

**Peri-transplant Immunosuppression Strategy** – Joquetta Pass, 11503524

**Donor Acceptance Considerations:**

Marginal donors – older, minimal luminal coronary disease

OCS transport to increase radius

**I. Pre-transplant**

Densitization protocol: [CFZ/Bela/Plasmapheresis](#)

1.5 volume plasmapheresis on Mondays and Wednesdays indefinitely

--> Transplant cardiology to ensure vasopressin for MAP > 60-65 and SBP > 90

\*CFZ can cause mild AKI – usually reversible but requires careful management of fluids and hemodynamics

**II. Once a heart is accepted, prior to transport to operating room**

Urgent 1.5 volume plasmapheresis – intra-operative pheresis is historically not an option due to pheresis staff availability; However, the pheresis team is working with us to ensure pre- and post- transplant pheresis in the CICU and 5E. Please contact the pheresis resident and Dr. Jeanne Hendrickson as soon as a heart is accepted.

**III. In the operating room**

*Thirty minutes prior to cross-clamp removal:* Thymoglobulin induction at 1.5mg/kg

**IV. Post-operatively**

## a) POD 0

- i. Cellcept 1500mg IV bid
  
- ii. Conservative Steroid Taper
  
- iii. Plasmapheresis: Decision on POD # 0 pheresis vs. POD #1 based on stat prospective cross-match at the time of transplant – consider 1.5 volume plasma exchange if DSA crossed
  
- iv. Continue with [ATG Induction protocol](#) – addenda to the ATG Induction Protocols
  - a. MUST monitor daily Absolute CD3 (Monday – Friday)
  - b. Decision for Follow-up ATG doses *only IF Absolute CD3 > 25. ATG should be continued until Absolute CD3 < 25.*
  
- v. Transplant cardiologist on call should call HLA team for expedite prospective cross-match

## b) POD 1

- i. Belatacept 10mg/kg
  
- ii. Plasmapheresis: Decision on POD # 0 pheresis vs. POD #1 based on stat prospective cross-match at the time of transplant – consider 1.5 volume plasma exchange if DSA crossed

## c) Prograf:

- i. Initiation: POD 1 or POD 3 based on degree of immunosuppression, as suggested by Absolute CD3 count
  
- ii. Target: Prograf level 10-12

- d) Alterations in Immunosuppression
  - i. Add: Belatacept 10mg/kg POD 7, 14, 21, 28 if ImmuKnow in the highest tertile or any evidence of early rejection (ACR/AMR/perioperative graft dysfunction)
  
  - ii. Reduction or cessation of immunosuppression pending leukopenia, thrombocytopenia, infectious complications, etc. with parameters similar to [ATG Induction Protocol](#)
  
- e) 3 months post-transplant
  - i. Restart Belatacept as maintenance immunosuppression
  
  
  - ii. Prograf Target: Should remain 8-12 for the first 6 months post transplant

Labs, Monitoring, Prophylaxis:

- a) Per [ATG Induction Protocol](#)
  
  
- b) Consider transplant infectious disease consult by POD #1
  
  
- c) Send ImmuKnow POD 7 and POD 14