Approaches to the Management of Sensitized Lung Transplant Candidates: Findings From An International Survey

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RATIONALE

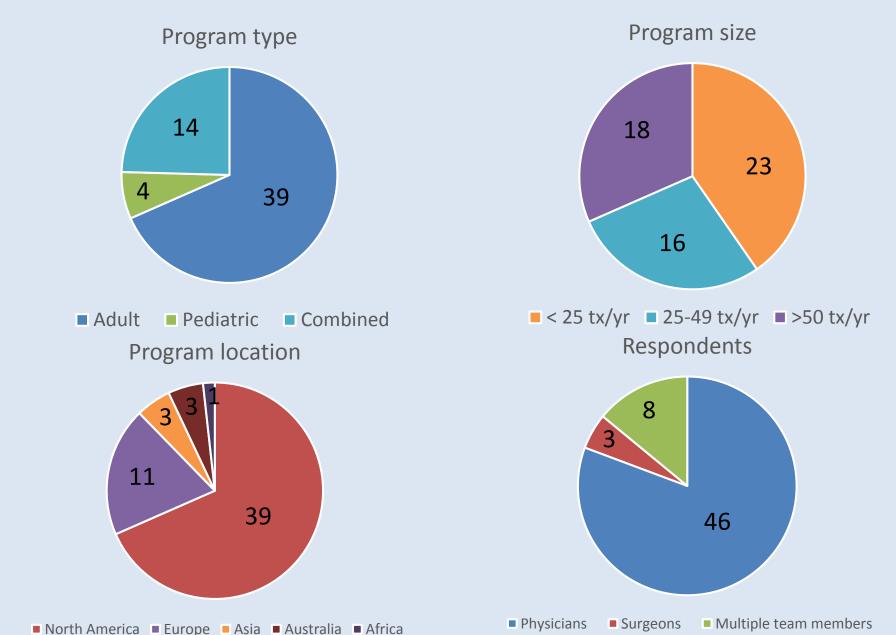
- Highly sensitized lung transplant candidates undergo transplant at a significantly lower rate than unsensitized candidates¹
- Study objective was to determine the approach to waitlist and peri-operative management of these candidates across lung transplant programs worldwide

METHODS

- Lung transplant programs were invited to complete the survey either online or over the phone
- Survey questions pertained to each program's method of human leukocyte antigen (HLA) antibody detection, characterization of HLA antibody risk, incorporation of virtual (VCM) and actual crossmatch (ACM) results in organ allocation decisions, and use of pre or peri-operative desensitization therapy between January 2018 and October 2019

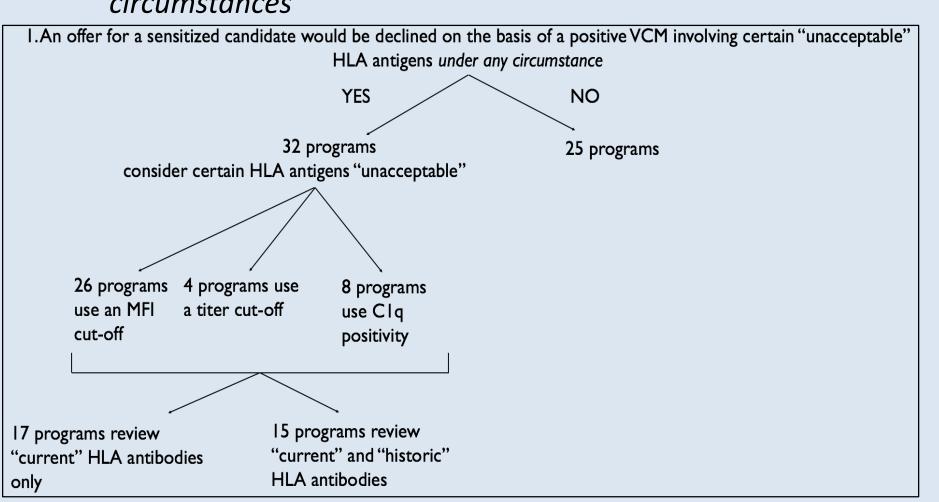
RESULTS

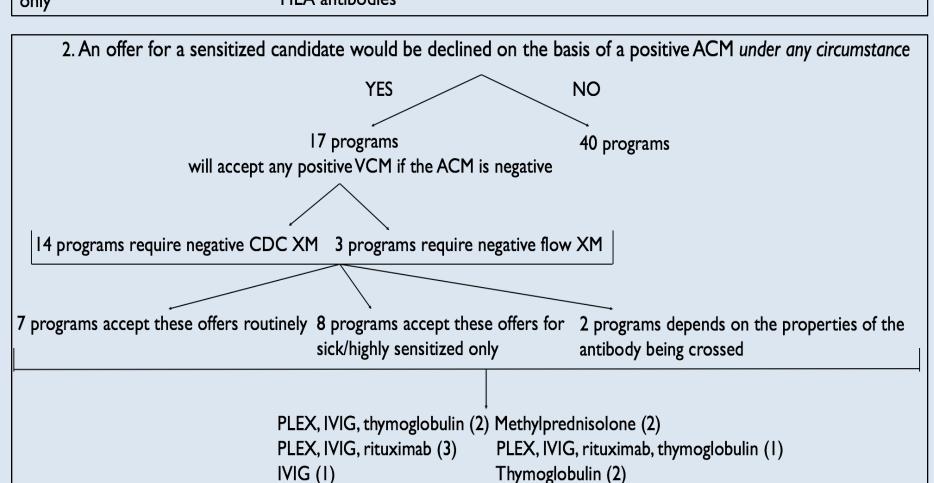
A total of 57 lung transplant programs were surveyed:



RESULTS

- There are 3 categories of practice across lung transplant programs that impact sensitized candidates' access to transplant:
 - 1. An offer for a sensitized candidate would be declined on the basis of a positive VCM involving certain "unacceptable" HLA antigens *under any circumstance*
 - 2. An offer for a sensitized candidate would be declined on the basis of a positive ACM *under any circumstance*
 - 3. An offer for a sensitized candidate would be accepted regardless of VCM or ACM results *under certain or any circumstances*

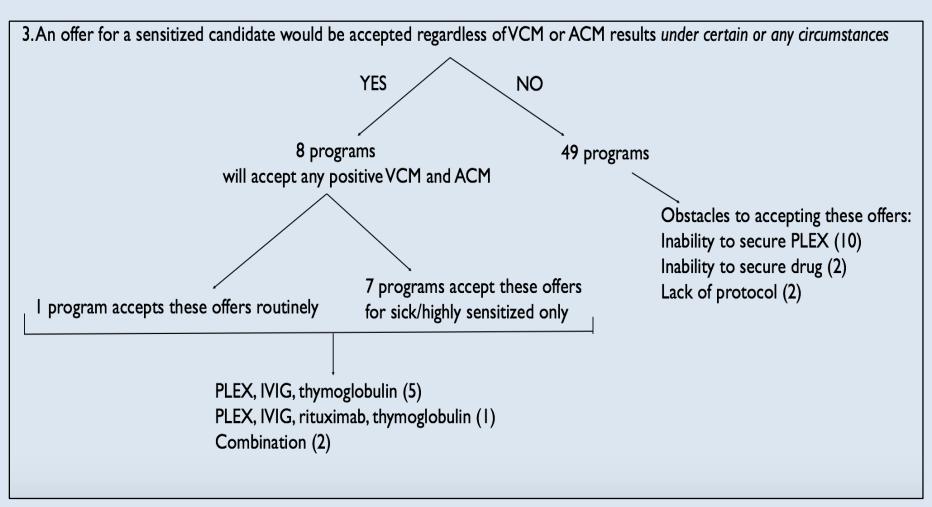




Basiliximab (1)

Combination (5)

RESULTS



- Impact of sensitization on candidates' access to lung transplant:
 - 12/57 (21%) of lung transplant programs consider a high calculated panel reactive antibody (cPRA) value a contraindication to list for transplant
 - 19/57 (33%) of lung transplant programs consider a high cPRA value a contraindication to offer mechanical bridge to transplant

CONCLUSIONS

- Management of sensitized lung transplant candidates varies widely across programs
- A minority of programs would accept an offer with a positive VCM and ACM for a sensitized candidate
- The majority of programs would decline an offer with either a positive VCM or ACM for a sensitized candidate
- Future directions should include multi-center studies comparing peri-operative management and outcomes of sensitized lung transplant candidates

REFERENCES:

1. Aversa M, Benvenuto L, Kim H, Shah L, Robbins H, Stanifer BP, D'Ovidio F, Vasilescu R, Sonett J, Arcasoy S. Effect of calculated panel reactive antibody value on waitlist outcomes for lung transplant candidates. *Ann Transpl.* 2019;24:383-392