Maine Medical Center
Maine Transplant Program
Policies and Procedures
Donor Specific Antibody and Allosure Protocol

Background
The development of donor specific antibody (DSA) is a risk factor for rejection and premature graft failure. Assessing DSA may be useful for various purposes:

- Pre-transplant assessment of transplant candidates to determine their rejection risk
- Ongoing assessment of increased immunologic transplant recipients
- As a precursor to assessing risk for potential reduction in immunotherapy
- As a risk assessment tool for patients who are on dual immunotherapy or less

Immunologic Risk Assessment
The following are categorized as criteria that define increase immunologic risk

1. Regrafts
2. Elevated PRA>10%
3. Pre-identified anti-HLA antibody
4. Patients with FCXM that is not negative (greater than 30 channel shift T-cell /50 channel shift B-cell)

These patients will have protocol DSA and Allosure (dd- CFDNA) checked:

Weeks 2, 4, 8, 12
Months 6, 9, 12, 18 & 24
At the discretion of transplant team

Donor Specific Antibody/Allosure may be requested for cause:

1. Evaluation of acute kidney injury after transplantation
2. Evaluation of post-transplant proteinuria
3. At the time of "for cause" allograft biopsy

Precursor for potential reduction in immunotherapy/dual immunotherapy

MTP standard of care is to provide triple immunotherapy
Reduction from 3 to 2 drug immunosuppression may be suggested after development of:
Infection (BK, CMV, other viral, Bacterial, Fungal)
Malignancy
Osteoporosis
It is recommended that the DSA be obtained prior to the decision to drop the third immunosuppressive agent and 1month after discontinuation in order to stratify risk and minimize rejection risk

Methodology
Blood samples will be screened using the single HLA antigen bead Luminex™ platform.

Original Date: 4/12/2017

Review Dates: 2/22/2018, 2/20/21

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