



PIONEER

Health Data Research Hub

Understanding and predicting outcomes in kidney transplantation and immunosuppressive treatments

Data range for infographic: 01.01.2000-01.07.2022

Other extended time periods are available on request

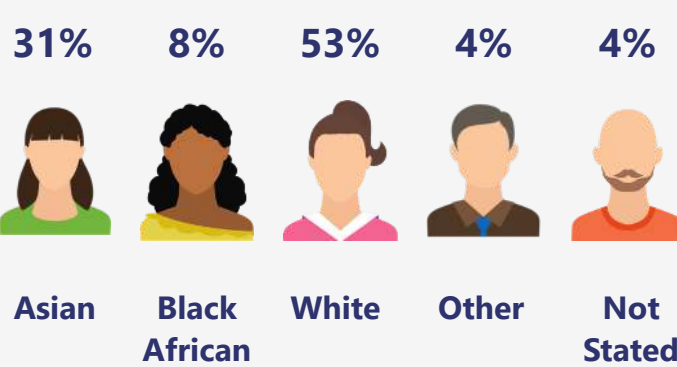
A dataset to understand the knowledge base surrounding transplants and their long-term outcomes, and to improve patient well-being. This dataset could be used for traditional statistical or machine learning/ artificial intelligence methodologies.

Demographic

The dataset includes:

- Young adults **7%** (ages 15-24)
- Adults **81%** (ages 25-64)
- Older adults **12%** (ages 65+)

Based on the index of multiple deprivation map, **41%** of the population are from most deprived areas and **9%** of patients are from least deprived areas.

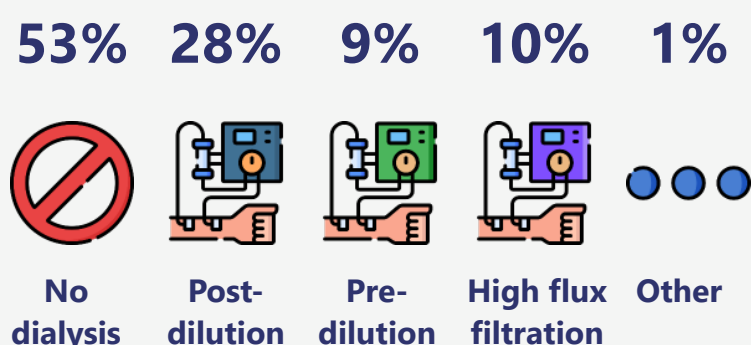
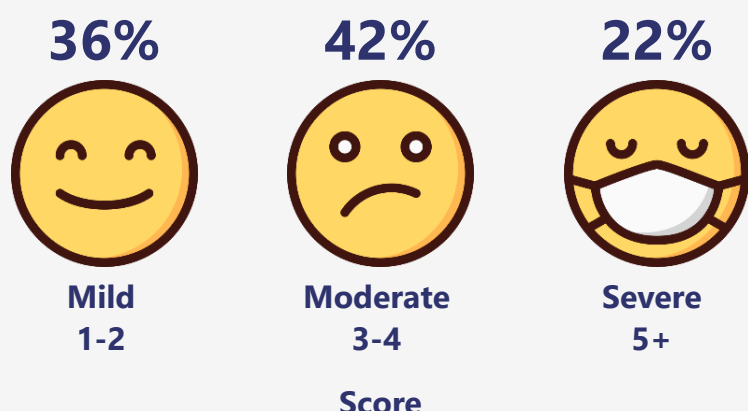


Diagnoses

Top 5 diagnoses in patient spell:

- **45K** Stage 5 chronic kidney disease
- **10K** Essential primary hypertension
- **3K** Type 2 diabetes mellitus
- **2K** Hypertensive renal disease
- **2K** Complications of cardiac and vascular prosthetic devices, implants and grafts

Charlson Comorbidity Index at transplant

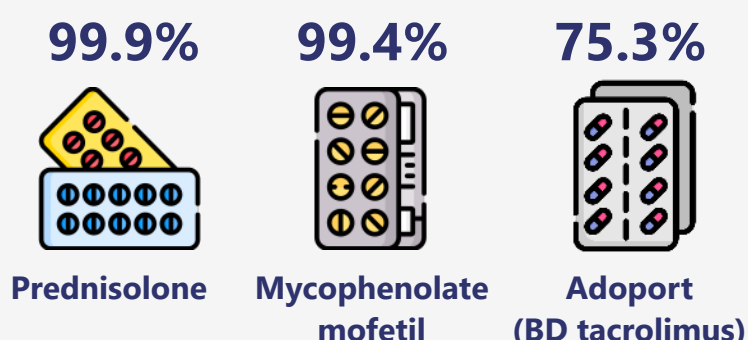


Haemodiafiltration

59K haemodiafiltration (HDF) sessions attended with less than **2k** sessions missed.

Other dialysis information are available.

Patients on immunosuppressive



Nephrotoxicity

Percentage of patients with nephrotoxicity within 5 year of transplant is less than **1%**.

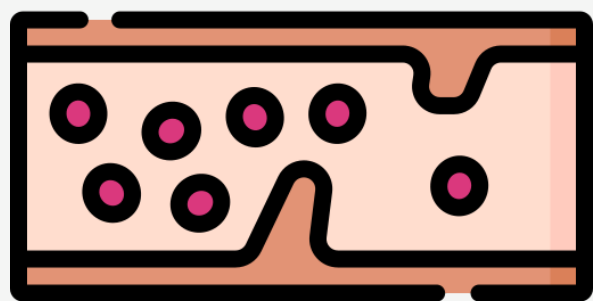
Other medications are available.

Inpatient care

- **79,698 Hospitalised spells;** containing **868** unique patients who had a kidney transplant
- **123K** days worth of hospital data with an average in-hospital length of stay of 1 day
- Average readmission rate of 14 times per year and hospital mortality rate of less than 1%
- Less than 1% of patients had a major adverse cardiovascular event prior kidney transplant

Thromboembolism

1% of patients had a thromboembolic event prior to kidney transplant and less than **2%** had a thromboembolic event within 5 years of kidney transplant.



Post transplant comorbidity

4% of patients had new diabetes within 5 years of transplant and **6%** of patients had new malignant tumors within 5 years of transplant.

