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

Jon Kobashigawa, MD
Cedars-Sinai Medical Center, Los Angeles, CA

DSL/Thomas D. Gordon Professor of Medicine
Director, Advanced Heart Disease Section
Director, Heart Transplant Program
Associate Director, Cedars-Sinai Heart Institute
Associate Director, Comprehensive Transplant Center
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 ≤40%, 30% said ≤45%, and 49% said ≤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 >20 minutes, 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

- 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.
### Key risk factors to be considered in donor selection: by tier of importance

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<th>Donor Risk Factors</th>
<th>Recipient Risk Factors</th>
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<td>MOST IMPORTANT</td>
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<tr>
<td>Older Age</td>
<td>Older age</td>
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<tr>
<td>Left ventricular function</td>
<td>Congenital heart disease as etiology of heart failure</td>
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<td>Presence of LVH</td>
<td>Severe organ dysfunction (as reflected by elevated creatinine or total bilirubin)</td>
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<td>Cold Ischemic time</td>
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<td>Distance from transplanting center</td>
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<td>High inotrope use</td>
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<td>IMPORTANT</td>
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<td>Gender mismatch (female to male)</td>
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