Histocompatibility Committee Report

OPTN/UNOS Board of Directors

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June 23-24, 2014

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Ongoing Committee Projects

- Histocompatibility Bylaws Rewrite Phase II
- Deceased Donor HLA Typing Requirements

Histo Bylaws Rewrite Phase 2

Spring 2013

- Bylaws Phase I recommendations released
- Approved November, 2013
- Effective Feb. 1, 2014

Fall 2014

- Phase II recommendations released
- Will be presented to Board in June 2015

Major Components

Add General Supervisor as key personnel

-

Recognize foreign equivalent education and experience

-

Create pathway for review of laboratories with HLA typing errors that result in incompatible transplants or re-allocation to someone other than intended recipient

Improving virtual crossmatching with complete and consistent deceased donor HLA typing requirements

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Current HLA Typing Requirements for Deceased Donors

Organ	A	B	Bw4	Bw6	C	DR	DR51	DR52	DR53	DPB	DQA	DQB
Kidney	●	●	●	●	●	●	●	●	●			●
Pancreas	●	●	●	●	●	●	●	●	●			●
Kidney-Pancreas	●	●	●	●	●	●	●	●	●			●
Heart*	●	●	●	●	●	●				●		●
Lung*	●	●	●	●	●	●				●		●
Liver												
Pancreas Islet												

*For deceased heart and lung donors, if a transplant hospital requires donor HLA typing prior to submitting a final organ acceptance, it must communicate this request to the OPO and the OPO must provide the HLA information required in the table above and document this request. The transplant hospital may request HLA-DPB typing, but the OPO need only provide it if its affiliated laboratory performs related testing.

Goals of the Proposal

- Promote transplant safety by communicating critical information on deceased donors (DD) to be used for determining donor and recipient compatibility and/or post transplant monitoring
- Expedite allocation by improving virtual crossmatching and preventing unexpected postitive crossmatches that result in discards or increased cold ischemia time

Summary

Complete, consistent list of HLA loci reported on all deceased donors

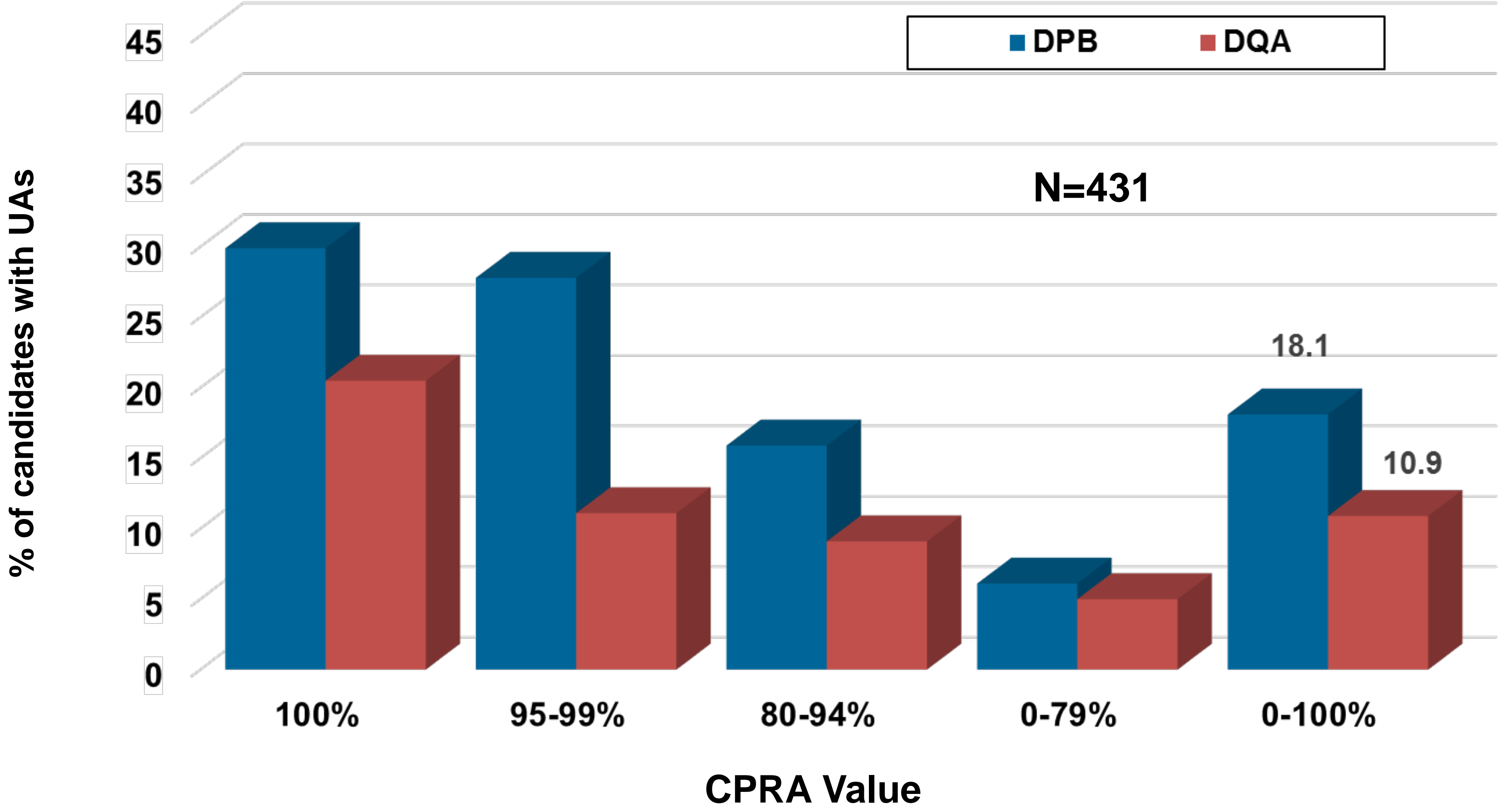
- For deceased liver and thoracic donors, HLA typing required only if requested

Molecular typing performed on all deceased donors

Require HLA-DQA and HLA-DPB typing and reporting for all kidney, kidney-pancreas, and pancreas donors

DQA & DPB

% of OPTN KPD Candidates with HLA-DPB and DQA UAs



Note that for kidney waiting list: 84% have CPRA 0-79%, 4% - 80-94%, 5% - 95-99 and 6% - 100%

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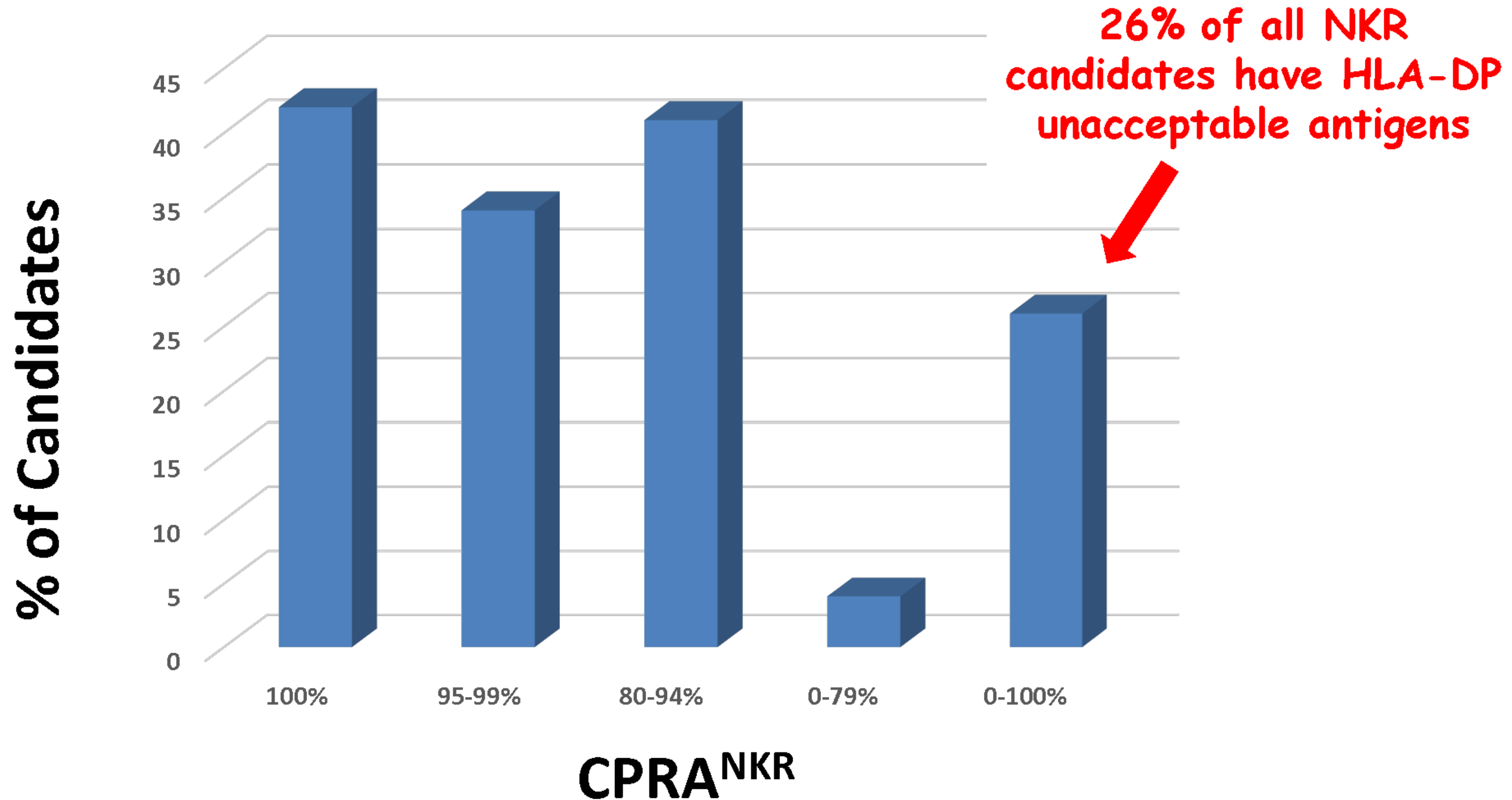
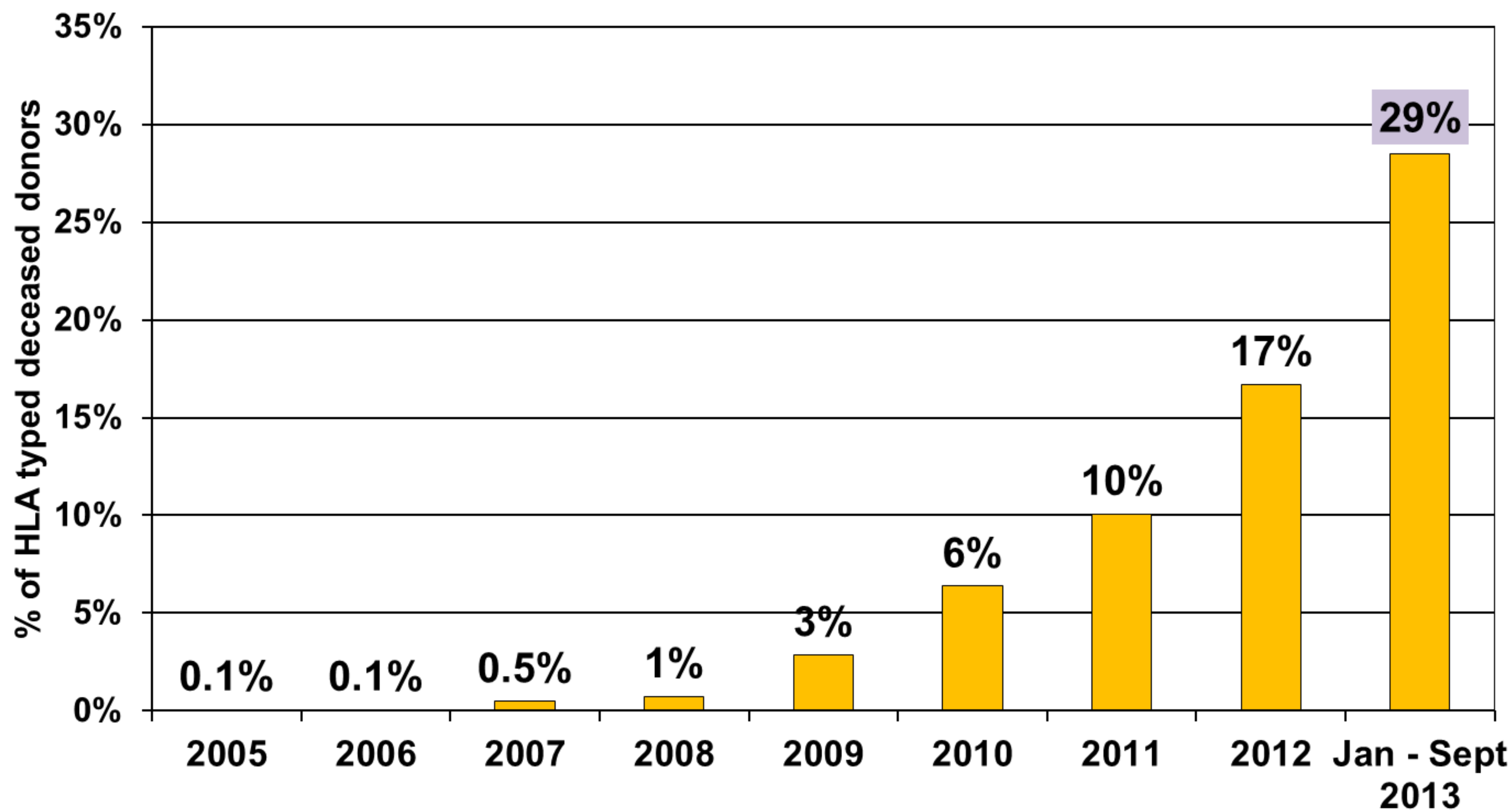
% of NKR Candidates with HLA-DP Unacceptable Antigens



Baxter-Lowe et al. American Journal of Transplantation, in press

Supporting Evidence

DPB Typed Deceased Donors



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Two Programming Options

#1

- DonorNet® Only

#2

- DonorNet® and Waitlist℠

•DonorNet® Only

Pro:

- Allows deceased donor HLA info to be reported for these types
- Slight reduction in IT programming estimate (still in large category)

Con:

- Patient safety concerns
- Burdensome for transplant programs
- Inconsistent with programming for all other HLA reporting and the KPD program

•DonorNet® and Waitlist℠

Pro:

- Eliminates patient safety concerns
- Less burdensome to transplant programs
- Consistent with KPD programming
- Supported by community (based on feedback from regions, ASHI, Kidney Committee, Pancreas Committee, Operations and Safety Committees)

Con:

- Higher IT programming cost (very large category)

Specific Feedback

- What additional info would you like to see when this is presented for decision in November?