Change Calculated Panel Reactive Antibody (CPRA) Calculation

OPTN Histocompatibility Committee

Purpose of Proposal

- Revised CPRA will better reflect actual sensitization and improve access to transplant for the highly sensitized and minority OPTN candidates

Proposal

- Add HLA-DQA1, DPB1, DPA1, and allele-level antibodies to calculation
- NMDP expands data cohort 100x
  - Includes much higher typing resolution than most OPTN deceased donors
- Use genotype instead of haplotype calculation to better approximate rate of incompatible donors
- Expand from four to seven groups for deceased donor ethnicity
  - Expand from kidney-specific donor ethnicities to all organs

Rationale

- Three major loci, HLA-DQA1, DPB1, and DPA1, not in current CPRA
  - Disadvantages 8% of K/KP candidates reporting UA for DQA and DPB
- Current calculation only uses low resolution HLA typing
  - Allelic antibodies do not receive allocation benefits
  - Most deceased donor HLA typing is reported at low resolution
- Frequency data needs updating from 2007-2008 donor population
  - OPTN race and ethnicity data is limited for smaller minority groups and needs expanding

Member Actions

- This proposal will not change required testing or data collection
  - There will be a transition period to obtain documentation for candidates with 99-100% CPRA prior to implementation

What do you think?

- Is one week sufficient transition time for kidney programs to obtain documentation for allocation priority for CPRA 99-100% candidates?
- Should CPRA be viewable for all candidates?