UCMC – Pancreas Transplant Immunosuppressive Guidelines

Population 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]	Induction *Rabbit antithymocyte globulin (Thymoglobulin®)* [2,3]	Steroids	Antimetabolite *Mycophenolate Mofetil (Cellcept®)* [6]	Calcineurin Inhibitor	
				Tacrolimus (Prograf®)	*Tacrolimus Target Levels*
RC: Normal[1] • 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 *Initiate intraoperatively*	Taper[4,5] Initiate PERI-op	**1000mg PO BID** Initiate PRE operatively	**Starting dose 0.1mg/kg/day divided in 2 daily doses[7]** 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/SGF[1] • 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 *Initiate intraoperatively*	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 *Then…* POD #0-89: 10-15 ng/mL POD #90-364: 8-10 ng/mL POD #≥365: 6-8 ng/mL if no rejection history

[1]Oliguric 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

[2]Thymoglobulin®

- Use ideal body weight (IBW) for dose calculation. If total body weight (TBW) is less than IBW, then use TBW instead for dosing
- 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

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

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

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

[3]Thymoglobulin® 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	

[4]STEROID Administration

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

[5]STEROID 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)

[6]Mycophenolate 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	

April 2025