## Document Information

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APBMT-COMM-022
ADULT AND PEDIATRIC BLOOD AND MARROW TRANSPLANT PROGRAMS' TRAINING FOR PHYSICIANS

1 PURPOSE
1.1 To ensure attending physician and physician-in-training clinical training, competency, and documentation for management of pediatric and adult blood and marrow transplantation population.

2 INTRODUCTION
2.1 Clinical programs performing pediatric and adult blood and marrow transplantation shall have a transplant team trained in the management of pediatric and adult patients.

3 SCOPE AND RESPONSIBILITIES
3.1 All attending physicians in Adult and Pediatric Blood and Marrow Transplant (APBMT) programs.
3.2 All physicians-in-training participating in training program in the Adult or Pediatric Blood and Marrow Transplant programs.

4 DEFINITIONS/ACRONYMS
4.1 APBMT Adult and Pediatric Blood and Marrow Transplant
4.2 ECP Extracorporeal Photopheresis
4.3 HLA Human Leukocyte Antigen
4.4 HPC Hematopoietic Progenitor Cell
4.5 GVHD Graft Versus Host Disease

5 MATERIALS
5.1 N/A

6 EQUIPMENT
6.1 N/A

7 SAFETY
7.1 N/A

8 PROCEDURE
8.1 Physician Training for Transplant Program Directors and Attending Physicians
8.1.1 All faculty attending physicians have completed at least one year of clinical training in hematopoietic stem cell transplantation including experience in both the outpatient and inpatient settings.
8.2 Other Attending Physicians

8.2.1 The Adult and Pediatric Blood and Marrow Transplant Program is staffed with faculty physicians licensed to practice in North Carolina and are board certified in either adult hematology or adult oncology or pediatric hematology/oncology or allergy/immunology. The attending physicians have received education and training in transplantation medicine and meet all the standards for credentialing at Duke University Medical Center.

8.2.2 Clinical training and competency includes the management of autologous and allogeneic transplant patients.

8.2.3 Clinical Program attending physicians shall participate in a minimum of ten (10) hours of educational activities related to the field of hematopoietic progenitor cell (HPC) transplantation cellular therapy annually.

8.2.4 Clinical Program attending physicians will be assessed for competency on an annual basis.

8.3 Cognitive Skills

8.3.1 Specific competencies include:

8.3.1.1 Indications for hematopoietic progenitor cell transplantation

8.3.1.2 Selection of suitable recipients and preparative regimens

8.3.1.3 Pre-transplant donor evaluation, for hematopoietic progenitor cell adequacy with respect to collection

8.3.1.4 Donor and recipient informed consent

8.3.1.5 Indications for cord blood washing and dilution

8.3.1.6 Administration of preparative regimen

8.3.1.7 Donor screening, selection, evaluation, and management

8.3.1.8 Age-specific donor and recipient care

8.3.1.9 Administration of growth factors for hematopoietic progenitor cell mobilization and for post-transplant hematopoietic cell reconstitution

8.3.1.10 HPC product infusion and patient management

8.3.1.11 Management of neutropenic fever

8.3.1.12 Diagnosis and management of infectious and non-infectious pulmonary complications of transplantation

8.3.1.13 Diagnosis and management of fungal, viral, and bacterial infections

8.3.1.14 Diagnosis and management of veno-occlusive disease/hepatic sinusoidal obstructive syndrome of the liver

8.3.1.15 Management of thrombocytopenia and bleeding

8.3.1.16 Management of hemorrhagic cystitis
8.3.1.17 Management of mucositis, nausea and vomiting
8.3.1.18 Management of pain
8.3.1.19 Management of terminal care patients
8.3.1.20 Documentation and reporting for patients on investigational protocols
8.3.1.21 Diagnosis and management of hematopoietic progenitor cell graft failure

8.4 Each attending physician has clinical training and competency in each of the following areas:

8.4.1 Identification and selection of hematopoietic progenitor cell source, including the use of donor registries
8.4.2 Methodology and implications for human leukocyte antigen (HLA) typing
8.4.3 Administration of blood transfusions and the use of irradiated blood products
8.4.4 Management of patients receiving ABO incompatible hematopoietic progenitor cell products
8.4.5 Diagnosis and management of cytokine release syndrome
8.4.6 Diagnosis and management of immunodeficiencies and opportunistic infections
8.4.7 Diagnosis and management of tumor lysis syndrome and macrophage activation syndrome
8.4.8 Diagnosis and management of acute and chronic graft versus host disease
8.4.9 Diagnosis and management of conditions encountered during and complications of transplant including, but not limited to, cardiac dysfunction, neurologic dysfunction, renal dysfunction, respiratory distress, and both infectious and non-infectious processes.
8.4.10 Evaluation of chimerism
8.4.11 Management of anaphylaxis
8.4.12 Evaluation of post-transplant cellular therapy outcomes
8.4.13 Evaluation of late effects of allo/auto transplants including cellular, pharmacologic, and radiation therapy
8.4.14 Applicable regulations and reporting for adverse events

8.5 Each attending physician has clinical training and competency in each of the following procedures:

8.5.1 Hematopoietic progenitor cell product infusion
8.5.2 Bone marrow harvest procedures

8.6 Each attending physician is knowledgeable of the following procedures:
8.6.1 Hematopoietic progenitor cell processing
8.6.2 Hematopoietic progenitor cell cryopreservation
8.6.3 Washing and diluting of cellular therapy products
8.6.4 Apheresis collection procedures
8.6.5 Administration of cellular therapy products
8.6.6 Extracorporeal photopheresis (ECP) for allogeneic transplants with Graft Versus Host Disease (GVHD)

8.7 Physicians-in-training

8.7.1 Physicians-in-training will be licensed to practice in the jurisdiction of the Clinical Program and shall be limited to a scope of practice within the parameters of their training and licensure and shall be appropriately supervised.

8.7.2 Physicians-in-training will receive specific training and develop competence in transplant-related skills, including those outlined in APBMT-COMM-023 Physician Training for Program Director and Attending Physicians Checklist.

9 RELATED DOCUMENTS/FORMS

9.1 APBMT-COMM-023 Physician Training for Program Director and Attending Physicians Checklist (Current FACT Training and Competency Form)

10 REFERENCES

10.1 Current edition, FACT-JACIE Cellular Accreditation Manual revision History

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<td>07</td>
<td>S. McCollum</td>
<td>-Added Physicians in Training to Responsibility</td>
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<td>-Added Physicians in Training to scope</td>
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<td>-Added Section 8.7 for Physicians in Training for compliance with FACT standards B3.4.1 and B3.4.2 (7th edition).</td>
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**Signature Manifest**

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### APBMT-COMM-022 Adult and Pediatric Blood and Marrow Transplant Programs' Training for Physicians

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