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1.0 OVERVIEW

The CIBMTR® (Center for International Blood and Marrow Transplant Research®) collaborates with the global scientific community to advance cellular therapy research worldwide to increase survival and enrich quality of life for patients. A research collaboration between the National Marrow Donor Program® (NMDP)/Be The Match® and the Medical College of Wisconsin, the CIBMTR facilitates critical observational and interventional research through scientific and statistical expertise, a large network of participating centers, a unique and extensive clinical database, and a robust and comprehensive biospecimen repository.

Fifteen international Scientific Working Committees oversee most of the CIBMTR’s clinical outcomes research. Each committee focuses on a specific disease or condition, use of cellular therapy, or complication of treatment (Table 1). This report details the Scientific Working Committee Research Portfolio as of July 1, 2020.

Table 1. Working Committee Focus Areas

<table>
<thead>
<tr>
<th>Working Committee</th>
<th>Scientific Focus</th>
</tr>
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<td>Acute Leukemia</td>
<td>Cellular therapy for acute leukemia and pre-leukemia</td>
</tr>
<tr>
<td>Cellular Immunotherapy for Cancer</td>
<td>Non-transplant uses of hematopoietic stem cells</td>
</tr>
<tr>
<td>Chronic Leukemia</td>
<td>Cellular therapy for chronic leukemias, myelodysplastic disorders, and myeloproliferative disorders</td>
</tr>
<tr>
<td>Donor Health and Safety</td>
<td>Donor safety and outcomes</td>
</tr>
<tr>
<td>Graft Sources and Manipulation</td>
<td>Graft types, composition, and manipulation techniques</td>
</tr>
<tr>
<td>Graft-versus-Host Disease</td>
<td>Biology, prevention, and treatment of graft-versus-host disease and its complications</td>
</tr>
<tr>
<td>Health Services and International Studies</td>
<td>Social and economic barriers to cellular therapy access, including quality of care and the influence of psychosocial factors on transplant outcomes, as well as international issues and differences in cellular therapy</td>
</tr>
<tr>
<td>Immunobiology</td>
<td>Histocompatibility and other genetic and immunologic issues related to cellular therapy</td>
</tr>
<tr>
<td>Infection and Immune Reconstitution</td>
<td>Prevention and treatment of post-transplant infections and issues related to recovery of immune function</td>
</tr>
<tr>
<td>Late Effects and Quality of Life</td>
<td>Long-term survival after cellular therapy, including clinical and psychosocial effects of transplantation</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>Cellular therapy for Hodgkin and non-Hodgkin lymphoma</td>
</tr>
<tr>
<td>Non-Malignant Diseases</td>
<td>Cellular therapy for non-malignant diseases, including autoimmune diseases, inherited and acquired marrow failure syndromes, hemoglobinopathies, immunodeficiency diseases, and inborn errors of metabolism</td>
</tr>
<tr>
<td>Working Committee</td>
<td>Scientific Focus</td>
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<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
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<tr>
<td>Pediatric Cancer</td>
<td>Cellular therapy for childhood leukemias and other issues related to use of cellular therapy in children</td>
</tr>
<tr>
<td>Plasma Cell Disorders and Adult Solid Tumors</td>
<td>Cellular therapy for multiple myeloma and other plasma cell disorders as well as solid tumors in adults</td>
</tr>
<tr>
<td>Regimen-Related Toxicity and Supportive Care</td>
<td>Preparative regimens, prevention, and treatment of early non-graft-versus-host disease toxicities; supportive care in the early post-transplant period</td>
</tr>
</tbody>
</table>

### 1.1 Membership

Total Working Committee membership exceeds 2,800 researchers. Membership is open to any researcher willing to take an active role in developing and conducting studies that use CIBMTR data and / or resources. While most of these individuals are cellular therapy clinicians, statisticians and basic scientists also participate. PhD Statistical Directors and Master’s-level statisticians from the CIBMTR Coordinating Center provide their unique expertise in data analysis. Basic scientists investigating HLA, immunogenetics, pharmacogenetics, stem cell biology, and other areas related to cellular therapy provide essential expertise in their respective research areas. The Working Committee structure encourages a collaborative but rigorous methodological approach to all CIBMTR activities.

### 1.2 Leadership

Each Working Committee is staffed by at least one MS-level Statistician, a PhD Statistical Director, and MD Scientific Director(s) from the CIBMTR Coordinating Center. Each also typically has two to four Chairs who are appointed by the Advisory Committee.

#### 1.2.1 Committee Chairs

Working Committee Chairs are appointed by the Advisory Committee to non-renewable five-year terms. Appointments are made each fall, with terms commencing on March 1 of the following year. Terms are staggered to facilitate succession and maintain continuity. Individuals may serve as Chair more than once but not consecutively for the same committee. Chairs participate in the nomination process for replacement positions and give special consideration to promising junior investigators, thus promoting ongoing leadership for the work of the CIBMTR.

Working Committee Chairs provide subject matter expertise in cellular therapy as well as understanding of CIBMTR organization and procedures. They must be members of CIBMTR centers that submit comprehensive report form (CRF)-level data and are compliant with continuous process improvement standards for data submission, unless an exception is granted by the Advisory Committee. Chairs are occasionally selected from outside these guidelines for their specific scientific expertise, for example, a scientist who directs a histocompatibility laboratory, apheresis center, or donor registry, who is committed to the CIBMTR and to the field of cellular therapy.
Chairs monitor and facilitate the progress of studies in their Working Committee’s portfolio. They communicate with principal investigators (PIs) to address barriers and / or delays and participate in weekly CIBMTR Coordinating Center study critiques when studies in their portfolios are being discussed. In addition to chairing annual Working Committee meetings, Chairs meet by teleconference every four to six weeks with their committee’s Scientific Director and biostatisticians to review the progress of study proposals and ongoing studies. Chairs lead the annual Working Committee meeting, and, using input from that meeting, they prioritize studies and establish the research agenda for the following year.

1.3 Productivity

There are >170 studies in progress, 49 of which are collaborations with other organizations (Appendix A). At the 2020 TCT Meetings of ASTCT and CIBMTR, 28 new study proposals were approved. The prioritization and selection process (Figure 1) ensures the most important issues can be addressed in a timely manner.

During the past year, Working Committee study investigators published 58 manuscripts in peer-reviewed journals, approximately half of the total number of CIBMTR publications. In each committee’s section of this report, publications since July 1, 2015, are listed (Sections 2.2-16.2). For a complete list of CIBMTR publications, visit the CIBMTR Publication List webpage.

Working Committee study investigators also presented 40 abstracts (22 oral and 18 poster) at national and international conferences this year. These presentations include 25 (12 oral and 13 poster) at the 2019 American Society of Hematology Annual Meeting, 12 (8 oral and 4 poster) at the 2020 TCT Meetings of ASTCT and CIBMTR, and 3 (2 oral and 1 poster) at other conferences.

1.4 How to Get Involved

Working Committees are collaborative in nature, and all interested individuals are encouraged to participate:

- **Join a Working Committee.** Learn more about each committee on the CIBMTR Working Committee webpage. To join a Working Committee, email contactus@cibmtr.org, contact the Working Committee leadership listed on the individual committee’s webpage, or attend a Working Committee Meeting at the TCT | Transplantation & Cellular Therapy Meetings of the American Society for Transplantation and Cellular Therapy and CIBMTR.

- **Attend a Working Committee Meeting at the TCT Meetings of ASTCT and CIBMTR.** All TCT Meetings of ASTCT and CIBMTR attendees may attend to learn more about the committee, its recent publications and current studies, and have the opportunity to learn about and provide feedback on new study proposals.

- **Participate in a Writing Committee.** When a draft protocol is approved by the Working Committee leadership and Coordinating Center, all Working Committee members on record are invited to participate in the study Writing Committee.
• **Propose a Study.** Anyone willing to follow the study development and management process ([Appendix B](#)) is eligible to propose a study to the Working Committees ([Figure 1](#)). Guidelines for CIBMTR study PIs, including hints and tips to make the study process as successful as possible, are provided in [Appendix C](#).

For more information regarding participation in a Working Committee, access the “Learn more about how to get involved in a Working Committee” section on the [CIBMTR Working Committee webpage](#).
Figure 1. Working Committee Study Proposal Review Process

**Submission**
- By late October, study investigator submits proposal to the CIBMTR Coordinating Center for consideration at the next TCT Meetings of ASTCT and CIBMTR.

**Initial Review**
- Working Committee Leadership reviews for feasibility with CIBMTR data, potential conflict with active studies, scientific merit, and ability to complete the study in a timely fashion. Researchers with similar concepts may be advised to combine their proposals.

**Preliminary Assessment**
- If Working Committee Leadership clears the proposal to move forward, the MS-level Statistician contacts the study investigator and prepares a table of characteristics of patient data based on the population defined in the proposal.

**Presentation**
- Study investigator presents the proposal at the Working Committee meeting at the February TCT Meetings of ASTCT and CIBMTR.

**Voting**
- Working Committee members vote for each proposal, assigning a scientific impact score to each.

**Final Approval**
- Working Committee Leadership utilizes member feedback in determining which proposals to pursue. Advisory Committee approves the CIBMTR research agenda.

**Notification**
- Working Committee Leadership contacts study investigator to notify of study approval / rejection by the beginning of April.
2.0 ACUTE LEUKEMIA WORKING COMMITTEE

2.1 Leadership

**Chair:** Mark Litzow, MD, Mayo Clinic Rochester  
Email: litzow.mark@mayo.edu

**Chair:** Partow Kebriaei, MD, M.D. Anderson Cancer Center  
Email: pkebriae@mdanderson.org

**Chair:** Christopher Hourigan, MD, D Phil, National Heart, Lung, and Blood Institute – NIH  
Email: hourigan@nih.gov

**Scientific Director:** Daniel Weisdorf, MD, CIBMTR Minneapolis  
Email: weisd001@umn.edu

**asst Sci Director:** Wael Saber, MD, MS, CIBMTR Milwaukee  
Email: wsaber@mcw.edu

**Statistical Director:** Mei-Jie Zhang, PhD, CIBMTR Milwaukee  
Email: meijie@mcw.edu

**MS Statistician:** Karen Chen, MS, CIBMTR Milwaukee  
Email: kachen@mcw.edu

2.2 Recent Publications

2019


2018


2017


2016


2015

2.3 Current Studies

LK15-03
Title: Comparison of outcomes of older adolescents and young adults with Philadelphia/BCR-ABL1-negative acute lymphoblastic leukemia receiving post-remission consolidation chemotherapy with pediatric-inspired chemotherapy on CALGB 10403 or myeloablative allogeneic hematopoietic cell transplantation
PIs: Matthew Wieduwilt (University of California, San Diego Medical Center)
Wendy Stock (University of Chicago Medicine)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)
* Collaborative study with CALGB 10403

LK16-02
Title: DRI-guided choice of conditioning intensity for allogeneic hematopoietic cell transplantation in adults with acute myeloid leukemia and myelodysplastic syndromes
PIs: Nelli Bejanyan (H. Lee Moffitt Cancer Center and Research Institute)
Erica Warlick (University of Minnesota Blood and Marrow Transplant Program)
Claudio Brunstein (University of Minnesota Blood and Marrow Transplant Program)
Daniel Weisdorf (University of Minnesota Blood and Marrow Transplant Program)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)

LK16-03
Title: Allogeneic transplantation to treat therapy related acute myeloid leukemia and myelodysplastic syndromes
PIs: Natalie Callander (University of Wisconsin Hospital and Clinics)
Leland Metheny (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Marcos De Lima (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Aric Hall (University of Wisconsin Hospital and Clinics)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

LK17-01
Title: Outcomes of acute myeloid leukemia patients who undergo allogeneic transplant stratified by depth of clinical response
PIs: Mary-Elizabeth Percival (University of Washington)
Brenda Sandmaier (Fred Hutchinson Cancer Research Center)
Elihu Estey (M.D. Anderson Cancer Center)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)
LK17-02
Title: Allogeneic hematopoietic transplant outcomes in adult patients with MLL-rearranged acute myeloid leukemia
PIs: Kamal Menghrajani (Memorial Sloan Kettering Cancer Center)
Martin Tallman (Memorial Sloan Kettering Cancer Center)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)

LK18-01
Title: Prognostic impact of the new European LeukemiaNet genetic risk stratification categories in predicting outcomes for adults with acute myeloid leukemia undergoing allogeneic hematopoietic stem cell transplantation
PIs: Antonio Jimenez (University of Miami)
Trent Wang (Fox Chase Temple University Hospital Bone Marrow Transplant Program)
Marcos De Lima (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Krishna Komanduri (University of Miami)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

LK18-02
Title: Comparison of outcomes of transplants with matched-related donor or matched-unrelated donor allogeneic hematopoietic cell transplantation for adults with acute lymphoblastic leukemia
PIs: Matthew Wieduwilt (University of California, San Diego Medical Center)
Leland Metheny (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Marcos De Lima (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

LK19-01
Title: Evaluating outcomes of hematopoietic cell transplantation in blastic plasmacytoid dendritic cell neoplasm
PI: Hemant Murthy (Mayo Clinic Florida)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
LK19-02
Title: Evolving significance of Philadelphia chromosome status on acute lymphoblastic leukemia prognosis in the TKI era
PIs: Maxwell Krem (University of Kentucky Chandler Medical Center)
Richard Maziarz (Oregon Health and Science University)
Status: Protocol Development (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)

LK19-03
Title: Outcomes of alloHCT in AML patients who achieved first complete remission after two or more cycles of induction chemotherapy
PIs: Michael Boyiadzis (University of Pittsburgh Medical Center - Cancer Center)
Marcos De Lima (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Status: Data File Preparation (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)

LK20-01
Title: Acute myeloid leukemia with chromosome 17 abnormalities with or without TP53 abnormalities and outcomes after hematopoietic stem cell transplantation
PIs: Ajoy Dias (Beth Israel Deaconess Medical Center)
Jean Yared (Greenebaum Comprehensive Cancer Center, University of Maryland)
Status: Protocol Development (as of July 1, 2020)
Data File Preparation (expected by June 30, 2021)

LK20-02
Title: Outcomes of allogeneic hematopoietic cell transplantation among germline RUNX1 mutation carriers with acute myeloid leukemia
PIs: Paul Liu (National Human Genome Research Institute)
Wael Saber (Medical College of Wisconsin)
Lea Cunningham (National Cancer Institute, Center for Cancer Research)
Status: Protocol Development (as of July 1, 2020)
Sample Typing (expected by June 30, 2021)

LK20-03
Title: Evaluating outcomes of allogeneic hematopoietic cell transplantation in T-cell acute lymphoblastic leukemia
PIs: Hemant Murthy (Mayo Clinic Florida)
Madiha Iqbal (Mayo Clinic Florida)
Mohamed Kharfan-Dabaja (Mayo Clinic Florida)
Status: Deferred (as of July 1, 2020)
Deferred (expected by June 30, 2021)
LK20-04
Title: **Impact of older age in allogeneic transplants for acute myeloid myelogenous leukemia in first complete remission**
PIs: Joseph Maakaron (Ohio State Medical Center, James Cancer Center)
      Daniel Weisdorf (University of Minnesota Blood and Marrow Transplant Program)
Status: Analysis (as of July 1, 2020)
      Submitted (expected by June 30, 2021)
3.0 CELLULAR IMMUNOTHERAPY FOR CANCER WORKING COMMITTEE

3.1 Leadership

**Chair:** Sarah Nikiforow, MD, PhD, Dana Farber Cancer Institute  
Email: snikiforow@partners.org

**Chair:** Peiman Hematti, MD, University of Wisconsin Hospital and Clinics  
Email: pxh@medicine.wisc.edu

**Chair:** Cameron Turtle, MBBS, PhD, Fred Hutchinson Cancer Research Center  
Email: cturtle@fredhutch.org

**Scientific Director:** Marcelo Pasquini, MD, MS, CIBMTR Milwaukee  
Email: mpasquini@mcw.edu

**Statistical Director:** Soyoung Kim, PhD, CIBMTR Milwaukee  
Email: skim@mcw.edu

**MS Statistician:** Kelley Qiu, MPH, CIBMTR Milwaukee  
Email: xqiu@mcw.edu

3.2 Recent Publications

2020

Annapragada A, Sikora A, Bollard C, Conejo-Garcia J, Cruz CR, Demehri S, Demetriou M,  


2018

Sullivan KM, Majhail NS, Bredeson C, Carpenter PA, Chatterjee S, Crofford LJ, Georges GE, Nash  
2017

3.3 Current Studies

AC16-01
Title: Pattern of use and outcomes with donor lymphocyte infusion after HLA-haploidentical allogeneic hematopoietic stem cell transplant
PIs: Eva Gupta (Florida Cancer Specialists & Research Institute)
James Foran (Mayo Clinic Florida)
Vivek Roy (Mayo Clinic Florida)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

AC17-01
Title: CD-19 chimeric antigen receptor T-cells with or without hematopoietic cell transplantation for treatment of refractory acute lymphocytic leukemia
PIs: Miguel-Angel Perales (Memorial Sloan Kettering Cancer Center)
Jae Park (Memorial Sloan Kettering Cancer Center)
Sarah Nikiforow (Dana Farber Cancer Institute)
Status: Data File Preparation (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)

AC18-01
Title: Effect of stem cell boost and donor lymphocyte infusion on the incidence of GVHD
PIs: James Yoon (Emory University Hospital)
Edmund Waller (Emory University Hospital)
Status: Protocol Development (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)
CT19-01
Title: Allogeneic hematopoietic cell transplantation vs chimeric antigen receptor T-cell therapy for diffuse large B-cell lymphoma patients with prior autologous transplant failure or refractory disease
PIs: Mehdi Hamadani (Medical College of Wisconsin)
      Marcelo Pasquini (Medical College of Wisconsin)
      Frederick Locke (H. Lee Moffitt Cancer Center and Research Institute)
      Ajay Gopal (University of Washington)
Status: Protocol Development (as of July 1, 2020)
       Manuscript Preparation (expected by June 30, 2021)

CT19-02
Title: Prolonged cytopenia following CD-19 targeted chimeric antigen receptor T therapy for diffuse large B-cell lymphoma
PI: Mazyar Shadman (Fred Hutchinson Cancer Research Center)
Status: Protocol Development (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

CT19-03
Title: Patient outcomes after chimeric antigen receptor T cells
PI: Marcelo Pasquini (Medical College of Wisconsin)
Status: Manuscript Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

CT20-01
Title: Comparative outcomes and analysis of patients with aggressive B-cell lymphoma treated with axicabtageneciloleucel versus tisagenlecucel
PIs: Brian Hill (Cleveland Clinic Foundation)
      Martina Pennisi (Memorial Medical Center)
      Taiga Nishihori (H. Lee Moffitt Cancer Center and Research Institute)
Status: Protocol Development (as of July 1, 2020)
       Analysis (expected by June 30, 2021)

CT20-02
Title: Resource utilization with chimeric antigen receptor T cells
PIs: Minoo Battiwalla (Sarah Cannon BMT Center at Centennial Medical Center)
      Hemalatha Rangarajan (Nationwide Children’s Hospital)
      Caleb Scheckel (Mayo Clinic Rochester)
Status: Protocol Development (as of July 1, 2020)
       Data File Preparation (expected by June 30, 2021)
CT20-03
Title: Determinants of outcomes after chimeric antigen receptor T cells for lymphoma
PIs: Hamza Hashmi (Medical University of South Carolina)
Roni Shouval (Sheba Medical Center)
Kitsada Wudhikarn (Stanford Health Care)
Status: Protocol Development (as of July 1, 2020)
Analysis (expected by June 30, 2021)

CT20-04
Title: Determinants of outcomes after chimeric antigen receptor T cells for acute lymphoblastic leukemia
PIs: Sayeff Mirza (H. Lee Moffitt Cancer Center and Research Institute)
Dristhi Ragoonanan (M.D. Anderson Cancer Center)
Status: Protocol Development (as of July 1, 2020)
Analysis (expected by June 30, 2021)
4.0 CHRONIC LEUKEMIA WORKING COMMITTEE

4.1 Leadership

Chair: Bart Scott, MD, Fred Hutchinson Cancer Research Center  
Email: bscott@fredhutch.org
Chair: Ryotaro Nakamura, MD, City of Hope  
Email: rnakamura@coh.org
Chair: Betul Oran, MD, MS, M.D. Anderson Cancer Center  
Email: boran@mdanderson.org
Scientific Director: Wael Saber, MD, MS, CIBMTR Milwaukee  
Email: wsaber@mcw.edu
Statistical Director: Soyoung Kim, PhD, CIBMTR Milwaukee  
Email: skim@mcw.edu
MS Statistician: Noel Estrada-Merly, MPH, CIBMTR Milwaukee  
Email: nestrada@mcw.edu

4.2 Recent Publications

2020

2019


2018

2017


2016


4.3 Current Studies

CK15-03a

Title: Outcome of allogeneic hematopoietic cell transplantation in patients with acute myeloid leukemia with antecedent history of Philadelphia-negative myeloproliferative neoplasm

PI: Vikas Gupta (Princess Margaret Cancer Center)

Status: Submitted (as of July 1, 2020)

Published (expected by June 30, 2021)

CK15-03b

Title: Outcome of allogeneic hematopoietic cell transplantation in patients with acute myeloid leukemia with antecedent history of Philadelphia-negative myeloproliferative neoplasm

PI: Vikas Gupta (Princess Margaret Cancer Center)

Status: Submitted (as of July 1, 2020)

Published (expected by June 30, 2021)
**CK16-01**

**Title:** Identification of germline predisposition mutations in young myelodysplastic syndrome patients

**PI:** Lucy Godley (University of Chicago Medicine)

**Status:** Deferred (as of July 1, 2020)
Sample Typing (expected by June 30, 2021)

* Collaborative study with University of Chicago

**CK17-01**

**Title:** Development of a prognostic scoring system predictive of outcomes in patients with myelofibrosis after allogeneic hematopoietic cell transplantation

**PI:** Roni Tamari (Memorial Sloan Kettering Cancer Center)

**Status:** Analysis (as of July 1, 2020)
Submitted (expected by June 30, 2021)

* Collaborative study with the European Society for Blood and Marrow Transplantation (EBMT)

**CK17-02**

**Title:** Reduced-intensity conditioning transplantation in older myelodysplastic syndrome: The effect of specific conditioning regimens on transplant outcomes

**PI:** Betul Oran (M.D. Anderson Cancer Center)

**Status:** Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

**CK18-01**

**Title:** A personalized prediction model for outcomes after allogeneic stem cell transplant in patients with myelodysplastic syndromes

**PIs:** Aziz Nazha (Cleveland Clinic Foundation)
Navneet Majhail (Cleveland Clinic Foundation)
Wael Saber (Medical College of Wisconsin)
Betty Hamilton (Cleveland Clinic Foundation)

**Status:** Published (as of July 1, 2020)

Published (expected by June 30, 2021)

**CK18-02**

**Title:** The impact of somatic mutations on allogeneic transplant in chronic myelomonocytic leukemia

**PIs:** Matthew Mei (City of Hope)
Ryotaro Nakamura (City of Hope)
Raju Pillai (City of Hope)

**Status:** Sample Typing (as of July 1, 2020)
Analysis (expected by June 30, 2021)
CK18-03
Title: Impact of donor age on the outcomes of allogeneic hematopoietic stem cell transplantation for myelodysplastic syndrome
PIs: Guru Murthy (Medical College of Wisconsin)
     Wael Saber (Medical College of Wisconsin)
Status: Manuscript Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

CK19-01a
Title: Outcomes after hematopoietic cell transplants for rare chronic leukemias: Evaluating outcomes of allogeneic hematopoietic cell transplantation in T-cell prolymphocytic leukemias
PIs: Hemant Murthy (Mayo Clinic Florida)
     Bhagi Dholaria (Vanderbilt University Medical Center)
     Mohamed Kharfan (Mayo Clinic Florida)
     Susan Bal (University of Alabama at Birmingham)
     Craig Sauter (Memorial Sloan Kettering Cancer Center)
     Lohith Gowda (Yale New Haven Hospital)
     Francine Foss (Yale New Haven Hospital)
     Hassan Alkhateeb (Mayo Clinic Rochester)
     Deepa Jagadeesh (Cleveland Clinic Foundation)
     Bipin Savani (Vanderbilt University Medical Center)
Status: Manuscript Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

CK19-01b
Title: Outcomes of chronic neutrophilic leukemia patients who underwent allogeneic hematopoietic cell transplantation
PIs: Bhagi Dholaria (Vanderbilt University Medical Center)
     Bipin Savani (Vanderbilt University Medical Center)
     Mohamed Kharfan (Mayo Clinic Florida)
Status: Data File Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)
* Collaborative study with EBMT

CK20-01
Title: Outcomes of allogeneic hematopoietic cell transplantation for myelofibrosis based on the conditioning regimen
PIs: Guru Murthy (Medical College of Wisconsin)
     Wael Saber (Medical College of Wisconsin)
Status: Protocol Development (as of July 1, 2020)
       Data File Preparation (expected by June 30, 2021)
5.0 DONOR HEALTH AND SAFETY WORKING COMMITTEE

5.1 Leadership

**Chair:** Nirali Shah, MD, MHSc, National Cancer Institute  
Email: nirali.shah@nih.gov

**Chair:** Galen Switzer, PhD, University of Pittsburgh Medical Center  
Email: switzerge@upmc.edu

**Chair:** Jack Hsu, MD, Shands HealthCare & University of Florida  
Email: hsujw@medicine.ufl.edu

**Scientific Director:** Bronwen Shaw, MBChB, MRCP, PhD, CIBMTR Milwaukee  
Email: beshaw@mcw.edu

**Statistical Director:** Brent Logan, PhD, CIBMTR Milwaukee  
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**MS Statistician:** Stephanie Bo-Subait, MPH, CIBMTR Minneapolis  
Email: sbosuba2@nmdp.org

5.2 Recent Publications

2020


2019


2018


2017


**2016**


**2015**


5.3 Current Studies

DS05-02d
Title: Quality of life for related adult donors compared to unrelated adult donors
PIs: Galen Switzer (University of Pittsburgh Medical Center)
      Michael Pulsipher (Children's Hospital of Los Angeles)
Status: Published (as of July 1, 2020)
       Published (expected by June 30, 2021)
* Collaborative study with University of Utah

DS05-02g
Title: Late toxicities and serious adverse events for related donors
PI: Michael Pulsipher (Children's Hospital of Los Angeles)
Status: Manuscript Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)
* Collaborative study with University of Utah

DS13-02
Title: A retrospective analysis to understand the potential mechanisms underlying the clinical impact of ABO incompatibility on allogeneic transplant outcomes
PIs: Guru Murthy (Medical College of Wisconsin)
      Bronwen Shaw (Medical College of Wisconsin)
Status: Protocol Development (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

DS18-02
Title: Factors affecting CD34+ cell yields at subsequent marrow/peripheral blood stem cell collections
PIs: Sandhya Panch (National Institutes of Health Clinical Center)
      David Stronecek (National Heart, Lung and, Blood Institute)
      Bipin Savani (Vanderbilt University Medical Center)
      Nirali N. Shah (National Institutes of Health)
Status: Manuscript Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

DS19-01
Title: Effect of Donor Graft Cryopreservation on Allogeneic Transplant Recipient Outcomes
PIs: Jack Hsu (Shands HealthCare & University of Florida)
      Nosha Farhadfar (Shands HealthCare & University of Florida)
      Hemant Murthy (Mayo Clinic Florida)
      John Wingard (Shands HealthCare & University of Florida)
Status: Draft Protocol Received (as of July 1, 2020)
       Analysis (expected by June 30, 2021)
DS19-02
Title: The impact of pre-apheresis health related quality of life on peripheral blood progenitor cells yield and donor's health and outcome  
PIs: Nosha Farhadfar (Shands HealthCare & University of Florida)  
John Wingard (Shands HealthCare & University of Florida)  
Galen Switzer (University of Pittsburgh Medical Center)  
Status: Protocol Development (as of July 1, 2020)  
Manuscript Preparation (expected by June 30, 2021)  
* Collaborative study with University of Pittsburgh

DS20-01
Title: Acute toxicities of bone marrow donation in donors with sickle cell trait  
PIs: Nosha Farhadfar (Shands HealthCare & University of Florida)  
John Wingard (Shands HealthCare & University of Florida)  
Status: Protocol Development (as of July 1, 2020)  
Protocol Development (expected by June 30, 2021)
6.0 GRAFT SOURCES AND MANIPULATION WORKING COMMITTEE

6.1 Leadership

Chair: Ian McNiece, PhD, M.D. Anderson Cancer Center  
Email: aussiflier@aol.com

Chair: Claudio Brunstein, MD, PhD, University of Minnesota  
Email: bruns072@umn.edu

Chair: Filippo Milano, MD, PhD, Fred Hutchinson Cancer Research Center  
Email: fmilano@fredhutch.org

Scientific Director: Mary Eapen, MD, MS, CIBMTR Milwaukee  
Email: meapen@mcw.edu

Statistical Director: Mei-Jie Zhang, PhD, CIBMTR Milwaukee  
Email: meijie@mcw.edu

MS Statistician: Mariam Johnson, MPH, CIBMTR Milwaukee  
Email: mhjohnson@mcw.edu

6.2 Recent Publications

2020


2019


2018


2017


2016


2015


6.3 Current Studies

GS18-01

Title: Mismatch in the setting of posttransplant cyclophosphamide based anti-graft-vs-host disease prophylaxis: Is a matched related, matched unrelated or haploidentical donor still an issue?

PIs: Saurabh Chhabra (Medical College of Wisconsin)
Kehinde Adekola (Northwestern Medicine)
Mahasweta Goopu (Thomas Jefferson University Hospital, Inc.)
Miguel-Angel Perales (Memorial Sloan Kettering Cancer Center)
Alberto Mussetti (Istituto Nazionale Tumori)
Rizwan Romee (Dana Farber Cancer Institute at Brigham and Women's Hospital)

Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
GS18-04
Title: **Optimal stem cell dosing for haploidentical peripheral blood stem cell transplantation with post-transplant cyclophosphamide**
PIs: Auro Viswabandya (Princess Margaret Cancer Center)
     Benjamin Tomlinson (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
     Michael Grunwald (Levine Cancer Institute)
     Hany Elmariah (H. Lee Moffitt Cancer Center and Research Institute)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

GS19-01
Title: **Comparison of myeloablative haploidentical or umbilical cord blood transplantation for pediatric and adult patients with acute leukemia**
PIs: John Wagner (University of Minnesota Blood and Marrow Transplant Program)
     Karen Ballen (University of Virginia Health System)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

GS19-02
Title: **Graft failure in MDS and acute leukemia patients after allogeneic stem cell transplantation receiving post transplant cyclophosphamide**
PIs: Cindy Lynn Hickey-Gillis (Dana Farber Cancer Institute)
     Rizwan Romee (Dana Farber Cancer Institute at Brigham and Women's Hospital)
     Corey Cutler (Dana Farber Cancer Institute at Brigham and Women's Hospital)
     Navneet Majhail (Cleveland Clinic Foundation)
Status: Protocol Development (as of July 1, 2020)
Analysis (expected by June 30, 2021)

GS19-03a
Title: **Impact of granulocyte colony-stimulating factor on in-vivo T-cell depleted allogeneic hematopoietic cell transplantation**
PIs: Nina Orfali (Weil Cornell Medicine)
     Jaap Jan Boelens (Memorial Sloan Kettering Cancer Center)
     Koen Van Besien (New York Presbyterian Hospital at Cornell)
Status: Analysis (expected by June 30, 2021)
**GS20-01**

**Title:** Reduced intensity conditioning and transplantation of double unrelated umbilical cord blood versus human leukocyte antigen-haploidentical related bone marrow for patients with acute leukemias: Comparison of survival outcomes from a randomized clinical trial with outcomes from a contemporaneous cohort from the CIBMTR registry

**PIs:**
- Paul O'Donnell (Massachusetts General Hospital)
- Claudio Brunstein (University of Minnesota Blood and Marrow Transplant Program)
- Ephraim Fuchs (The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins)

**Status:**
- Protocol Development (as of July 1, 2020)
- Manuscript Preparation (expected by June 30, 2021)
7.0 GRAFT-VS-HOST DISEASE WORKING COMMITTEE

7.1 Leadership

**Chair:** Joseph Pidala, MD, PhD, H. Lee Moffitt Cancer Center and Research Institute  
Email: joseph.pidala@moffitt.org

**Chair:** Margaret MacMillan, MD, MSc, University of Minnesota  
Email: macmi002@umn.edu

**Chair:** Carrie Kitko, MD, Vanderbilt University Medical Center  
Email: carrie.l.kitko@vumc.org

**Scientific Director:** Mukta Arora, MD, MS, CIBMTR Minneapolis  
Email: arora005@umn.edu

**Scientific Director:** Stephen Spellman, MBS, CIBMTR Minneapolis  
Email: sspellma@nmdp.org

**Statistical Director:** Tao Wang, PhD, CIBMTR Milwaukee  
Email: taowan@mcw.edu

**MS Statistician:** Karen Chen, MS, CIBMTR Milwaukee  
Email: kachen@mcw.edu

7.2 Recent Publications

2020


2019


2018


2017


2016


### 7.3 Current Studies

**GV17-01**

**Title:** Investigating antibiotic exposure and risk of acute graft versus host disease in children undergoing hematopoietic stem cell transplantation for acute leukemia

**Pls:** Caitlin Elgarten (Children’s Hospital of Philadelphia)  
Brian Fisher (Perelman School of Medicine at the University of Pennsylvania)  
Richard Aplenc (Children’s Hospital of Philadelphia)

**Status:** Submitted (as of July 1, 2020)  
Published (expected by June 30, 2021)

*Collaborative study with Pediatric Health Information System (PHIS)*
GV17-03
Title: Alterations in the characteristics and outcomes of acute and chronic graft-versus-host disease following post-transplant high dose cytoxan prophylaxis for haploidentical transplantation and in patients over 60 at high risk for graft-versus-host disease
PIs: Rima Saliba (M.D. Anderson Cancer Center)
Stefan Ciurea (University of California Irvine Health)
Jeff Schriber (Cancer Transplant Institute at Virginia G. Piper Cancer Center)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)

GV18-01
Title: Comparison of late effects among allogeneic hematopoietic cell transplantation survivors with and without chronic graft-versus-host disease
PIs: Catherine Lee (Utah Blood and Marrow Transplant Program)
Daniel Couriel (Utah Blood and Marrow Transplant Program)
Status: Analysis (as of July 1, 2020)
Submitted (expected by June 30, 2021)

GV18-02
Title: Comparison of antibacterial prophylaxis strategies and outcomes in allogeneic stem cell transplantation patients with acute graft vs host disease
PI: Whitney Wallis (Monroe Carrel Jr. Children's Hospital)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

GV18-03
Title: Impact of chronic graft-versus-host disease on non-relapse mortality and disease relapse in transplant recipients
PIs: Vijaya Bhatt (Nebraska Medicine)
Stephanie Lee (Fred Hutchinson Cancer Research Center)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

GV18-04
Title: Development of a risk score to predict the incidence of acute graft versus host disease after allogeneic hematopoietic cell transplantation
PI: Caden Ulschmid (Medical College of Wisconsin)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
GV19-01
Title: Exploring the link between donor-engrafted clonal hematopoiesis and adverse outcomes in allogeneic transplants recipients
PIs: Nancy Gillis (H. Lee Moffitt Cancer Center and Research Institute)
     Eric Padron (H. Lee Moffitt Cancer Center and Research Institute)
     Aleksandr Lazaryan (H. Lee Moffitt Cancer Center and Research Institute)
Status: Analysis (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

GV20-01
Title: Machine learning models and clinical decision support tool for acute and chronic graft-versus-host disease in patients with acute myelogenous leukemia undergoing allogeneic transplants
PIs: Tamila Kindwall-Keller (University of Virginia Health System)
     Benjamin Lobo (University of Virginia Health System)
Status: Protocol Development (as of July 1, 2020)
       Analysis (expected by June 30, 2021)

GV20-02
Title: Prediction of graft-versus-host disease in recipients of hematopoietic cell transplant from a single mismatched unrelated donor using a highly-multiplexed proteomics assay: MHC-PepSeq
PIs: Karamjeet Sandhu (City of Hope)
     John Altin (City of Hope)
     Askar Medhat (Baylor University Medical Center)
     Ryotaro Nakamura (City of Hope)
Status: Protocol Pending (as of July 1, 2020)
       Analysis (expected by June 30, 2021)
8.0 HEALTH SERVICES AND INTERNATIONAL STUDIES WORKING COMMITTEE

8.1 Leadership

Chair: William Wood, MD, MPH, University of North Carolina Hospitals
Email: wawood@med.unc.edu
Chair: Shahrukh Hashmi, MD, MPH, King Faisal Specialist Hospital and Research Center
Email: hashmi.shahrukh@mayo.edu
Chair: Leslie Lehmann, MD, Dana Farber Cancer Institute
Email: leslie.lehmann@dfci.harvard.edu
Scientific Director: Wael Saber, MD, MS, CIBMTR Milwaukee
Email: wsaber@mcw.edu
Statistical Director: Ruta Brazauskas, PhD, CIBMTR Milwaukee
Email: ruta@mcw.edu
MS Statistician: Naya He, MPH, CIBMTR Milwaukee
Email: nhe@mcw.edu

8.2 Recent Publications

2020
ncbi.nlm.nih.gov/32464284
2019


2018


2017


2016


2015


### 8.3 Current Studies

**HS15-02**

**Title:** Impact of socioeconomic status on pediatric stem cell transplant outcomes  
**PI:** Kira Bona (Dana Farber Cancer Institute)  
**Status:** Submitted (as of July 1, 2020)  
Published (expected by June 30, 2021)

**HS16-01**

**Title:** Trends in utilization and outcomes of autologous and allogeneic hematopoietic cell transplantation in racial and ethnic minorities  
**PIs:** Nandita Khera (Mayo Clinic Arizona and Phoenix Children's Hospital)  
Wael Saber (Medical College of Wisconsin)  
**Status:** Protocol Development (as of July 1, 2020)  
Submitted (expected by June 30, 2021)
HS16-02
Title: The impact of marital status on hematopoietic stem cell transplant recipient outcomes: A surrogate for consistent caregiver
PI: Sara Margaret Beattie (Tom Baker Cancer Centre)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)

HS16-03
Title: Relationship of race/ethnicity and survival after single and double umbilical cord blood transplantation
PI: Karen Ballen (University of Virginia Health System)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

HS17-01
Title: Association of community health status and center survival for allogeneic hematopoietic cell transplantation
PIs: Sanghee Hong (Cleveland Clinic Foundation)
Navneet Majhail (Cleveland Clinic Foundation)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)

HS18-01
Title: International collaborative study to compare the prognosis for acute leukemia patients transplanted with intensified myeloablative regimens
PIs: Yasuyuki Arai (Kyoto University)
Yoshiko Atsuta (Japanese Data Center for Hematopoietic Cell Transplantation)
Shingo Yano (Jikei University School of Medicine)
Status: Protocol Development (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with the Japan Society for Hematopoietic Cell Transplantation

HS18-02
Title: Racial differences in long term survivor outcomes after allogeneic transplants
PIs: Branson Blue (Saint Louis University)
Navneet Majhail (Cleveland Clinic Foundation)
Status: Protocol Development (as of July 1, 2020)
Data File Preparation (expected by June 30, 2021)
HS18-03
Title: **Racial/ethnic disparities in receipt of hematopoietic cell transplantation and subsequent resource utilization in children with acute leukemia**
PIs: Lena Winestone (University of California San Francisco Medical Center)
Richard Aplenc (Children's Hospital of Philadelphia)
Kelly Getz (Perelman School of Medicine, University of Pennsylvania)
Status: Deferred (as of July 1, 2020)
Deferred (expected by June 30, 2021)
* Collaborative study with PHIS

HS19-01
Title: **Factors associated with clinical trial participation among hematopoietic stem cell transplant patients: A CIBMTR analysis**
PIs: Tamryn Gray (Mass General Cancer Center)
Areej El-Jawahri (Massachusetts General Hospital)
Status: Protocol Development (as of July 1, 2020)
Data File Preparation (expected by June 30, 2021)

HS19-02
Title: **Comparing outcomes of myeloablative T-replete haploidentical transplantation with posttransplant cyclophosphamide protocol and anti-thymocyte globulin+granulocyte colony-stimulating factor protocol in patients with cytogenetic intermediate/high risk acute myeloid leukemia in first complete remission**
PI: Xiao-Jun Huang (Peking University People's Hospital)
Status: Deferred (as of July 1, 2020)
Deferred (expected by June 30, 2021)
* Collaborative study with Peking University

HS19-03
Title: **Haploidentical stem cell transplantation for malignant and non-malignant hematological diseases in patients without sibling donor: A multicenter prospective longitudinal study of the Brazilian bone marrow transplantation study group**
PIs: Nelson Hamerschlak (Hospital Israelita Albert Einstein)
Mariana Kerbauy (Hospital Israelita Albert Einstein)
Andreza Ribeiro (Hospital e Maternidade Brasil)
Status: Data Collection (as of July 1, 2020)
Data Collection (expected by June 30, 2021)
* Collaborative study with the Brazilian Transplant Group
HS19-04
Title: Outcomes after allogeneic stem cell transplants performed in Brazil from HLA-matched siblings, unrelated and mismatched related donors: Retrospective study on behalf of the Brazilian Bone Marrow Transplantation Society (SBTMO), GEDECo (Brazil-Seattle Transplant-related complications Consortium), Hospital Israelita Albert Einstein (AmigoH), Associação da Medula Óssea do Estado de São Paulo (Ameo), Program Nacional de Apoio à Atenção Oncológica (Pronon), and CIBMTR
PIs: Adriana Seber (Hospital Samaritano)
      Nelson Hamerschlak (Hospital Israelita Albert Einstein)
      Mary Flowers (Fred Hutchinson Cancer Research Center)
      Marcelo Pasquini (Medical College of Wisconsin)
Status: Data File Preparation (as of July 1, 2020)
       Analysis (expected by June 30, 2021)
* Collaborative study with the Brazilian Transplant Group

HS20-01
Title: Resource intensity of end-of-life care in children after hematopoietic stem cell transplant for acute leukemia: Rates and disparities
PIs: Emily E. Johnston (Children’s of Alabama)
      Caitlin Elgarten (Children's Hospital of Philadelphia)
      Lena Winestone (University of California San Francisco Medical Center)
      Richard Aplenc (Children's Hospital of Philadelphia)
Status: Protocol Development (as of July 1, 2020)
       Protocol Development (expected by June 30, 2021)
9.0 IMMUNOBIOLOGY WORKING COMMITTEE

9.1 Leadership

Chair: Sophie Paczesny, MD, MPH, Indiana University Hospital / Riley Hospital for Children
Email: sophpacz@iu.edu

Chair: Steven Marsh, BSc, PhD, ARCS, Anthony Nolan Research Institute
Email: steven.marsh@ucl.ac.uk

Chair: Shahinaz Gadalla, MD, PhD, National Cancer Institute (NCI)
Email: gadallas@mail.nih.gov

Scientific Director: Stephanie J. Lee, MD, MPH, CIBMTR, Fred Hutchinson Cancer Research Center
Email: sjlee@fredhutch.org

Scientific Director: Stephen Spellman, MBS, CIBMTR Minneapolis
Email: sspellma@nmdp.org

Statistical Director: Tao Wang, PhD, CIBMTR Milwaukee
Email: taowang@mcw.edu

MS Statistician: Meilun He, MPH, CIBMTR Minneapolis
Email: mhe@nmdp.org

9.2 Recent Publications

2020


2019


2017


2016


2015


9.3 Current Studies

IB06-05
Title: Use of high-resolution HLA data from the NMDP for the International Histocompatibility Working Group in HCT
PI: Effie Petersdorf (Fred Hutchinson Cancer Research Center)
Status: Ongoing (as of July 1, 2020)
Ongoing (expected by June 30, 2021)
* Collaborative study with the International Histocompatibility Working Group

IB09-01
Title: Clinical importance of minor histocompatibility complex haplotypes in umbilical cord blood transplantation
PI: Effie Petersdorf (Fred Hutchinson Cancer Research Center)
Status: Ongoing (as of July 1, 2020)
Ongoing (expected by June 30, 2021)
* Collaborative study with the International Histocompatibility Working Group

IB09-03
Title: Clinical importance of minor histocompatibility complex haplotypes in umbilical cord blood transplantation
PI: Effie Petersdorf (Fred Hutchinson Cancer Research Center)
Status: Ongoing (as of July 1, 2020)
Ongoing (expected by June 30, 2021)
* Collaborative study with the International Histocompatibility Working Group

IB09-05
Title: Clinical importance of minor histocompatibility complex haplotypes in umbilical cord blood transplantation
PI: Effie Petersdorf (Fred Hutchinson Cancer Research Center)
Status: Ongoing (as of July 1, 2020)
Ongoing (expected by June 30, 2021)
* Collaborative study with the International Histocompatibility Working Group
IB09-06b
Title: Genetic susceptibility to transplant-related mortality after unrelated donor stem cell transplant
PI: Theresa Hahn (Roswell Park Cancer Institute)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)
* Collaborative study with Roswell Park Cancer Institute

IB09-06j
Title: Additional analysis of major histocompatibility complex single nucleotide polymorphisms
PIs: Steve Spellman (CIBMTR - Minneapolis)
Lara Sucheston-Campbell (Ohio State Medical Center, James Cancer Center)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with Roswell Park Cancer Institute and Ohio State

IB09-06n
Title: Compare unrelated donor to welcome trust case control consortium controls
PIs: Kenan Onel (Comer Children’s Hospital / University of Chicago Medicine)
Alyssa Clay-Gilmour (University of South Carolina)
Ezgi Karaesmen (Ohio State Medical Center, James Cancer Center)
Status: Submitted (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with Roswell Park Cancer Institute and Ohio State

IB09-06o
Title: Genetics and epidemiology of myeloid malignancies candidate gene paper
PIs: Lara Sucheston-Campbell (Ohio State Medical Center, James Cancer Center)
Ezgi Karaesmen (Ohio State Medical Center, James Cancer Center)
Alyssa Clay-Gilmour (University of South Carolina)
Theresa Hahn (Roswell Park Cancer Institute)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with Roswell Park Cancer Institute and Ohio State

IB09-06p
Title: Genetics and epidemiology of myeloid malignancies genome-wide association study
PIs: Alyssa Clay-Gilmour (University of South Carolina)
Kenan Onel (Comer Children’s Hospital / University of Chicago Medicine)
Theresa Hahn (Roswell Park Cancer Institute)
Status: Submitted (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with Roswell Park Cancer Institute and Ohio State
IB09-07
Title: Clinical importance of minor histocompatibility complex haplotypes in umbilical cord blood transplantation
PI: Effie Petersdorf (Fred Hutchinson Cancer Research Center)
Status: Ongoing (as of July 1, 2020)
Ongoing (expected by June 30, 2021)
* Collaborative study with the International Histocompatibility Working Group

IB10-01f
Title: Epigenetic clock: Can this guide donor selection in HCT
PIs: Shahinaz Gadalla (National Cancer Institute)
Sharon Savage (National Cancer Institute)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)
* Collaborative study with the National Cancer Institute

IB14-03c
Title: Impact of telomere length and telomerase gene mutations on allogeneic stem cell transplantation outcomes in myelodysplastic syndrome
PIs: R. Coleman Lindsley (Dana Farber Cancer Institute at Brigham and Women's Hospital)
Wael Saber (Medical College of Wisconsin)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)

IB14-05
Title: mtDNA haplotypes and unrelated donor transplant outcomes
PIs: Michael Verneris (University of Colorado - Children's Hospital)
Logan Spector (University of Minnesota)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with University of Minnesota

IB14-07
Title: Indirectly recognizable HLA epitopes: A retrospective validation study on the role of indirect recognition of mismatched HLA in hematopoietic stem cell transplantation outcome
PI: Eric Spierings (University Medical Center Utrecht)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with International Histocompatibility Working Group
**IB16-02**
Title: Use of HLA structure and function parameters to understand the relationship between HLA disparity and transplant outcomes  
PI: Lee Ann Baxter Lowe (Children’s Hospital of Los Angeles)  
Status: Manuscript Preparation (as of July 1, 2020)  
Submitted (expected by June 30, 2021)

**IB17-02**
Title: Donor-recipient NK cell determinants associated with survival in JMML after hematopoietic stem cell transplantation  
PIs: Dean Lee (Ohio State Medical Center, James Cancer Center)  
Hemalatha Rangarajan (Nationwide Children’s Hospital)  
Status: Manuscript Preparation (as of July 1, 2020)  
Submitted (expected by June 30, 2021)

**IB17-03**
Title: Identification of genomic markers of post hematopoietic cell transplantation (HCT) outcomes in patients with myelofibrosis: A pilot study  
PIs: Wael Saber (Medical College of Wisconsin)  
Shahinaz Gadalla (National Cancer Institute)  
Status: Analysis (as of July 1, 2020)  
Submitted (expected by June 30, 2021)  
* Collaborative study with the National Cancer Institute

**IB17-04**
Title: Epigenetic profiling of unrelated donor-recipient pairs to improve donor selection during HCT transplants  
PIs: Stephan Beck (University College London)  
Karl Peggs (University College London)  
Vardhman Rakyan (Barts and The London School of Medicine, Blizard Institute)  
Amy Webster (University College London)  
Status: Manuscript Preparation (as of July 1, 2020)  
Submitted (expected by June 30, 2021)

**IB18-01**
Title: Effect of HLA phenotypes on long term GVHD risk  
PIs: Charlotte Story (University of North Carolina Hospitals)  
Marcie Riches (University of North Carolina Hospitals)  
Paul Armistead (University of North Carolina Hospitals)  
Status: Manuscript Preparation (as of July 1, 2020)  
Submitted (expected by June 30, 2021)
IB18-02
Title: The impact of HLA class I risk alleles associated with AA immune pathogenesis on allogeneic transplant outcomes in patients with severe acquired aplastic anemia
PIs: Daria Babushok (Penn Medicine)
     Timothy Olson (Children's Hospital of Philadelphia)
Status: Data File Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

IB18-03
Title: The effect of HLA Class I heterozygosity and HLA supertypes on outcomes following allogeneic hematopoietic cell transplant for myeloid and lymphoid malignancies
PIs: Christine Camacho-Bydume (Memorial Sloan Kettering Cancer Center)
     Katharine Hsu (Memorial Sloan Kettering Cancer Center)
Status: Submitted (as of July 1, 2020)
       Published (expected by June 30, 2021)

IB18-04a
Title: Evaluation of the impact of donor KIR genotype on outcome after unrelated donor transplantation in patients with myelodysplastic syndromes or secondary acute myeloid leukemia
PIs: Johannes Schetelig (Universitaetsklinikum Dresden)
     Nicolas Kröger (Universitaetsklinikum Hamburg, Eppendorf)
     Marie Robin (Hopital Saint Louis)
Status: Submitted (as of July 1, 2020)
       Published (expected by June 30, 2021)
* Collaborative study with Deutsche Knochenmarkspenderdatei GmbH (DKMS, German Bone Marrow Donor Center)

IB18-04b
Title: Evaluation of the impact of donor KIR genotype on outcome after unrelated donor transplantation in patients with myelodysplastic syndromes or acute myeloid leukemia
PIs: Johannes Schetelig (Universitaetsklinikum Dresden)
     Nicolas Kröger (Universitaetsklinikum Hamburg, Eppendorf)
     Marie Robin (Hopital Saint Louis)
Status: Data File Preparation (as of July 1, 2020)
       Analysis (expected by June 30, 2021)
* Collaborative study with DKMS and the EBMT
IB18-06
Title: **Clonal mosaicism and HCT outcomes in patients with acute leukemia and myelodysplastic syndromes**
PIs: Shahinaz Gadalla (National Cancer Institute)
      Theresa Hahn (Roswell Park Cancer Institute)
      Lara Sucheston-Campbell (Ohio State Medical Center, James Cancer Center)
Status: Submitted (as of July 1, 2020)
       Published (expected by June 30, 2021)
* Collaborative study with the National Cancer Institute

IB18-07
Title: **Donor and recipient genomic associations with acute GVHD**
PI: Vahid Afshar-Khargan (M.D. Anderson Cancer Center)
Status: Data File Preparation (as of July 1, 2020)
       Analysis (expected by June 30, 2021)
* Collaborative study with the National Cancer Institute

IB19-01a
Title: **The impact of ultra-high resolution human leukocyte antigen matching on the outcome of unrelated donor hematopoietic cell transplantation**
PIs: Neema Mayor (Anthony Nolan Research Institute)
      Steve Spellman (CIBMTR - Minneapolis)
      Steven Marsh (Anthony Nolan Research Institute)
Status: Manuscript Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

IB19-01b
Title: **Refinement of the T cell epitope algorithm for the definition of permissive human leukocyte antigen-DPB1 mismatches in allogeneic hematopoietic cell transplantation: Stratification of T cell epitope group 3 mismatches**
PIs: Esteban Arrieta-Bolaños (Universitatsklinikum Essen KMT)
      Pietro Crivello (Universitatsklinikum Essen KMT)
      Katharina Fleischhauer (Universitatsklinikum Essen KMT)
Status: Protocol Pending (as of July 1, 2020)
       Analysis (expected by June 30, 2021)

IB19-01a
Title: **The impact of ultra-high resolution human leukocyte antigen matching on the outcome of unrelated donor hematopoietic cell transplantation**
PIs: Neema Mayor (Anthony Nolan Research Institute)
      Steve Spellman (CIBMTR - Minneapolis)
      Steven Marsh (Anthony Nolan Research Institute)
Status: Manuscript Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)
IB19-02a
Title: Effect of class II HLA mismatching on the outcome of HLA-haploidentical hematopoietic cell transplantation with high dose, post-transplantation cyclophosphamide: a combined CIBMTR/EBMT analysis
PIs:
- Shannon McCurdy (The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins)
- Scott Solomon (The Blood and Marrow Transplant Program at Northside Hospital)
- Yvette Kasamon (Johns Hopkins Hospital)
- Asad Bashey (The Blood and Marrow Transplant Program at Northside Hospital)
- Ephraim Fuchs (The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

IB19-02b
Title: The role of human leukocyte antigen-B leader dimorphism on outcome after haploidentical hematopoietic stem cell transplant
PI: Effie Petersdorf (Fred Hutchinson Cancer Research Center)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

IB19-03
Title: Impact of the direction of NK cell alloreactivity predicted by KIR ligand mismatch on engraftment in umbilical cord blood and haploidentical stem cell transplantation
PIs:
- Folashade Otegbeye (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
- Marcelo Fernandez-Vina (Stanford Health Care)
- Marcos De Lima (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Status: Data File Preparation (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)

IB19-04
Title: Impact of donor HLA on transplant outcomes in NPM1 mutated AML
PIs:
- Rupa Narayan (Massachusetts General Hospital)
- Everett Meyer (Stanford Health Care)
- Yi-Bin Chen (Massachusetts General Hospital)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
IB20-01
Title: Association of immunopeptidome divergence between mismatched human leukocyte antigen class I alleles and outcome of 9/10 matched unrelated hematopoietic stem cell transplant
PIs: Pietro Crivello (Universitatsklinikum Essen KMT)
Estaban Arrieta-Bolanos (Universitatsklinikum Essen KMT)
Katharina Fleischhauer (Universitatsklinikum Essen KMT)
Status: Protocol Development (as of July 1, 2020)
Analysis (expected by June 30, 2021)

IB20-02
Title: Evaluation of the impact of human leukocyte antigen molecular mismatch on clinical outcomes in patients who underwent haploidentical hematopoietic stem cell transplantation
PIs: Jun Zou (M.D. Anderson Cancer Center)
Stefan Ciurea (University of California Irvine Health)
Status: Data File Preparation (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)

IB20-03
Title: Donor socioeconomic status as a predictor of altered immune function and treatment response following hematopoietic cell transplantation for hematologic malignancy
PIs: Jun Zou (M.D. Anderson Cancer Center)
Stefan Ciurea (University of California Irvine Health)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with the Medical College of Wisconsin

R02-40/R03-63d
Title: Acquisition of natural killer cell receptors in recipients of unrelated transplant
PI: Jeff Miller (University of Minnesota Blood and Marrow Transplant Program)
Status: Ongoing (as of July 1, 2020)
Ongoing (expected by June 30, 2021)
* Collaborative study with University of Minnesota

R04-74d
Title: Functional significance of killer cell immunoglobulin-like receptor genes in HLA-matched and mismatched unrelated HCT
PI: Katharine Hsu (Memorial Sloan Kettering Cancer Center)
Status: Ongoing (as of July 1, 2020)
Ongoing (expected by June 30, 2021)
* Collaborative study with International Histocompatibility Working Group
RT09-04 / IB09-06i

Title: Recipient, donor genome-wide association study interaction with conditioning intensity (myeloablative/reduced intensity conditioning), total body irradiation, disease status

PIs: Ezgi Karaesmen (Ohio State Medical Center, James Cancer Center)
     Lara Sucheston-Campbell (Ohio State Medical Center, James Cancer Center)
     Theresa Hahn (Roswell Park Cancer Institute)

Status: Manuscript Preparation (as of July 1, 2020)
     Submitted (expected by June 30, 2021)

* Collaborative study with Roswell Park Cancer Institute and Ohio State
10.0 INFECTION AND IMMUNE RECONSTITUTION WORKING COMMITTEE

10.1 Leadership

Chair: Miguel-Angel Perales, MD, Memorial Sloan Kettering Cancer Center  
Email: peralesm@mskcc.org

Chair: Roy Chemaly, MD, MPH, M.D. Anderson Cancer Center  
Email: rfchemaly@mdanderson.org

Chair: Christopher Dandoy, MD, Cincinnati Children's Hospital Medical Center  
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Statistical Director: Michael Martens, PhD, CIBMTR Milwaukee  
Email: mmartens@mcw.edu

MS Statistician: Naya He, MPH, CIBMTR Milwaukee  
Email: nhe@mcw.edu

10.2 Recent Publications

2020


2019


2018


2016


2015


10.3 Current Studies

CV20-04
Title: COVID-19 in HCT recipients
PIs: Akshay Sharma (St. Jude Children’s Research Hospital)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

IN17-01a
Title: Incidence and impact of cytomegalovirus infection in haploidentical and matched-related donors receiving post-transplant cyclophosphamide: A CIBMTR analysis
PI: Scott Goldsmith (Washington University)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
IN17-01b
Title: Incidence and impact of non-cytomegalovirus herpes viral infection in haploidentical and matched sibling donors receiving post-transplant cyclophosphamide: A CIBMTR analysis
PI: Anurag Signh (University of Kansas)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

IN17-01c
Title: Incidence and impact of community respiratory viral infection in haploidentical and matched sibling donors receiving post-transplant cyclophosphamide: A CIBMTR analysis
PI: Randy Taplitz (City of Hope)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

IN18-01
Title: Comparison of early (By D+100) infections between posttransplantation cyclophosphamide and other GVHD prophylaxis
PIs: Genovefa Papanicolaou (Memorial Sloan Kettering Cancer Center)
Celalettin Ustun (Rush University Medical Center)
Status: Analysis (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)

IN18-02
Title: Study the incidence and impact of C diff infection within 100 days on transplant outcomes after allogeneic stem cell transplant
PIs: Muthalagu Ramanthan (UMass Memorial Medical Center)
Bipin Savani (Vanderbilt University Medical Center)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

IN19-01
Title: Immune recovery predicts post-transplant outcomes
PI: Miguel-Angel Perales (Memorial Sloan Kettering Cancer Center)
Status: Protocol Development (as of July 1, 2020)
Analysis (expected by June 30, 2021)

IN19-02
Title: Impact of antibacterial prophylaxis on outcomes after allogeneic hematopoietic stem cell transplant
PIs: Christopher Dandoy (Cincinnati Children's Hospital Medical Center)
Priscila Alonso (Cincinnati Children's Hospital Medical Center)
Zeinab El Boghdadly (Ohio State Medical Center, James Cancer Center)
Status: Protocol Development (as of July 1, 2020)
Data File Preparation (expected by June 30, 2021)
IN20-01

Title: Infectious complications in patients with B-Lymphoid hematologic malignancy treated with CD19 chimeric antigen receptor T cell therapy

PIs: Kitsada Wudhikarn (Stanford Health Care)
     Miranda McGhee (Oklahoma University)
     Joshua Hill (Fred Hutchinson Cancer Research Center)
     Megan Herr (Roswell Park Cancer Institute)
     Hemalatha Rangarajan (Nationwide Children's Hospital)
     Prakash Satwani (New York Presbyterian Hospital / Columbia University Medical Center)
     John Baird (Stanford University School of Medicine)
     Elizabeth McGehee (University of Texas Southwestern)
     Lohith Gowda (Yale New Haven Hospital)
     Giancarlo Fatobene (Universidad do Sao Paulo)

Status: Protocol Development (as of July 1, 2020)
        Data File Preparation (expected by June 30, 2021)
11.0 LATE EFFECTS AND QUALITY OF LIFE WORKING COMMITTEE

11.1 Leadership

Chair: David Buchbinder, MD, Children's Hospital of Orange County
Email: dbuchbinder@choc.org
Chair: Betty Hamilton, MD, Cleveland Clinic Foundation
Email: hamiltb2@ccf.org
Chair: Helene Schoemans, MD, University Hospitals Leuven and KU Leuven
Email: helene.schoemans@uzleuven.be
Scientific Director: Rachel Phelan, MD, CIBMTR Milwaukee
Email: rphelan@mcw.edu
Statistical Director: Ruta Brazauskas, PhD, CIBMTR Milwaukee
Email: ruta@mcw.edu
MS Statistician: Stephanie Bo-Subait, MPH, CIBMTR Minneapolis
Email: sbosuba2@nmdp.org

11.2 Recent Publications

2020


2019

2018


2017


2016


2015


### 11.3 Current Studies

**LE12-03**

**Title:** Solid organ transplantation and hematopoietic cell transplantation  
**PIs:** Meera Gupta (Abramson Cancer Center University of Pennsylvania Medical Center)  
Peter L Abt (Abramson Cancer Center University of Pennsylvania Medical Center)  
Matthew Levine (Abramson Cancer Center University of Pennsylvania Medical Center)  
**Status:** Manuscript Preparation (as of July 1, 2020)  
Submitted (expected by June 30, 2021)  
* Collaborative study with United Network for Organ Sharing

**LE16-02b**

**Title:** Late effects after AlloHCT for pediatric patients with non-malignant diseases  
**PIs:** Justine Kahn (Morgan Stanley Children's Hospital of New York-Presbyterian – Columbia Medical Center)  
Prakash Satwani (Columbia University Medical Center)  
**Status:** Manuscript Preparation (as of July 1, 2020)  
Submitted (expected by June 30, 2021)

**LE17-01a**

**Title:** Long-term follow up after hematopoietic stem cell transplantation for sickle cell disease  
**PIs:** Elizabeth Stenger (University of Pittsburgh Medical Center, Children’s Hospital of Pittsburgh)  
Rachel Phelan (Medical College of Wisconsin)  
Shalini Shenoy (Washington University / St. Louis Children's Hospital)  
Lakshmanan Krishnamurti (Children’s Healthcare of Atlanta at Egleston)  
**Status:** Manuscript Submission (as of July 1, 2020)  
Submitted (expected by June 30, 2021)  
* Collaborative study with Emory University
LE17-01b
Title: Comparison of survival between transplanted and non-transplanted SCD patients
PIs: Elizabeth Stenger (UPMC Children's Hospital of Pittsburgh)
     Rachel Phelan (Medical College of Wisconsin)
     Shalini Shenoy (Washington University / St. Louis Children's Hospital)
     Lakshmanan Krishnamurti (Children's Healthcare of Atlanta at Egleston, Emory University Hospital)
Status: Data File Preparation (as of July 1, 2020)
        Manuscript Preparation (expected by June 30, 2021)
* Collaborative study with Emory University

LE18-01
Title: Survival trends amongst two-year survivors of alloHCT
PIs: Prakash Satwani (New York Presbyterian Hospital / Columbia University Medical Center)
     Larisa Brogile (Medical College of Wisconsin)
Status: Data File Preparation (as of July 1, 2020)
        Submitted (expected by June 30, 2021)

LE18-02
Title: Return to work or school status in survivors of adolescent and young adult alloHCT
PIs: Neel Bhatt (Fred Hutchinson Cancer Research Center)
     Rachel Salit (Fred Hutchinson Cancer Research Center)
Status: Manuscript Preparation (as of July 1, 2020)
        Submitted (expected by June 30, 2021)

LE18-03
Title: Incorporating patient reported outcomes into individualized prognostication tools for survival and quality of life in transplant patients
PI: Bronwen Shaw (Medical College of Wisconsin)
Status: Analysis (as of July 1, 2020)
        Submitted (expected by June 30, 2021)
* Collaborative study with The Emmes Company

LE19-01
Title: Long-term survival and late effects in critically ill pediatric hematopoietic cell transplant patients
PIs: Matt Zinter (University of California San Francisco Medical Center)
     Chris Dvorak (University of California San Francisco Medical Center)
     Christy Duncan (Dana Farber Cancer Institute & Boston Children's Hospital)
Status: Protocol Development (as of July 1, 2020)
        Manuscript Preparation (expected by June 30, 2021)
* Collaborative study with Virtual Pediatric Systems
LE19-02
Title: Incidence and predictors of Long term toxicities and late side effects in elderly patients (>=60 years) receiving allogeneic hematopoietic cell transplantation for hematological malignancies
PIs: Muthu Veeraputhiran (University of Arkansas for Medical Sciences)
     Sai Ravi Pingali (M.D. Anderson Cancer Center)
     Akash Mukherjee (University of Arkansas for Medical Sciences)
     Lori Muffly (Stanford Health Care)
Status: Protocol Development (as of July 1, 2020)
       Manuscript Preparation (expected by June 30, 2021)

LE20-01
Title: Cardiometabolic risk after total body irradiation during childhood
PIs: Danielle Novetsky Friedman (Memorial Sloan Kettering Cancer Center)
     Eric Chow (Fred Hutchinson Cancer Research Center)
Status: Protocol Development (as of July 1, 2020)
       Data File Preparation (expected by June 30, 2021)
* Collaborative study with Childhood Cancer Survivor Study – St. JudeCCSS

LE20-02
Title: Association between PRO and the social transcriptome profile as a predictor of clinical outcomes following hematopoietic cell transplantation
PIs: Mallory R. Taylor (University of Washington / Fred Hutchinson Cancer Research Center)
     Jennifer M. Knight (Medical College of Wisconsin)
     K. Scott Baker (Fred Hutchinson Cancer Research Center)
     Steve W. Cole (UCLA School of Medicine)
Status: Protocol Pending (as of July 1, 2020)
       Data File Preparation (expected by June 30, 2021)
* Collaborative study with UCLA

LE99-01
Title: Quality of life in late HCT survivors
PI: John Wingard (Shands HealthCare & University of Florida)
Status: Ongoing (as of July 1, 2020)
       Ongoing (expected by June 30, 2021)
* Collaborative study with University of Florida
12.0 LYMPHOMA WORKING COMMITTEE

12.1 Leadership

Chair: Mohamed Kharfan-Dabaja, MD, MBA, Mayo Clinic Florida
Email: kharfandabaja.mohamed@mayo.edu

Chair: Craig Sauter, MD, Memorial Sloan Kettering Cancer Center - Adults
Email: sauterc@mskcc.org

Chair: Alex Herrera, MD, City of Hope
Email: aherrera@coh.org

Scientific Director: Mehdi Hamadani, MD, CIBMTR Milwaukee
Email: mhamadani@mcw.edu

Statistical Director: Kwang Woo Ahn, PhD, CIBMTR Milwaukee
Email: kwooahn@mcw.edu

MS Statistician: Stella Chen, MS, CIBMTR Milwaukee
Email: yuchen@mcw.edu

12.2 Recent Publications

2020


**2018**


2017


2016


2015


12.3 Current Studies

LY17-02d
Title: Conditioning regimen in allografts for diffuse large B cell lymphoma
PI: Mehdi Hamadani (Medical College of Wisconsin)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)
LY18-01b
Title: Outcomes in B cell non-Hodgkin lymphoma patients who underwent autologous stem cell transplantation following rituximab containing conditioning regimens in partial remission
PI: Mehdi Hamadani (Medical College of Wisconsin)
Status: Submitted (as of July 1, 2020)
Published (expected by June 30, 2021)

LY18-01c
Title: Outcomes for resistant autologous transplants in early chemotherapy failure for diffuse large B-cell lymphoma patients
PI: Susan Bal (University of Alabama at Birmingham)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

LY18-02
Title: Effect of time to relapse on overall survival in mantle cell lymphoma patients following frontline autologous stem cell transplant
PIs: Peter Riedell (University of Chicago Medicine)
      Sonali Smith (University of Chicago Medicine)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

LY18-03
Title: Transplantation for CLL undergoing Richter's transformation arising in the setting of indolent lymphoma
PI: Alex Herrera (City of Hope)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

LY19-01
Title: Post-transplant cyclophosphamide-based haploidentical transplantation versus matched sibling or well matched unrelated donor transplantation for peripheral T-cell lymphoma: A CIBMTR Lymphoma Working Committee and EBMT Lymphoma Working Party analysis
PIs: Peter Dreger (Universitaetsklinikum Heidelberg)
      Mehdi Hamadani (Medical College of Wisconsin)
Status: Analysis (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with EBMT
LY19-02
Title: Determining the optimal conditioning regimen for patients with primary central nervous system lymphoma undergoing autologous hematopoietic cell transplantation
PIs: Michael Scordo (Memorial Sloan Kettering Cancer Center)
    Craig Sauter (Memorial Sloan Kettering Cancer Center)
    Antonio Jimenez (University of Miami)
Status: Manuscript Preparation (as of July 1, 2020)
        Submitted (expected by June 30, 2021)

LY20-01
Title: Comparison of outcomes of diffuse large B-cell lymphoma patients with partial response after salvage therapy who underwent chimeric antigen receptor T versus autologous hematopoietic cell transplantation
PI: Mazyar Shadman (Fred Hutchinson Cancer Research Center)
Status: Protocol Development (as of July 1, 2020)
        Submitted (expected by June 30, 2021)

LY20-02
Title: Outcomes of allogeneic transplants in patients with hodgkin lymphoma in the era of checkpoint inhibitors: A joint CIBMTR and EBMT analysis
PIs: Miguel-Angel Perales (Memorial Sloan Kettering Cancer Center)
    Anna Sureda (Institut Català d’Oncologia- Hospital Duran I Reynals)
    Farrukh Awan (UT Southwestern Medical Center)
    Silvia Montoto (Royal London Hospital Whitechapel, St. Bartholomew’s)
Status: Protocol Pending (as of July 1, 2020)
        Protocol Development (expected by June 30, 2021)
* Collaborative study with EBMT

LY20-03
Title: Comparison of allogeneic hematopoietic cell transplantation vs ibrutinib for patients with small lymphocytic lymphoma/chronic lymphocytic leukemia and del17p
PI: Farrukh Awan (UT Southwestern Medical Center)
Status: Protocol Development (as of July 1, 2020)
        Submitted (expected by June 30, 2021)
13.0 NON-MALIGNANT DISEASES WORKING COMMITTEE

13.1 Leadership

Chair: Christopher Dvorak, MD, University of California San Francisco Medical Center
Email: christopher.dvorak@ucsf.edu

Chair: Andrew Gennery, MD, Newcastle General Hospital and The Royal Victoria Infirmary
Email: a.r.gennery@ncl.ac.uk

Chair: George Georges, MD, Fred Hutchinson Cancer Research Center
Email: ggeorges@fredhutch.org

Scientific Director: Mary Eapen, MD, MS, CIBMTR Milwaukee
Email: meapen@mcw.edu

Statistical Director: Soyoung Kim, PhD, CIBMTR Milwaukee
Email: skim@mcw.edu

MS Statistician: Kyle Hebert, MS, CIBMTR Milwaukee
Email: khebert@mcw.edu

13.2 Recent Publications

2020


2019


2018


2017


2016

13.3 Current Studies

AC18-02
Title: Prospective cohort study of recipients of autologous hematopoietic cell transplant for systemic sclerosis
PI: George Georges (Fred Hutchinson Cancer Research Center)
Status: Data Collection (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)

NM15-01
Title: Outcome of allogeneic hematopoietic cell transplant in erythropoietic porphyria
PIs: Despina Moshous (Hospital Necker)
Ayman Saad (Ohio State Medical Center, James Cancer Center)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)
* Collaborative study with EBMT

NM16-03
Title: Results of transplants from genetically-identical twin donors in persons with aplastic anemia
PI: Robert Peter Gale (LifebankUSA-Celularity)
Status: Analysis (as of July 1, 2020)
Submitted (expected by June 30, 2021)

NM17-01
Title: Late effects after hematopoietic stem cell transplantation in patients with hemophagocytic lymphohistiocytosis
PIs: AnnaCarin Horne (Karolinska Institutet)
K. Scott Baker (Fred Hutchinson Cancer Center)
Karin Beutel (Histiocyte Society)
Status: Protocol Development (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)
* Collaborative study with EBMT
NM18-01
Title: Impact of choice of serotherapy in pediatric stem cell transplantation for non-malignant diseases
PIs: Anand Prakash (Hospital for Sick Children, Toronto)
      Donna Wall (Hospital for Sick Children)
      Kristjian Paulson (CancerCare Manitoba/University of Manitoba)
Status: Data File Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

NM19-01
Title: Conditional and cause-specific mortality of patients with severe aplastic anemia surviving at least one year after alloHCT or immunosuppressive therapy
PIs: Ryotaro Nakamura (City of Hope)
      F. Lennie Wong (City of Hope)
      Saro Armenian (City of Hope)
Status: Analysis (as of July 1, 2020)
       Manuscript Preparation (expected by June 30, 2021)
   * Collaborative study with National Heart, Lung, and Blood Institute

NM19-02
Title: Impact of conditioning regimen on allogeneic HCT outcomes for hyper-inflammatory immune deficiency disorders
PI: Rebecca Marsh (Cincinnati Children’s Hospital Medical Center)
Status: Manuscript Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

NM19-03
Title: Hematopoietic stem cell transplantation for congenital amegakaryocytic thrombocytopenia
PIs: Farid Boulad (Memorial Sloan Kettering Cancer Center)
      Maria Cancio (Memorial Sloan Kettering Cancer Center)
      Jaap Jan Boelens (Memorial Sloan Kettering Cancer Center)
Status: Manuscript Preparation (as of July 1, 2020)
       Submitted (expected by June 30, 2021)

NM20-01
Title: Hematopoietic stem cell transplantation for fanconi anemia
PIs: Farid Boulad (Memorial Sloan Kettering Cancer Center)
      Seth Rotz (Cincinnati Children’s Hospital Medical Center)
      Hesham Eissa (University of Colorado-Children’s Hospital)
Status: Protocol Development (as of July 1, 2020)
       Analysis (expected by June 30, 2021)
SC17-09/17-CMS-SCD
Title: Prospective assessment of allogeneic hematopoietic cell transplantation in adolescents and young adults with severe sickle cell disease
PI: Mary Eapen (Medical College of Wisconsin)
Status: Data Collection/Data File Preparation (as of July 1, 2020)
Data Collection/Data File Preparation (expected by June 30, 2021)
14.0 PEDIATRIC CANCER WORKING COMMITTEE

14.1 Leadership

Chair: Gregory Yanik, MD, The University of Michigan
Email: gyanik@med.umich.edu

Chair: Muna Qayed, Children’s Healthcare of Atlanta at Egleston
Email: muna.qayed@choa.org

Chair: Kirk Schultz, MD, British Columbia’s Children’s Hospital, The University of British Columbia
Email: kschultz@mail.ubc.ca

Scientific Director: Mary Eapen, MD, MS, CIBMTR Milwaukee
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asst Sci Director: Larisa Broglie, MD, MS, CIBMTR Milwaukee
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Statistical Director: Kwang Woo Ahn, PhD, CIBMTR Milwaukee
Email: kwooahn@mcw.edu

MS Statistician: Kyle Hebert, MS, CIBMTR Milwaukee
Email: khebert@mcw.edu

14.2 Recent Publications

2020

2018
2017


2015


### 14.3 Current Studies

**PC19-01**

**Title:** Variation of the disease risk index in children undergoing allogeneic transplants  
**PIs:** Muna Qayed (Children’s Healthcare of Atlanta at Egleston)  
Carrie Kitko (Vanderbilt University Medical Center)  
**Status:** Submitted (as of July 1, 2020)  
Published (expected by June 30, 2021)

**PC19-02**

**Title:** Does mixed peripheral blood T cell chimerism predict relapse?  
**PIs:** Susan Prockop (Memorial Sloan Kettering Cancer Center)  
Japp-Jan Boelens (Memorial Sloan Kettering Cancer Center)  
Karl Peggs (University College London)  
**Status:** Protocol Development (as of July 1, 2020)  
Analysis (expected by June 30, 2021)

**PC19-03**

**Title:** The impact of pre-transplant extramedullary disease on the outcome of allogeneic hematopoietic cell transplantation for acute myeloid leukemia in children: A combined CIBMTR and EBMT analysis  
**PIs:** Kamakshi Rao (University of North Carolina Hospitals)  
Hemalatha Rangarajan (Nationwide Children's Hospital)  
Prakash Satwani (New York Presbyterian Hospital / Columbia University Medical Center)  
Deepak Chellapandian (Johns Hopkins All Children's Hospital)  
Bipin Savani (Vanderbilt University Medical Center)  
Juliana Silva (Great Ormond Street Hospital for Children)  
**Status:** Data File Preparation (as of July 1, 2020)  
Manuscript Preparation (expected by June 30, 2021)  
* Collaborative study with EBMT

**PC20-01**

**Title:** Autologous graft cell dose and post-transplant granulocyte colony stimulating factor in post-transplant outcomes among pediatric patients undergoing autologous hematopoietic stem cell transplantation  
**PIs:** Tristan Knight (Hospital for Sick Children)  
Donna Wall (Hospital for Sick Children)  
Kanhatai Chiengthong (Hospital for Sick Children)  
**Status:** Data File Preparation (as of July 1, 2020)  
Manuscript Preparation (expected by June 30, 2021)
PC20-01
Title:  **Germline genetics of pediatric myelodysplastic syndromes**
PIs:    Jenny Poynter (University of Minnesota)
        Logan Spector (University of Minnesota)
Status: Protocol Development (as of July 1, 2020)
        Sample Typing (expected by June 30, 2021)
15.0 PLASMA CELL DISORDERS AND ADULT SOLID TUMORS WORKING COMMITTEE

15.1 Leadership

Chair: Shaji Kumar, Mayo Clinic Rochester
Email: kumar.shaji@mayo.edu

Chair: Nina Shah, MD, University of California San Francisco Medical Center
Email: nina.shah@ucsf.edu

Chair: Muzaffar Qazilbash, MD, M.D. Anderson Cancer Center
Email: mqazilba@mdanderson.org

Scientific Director: Anita D’Souza, MD, CIBMTR Milwaukee
Email: anitadsouza@mcw.edu

Statistical Director: Raphael Fraser, PhD, CIBMTR Milwaukee
Email: rfraser@mcw.edu

MS Statistician: Noel Estrada-Merly, MS, CIBMTR Milwaukee
Email: nestrada@mcw.edu

15.2 Recent Publications

2020


2019

2018


2017


2016


2015


### 15.3 Current Studies

**MM17-02**

**Title:** The impact of bortezomib based induction therapy vs no induction therapy on outcomes for light chain amyloidosis  
**PIs:** Robert F. Cornell (AbbVie)  
Luciano Costa (University of Alabama at Birmingham)  
Stacey A. Goodman (VA Tennessee Valley HCS HSCT Program Nashville)  
**Status:** Manuscript Preparation (as of July 1, 2020)  
Submitted (expected by June 30, 2021)

**MM17-03**

**Title:** Assessment of allogeneic hematopoietic cell transplantation in Medicare beneficiaries with multiple myeloma: A study to develop evidence of effectiveness for the Centers for Medicare and Medicaid Services (CMS)  
**PIs:** Anita D'Souza (Medical College of Wisconsin)  
Parameswaran Hari (Medical College of Wisconsin)  
Mary Horowitz (Medical College of Wisconsin)  
Sergio Giralt (Memorial Sloan Kettering Cancer Center)  
Gunjun Shah (Memorial Sloan Kettering Cancer Center)  
**Status:** Data Collection/Data File Preparation (as of July 1, 2020)  
Data Collection/Data File Preparation (expected by June 30, 2021)

**MM18-03b**

**Title:** Transplant outcomes of elderly (>=75 years) multiple myeloma patients  
**PIs:** Pashna Munshi (Georgetown University Hospital)  
David Vesole (Hackensack University Medical Center)  
**Status:** Analysis (as of July 1, 2020)  
Submitted (expected by June 30, 2021)
MM18-04
Title: *Busulfan, melphalan, and bortezomib versus high-dose melphalan as a conditioning regimen for autologous transplants in multiple myeloma: Long term follow up of a novel conditioning regimen*
PIs: Patrick Hagen (Loyola University Medical Center)
      Patrick Stiff (Loyola University Medical Center)
Status: Published (as of July 1, 2020)
Published (expected by June 30, 2021)
* Collaborative study with Loyola University

MM19-01
Title: *Impact of induction therapy with VRD vs. VCD on outcomes in patients with multiple myeloma undergoing stem cell transplantation*
PIs: Surbhi Sidana (Stanford Health Care)
      Maxim Norkin (Baptist MD Anderson Cancer Center)
      Shaji K. Kumar (Mayo Clinic Rochester)
      Sergio Giralt (Memorial Sloan Kettering Cancer Center)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

MM19-02
Title: *Maintenance therapy after second autologous hematopoietic cell transplantation for multiple myeloma*
PIs: Oren Pasvolsky (Rabin Medical Center)
      Moshe Yeshurun (Davidoff Cancer Center, Rabin Medical Center, Beilinson Hospital)
      Uri Rozovski (Rabin Medical Center)
      Liat Shargian-Alon (Davidoff Cancer Center, Rabin Medical Center, Beilinson Hospital)
Status: Data File Preparation (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)

MM19-03
Title: *Second autologous stem cell transplantation as salvage therapy for relapsed or refractory immunoglobulin light chain amyloidosis*
PIs: Carlyn Tan (Fox Chase Cancer Center)
      Henry Fung (Fox Chase Temple University Hospital)
Status: Data File Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

MM20-01
Title: *Outcomes after autologous hematopoietic cell transplantation in POEMS syndrome*
PIs: Ankit Kansagra (UT Southwestern Medical Center)
      Roberta Cornell (AbbVie)
      Angela Dispenzieri (Mayo Clinic Rochester)
Status: Protocol Development (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)
MM20-02
Title: Risk factors for and characteristics of secondary primary malignancies following autologous hematopoietic cell transplant for multiple myeloma
PIs: Brittany Ragon (Levine Cancer Institute)
Gemlyn George (Medical College of Wisconsin)
Lohith Gowda (Yale New Haven Hospital)
Mithun Shah (Mayo Clinic Rochester)
Saad Zafar Usmani (Levine Cancer Institute)
Status: Protocol Development (as of July 1, 2020)
Data File Preparation (expected by June 30, 2021)

MM20-03
Title: Impact of bortezomib-based versus lenalidomide maintenance therapy on outcomes of patients with high-risk multiple myeloma
PIs: Naresh Bumma (Ohio State Medical Center, James Cancer Center)
Surbhi Sidana (Stanford Health Care)
Binod Dhakal (Medical College of Wisconsin)
Status: Protocol Development (as of July 1, 2020)
Data File Preparation (expected by June 30, 2021)

MM20-04
Title: Trajectories and correlates of patient-reported outcomes after autologous hematopoietic cell transplant in multiple myeloma
PI: Anita D'Souza (Medical College of Wisconsin)
Status: Analysis (as of July 1, 2020)
Submitted (expected by June 30, 2021)
16.0 REGIMEN-RELATED TOXICITY AND SUPPORTIVE CARE WORKING COMMITTEE

16.1 Leadership

Chair: Edward Stadtmauer, MD, Abramson Cancer Center University of Pennsylvania Medical Center
Email: edward.stadtmauer@uphs.upenn.edu

Chair: Bipin Savani, MD, Vanderbilt University Medical Center
Email: bipin.savani@vumc.org

Chair: Mohamed Sorror, MD, MSc, Fred Hutchinson Cancer Research Center
Email: msorror@fredhutch.org

Scientific Director: Saurabh Chhabra, MD, CIBMTR Milwaukee
Email: schhabra@mcw.edu

Statistical Director: Kwang Woo Ahn, PhD, CIBMTR Milwaukee
Email: kwooahn@mcw.edu

MS Statistician: Mariam Johnson, MPH, CIBMTR Milwaukee
Email: mhjohnson@mcw.edu

16.2 Recent Publications

2020

2019


2018


2017


2016


16.3 Current Studies

RT17-01
Title: **Allogeneic hematopoietic stem cell transplant outcome for patients with end stage renal disease on dialysis**
PIs: Nosha Farhadfar (Shands HealthCare & University of Florida)
Ajoy Dias (Beth Israel Deaconess Medical Center)
John Wingard (Shands HealthCare & University of Florida)
Hemant Murthy (Mayo Clinic Florida)
Siddhartha Ganguly (University of Kansas)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

RT18-01
Title: **Developing a modified hematopoietic stem cell transplantation-comorbidity index for adolescents and young adults. A modified hematopoietic cell transplantation-comorbidity index for pediatric recipients of allogeneic transplantation**
PIs: Brian Friend (Baylor College of Medicine Center for Cell and Gene Therapy)
Gary Schiller (UCLA Health)
Larisa Broglie (Medical College of Wisconsin)
Monica Thakar (Fred Hutchinson Cancer Research Center)
Mohamed Sorror (Fred Hutchinson Cancer Research Center)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

RT18-02
Title: **The effect of obesity on outcomes after alternative donor stem cell transplants**
PIs: Mouhamed Yazan-Abou Ismail (University of Utah Health)
Gayathri Ravi (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Leland Metheny (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Marcos De Lima (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Status: Analysis (as of July 1, 2020)
Submitted (expected by June 30, 2021)
RT18-03
Title: An analysis of non-infectious pulmonary toxicities in myeloablative total body irradiation vs. chemotherapy-based conditioning regimens after allogeneic hematopoietic cell transplantation for hematologic malignancies/diffuse alveolar hemorrhage is a result of complex interaction between conditioning regimen, graft source, and engraftment
PIs: Sagar Patel (University of Utah Health)
Betty Hamilton (Cleveland Clinic Foundation)
Navneet Majhail (Cleveland Clinic Foundation)
Celalettin Ustun (Rush University Medical Center)
Status: Manuscript Preparation (as of July 1, 2020)
Submitted (expected by June 30, 2021)

RT19-01
Title: Analysis of comorbidity-associated toxicity at the regimen level
PIs: Roni Shouval (Sheba Medical Center)
Bipin Savani (Vanderbilt University Medical Center)
Aarnon Nagler (Sheba Medical Center)
Status: Data File Preparation (as of July 1, 2020)
Manuscript Preparation (expected by June 30, 2021)

RT19-02
Title: Hemorrhagic cystitis as a complication of hematopoietic cell transplantation in the posttransplant cyclophosphamide graft-versus-host disease prophylaxis era compared to other allogeneic hematopoietic cell transplantation
PIs: Kehinde Adekola (Northwestern Medicine)
Naveed Ali (Case Western Reserve University)
Olga Frankfurt (Northwestern Medicine)
Leland Metheny (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Jonathan Moreira (Northwestern Medicine)
Marcos De Lima (Seidman Cancer Center-University Hospitals Cleveland Medical Center)
Status: Protocol Development (as of July 1, 2020)
Analysis (expected by June 30, 2021)

RT20-01
Title: Toxicities of older adults receiving allogeneic hematopoietic cell transplant compared to younger patients
PIs: Reena Jayani (Vanderbilt University Medical Center)
Harvey Murff (Vanderbilt University Medical Center)
Status: Protocol Development (as of July 1, 2020)
Data File Preparation (expected by June 30, 2021)
APPENDIX A: COLLABORATIVE STUDIES

Brazilian Transplant Group

- HS19-03: Haploidentical stem cell transplantation for malignant and non-malignant hematological diseases in patients without sibling donor: A multicenter prospective longitudinal study of the Brazilian bone marrow transplantation study group
- HS19-04: Outcomes after allogeneic stem cell transplants performed in Brazil from HLA-matched siblings, unrelated and mismatched related donors: Retrospective study on behalf of the Brazilian Bone Marrow Transplantation Society (SBTMO), GEDECo (Brazil-Seattle Transplant-related complications Consortium), Hospital Israelita Albert Einstein (AmigoH), Associação da Medula Óssea do Estado de São Paulo (Ameo), Program Nacional de Apoio à Atenção Oncológica (Pronon), and CIBMTR

Cancer and Leukemia Group B (CALGB)

- LK15-03: Comparison of outcomes of older adolescents and young adults with philadelphia/BCR-ABL1-negative acute lymphoblastic leukemia receiving post-remission consolidation chemotherapy with pediatric-inspired chemotherapy on CALGB 10403 or myeloablative allogeneic hematopoietic cell transplantation

Childhood Cancer Survivor Study – St. Jude

- LE20-01: Cardiometabolic risk after total body irradiation during childhood

German Bone Marrow Donor Center

- IB18-04a: Evaluation of the impact of donor KIR genotype on outcome after unrelated donor transplantation in patients with myelodysplastic syndromes or secondary acute myeloid leukemia
- IB18-04b: Evaluation of the impact of donor KIR genotype on outcome after unrelated donor transplantation in patients with myelodysplastic syndromes or acute myeloid leukemia
  o Also in collaboration with EBMT

European Society for Blood and Marrow Transplantation

- CK17-01: Development of a prognostic scoring system predictive of outcomes in patients with myelofibrosis after allogeneic hematopoietic cell transplantation
- CK19-01b: Outcomes of chronic neutrophilic leukemia patients who underwent allogeneic hematopoietic cell transplantation
- IB18-04b: Evaluation of the impact of donor KIR genotype on outcome after unrelated donor transplantation in patients with myelodysplastic syndromes or acute myeloid leukemia
  o Also in collaboration with DKMS
- LY19-01: Post-transplant cyclophosphamide-based haploidentical transplantation versus matched sibling or well matched unrelated donor transplantation for peripheral T-cell lymphoma: A CIBMTR Lymphoma Working Committee and EBMT Lymphoma Working Party analysis
LY20-02: Outcomes of allogeneic transplants in patients with hodgkin lymphoma in the era of checkpoint inhibitors: A joint CIBMTR and EBMT analysis

NM15-01: Outcome of allogeneic hematopoietic cell transplant in erythropoietic porphyria

NM17-01: Late effects after hematopoietic stem cell transplantation in patients with hemophagocytic lymphohistiocytosis

PC19-03: The impact of pre-transplant extramedullary disease on the outcome of allogeneic hematopoietic cell transplantation for acute myeloid leukemia in children: A combined CIBMTR and EBMT analysis

The Emmes Company

LE18-03: Incorporating patient reported outcomes into individualized prognostication tools for survival and quality of life in transplant patients

Emory University

LE17-01a: Long-term follow up after hematopoietic stem cell transplantation for sickle cell disease

LE17-01b: Comparison of survival between transplanted and non-transplanted SCD patients

International Histocompatibility Working Group

IB06-05: Use of high-resolution HLA data from the NMDP for the International Histocompatibility Working Group in HCT

IB09-01: Clinical importance of minor histocompatibility complex haplotypes in umbilical cord blood transplantation

IB09-03: Clinical importance of minor histocompatibility complex haplotypes in umbilical cord blood transplantation

IB09-05: Clinical importance of minor histocompatibility complex haplotypes in umbilical cord blood transplantation

IB09-07: Clinical importance of minor histocompatibility complex haplotypes in umbilical cord blood transplantation

IB14-07: Indirectly recognizable HLA epitopes: A retrospective validation study on the role of indirect recognition of mismatched HLA in hematopoietic stem cell transplantation outcome

R04-74d: Functional significance of killer cell immunoglobulin-like receptor genes in HLA-matched and mismatched unrelated HCT

Japan Society for Hematopoietic Cell Transplantation

HS18-01: International collaborative study to compare the prognosis for acute leukemia patients transplanted with intensified myeloablative regimens

Loyola University

MM18-04: Busulfan, melphalan, and bortezomib versus high-dose melphalan as a conditioning regimen for autologous transplants in multiple myeloma: Long term follow up of a novel conditioning regimen
**Medical College of Wisconsin**
- IB20-03: Donor socioeconomic status as a predictor of altered immune function and treatment response following hematopoietic cell transplantation for hematologic malignancy

**National Cancer Institute**
- IB10-01f: Epigenetic clock: Can this guide donor selection in HCT
- IB17-03: Identification of genomic markers of post hematopoietic cell transplantation (HCT) outcomes in patients with myelofibrosis: A pilot study
- IB18-03: Clonal mosaicism and HCT outcomes in patients with acute leukemia and myelodysplastic syndromes
- IB18-07: Donor and recipient genomic associations with acute GVHD

**National Heart, Lung, and Blood Institute**
- NM19-01: Conditional and cause-specific mortality of patients with severe aplastic anemia surviving at least one year after alloHCT or immunosuppressive therapy

**The Ohio State University**
- IB09-06j: Additional analysis of major histocompatibility complex single nucleotide polymorphisms
  - Also in collaboration with Roswell Park Cancer Institute
- IB09-06m: Analysis of X chromosome single nucleotide polymorphisms
  - Also in collaboration with Roswell Park Cancer Institute
- IB09-06n: Compare unrelated donor to welcome trust case control consortium controls
  - Also in collaboration with Roswell Park Cancer Institute
- IB09-06o: Genetics and epidemiology of myeloid malignancies candidate gene paper
  - Also in collaboration with Roswell Park Cancer Institute
- IB09-06p: Genetics and epidemiology of myeloid malignancies genome-wide association study
  - Also in collaboration with Roswell Park Cancer Institute
- RT09-04 / IB09-06i: DISCOVeRY-BMT: Recipient, donor genome-wide association study interaction with conditioning intensity (myeloablative/reduced intensity conditioning), total body irradiation, disease status
  - Also in collaboration with Roswell Park Cancer Institute

**Peking University**
- HS19-02: Comparing outcomes of myeloablative T-replete haploidentical transplantation with posttransplant cyclophosphamide protocol and anti-thymocyte globulin+granulocyte colony-stimulating factor protocol in patients with cytogenetic intermediate/high risk acute myeloid leukemia in first complete remission
Pediatric Health Information System

- GV17-01: Investigating antibiotic exposure and risk of acute graft versus host disease in children undergoing hematopoietic stem cell transplantation for acute leukemia
- HS18-03: Racial/ethnic disparities in receipt of hematopoietic cell transplantation and subsequent resource utilization in children with acute leukemia

Roswell Park Cancer Institute

- IB09-06b: Genetic susceptibility to transplant-related mortality after unrelated donor stem cell transplant
- IB09-06j: Additional analysis of major histocompatibility complex single nucleotide polymorphisms
  - Also in collaboration with The Ohio State University
- IB09-06m: Analysis of X chromosome single nucleotide polymorphisms
  - Also in collaboration with The Ohio State University
- IB09-06n: Compare unrelated donor to welcome trust case control consortium controls
  - Also in collaboration with The Ohio State University
- IB09-06o: Genetics and epidemiology of myeloid malignancies candidate gene paper
  - Also in collaboration with The Ohio State University
- IB09-06p: Genetics and epidemiology of myeloid malignancies genome-wide association study
  - Also in collaboration with The Ohio State University
- RT09-04 / IB09-06i: DISCOVeRY-BMT: Recipient, donor genome-wide association study interaction with conditioning intensity (myeloablative/reduced intensity conditioning), total body irradiation, disease status
  - Also in collaboration with The Ohio State University

University of California, Los Angeles

- LE20-02: Association between PRO and the social transcriptome profile as a predictor of clinical outcomes following hematopoietic cell transplantation

University of Chicago

- CK16-01: Identification of germline predisposition mutations in young myelodysplastic syndrome patients

University of Florida

- LE99-01: Quality of life in late HCT survivors

University of Minnesota

- IB14-05: mtDNA haplotypes and unrelated donor transplant outcomes
- R02-40 / R03-63d: Acquisition of natural killer cell receptors in recipients of unrelated transplant
University of Pittsburgh
- DS19-02: The impact of pre-apheresis health related quality of life on peripheral blood progenitor cells yield and donor’s health and outcome

University of Utah
- DS05-02d: Quality of life for related adult donors compared to unrelated adult donors
- DS05-02g: Late toxicities and serious adverse events for related donors

United Network for Organ Sharing
- LE12-03: Solid organ transplantation and hematopoietic cell transplantation

Virtual Pediatric Systems
- LE19-01: Long-term survival and late effects in critically ill pediatric hematopoietic cell transplant patients
### APPENDIX B: STUDY DEVELOPMENT AND MANAGEMENT PROCESS

This study development cycle pertains to studies for which CIBMTR provides data, scientific, and statistical support. Data sets are also made available to investigators who have their own statistical resources. Manuscripts resulting from these analyses are reviewed and approved by the CIBMTR prior to journal submission.

<table>
<thead>
<tr>
<th>STUDY DEVELOPMENT AND MANAGEMENT PROCESS</th>
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</thead>
<tbody>
<tr>
<td><strong>Planned</strong></td>
</tr>
<tr>
<td><strong>Protocol pending.</strong> Proposals remain in this preliminary stage until the principal investigator (PI) creates a draft protocol.</td>
</tr>
<tr>
<td><strong>Draft protocol received.</strong> When a PI submits a draft protocol, Coordinating Center staff review it.</td>
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<tr>
<td><strong>Protocol development.</strong> During the development process, the Working Committee biostatisticians, Scientific Director, and Chairs refine the submission into a comprehensive study protocol. They add a table with a preliminary description of the proposed study population and present the draft protocol for discussion at a weekly Coordinating Center statistical meeting. When a protocol is approved, Coordinating Center personnel invite Working Committee members to participate in a Writing Committee.</td>
</tr>
<tr>
<td><strong>In Progress</strong></td>
</tr>
<tr>
<td><strong>Sample typing.</strong> If applicable, the PIs perform laboratory tests (e.g., genotyping) on samples from the CIBMTR Research Repository. The testing data will be used in the analysis to determine any correlation with clinical outcome.</td>
</tr>
<tr>
<td><strong>Supplemental forms / data collection.</strong> Most studies use routinely-collected data. If necessary, Coordinating Center staff, in collaboration with the PI and relevant Working Committee Chairs, develop a supplemental form, which is approved prior to soliciting centers for additional data. Use of supplemental data (e.g., data not collected on standard CIBMTR data collection forms) is discouraged unless it will result in a particularly meaningful publication and/or external funding can support the extra burden placed on centers and supplement forms reimbursement costs.</td>
</tr>
<tr>
<td>STUDY DEVELOPMENT AND MANAGEMENT PROCESS</td>
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<td>-----------------------------------------</td>
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<tr>
<td><strong>In Progress (continued)</strong></td>
</tr>
<tr>
<td><strong>Data file preparation.</strong> The objective of data file preparation is to create a file of eligible subjects who are consecutively treated at participating centers with adequate follow-up, with minimal missing data fields, and in large enough numbers to give the analysis sufficient statistical power to meet the stated study objectives. This process involves a series of steps by the MS-level statistician, working with the Scientific Director, PI(s), and sometimes the Clinical Research Coordinator, to ensure data quality:</td>
</tr>
<tr>
<td>• Verifying selection criteria</td>
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<tr>
<td>• Including and excluding patients so that the investigators can determine whether the final study population is representative of the target population</td>
</tr>
<tr>
<td>• Assessing follow-up</td>
</tr>
<tr>
<td>• Determining the extent and nature of missing values and their potential effect on the study</td>
</tr>
<tr>
<td>• Resolving and reconciling data discrepancies / outliers by examining data collection forms and communicating with centers and the PI</td>
</tr>
<tr>
<td><strong>Analysis in progress.</strong> Analysis proceeds in several phases. The first generally includes a detailed description of the patient population and univariate and multivariate analyses of study endpoints. Study PI(s) and associated Working Committee Chairs present these data for discussion at a weekly Coordinating Center statistical meeting and then distribute them to Writing Committee members for suggestions and comments. The PI works with Coordinating Center staff in an iterative process to review comments from the Writing Committee. The process repeats until final analysis, which serves as the basis for the manuscript.</td>
</tr>
<tr>
<td><strong>Ongoing.</strong> A study in ongoing status is long-term and often involves multiple grants and/or renewals outside of the CIBMTR in order to reach its objectives. The study typically has its own Statistical Director for analysis, but it requires data from the CIBMTR, usually each year.</td>
</tr>
<tr>
<td><strong>Preliminary Results</strong></td>
</tr>
<tr>
<td><strong>Manuscript preparation.</strong> The PI is primarily responsible for manuscript preparation and is expected to prepare a draft manuscript within 30 days of receiving analysis results. Study Leadership reviews and revises the document, ensuring that the description and interpretation of the statistical analyses are accurate and contribute to the fundamental message of the manuscript. The Coordinating Center then distributes the approved first draft to the Writing Committee and solicits feedback. The PI incorporates comments from the Writing Committee and creates a revised draft, which is reviewed in an iterative process by the Writing Committee until reaching a reasonable consensus on a final manuscript.</td>
</tr>
<tr>
<td>STUDY DEVELOPMENT AND MANAGEMENT PROCESS</td>
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<tr>
<td>------------------------------------------</td>
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<tr>
<td><strong>Preliminary Results (continued)</strong></td>
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<tr>
<td><strong>Submitted.</strong> The Coordinating Center staff is responsible for submitting the manuscript and corresponding with the chosen journal. The Working Committee Scientific Director often serves as corresponding author, and the study statistician forwards all editor and reviewer comments to the PI and Statistical Director. The PI is expected to prepare a response, working with Study Leadership who provide additional analyses of data, as needed. Coordinating Center personnel communicate with the journal, including re-submissions, in most cases.</td>
</tr>
<tr>
<td><strong>In press.</strong> A publication is in press when it has been approved but does not yet have a citation.</td>
</tr>
<tr>
<td><strong>Completed</strong></td>
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</table>
APPENDIX C: GUIDELINES FOR STUDY PRINCIPAL INVESTIGATORS

The role of a Study Chair / PI is simple: always behave ethically and do whatever it takes to complete the study that answers your research question. It is easier to accomplish this task if you have an understanding of the CIBMTR study process, specifically where and when your efforts are most needed. The following document will explain the life-cycle of a CIBMTR observational study and review the responsibilities of a PI. Hints and tips to make the study process as successful as possible are noted with an arrow (→).

STUDY PROPOSAL

The PI is usually the first person who suggests the study and who prepares the Study Proposal (cibmtr.org/Studies/Observational/ProposeStudy/Pages/index.aspx). Ideally the PI presents his or her proposal in person to the appropriate Working Committee at the TCT Meetings of ASTCT and CIBMTR. Some PIs view the CIBMTR presentation as a formality but, in reality, it is an important opportunity to convince the other Working Committee members that your study is more important, more feasible, and more likely to advance the field and be published in a high-profile journal than other studies being proposed. CIBMTR Working Committee hours and resources are limited, and not all good studies proposed can be supported.

→ Review the data collection forms (cibmtr.org/DataManagement/DataCollectionForms/Pages/Investigators.aspx) to ensure the data you wish to study are available for the timeframe you wish to study. Many people propose studies that require data not collected routinely by the CIBMTR. Studies that require additional data collection usually get greater scrutiny because of the extra time and effort required whenever centers have to be contacted for additional data. Additionally, the response rate to requests for supplemental data is often disappointing; ask your own data managers how difficult it is to go back and find data for patients transplanted years ago. The ability to collect supplemental data successfully depends on how complex and/or extensive the data are, the size of the study population, how far back in time the transplants were done, and whether you have resources (people or funds) to assist in the process.

→ Examine the latest accrual tables for your proposed Working Committee to ensure there are sufficient data in the CIBMTR Research Database to answer your study questions. Accrual tables are provided in the meeting agenda for each committee’s annual in person meeting at the TCT Meetings of ASTCT and CIBMTR under Attachment 2.

→ Review this report and/or the CIBMTR Publication List and Working Committee Study Lists of planned, in progress, and recently published studies to ensure someone else has not already conducted the study you are proposing.

→ Note that study proposals may be submitted throughout the year. The vast majority are submitted just before the deadline, three months before the TCT Meetings of ASTCT and CIBMTR. If you want your proposal to benefit from greater CIBMTR statistical and scientific input, then submitting your proposal far in advance is helpful. Proposals submitted throughout the year will be reviewed by the Working Committee Chairs and Scientific Director. They have the authority to approve a proposal based on the importance of the scientific question or they may elect to defer it until presentation at the Working Committee meeting.
PRIORITIZATION AND DISTRIBUTION OF STATISTICAL HOURS

After the TCT Meetings of ASTCT and CIBMTR, the Working Committee Chairs, Scientific Directors, Statistical Director, and MS Statistician meet to discuss the results of the meeting and prioritize new and ongoing studies. Studies are assigned Coordinating Center hours according to their need and priority. In general, a study needs 100 hours of Statistical Staff time to finish the protocol document, 100-160 hours to prepare the data file (depending on whether additional data collection, follow-up, or excessive data cleaning is necessary), 60 hours for the analysis phase, and 70 hours for manuscript preparation. PIs are generally notified about Committee decisions (i.e., approval, prioritization, and assigned hours) regarding their proposals within one month after the meeting. At that time, PIs also learn which MS-level Statistician is assigned to their studies; this MS-level Statistician subsequently serves as the point person for communications regarding study issues.

→ PIs can increase the chance of their proposal being approved by carefully preparing the Proposal Form that is presented to the Working Committee. Discussion with Working Committee Leadership in advance of the Working Committee meeting may help clarify the study and address study design questions. Many great concepts fail because PIs do not consider available data, size of the available study population, power calculations, and other statistical issues. The Working Committee is much less receptive to studies that appear to have multiple unresolved issues at the meeting.

STUDY PROTOCOL

The next step in the study’s life is generation of the study protocol. This is an important document that is first drafted by the PI and submitted to the MS-level Statistician. The draft study protocol should be completed within two months of concept approval notification. In preparing this document, it is crucial to carefully review the applied study selection criteria and description of patient, disease, and transplant characteristics. The PI must also carefully consider the variables to be included in the analysis because the MS-level Statisticians, Statistical Directors, and Scientific Directors use these documents to guide data collection and cleaning. Common pitfalls include failure to include important variables to address study hypotheses and failure to consider potentially confounding variables. After the initial draft is reviewed and approved by the Coordinating Center, it is circulated to the Working Committee for comment; at that time, Committee members may request to participate in the study and a Writing Committee is formed (see below). Individuals wishing to serve on the Writing Committee provide substantive comments on the study protocol. It is the PI’s responsibility to collate and address these comments by either modifying the protocol or providing an explanation for not incorporating suggested changes. Since Writing Committee members earn their authorship by reviewing the study protocol, analyses, and manuscripts, the CIBMTR also keeps track of comments and contributions.

→ Each study protocol is reviewed at the weekly Coordinating Center conference call / meeting (held on Tuesdays, 9:00-10:00 am US Central Time) before distribution to the Working Committee; it is very helpful for the PI to join that meeting by phone and to participate in the discussion of the study’s design and implementation. (Studies are again discussed at a Coordinating Center weekly meeting as they reach significant milestones. PI participation in each of these discussions is strongly encouraged.)
The most successful PIs respond to Writing Committee critiques as they do journal reviews — by carefully organizing them and responding to each. If a Writing Committee member brought up an issue, it is likely that a reviewer will also bring up the same points. It is expected that the PI will summarize and respond to these critiques within three weeks after the deadline for comments has passed.

PIs have a great deal of control over the interval between study proposal approval and the completion of a final study protocol. Timely submission of the draft protocol and response to Writing Committee comments can vault your study ahead of others in terms of Coordinating Center priority. If yours is ready to go and another is not, yours may be given priority, even if initially it was planned for the other study to be done first.

**DATA COLLECTION**

If supplemental data collection is needed for the study, approval from the Chief Scientific Director is required. The PI needs to provide the following information for the approval: 1) number of questions, 2) types of questions, 3) number of cases and 4) the study calendar. Once the request has been approved, the Forms Development Clinical Research Coordinator will prepare a supplemental form for review within one week. This draft form will be a Word document listing all the supplemental questions that are relevant, as well as the most frequent response options. This form will have input from the Scientific Director, PI, Study Statistician, Metadata and Data Operations Staff for clarity, length, internal consistency of response options, and feasibility of data retrieval. The form will be formatted to be consistent with other CIBMTR forms, and a table will be created in the database to receive the data. This step is very important for any study collecting additional data. If the form is long or leaves out critical variables, the ultimate study results could be compromised by missing data. The supplemental form will go to the Chief Scientific Director, Scientific Director, and PI for final approval. The Scientific Director and PI will prepare a letter detailing the importance of the data needed for the study with a copy to the Medical Director. This letter will be sent with the study request. If terms or concepts on the supplemental data collection form are unfamiliar to the data management teams, an instruction manual that describes the variable and provides examples of how data managers should interpret primary data will have to be written. Each study is assigned a Clinical Research Coordinator who communicates with centers to facilitate data submission. Most, but not all, centers are very responsive to these requests. If some centers are lagging behind in submitting extra forms, PIs may need to make personal email or phone appeals.

Providing the initial draft form and content for the instruction manual is the responsibility of the PI. Delay in putting it together can significantly delay initiating the data collection process. If the process is inordinately delayed so that the data needed for a study is not available in a timely manner, the study may be deferred to the next year.

For smaller studies, where every patient counts, personal appeals from the PI to the Transplant Center Director can sometimes be very effective.

**DATA FILE PREPARATION**

In this step, the MS-level Statistician prepares a data file using the finalized study protocol as guidance. Data interpretation issues may arise here, especially if uncommon variables are necessary for the study. Values for common variables have probably already been reviewed and, if missing or out of range or inconsistent, already clarified (data “cleaning”) for other studies. If
your study is the first to examine a particular variable or study population, then expect to do a lot of data cleaning.

→ The PI can accelerate this process by being available to the MS-level Statistician and Scientific Director as questions come up. The PI should also carefully review the frequencies of study variables for outliers and other clinical inconsistencies.

**UNIVARIATE ANALYSIS**

Once the data file is prepared, the MS-level Statistician performs as much of the analysis as possible before handing the data set to the Statistical Director assigned to the project. First, a table of study population characteristics and preliminary univariate analysis is prepared. This is reviewed by the PI and Scientific Director. When they are satisfied with the population, the study is scheduled for another Coordinating Center weekly meeting / conference call to confirm final composition of the population and study design and review the univariate analysis before multivariate analyses are performed. Relevant comments from the Coordinating Center review will be summarized by the MS-level Statistician or the Scientific Director and relayed back to the PI for comment if the PI cannot participate personally in the meeting.

→ As noted above, the PI is invited to participate in the CIBMTR Coordinating Center Meeting (Tuesdays) when his or her study is discussed. It is worth repeating that it is very helpful for the PI to participate since they can often address questions as they arise so that the statistical input is most helpful.

**MULTIVARIATE ANALYSIS**

Once the population characteristics and univariate analyses are approved, the data file is transmitted to the Statistical Directors for multivariate and more complex modeling. When completed, results are sent to the PI and Scientific Director who present them on a weekly Coordinating Center conference call. The PI and Scientific Director address comments provided at the meeting and then prepare a memo for circulation to the Writing Committee for comments. The comment period usually lasts two to three weeks. The PI summarizes the comments and prepares another memo for the Writing Committee within three weeks of the close of the comment period. If substantive issues arise, especially related to the study population or analyses, then a conference call involving the PI, Scientific Director, Statistical Director, and MS-level Statistician may need to be convened to plan an approach for addressing the comments.

→ The most successful PIs take advantage of the MS-level Statisticians’ and Statistical Directors’ familiarity with the project and the data to finish their analyses quickly. If extended time passes between each phase of the analysis, the Statisticians will have to re-familiarize themselves with the project and coding. A task that could take a couple of hours immediately after the initial results are completed may take much longer a month or two later (and the Statisticians understandably will be less excited about picking up the project again).

**ABSTRACTS**

Many PIs hope to submit abstracts to national and international meetings. Multivariate analyses must be complete with enough time to allow generation of an abstract. These abstracts must be circulated to the Writing Committee and reviewed by the Coordinating Center faculty and staff prior to submission. Please allow enough time to complete these steps before the abstract
deadline. If the abstract is accepted for oral presentation, the Coordinating Center staff will also need to review the slides, primarily for accuracy but sometimes also to make suggestions for clarity. The CIBMTR has a template for format and background that is required for all presentations.

→ Planning for meeting abstracts for the American Society of Hematology and other meetings happens immediately after the TCT Meetings of ASTCT and CIBMTR. If you would like to submit your abstract to one of these meetings, an early declaration of your intentions and demonstrable effort in moving towards that goal will result in your study getting higher priority.

→ In general, studies are only submitted to one meeting; once submitted in abstract form, priority should be placed on writing and submitting the manuscript.

MANUSCRIPT

Once the analysis is completed, drafting the manuscript is the responsibility of the PI. A draft manuscript is expected within 30 days of the final analysis. The draft is circulated to the Writing Committee and comments are again summarized and incorporated. At least one round and sometimes up to three or more rounds are necessary to create a final manuscript. The CIBMTR will do the final formatting for journal submission, attach all the co-authors’ information (such as institution and contact information), collect any necessary signatures, and submit the paper. The CIBMTR has a long list of acknowledgment for funding sources that are attached to the paper.

→ The initial manuscript draft usually causes the greatest delay in study progress and is the step most directly under control of the PI. The most successful PIs recognize that publishing their study results is a critical measure of success for all involved parties - themselves, the CIBMTR and all the collaborators involved in the study. Working Committee Chairs have the authority to re-assign a study to a different PI if the delay in manuscript preparation is too long (>60 days).

ACCEPTANCE

Unless the paper is accepted on the first submission, it will need to be revised or resubmitted. If comments are straightforward, the PI can prepare a response to reviewers for circulation, along with the revised version. Some comments from reviewers require additional analyses or discussion at a Coordinating Center meeting prior to resubmission. The CIBMTR will assist with manuscript resubmission. Once the paper is accepted, the PI also handles proof review.

→ Unless a study is completed in record time, it will be “in progress” at the next TCT Meetings of ASTCT and CIBMTR. PIs should plan to present a study update at the CIBMTR Working Committee meetings or designate another person on the Writing Committee to do this, as long as the study is active.

→ Any expected or unexpected deviations from the above timetable should be discussed between the PI and Working Committee Leadership. Sometimes unavoidable delays are due to either the CIBMTR or the PI. A proactive plan designed to keep the study moving forward should be devised. Generally, the CIBMTR expects studies to be completed within 18-24 months.
# APPENDIX D: GLOSSARY

<table>
<thead>
<tr>
<th>Abbreviation/Acronym</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>aplastic anemia</td>
</tr>
<tr>
<td>ABO</td>
<td>Landsteiner’s blood grouping system</td>
</tr>
<tr>
<td>ALL</td>
<td>acute lymphoblastic leukemia</td>
</tr>
<tr>
<td>alloHCT</td>
<td>allogeneic hematopoietic cell transplantation</td>
</tr>
<tr>
<td>AML</td>
<td>acute myeloid (myelogenous) leukemia</td>
</tr>
<tr>
<td>APL</td>
<td>acute promyelocytic leukemia</td>
</tr>
<tr>
<td>BMT</td>
<td>bone or blood marrow transplant</td>
</tr>
<tr>
<td>BMT CTN</td>
<td>Blood and Marrow Transplant Clinical Trials Network</td>
</tr>
<tr>
<td>BSI</td>
<td>bacterial bloodstream infections</td>
</tr>
<tr>
<td>CALGB</td>
<td>Cancer and Leukemia Group B (member Alliance for Clinical Trials in Oncology)</td>
</tr>
<tr>
<td>CIBMTR</td>
<td>Center for International Blood and Marrow Transplant Research</td>
</tr>
<tr>
<td>CMV</td>
<td>cytomegalovirus</td>
</tr>
<tr>
<td>CR2</td>
<td>second complete remission</td>
</tr>
<tr>
<td>CRF</td>
<td>Comprehensive Report Form</td>
</tr>
<tr>
<td>CRFS</td>
<td>chronic GVHD-free relapse-free survival</td>
</tr>
<tr>
<td>DLBCL</td>
<td>diffuse large B-cell lymphoma</td>
</tr>
<tr>
<td>DNA</td>
<td>deoxyribonucleic acid</td>
</tr>
<tr>
<td>DRI</td>
<td>disease risk index</td>
</tr>
<tr>
<td>EBMT</td>
<td>European Society for Blood and Marrow Transplantation</td>
</tr>
<tr>
<td>ECOG</td>
<td>Eastern Cooperative Oncology Group</td>
</tr>
<tr>
<td>FACT</td>
<td>Foundation for the Accreditation of Cellular Therapy</td>
</tr>
<tr>
<td>FLT3</td>
<td>FMS like tyrosine kinase 3</td>
</tr>
<tr>
<td>G-CSF</td>
<td>granulocyte colony-stimulating factor</td>
</tr>
<tr>
<td>GRFS</td>
<td>GVHD-free relapse-free survival</td>
</tr>
<tr>
<td>GVHD</td>
<td>graft-versus-host disease</td>
</tr>
<tr>
<td>HCT or HSCT</td>
<td>hematopoietic stem cell transplantation</td>
</tr>
<tr>
<td>JACIE</td>
<td>Joint Accreditation Committee – International Society for Cellular Therapy &amp; European Society for Blood and Marrow Transplantation</td>
</tr>
<tr>
<td>JMML</td>
<td>juvenile myelomonocytic leukemia</td>
</tr>
<tr>
<td>KIR</td>
<td>killer-cell immunoglobulin-like receptors</td>
</tr>
<tr>
<td>KIR3DL1</td>
<td>killer cell immunoglobulin like receptor, three Ig domains and long cytoplasmic tail 1</td>
</tr>
<tr>
<td>MDS</td>
<td>myelodysplastic syndrome</td>
</tr>
<tr>
<td>mtDNA</td>
<td>mitochondrial DNA</td>
</tr>
<tr>
<td>MHC</td>
<td>major histocompatibility complex</td>
</tr>
<tr>
<td>MLL</td>
<td>mixed lineage leukemia</td>
</tr>
<tr>
<td>MS</td>
<td>Master of Science (level statistician)</td>
</tr>
<tr>
<td>NK</td>
<td>natural killer (cell)</td>
</tr>
<tr>
<td>NIH</td>
<td>National Institutes of Health</td>
</tr>
<tr>
<td>NIMA</td>
<td>National Integrated Medical Association</td>
</tr>
<tr>
<td>Abbreviation/Acronym</td>
<td>Meaning</td>
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<td>----------------------</td>
<td>----------------------------------------------</td>
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<tr>
<td>NMDP</td>
<td>National Marrow Donor Program</td>
</tr>
<tr>
<td>PBSCT</td>
<td>peripheral blood stem cell transplantation</td>
</tr>
<tr>
<td>PHIS</td>
<td>Pediatric Health Information System®</td>
</tr>
<tr>
<td>PI</td>
<td>principal investigator</td>
</tr>
<tr>
<td>PMCID</td>
<td>PubMed Central unique identifier</td>
</tr>
<tr>
<td>SWOG</td>
<td>Southwest Oncology Group</td>
</tr>
<tr>
<td>SWOT</td>
<td>strengths, weaknesses, opportunities, threats</td>
</tr>
<tr>
<td>TBI</td>
<td>total body irradiation</td>
</tr>
<tr>
<td>TNFSF4</td>
<td>tumor necrosis factor superfamily member 4</td>
</tr>
<tr>
<td>TRM</td>
<td>transplantation-related mortality</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>VRE</td>
<td>vancomycin-resistant enterococcus</td>
</tr>
<tr>
<td>vs</td>
<td>versus</td>
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</tbody>
</table>