



# Overview of Donor Consensus Conference, May 1 2015 at American Transplant Congress

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# Disclosures

I have the following relationships to disclose:

Research grants, advisory boards, speaker honoraria

Name of Companies with which relationship exists:

Transmedics Inc., CareDx Inc., Novartis

# Pre-conference survey

- Questions to participants relating to their center's current approach to donor selection and management
  - Sizing of donor as compared to recipient
  - Donor risk factors and their perceived importance
  - Donor management strategies
- 47 respondents, each from a different center
- 11 UNOS regions represented
- Balanced mix of small, medium and large volume centers for both transplant and MCS

## Sizing of donor/recipient

- 58% believed that oversize donors are needed for recipients with pulmonary hypertension, 42% disagree.
- 57% of respondents place most importance on height in donor to recipient ratio, while 43% place most importance on weight
- For female donor heart to male recipient, 46% would oversize the donor, 48% believe no oversizing is necessary and 6% would accept an undersized heart.

# Perceived importance of donor risk factors

- Asked what level of left ventricular hypertrophy would cause them to reject a heart, assuming no other mitigating circumstances, 21% chose >1.2cm, 45% chose >1.3cm, 21% chose >1.4cm and 13% chose >1.5cm.
- Asked what expected ischemia time would cause them to reject a heart, assuming no other mitigating circumstances, 34% said >4 hours, 34% said >5 hours, 30% said >6 hours and 2% said >7 hours.
- Asked what LVEF level would cause them to reject a heart, assuming no other mitigating circumstances, 21% said  $\leq 40\%$ , 30% said  $\leq 45\%$ , and 49% said  $\leq 50\%$ .

# Perceived importance of donor risk factors (continued)

- Asked what an unacceptable downtime (administration of CPR duration) would be for acceptance of a donor heart, 20% said >20minutes, 38% said >30 minutes, 23% said >40 minutes, and 20% said >60 minutes.
- 34% of respondents require donor hearts to be off inotropes to proceed to transplant, 66% do not require this.
- 38% of respondents routinely use older donors (>50 years) for older recipients (>60 years) at their program, 62% do not.

# Donor management strategies

- 53% of respondents normally request the use of thyroid hormone to optimize donor heart function, 47% do not.
- 22% of respondents normally request the use of corticosteroids to optimize donor heart function, 78% do not.

# Key points: debunking myths in donor selection

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- Oversizing is not necessarily needed for recipients with pulmonary hypertension, but undersizing should be avoided. Cases should be assessed on an individual basis.
  - Oversizing is not necessarily needed for female donors to male recipients, and should be assessed on case-by-case basis
  - Regarding parameters to assess “oversizing” or “undersizing”, LV mass index should be considered in conjunction with height and weight.
  - Younger donor age with good graft function is a factor that should generally be prioritized above all other risk factors.
  - There is no unacceptable “downtime” for a heart if echocardiographic function and other factors are favorable
  - Low dose inotrope use on the donor heart is acceptable to proceed to transplant, however, use of norepinephrine, epinephrine and/or multiple inotropes should be viewed with caution. Vasopressors are acceptable.
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# Key risk factors to be considered in donor selection: by tier of importance

Donor Risk Factors	Recipient Risk Factors
<b>MOST IMPORTANT</b>	<b>MOST IMPORTANT</b>
<p>Older Age</p> <p>Left ventricular function</p> <p>Presence of LVH</p> <p>Cold Ischemic time</p> <p>Distance from transplanting center</p> <p>High inotrope use</p>	<p>Older age</p> <p>Congenital heart disease as etiology of heart failure</p> <p>Severe organ dysfunction (as reflected by elevated creatinine or total bilirubin)</p> <p>Pulmonary Hypertension</p> <p>Temporary circulatory support, especially if complicated</p> <p>Mechanical ventilation</p> <p>Amyloid</p>
<b>IMPORTANT</b>	<b>IMPORTANT</b>
<p>Gender mismatch (female to male)</p> <p>Hepatitis C serology</p> <p>Pre-existing coronary artery disease</p> <p>Malignancy as cause of death</p>	<p>Redo heart transplant?</p> <p>Sensitization level of patient</p>