Minutes

Cord Blood Special Interest Group Second Annual Meeting

Feb 25, 2017

Steering Committee	Juliet Barker, MD, Elizabeth Shpall, MD, Joanne Kurtzberg, MD, Claudio Brunstein, MD, PhD, Colleen Delaney, MD, Filippo Milano, MP, PhD, Ioannis Politikos, MD
Guests	By Invitation
Staff	Dan Kotheimer

1. Introduction: Drs. Juliet Barker and E.J. Shpall
Dr. Barker welcomed the attendees and provided a brief introduction regarding the mission and operations of the ASBMT Cord Blood SIG and introduced the two new Steering Committee members (Dr. Filippo Milano, FHCRC and Dr. Ioannis Politikos, MSKCC) and led the meeting.

2. CIBMTR perspective: Dr Mary Horowitz
Dr. Horowitz discussed her perspectives of the status of Cord Blood Transplants (CBT) versus other alternative stem cell sources. She encouraged accrual to protocols such as the dCBT vs haplo CTN study as well as more CBT proposals to the Graft Sources and Manipulation Working Committee. She encouraged the field in pursuing high quality retrospective studies to bolster the evidence of the potential long-term benefits of CBT.

3. NMDP update on CBT activity: Karen Dodson and Merry Duffy
Merry Duffy presented the numbers of CBT and CB shipments in the FY2016. CBT activity has slowed although CBT accounts for approximately one-third of transplant activity in African-American populations, for example. Rates of unit banking have also slowed and may be explained by the costs of licensure and storage as well as the development of more stringent dose criteria for banking. Data from WMDA mirror the decreasing numbers of CBT worldwide (except for Japan). Most recently, FY17 (Oct 2016-Jan 2017): overall CBT up 1% and multi-CB up 26% compared to FY16. Shipment of CBU with TNC >150 increased by 14%.
Audience comments: There were major concerns about the cost of CB unit(s) being an impediment to CBT. There were also comments/concerns that haplo-identical transplants had substituted for CBT in many U.S. centers.

4. NMDP CB Advisory Group (CBAG) update: Dr Karen Ballen
Dr Ballen explained that the NMDP CBAG is an advisory to NMDP Staff and Board of Directors that meets twice yearly and includes CB Bank Directors, transplant physicians, NMDP staff, representatives from HRSA, and invited guests with a goal to promote the quality of CB units and CBT. The CBAG seeks to track and address impediments to CBT utilization. The CBAG has overseen a Bank practices initiative in relation to Zika virus and oversees quality standard discussions (e.g TNC standardization,

definitions of high quality units). Other activities have included protocols to handle the dextran shortage, the Volume is Vital campaign (collections), and interactions with foreign Banks. The CBAG interacts with HSRA in regard to NCBI funding.
Audience comments: As it pertains to cost, the UK has recently demonstrated favorable cost effectiveness after CBT comparable to unrelated donor BMT. This combined with good CBT outcomes has formed the basis for lobbying the British government for further funding of their CB Banks. Publication of the UK cost effectiveness analysis was encouraged. It was stated that a similar cost-effectiveness analysis would not be feasible in the US as it would require insurance data.

5. CB association (CBA) update: Dr Joanne Kurtzberg
Dr Kurtzberg described the role of the CBA as an international non-profit organization that promotes the banking and use of CB and related tissues for the treatment of hematologic diseases and other diseases as well as regenerative therapies. She demonstrated the CBA website and membership application process and emphasized that CB is the only graft source regulated by the FDA. She emphasized that the future of CBT depends on demonstrating excellent long term outcomes (i.e. low relapse and cGVHD rates) and encouraged center collaboration to generate a high-impact publication focusing on late outcomes commencing in pediatric recipients. She also led the discussion that while trials comparing graft sources may provide more definitive data; the trials can be lengthy and have multiple impediments, and therefore retrospective late outcomes projects should be a very high priority given the decline in CBT use.
Audience questions/comments: It was suggested that quality of life measures be added which may be difficult and time consuming although may be feasible to explore in individual centers that have all the data. Dr. Vanderson Rocha of Eurocord stated they had data and would be willing to collaborate. Whether the CIBMTR registry data could be used as controls when comparing CBT to other graft sources was discussed. Overall, there was a consensus to collaborate on the late effects project as a high-priority and discrete deliverable.

6. NCBP of the NYBC update: Dr. Andromachi Scaradavou
Dr. Scaradavou presented the status of the highly regulated GMP manufacturing process in public banks in the US. The NCBP has an ~ 61,000 unit inventory. The percentage of units that are licensed have continued to increase since 2011 but still only comprise a small percentage of the entire inventory. The average pre-cryopreservation TNC dose has increased to ~ 140 since 2013. The likelihood of obtaining a high TNC unit depends on time of clamping at collection and delayed cord clumping (ACOG 2017) poses a challenge. She described the improvements in CFU assays obtained by high resolution imaging and high through-put standardized approaches. She then presented data on stability evaluation studies and correlation of CB unit segment vCD34+ cell dose and CFU with pre-cryo values that can reliably ensure unit quality. Dr. Scaradavou also emphasized that search to shipment time is a mean of 5.4 and median of 4 days in the US (mean 5.7 and median 4 days for non-US centers), and that 74% of NYBC units ship within 7 days.
Comments: the speed of access to the graft has not been adequately recognized as a major advantage in the transplant field.

7. CB SIG activities: Dr. Juliet Barker
Dr Barker briefly reviewed the mission of the SIG. She announced that the first major achievement of the SIG was the completion of the *"Optimal practices"* manuscript on behalf of the SIG and the NMDP and this had been accepted for publication in BBMT. She then discussed the proposed content for the CB SIG website. She stated that a member list was being generated arranged by Center/ Organization, and that the plan was to develop the CB SIG website with membership lists, content such as CBT manuscripts, newsletters, and links to other websites such as NMDP, NYBC, CBA, ISCT, CBA, EBMT, and FACT. The ASBMT communications contact Dan Kotheimer (DanKotheimer@asbmt.org) was introduced. Whether the CB SIG could be highlighted through the NMDP Network was discussed. Whether further CBT practice guidelines could be developed was discussed, but it was thought this would need to go

through the ASBMT practice guidelines committee. Collaborations between the CB SIG and other SIGs such as Infectious Diseases and Pharmacy were discussed as were other methods of publicity (eNEWS articles with link, CB SIG email blasts, and social media). The link to the website in development is: http://asbmt.org/about-us/special-interest-groups/cord-blood-sig.

8. Center collaborations - New models for clinical trials: Dr. Colleen Delaney
Dr Delaney discussed the challenges to clinical trials given the current funding environment and concerns that the BMT CTN may not pursue another CBT trial. She discussed a model that she has used to fund multi-center trials and discussed how a NIH mandate for central IRB may be helpful in this setting.
Audience questions/comments: It is equally important to demonstrate evidence of current good CBT outcomes as explore new techniques (expansion, GVHD, viral infections). The field needs advocacy and other sources of funding. Participants questioned if we can agree on a high priority trial to propose for government funding and it was stated a pediatric CBT vs haplo trial would be proposed. Audience members stated that mechanisms to decrease the cost of CB grafts needed to be pursued.

9. Opportunities for collaboration with Europe: Dr. Jaap Boelens
Dr. Boelens emphasized that CBT is a platform with unique advantages but also unmet needs/challenges for the future. He suggested we focus on CBT strengths (powerful anti-tumor activity, rapid immune reconstitution with omission of ATG, better long term outcomes due to low cGVHD. He stated that we need to promote international collaborations with harmonization of conditioning regimens and practices (e.g. GVHD prophylaxis). He stated he also had an interest to further study the optimization of CB unit selection: e.g. PIRCHE. He also emphasized that multiple investigators had interests in CB derived cellular therapies with NK, DC, and Treg products as well as expansion. He stated that centers were already collaborating to compare graft sources in children in dedicated centers (i.e. not registry data).

10. ISCT collaborations: Dr. E.J. Shpall
Dr. Shpall announced that ASBMT CB SIG was jointly funding the Cord Blood Series Workshop with the CBA at the ISCT annual meeting. The one-day workshop would address CBT as a platform for cellular therapy, the status of new CB-derived cellular products, applications of CB or cord tissue for non-hematological disorders, and cost effectiveness of CBT.

11. ASBMT Transplant Infectious Disease SIG collaboration: Dr. Michael Boeckh
As Co-Chair of ASBMT I.D. SIG, Dr Boeckh emphasized their commitment and interest to collaborate with the CB SIG on clinical trials, guidelines for management of infections, or analyses of infectious complications after CBT.

12. Other business: Dr. Juliet Barker
Juliet Barker summarized major points of the meeting and opened the session to further discussion concerning the above issues.

Submitted by Dr. Juliet Barker, MSKCC