Apheresis Collection of Hematopoietic Progenitor Cells (HPC)

- Used to obtain HPCs for transplantation
- Routinely performed in patients and healthy donors
- Studies have shown these procedures to be relatively safe
- Requires adequate venous access in the donor

Image courtesy of Dr. Fernando
Study Objectives

• Discover the current practices of donor vein assessment and central venous line usage in HPC collection

• Ultimate goal of guideline development for effective donor venous access and care
Methods

• Electronic survey created with questions addressing both autologous and allogeneic donors
  – Demographics
  – Pre-collection vein assessment
  – Central venous catheter (CVC) placement, care and removal
• Distributed to >5000 possible participants on ASFA electronic distribution lists
  – One response analyzed per institution
• Results calculated using the denominator of response number to each question
Results - Participants

120 Total Responses

100 Center Responses

84 Performing Autologous

68 Performing Allogeneic

20 Duplicate Responses

81 USA

19 Abroad
Results – Donor Vein Assessment

- If questionable access, CVC placement considered as next step
- Provider confirmation
- Documentation of results
- Performed >1 week before collection
- Most often performed by apheresis staff

Graph showing response center (%): Allo (red) vs Auto (blue)
Results – Assessment Documentation

Are the results of the assessment documented?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Allo</td>
<td>Auto</td>
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Is there confirmation that the clinical transplant staff received results of the venous assessment?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allo</td>
<td>Auto</td>
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How are the results of the assessment communicated to clinical transplant staff/provider?

- Phone Call
- Email
- Written Report
- Electronic (donor or medical)...
- Assessment not communicated.
Results – CVC Placement

- Written provision of post-insertion care instructions
- Verbal provision of post-insertion care instructions
- CVC documentation written/EMR
- CVC placement verification
- Preferred site of CVC placement - IJ
- CVC placed on day of collection
- CVC placed by Interventional Radiology

![Bar Chart]

- Allo
- Auto

Response Center (%)
Results – CVC Care and Removal

- Catheter care performed by apheresis team
- Heparin to lock catheter
- Heparin (1000 IU/mL)
- Tissue plasminogen activator (tPA) usage
- 60 minute maximum time in line for tPA
- Line removal not dependent on lab criteria

Response Center (%)
Conclusion

- These data summarize the largest single survey of donor vein assessment at institutions performing HPC collections by apheresis
- Practice variation warrants further investigation and consensus to establish best practice