across the globe in service of the ASBMT, and at times joked that we saw each other more often than our wives. I am one of the few who knows how much Chris put the needs of the ASBMT above his personal interests, those of his rapidly growing program in Ottawa and even his family. In spearheading the reorganization of the ASBMT office this past year, Chris worked closely with the support of the Executive Committee and the board to tackle difficult decisions, while always keeping his focus on the long-term needs of the Society. He leaves the ASBMT far better staffed and prepared to address the evolving needs of our community, and we will be reaping the rewards of his efforts for years to come. I will miss being his "wingman," but feel very fortunate to have worked with such an outstanding leader and to have gained such a dear friend in the process.

So what about me? Following medical school at the University of Minnesota where I grew up, I did my residency at UCLA and my hematology/oncology fellowship at UCSF. In San Francisco, I also pursued postdoctoral training in immunology, and was fortunate to be recruited to MD Anderson by our first ASBMT president, Dick Champlin, as a physician-scientist. I spent the next nine years in Houston, conducting research and contributing to scientific and educational missions, before taking a chance at program leadership when I moved to the Sylvester Comprehensive Cancer Center at the University of Miami in 2008. I've been fortunate to continue my laboratory research in transplantation immunology, while helping our program transition from a small to increasingly larger and more academic program emphasizing both transplantation and cellular immunotherapy. In my varied roles as scientist,

Continues on page 3

PRESIDENT'S MESSAGE (CONTINUED FROM PAGE 2)

clinician, educator and administrator, and in both small and large programs from coast to coast, I've seen a broad range of challenges and opportunities. I hope to apply these experiences to address the unique and common needs of our diverse ASBMT membership.

So what do I hope to accomplish? Beyond the obvious (e.g., leading a scandal-free administration and avoiding impeachment) I look forward to working with your board of directors, as well as your president-elect, John DiPersio, and vice-president, Navneet Majhail, to address several goals in the coming year. The first will be to continue the transformation of the ASBMT office into one that leverages the success of the Society's working units: the special interest groups, committees and task forces that gauge the needs of the membership and translate vision into action.

I look forward to continuing to work with Dr. Bredeson to empower our ASBMT committees and make them more dynamic. Creating processes that encourage broader involvement, including that by early stage professionals, will encourage new leaders and ideas to emerge that better prepare us for the future. We must determine how the society should meet the opportunities of nontransplant cellular immunotherapies, including the scientific, clinical, regulatory and financial frameworks needed to maximize their success, while ensuring broad patient access. Finally, it is time that the ASBMT revisits its preferred future, to ensure we can maximize the quality of our scientific achievements, promote clinical research, maintain a patient-centered focus and attract the brightest next generation of leaders to our field.

Critical to our success will be your input regarding where we should focus and how we are doing. I will be working with our dedicated ASBMT staff to develop and expand ways that each of you can help us to enable your success. We will continue to improve our apps and use our website to make the increasingly complex functions of a growing society as transparent and accessible as possible. I will share some of my thoughts on our new presidential Twitter account (@POASBMT) and ASBMT staff will continue to tweet from @ASBMT.

I am profoundly honored to serve as your president. I look forward to hearing from and working with you in what I hope will be a very productive year.

With warm regards,

Krishna

BMT TANDEM MEETINGS

BMT Tandem Meetings in Orlando Sets Record Attendance

Preliminary data shows that the 2017 BMT Tandem Meetings in Orlando last month was our best-attended meeting of all time! Health professionals with a clinical interest in blood and marrow transplantation including investigators, advance practice professionals, laboratory technicians, clinical research professionals, phamacists, nurses, data managers, blood and marrow transplantation center administrators all gathered at the Gaylord Palms Convention Center to learn and interact February 22-26.

From the poster presentations, to the exhibits, to the excellent scientific and educational content, attendees extolled the meeting as being the "best ever." Anyone following #BMTTandem17 on Twitter could see the minute-by-minute updates from ASBMT and the Center for International Blood and Marrow Transplant Research as well as photos and quotes from attendees who were clearly enthusiastic about the meetings.

"The #BMTTandem17 Twitter feed is a great snapshot of the meeting," said new ASBMT President Krishna Komanduri, M.D.

Continues on page 4

BMT TANDEM MEETINGS (CONTINUED FROM PAGE 3)

Record Attendance (continued from page 3)

"You can go there now and see all the posts from attendees who wanted to share what they learned and continue the interactions that were established at the meeting."

The 2018 BMT Tandem Meetings will be held in Salt Lake City, Feb. 21-25, 2018. October 3, 2017, is the deadline for submitting abstracts.

ASBMT will continue to share photos from the 2017 event using the Twitter hashtag, #BMTTandem17, so keep coming back to see new things you may have missed. And don't forget, the BMT Tandem online evaluation program is open until March 28. To claim continuing education credit, click here to fill out your evaluation.

Attendees gather at the Convention Center fountain.

The very popular poster sessions.

A packed room for one of the many scientific sessions.

Michael Schuster, M.D., of Stony Brook University Hospital.

BMT TANDEM MEETINGS (CONTINUED FROM PAGE 4)

Christopher Bredeson, M.D., M.Sc., ASBMT immediate past president, (left) is congratulated for his service by new ASBMT President Krishna Komanduri, M.D. (right).

Those who stayed late at the reception Saturday night were treated to a live band, great music and dancing!

FACT Events at 2017 BMT Tandem Meetings Were a Success!

The Foundation for the Accreditation of Cellular Therapy (FACT) hosted several popular events at the 2017 BMT Tandem Meetings in Orlando, Florida. Over 100 people joined FACT on February 21 for the Cellular Therapy Inspection and Accreditation Workshop, which included major topics such as clinical outcomes benchmarking, FACT-CIBMTR data audits, and immune effector cell requirements. Also on February 21, FACT hosted two cellular therapy leadership courses which were open to anyone who has, or aspires to, a leadership position in cell therapy.

On February 22, FACT teamed up with ASBMT again to host the popular Quality Boot Camp. Over 125 people registered to participate in pre-event exercises and attend the lectures and group discussions on the day of the boot camp. Quality experts presented important concepts and led roundtables that allowed participants to ask questions and help each other reach their quality management goals.

Training for the new FACT Accreditation portal began at this year's BMT Tandem Meetings. FACT's IT business analyst, Alisa Forsythe, conducted several hands-on training sessions of the system interface and demonstrated the overall workflow of the new portal. FACT is excited to launch the new portal in the upcoming months and will provide many tools to help users get acclimated to the new system.

Special invitations were extended to all international delegates attending the BMT Tandem Meetings for a wine and cheese reception on February 22. Members of the FACT Global Affairs Committee were available to provide attendees with information about the new International Accreditation program, established to assist transplant centers in developing economies that may require additional assistance and education in fostering systems and adhering to global accreditation requirements.

FACT also hosted a session for all BMT Tandem Meetings delegates on February 24 titled, "Improving Clinical Outcomes with FACT." To assist programs with evaluating and improving clinical outcomes, FACT implemented standards and a review process that require programs that do not meet

Continues on page 6

BMT TANDEM MEETINGS (CONTINUED FROM PAGE 5)

FACT Events (continued from page 5)

expected one-year survival to submit a a corrective action plan. The FACT Clinical Outcomes Improvement Committee has been reviewing these plans for nearly a year and shared with the audience guidelines for corrective action plans and trends noted in the reviewed plans, including causes of death, challenges in root cause analysis and ideas for improving one-year survival.

In addition to these events, FACT welcomed visitors to its exhibit booth and conducted a dozen more meetings with its active committees.

All events were successful and FACT looks forward to the 2018 BMT Tandem Meetings in Salt Lake City, Utah.

ASSOCIATION NEWS

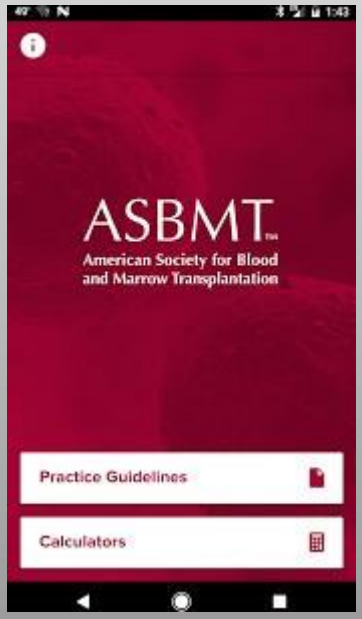
ASBMT Practice Guidelines App Now Available

The new ASBMT Practice Guidelines mobile application provides up-to-date access to practice guidelines, evidence-based reviews and position statements from the ASBMT Committee on Practice Guidelines. These documents are developed and updated by leading experts in the field of blood and bone marrow transplantation and cellular therapy. In addition, the app includes clinical calculators relevant to hematopoietic cell transplantation (HCT) patients. These tools will allow immediate access to information that can help guide clinical decision making.

Topics covered include:

- General guidelines
- Conditioning regimens
- Stem cell collection and mobilization
- Graft-versus-host disease
- HCT for malignant and nonmalignant hematologic diseases, including pediatric and adult patients
- Supportive care
- Survivorship

Detailed references and full access to source papers is also provided.



Available on the App Store

ANDROID APP ON Google play

ISCT-ASBMT Cell Therapy Training Course Deadline Extended

The application deadline for the 2017 ISCT-ASBMT Cell Therapy Training Course has been extended to March 15.

For more information and to apply, please click here.

ASSOCIATION NEWS (CONTINUED FROM PAGE 6)

FOCIS 2017 Features Dynamic, Cross-Disciplinary Program

ASBMT has partnered with the Center for International Blood and Marrow Transplant Research to host an exciting Member Society symposium at the 17th Annual Meeting of the Federation of Clinical Immunology Societies (FOCIS 2017) on Wednesday, June 14, at the Hilton Downtown Chicago Hotel on Michigan Avenue. ASBMT members are invited to attend. The FOCIS 2017 registration fee includes access to Member Society Symposia.

First held in 2001, the FOCIS Annual Meeting draws the best clinician scientists from around the world to participate in the scientific program, bringing together cutting-edge science from various disease fields related to clinical immunology.

The FOCIS approach to clinical immunology is unique, concentrating on breaking down clinical barriers between specialties and focusing on the shared pathologies of diseases and conditions. At FOCIS 2017, researchers and clinicians from over 40 disease- and specialty-specific societies will unite to share knowledge across traditional disease borders, and identify commonalities between treatments and therapies that are life changing for those affected with immune-mediated diseases.

Why FOCIS 2017 is right for you!

- **Get Ahead**: See the latest developments across immunology disciplines to uncover novel solutions to the challenges facing the transplantation community.
- **Grow Your Knowledge**: Three educational courses will be held before the meeting to fill your knowledge gaps, including Basic Immunology in Medicine, Computational Immunology and the new Cancer Immunity and Immunotherapy course. Package registration rates are available!
- **Network with Colleagues**: FOCIS 2017 is large enough to draw leaders from across immunology disciplines, but small enough to actually network with them.

- **Great Location**: The Hilton Downtown Chicago Hotel is minutes from many popular attractions, including the Shedd Aquarium, Millennium Park, Navy Pier, Magnificent Mile and the Willis (Sears) Tower.

FOCIS is accepting late-breaking abstracts for programming at FOCIS 2017 until April 7. Travel awards are available to FOCIS members with top-scoring late-breaking posters – *up to a $500 value*! Before submitting your abstract, become a FOCIS member to waive the $30 submission fee, receive a registration discount and qualify for the late-breaking travel award.

About the ASBMT FOCIS 2017 symposium
Title: Immune Cells as Therapies
Date/Time: Wednesday, June 14, 12:45 p.m. – 4:45 p.m.
Chair: Marcela Maus, M.D.
Speakers:

- Stephan Grupp, M.D., Ph.D.
- Marcela Maus, M.D.
- Prasad Adusumilli, M.D., FACS
- Sarah Nikiforow, M.D., Ph.D.

Stay ahead of the curve by making plans to attend FOCIS 2017. With an innovative lineup of topics and presenters, the FOCIS 2017 program has something for everyone! See you in Chicago! #FOCIS

ASSOCIATION NEWS (CONTINUED FROM PAGE 7)

Upcoming Educational Opportunities from NMDP/Be The Match

The National Marrow Donor Program (NDMP)/Be The Match is offering several educational opportunities for clinicians and other allied health professionals in areas such as acute myeloid leukemia (AML) and severe aplastic anemia (SAA).

New on-demand continuing medical education (CME) activities

Making AML therapy decisions at first remission: Is timing everything?

- Robert J. Soiffer, M.D., Laura C. Michaelis, M.D., and Roland Walter, M.D., share research on making AML therapy decisions at first remission, and how timing impacts outcomes.

AML in older adults: Are outcomes age dependent?

- Fred Appelbaum, M.D., James Foran, M.D., and Laura C. Michaelis, M.D., discuss comorbidities, disease factors and therapy regimens that influence treatment decision-making for AML patients over age 60.

AML risk stratification: Influence of emerging cytogenetics and molecular markers on treatment decisions

- Clara D. Bloomfield, M.D., Jessica Altman, M.D., and Aaron Gerds, M.D., discuss using cytogenetic and molecular marker testing results to develop risk-adapted treatment choices for optimal patient outcomes.

Access the case-based CME activities at BeTheMatchClinical.org/AMLCME and view them when your schedule allows. Each on-demand activity is one hour. Choose the activities most relevant to your practice.

Share these free CME opportunities with your community hematologists/oncologists who refer patients for transplant.

Live continuing education webinar for allied health professionals

Children and adults with SAA: Treatment options, care and support

- Wednesday, March 29, 11 a.m.-12:15 p.m.
- Speakers: David A. Margolis, M.D., and Sheila Dodds, M.S.W.

The speakers will present current research and case examples to illustrate treatment options and common experiences for aplastic anemia patients and their families. They will also summarize psychosocial assessment considerations. View more details and register.

The 2017 MPN Challenge: Request for Research Proposals

The MPN Research Foundation (MPNRF), with support from The Leukemia & Lymphoma Society (LLS), is proud to announce The 2017 MPN Challenge, a grant program with the objective to change the trajectory and ultimate prognosis for patients with myeloproliferative neoplasms (MPNs), including myelofibrosis, polycythemia vera and essential thrombocythemia.

This program represents an important partnership between MPNRF and LLS, who share a mission to advance the scientific understanding of MPNs, and bring new treatments and hope for a cure to patients with these rare diseases.

Research proposals are due April 1. For full details, click here.

ASSOCIATION NEWS (CONTINUED FROM PAGE 8)

Rad/Nuke Preparedness: Operationalizing Ten Years of Development

The Radiation Injury Treatment Network (RITN) will present "Radiation and Nuclear Preparedness: Operationalizing Ten Years of Development" July 25-26 in Rockville, Maryland.

The RITN seeks to increase awareness and understanding of the tremendous environmental, social and medical costs of a mass casualty incident resulting from a large-scale release of nuclear or radiological material from a deliberate attack or natural disaster complications. Several programs are aimed at improving national and local preparedness.

This workshop will engage attendees through discussions about recent developments related to the mitigation and treatment of radiation damage, including patient assessment; biomarkers and biodosimetry; suitability of animal models; small molecules; growth factors; cells as mitigators; mechanisms of action in radiation-damaged tissues; late effects of acute and prolonged exposure; survivorship issues; and future developments.

The industry session proposal deadline is April 1.

Visit https://ritn.net for abstract submission forms, the speaker disclosure form and registration.

SIG SPOTLIGHT

Survivorship Special Interest Group

By Linda J. Burns, M.D., and Shahrukh K. Hashmi, M.D., M.P.H.

We are delighted to report that the inaugural meeting of the Survivorship Special Interest Group (SIG) held during the BMT Tandem Meetings on February 23 was a resounding success with over 60 attendees engaged in lively discussions! In addition to clinicians, researchers, payers, nurses and administrators, we welcomed, most importantly, transplant survivors to the SIG.

As Survivorship SIG co-chairs, we opened the meeting with a review of the SIG charter and goals: providing a national and international forum for the exchange of ideas, promoting educational initiatives, conducting collaborative research, and disseminating information to the greater transplant community. Steering committee members were then introduced, including Scott Baker, M.D., M.S.; Christy Duncan, M.D.; Areej El-Jawahri, M.D.; Adetola Kassim, M.D.; and Karen Syrjala, Ph.D.

As part of background information for attendees, Minoo Batiwalla, M.D., M.S., provided an update on the National Institutes of Health Late Effects Initiative; Bipin Savani, M.D., reviewed the scope of work for the Center for International Blood and Marrow Transplant Research (CIBMTR) Working Committee on Late Effects and Quality of Life; Effie Petersdorf, M.D., reported that an ASBMT Palliative Care SIG has been established; and Linda Burns, M.D., discussed the outcomes from the Patient-Centered Outcomes Research Institute Initiative and collaborative opportunities for investigators within the CIBMTR Health Services Research Program.

Stephanie Lee, M.D., Ph.D., then led the research portion of the meeting during which 15 principal investigators presented their research concepts for group discussion. Hopefully the feedback will help the investigators strengthen their concepts and move them forward into research protocols. The proposals, with contact information for each principal investigator, will be posted on the ASBMT Survivorship SIG

Continues on page 10

SIG SPOTLIGHT (CONTINUED FROM PAGE 9)

Survivorship SIG (continued from page 9)
website in order to encourage researchers to connect and collaborate with each other.

In the coming month the Steering Committee will meet to formulate a SIG agenda for the coming year. We also plan to add a patient to the Steering Committee, as the patient voice is incredibly important to our efforts, and develop a robust website to facilitate communication among SIG members.

The SIG is open to all interested in survivorship issues, and ASBMT membership is not required. If you were unable to attend the session at the Tandem meetings and would like to join the SIG, please click here.

Also, if you have any suggestions or comments, please contact Shahrukh at hashmi.shahrukh@mayo.edu or Linda at lburns2@nmdp.org.

LEGISLATION & REGULATION

Policy Perspective: Opinions Needed!

By Stephanie Farnia, ASBMT Director of Health Policy and Strategic Relations

I realize this is rare phrasing – many of you are likely far more used to being asked to keep your opinions to yourselves. In Washington, D.C., however, opinion letters printed opposite of the editorial page (op-eds) have high visibility and really do help drive policy change. Specialty publications focused on federal agency issues (*Inside CMS*, *Politico*) and general media sources like the *Washington Post* or the *Baltimore Sun* are all read by Capitol Hill staffers daily to keep abreast of key issues. In addition, local congressional offices monitor publications in their home state and congressional district for issues of interest to their constituent groups, and relay those concerns to their partner offices in Washington. In particular, issues identified on the home turf of congressional representatives seated on specific committees with jurisdiction over health care or finances are very important. When the issues highlighted in the media match those brought to their attention from visits to their office, staff are far more likely to take a concern seriously and speak with their senator or representative about acting in accordance with the request.

In 2016, the National Marrow Donor Program (NMDP)/Be The Match and ASBMT partnered on a targeted campaign around the issue of Medicare reimbursement. There were multiple letters placed in various parts of the country, three of which were authored by Krishna Komanduri, M.D. (*Miami Herald*), Fred LeMaistre, M.D. (*MedPage Today*), and Navneet Majhail, M.D. (*Cleveland Sun*). Each of these articles was tracked for "impressions" – the number of individuals that interact with it in some manner, whether that be posting to Facebook or Twitter or simply sending a copy of the article via email to another individual. The articles authored by Drs. Komanduri, LeMaistre and Majhail each tallied impression counts in the multiple thousands and created positive visibility for their hospitals and programs by highlighting them as advocates for patient care.

The process for drafting these letters is collaborative. When specific issues of interest to our field are being considered by Congress, those topics are top priority for seeking media attention. The legislative communications group within the NMDP/Be The Match will often suggest an outline of the communication, reach out to the ASBMT for thoughts on authors, and then contact with a suggested

Continues on page 11

LEGISLATION & REGULATION (CONTINUED FROM PAGE 10)

Policy Perspective (continued from page 10)

author is made by both groups. If the article topic is of interest and an author agrees to participate, they are able to modify the language to make it personal to his or her geographic location, professional background and type of hospital. If needed, authors are invited to share the draft with the communication or government affairs team at their hospital. The legislative team then contacts colleagues at the major media outlets either "Inside the Beltway" (Washington, D.C., and the surrounding areas) or in the author's home state and congressional district. These placements are symbiotic in nature – many of these media contacts are long-time partners and look to their network for important topics to place in their news outlet throughout a given week or month.

We are actively seeking individuals willing to work on these op-eds throughout the year. The topics will vary based on what activity is happening in D.C., but most will likely focus on access to care – Medicare coverage and reimbursement, and efforts to repeal the Affordable Care Act legislation – and other issues important to the world of hematopoietic cell transplantation and cell therapy, such as research funding. If you are willing to partner on such a letter, please send me a note at StephanieFarnia@asbmt.org.

CLINICAL RESEARCH (CONTINUED FROM PAGE 1)

Maraviroc Effective at Blocking CCR5 and Preventing GVHD

Researchers of a study appearing in *Blood* have discovered that the prophylaxis maraviroc protects patients from developing graft-versus-host disease (GVHD) by blocking the chemokine receptor CCR5, which decreases alloreactive donor T-cell responses. To determine the clinical and immunologic effects of CCR5 blockade in allogeneic hematopoietic cell transplantation (HCT), researchers compared two groups of reduced-intensity conditioning HCT recipients: one group received standard GVHD prophylaxis as well as maraviroc, while the other group received only standard GVHD prophylaxis. Not only did the maraviroc recipients have a lower occurrence of acute GVHD without an increase in relapse, but they also had lower gut-specific marker levels. The cohort that received maraviroc also had increased CCR5 expression on T cells and decreased T-cell activation in peripheral blood without adversely affecting early immune reconstitution or risk for infections. Despite the effectiveness of maraviroc, some recipients still developed GVHD. These patients had increased T-cell activation, naïve T-cell skewing, and elevated serum CXCL9 and CXCL10 levels, leading researchers to conclude that CXCR3 signaling may be resistant to CCR5 blockade in GVHD prophylaxis. More...

TRANSLATIONAL SCIENCE STUDIES

Daclizumab Ineffective at Preventing Acute GVHD, Has Other Long-Term Effects

According to a study from *Biology of Blood and Marrow Transplantation*, daclizumab does not prevent acute graft-versus-host disease (GVHD) after unrelated bone marrow transplantation but may contribute long term to an increased risk of chronic GVHD and a decreased risk of relapse. The double-blind clinical trial included 210 adult and pediatric patients with either a hematologic malignancy or severe aplastic anemia. After transplantation, the patients received five weekly doses of .3 mg/kg or 1.2 mg/kg of daclizumab or a placebo. All of the groups had similar acute GVHD and survival outcomes. However, at long-term follow up, daclizumab recipients were found to have a higher risk of chronic GVHD and a lower risk of relapse. Comparison of T cells from a subset of 107 patients demonstrated that daclizumab reduced the proportion of regulatory T cells (Tregs) among CD4 T cells 11 to 35 days post-transplantation and increased the proportion of central memory cells among CD4 T cells one year after transplantation. The researchers concluded that delaying Treg reconstitution and promoting immunologic memory, anti-CD25 therapy may enhance alloreactivity and antitumor immunity. More...

Donor T Cells Weaken NK-Cell Reconstitution and Leukemia Protection

Donor T cells compete with natural killer (NK) cells for interleukin 15 (IL-15) during graft-versus-host disease (GVHD), causing defects in NK-cell reconstitution that weaken protection from leukemia and other pathogens. In this study appearing in *Blood*, GVHD that developed after allogeneic bone marrow transplantation prevented NK-cell reconstitution, especially within the maturing M1 and M2 NK-cell subsets associated with exaggerated activation, apoptosis and autophagy. Donor T cells played a key role in this process by limiting availability of IL-15. In addition, administration of IL-15/IL-15Rα or immune suppression with rapamycin restored NK-cell reconstitution. The NK-cell defect led to the failure of NK-cell-dependent in vivo cytotoxicity and graft-versus-leukemia effects. Cytomegalovirus infection control was also impaired during GVHD. More...

New Cellular Therapy for Relapsed or Refractory AML

Researchers have discovered a novel cellular therapy for relapsed or refractory acute myeloid leukemia (AML) after allogeneic hematopoietic cell transplantation, according to a study published in *Leukemia*. The researchers demonstrated that in vitro stimulation of CD45RA-selected CD4 T cells from donors with a 10/10 HLA-match expanded cytolytic T-lymphocytes (CTL) that recognized nearly all HLA-DPB1 mismatch alleles. AML blasts expressed HLA-DPB1. Fibroblasts and keratinocytes used as surrogate target cells for graft-versus-host disease also expressed HLA-DBP1, but only after IFN-γ pre-treatment. For the study, researchers stimulated donor-derived CD45RA-selected CD4 T cells with autologous dendritic cells electroporated with RNA encoding patients' HLA-DPB1 mismatch alleles. T-cell lines that were stimulated for a short time lysed HLA-DPB1 mismatch-expressing AML blasts. These CD4 CTL eliminated AML blasts when transferred into mice. This study demonstrated immunogenicity of HLA-DPB1 mismatch alleles in CD45RA-selected CD4 T cells of donors, as well as a new way to generate HLA-DPB1-specific CD4 CTL. More....

Calendar of Events

•March

European School of Haematology
Training Course on WHO Classification: Towards Personalized Medicine in Haematology
March 9-11
Saggart (Dublin), Ireland

National Comprehensive Cancer Network
22nd Annual Conference: Improving the Quality, Effectiveness and Efficiency of Cancer Care
March 23-25
Orlando, Florida

European Society for Blood and Marrow Transplantation
43rd Annual Meeting
March 26-29
Marseille, France

British Society for Haematology
Annual Scientific Meeting
March 27-29
Brighton, United Kingdom

Association of Community Cancer Centers
43rd Annual Meeting
March 29-31
Washington, D.C.

•April

American Association for Cancer Research
Annual Meeting
April 1-5
Washington, D.C.

Canadian Blood and Marrow Transplant Group
"Blood Banking in BMT" webinar
April 5

European School of Haematology
2nd Scientific Workshop – The Tumor Environment in Haematological Malignancies and Its Therapeutic Targeting
April 7-9
Berlin, Germany

American Society of Pediatric Hematology/Oncology
30th Annual Meeting
April 26-29
Montreal, Quebec, Canada

•April

American Society of Transplant Surgeons
American Transplant Congress
April 29 - May 4
Chicago, Illinois

•May

The Myelodysplastic Syndromes Foundation
14th International Symposium
May 3-6
Valencia, Spain

International Society for Cellular Therapy
Annual Meeting
May 3-6
London, England

European School of Haematology
21st Training Course on Haemopoietic Cell Transplantation
May 4-6
Saggart (Dublin), Ireland

Oncology Nursing Society
42nd Annual Congress
May 4-7
Denver, Colorado

Canadian Blood and Marrow Transplant Group
"Empowerment" Themed Meeting Series
May 5-6
Winnipeg, Canada

International Society for Biological and Environmental Repositories
Annual Meeting
May 9-12
Toronto, Canada

American Society of Gene and Cell Therapy
20th Annual Meeting
May 10-13
Washington, D.C.

American Society of Immunologists
Annual Meeting
May 12-16
Washington, D.C.

European School of Haematology
Clinical Updates on Multiple Myeloma
May 19-21
Paris, France

European Bone Marrow Working Group
XIII International Course and Workshop on Bone Marrow Pathology
May 27-30
Utrecht, The Netherlands

•June

American Society of Clinical Oncology
Annual Meeting
June 2-6
Chicago, Illinois

AABB
International Cord Blood Symposium
June 8-10
San Diego, California

Canadian Blood and Marrow Transplant Group
"Innovation in BMT" Themed Meeting Series
June 9-10
Calgary, Alberta

Federation of Clinical Immunology Societies
Annual Meeting
June 14-17
Chicago, Illinois

International Society for Stem Cell Research
Annual Meeting
June 14-17
Boston, Massachusetts

European Hematology Association
22nd Congress
June 22-25
Madrid, Spain

•July

ASBMT
Clinical Research Training Course
July 12-17
Charlotte, North Carolina

Society for Cryobiology
CRYO 2017
July 20-24
Hefei, China

•August

International Society for Experimental Hematology
46th Annual Scientific Meeting
August 24-27
Frankfurt, Germany

•2018

BMT Tandem Meetings
Combined ASBMT and CIBMTR Annual Meetings
February 21-25
Salt Lake City, Utah

The editor for ASBMT eNews is Jean Sanders, M.D. ASBMT eNews services provided by Lori O'Keefe.
Do you have news, responses or opinions to share with us? Please e-mail the association office at enews@asbmt.org.