

Bone Marrow Transplantation Program



17

Bone marrow transplantation specialists

10

Immune deficiency and histiocytosis specialists

2,300

Transplants in program's 40+ year history

100

Performs an average of 100 hematopoietic stem cell transplants each year for patients with complex genetic disease and difficult to treat cancers, making it one of the largest programs in the U.S.



Cincinnati Children's is ranked #3 in the nation among all Honor Roll hospitals.

The Bone Marrow Transplantation (BMT) Program at Cincinnati Children's is one of the largest pediatric transplant programs in the United States, providing, on average, transplants to more than 100 children and young adults a year. The program also has the most extensive experience in the nation in the diagnosis and treatment of children with primary immune deficiencies and marrow failure syndromes such as:

- Hemophagocytic lymphohistiocytosis (HLH)
- Combined immune deficiencies
- Wiskott-Aldrich syndrome
- Marrow failure syndromes, such as Fanconi anemia or dyskeratosis congenita

MULTIDISCIPLINARY CLINICS AND DIAGNOSTIC TESTING

The Immune Deficiency and Dysregulation Program evaluates and treats children with immune deficiencies and histiocytic disorders. The team formulates highly specific treatment plans, which can be carried out in Cincinnati or closer to home. Collaboration with the referring physician is always our goal.

The Diagnostic Immunology Laboratory offers more than 45 specialized laboratory tests to assess the function of the immune system, together with genetic testing for diseases leading to malfunction of the immune system. Doctors from around the world submit blood samples for testing. Cincinnati Children's provides the referring physician with an interpretation of the results and plan of treatment.

The Bone Marrow Failure and Fanconi Anemia multidisciplinary clinics, directed by Division Director Stella Davies, MBBS, PhD, offer a combination of specialized genetic testing to diagnose the cause of marrow failure and a unique comprehensive care structure.

Children with marrow failure often need regular review by as many as eight or nine specialists. Clinic coordinators supervise visits, coordinate care among specialists and ensure the treatment plan is complete. When a transplant is needed, the patient can be treated immediately, supported by a team of specialists familiar with the case. Between visits, the doctors and coordinators are available by telephone to assist with any questions or problems that may arise.

The long-term goal of the clinics is to prevent, rather than treat, marrow failure. Dr. Davies and her team work closely with scientists who are studying these diseases. This collaboration has led to novel treatments for the improvement and prevention of marrow failure, currently available through the program.



TREATMENT TEAM

Stella Davies, MBBS, PhD, MRCP
Director, Bone Marrow Transplantation and Immune Deficiency

Jacob (Jack) J.H. Bleesing, MD, PhD

Sharat Chandra, MBBS, MD, MRCPCH

Christopher Dandoy, MD, MSc

Michael S. Grimley, MD

Sonata Jodele, MD

Michael B. Jordan, MD

Pooja Khandelwal, MD

Ruby Khoury, MD

Jane Koo, MD

M. Christa Krupski, MD

Ashish R. Kumar, MD, PhD

Rebecca A. Marsh, MD

Parinda A. Mehta, MD

Kasiani Myers, MD

Anthony Sabulski, MD

YunZu Michele Wang, MD

CONTACT US

For patient referrals and non-urgent consultation during business hours, contact:

Phone: **1-888-636-7997**

www.cincinnatichildrens.org

INTERNATIONALLY RECOGNIZED LEADERS

Division of Bone Marrow Transplantation and Immune Deficiency Faculty

Stella Davies, MBBS, PhD, MRCP, *Director, Bone Marrow Transplantation Program*

Dr. Davies has been active in the field for over 30 years. She has authored over 330 articles on BMT, bone marrow failure syndromes and other genetic disorders.

Jack Bleesing, MD, PhD focuses on clinical investigation of primary immunodeficiency disorders, immuno-reconstitution following blood and marrow transplantation, and diagnostic immunology.

Sharat Chandra, MBBS, MD, MRCPCH cares for children undergoing BMT for primary immune deficiencies and immune dysregulatory disorders. His research includes pharmacokinetics of medications in children undergoing BMT and in developing a personalized pharmacokinetic-guided chemotherapeutic approach to optimize outcomes following BMT.

Christopher Dandoy, MD, MSc cares for children and young adults with malignancy, hemoglobinopathy, or undergoing BMT. His research focuses on patient safety, quality improvement, and identification and treatment of BMT complications.

Michael S. Grimley, MD has interest in the treatment and research of opportunistic viral infections in immunocompromised individuals, and in hematopoietic stem cell transplants for hemoglobinopathies, primary immune deficiencies, and new therapies for prevention of Graft versus Host Disease (GvHD).

Sonata Jodele, MD is an international expert in transplant-associated thrombotic microangiopathy (TMA). Her research efforts focus on developing new and better therapies for TMA. Dr. Jodele led the first prospective TMA biomarker and genetic predisposition studies and serves as a clinical consultant for physicians throughout the world regarding care of complex patients with this disorder.

Michael B. Jordan, MD cares for children with histiocytic disorders, primary immune deficiencies, or who are undergoing BMT. His lab focuses on understanding effector T-cell function, immune regulation, and the pathogenesis of HLH.

Pooja Khandelwal, MD cares for children with hemoglobinopathies, metabolic disorders and primary immune deficiencies. Her research includes novel methods of preventing and predicting acute GvHD including ways of modifying lymphocyte trafficking to target organs in GvHD.

Ruby Khoury, MD cares for children with hematologic malignancies and primary immune deficiencies undergoing BMT. Her research focuses on improving outcomes and minimizing toxicities and complications post BMT.

M. Christa Krupski, MD cares for children with primary immune deficiencies and those undergoing BMT. Her research includes post-transplant complications and pharmacogenomics.

Ashish Kumar, MD, PhD cares for children with histiocytic disorders, primary immune deficiencies, and those undergoing BMT. His lab researches infant leukemia and Langerhans cell histiocytosis (LCH).

Rebecca A. Marsh, MD focuses on understanding the pathogenesis of HLH in patients with XIAP deficiency, developing new diagnostic laboratory assays, and improving the outcomes of allogeneic BMT in patients with primary immune deficiencies.

Parinda A. Mehta, MD cares for children with Fanconi anemia, myelodysplastic syndrome, and those undergoing BMT. Her research includes reduced intensity conditioning for non-malignant disorders, novel targeted chemoprevention for Fanconi anemia, and precision dosing in BMT.

Kasiani Myers, MD is the Co-Director of the North American Shwachman Diamond Syndrome Registry and researches the fields of bone marrow failure and late effects of hematopoietic stem cell transplant.

Anthony Sabulski, MD focuses on understanding the mechanisms and consequences of BK polyomavirus infection and blood vessel injury after BMT. He is also working to identify novel markers and therapies for the diagnosis and prevention of graft rejection.

YunZu Michele Wang, MD cares for children and young adults undergoing BMT. Her research includes both acute and chronic complications after transplant.