The Transplant Institute METHODIST DALLAS **Methodist Dallas Medical Center**	**Title:** Transplanting Type A non-A1 and type AB, Non -A1 kidneys to blood group B and O candidates **Section:** Kidney	**Effective Date:** 08/17/2016
Approved by: Richard Dickerman, M.D., Surgical Director Kidney/Pancreas Transplant Jose Castillo-Lugo, M.D., Medical Director Kidney/Pancreas Transplant Melody Holder, Director of Transplant Clinical Operations		**Revision Date(s):** 06/23/2020; 08/08/2022; 11/2025 **Next review Date:** 11/2028

Purpose: To describe the process for transplanting Type A non-A1 and type AB, Non- A1 kidneys into blood group B and O candidates for living donor transplantation, and non-A1 kidneys into blood group B candidates for deceased donor transplantation.

Policy:

1) **Pre-Transplantation**

- Blood group B and O living donor recipient potential candidates and blood group B recipient candidates for deceased donor will be evaluated at Methodist Dallas Medical Center (MDMC) for their eligibility to receive non-A1/ AB, NonA1 donor kidneys using Transplant Anti-A DTT Titer by Gel, and/ or Ref Transplant ABO Antibody DTT Titer and/ or as appropriate. Initial qualification requires a titer ≤ 4 for further consideration.
- If initially qualified, the transplant program will explain the risks and obtain informed consent from the recipient or next of kin, the legal next of kin, designated health care representative or appropriate surrogate before transplant.
- This consent will be kept in the patient's medical record
- Candidates will be required to consent for periodic blood draws for Transplant Anti-A DTT Titer by Gel testing.
- For living donor transplant: If the donor is blood type A and the recipient is blood type O or if donor is blood type AB and recipient is blood type B the lab will first subtype the donor to determine if they are non A-1. If so, a Transplant Anti-A DTT Titer by Gel will be performed on the recipient.
- If the recipient has a titer of ≤ 4, then we will proceed with crossmatch

Anti-A DTT titers will be tested at MDMC utilizing double dilutions of patient sera via gel methodology.

TRANSPLANT ANTI-A DTT TITERS will be tested monthly, 2 additional times, and afterwards, assessed every 90 days (+/- 20days) while waitlisted in accordance with UNOS policy.

- Candidates with sustained anti-A DTT titers ≤4 will be eligible for listing to receive non-A1 and AB, non-A1 donor kidneys. See chart below for recipient/ donor ABO intended incompatible pairings.

Recipient Type	Recipient Anti-A titer	Donor Type A, Non A-1	Donor Type AB, Non A1
B	≤4	Intended Incompatible	Intended Incompatible
B	>4	Incompatible	Incompatible
O	≤4	Intended Incompatible	Incompatible
O	>4	Incompatible	Incompatible

- The Transplant Program will notify patients about their candidacy to receive A, non-A1/ AB, NonA1 donor kidneys.
- In the case of a rise in antibody titers >4, patient will be removed from the A, non-A1/ AB, NonA1 waitlist. The transplant program will notify the patient and referring nephrologist.
- Standard serogrouping laboratory methods will be used to detect non-A1 type A or non-A1B type AB.

2) Transplantation:

- Prior to transplant surgery the transplant program will test for Anti-A antibodies titers on current sera in addition to the crossmatch. This may slightly increase warm ischemia time
- Every effort will be made to avoid anti-A plasma containing products (plasma)
- Immunosuppression: All candidates will receive lymphocyte-depleting induction with Thymoglobulin

3) Post-Transplantation:

- Maintenance immunosuppression will be with a triple drug regimen: Calcineurin inhibitor, steroid and antimetabolites.
- Outpatient follow-up will be according to standard policy.
- In case of allograft dysfunction, the transplant nephrologist and/or transplant surgeon will determine the need for allograft biopsy.
- Patient sera will be tested for Transplant Anti-A DTT Titer by Gel .
- The transplant team will determine the need for plasmapheresis.
- In case there is suspicion for humoral rejection, sera will be tested for donor specific antibodies (DSA).
- Cellular and humoral rejection will be treated per protocol

Reference: OPTN/UNOS Policy 8.0