<table>
<thead>
<tr>
<th>Population Defined by these RISK Categories (RC)</th>
<th>Induction Rabbit antithymocyte globulin (Thymoglobulin	extsuperscript{*})	extsuperscript{4,5}</th>
<th>Steroids</th>
<th>Antimetabolite Mycophenolate Mofetil (Cellcept	extsuperscript{*})	extsuperscript{10}</th>
<th>Calcineurin Inhibitor</th>
</tr>
</thead>
</table>
| **RC: Low Risk**
- Age > 65 years or 0 antigen mismatch (not HLA identical)
- No immunologic risk factors	extsuperscript{2} | 1.5mg/kg/dose 3 doses: POD #0, 1, 2 Total dose = 4.5mg/kg Initiate intraoperatively Consider Basiliximab	extsuperscript{6} when KDPI < 85% and CIT < 24 hours | Taper	extsuperscript{7,8,9} Initiate PERI-op | 1000mg PO BID Initiate PRE operatively | Starting dose 0.1mg/kg/day divided in 2 daily doses	extsuperscript{11,12} Max 8mg PO BID Initiate by POD #1 |
| **RC: Low Risk African American**
- Age > 65 years
- African American
- No additional immunologic risk factors	extsuperscript{2} | 1.5mg/kg/dose 3 doses: POD #0, 1, 2 Total dose = 4.5mg/kg Initiate intraoperatively | Taper	extsuperscript{7,8,9} Initiate PERI-op | 1000mg PO BID Initiate PRE operatively | Starting dose 0.2mg/kg/day divided in 2 daily doses Max 8mg PO BID Initiate by POD #1 |
| **RC: Normal Risk**
- Age ≤ 65 years
- No immunologic risk factors	extsuperscript{2} | 1.5mg/kg/dose 4 doses: POD #0, 1, 2, 3 Total dose = 6mg/kg Initiate intraoperatively | Taper	extsuperscript{7,8,9} Initiate PERI-op | 1000mg PO BID Initiate PRE operatively | Starting dose 0.1mg/kg/day divided in 2 daily doses	extsuperscript{11} Max 8mg PO BID Initiate by POD #1 |
| **RC: High Risk**
- One or more immunologic risk factor	extsuperscript{2} | 1.5mg/kg/dose 5 doses: POD #0, 1, 2, 3, 4 Total dose = 7.5mg/kg Initiate intraoperatively | Taper	extsuperscript{7,8,9} Initiate PERI-op | 1000mg PO BID Initiate PRE operatively | Starting dose 0.1mg/kg/day divided in 2 daily doses	extsuperscript{11} Max 8mg PO BID Initiate by POD #1 |
| **RC: Oliguric ATN/Delayed CrCl/SGF**
- UOP < 250ml in first 12 hours
- UOP < 500ml in first 24 hours
- No ↓ Scr by > 10% in first 48 hours | 1.5mg/kg/dose given POD #0, 1, then every other day 3-5 doses based on physician discretion | Taper	extsuperscript{7,8,9} Initiate PERI-op | 1000mg PO BID Initiate PRE operatively | 2mg PO BID	extsuperscript{14} Initiate by POD #1 |

**UCMC – Deceased Donor Kidney Transplant Immunosuppressive Guidelines**

**Calcineurin Inhibitor Tacrolimus (Prograf	extsuperscript{*}) Tacrolimus Target Levels**

<table>
<thead>
<tr>
<th>POD #0-89: 10-12 ng/mL</th>
<th>POD #90-364: 8-10 ng/mL</th>
<th>POD #2365: 6-8 ng/mL if no rejection history</th>
</tr>
</thead>
</table>

**Target Levels**

- October 2021
Oliguric ATN/Delayed CrCl/SGF

If patient experiences oliguric ATN, delayed CrCl, or SGF:
refer to the Oliguric ATN/Delayed CrCl/SGF guideline as appropriate. Not: Any patient experiencing Oliguric ATN/Delayed CrCl/SGF who is not in a research protocol will receive immunosuppression based on these guidelines, regardless of regimen initiated at transplant.

Immunologic Risk Factors:
- Repeat renal transplant (for kidney after liver transplant recipients, only give 3 doses of Thymoglobulin on POD #0, 1, 2)
- Type 1 diabetes
- African American ≤ 65 years
- Peak cytotoxic PRA > 50% or current cytotoxic PRA > 25%
- Positive DSA
- Positive T or B cell flow crossmatch with a positive DSA
- Female recipient with exposure to paternal antigen

Consider performing kidney allograft biopsy at 7-10 days post-transplant, then weekly until kidney function starts to recover.

Thymoglobulin®
- Use pre-op weight on day of transplant for dose calculations
- Round doses to nearest 25 mg
- Premedication: administer 30 minutes before dose
  - Steroids = 500mg methylprednisolone pre-op for first dose then daily steroid taper
  - Acetaminophen 650mg PO
  - Diphenhydramine 25mg PO
- Administration: 1st dose over 24 hours and subsequent doses over 4-6 hours. Decrease rate if adverse events occur or if patient becomes hemodynamically unstable

Basiliximab (Simulect®) 20mg induction x 2 doses (see criteria for use above)
- 2 doses: POD #0 (initiate intraoperatively) and POD #3-4 (can be administered peripherally as an outpatient)

Steroid Administration
Administer methylprednisolone prior to rabbit antithymocyte globulin (Thymoglobulin®) dose when appropriate.

Steroid Taper

<table>
<thead>
<tr>
<th>POD</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylprednisolone IV</td>
<td>500</td>
<td>250</td>
<td>125</td>
<td>80</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Prednisone PO</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>60</td>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
</tbody>
</table>

Steroid taper:
- POD 8: DISCONTINUE steroids

Criteria for Steroid continuation:
Consider continuing prednisone 5mg PO daily indefinitely if the following:
- History of biopsy-proven IgA nephropathy
- DSA ≥ 4000 MFI prior to transplant
- Chronic prednisone use at time of transplant

Mythglobulin® recommended doses adjustments

<table>
<thead>
<tr>
<th>Laboratory parameter</th>
<th>Adjustment</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC &gt;1200 cells/µL AND PLT &gt; 80,000 cells/µL</td>
<td>None</td>
<td>Complete held or decreased dose at next dosing interval (to ensure total dose of either 4.5mg/kg, 6mg/kg, or 7.5mg/kg, as appropriate)</td>
</tr>
<tr>
<td>ANC ≤ 1200 cells/µL OR PLT ≤ 80,000 cells/µL</td>
<td>Reduce dose by 50%</td>
<td></td>
</tr>
<tr>
<td>ANC ≤ 800 cells/µL OR PLT ≤ 50,000 cells/µL</td>
<td>Hold dose</td>
<td></td>
</tr>
</tbody>
</table>

For African Americans: consider tacrolimus starting dose of 0.2 mg/kg/day divided in 2 daily doses
If using basiliximab induction: use tacrolimus starting dose of 0.2 mg/kg/day divided in 2 daily doses. Use weight-based dosing of tacrolimus to rapidly obtain therapeutic levels, with no maximum starting dose
For African Americans: start tacrolimus at 4 mg PO BID