WL1

Long-term outcomes of ABO-incompatible kidney transplantation: A 20-year single-centre cohort study

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

Introduction: ABO - incompatible (ABOi) kidney transplantation has become an established option to expand the living donor pool. Registry outcomes are generally favourable; however, detailed analyses from single-centre cohort studies can provide granular insights. We present a long-term review of our centre's experience in ABOi transplantation from 2004 to 2024.
Methods: A retrospective observational cohort study of all patients who underwent ABOi kidney transplantation at our institution. Data on baseline demographics, desensitisation protocol (a rituximab-based protocol in combination with antibody removal therapies was used until 2010, followed by a subsequent change to a non-rituximab protocol), patient and graft survival, rejection, and infection rates were analysed. Survival analyses were performed using the Kaplan-Meier method/estimator and multivariable Cox proportional hazards models to identify independent predictors of graft survival. Infection rates between the rituximab and non-rituximab desensitisation protocol groups were compared using the Mann-Whitney U test.
Results: 89 consecutive ABOi recipients are reported. The median age was 47 years (IQR, 35–57), 54% were female and 37% pre-emptive recipients. Overall death-censored graft survival rates at 1, 5, and 10 years were 93%, 88%, and 82%, respectively. Similarly, patient survival rates at 1, 5, and 10 years were 98%, 91%, and 85%, respectively, with no significant difference observed between the Rituximab and non-Rituximab based protocol groups ($p = 0.769$). On multivariable analysis, the occurrence of rejection was the strongest predictor of graft failure HR = 3.2, 95% CI 1.1–9.3, $p = 0.030$). Older recipient age was associated with a lower risk of graft failure (HR 0. 95, 95% CI 0. 91–0. 99, $p = 0.017$). The type of desensitisation protocol used did not significantly impact patient or graft survival. Infection rates per person-year were significantly higher in patients treated with a rituximab-based desensitisation protocol compared to a non-rituximab protocol (mean rank 55.2 vs 36.6, $p< 0.001$).
Conclusion: Our single-centre experience demonstrates good long-term outcomes in ABOi kidney transplantation. Acute rejection remains the most significant risk factor for graft loss. While the desensitisation protocol did not influence graft survival, the use of rituximab was associated with a significantly increased risk of infection. This finding supports our centre's protocol evolution and highlights the need for a tailored approach to immunosuppression, balancing the risk of rejection against the risk of infection in the ABOi transplant population.

WL2

Twenty-year trends of living kidney donation at a single UK centre: donor relationships, altruism and policy context

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Introduction

Living donor kidney transplantation (LDKT) offers superior outcomes over deceased donor transplantation, making it the best renal replacement therapy option. It helps shorten the gap between patients on the transplant waiting list and available kidney donors. Since the Human Tissue Act 2004 and subsequent 2012 legal guidance clarified donor categories, including non-directed altruistic (NDAD), and directed altruistic donation (DAD), the landscape of LDKT has evolved alongside growing public awareness and ethical scrutiny. The 2015 British Transplantation Society (BTS) guidance on DAD aimed to standardise evaluation, discourage commercial influence, and promote NDAD in the absence of a pre-existing relationship. However, long-term trends in living donation at the local level remain underreported. Here, we examined 20-year patterns in donor relationships, altruism, and demographics in a single centre in the Northwest of England.

Methods

A retrospective evaluation of service was conducted. A total of 422 living donor kidney transplants were recorded between January 2005 and April. Donors were included if the recipient was on the transplant list of the regional transplant centre. Data were categorised by donor–recipient relationship: first-degree relative, spouse/partner, extended family, other (non-relative), or altruistic. Altruistic donations were further sub-classified into NDAD or DAD. Donor demographics, sex, ethnicity were recorded. Analysis was conducted descriptively using Microsoft Excel and SPSS. Annual trends were examined over the 20-year period, focusing on patterns before and after the 2015 BTS guidance. While the legal framework for non-directed and directed altruistic donations was introduced in 2012, the 2015 guidance provided the first set of comprehensive clinical recommendations for its implementation. As such, 2015 was selected as the comparative point to assess real-world changes in practice.

Results

No altruistic donations were recorded between 2005 and 2009. Altruistic donations began in 2010, peaking at 26.3% of annual donations in 2013. The average percentage was 13.0% before July 2015, rising to 17.4% afterward, but fluctuations occurred without consistent increase after 2015. Most cases (63 out of 64) were from NDAD. Only one DAD was reported (in 2021) during the 20-year period, despite a legal framework established in 2012 allowing DADs without coercion or reward. Figure 1 illustrates annual trends in total and altruistic donations. Across the full 20-year cohort, most living donors were White, with a female predominance of 52.1%. Donations primarily came from first-degree relatives, spouses or partners, with a modest rise in paired and pooled donations in recent years. Table 1 presents a summary of donor types and associated demographic characteristics.

Discussion

Over the past two decades, living kidney donation has followed a steady but evolving trajectory. Altruistic donation has remained a small yet consistent part of overall activity. Although the 2012 law permitted both NDAD and DAD, the latter has seen minimal uptake, with NDAD continuing as the predominant altruistic route. Demographic and regional patterns observed may reflect local referral practices, public awareness, or cultural attitudes toward donation. These findings underscore the importance of ongoing efforts to support diverse forms of living donation and ensure ethical and equitable access for all transplant candidates.

WL3

Outcomes of patents with a failed renal transplant at a non-transplant renal centre 2020–2025

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Introduction:
Patients with failing kidney transplants face a disproportionate burden of morbidity and mortality compared with those with native kidney failure. Outcomes following graft loss are poor, with rapid progression to renal replacement therapy (RRT) and limited survival thereafter. Although graft survival has improved due to advances in immunosuppression and post-transplantion care, the absolute number of patients entering the RRT cohort following transplant failure continues to rise. Current British Transplant Society (BTS) guidance for managing failing kidney transplants is based largely on low-quality evidence,[1] and published data suggest wide variation in clinical practice between UK centres.[2] In this context, we evaluated the outcomes of patients with incident transplant failure at our non-transplant renal centre over a 5-year period.

Methods:
We conducted a retrospective review of all renal transplant recipients who experienced graft failure between April 2020 and April 2025. Data were extracted from electronic case records and laboratory databases. Demographic characteristics, transplant details, dialysis initiation, immunosuppression strategy, biopsy history, and outcomes including mortality and cause of death were analysed. Our centre does not perform kidney transplantation but provides long-term follow-up for approximately 850 transplant recipients.

Results:
Seventy cases of transplant failure were identified. The median patient age at last follow-up was 60 years, with a mean age at transplantation of 44 years; 54% were male and 87% were of white ethnicity. Seventy-one percent of grafts were from deceased donors. The median allograft survival before transition to RRT was 9.5 ± 0.7 years.

During the terminal decline phase, 83% of patients were reviewed by the Kidney Choices Team (KCT) for modality counselling. One patient underwent re-transplantation, four initiated peritoneal dialysis, and the remainder commenced haemodialysis. Among haemodialysis starters, 20% began with a temporary central venous catheter, 35% with a tunnelled line, and 45% with an arteriovenous fistula, reflecting variable preparedness for dialysis access. In the 12 months prior to graft failure, 39% underwent a transplant biopsy.

By April 2025, 41% of patients had died. The median survival from RRT initiation to death was 200 ± 100 days. Documented causes of death were infection (n=9, predominantly pneumonia and intra-abdominal sepsis), cardiovascular disease (n=8), mesenteric ischaemia (n=1), aortic dissection (n=1), cirrhosis (n=1), intracerebral bleed (n=1), metastatic malignancy (n=1), and unknown causes (n=7).

Discussion/Conclusion:
This study highlights the significant challenges faced by patients with failing kidney transplants. Despite improvements in graft survival, mortality following graft loss remains alarmingly high, with more than two-fifths of patients dying within a median of just over six months of RRT initiation. The low re-transplantation rate, together with the high proportion of patients initiating dialysis via central venous catheters, suggests opportunities for earlier planning, improved access creation, and more structured immunosuppression strategies. Infection and cardiovascular disease were the leading

causes of death, reinforcing the need for proactive infection prevention, cardiovascular risk management, and timely transition pathways.

References

1. British Transplant Society. UK guideline for the management of the patient with a failing kidney transplant.

2. Gittus M et al. Management of patients with a failing kidney transplant. doi: 10.1093/ndt/gfad084

WL4

Assessment of factors affecting pre-emptive kidney transplantation: one year retrospective single centre review

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

Introduction

Pre-emptive kidney transplantation (PKT), undertaken before dialysis, offers superior patient and graft survival compared with post-dialysis transplantation (Fishbane and Nair, 2018; NKF, 2017). Despite this, PKT is underutilised, with only 12% of UK patients receiving it (NHSBT, 2022). Pre-emptive listing, defined as registration on the transplant waiting list before the need for dialysis, remains variable: the UK average was 45% in 2020/21, whilst we achieved 53% (NHSBT, 2022).

Barriers to timely listing remain poorly understood. Patient characteristics such as age, sex, ethnicity, socioeconomic status, education, and geography have been shown to influence PKT listing.

This service evaluation aimed to assess factors including patient characteristics that may influence PKT among new referrals to the Advanced Kidney Care Clinic (AKCC) at our unit.

Methods

We conducted a retrospective cohort study of all new patients referred to the AKCC between April 2021 and March 2022, with one-year follow-up. The primary outcome was pre-emptive listing for kidney transplantation, as recorded in the hospital electronic medical record. Baseline characteristics were collected. Time from AKCC referral to listing & to dialysis start and cardiac risk stratification status were assessed.

Results

105/109 new AKCC referrals were identified & analysed. 34 (32%) were referred for transplant work-up, while 71 (68%) were not(Diagram 1). Among those referred, 8/34 (23.5%) were pre-emptively listed. The remaining 26/34 (76.5%) were not pre-emptively listed (Diagram 1).

There was a significantly lower number of males (12.7%) in the pre-emptively listed group. There were no other statistically significant baseline differences between the two groups (Figure 1). Although not statistically significant, which may be due to small numbers, it is worth noting some trends in the pre-emptively listed cohort: There was a lower proportion who had diabetes mellitus, a higher proportion with Afro-Caribbean heritage and younger age. Patients who were pre-emptively listed had a shorter mean time to listing from their first AKCC appointment, were more likely to be stratified as low cardiac risk and less likely to start dialysis within six months of referral to AKCC (Figure 2). Reasons for not being pre-emptively listed are shown in Figure 3.

Discussion

There was a clear gender difference in patients who were pre-emptively listed for transplantation with the majority being female. The shorter workup period for those who were pre-emptively listed may be related to more of this cohort having a low cardiac risk and so the need for fewer investigations requiring less time. There is no consensus for optimal cardiac screening with a lack of evidence of survival benefit. Minimising this aspect of transplant work up could potentially increase PKT.

The number of patients who started dialysis less than six months after referral to AKCC was higher in the patients who were not pre-emptively listed suggesting that kidney function may have progressed more rapidly. Use of additional tools e.g. kidney failure risk equation (KFRE) may be beneficial to assess optimal time of referral for transplant workup. Further work to explore whether incorporation of this score into AKCC referral criteria to increase PKT would be useful.

WL5

Strategies to increase pre-emptive kidney transplantation rates in a Northeast England NHS Trust: addressing clinical, psychological, and systemic barriers

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Background
Pre-emptive kidney transplantation (PEKT), which is transplantation before dialysis initiation, offers the best outcomes for patients with advanced chronic kidney disease. PEKT is associated with improved patient and graft survival, enhanced quality of life, and long-term cost-effectiveness. Despite the well-known benefits, PEKT rates remain low in the United Kingdom (UK) compared to post-dialysis transplantation. Therefore, we aimed to quantify current PEKT rates in our local hospital trust and identify prominent barriers to PEKT to develop focused solutions.

Methods
We retrospectively reviewed 134 patients assessed for kidney transplantation over a 3-year period between January 2022 to February 2025 at our non-transplanting (referral) centre (South Tyneside and Sunderland NHS Foundation Trust), including 45 patients who underwent successful transplantation and 89 patients who were awaiting a transplant. Clinical records, referral pathways, and multidisciplinary inputs were analysed to identify barriers to achieving PEKT. Key themes were categorised into patient-related, donor-related, and system-related delays. 4 post-transplant patients who received transplant organs outside of the Northeast were excluded. One patient in the wait-list cohort was excluded as she waiting for a pancreas rather than a kidney transplant.

Results
Analysis of the 129 patients included in the study revealed that 41 individuals (31.8%) were successfully transplanted and a further 88 patients (68.4%) awaited transplantation. 3 out of 41 post-patients (7.3%) received a pre-emptive transplant. This equated to an overall PEKT rate of 2.3% in the entire population. 69 out of 88 patients (78.4%) in the waitlist cohort were already receiving dialysis at the time of analysis, reflecting limited opportunities for pre-emptive transplantation within this group.

Key barriers that reduce the chance of PEKT include:
- Paper-based correspondence between centres and interdisciplinary teams
- High recipient BMI, necessitating a prolonged period for weight reduction before eligibility for surgical evaluation and listing
- Recipient psychological and behavioural factors, such as health anxiety, poor attendance, and non-adherence to treatment
- Imbalance between supply and demand in the deceased donor pool

Potential strategies to improve rates include:
- Increasing digital integration through development of an electronic referral and communication system
- Enhancing funding to allow early involvement of renal psychologists and renal dietitians, and initiation of structured behavioural therapies and weight-loss programmes into pre-transplant care
- Increasing the use and wider adoption of GLP-1 receptor agonist therapy in the obese pre-transplant population with less stringent initiation and prescribing criteria
- Proactive education and initiatives for patients, families, and the wider community on the benefits and process of living donation to enhance donor availability

Conclusion

Pre-emptive kidney transplantation (PEKT) is associated with superior patient and graft outcomes and avoids dialysis-related complications. Despite these clear benefits, national PEKT rates remain low. Analysis of patients in our local trust helped us identify multiple barriers and potential targeted interventions, which we believe could be applied more broadly to improve the effectiveness and uptake of the UK renal transplant programme.

WL6

The road to kidney transplant: are we effectively assessing and preparing patients?

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Background
A pre-transplant service was established within a non-surgical kidney unit (Feb 2022) to facilitate early identification of patients suitable for kidney transplantation. The service aims to ensure timely assessments, deliver effective patient education, and streamline the transplant assessment, referral, and listing process. Kidney transplantation is widely recognised as the gold standard treatment for end-stage kidney disease, with pre-emptive transplants improving long-term outcomes [1–3]; however, pathways vary significantly across the UK. While National data highlights delays in cardiac testing, clinical complexity, and socioeconomic factors as key barriers to timely transplantation, unit-specific challenges contributing to these delays are less well defined.
Aim
To evaluate whether patients in the kidney unit are being adequately and promptly prepared for transplantation, and to identify key themes and barriers within the assessment and referral process.
Methods
A retrospective analysis was conducted using transplant referral data from quarter four in 2022 and 2024. Data was collated and stored using a password-protected spreadsheet approved through internal audit governance. This included demographics, regional locality, clinic type, presence of a living kidney donor (LKD), and time from assessment initiation to referral. Reasons for delay and regional trends were also recorded.
Results
Median time from assessment to referral reduced by 52 days (154 in 2022 - 102 in 2024). Faster pathways were seen in acute admission and advanced kidney care clinics; slower referrals arose in general nephrology and haemodialysis clinics. Gender disparity persisted, with 13-25% more men referred. Referrals halved for patients aged 26-45, while 63% were for those aged 46-65. Referrals increased in the 66-70 age group but declined in those aged over 70.
Most patients (60%) began assessment with a glomerular filtration rate (GFR) of 15-19, limiting pre-emptive transplant opportunities. Reasons for delay in 2024 included late presentation, clinical complexity, raised body mass index, and non-adherence. Regional variation persisted, with some areas showing improvement but others experiencing systemic or administrative delays. For patients with LKDs, the delay seen in 2022 (29 days longer than non-LKD) narrowed to 2.5 days longer than non-LKD in 2024. Improvements were seen for unemployed patients (median days reduced from 377 to 152); retired patients experienced longer waits, likely reflecting complexity.
Discussion
Findings align with national data highlighting persistent disparities in referral pathways. Most patients began work-up below a GFR of 20, limiting opportunities for pre-emptive transplantation. Delays remain most significant in haemodialysis and general nephrology. Regional variation and barriers, such as BMI and non-adherence, further affect timeliness. Limitations include a small dataset from two quarters only.
Conclusion
This project demonstrates gains in assessment; however, disparities and emerging barriers persist. Ongoing assessment, education, and coordination are essential to ensure all patients are adequately prepared and have equitable access to transplantation.

WL7

Audit of prevalent BK viraemia and outcomes at Nottingham

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BK virus, a polyomavirus, is a common virus that most people get in childhood. Symptoms resemble a common cold, and once you've had a BK virus infection it remains dormant in the renal tract forever. BK can be found in urological tumours and there is no effective treatment for BK viraemia. Care is primarily aimed at reducing immunosuppression burden.
We looked at all renal transplant recipients with a positive BK viraemia serological test (1.1.14-31.3.24) before starting protocol monitoring. We analysed demographic data as well as treatment interventions, graft and patient survival.
73 patients had proven BK viraemia during this time period, with 1 patient having BK in repeated kidney transplants. 17 (23%) were female. On average patients had a positive BK reading 1080 days post transplant, with a range of 47-6866 days. The titres ranged from 50 to 4.7 billion copies/ml. By 1 year two patients had died with a functioning renal transplant, three had lost their graft and two were lost to follow up having returned to their referring centre. As of 31.12.24, 34 (47%) patients had no detectable serological BK viraemia, 3 patients still had low level positive BK viraemia (range 62-621 copies/ml) and 22 patients had died; of the 24 deaths only one patient lost their renal transplant prior to death, unrelated to BK. Four patients had received Campath induction and two patients ATG for earlier rejection episodes, with four patients developing subsequent biopsy proven rejection after BK viraemia was detected, and immunosuppression had been reduced. Just over half of the cohort (59%) underwent a transplant renal biopsy for persistent BK viraemia and decline in kidney function, some patients have multiple biopsies over time. Overall 24 (56%) of those undergoing a kidney transplant biopsy had evidence at some stage of BK nephropathy.
Only 8 (12%) of the surviving 69 patients under follow up had lost their kidney transplant by the 31.3.24, and four patients went on to develop bladder cancer. Two of the four bladder lesions stained positive for BK, but we don't have data on the BK status of the other two.
CONCLUSION: BK viraemia was identified in a small number of our prevalent cohort and detected as a result of a rise in creatinine. In the majority of cases BK became undetectable but a small number of patients went on to lose their grafts due to rejection or BK nephropathy. There is data to suggest a link with bladder cancer and of the four cases in our cohort, half stained positive for BK. it is now routine practice for us to stain bladder tumours in our BK positive recipients. By undertaking protocol BK monitoring we expect to detect cases earlier and reduce subsequent morbidity.