

# Kidney Transplant Immunosuppressive Protocol

**All Renal Transplants**

**Simulect** 20mg pre-op and day 4  
**Methylprednisolone** 500mg at clamp release  
**Tacrolimus** 0.1mg/kg/day in 2 divided doses (target trough level 4-8ng/ml)  
**Azathioprine** 1mg/kg/day in 1 dose  
**Prednisolone EC** 20mg/day in 1 dose

## Delayed Graft Function

REDUCE dose of **Tacrolimus** to achieve trough level 2-4ng/ml  
STOP **Azathioprine**  
ADD **Mycophenolate Mofetil** 500mg qds  
CONTINUE or ADD **Prednisolone EC** 20mg od

When graft functions INCREASE **Tacrolimus** to trough level 4-8 ng/ml and REDUCE **MMF** to 500mg bd

**Except**

## Non Heart Beating Donors

**Zenapax** 2mg/kg pre-op  
**Methylprednisolone** 500mg at clamp release  
**Mycophenolate Mofetil (MMF)** 500mg qds  
**Prednisolone EC** 20mg/day in 1 dose

**Tacrolimus** 0.1mg/kg/day in 2 divided doses introduced when serum creatinine < 350µmol/L (trough level 4-8ng/ml). REDUCE **MMF** to 500mg bd

## Acute Rejection

AUGMENT with **Methylprednisolone** 500mg per day for 3 days  
INCREASE dose of **Tacrolimus** to achieve trough level 8-12ng/ml  
STOP **Azathioprine**  
ADD **Mycophenolate Mofetil** 500mg qds (REDUCE to bd on discharge)  
CONTINUE **Prednisolone EC** 20mg od  
ADD **Prednisolone** 5mg od if steroid avoidance

## 'High Risk'\*\* and Steroid avoidance

**Simulect** 20mg pre-op and day 4  
**Methylprednisolone** 500mg at clamp release  
**Tacrolimus** 0.15mg/kg/day in 2 divided doses (target trough level 8-12ng/ml)  
**Mycophenolate Mofetil** 500mg qds (REDUCE to bd on Discharge)  
**Prednisolone EC** 20mg/day (omit if steroid avoidance)

**\*\*High Risk is:**

**Any transplant with 2 HLA DR mismatch**  
**Previous graft loss to ACUTE rejection**

## Prednisolone Reduction

**Prednisolone EC** 20mg od for 4 weeks then reduce by 2.5mg each 2 weeks, aiming for 5mg final dose

## Cardiovascular disease prophylaxis

All patients to be discharged on **Aspirin** 75mg od & **Simvastatin** 20mg od (or their pre-transplant 'statin')

**Anti-IL2 Receptor Antibody is either :**

**Simulect (Basiliximab)**

20mg IV pre-transplant (day 0)  
20 mg IV on day 4

or

**Zenapax (Daclizumab)**

2mg/kg IV pre-transplant (day 0)  
1mg/kg IV on day 14 if patient remains in patient

**Delayed Graft Function is :**

Oliguria persisting for more than 24 hours following transplantation

Any requirement for dialysis

Rising serum creatinine over first 48 hours whether or not patient is oliguric or receives dialysis

**Special Situations :**

Patients with increased immunological risk, for example a **previous positive cross match**, current **positive B cell cross match by flow cytometry**, or **high PRA**, should be treated as for all other transplants **UNLESS** the recipient has had donor specific antibodies against donor HLA. This is very unlikely to occur with a cadaveric transplant because such HLA antigens are listed as 'unacceptable' for these recipients.

A very few patients will have underlying renal disease that warrants very specific treatment. Examples include patients with **non-diarrhoeal HUS** and previous graft loss due to **recurrent FSGS**. Immunosuppression for these patients will have been extensively discussed and recorded in the notes.

**Please see separate protocol for patients receiving a Kidney + Pancreas or Pancreas alone Transplant**