TSANZ
The Transplantation Society of Australia and New Zealand

Early Career Network Quarterly Newsletter

Volume 1
June 2026

Catch up on the latest in Australia & New Zealand transplant research, learn from experts and hear from your early career network colleagues.

Contents:

We acknowledge the Traditional Custodians of the lands on which we work, live, and gather. We pay our respects to Elders past, present, and emerging, and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

If you are would like to become a member of the Early Career Network, please email tsanz@tsanz.com.au.

Welcome to the inaugural edition of the TSANZ Early Career Network (ECN) Newsletter!

The Early Career Network is a vibrant community of early career clinicians, scientists, and allied health professionals in the field of transplantation within Australia and New Zealand.

These newsletters will keep you updated with the latest in the transplantation field, feature informative interviews with early career members and senior transplant experts and provide details of interesting opportunities and developments.

Enjoy!

Maddi Taylor and Craig Coorey, TSANZ Early Career Committee (ECC)

Q&A

Dr Matthew Tunbridge

Dr Matthew Tunbridge is an early career nephrologist at the Princess Alexandra Hospital in Brisbane. He is completing a PhD focussed on vaccination in transplantation through Adelaide University and is broadly interested in translational transplant immunology research.

Dr Tunbridge, you've recently submitted your PhD after working at Duke University, can you tell us what was the focus of your thesis?

I was lucky enough to receive approval from Adelaide University to complete a period of study away at Duke University during my PhD studies which allowed me to expand the scope of my work. The focus is on using vaccination in transplantation to enhance antiviral immunity, as well as using "negative vaccination" in preclinical models for donor-specific immunosuppression and tolerance.

Given your research has been quite heavily lab based, how does one transition this knowledge into your day to day as a clinician?

Bench science can provide important context to clinical work. For me, it has helped me to really begin to understand the nuances of transplant immunology in a way that I did not adequately appreciate before. Few things in biology are absolute, and wide biological variation in experiments helped me to cement the idea that pathologies and treatment responses are not homogenous. Learning how to do assays myself, such as a flow crossmatch or Luminex, has also made me better at understanding the clinical tests. Laboratory work has also opened up a new world of preclinical studies I did not know anything about – it feels like looking into the future and gives me great hope for new and better treatments for our patients.

With regards to cell tolerance and organ transplantation where do you think we are going next and what are some of the tactics you can see being used in human trials over the next 10 years?

I hope to see a lot more options for immunomodulatory therapies emerging in transplantation. We are seeing a new wave of costimulatory blockade therapies progress from preclinical studies to early phase clinical trials. These may prove important facilitatory therapies – in combination with genetic editing technologies, cell therapies and other immunomodulatory agents we may see more acceptable xenotransplantation regimens emerging. Chimeric Antigen Receptor (CAR)-T cells for antigenspecific tolerization and CD19 CAR-T cells in desensitisation regimens are under active investigation, we may also see the expanded use of CAR technology in other cell types such as regulatory macrophages. There are some great Australian transplant immunology labs doing work in these spaces.

What advice would you give to clinicians considering a laboratorybased component to their research career? Where is a good place to start?

Laboratory work can be very daunting but also very rewarding. While it can be slower to produce results, that can also lend itself to part-time longitudinal research projects that integrate well with clinical commitments. We are lucky to have great transplant laboratories around the country that all have active projects and opportunities. I would suggest searching your local University pages for transplant researchers and contacting them about your interests. People interested in doing laboratory research either for interest or as part of a research higher degree are always welcomed.

What field of transplantation are you in and at what stage of your career are you?

ECN Member Snapshot Dr Amy Prosser

I'm an early career postdoctoral research fellow at the University of Western Australia. I work in the Immunology and Transplantation Laboratory of Clinical Professor Michaela Lucas in solid organ transplantation basic science research. My research focus is the immunology underlying the post-transplant immune response, graft rejection, and graft tolerance using mouse models of liver, heart, and kidney transplantation and human transplant samples.

How did you first become involved in the field of transplantation and how has your career journey been so far?

I worked as a research assistant for some years in various fields of immunology before joining my current group in 2015. After working as a research assistant with the group for a year, I signed up to do a PhD, which I completed in 2022. I had no real personal connection with transplantation, but I love understanding how our immune system works. Transplantation is one of the biggest immunological challenges, and it's fascinating that people can survive by relying on someone else's organ.

My career journey has had its ups and downs, like most I think. PhDs can be tough going, but I was fortunate to have very enthusiastic and invested supervisors and a great team to work with. Research can be very challenging with dependency on grant funding, but I also find my work interesting and rewarding, and there's nothing I'd rather do.

What is one highlight experience so far while working in transplant?

At the Australian and New Zealand Society for Immunology conference in 2025 I had the opportunity to present on the importance of including consumers in basic research. I presented with one of our transplant consumers and hearing the impact that we have on the lives of not only people who receive transplants, but those who donate organs and the families of all involved really invigorated my passion for the work I do.

Do you have any tips or advice for early career members in transplantation, particularly useful resources or opportunities you have encountered?

Apply for as many committees, grants, fellowships, and conference presentations as you can. This has been a huge help for me in expanding my network and significant opportunities have arisen from knowing certain people and people knowing who I am and what I do. It really is who you know that helps you get ahead!

Research Buzz

With hundreds of articles released monthly it can be hard to know where to start reading. Here are a few papers we found quite interesting to read in the last few months:

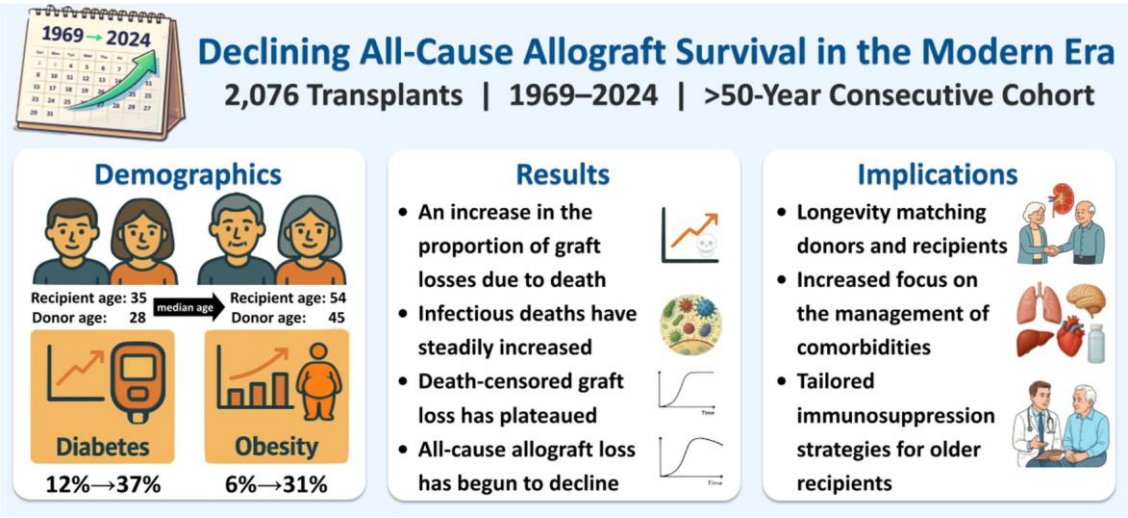
1: Post Kidney Transplant Thrombotic microangiopathy: A narrative review of the challenges and opportunities.

Dr Attieh and colleagues provide a concise summary of thrombotic microangiopathy (TMA) post kidney transplant discussing both recurrence of TMA as well as de novo TMA in the context of the multiple complement activating triggers that occur early post transplant.
It provides a summary of histopathological features and the ongoing development of Banff criteria. The contributors to post transplant TMA are discussed broadly with focus on antibody mediated rejection, ischaemiareperfusion injury and a balanced view on the role of calcineurin inhibitors as a causative agent.

Complement blockade as treatment for post transplant TMA is discussed with some studies reporting promising outcomes for short courses in these cases triggered by transplant.

Attieh, Rose Mary; Kuruvada, Krishna Mohita; Alatta, Lina; Jhaveri, Kenar D. Post Kidney Transplant Thrombotic Microangiopathy: A Narrative Review of the Challenges and Opportunities. Kidney360 ():10.34067/KID.0000001231, April 20, 2026. | DOI: 10.34067/KID.0000001231

2: Declining Allcause Allograft survival in the modern era: a 50-year Single Center Consecutive Cohort Study



This was an interesting retrospective cohort from Canada which looked at survival outcomes for their transplant population over the last 50 years. A number of their findings ring true for some of the trends we are also seeing in Australia. Both recipient and donor age have increased over time, as has recipient dialysis vintage.

Importantly, when cause of death was analysed between the transplant eras there was a notable increase in infectious deaths (21% of all deaths in the 1969–1987 era) even when covid-19 was excluded (21% 1969-1987 vs 35% 2018-2024, $P = 0.007$). Ultimately,

they found that death censored graft survival rates were plateauing and that all cause graft survival gains had reversed in the contemporary era and this is likely attributable to older donors and recipients with higher pretransplant comorbidity burdens.

Wiebe, Elijah; Balshaw, Robert; Chartier, Kaleb; Gibson, Ian W; Ho, Julie; Shaw, Jamie; Karpinski, Martin; Trachtenberg, Aaron; Pochinco MLT, Denise; Goldberg, Aviva; Birk, Patricia; Pinsk, Maury; Rush, David N; Nickerson, Peter W; Wiebe, Chris M; Declining All-cause Allograft Survival in the Modern era: A 50-y Single-center Consecutive Cohort Study. Transplantation ():10.1097/ TP.0000000000005740, May 04, 2026

3: Valganciclovir therapeutic drug monitoring-guided dosing for cytomegalovirus prophylaxis in lung transplant patients

This paper by Katada and colleagues from Kyoto University Hospital explored the outcomes prospectively of 45 patients undergoing therapeutic drug monitoring (TDM) and dose adjustment of valganciclovir for cytomegalovirus (CMV) prophylaxis compared to historic control cases of 42 patients on standard dosing valganciclovir.

In the control group trough ganciclovir levels were measured every 2 weeks with renally adjusted prophylaxis dosing. In the prospective cohort dose adjustments were made based on the trough level (aiming 300800ng/mL).

An important difference between groups was the availability of letermovir prophylaxis. In the control group (2021-2023) if there was severe leukopenia they ceased prophylaxis as no alternative was available, compared to the intervention arm (2023-2025) they had access to letermovir as replacement in cases of severe leukopenia. Patients who transitioned to letermovir were censored.

Rates of leukopenia were significantly lower in the TDM arm with a hazard ratio (HR) 0.303 [95% CI 0.126-0.730]. Grade ≥3 neutropenia was lower in the TDM-guided group than in the control group (risk ratio, 0.117 [95% CI, 0.015–0.894]).

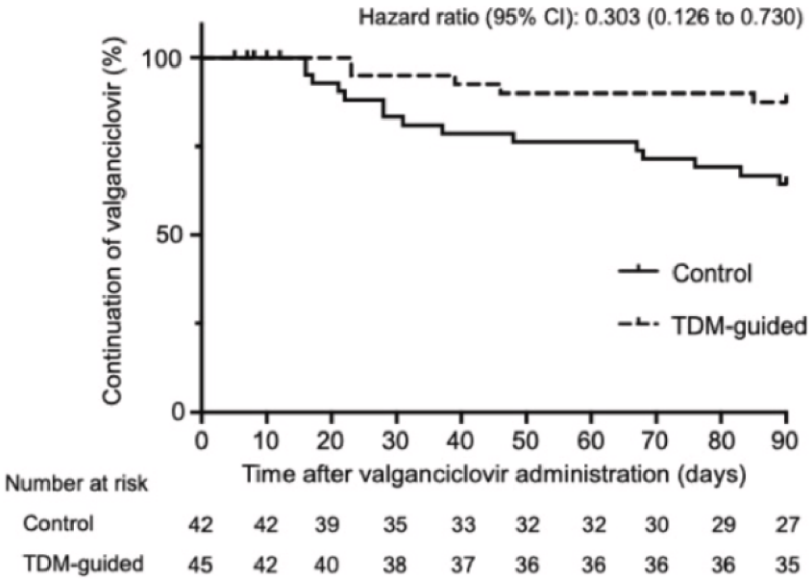


Fig. 2 | Percentage of patients in each group who continued valganciclovir therapy.

There was a single case of CMV viraemia in the control cohort during the prophylaxis period and no cases in the therapeutic drug monitoring group. After valganciclovir discontinuation three patients in the control group compared to one in the TDM group developed viraemia.

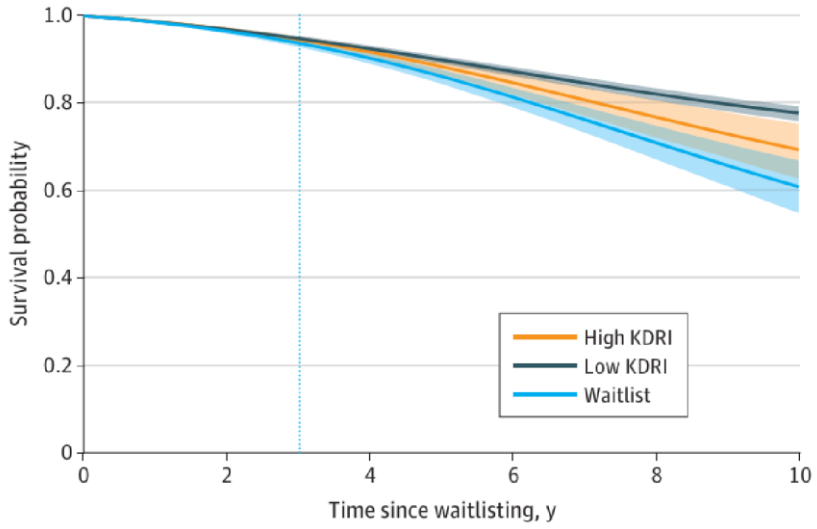
This was a small study and follow up was limited to around 3 months due to patients returning to their home centres. However, this study does provide valuable insights into how dose adjustment based on ganciclovir trough levels can help reduce leukopenia and have similar efficacy for CMV prevention. It would be helpful to expand this to larger cohorts, other organ recipient groups and with more protocolised dose adjustments.

Katada Y, Umemura K, Nakagawa S, Katsube Y, Ishimura H, Kojima Y, Hirai M, Kajiwara M, Endo H, Hira D, Tsuda M, Tanaka S, Nakajima D, Nagao M, Terada T. Valganciclovir therapeutic drug monitoring-guided dosing for cytomegalovirus prophylaxis in lung transplant patients. J Infect Chemother. 2026 Jun;32(6):102986. doi: 10.1016/j.jiac.2026.102986. Epub 2026 May 6. PMID: 42102918.

4: Survival benefits of Deceased Donor Kidney Transplant vs Waitlisting

This paper utilises ANZDATA to perform target trial emulation with clone-censor-weighting and explore whether patients who had a high Kidney Donor Risk Index (KDRI) (>90%) or low KDRI (<90%) or remained on the waitlist had better survival at 10 years. This involved cloning or duplicating the data of patients who died on the wait list, remained un-transplanted on the waitlist or were transplanted with various KDRI kidney transplants. Each clone then went into one of the three treatment arms (waitlisting, low KDRI or high KDRI) and the time point at which that patient experienced that outcome the other clones were censored out. This allowed for the elimination of immortal time bias.

Figure 2. Survival Curves for the Cloned Treatment Groups



They examined data from 8011 patients on the ANZDATA registry, where 56.5% received a low KDRI kidney, 6.1% received a high KDRI kidney and 37.4% were not transplanted within the 3-year window. The estimated 10 year all-cause mortality showed some modest differences between groups:

Low KDRI group: 22.4% (95% CI, 20.8% - 24.2%)

High KDRI group: 30.6% (95% CI, 24.8% - 37.2%)

Waitlisted but not transplanted group: 39.1% (95% CI, 33.2% 45.1%)

In the subgroup analysis there was evidence that for patients under 60 they did not have a mortality benefit if they received a high KDRI kidney, where as survival benefit accumulated over 10 years for patients over 60 was 16.3 months with a low KDRI kidney and 10.1 months with a high KDRI kidney.

Lin Zhu, Armando Teixeira-Pinto, Ryan Gately, Farzaneh Boroumand, K. Shuvo Bakar, Dharshana Sabanayagam, Fiona Stanaway, Wai Lim, Germaine Wong. (2025). Survival Benefits of Deceased Donor Kidney Transplant vs Waitlisting. JAMA Internal Medicine. 185. 1471-1478. 10.1001/jamainternmed.2025.5624.

Upcoming events and opportunities

- TSANZ 3RD Mini Grand Round: 23rd July 4pm: Breathing room for antibodies: when your immune system needs an eviction notice with Dr Fiona Husdon and Prof Greg Snell https://tsanz.com.au/
- 2nd round TSANZ Travel Grants in 2026 can support eligible TSANZ members to attend TTS 2026 Sydney | 20–23 September. https://tsanz.com.au/awardsandfellowships/travel-awards.htm
- Applications for NHMRC Investigator Grants - Minimum data due date 1 July 2026 and applications close 29 July 2026 https://www.nhmrc.gov.au/funding/find-funding/investigator-grants

- Volunteer or attend the Roving Scientist Program for National Science Week 2026, Beaker Street Festival | Tasmania 6-17 August 2026: https://www.beakerstreet.com.au
- International Congress of The Transplantation Society in Sydney over Sept 20–23 2026: https://tts2026.org
- Volunteer or attend the Australian Transplant Games | Tasmania 26 September - 3 October 2026: https://australiantransplantgames.com