

Beyond Fundamentals of HCT Course Overview

Course Description

This extensive training program provides practitioners with the skills required to care for patients undergoing hematopoietic cell transplantation (HCT), with a focus on pharmacotherapeutic management throughout the transplant process. This two-day course includes continuing pharmacy education, continuing medical education and nursing continuing education, as well as the comprehensive electronic course book containing more than 1,500 pages of rigorously peer-reviewed clinical information.

New to the live course will be panel-based discussions about infectious complications and graft-versus-host disease, as well sessions covering busulfan pharmacokinetics, pediatric HCT, pharmacokinetics, pediatric HCT and immune reconstitution.

The target audience for this course includes pharmacists, physicians (including residents and hematology/oncology fellows), advanced practice providers and nurses.

Learning Objectives

After attending the 2017 Beyond Fundamentals of HCT Training Course, participants should be able to:

1. Describe the advantages and disadvantages of available strategies for stem cell mobilization.
2. Analyze the pharmacologic properties and expected toxicity profiles of medications commonly used in HCT preparative regimens.
3. Describe current challenges in managing nausea and vomiting in patients undergoing HCT; outline appropriate monitoring, prevention, and treatment strategies for these patients.
4. Assess patient eligibility criteria for HCT based on disease-specific transplantation outcomes.
5. Describe strategies available for disease control after HCT.
6. Explain interventions to prevent and treat mucositis and maintain nutritional status before and after HCT.
7. Define sinusoidal obstructive syndrome (SOS) and associated risk factors; outline prevention and treatment strategies for SOS.
8. Summarize common bacterial pathogens and unique approaches to prophylaxis and treatment in patients undergoing HCT.
9. Outline the incidence of invasive fungal infections in HCT patients and describe strategies for prophylaxis, empiric therapy, and treatment of documented fungal infections.
10. Develop a prophylactic and treatment strategy for common viral infections in HCT patients.
11. Evaluate risk factors, prevention strategies, pharmacologic treatment, monitoring guidelines, and supportive care strategies for acute graft-versus-host disease (GVHD).
12. Distinguish risk factors, pathophysiology, prevention and treatment strategies, and long-term complications between acute and chronic GVHD.

13. Identify and develop a treatment strategy for common pulmonary complications associated with HCT.
14. List long-term complications and survivorship challenges experienced by patients undergoing HCT.
15. Describe how population pharmacokinetic models are used to support busulfan therapeutic drug monitoring and achievement of desired outcomes in HCT patients receiving busulfan.
16. Recognize risk factors, newer diagnostic criteria, and appropriate treatment strategies associated with transplant-associated thrombotic microangiopathy (TA-TMA).
17. Outline prevention and treatment strategies for acute and chronic neurologic toxicities caused by either preparative regimens or infectious complications in HCT patients.
18. Explain the impact of immune reconstitution on HCT-related outcomes.
19. Identify key physiologic changes, risk factors, and benefits that support the need for revaccination in patients who have undergone HCT; formulate a vaccination schedule for a post- HCT patient.
20. Evaluate differences in transplant indications and preparative regimen pharmacokinetics and pharmacodynamics when comparing pediatric and adult HCT populations.

Course Organizers

ASBMT

ASBMT is the professional association dedicated to improving the application and success of blood and marrow transplantation and related cellular therapies, through the promotion of research, education, and the highest standards of clinical practice.

ASBMT.org

National Marrow Donor Program® (NMDP)/Be The Match®

NMDP/Be The Match is the global leader in providing a cure to patients with life-threatening blood and marrow cancers like leukemia and lymphoma, as well as other diseases. We manage the world's largest registry of potential marrow donors and cord blood units, connect patients to their donor match for a life-saving marrow or umbilical cord blood transplant and educate health care professionals and patients. We conduct research through our research program, CIBMTR® (Center for International Blood and Marrow Transplant Research®), in collaboration with Medical College of Wisconsin.

BeTheMatch.org

BeTheMatchClinical.org

Continuing Education Information

Verification of Participation and Continuing Education

To receive continuing education credit for this meeting, attendees must attend the sessions in their entirety, participate in the active learning methods offered, and complete the online course evaluation in its entirety. Credits will not be granted retroactively.

This course has been approved for continuing education credits for:

Nurses: The National Marrow Donor Program is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation (COA).

Up to 16 contact hours may be claimed for this educational activity.

Pharmacists: Syntaxx Communications, Inc. is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education. Syntaxx Communications has assigned 16.00 contact hours (1.60 CEUs) of continuing pharmacy education credit for this knowledge- and application-based activity. This 2-day conference will incorporate 22 individual activity sessions that combined will fulfill the 16.00 hours of CE. The target audience for this accredited activity is pharmacists.

To receive continuing pharmacy education credit for the conference, participants must attend the sessions in their entirety and complete the associated program evaluation forms. Additionally, all US-based pharmacists must supply their National Association of Boards of Pharmacy (NABP) electronic Profile Identification (ePID) number and their birth month and day (MM/DD). No credit can or will be issued without this information. To acquire an NABP ePID, go to <http://www.nabp.net> and click on CPE Monitor.



Universal Activity Numbers

0299-9999-17-014-L01-P – 0299-9999-17-035-L01-P

This 2-day conference will be comprised of 22 individual sessions identified by 22 distinct UAN numbers.

Faculty and Agenda

The full list of faculty and 2-day agenda are provided below.

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February 22, 2017 – February 23, 2020

Physicians: This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education through the joint providership of The Medical College of Wisconsin and American Society for Blood and Marrow Transplantation (ASBMT). The Medical College of Wisconsin is accredited by the ACCME to provide continuing medical education for physicians.

AMA Credit Designation Statement:

The Medical College of Wisconsin designates this Live Activity for a maximum of 16.25 *AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



Hours of Participation for Allied Health Care Professionals

The Medical College of Wisconsin designates this activity for up to 16.25 hours of participation for continuing education for allied health professionals.

Program Evaluation Forms

The program evaluation forms may be accessed and completed online. These forms will be sent via email to attendees via a link provided by the National Marrow Donor Program. All participants completing program evaluation forms will receive a certificate of attendance provided by the National Marrow Donor Program.

For problems or issues related to continuing pharmacy education, please contact Amber Lawson at Syntaxx Communications:

E-mail: alawson@syntaxxcomm.com

Phone: 678.740.3580

Mail: 305 W Country Dr, Johns Creek, GA 30097

For any other questions regarding continuing education, please contact Nicole Heino at the National Marrow Donor Program/Be The Match:

E-mail: nheino@nmdp.org

Phone: 763-406-4811

Mail: Be The Match Education & Training, 500 N 5th Street, Minneapolis, 55401

Fees

Early registration fees until October 3, 2016 are \$425 per person and registration fees after the early registration deadline of October 3, 2016 are \$475 per person. No additional fee for the 2-day (February 22, 2016 – February 23, 2017) Beyond Fundamentals of HCT Training Course will be charged to attendees requesting continuing pharmacy education (CPE) credit.

Required Computer Hardware/Software

Registrants are encouraged to bring a computer and print the materials before arriving at the conference. Printers will not be available onsite for conference attendee use. A business center will be available to those willing to pay for copies.

This course will use live polling via the 2017 BMT Tandem Meetings mobile app. Access via a mobile device or using the desktop version.

Search the App Store or Google Play store for BMT TANDEM MEETINGS (CrowdCompass, Inc). Polling can also be accessed via web browser via the link: <https://crowd.cc/bmt2017>.

Disclaimer

The opinions expressed in these presentations are those of the faculty and do not necessarily represent the views of ASBMT, Syntaxx Communications, Inc. or the National Marrow Donor Program (NMDP)/ Be The Match. Professional opinions and interpretations of the scientific literature may vary. Advances in medicine may cause this information to become outdated, invalid or subject to debate. ASBMT, Syntaxx and NMDP/Be The Match assume no responsibility for errors or omissions in these presentations. Participants are advised to check the appropriate medical literature and product information currently provided by the manufacturer of each drug to be administered to verify the dosage, method and duration of administration, or contraindications. The information provided is not a substitute for medical advice. It is the responsibility of the pharmacist or other healthcare professional, relying on their independent experience with and knowledge of their patients, to determine the best treatment for a patient.

Non-Endorsement of Products

The opinions expressed in this program are those of the participating faculty. Approval of this program does not imply endorsement by the program providers or ACPE and ANCC of any commercial products discussed.

Financial Support

This course is made possible through course registration fees and educational grants from Jazz Pharmaceuticals and the National Marrow Donor Program/Be The Match.

Off-Label Product Use

These presentations may contain discussion of off-label, investigational, or unproven use of products other than those approved by the Food and Drug Administration (FDA). The presentations and discussions are not intended to imply recommendation or endorsement of such uses, by ASBMT, Syntaxx Communications and/or the NMDP/Be The Match. It is the responsibility of the pharmacist or other healthcare professional, relying on their independent experience with and knowledge of their patients, to determine the best treatment for a patient.

Beyond Fundamentals of HCT Training Course

Program Agenda – Day 1; February 22, 2017

Time	Topic	Speakers
7:00 AM	Registration/Check-in Opens	
8:00 – 8:15 AM	Welcome – Opening Remarks	Kelly Valla, PharmD, BCOP
8:15 – 9:15 AM	Indications for Hematopoietic Cell Transplantation (HCT)	Teresa Kam, PharmD, BCOP
9:15 – 10:15 AM	Preparative Regimens	Missy Stricherz, PharmD, BCOP
10:15 – 10:30 AM	Break	
10:30 – 11:00 AM	Busulfan PK Review	Janel Long-Boyle, PharmD, PhD
11:00 – 11:30 AM	Sinusoidal Obstruction Syndrome (SOS)	Missy Stricherz, PharmD, BCOP
11:30 – 12:00 PM	Mucositis	Diwura Owolabi, PharmD, BCOP
12:00 – 12:30 PM	Antiemetics	Amber Clemmons, PharmD, BCOP
12:30– 1:15 PM	Lunch	
1:15 – 1:45 PM	Mobilization	Heather Pound, PharmD, BCPS, BCOP
1:45 – 2:45 PM	Infection – Antibacterial	Amber Clemmons, PharmD, BCOP
2:45 – 3:00 PM	Break	
3:00 – 4:00 PM	Infection - Antiviral	Kristin Held, PharmD, BCOP
4:00 – 5:00 PM	Infection - Antifungal	Sarah Perreault, PharmD, BCPS, BCOP
5:00 – 5:30 PM	Infections Discussion Panel	Kristin Held, PharmD, BCOP Sarah Perreault, PharmD, BCPS, BCOP Amber Clemmons, PharmD, BCOP
5:30 PM	Day 1 concludes = 480 minutes = 8 hours ACPE	

Beyond Fundamentals of HCT Training Course

Program Agenda – Day 2; February 23, 2017

Time	Topic	Speakers
8:00 – 9:00 AM	Acute Graft-versus-host disease (aGVHD)	Helen Leather, BPharm
9:00 – 10:00 AM	Chronic Graft-versus-host disease (cGVHD)	Rebecca Gonzalez, PharmD, BCOP
10:00 – 10:30 AM	GVHD panel discussion	Helen Leather, BPharm Rebecca Gonzalez, PharmD, BCOP Missy Stricherz, PharmD, BCOP
10:30 – 10:45 AM	Break	
10:45 – 11:15 AM	Transplant-Associated Thrombotic Microangiopathy (TA- TMA)	Ashley Morris Engemann, PharmD, BCOP, CPP
11:15 – 11:45 AM	Neurological Complications	Sarah Perrault, PharmD, BCPS, BCOP
11:45 – 12:15 PM	Pulmonary Complications	Alex Ganetsky, PharmD, BCOP
12:15 – 1:00 PM	Lunch	
1:00 – 2:00 PM	Pediatrics – Specific considerations	Ashley Teusink-Cross, PharmD, MBA, BCPS
2:00 – 3:00 PM	Immune Reconstitution	Patrick Kiel, PharmD, BCPS, BCOP Robert Nelson, MD
3:00 – 3:15 PM	Break	
3:15 – 4:15 PM	Post HCT Strategies	Kamakshi Rao, PharmD, BCOP, CPP, FASHP
4:15 – 4:45 PM	Vaccinations	Maurice Alexander, PharmD, BCOP, CPP
4:45 – 5:15 PM	Long Term Complications	Valkal Bhatt, PharmD, BCOP, BCPS
5:15 – 5:30 PM	Closing Remarks and Program Evaluation	Kelly Valla, PharmD, BCOP
5:30 PM	Day 2 concludes = 480 minutes = 8 hours ACPE	

Beyond Fundamentals of HCT Course Disclosures

It is the policy of the providers of this program to ensure balance, independence, objectivity, scientific rigor, and content that is free of commercial bias and outside the control of persons or organizations with an economic interest in influencing the content in all of its sponsored educational activities. Therefore, all planning committee members and speakers are required to disclose their relevant financial relationships.

In addition, any or all apparent conflicts of interest to the content of their presentations have been identified and resolved. The audience shall be informed of all relevant financial relationships, including the source of any commercial support for this course.

The presenters, planners, reviewers and authors below disclosed the following pertinent financial relationships:

Maurice Alexander, PharmD, BCOP, CPP	Juno Therapeutics – Advisory board
Amber Clemmons, PharmD, BCOP	Spectrum – Consultant
Alex Ganetsky, PharmD, BCOP	Amgen – Speaker
	Jazz Pharmaceuticals – Consultant
	Juno Therapeutics – Advisory Board
Kelly Hawks, PharmD, BCPS, BCOP	Seattle Genetics – Focus Group
Patrick Kiel, PharmD, BCPS, BCOP	Takeda – Speaker; Celgene – Speaker
Susannah Koontz, PharmD, BCOP	Sigma Tau Pharmaceuticals, Inc. – Consultant
	Shire, Inc. – Speaker
Justin LaPorte, PharmD, BCOP	Astellas – Speaker
Helen Leather, BPharm	Sanofi – Consultant
Jill Leslie, PharmD, BCPS, BCOP	Optum Health – Speaker
Janel Long-Boyle, PharmD, PhD	InSightRX – Scientific Advisor
Ashley Morris Engemann, PharmD, BCOP	Astellas – Advisory board
Robert Nelson, MD	Eonimmune, LLC – Employment
Julianna Roddy, PharmD, BCOP	Juno/Car-T Cells – Advisory board
Ila Saunders, PharmD	Compass Strategic Consulting – Consultant
	Genentech – Advisory board
Melisa Stricherz, PharmD, BCOP	Jazz Pharmaceuticals – Advisory board
Ashley Teusink-Cross, PharmD, MBA, BCPS	Jazz Pharmaceuticals – Speaker

Upon review of these disclosures, it was determined that the above financial relationships either do not relate to the educational assignment or were resolved prior to the program.

The following presenters did not identify any relevant financial relationships:

Valkal Bhatt, PharmD, BCOP, BCPS
 Rebecca Gonzalez, PharmD, BCOP
 Kristin Held, PharmD, BCOP
 Teresa Kam, PharmD, BCOP
 Diwura Owolabi, PharmD, BCOP
 Sarah Perreault, PharmD, BCPS, BCOP
 Heather Pound, PharmD, BCPS, BCOP
 Kamakshi Rao, PharmD, BCOP, CPP, FASHP

The following course reviewers did not identify any relevant financial relationships:

Gabe Bartoo, PharmD, BCOP, BCPS
 Amy Bryk, PharmD, BCOP, BCPS
 K. Leigh Casey, PharmD, BCOP
 Karen Fancher, PharmD, BCOP
 Tatjana Grgic, PharmD, BCOP
 Cathie Jennissen, PharmD, BCOP
 LeAnne Kennedy, PharmD, BCOP
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 Betsy Poon, PharmD, FCCP
 Sarah Schmidt, PharmD, BCPS, BCOP
 Ryan Shaw, PharmD, BCPS, BCOP
 Laura Whited, PharmD, BCOP
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The following authors did not identify any relevant financial relationships:

Elizabeth DiMaggio, PharmD
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 Justin Wasko, PharmD, BCPS

The following planning committee members did not identify any relevant financial relationships:

Terri Davidson, PharmD
 Nicole Heino
 Maureen Knight
 Amber Lawson, PharmD, BCOP
 Lauren Marks
 Julie Marino
 Elizabeth A. Murhpy, EdD, RN
 Stacy Stickney Ferguson, MSW, LICSW
 J. Douglas Rizzo, MD, MS
 Kelly Valla, PharmD, BCOP