OPTN/UNOS
Histocompatibility Committee

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June 24-25, 2013
Richmond, VA
Proposal to add optional fields for HLA-DQA and HLA-DPB in DonorNet® and Waitlist℠
Problem

- Anti-HLA antibodies to DQA and/or DPB frequently observed in sensitized transplant candidates.
- If candidate not properly screened from donors with relevant HLA, result can be adverse graft outcome.
- Some OPOs and transplant centers are requesting testing for this donor HLA information and for the presence of antibodies in candidates.
- Once information is obtained, however, it cannot be reported in DonorNet® or Waitlist℠.
Background

Thoracic Committee-2011

- Donor HLA-DPB required for heart/lung offers if requested and OPO’s lab performs the testing

Kidney Committee-2012/2013

- New KAS gives national priority to highly sensitized candidates
- Concern that absence of fields to report donor HLA/candidate UAs will result in unexpected positive crossmatches
Reporting of DPB on Donor Histo Forms by Year

% of HLA typed deceased donors

- 2005: 0.1
- 2006: 0.1
- 2007: 0.5
- 2008: 0.7
- 2009: 2.9
- 2010: 6.4
- 2011: 10.1
- 2012: 16.8

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UNITED NETWORK FOR ORGAN SHARING
Supporting Evidence

Total number of candidates:
Lab1 N = 2,783
Lab2 N = 846
Lab3 N = 2,625

- **Antibodies to HLA-DQA**
  - Lab1: 21.6% (602 candidates)
  - Lab2: 4.0% (34 candidates)
  - Lab3: 1.6% (42 candidates)

- **Antibodies to HLA-DPB**
  - Lab1: 33.7% (939 candidates)
  - Lab2: 4.6% (39 candidates)
  - Lab3: 6.6% (173 candidates)
Cost

- 2,490 hours (mostly IT) =$141, 607
- Large # of pages where donor HLA and candidate UA’s appear
- Programming complexity due to addition of elements for screening candidates from donors (match runs)
- Committee considered larger proposal but is recommending one with least expense that will address patient safety/unexpected positive crossmatch issues
  - Note: these HLA types will **NOT** be used for calculating CPRA
Benefits

- Improving patient safety by screening candidates from donors with relevant HLA types

- Improving efficiency for allocation of all organ types, esp. where virtual crossmatching used by preventing some unexpected positive crossmatches/increased cold ischemia time
Plan for Evaluating

- The number and percentage of registrations with unacceptable DQA and DPB antigens reported on the waiting list, overall and by organ and center.
- The number and percentage of deceased donors with donor DQA and DPB antigens reported in DonorNet prior to making offers, overall and by organ and OPO.
- The number and percentage of offers refused due to a positive crossmatch by organ.
RESOLUTION 13

RESOLVED, that optional fields for HLA-DQA and HLA-DPB in DonorNet® and Waitlist℠ shall be added as set forth in Exhibit A to the Histocompatibility Committee’s report to the Board, effective pending programming and notice to the OPTN membership.

*Page 23 of Board book
Questions?