

UCMC – Pancreas Transplant Immunosuppressive Guidelines

Population	Induction <i>Rabbit antithymocyte globulin (Thymoglobulin®)</i> ^{2,3}	Steroids	Antimetabolite <i>Mycophenolate Mofetil (Cellcept®)</i> ⁶	Calcineurin Inhibitor	
				<i>Tacrolimus (Prograf®)</i>	<i>Tacrolimus Target Levels</i>
At time of Tx select NORMAL Risk Category (RC). For Simultaneous Pancreas-Kidney: over time post-Tx, may need to transition to Oliguric ATN/Delayed CrCl/Slow Graft Function (SGF) RC based on clinical situation ¹					
RC: Normal¹ <ul style="list-style-type: none"> Pancreas Alone Pancreas after Kidney Simultaneous Pancreas-Kidney 	1.5mg/kg/dose 5 doses: POD #0, 1, 2, 3, 4 Total dose = 7.5mg/kg <i>Initiate intraoperatively</i>	Taper ^{4,5} Initiate PERI-op	1000mg PO BID Initiate PRE operatively	Starting dose 0.1mg/kg/day divided in 2 daily doses⁷ Max 4mg PO BID Initiate by POD #1	POD #0-89: 10-15 ng/mL POD #90-364: 8-10 ng/mL POD #≥365: 6-8 ng/mL if no rejection history
RC: Oliguric ATN/Delayed CrCl/SGF¹ <ul style="list-style-type: none"> UOP < 250ml in first 12 hours UOP < 500ml in first 24 hours No ↓ SCr by > 10% in first 48 hours 	1.5mg/kg/dose 5 doses: given POD #0, 1, then every other day Total dose = 7.5mg/kg <i>Initiate intraoperatively</i>	Taper ^{4,5} Initiate PERI-op	1000mg PO BID Initiate PRE operatively	2mg PO BID^{8,9} Initiate by POD #1	Until SCr ↓ ≥ 50% of pre-Tx: 6-10 ng/mL <i>Then...</i> POD #0-89: 10-15 ng/mL POD #90-364: 8-10 ng/mL POD #≥365: 6-8 ng/mL if no rejection history

¹Oliguric ATN/Delayed CrCl/SGF

- If simultaneous pancreas-kidney patient experiences oliguric ATN, delayed CrCl, or SGF: refer to Oliguric ATN/Delayed CrCl/SGF guideline as appropriate.
- Note: 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.*
- Consider performing kidney allograft biopsy at 7-10 days post-transplant, then weekly until kidney function starts to recover

²Thymoglobulin®

- 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

⁷For African Americans: consider tacrolimus starting dose of 0.2 mg/kg/day divided in 2 daily doses. Max 8mg PO BID.

⁸For African Americans: start tacrolimus at 4 mg PO BID

⁹Tacrolimus levels must be therapeutic before Thymoglobulin® is discontinued.

³Thymoglobulin® recommended dose adjustments

Laboratory parameter	Adjustment	Comments
ANC >1200 cells/μL AND PLT > 80,000 cells/μL	None	Complete held or decreased dose at next dosing interval (to ensure total dose of 7.5mg/kg)
ANC ≤ 1200 cells/μL OR PLT ≤ 80,000 cells/μL	Reduce dose by 50%	
ANC ≤ 800 cells/μL OR PLT ≤ 50,000 cells/μL	Hold dose	

⁴STEROID Administration

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

⁵STEROID Taper

POD	0	1	2	3	4	5	6	7	8+
Methylprednisolone IV	500	250	125	80	--	--	--	--	--
Prednisone PO	--	--	--	--	60	40	30	20	5 daily (indefinitely)

⁶Mycophenolate recommended dose adjustments

Laboratory parameter	Adjustment
Mycophenolate mofetil (MMF)	
WBC ≤ 3000 cells/μL	Refer to leukopenia management guideline MPA AUC methodology can be found in the PK monitoring of mycophenolate mofetil (Cellcept®) guidelines
ANC ≤ 1500 cells/μL	