Canadian Blood Services
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For Information only
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Willing to Cross Antigens
Information Sheet for Transplant Programs

In transplant candidates who are very highly sensitized, accepting a Donor Specific Antibody (DSA) positive, flow crossmatch negative transplant can be advantageous to staying on dialysis waiting for a DSA-negative match to occur.

Consideration of which candidates are suitable for selection for willing to cross will be driven by clinical policy and transplant program discussions.

Willing to Cross applies to clearly defined antigens which the transplant team considers of reduced clinical importance and are therefore willing to cross to improve the possibility of transplantation.

Recipient Suitability for Willing to Cross

- Consideration for ‘Willing to Cross’ must align with local clinical policy and practices.
- The transplant program is responsible for identifying potential candidates, for ‘Willing to Cross’ from their local transplant waitlist.
- Patients to be considered for ‘Willing to Cross’ could be enrolled in either the KPD or HSP programs, or both.
- Initial recommendation for ‘Willing to Cross’ is to start with the ≥99.0% cPRA patients enrolled in the KPD and HSP programs.

Decision Making

The adjusted cPRA is the cPRA after ‘Willing to Cross’ antibodies are removed and is relevant for the current allocation, if the offer requires ‘Willing to Cross’ to be used. The unadjusted cPRA is the cPRA with no ‘Willing to Cross’ antibodies.

If the adjusted cPRA in these candidates is < 94.5% then the transplant candidate is not eligible for allocation using this antibody profile. The adjusted cPRA dropping below <94.5% does not impact the patient’s eligibility for HSP.

The HLA lab director and clinical transplant program will approve HLA specificities to cross based on the following categories:

1. Historical antibody for the purposes of the WTC guidelines is one that is not observed in the current serum. This antibody had previously been present and was clinically relevant.
2. Low level antibody which results in a negative surrogate flow crossmatch or becomes negative upon serum dilution.
    i. Antibody level – low Mean Fluorescence Intensity (MFI) (document normalized MFI for highest reactive bead: antigen or epitope group)
    ii. Antibody level - negative upon serum dilution (document serum dilution)
    iii. Antibody level - surrogate crossmatch negative (document serum dilution at which crossmatch becomes negative)
    iv. Antibody level - locus-specific (document normalized MFI)
    v. Other (provide detailed reason)

When a crossmatch is performed, the Flow crossmatch is negative or clinically irrelevant (e.g., auto antibodies).

Note: There is a need for a blood sample to be shipped ahead of the kidney, to ensure adequate time is allotted for flow crossmatch and to prevent the kidney to be given to an unintended recipient. There will be more information to follow on this process, soon to be formalized within interprovincial organ sharing policies. Currently this practise is agreed upon by our KTAC and NHLAAC members for WTC transplants.

WTC Guidelines

The WTC Guidelines document is a clinical guideline developed by the Willing to Cross Working Group which is a sub-group formed from the Canadian Blood Service's National HLA Advisory Committee and Kidney Transplant Advisory Committee members. This document describes, for Transplant Programs who wish to seek additional opportunities for these patients, the guidelines and recommendations to use in identifying antigens that can be crossed. The document covers recommendations from patient selection criteria, immunosuppression (Induction and maintenance) and treatment of rejection episodes as well as other pertinent information.

WTC Consent Form Template

The WTC program was piloted in BC and Dr. James Lan developed a consent form for WTC eligible patients. This form is in **Appendix 3** of the WTC Guidelines document and is for programs to use as reference or guidance when creating a local patient consent form for WTC patients in their transplant program. This patient consent form can be used and modified in any

way to help transplant programs and acts as a resource for Transplant Physicians to develop a WTC patient consent in their local transplant program.

Follow-up Requirements

It is important that the following outcome data be monitored by clinical transplant programs participating in the Willing to Cross protocol. The post-transplant outcome information is required at the following time points: 1 week, 2 week, 1 month, 3 month, 6 month and 12 month post-transplant. The Outcome monitoring data points and process is detailed in the WTC Management Guidelines document.

Due to the higher than usual risk with WTC to recipients, close outcome monitoring will be important to ensure the success of the program.

There will be a survey link sent to all programs who have a WTC transplant, **please send us updated contact information of the responsible person/s for the outcome monitoring surveys from your Transplant Center to listing.allocation@blood.ca**

While understanding the importance of outcome monitoring and the additional resources to fill surveys, we ensure the number of WTC cases in each year are expected to be low.

Committee Oversight

The 'Willing to Cross' data will be reviewed bi-annually, at a minimum, by the National HLA Advisory Committee (NHLAAC) and Kidney Transplant Advisory Committee (KTAC).

There is a halt and Review process outlined in WTC Clinical Guidelines Document.