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Doug Padley, MT(ASCP)

Development Coordinator

Human Cellular Therapy Laboratory

Mayo Clinic, MN

Chair, AABB Cellular Therapies Standards Program Unit

Objectives

- Review AABB standard setting process
- Describe accreditation program
- Review selected standards that have significantly changed

What is AABB?

- International association
 - Dedicated to transfusion medicine and cell therapy
- Standard setting / accreditation for 50 yrs.
- 8,000 individual members
- 1,800 institutional members
- 50 states 80 countries

Standards Overview

- Based on ISO and Quality Systems
- Include QS and Technical standards
- Standards not prescriptive
 - Flexible
 - Allow for innovation and technology
 - Facilities must meet all requirements
- Worded as "shall" not "should"
 - "Shoulds" described in Standards Source
- 18 month cycle (formerly 24 month)
- Tools
 - Assessment tools (guidance/inspection preparation)
 - Commendable practice on web (examples of SOPs, forms, etc)

Changes to Standards

- Based on new evidence
- Changes in regulations
- Changes in standard of care
- Input from membership, SPU members, and accredited facilities
- CT SPU has a defined algorithm for changing standards
- AABB has mechanism for public/membership notification

The Evolution of AABB Cellular Therapy Standards

- 1991-96 Part of BB TS Standards
- 1996 1st Edition HPC Standards
- 2000 2nd Edition HPC Standards
- 2001 1st Edition Cord Blood Standards
- 2002 3rd Edition HPC Standards
- 2004 1st Edition Cellular Therapy Stds
 Combined with 1st ed. cord blood (2001) and 3rd edition HPC
- 2007 2nd Edition Cellular Therapy Stds
- 2008 3rd Edition Cellular Therapy Stds

Format of AABB CT Standards

- Cascading pattern:
 - General quality standards
 - Technical standards that apply to all cellular therapy products
 - Technical standards that are specific to the type of product or donor
 - Reference standards (most detailed requirements in book)
- C or F = Corresponding record required
 - Refer to retention time for records (6.2.10)
 - From Creation or Final Disposition

- 5.0: Process Control
 - 5.7 Verification of Donor Eligibility
 - PF 5.7.2 Donor identity: Requires 2 identifiers at procurement
 - 5.7.2.1 Additional requirements for cord blood: requires identification of the birth mother before procurement.
 - Reference standard 5.7.1.A
 - Contains more detail about donor eligibility requirements

The Standards Program Unit

- Content experts
 - Technical
 - Scientific
 - Regulatory
- An ethicist (may also serve as public rep)
- Physicians
 - Lab Directors
 - Clinicians

- Representative from AABB accreditation program unit
- Representatives from other organizations (AATB, ACOG, ASBMT, ASFA, ASH, FACT, FDA, ISCT, NMDP)

AABB Accreditation Program

- Based on Standards
- Program has policies regarding:
 - Conflict of interest
 - Confidentiality
 - Assessor technical expertise
 - Organization of accrediting body
 - Impartiality
- Internal and external validation of assessments
 - CMS (for CLIA- no disparities in >10yrs)
 - deemed status
 - Internal validations min 1% reassessed immediately after, different team

The Process

- Assessment team and duration of assessment based on services and volume
 - Team includes AABB staff assessor plus others
- Either facility or assessor may decline
- Not same assessor for sequential cycles
- Unannounced (within an approved date range)
- Written policies and procedures
- Dispute process (Accreditation Review Cmte)
- Assessor CE requirements (content and quantity)
- Variance process
 - Facility can request variance from standards, reviewed by CT SPU

Accreditation Spans Entire Process

- Collection sites
- Testing sites
- Processing sites
- Storage sites
- Infusion sites
- Off-site collection facilities (incl UCB)
 - Physically assess minimum of one site or 10% (greater of the two – since 1998)

Selected Changes in AABB Cellular Therapy Standards 2nd Edition

Procurement Activities

 4.2.1.1: There shall be a process to ensure the quality of the procurement activities when these are performed by a supplier.

This is a new standard that clarifies and strengthens what had always been the intent.

Transportation of cryopreserved cellular therapy components

- This section has been significantly modified:
- C 5.12.1.2 Shipping containers shall be validated and requalified at defined intervals to ensure they maintain temperatures within the acceptable range for the duration of transportation.
- F 5.12.1.3 When non cryopreserved products are transported between facilities, the extent of temperature monitoring shall be defined.
- F 5.12.1.4 When <u>cryopreserved products</u> are transported <u>between facilities</u>, the temperature of the shipping container shall be continuously monitored.

5.12 – Distribution & Transportation New Concept

• 5.12.1.7 – The receiving facility shall maintain records of product acceptability and verify shipper temperature upon receipt.

Screening of Autologous Donors

- For the 1st Edition there were several variances granted to the standards requiring similar health history screening for autologous and allogeneic donors.
- Reference Standard 5.7.1B Clinical Evaluation and Laboratory Testing of Donors clearly delineates differences between the extent of evaluation for infectious risk factors, clinical evaluation and infectious testing for
 - Allogeneic donors
 - Autologous donors
 - Mothers of the cord blood donors
 - Cadaveric donors
- However, the requirements for testing for infectious disease remains the same between the donors with exception of testing for CMV in autologous testing.

HLA Testing...

- The Standards now specify not only that the HLA testing needs to be performed in certain situations but also the required level of resolution and the use of DNA based techniques.
- Reference Standard 5.7.1B (for allogeneic donors only)
 - ** Typing for HLA shall be performed whenever this information is necessary for the selection and/or clinical use of a cellular therapy product.
 - # HLA-A, HLA-B, HLA-C, and HLA-DRB1 loci shall be determined. All typing used for the final selection of the donor shall utilize DNA based technologies.

Ref Std 5.14B – Processing Tests for HPC, Cord Blood Products

- 2) HLA testing is required
 - for all products designated for possible allogeneic use
 - on a sample from product or donor
 - at a minimum of HLA-A, -B, -DRB1 loci
 - using DNA-based technologies
 - At Confirmatory Testing, HLA-C is also required

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Donation/Donor	Abnormal Health	Abnormal Communicable	Results affect	Results affect therapeutic	Recipient	Notification
	Screening	Disease	donor's	value of the	known ³	
	Results	Testing	health ²	product	KIIOWII	
1	Results	Results	пеанн	product		
Allogeneic	Yes	No	No	No	Yes	Donor,
9						Recipient's
						physician4
	Yes/No	Yes	Yes	No	Yes	Donor,
						Recipient's
						physician
	Yes/No	Yes	Yes	Undetermined	No	Donor
Autologous	Yes	No	No	NA	Yes	Donor,
8						Donor's
j						physician
	Yes/No	Yes	Yes	NA	Yes	Donor's
Cord Blood⁵		N.T.	N.T.	N	NT.	physician
Cord Blood	Yes	No	No	No	No	Donor's
	Yes/No	Yes	Yes	Yes/No	No	mother Donor's
	Y es/No	Yes	res	Y es/No	No	mother
						and/or
						donor's
						physician,
1						as defined in
						agreement
3						and/or
4						informed
4						consent
	Yes/No	Yes	Yes	Yes/No	Yes	Donor's
						mother
						Donor's
						physician
						Recipient's
					** **	physician
Cadaveric	Yes	No	No	No	Yes/No	Procurement
4	Yes/No	Yes	Yes	Yes/No	No	facility
	Y es/INO	res	res	Y es/INO	NO	Procurement facility ⁶
	Yes/No	Yes	No	Yes/No	Yes	Procurement
,	1 03/110	1 03	110	103/110	1 03	facility,
3						recipient's
V						physician
						1 /

Abnormal results notification

Reference standard
5.7.9A has been
completely re-done
and is more
comprehensive
than previous
reference standard
in the 1st edition.

Changes in the labeling table...

- Reference Standard 5.6.2A. Requirements for Labeling of Cellular Therapy Products
 - P=Permanently affixed,
 - A=Affixed or attached using a tie-tag,
 - R=accompanying Records
- In addition the table is now divided between labeling of the product and the Outer container/Inner Container labeling

Questions...

Contact us at standards@aabb.org

Harmonization of Cellular Therapy Standards

- AHCTA, A formal worldwide group with broad representation has been established.
 - AHCTA has begun process of comparing standards/references from at least 7 organizations
- The Circular of Information- new revision in early development
- The ISBT 128 working group



Mission statement:

- Harmonisation of respective standards
- Ultimately achieve a single set of quality, safety and professional requirements for cellular therapy including haematopoietic stem cell (HSC) transplantation.
- All aspects of the process from donor recruitment to transplantation and clinical outcome.
- Supported by
 - complementary standards and guidelines,
 - promotion of the concept of a global set of standards
- Inform and support authorities in the area of cellular therapy regulation: minimum requirements

Cell Therapy Harmonization

ISBT 128 Implementation Plan for Cellular Therapy Products

Paul Ashford, Pat Distler, Adrian Gee, Alan Lankester, Stella Larsson, Irene Feller, Kathy Loper, Derwood Pamphilon, Leigh Poston, Fran Rabe, Ineke Slaper-Cortenbach, Zbigniew Szczepiorkowski, and Phyllis Warkentin

Standards for the Terminology and Labeling of Cellular Therapy Products

Paul Ashford, Pat Distler, Adrian Gee, Alan Lankester, Stella Larsson, Irene Feller, Kathy Loper, Derwood Pamphilon, Leigh Poston, Fran Rabe, Ineke Slaper-Cortenbach, Zbigniew Szczepiorkowski, and Phyllis Warkentin

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