



ANNUAL REPORT 2022

Transplantation & Cellular Therapy Program

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[TCT Program Website](#)

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The Ottawa
Hospital

L'Hôpital
d'Ottawa

Our Mission

To provide each transplantation and cellular therapy patient with the world-class care, exceptional service and compassion we would want for our loved ones.

Our Vision

The Ottawa Hospital Transplantation & Cellular Therapy (TCT) Program strives to continuously provide the best care possible to patients with hematologic malignancies and blood or immune disorders who would benefit from stem cell transplantation or CAR T-cell therapy. We develop, share, and apply new knowledge and technology in the delivery of TCT patient care through world-leading research programs in partnership with the Ottawa Hospital Research Institute (OHRI).

Our Footprint

TCT Coordination Unit Office

Centre for Practice Changing Research, 2nd Floor
501 Smyth Rd, Ottawa, ON, K1H 8L6

Inpatient Unit / Day Hospital

TOH General Campus, Main Building, 5th Floor
501 Smyth Rd, Ottawa, ON, K1H 8L6

Outpatient Clinic

Module L, TOH General Campus, 2nd Floor
501 Smyth Rd, Ottawa, ON, K1H 8L6

Cell Collection Facility

Cancer Centre, 2nd Floor, C2148 North Tower
501 Smyth Rd, Ottawa, ON, K1H 8L6

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LETTER FROM THE PROGRAM MEDICAL DIRECTOR

Highlights

I must start with a confession! I did not think we would still be in the midst of Covid-19 and construction on the 5 West inpatient unit! Clearly, the two are linked and remind us of the incredible impact the pandemic continues to have on health care, even into 2023. And yet, as I highlighted last year, the necessity and vitalness of our program mean we have adapted, not slowed, and rallied, not cowered as individuals and as a team to meet the needs of our patients nationwide (truly pan-Canadian). What is resiliency if never tested? The proof is in this report, and I encourage you to take the time to see what we were up to in 2022. As always, there are many things to highlight and only a limited space. Additions and departures have dotted the year.



I am delighted to say that we have added TCT physician Dr. Ram Vasudevan. He joins us from Princess Margaret Hospital as a clinician investigator and will work hard to develop our survivorship program, incorporating virtual care into the mix. More remarkably, Dr. Lothar Huebsch, our program founder, is retiring after over 42 years at TOH. Without Lothar, this program would never have come to be, and many of us would never have become hematologists and transplant physicians.

Our data team has grown and evolved into a solid team as we head into FACT renewal, CIBMTR data audits, and the ongoing transition to a new data system. Hats off to Kalina, Eden, Judith, and Trang. The Program's success depends on high-quality data for funding, quality improvement and planning. Thankfully we are in good hands.

While I can't list every nurse and member of the multidisciplinary unit on 5 West, this has been their year to carry the team as we struggled with space limitations and the impacts of the last few years on staffing capacity. We are elevated by the grace of their compassion, commitment, and expertise.

While last year I offered general thanks to our partners in administration, this year, I want to be specific. My deepest bow to the two people who carry our banner and lead the charge through the administrative corridors on our behalf: Carey Landry and Julie Renaud. Our relationship is the envy of every other program in the province. Thank you.

"...we have adapted, not slowed, and rallied, not cowered as individuals and as a team to meet the needs of our patients nationwide"

Looking Ahead

Now, big predictions (but no bets) for 2023. 5 West construction will end, and we will enjoy the benefits of the long process of expansion renovations. Our program will continue to grow (more slowly) to accommodate the growing number of patients with illnesses we can treat and therapeutic options for them. Think more CAR T Cells, both commercial and research.

Lastly, new leadership, as Dr. Michael Kennah, building on the success of the CAR T program he developed, will become the Clinical Director of the Ottawa Hospital TCT Program. I look forward to supporting Michael in his new role. He has the energy of the young(er) and great ideas to lead us on.

Dr. Christopher Bredeson, MD, MSc, FRCPC FASTCT
 TCT Program Medical Director
 Head, Malignant Hematology, Transplantation and Cellular Therapy
 The Ottawa Hospital
 Professor, University of Ottawa Dept. of Medicine

LETTER FROM THE COLLECTION FACILITY DIRECTOR

Dear colleagues,

This year I am speaking to you from our most recent location, the chemotherapy treatment unit in the Cancer Centre. On behalf of the team, I am thrilled to announce that our next move will be our last! We will be moving into a brand-new unit on the 6th floor of the General Campus near the TCT inpatient unit. We have been assured that design planning will begin sometime this fiscal year, so I hope that by next year we will be reporting from that location.



No matter where we are, we provide exceptional service to our patients and the TCT program. Since its inception in 2015, the collection program at TOH has benefitted from the experienced Canadian Blood Services nursing team that relocated here with the Apheresis program transfer to TOH in 2011. This will be the year many of these veteran nurses start enjoying their well-deserved retirement. It is difficult to say goodbye to the nurses who have been the driving force behind the program's success through their quality work, their determination to succeed with cell collections and their patient-centred approach. Fortunately, we have recruited new nurses who share that vision and will grow to fill those big shoes.

“No matter where we are, we provide exceptional service to our patients and the TCT program”

This year we look forward to participating in an exciting gene therapy trial for patients with sickle cell disease. Our team performs chronic red cell exchanges on many patients with this illness, so it is exciting to be part of a study that may provide a cure. We have seen this in patients with autoimmune diseases where years of plasma exchange was part of their treatment before being cured with an autologous transplant.

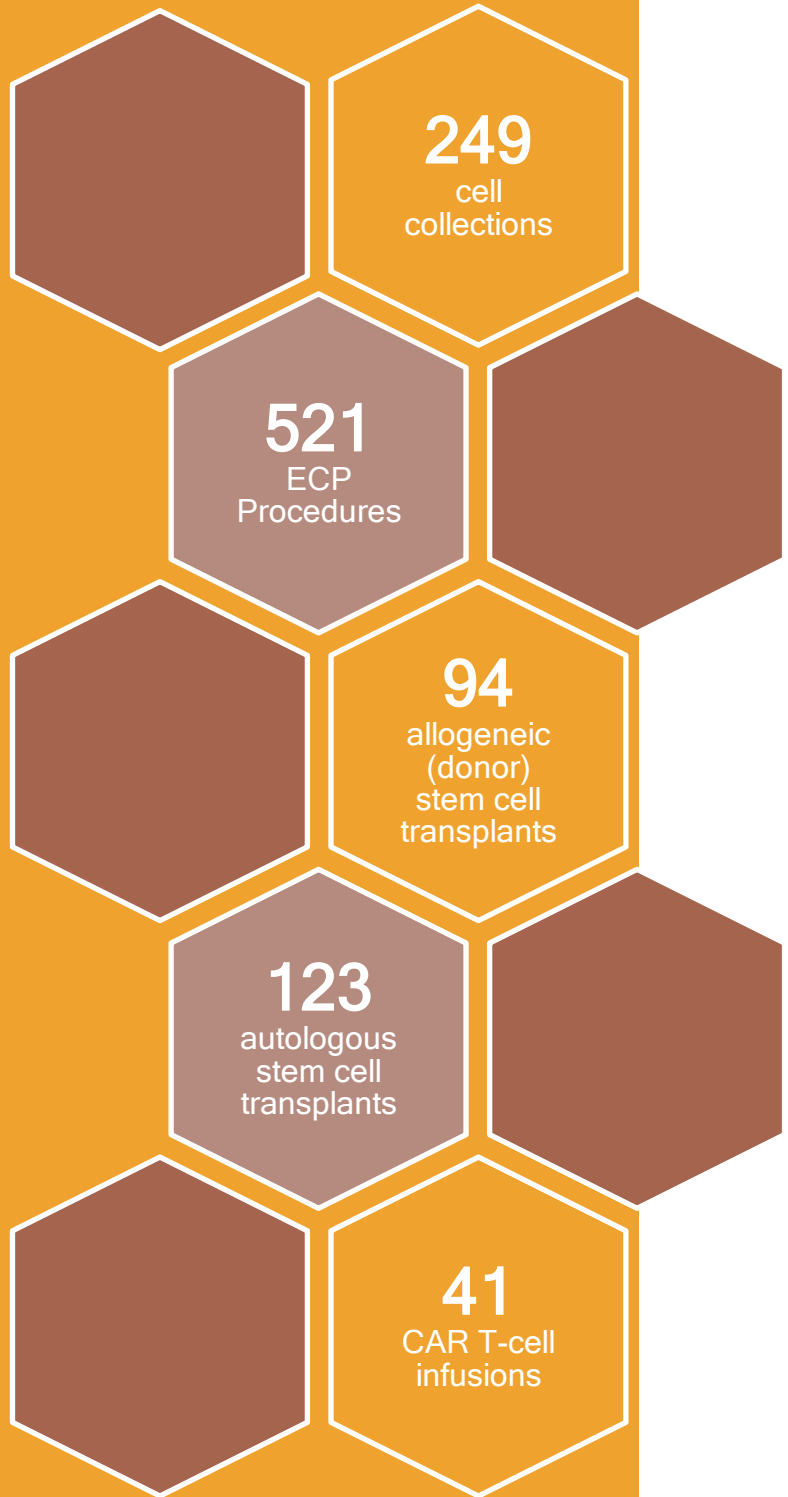
We are eager to collaborate with our clinical and research colleagues in the complex, rapidly evolving field of cellular therapy and look forward to an exciting 2023.

Sheryl McDiarmid, RN, BScN, Med, MBA, CVAA®, CRNI®

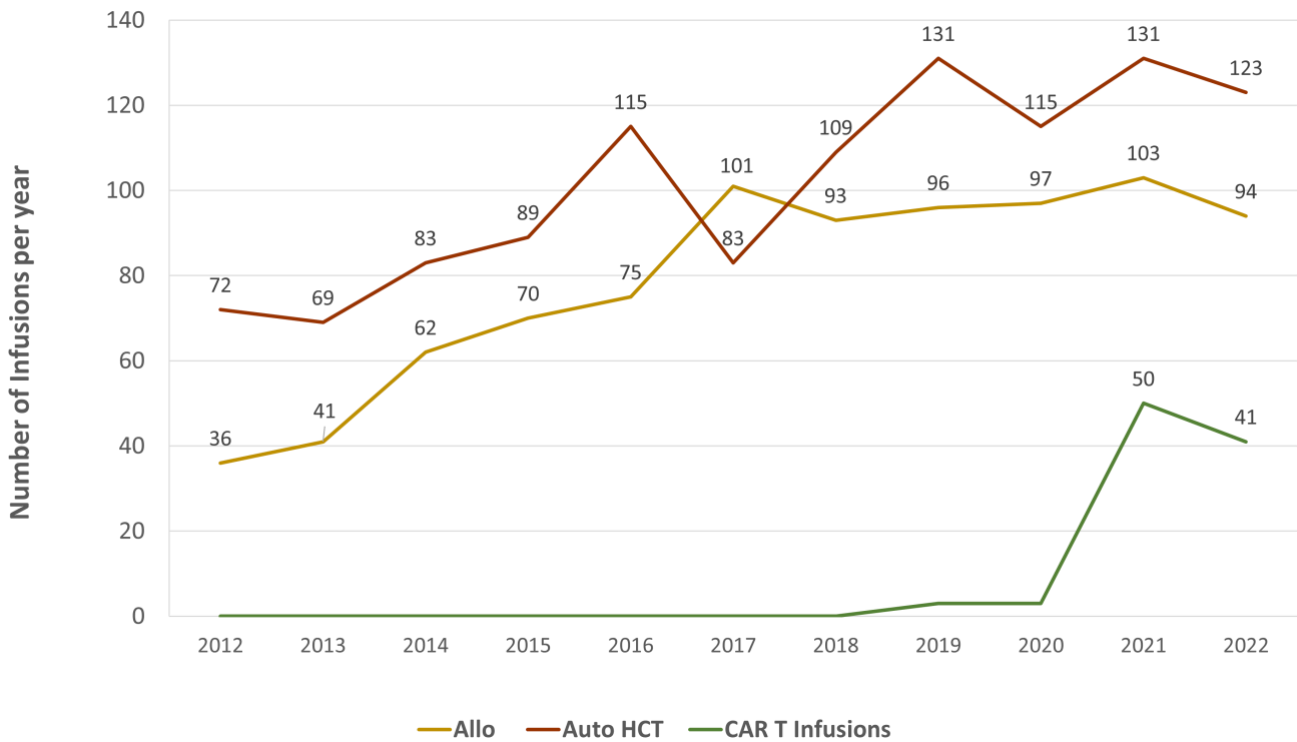
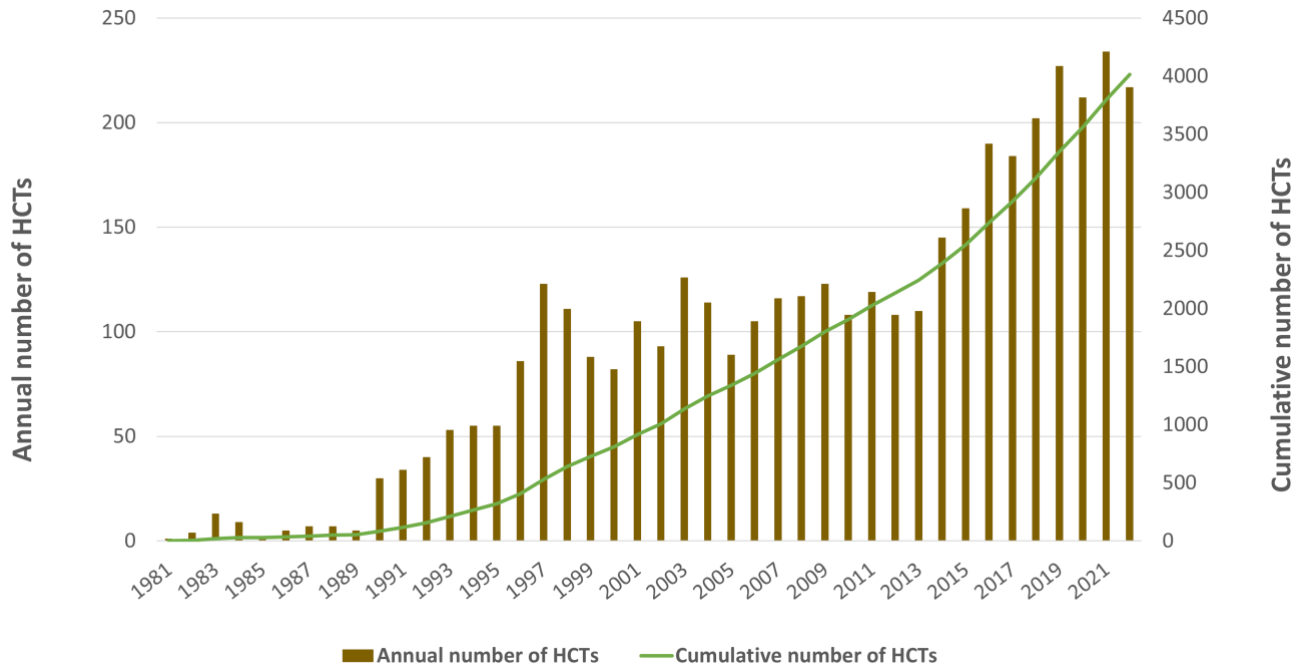
Collection Facility Director / Advanced Practice Nurse, TCT Program

Clinical Manager, Vascular Access & Apheresis

CLINICAL ACTIVITY



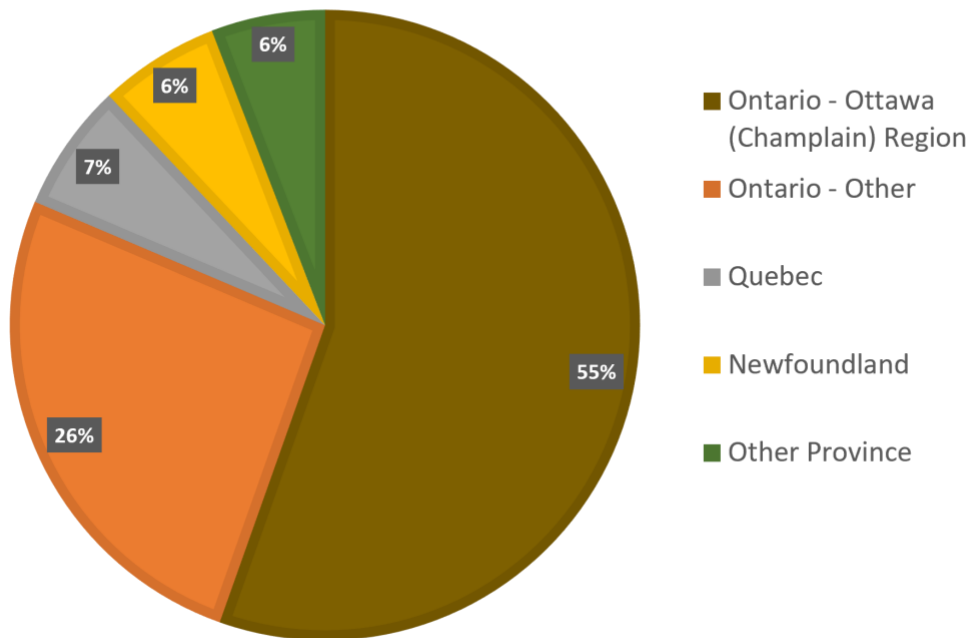
Activity by Year



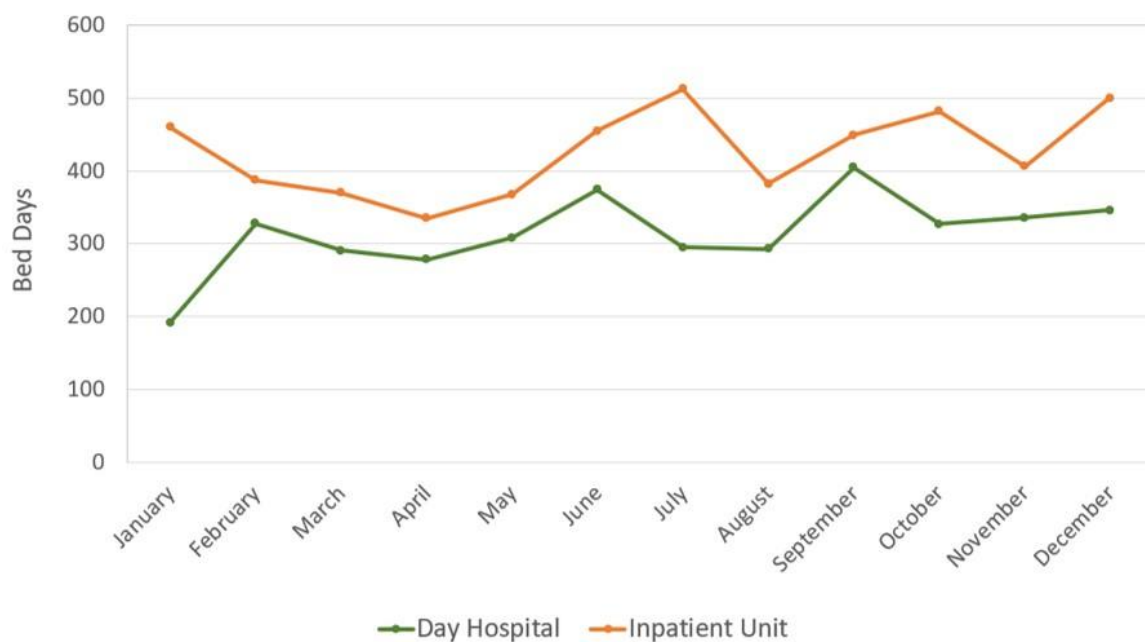
HCT = Hematopoietic (stem) Cell Transplant, where “Allo” is Allogenic (donor) and “Auto” is Autologous (self)

Patient Distribution

Where did TOH TCT patients come from this year?

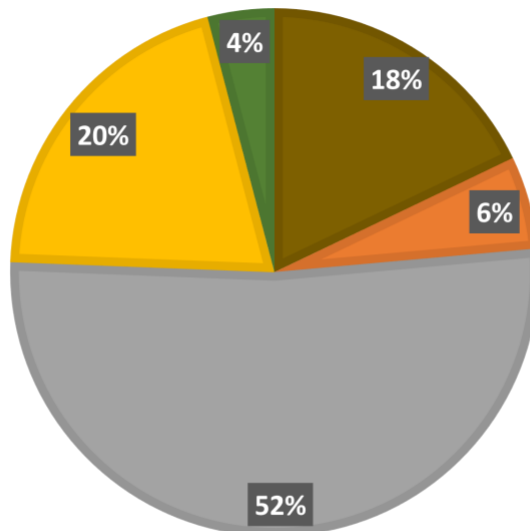


TCT Admission Volumes by Month



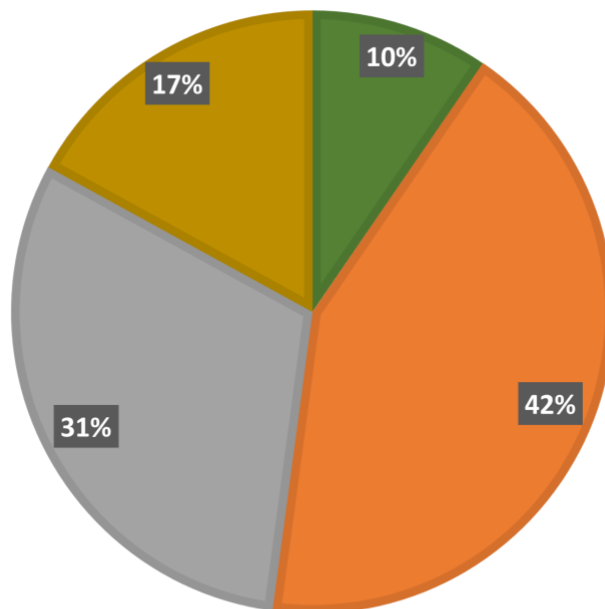
Transplant by Disease Type

AUTOLOGOUS



- Autoimmune Diseases
- Hodgkin's Lymphoma (HL)
- Multiple Myeloma (MM)
- Non-Hodgkin Lymphoma (NHL)
- Other

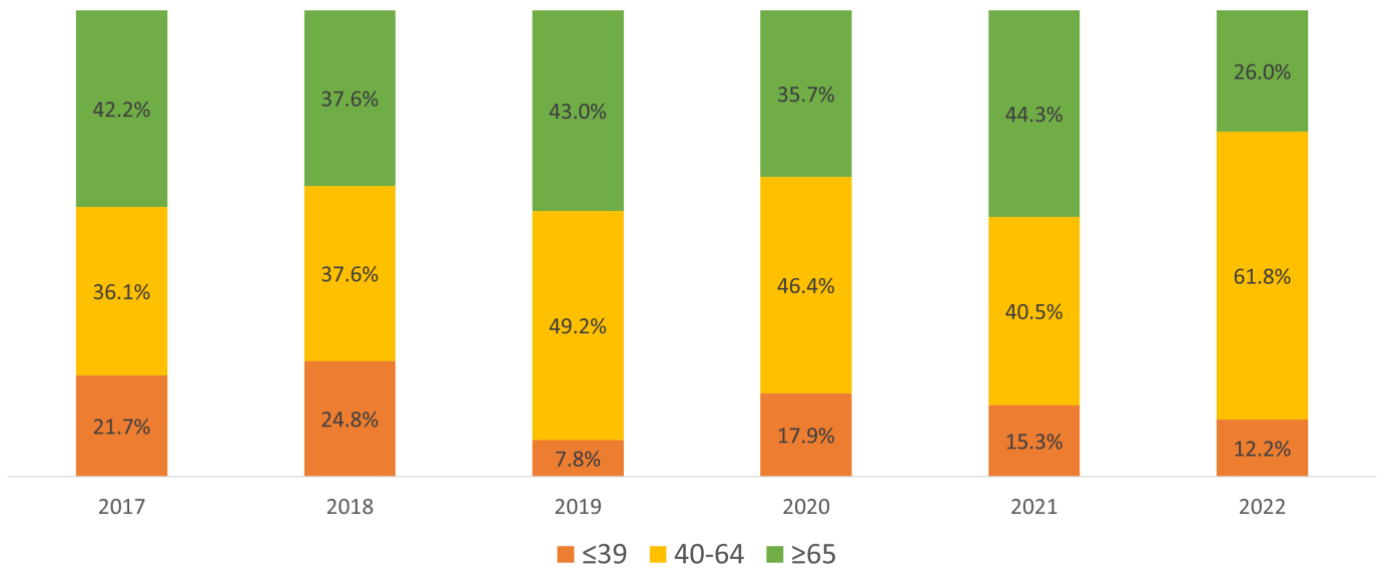
ALLOGENEIC (DONOR)



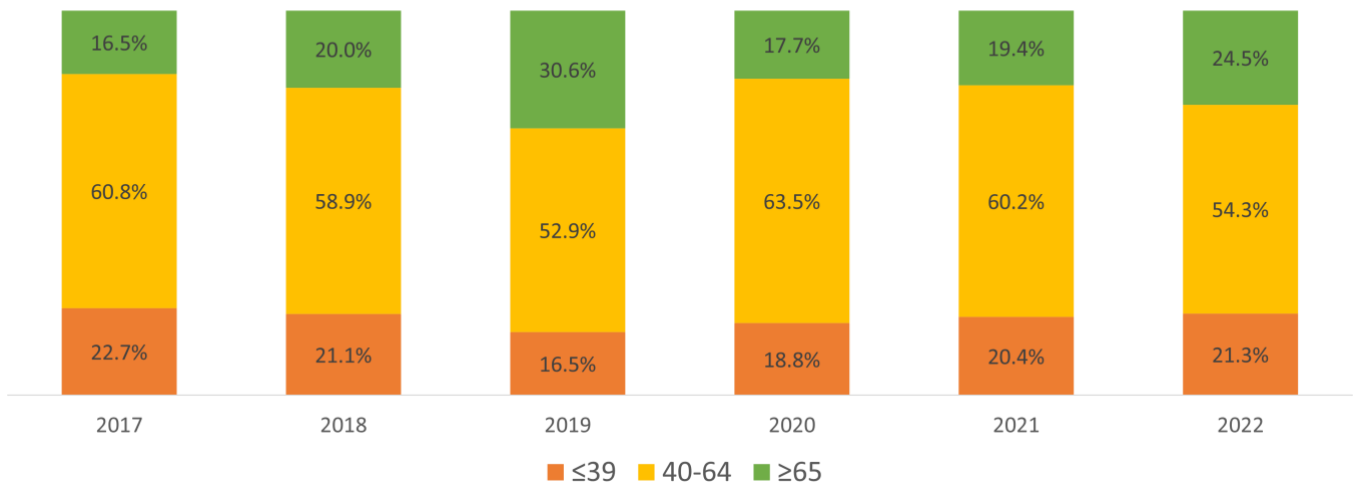
- Acute lymphoblastic leukemia (ALL)
- Acute myelogenous leukemia (AML)
- Myelodysplastic (MDS) / myeloproliferative (MPN) diseases
- Other

Transplant by Age

AUTOLOGOUS



ALLOGENEIC (DONOR)



MEET THE TEAM

Data and Reporting Services

The TCT Data and Reporting Service provides critical ongoing support to the transplant and cellular therapy community. All patients undergoing stem cell transplant or CAR T-cell therapy at TOH are provided the option to consent to participate in data collection for the Center for International Blood and Marrow Transplant Research (CIBMTR). This large-scale patient data registry maintains the information on patient characteristics, experiences, and outcomes to drive research and development to improve transplant success and quality of life. In 2022, the data team completed and submitted 2,013 data forms to CIBMTR. They also provide routine reporting to Cancer Care Ontario for critical funding infrastructure. Their work would not be possible without ongoing support from our Quality Coordinators who assist with process design and data quality assurance via routine audit. Most recently, the team is collaborating with TOH Information Services and WellSky® to launch a brand-new Biotherapies Clinic database for TCT data, with go-live anticipated in Summer 2023.



Clockwise, from bottom left: Matt G., Carolina C., Eden D., Trang D., Judith C., Kalina A., Christine A., & Jeremie S.

"I'm very appreciative of the support and engagement provided by the data team, particularly Kalina, towards the Biotherapies Clinic implementation project. Her commitment, quality of work, and diligence towards this project has helped us progress to where we are today. It is such a pleasure to work with Kalina and this team!"

- Archana G., IS Dept. Senior Business Analyst

Getting to Know...

Tania Baird, *5W Manager*

Q: What motivated you to pursue a career in oncology and hematology leadership?

A: I'd like to think that hematology found me. I was at a place in my career where I was looking for a change. A change that would allow me to expand my leadership knowledge. The opportunity to apply for the 5 West Clinical Manager presented itself. Upon further research into hematology and more specifically Cellular Transplant I realized that it was a fascinating world that I wanted to be a part of. I applied and was successful, three years later and the fascination still remains!

Q: Coming out of the Covid-19 pandemic, what is your next biggest priority to tackle?

A: I started my leadership journey on 5West right as the pandemic hit. The 5 West team has only known me during a time of crisis. We have seen many changes over the past 3 years and now that we are coming out on the other side of the pandemic my biggest priority is to re-direct my team to focus on not what the pandemic has taken from us but the power it has left us to learn and change.

Q: Is there anything the 5 West staff would be surprised to learn about you?

A: I tend to be pretty transparent with my team and share fun facts about myself. There are a few things that might surprise them.

1-I started my career at the Ottawa Hospital in housekeeping

2-I once delivered a baby by myself! Just the mom & I

3-When I was a child, I wanted to be a baseball player for the Toronto Blue Jays

Q: What part of your job do you find most rewarding?

A: Without hesitation, the most rewarding part of my job is the people. I have the absolute privilege of working with an extraordinary team. People who are passionate about what they do. People who are committed to providing the best care possible. I also have the honour of working with patients and families as they navigate through what is possibly the most terrifying and vulnerable time in their lives. I have the ability to advocate for patients around their specific care goals. I can ensure that quality care is being provided and If I can do anything to help comfort and support people through their transplant journey, that to me is the most rewarding thing.



Getting to Know...

Dr. Ram Vasudevan Nampoothiri,

hematologist

Q: What drew you to the field of hematology and stem cell transplantation?

A: Advances in cancer treatment was something that always inspired me - and somehow stem cell transplantation and immune effector cell therapy just fit the category. The people in the hematology department, everywhere I worked, were so amazing, so knowledgeable, and had a great role in my choosing this career.

Q: What attracted you to The Ottawa Hospital?

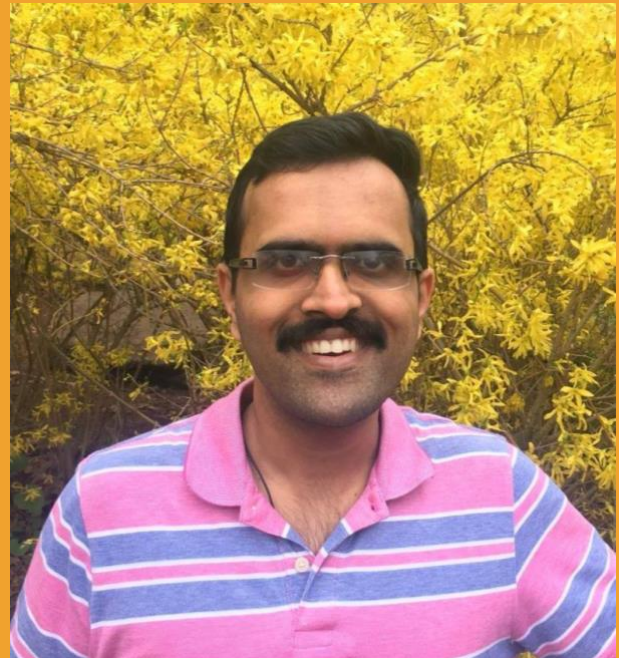
A: I have been to Ottawa as a tourist and we somehow felt a connection and liked the place immediately. I met the Malignant Hematology team at TOH at various conferences and they struck me as a group who were knowledgeable, straightforward, cool, and fun. So here we are... :-)

Q: Post-transplant survivorship and quality of life research is a growing area of interest. Where in the future do you see opportunities for improvement?

A: Sometimes specialty (including malignant hematology) physicians have a tendency to view their patients through the lens of their own specialty and hence tend to miss the bigger picture of the patient. Unfortunately, patients who are long-term out of transplant sometimes fall into this category. Their malignancy is cured but they have a lot of other medical and social problems that affect them, which they feel are not addressed adequately. With an increasing number of transplants every year in TOH and across the world - these issues need to be addressed as a priority. A good proportion of transplants that happen in TOH are from out of town but inside our catchment area. Hence, there needs to be better education for referring providers from the other hospitals as well as better coordination/communication to deal with issues and monitoring post-transplant. All of this will be part of a comprehensive post-transplant survivorship program which we are aiming to implement soon.

Q: What are your favorite hobbies when you are not busy at work?

A: I like to think I am a really good cook - I picked up ice skating after coming to Canada (still a novice though) - I used to do crochet before our daughter came and started biting the hooks 😊 My wife (who is reading this over my shoulder) is insisting that I add that I am a news junkie. So adding that too. 😊



Module L Outpatient Clinic

Module L is the first place the patients come when considering a stem cell transplant or CAR T-cell therapy. Here, they undergo a complete medical evaluation to make sure the therapy is right for them. They usually receive their treatment protocol here, which is specific to their disease type and individual needs. Once they've adequately recovered from receiving their chemotherapy and cell product, they return to Module L for ongoing follow-up care. Module L's seamless operation is made possible by two clerks and seven clinic nurses, including two who have specialized in the field of stem cell transplant, who also provide ongoing pre- and post-transplant phone support and coordination assistance. Module L nurses also diligently perform post-transplant revaccinations to help keep patients healthy.

In 2022...

483

In-Person Consults

3473

In-Person Follow-ups

525

Vaccine appointments

21

Group Patient Education Sessions

91%

Patient Education Participation Rate



L-R: Jill P., Jen H., Caroline C., Becky G., & Marc L.

“Jen has been so helpful with my vaccines. Every time I come, she is always kind and organized.”

- Lisa M., Transplant Survivor

FROM STEM CELL PROCESSING TO PATIENT – LISA’S STORY

Lisa Martin is no stranger to stem cells. A lab technologist by training, she is the site manager for the Canadian Blood Services Cord Blood Bank and Stem Cell Manufacturing Laboratory in Ottawa. Her lab processes and freezes stem cells for the treatment of many life-threatening conditions such as blood cancers and immune diseases. Part of Lisa’s role includes meeting monthly with TOH’s TCT program leadership to discuss stem cell freezing requirements and quality improvement initiatives. During her career, she has learned a lot about the various types of blood cancers that stem cells can treat and the lifesaving gift they can provide.



In 2016, Lisa started having double vision. Doctors discovered a mass behind her left eye, and a biopsy revealed it to be diffuse large B-cell lymphoma. Although this diagnosis came as a surprise, Lisa knew more than most people what to expect in the coming months. And she knew she was in good hands. “Every single patient that comes through this door is going to have the same excellent, compassionate care,” she says. After a consult with Dr. Isabelle Bence-Bruckler and six rounds of the therapy ‘R-CHOP,’ her cancer was in remission. But in early 2022, abnormal bloodwork prompted additional tests, and a CT scan confirmed her fears that her lymphoma had returned. She received some chemotherapy and moved on to the next step in her treatment pathway: autologous stem cell transplantation. This is a procedure where a patient’s own stem cells are collected, processed (in Lisa’s case, by her colleagues at Canadian Blood Services), stored and infused after chemotherapy to replenish the patient’s bone marrow. She was nervous about getting a PICC line for the transplant. But Ben, the vascular access nurse, provided immediate reassurance and inserted the device with expert ease and gentleness. From pharmacists to inpatient nurses, Lisa cannot say enough good things. “They explained everything in detail. They treated every patient with so much care, it’s unbelievable. No matter how you felt, the nurses made every

day a little brighter”. But the highlight of her experience was the package that arrived accompanying her stem cells. Her colleagues at Canadian Blood Services had included a special gift bag of personalized goodies and well-wishes to show their support.

“The nurses made every day a little brighter”



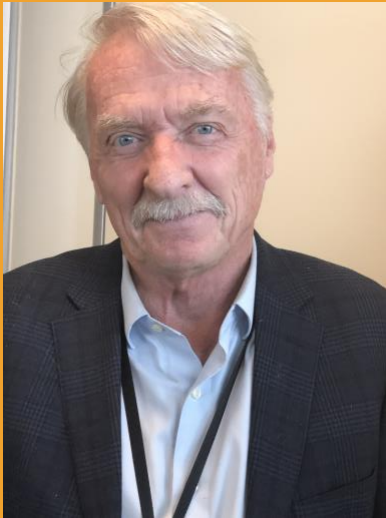
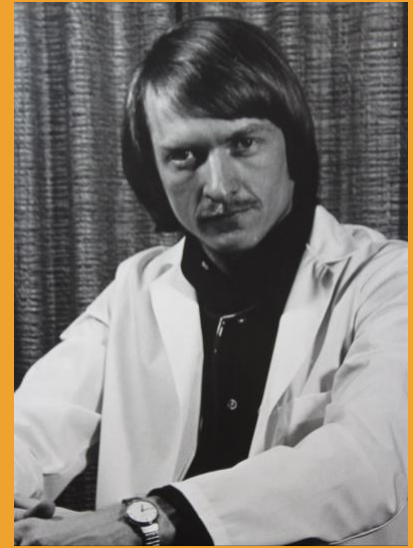
When asked what she appreciated most about the process, Lisa did not hesitate. “The outpatient day hospital program. I wish every transplant program in the world had this available. I was able to go home, eat my own food, sleep in my own bed. It was wonderful”. Lisa credits this option for making the intensive chemotherapy treatment more tolerable.

Now, at nine months post-transplant, Lisa is cancer free and readjusting to everyday life. She’s currently transitioning from remote to on-site work at the Canadian Blood Services laboratory, where her career has new meaning resulting from her unique perspective as a transplant survivor.

END OF AN ERA – THE LEGACY OF DR. HUEBSCH

Dr. Lothar B. Huebsch, the man who brought stem cell transplantation to Ottawa, is retiring in March 2023 after 42 years with the Division of Hematology. Numerous accolades and teaching awards peppered his career at TOH. However, within the TCT program, he was famously known for his efforts in building the team to excel and achieve milestones in the stem cell transplantation community.

Dr. Huebsch maintained an openness to the realm of stem cell transplant possibilities to further the scope of benefit to patients, whether it was pushing the boundaries of patient age, disease type, or treatment setting. To quote collection facility director Sheryl McDiarmid, “He has never said no to anyone with ideas”. In



2001 he supported Dr. Harry Atkins's clinical trial proposal for TOH to be a pioneering institution for autologous stem cell transplant for the treatment of multiple sclerosis. This work, combined with optimization of cell selection techniques in collaboration with the Canadian Blood Services, culminated in a ground-breaking [Lancet publication](#), where long-term control of this devastating relapsing disease became a reality. When other transplant centres hesitated to venture out of the inpatient domain of care, Dr. Huebsch worked diligently to explore the then-novel concept that [outpatient transplant was safe and feasible](#). This paradigm shift afforded tremendous gains to patient health and well-being during transplant. These few impactful examples come from a long list of clinical innovations and accomplishments championed by Dr. Huebsch during his tenure as a hematologist and transplant specialist.

While Dr. Huebsch is responsible for many clinical advancements in his field, he will be most remembered at TOH for his people leadership. A fervent supporter of continuing education, Dr. Huebsch wholeheartedly endorsed funding for staff to attend conferences, even going so far as to rent houses on location to maximize attendance. He also founded TOH's 'Heme Day,' held for many years, where clinicians could learn from colleagues and collaborators about the research, innovation, and best practices being applied directly within the Division of Hematology. The biannual TCT Survivors Picnic, another Dr. Huebsch origination, brought the TOH community of stem cell recipients, caregivers, and hospital staff together to celebrate recovery and success in the face of adversity, complete with hotdogs, music, and good company.

Although he is retiring, he's certainly not resting. Dr. Huebsch's next endeavour will bring his wisdom across the world. He will be working with the Sheikhha Salwa Al-Sabah Stem Cell Research Centre in Kuwait to assist with program infrastructure development and efforts to obtain FACT-Jacie accreditation so that this emerging institution can create a world-class stem cell transplant centre much like the one Dr. Huebsch cultivated at TOH years before, from an ocean away.

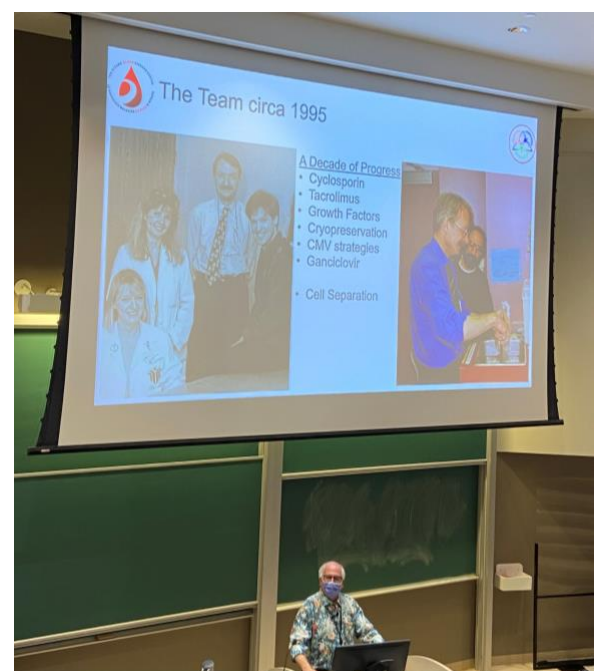


L-R: Dr. L.B. Huebsch, Dr. M. Rodger, & Dr. M. Carrier, circa 1999

PROGRAM ACTIVITIES

Hematology Symposium Celebrates the TCT Program

On October 27 and November 4th, the Division of Hematology held a two-day symposium celebrating the Ottawa Blood Disease Centre's 10-year anniversary showcasing clinical, educational, and research excellence. The TCT program played an integral part of the agenda, which was coordinated by Dr. L.B. Huebsch to coincide with the 40th anniversary of the program formerly known as 'BMT'. The audience of clinicians, administrators and support staff was treated to a historical review of stem cell transplantation at TOH from program inception to current day by transplant physician Dr. H. Atkins (Bottom Right). The presentations also included overviews of the quality management program (Dr. C. Cieniak, Bottom Left), the stem cell collection service (S. McDiarmid), CAR T-cell therapy research and clinical trials (Dr. M. Kennah, Right), and the role of Cancer Care Ontario in complex malignant hematology service provision (Dr. C. Bredeson).



2022 Highlights

- We welcomed new transplant physicians **Dr. Ashish Masurekar** and **Dr. Ram Vasudevan Nampoothiri**.
- We gained approval from Gilead Sciences Canada and Cancer Care Ontario to be a certified provider of the CAR T-cell therapy **Tecartus™**, used for treating mantle cell lymphoma.
- We created a **CAR T-cell educational video** for improved patient experience.
- We kicked off the **WellSky® Biotherapies Clinic** database implementation project for enhanced TCT data management within the program.

What's Next?

- **Dr. Michael Kennah** has been named the new TOH TCT Clinical Program and Collection Facility Director, effective April 1st, 2023.
- **Dr. Natasha Kekre** and her team received \$4 Million in funding for expansion of the **Canadian-led Immunotherapies in Cancer** program. This grant comes from Canada's largest-ever investment in clinical trials, the ACT Consortium, funded by the CIHR Clinical Trials Fund (CTF) as part of Canada's Biomanufacturing and Life Sciences Strategy (BLSS). This trial will continue to offer hope to TOH patients with otherwise terminal blood cancers.
- The TCT quality program is actively involved in review and preparation for 2023 on-site **audits and accreditations** by the Center for International Research in Blood and Marrow Transplant (CIBMTR), the Foundation for Accreditation in Cellular Therapy (FACT), and Accreditation Canada.
- The **5 West/TCT Day Hospital Unit** expansion for increased transplantation and cellular therapy service capacity is ongoing, with completion expected in Summer 2023.
- TOH has approved space for a permanent **Apheresis Suite** at the General Campus, 6th floor, for program stability and increased cell collection capacity. Construction will tentatively commence in January 2024.

FEATURED PUBLICATIONS

1. **D Allan**, M Green, G Morris, J Weiss, N Dibdin, D Mercer, & M Seffel. (2022). Demand and usage of unrelated donor products for allogeneic haematopoietic cell transplantation during the COVID-19 pandemic: A Canadian Blood Services Stem Cell Registry analysis. *Vox Sang*, 117(9), 1121-1125. <https://doi.org/10.1111/vox.13294>
2. AJM Bailey, AM Kirkham, M Monaghan, R Shorr, **CA Buchan**, **C Bredeson**, & **DS Allan**. (2022). A portrait of SARS-CoV-2 infection in patients undergoing hematopoietic cell transplantation: A systematic review of the literature. *Curr Oncol*, 29(1), 337-349. <https://doi.org/10.3390/curroncol29010030>
3. AJM Bailey, HB Maganti, W Cheng, R Shorr, **CA Buchan**, & **DS Allan**. (2023). Humoral and cellular response of transplant recipients to a third dose of mRNA SARS-CoV-2 vaccine: A systematic review and meta-analysis. *Transplantation*, 107(1), 204-215. <https://doi.org/10.1097/TP.0000000000004386>
4. DJ Bastin, J Quizi, MA Kennedy, **N Kekre**, & RC Auer. (2022). Current challenges in the manufacture of clinical-grade autologous whole cell vaccines for hematological malignancies. *Cytotherapy*, 24(10), 979-989. <https://doi.org/10.1016/j.jcyt.2022.03.010>
5. B Beland, C Hahn, K Jamani, S Chhibber, C White, **H Atkins**, & J Storek (2023). Autologous hematopoietic stem cell transplant for the treatment of refractory myasthenia gravis with anti-muscle specific kinase antibodies. *Muscle Nerve*, 67(2), 154-157. <https://doi.org/10.1002/mus.27772>
6. JA Berard, MS Freedman, RA Marrie, JJ Marriott, **HL Atkins**, D Szwajcer, DW Courtman, S Thebault, & LAS Walker. (2022). Mesenchymal stem cell therapy and cognition in MS: Preliminary findings from a phase II clinical trial. *Mult Scler Relat Disord*, 61, 103779. <https://doi.org/10.1016/j.msard.2022.103779>
7. TM Campbell, FJ Dilworth, **DS Allan**, & G Trudel. (2022). The hunt is on! In pursuit of the ideal stem cell population for cartilage regeneration. *Front Bioeng Biotechnol*, 10, 866148. <https://doi.org/10.3389/fbioe.2022.866148>
8. J Candelieri, AM Kirkham, R Shorr, G Morris, P Berardi, MD Seffel, & **DS Allan**. (2022). Systematic scoping review of studies reporting unexpected donor-derived abnormalities from recipients of allogeneic hematopoietic cell transplantation: A proposed framework for donor disclosure: Donor-derived abnormalities in allogeneic HCT. *Transplant Cell Ther*, 28(7), 408.e1-408.e8. <https://doi.org/10.1016/j.jtct.2022.03.029>
9. C Cipkar, K Srishti, K Thavorn, & **N Kekre**. (2022). Optimal timing of allogeneic stem cell transplantation for primary myelofibrosis. *Transplant Cell Ther*, 28(4), 189-194. <https://doi.org/10.1016/j.jtct.2022.01.018>
10. M Elsayy, JC Chavez, I Avivi, JF Larouche, L Wannesson, K Cwynarski, K Osman, Davison, JD Rudzki, S Dahiya, K Dorritie, Jaglowski, J Radford, F Morschhauser, D Cunningham, A Martin Garcia-Sancho, D Tzachanis, ML Ulrickson, R Karmali, **N Kekre**, C Thieblemont, G Enblad, P Dreger, R Malladi, N Joshi, WJ Wang, CT Solem, JT Snider, P Cheng, C To, & MJ Kersten. (2022). Patient-reported outcomes in ZUMA-7, a phase 3 study of axicabtagene ciloleucel in second-line large B-cell lymphoma. *Blood*, 140(21), 2248-2260. <https://doi.org/10.1182/blood.2022015478>
11. WB Fingrut, AC Chen, M Green, JT Weiss, D Mercer, & **D Allan**. (2022). Development and evaluation of checklists to support the recruitment of committed hematopoietic stem cell donors. *Transfusion*, 62(4), 887-896. <https://doi.org/10.1111/trf.16827>
12. G Fox, DA Fergusson, M Foster, T Hawrysh, S Dupont DJ Walling, M Irwin, **N Kekre**, J Pousseau, G Castillo, J Montroy, & MM Lalu. (2022). Building a platform for meaningful patient partnership to accelerate "bench-to-bedside" translation of promising new therapies. *Healthc Q*, 24(SP), 74-79. <https://doi.org/10.12927/hcq.2022.26770>

13. **J Fulcher, AP Blanchard, C Bredeson, & C van Walraven.** (2023). Primary preventative care of hematopoietic stem cell transplantation survivors: Time to educate and empower recipients and providers. *Transplant Cell Ther*, 29(2), 131.e1-131.e6.
<https://doi.org/10.1016/j.itct.2022.10.028>
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