This session was co-developed with Immunodeficiency Canada and was planned to achieve scientific integrity, objectivity and balance. This activity is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada and approved by Canadian Society of Allergy and Clinical Immunology.

Overall Learning Objectives

- 1. Review the approach, considerations, and strategies to support families facing a diagnosis of primary immunodeficiency
- 2. Understand the pathophysiology and underlying genetic aberrations leading to primary immunodeficiency
- 3. Recognize the outcomes of a spectrum of primary immunodeficiencies in pediatric and adult cases

Scientific Planning Committee Disclosures:

CMR is Chair of DSMB Kedrion KB070 study, Chair of the Jeffrey Modell Foundation Network of Centers, receives support from Grifols Canada, Takeda Canada, and Pharming. BD reports consulting activities for Pharming and EVERSANA. Other members report no conflicts of interest.

Thursday October 19, 2023

Time	Duration & Interactivity	Topic
2:30 pm	2 min	Introduction & Welcome
		Plenary Session Moderator Brenda Reid, RN, MN, Immunodeficiency Canada, Toronto, ON
2.32 pm	12 min	Brenda Reid, RN, MN¹. Immunodeficiency Canada, Toronto, ON, Canada
		Reflections on over 35 years of providing nursing support to immunodeficiency patients and families
		Learning Objectives: 1. Identify the unique issues that immunodeficient patients and families face 2. Discuss some of the education principles and strategies that promote successful coping for immunodeficient patients and families
	4 min	Q&A
2.48 pm	12 min	Jessica Willett Pachul, RN, MN ¹ . Division of Immunology & Allergy, Department of Paediatrics, Hospital for Sick Children, Toronto, ON, Canada
		Beyond the bloodspot: Parent perspectives following a positive newborn screen for SCID
		Learning Objectives: 1. Understand informational and psychosocial needs expressed by parents of infants that screen positive for SCID on newborn screening 2. Care considerations for clinicians in the early evaluation and diagnostic period 3. Understand the nursing role as a central care provider from retrieval to diagnosis
	4 min	Q&A
3.04 pm	20 min	James A. Anderson, MHA, MA, PhD¹ and Lauren Chad, MDCM, MHSc². ¹Department of Bioethics, Hospital for Sick Children; SickKids Research Institute; Institute for Health Policy Management and Evaluation, University of Toronto; Joint Centre for Bioethics, Toronto, ON, Canada. ²Clinical & Metabolic Genetics, Hospital for Sick Children; Department of Paediatrics, University of Toronto, Toronto, ON, Canada
		Ethical considerations in the diagnosis of inborn errors of immunity in the genomic era
		Learning Objectives: 1. Review the ethical challenges associated with advances in genomic medicine 2. Understand the ethical considerations of genetic testing in the diagnosis of inborn errors of immunity 3. Consider solutions
	5 min	Q&A
3.29 pm	10 min	Break

Thursday October 19, 2023 (cont.)

Time	Duration & Interactivity	Topic
		Lightning Session Moderators Ori Scott, MD, PhD, Hospital for Sick Children, Toronto, ON Adam Byrne, MD, Children's Hospital of Eastern Ontario, Ottawa, ON
3.39 pm	9 min	Keely Loewen ¹ , Shannon Deane ¹ , Elinor Simons ¹ , Patrick Frosk ² , Geoffrey D.E. Cuvelier ³ , Marianne Miguel ¹ , Tamar Rubin ¹ . Section of Clinical Immunology and Allergy, Department of Pediatrics & Child Health, University of Manitoba, Winnipeg, MB, Canada. Department of Biochemistry and Medical Genetics, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, MB, Canada. Manitoba Blood and Marrow Transplant Program, CancerCare Manitoba, University of Manitoba, Winnipeg, MB, Canada.
		Early onset infection susceptibility and excessive inflammation caused by homozygous NCKAP1L variants
		Learning Objectives: 1. Review the clinical features, and pathophysiology of a rare immune-actinopathy with HLH-like features. 2. Consider this diagnosis in Canadian patients presenting with compatible features including combined immunodeficiency, atopy, lymphoproliferation or HLH.
	4 min	Q&A
3.52 pm	9 min	Abdulrahman Al Ghamdi ^{1,2} , Meghan Fraser ³ , Abby Watts-Dickens ³ , Jessica Willett Pachul ¹ , Linda Vong ¹ , Chaim M. Roifman ¹ . Division of Immunology & Allergy, Department of Pediatrics, Hospital for Sick Children and University of Toronto, Toronto, ON, Canada. ² Department of Pediatrics, King Faisal Specialist Hospital and Research Center, Jeddah, Saudi Arabia. ³ Newborn Screening Program, Department of Clinical and Metabolic Genetics, Hospital for Sick Children and University of Toronto, Toronto, ON, Canada.
		Newborn screening for Severe Combined immunodeficiency (SCID): Experience of a single centre over ten years (2013-2023)
		Learning Objectives: 1. Review the basics of newborn screening for SCID 2. Present the data for positive NBS results for the past 10 years in our centre 3. Compare the data with other published reports of NBS for SCID worldwide
	4 min	Q&A
4.05 am	9 min	Khaled Hazzazi ¹ , Nicholas Vonniessen ² , Eisha Ahmed ² , M. Walid Mourad ³ , Donald Vinh ⁴ , Bruce. D. Mazer ^{1,2} . ¹Division of Allergy, Immunology, and Dermatology, Department of Pediatrics, McGill University Health Center-Montreal Children's Hospital, Montreal, QC, Canada, ²Meakins-Christie Laboratories, McGill University, Montreal, QC, Canada, ³Department of Medicine, University de Montreal, Montreal, QC, Canada, ⁴ Division of Infectious Diseases, Department of Medicine, Department of Medical Microbiology, and Infectious Diseases and Immunity in Global Health Program, Research Institute of the McGill University Health Centre, Montreal, QC, Canada.

		Ottawa
		Profiling B-cell Response: Hyperimmunoglobulin M Syndrome due to CD40 Deficiency
	4 min	Learning Objectives: 1. Summarize the clinical manifestations and immunological features of Hyper-IgM syndrome due to CD40 deficiency 2. Describe the B-cell profile of Hyper-IgM syndrome due to CD40 deficiency 3. Outline the pathophysiology of Hyper-IgM syndrome due to CD40 deficiency Q&A
4.18 pm	9 min	Azhar Al Shaqaq ¹ , Marina Sham ¹ , Laura Abrego Fuentes ¹ , Jenny Garkaby ² , Jessica Willett Pachul ¹ , Linda Vong ¹ , Julia Upton ¹ , Vy H.D. Kim ¹ , Chaim M. Roifman ¹ . ¹ Division of Immunology & Allergy, Department of Pediatrics, Hospital for Sick Children and University of Toronto, Toronto, ON, Canada. ² McMaster University, McMaster Children's Hospital, Department of Pediatrics, Division of Rheumatology, Immunology and Allergy, Hamilton, ON, Canada.
		Single-centre experience of COVID-19 clinical course and outcomes in pediatric and adult patients with primary immunodeficiency
		Learning Objectives: 1. To understand the impact of COVID-19 on individuals with PID 2. Analyze the spectrum of symptoms and their duration 3. Assess the influence of COVID-19 vaccination on disease course 4. Investigate clinical outcomes in this patient population
	4 min	Q&A
4.31 pm	9 min	Ariana Mustillo ¹ , Khaled Hazzazi ² , Reza Alizadehfar ² , Bruce Mazer ² , Christine McCusker ² . ¹ Department of Adult Allergy and Immunology, McGill University Health Center, Montreal, Quebec, Canada. ² Department of Pediatric Allergy and Immunology, Montreal Children's Hospital, Montreal, Quebec, Canada.
		A complex case of chronic lymphopenia in a 9-year-old girl
		Learning Objectives: 1. Recognize the role of genetic testing in chronic lymphopenia 2. Discuss the timing of therapy initiation in patients with no infectious history
	4 min	Q&A
4.44 pm	9 min	Payam Salimi ¹ , Tamar Rubin ² , Jennifer Stoddard ³ , Julie Niemela ³ , Hye Sun Kuehn ³ , Sergio Rosenzweig ³ . ¹ Department of Internal Medicine, University of Manitoba, Winnipeg, MB, Canada. ² Section of Clinical Immunology and Allergy, Department of Pediatrics & Child Health, University of Manitoba, Winnipeg, MB, Canada. ³ Immunology Service, Department of Laboratory Medicine, National Institutes of Health (NIH) Clinical Center, Bethesda, Maryland, USA.
		A novel germline IKZF-1 variant leading to functional haploinsufficiency in a patient with common variable immunodeficiency
		Learning Objectives:

- 1. Recognize the clinical significance of IZKF-1 variants in the pathogenesis of immune dysregulation and infection susceptibility
- 2. Classify IZKF-1 variants into three distinct allelic categories based on functional in-vitro analysis

4 min Q&A

4.57 pm	9 min	Narges Baluch ¹ , Julia Upton ¹ . ¹ Division of Pediatric Clinical Immunology and Allergy, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada.
		Humoral immunodeficiency in a 6-year-old patient with complete trisomy 13
		Learning Objectives: 1. Recognize the potential link between humoral immunodeficiency and complete trisomy 13
	4 min	Q&A
5.10 pm	9 min	Angela Hu ¹ , Omar Almatrafi ¹ , Vy H.D. Kim ² , Donna Wall ³ , Rae Brager ¹ . Division of Rheumatology, Immunology and Allergy, Dept. of Pediatrics, McMaster Children's Hospital/McMaster University Medical Centre, Hamilton, ON, Canada. Division of Clinical Immunology and Allergy, Hospital for Sick Children, Toronto, ON, Canada. Division of Haematology/Oncology, Blood and Marrow Transplant/Cellular Therapy Section, Hospital for Sick Children, Toronto, ON, Canada.
		Neurodevelopmental outcomes in two cases of Artemis Deficiency
		Learning Objectives: 1. Explore the relationship between Artemis-SCID, hematopoietic stem cell transplant (HSCT), and potential effects on neurodevelopmental outcomes
	4 min	Q&A
5.23 pm	9 min	Adnan Al Ali ¹ , Bruce Mazer ¹ , Christine McCusker ¹ . Reza Alizadehfar ¹ . ¹ Division of Allergy and Clinical Immunology, Department of Pediatrics, McGill University Health Centre, Montreal, QC, Canada.
		TNFRSF13B variant in Very Early Onset Inflammatory Bowel Disease: a case report
		Learning Objectives: 1. Immune dysregulation in Very Early Onset Inflammatory bowel disease
	4 min	Q&A
5.36 pm		Abstract Winners
		Best abstract – 2 nd place best abstract – 3 rd place best abstract –