Physician-reported satisfaction with, challenges in, and patient adherence to, immunosuppressive treatment among kidney transplant recipients: Results from a real-world survey

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Introduction:

- End stage renal disease (ESRD) affects more than 800,000 people in the United States (US) and can be defined as a glomerular filtration rate of less than 15 mL/min/1.73m²¹. Kidney transplantation is the preferred treatment for ESRD² due to increased survival³ and improved quality of life⁴. After transplantation, an immunosuppressive treatment regimen is prescribed to reduce the risk of organ rejection. However, these regimens can cause deleterious side effects which may affect treatment satisfaction and compliance ^{5, 6}. A better understanding of the disadvantages of immunosuppressants may increase treatment satisfaction and support with identification of unmet needs for kidney transplant recipients. **Objective:**
- To describe physician-reported treatment satisfaction, challenges in current immunosuppressive therapy, and treatment adherence among kidney transplant recipients.

Methods:

- Data were drawn from the Adelphi Real World Kidney Transplant Disease Specific Programme (DSP)[™], a real-world, cross-sectional survey, with retrospective data collection, of transplant nephrologists in the US from September–November 2024.
- Transplant nephrologists were eligible for inclusion if they managed ≥ 8 kidney transplant recipients per month and had previously managed ≥ 50 kidney transplant recipients.
- Adult patients were eligible if they were ≥ 6 months post-kidney transplant, were not involved in a clinical trial, and had not received any other organ transplants.
- Physicians reported demographics, side effects, treatment satisfaction and adherence with current immunosuppressive therapy for six consecutively consulting kidney transplant recipients.
- The DSP methodology has been previously described^{7, 8}, validated⁹, and shown to be representative and consistent over time¹⁰.
- Analyses were descriptive.

Results:

Overall, 35 physicians provided data for 97 patients. Patient demographics are summarized in **Table 1**.

Table 1: Patient demographics	
Patient age (years), mean (SD)	53.9 (12.9)
Sex, male, n (%)	62 (64)
Ethnicity, White, n (%)	56 (58)
Employment status, n (%)	
Full-time employment	48 (52)
Not in full-time employment*	44 (48)
Not in full-time employment due to kidney transplant, n (%)	18 (44)
Time since kidney transplant (years), mean (SD)	2.6 (4.3)
Definitions: SD, standard deviation	1

*Patients were in part-time employment, on long-term sick leave, retired, or unemployed

Results:

- At data collection, 97% of patients were receiving immunosuppressive treatment. Patients began their current treatment regimen a mean (SD) of 2.2 (3.3) years ago.
- The most frequently prescribed immunosuppressants were tacrolimus (70% of patients: 51% Prograf, 10% Envarsus XR, 4% Astagraf XL, 2% Hecoria, 2% other tacrolimus formulations), mycophenolate mofetil (63%) and corticosteroids (59%). Most patients (71%) were receiving a combination of treatments.
- At data collection, physicians reported that **35% of patients experienced side effects or** most common side effects are shown in **Figure 1a.**

Figure 1a: Most frequent physician-reported side effects (n=33)

Increased cardiovascular risk Tremors Nausea/ vomiting Muscle weakness Headache Fatigue/ lack of energy Changes in appetite High blood pressure Loss of balance Infection persisting



Only patients who experienced an issues were included in this figure.

- issues (21%), lack of insurance coverage (18%), and lack of treatment efficacy (15%).
- While most physicians reported **satisfaction** with the efficacy of patients' current the number (35%) and severity (27%) of side effects experienced by patients (Figure **1b**).



*Question only asked when side effects were experienced by patients in relation to the immunosuppressants being taken at the time of data collection. Data points <4% not shown.

other challenges with their treatment regimen. From those experiencing at least one side effect or challenge, the mean (SD) number of side effects experienced was 1.4 (1.4). The

Physicians reported other challenges experienced by patients included patient compliance

immunosuppressive treatment (93%), some physicians expressed dissatisfaction with

Results:

current treatment regimen (Figure 2).



Data shown for patients currently receiving an immunosuppressant with a known adherence. Data points <4% not shown

Conclusions:

Limitations:

- relationships.

Disclosures:

Adelphi Real World.

References:

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Physicians reported that overall, 33% of patients were not fully adherent to their

Figure 2: Physician-reported treatment adherence (n=92)

- Not at all does not fill prescriptions
- Not at all does fill prescriptions but does not take them
- Poor compliance (takes <50% of prescribed)</p> dose)
- Fairly compliant (takes 50 80% of prescribed dose)
- Fully compliant (takes >80% of prescribed) dose)
- Too early in patient's regimen to tell

Overall, physician satisfaction with prescribed therapy was high. However, for approximately a third of patients, challenges relating to side effects and treatment adherence were reported. Further research is needed to understand the impact of side effects and non-adherence on both clinical and patient-reported outcomes.

• The patient sample may not reflect the general population of patients with a kidney transplant, as patients who consult more frequently were more likely to be included. • The cross-sectional design of the DSP prevented any conclusions about causal

Lobat Hashemi, Samir Patel, Timothy Horwedel are employees of Veloxis Pharmaceuticals. Emily Green, Sarah Clayton, Mollie Lowe are employers of

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