Response to Comments Received to the 9th edition of Standards for Cellular Therapy Services

Please note that public comments that were submitted address the proposed 9th edition of CT Standards, and not the final version. The changes are best understood when the proposed Standards are compared to the final published version. The program unit has elected to make the substance of public comments that were submitted a part of this document. This document does not represent a full summary of significant changes to the 9th edition of CT Standards. Guidance that appears with the 9th edition of CT Standards in the Standards Portal provides a more in-depth look at the additions, deletions and changes and the rationales behind those decisions that what appears below.

Standard	Comment	Change made?	Outcome
1.1.2.1	We request clarification as to what constitutes relevant experience in the scope of procurement activities. Additionally, we propose that education be considered as applicable to the scope of experience required by the standard.	NO	The committee reviewed this comment but did not feel that a change was needed at this time. The concept of distribution is already covered in the standard in its current format. The committee did not feel that adding "collection" to the standard was appropriate as this concept does not belong in this standard related to the laboratory and not procurement.
1.1.2.1.1 (New)	I would like to ask on point 1.1.2.1.1 what do you mean 5 cell product? Do you mean the same product but at least 5 times or do you mean different source of product.	NO	The committee noted this comment and has decided to create guidance to assist in adherence to this standard
1.1.3.1	Please edit the standard as such: The laboratory medical director(s) shall have responsibility and authority for medical activities related to the collection, processing, and distribution of cellular therapy products and related services.	NO	The committee reviewed this comment but did not feel that a change was needed at this time. The concept of distribution is already covered in the standard in its current format. The committee did not feel that adding "collection" to the standard was appropriate as this concept does not belong in this standard related to the laboratory and not procurement.
1.1.3.1.1 (New)	In the event of the need to replace laboratory medical director through external hire, it may be difficult to find an outside replacement who meets both the competent authority's requirements of a Medical Director as well as the proposed AABB requirement of "at least one year of experience in the scope of processing activities performed in the facility" in the countries where we operate in due to the limited pool of such talent.	YES	The committee agreed with this comment and changed the wording from the proposed edition to the final edition by replacing the term "in" with "by", allowing potential medical directors to have previous experience at a different facility.
1.1.3.1.1 (New)	We request clarification as to what constitutes relevant experience in the scope of procurement activities. Additionally, we propose that education be considered as applicable to the scope of experience required by the standard.	NO	The committee reviewed this comment but did not feel that a change was needed at this time. Relevant experience would be based on the activities being performed in each facility. This would be facility defined.
1.1.3.2	Please edit the standard as such:	NO	The committee did not feel that a chance was needed at this time. The terms suggested to be

	The laboratory director shall be responsible for all technical aspects of the facility that are related to the processing, **testing, storage and distribution** of cellular therapy products, related services, and consultative and support services.		added to this standard are intrinsic elements of processing.
1.1.3.2.1 (New)	We request clarification as to what constitutes relevant experience in the scope of procurement activities. Additionally, we propose that education be considered as applicable to the scope of experience required by the standard.	NO	The committee reviewed this comment but did not feel that a change was needed at this time. The concept of distribution is already covered in the standard in its current format. The committee did not feel that adding "collection" to the standard was appropriate as this concept does not belong in this standard related to the laboratory and not procurement.
1.1.3.2.1 (New)	In the event of the need to replace laboratory director through external hire, it may be difficult to find an outside replacement who meets both the competent authority's requirements of a Medical Director as well as the proposed AABB requirement of "at least one year of experience in the scope of processing activities performed in the facility" in the countries we operate in due to the limited pool of such talent.	YES	The committee agreed with this comment and changed the wording from the proposed edition to the final edition by replacing the term "in" with "by", allowing potential medical directors to have previous experience at a different facility.
1.2.3.6 (New)	By separating standards 1.2.3.2.1 through 1.2.3.5.1, is the intent that each exception warranted by a clinical situation needs to be approved by all parties, is the exception limited to only those whose realm of responsibility would be impacted? If that is the case, who would have the final decision for determining which areas are impacted? Why can these not be condensed into a single standard, listing each relevant party?	YES	The committee agreed with this comment and consolidated the four separate standards into one general standard that could apply to all disciplines.
1.2.3.6 (New)	All 4 new standards read the same except the person approving. I suspect facilities will have hard time understand & /or decide who should approve what deviation unless you want all 4 directors to approve. In this case, you can combine the standards into one and list all 4 directors in that standard.	YES	The committee agreed with this comment and consolidated the four separate standards into one general standard that could apply to all disciplines.
1.2.4	Please define independent authority. How does assessor verify that quality representative have a defined independent authority?	NO	The committee noted this comment but did not feel that a change was needed at this time. The Assessment Tool and the forthcoming Guidance will provide information on how to comply with this requirement.
1.3, 1.3.1	Suggest moving the pen symbol from 1.3 to 1.3.1.	NO	The committee noted this comment but did not feel that the change was appropriate. The intent of the pen symbol "living" on standard 1.3 is the understanding that it cascade down to standard 1.3.1 as well.
1.4. (New)	Please delete this standard. This is getting into business strategy and is not required to ensure safety or efficacy of cell therapies.	NO	The committee reviewed this comment but did not feel that a deletion would be appropriate.

			The committee edited the title of the standard for clarity.
1.4 (New)	We request clarification as to what would constitute an unforeseen event. As currently written, the standard could be interpreted to encompass any number of scenarios that might affect a facility's accreditation status.	NO	The committee reviewed this comment and notes that the standard's title was edited and re-written for clarity. The guidance to the standard will provide examples of ways in which to meet the intent.
1.4 (New)	Disaster recovery planning should be part of business contingency planning. Suggest combine or put existing standards 1.3 Emergency operation plans under 1.7 Business contingency plan.	NO	The committee noted this comment, but felt it was not appropriate to incorporate this standard into the emergency management standard as the concepts are different.
1.4 (New)	I didn't like the use of the word business. Wonder if it can be omitted (will not change the intent of the standard) . Alternatively, use facility.	YES	The committee agreed with the intent of this comment and edited the standard to appear as "Operational Continuity" to ensure that the standard was not interpreted to focus only on business, but the overall health of the facility.
1.4 (New)	I understand the request for a new Standard, but the Standard should not get involved in the aspect of running a business. Every business has a CEO, VPs, etc, whose responsibility is to ensure that the business survives competition, etc. Who are we to assess their "business contingency plan"? This will involve the assessor looking into the company's business plan. Contingency is part of running a business. If the intent is to prepare for something that could affect their accreditation status, then the Standard should not use "Business Contingency Plan". Accreditation would be the least of their worries as they can always regain it if they lose it.	NO	The committee noted this comment and did edit the title of the standard to ensure there was no confusion and to assist users in understanding what is meant.
1.4 (New)	Request clarification as to the types situations this standard would apply to, or recommend not adopting this new standard as the expectations are very unclear and generally covered by existing contingency plans.	NO	The committee noted this comment and will be expanding on what is required of facilities in the guidance.
1.7.1	How does one assess 'undue'? Suggest changing 'prevents undue' to 'reduces'.	YES	The committee agreed with this comment and the change to the standard was made.
2.1.4.1 (Proposed Edition)	2.1.4.1 seems to be redundant as everything is already delineated in 2.1.4. Secondly why only focus on personnel performing critical tasks? The process for identifying training needs is accomplished by performing competency assessment. I think "2.1.6 Competency" should instead be moved up and be numbered 2.1.4.1 as Training and competency tend to go hand in hand.	YES	The committee agreed with this comment and deleted proposed standard 2.1.4.1 from the final edition, as it was deemed redundant per standard 2.1.4. The committee did not feel however that standard 2.1.6 should be moved to exist below 2.1.4, feeling instead that it should appear as its own stand alone standard.
2.1.5 (New)	Please delete this standard. What exactly does AABB expect to find in personnel records that are pertinent? And for retention, why would I keep them	NO	The committee reviewed this comment but did not agree that the standard should be deleted.

	10 years after CT product disposition (could be several decades)? This will conflict with HR/labor policies. If there is a specific record that is within AABB's scope to require, be specific about what it is.		This concept has existed in the standards, but had not been spelled out explicitly as it is in other sets of Standards for which the AABB grants voluntary accreditation. The records in question would not be considered of the HR variety, but of employees level of competence, training etc.
2.1.5 (New)	The new standard does not describe the extent of the personal records required to comply the scope of accreditation. Does the standard require all Staff or staff who are performing critical activities?	NO	The committee noted this comment but did not feel that a change was needed at this time. The committee will be creating guidance to assist users in their implementation of the standard.
2.1.7.1 (2.1.6.1)	Please clarify what would be acceptable content of continuing education for quality. Quality staff should have an understanding of CT, but their expertise is quality management science. QA continuing education should include any combination of CT and quality topics. Also, if you are going to lump quality rep in with director titles, why not apply same way – provide minimum qualification standards and include in the exec management group.	NO	The committee did not feel that a change was needed based on this comment. There is guidance to assist in determining relevant continuing education. The committee feels that the quality representative providing input to executive management is of paramount importance, however, the role is not a member of executive management and thusly does not need further qualification beyond what is already required in standard 1.2.4.
2.1.7.1 (2.1.6.1)	Please add the clause, "activities performed by the facility" to the standard.	NO	The committee did not feel that a change was needed as the clause, "related to the accredited activity or activities…" is already included in the standard as written.
4.1.1	There is a need for examples of agreement between departments that the record is required by assessor in order not to damper effectiveness and efficiency. Should this change be included in the 9th Edition, the definition of 'agreement' in glossary should be consistent with the propos*ed change to add 'or department.*	NO	The committee reviewed this comment but did not feel that a change was needed at this time. The committee will expand the guidance to provide examples for users to review.
4.1.1	Adding "department" may prove to be confusing to the assessor. What constitutes a department in a facility? If the stem cell lab sends their CD34 sample to flow cytometry, is there a need for an agreement? In some facilities, any agreement needs a stamp of approval from the legal department. Further clarification may be in order.	NO	The committee reviewed this comment but did not feel that a change was needed at this time. The committee will expand the guidance to provide examples for users to review.
4.3	This statement limits the agreements to the eight standards just below it (Medical Orders for Procurement & Processing, Medical Orders for Distribution, Transfer of Products, Providing Instructions, Records, Conditions for Product Storage & Disposition, Information about Product Administration, and International Requests for Cellular Therapy Products). This causes	YES	The committee reviewed this comment and agreed with the potential reading of it to appear in that fashion. As a result, the committee added the clause, "including but not limited to…" to the stem of

	confusion for initial facilities and even people in the office. We see N/A listed for standards, "we aren't involved". Or "in the portal that standard is grayed out, why should we bother with it?" If a facility is part of the complete chain of events from donor to transplant, ignoring one or more of those steps should not be the intent of the standards. For example, if the processing lab is not the responsible party for performing infectious disease tests, they should have it in agreements that some party is responsible. Change 4.3 to say "The responsibilities for activities covered by these CT Standards when more than one facility or department is involved shall be specified by agreement." Keep 4.3.1 – 4.3.8 to call specific topics.		standard 4.3 to ensure that it was understood that these are minimum requirements. The committee also added "Materials and Services" to the header of the standard to be more inclusive.
4.3.2 (New)	Agreements may not be practically possible between the processing and clinical facility, with that in mind, please adjust the standards as such: 1) The distributing facility shall have policies and procedure to obtain medical order before distribution of cellular therapy product. The receiving facility shall have policies and procedure to provide medical order before distribution of cellular therapy product.	NO	The committee reviewed this comment but did not agree with its intent. The committee believes agreements should be required.
4.3.6	Discard, is defined as "destruction", as such could we add the term to this standard?	NO	The committee reviewed this comment but did not feel that a change was needed at this time. As noted in the comment, the term "destruction" is considered a part of discard, and therefore not needed to be included.
4.5A, #11	Concerning the clause, "Ownership, transfer and/or disposition of the cellular therapy product.", Transfer and/or disposition may include hematopoetic reconstitution or clinical research/trials through an IRB and FDA-approved IND but does not include the sale or transfer to entities for non-FDA approved human use. If disposition includes discard, discard is defined as destruction."	NO	The committee noted this comment but did not feel that a change was needed. The requirement as stated could be viewed as overly prescriptive and the intent of the standard as written is to maintain a positive framing of the language.
4..5A, II	Please create new subletter E to read as such: e. Either the donation is for related or unrelated application.	NO	The committee noted this comment but did not feel that the creation of a new subletter "e" was necessary at this time.
Chapter 5	Please could a Standard be added stating that a relevant donor sample should be stored frozen for possible future testing?	NO	The committee noted this comment but did not feel that a change was needed, at this time. It was felt that such a requirement for all products could prove burdensome with minimal benefit
5.1	The revisions specifically note that the term "patient" is changed to "recipient in standard 5.1 for accuracy. There are multiple other standards that reference "patient" that are not changed, including 5.27, in which the title is changed to "recipient" but the verbiage of the standard uses the term "patient."	YES	The committee agreed with this comment and has replaced the term "patient" with "recipient."This change was made thoghout the entire set of Standards.

5.1.1, #1	Please create new subnumber 1 to read as such: 1) Defined acceptable criteria for receipt, processing, in-process tests and final cellular therapy product characteristics.	NO	The committee reviewed this request, but noted that this concept is already covered in standard 5.10.2 and therefore not needed in this standard.
5.1.2.1	Rephrase to remove duplicate phrase 'for each analyte requiring proficiency testing under CLIA': In the United States, each laboratory shall participate in a CMS-approved proficiency testing program for each analyte requiring proficiency testing under CLIA.	YES	The committee agreed with this comment and edited the standard accordingly by removing the clause in question.
5.1.2.3.1	What does the phrase 'as appropriate' add? This would be difficult to assess.	YES	The committee agreed with this comment and removed the clause "as appropriate" as it is not assessable.
5.2.3.1, #1	Validation activities should identify responsible individuals for what? DO you mean the individuals who will perform validation, review and approve it? Sometimes those are identified as roles, not individuals. And this level of paperwork detail should not be lumped together with goals and outcomes that are really far more important.	YES	The committee noted this comment and agreed with the intent. The committee moved the clause "individual(s) responsible" to the beginning of subnumber 1 to ensure that it is understood that the responsibility can fall to a specific individual or a defined role.
5.2.3.1, #1	Please edit subnumber 1 as such: 1) Identification of goals, expected outcomes, acceptable criteria, and/or performance measures and responsible individuals.	NO	The committee reviewed this comment but did not feel that a change was needed at this time. The committee notes that subnumber 2 that focuses on expected outcomes covers the request already.
5.2.3.1, #1	Is responsible individuals (the new edition) defined?	YES	As noted above, the committee agreed with this comment and feels that the change, (to move individual(s) responsible) to appear at the beginning of the subnumber will provide clarity.
5.2.3.1, #1 and 2	1. Should acceptance criteria be part of it? 2. Validation processes may be a better terminology than validation activities e.g. During assessment I ask for the facility's validation process not activity.	NO	The committee reviewed these comments but did not feel a change was needed. With regard to #1, the committee points to #2 in the same standard that focuses on expected outcomes, which would cover acceptance criteria. For #2, the committee did not feel that the change was needed and felt that the terminology in use was appropriate.
5.3	With more and more scenarios where multiple facilities are involved, (eg contracted collections, processing, testing, storage) be careful about what you are asking each player to do. Does every facility in the role of contract manufacturer have to ask the transplant service for patient data? It's hard enough to get for even the facility that issues the product.	NO	The committee reviewed this comment but did not feel that a change was needed at this time. It was noted that the facility's policies, processes and procedures would define the issues discussed in the comment.

5.3.1, 5.3.2 (New)	Clarify that you are still looking for recipient outcome data in these standards, but just calling out data that could be attributed to something that may have happened during procurement or processing activities. May be better to live in Chapter 7. If not addressed in chapter 7, please re-write the Standards as such: 5.3.1 For the procurement facilities, this shall include but is not limited to recipient adverse events and complications that could be attributed ~~related~~ to procurement activities. 5.3.2 For processing facilities, this shall include but is not limited to recipient adverse events and complications that could be attributed ~~related~~ to processing activities.	YES	The committee noted this comment and agreed with its intent. As a result the committee replaced the term "related" with "attributed" in the final edition of the Standards.
5.3.4 (5.3.2)	Please edit the standard as such: 5.3.4 For facilities that procure, process or administer products that will be used for hematopoietic reconstitution, there shall be a process for review of **adverse events, annual survival rates, GVHD**, time to **neutrophil and platelet engraftment** following cellular therapy product administration.	NO	The committee reviewed this comment but did not feel that this change could occur at this stage in the standards development process. The committee noted that adverse events were covered in chapter 7, GVHD is covered by standard 5.26, and that the other elements are covered by the clinical standards at the end of chapter 5.
5.3.5 (5.3.3)	Please consider add Pain as a specific item for clinical outcome. Pain is the main reason many of the auto islet transplants are done (unless QOL covers that).	NO	The committee reviewed this request but did not feel that a change was appropriate at this time. The committee wanted to leave the standard as written with scientifically measurable clinical outcomes.
5.3.5 #2 (5.3.3)	Item #2 is a double negative. Is this how the industry states this? If not, remove the double negative.	NO	The committee reviewed this comment but did not feel that making the change suggested would strengthen the standard.
5.3.7, 5.3.7.1 (5.3.5, 5.3.5.1)	What about the procurement facility?	NO	The committee noted this comment and will ensure that the standard applies to procurement facilities when tagged in the Standards Portal.
5.8.1 (5.8, #6)	Is Eurocode the correct term? The more specific term might be: The Single European Code (SEC) https://ec.europa.eu/health/blood_tissues_organs/tissues/single_european_code_en ICCBBA document: https://iccbba.org/uploads/14/db/14dbe4eb3638ba7e3839fbbed4437dcd/ST-012-ISBT-128-and-the-Single-European-Code-SEC-v1.3.1.pdf If the SEC is to be allowed will the NDC also be allowed? Are there codes in	NO	The committee reviewed this comment and after conferring with knowledgeable sources noted that this terminology is accurate.

	other countries which should be considered? Will these issues be addressed on a case by case basis?		
5.8.1.1 (New)	During the comment period, the CT Standards Committee received many comments that resulted in the creation of new standard 5.8.1.1. Examples of the themes of the comments are listed below: • ISBT guidance document provides for DIN to be assigned at receiving laboratory under some circumstances. Family banking may not be able to assign DIN at point of procurement as procurement facilities (not own by Family banks) do not implement ISBT 128 labeling. Therefore, DIN is not available. • ICCBBA have informed us that they do not mandate full ISBT-128 labeling at time of collection, rather requires a DIN (not necessarily and ISBT DIN) on the collection label. We have taken this advice from ICCBBA and assigned a company DIN at time of collection, then link that company DIN to an ISBT-128 label at time of receipt in the processing Lab. It is not possible for Cord blood Banks to have ISBT label printers at each collection site. • A requirement to label the product with ISBT 128 labels at the time of procurement would present specific risks that would be counterproductive to the intent of the proposed standard. Collection kits are issued to clients well in advance of their intended use. • Not all collection sites have the capability to implement ISBT labeling systems. There is risk in sending sheets of labels to multiple collection sites. It is easier control ISBT labels when the product arrives at the manufacturing site with a unique alpha/numeric number, which can be linked with ISBT labeling requirements.	YES	The committee reviewed these comments and agreed with the intent contained therein. To address these concerns, the committee edited new standard 5.8.1.1 to be only applicable to apheresis and marrow products, excluding other cellular therapy products that cannot be labeled with ISBT128 labels. The standard reads as follows: **5.8.1.1** Apheresis and marrow products shall be labeled with ISBT 128 or Eurocode labels at the time of procurement.
5.8.1.1.1 (New)	During the comment period, the CT Standards Committee received many comments that resulted in the creation of new standard 5.8.1.1.1. Examples of the themes of the comments are listed below: • ISBT guidance document provides for DIN to be assigned at receiving laboratory under some circumstances. Family banking may not be able to assign DIN at point of procurement as procurement facilities (not own by Family banks) do not implement ISBT 128 labeling. Therefore, DIN is not available. • ICCBBA have informed us that they do not mandate full ISBT-128 labeling at time of collection, rather requires a DIN (not necessarily and ISBT DIN) on the collection label. We have taken this advice from ICCBBA and assigned a company DIN at time of collection, then link that company DIN to an ISBT-128 label at time of receipt in the	YES	The committee reviewed these comments and agreed with the content. As a result, the committee created new standard 5.8.1.1.1 in conjunction with standard 5.8.1.1 which reads as follows: **5.8.1.1.1** Other cellular therapy products shall be labeled with the proper product name and a unique alpha or numeric identifier at the time of procurement. This standard was created to ensure that all other products are labeled with minimum

	processing Lab. It is not possible for Cord blood Banks to have ISBT label printers at each collection site. • A requirement to label the product with ISBT 128 labels at the time of procurement would present specific risks that would be counterproductive to the intent of the proposed standard. Collection kits are issued to clients well in advance of their intended use. • Not all collection sites have the capability to implement ISBT labeling systems. There is risk in sending sheets of labels to multiple collection sites. It is easier control ISBT labels when the product arrives at the manufacturing site with a unique alpha/numeric number, which can be linked with ISBT labeling requirements.		requirements to ensure traceability and trackability.
5.8.1.2 (New)	During the comment period, the CT Standards Committee received many comments that resulted in the creation of new standard 5.8.1.1.1. Examples of the themes of the comments are listed below: • ISBT guidance document provides for DIN to be assigned at receiving laboratory under some circumstances. Family banking may not be able to assign DIN at point of procurement as procurement facilities (not own by Family banks) do not implement ISBT 128 labeling. Therefore, DIN is not available. • ICCBBA have informed us that they do not mandate full ISBT-128 labeling at time of collection, rather requires a DIN (not necessarily and ISBT DIN) on the collection label. We have taken this advice from ICCBBA and assigned a company DIN at time of collection, then link that company DIN to an ISBT-128 label at time of receipt in the processing Lab. It is not possible for Cord blood Banks to have ISBT label printers at each collection site. • A requirement to label the product with ISBT 128 labels at the time of procurement would present specific risks that would be counterproductive to the intent of the proposed standard. Collection kits are issued to clients well in advance of their intended use. • Not all collection sites have the capability to implement ISBT labeling systems. There is risk in sending sheets of labels to multiple collection sites. It is easier control ISBT labels when the product arrives at the manufacturing site with a unique alpha/numeric number, which can be linked with ISBT labeling requirements.	YES	As a result of the comments received, the committee created new standard 5.8.1.2 which requires that all cellular therapy products (cord blood included) have to be labeled with ISBT 128 or Eurocode labels at the completion of processing. The standard reads as follows: **5.8.1.2** Cellular therapy products shall be labeled with ISBT 128 or Eurocode labels at the completion of processing.
5.8.4 (5.8.3)	Elsewhere in the standards Eurocode is allowed. Does this mean that even though a facility uses Eurocode, they still need to use ISBT 128 for product names and descriptions? If not, then would such a facility automatically need to apply for a variance? This seems to be a conflict between various standards.	NO	The committee noted this comment and would clarify that both labeling systems (ISBT and Eurcode) utilize ICCBBA terminology as mentioned in the standard

5.10.1, #3	Would AABB consider removing this new standard? At time of collection of Cord Blood we question the intent and value of an ISBT 128 product code/description code/division code on the bag label as collectors responsible for cord blood collection are not familiar with ICCBBA codes. The product is shipped under the control of the cord blood bank solely. The ICCBBA rationale for product code is to ensure that there is identification between different products. However, all of our cord bloods are identical in terms of product code and description.	YES	The committee agreed with the intent of the comment and to ensure that it was understood that number 3 does not apply to cord blood, a cross reference to standard 5.8.1 has been added to the beginning of the standard.
5.10.1, #8	Numbers 7 and 8 seem to be duplicates, should number 8 be removed?	YES	The committee agreed with this comment and removed the redundant requirement.
5.11.1.1 (NEW)	Are CT products are falling under the same requirements as blood? I am ok with that just double checking if necessary.	NO	The committee noted that yes, in fact in this case cellular therapy products would have similar requirements to blood that are maintained in an open storage area.
5.12.2.1.1	Please delete the word "interview" or otherwise correct the sentence: 1) Donor screening, including a physical exam, review of relevant medical records, and obtaining a current medical history to…" Either you obtain a medical history or you perform an interview, but you don't "obtain" an interview. For the glossary, are you saying that we perform physical exam and review medical records solely for the purpose of identifying communicable disease risks? Are we doing a separate physical for the purpose of identifying issues that may relate to donor safety?	YES	The committee agreed with the suggestion contained in the comment and removed the term "obtaining" from the standard. A review of the individual's medical records would include the information gleaned from the interview which would be sufficient to the meet the intent of the standard. Donor screening is defined for the purpose of identifying communicable disease risk. In standard 5.12.1, donor suitability is "based on examination and relevant clinical history." The Standards do not preclude using the same examination for both suitability and eligibility.
5.12.2.7	One thing this helped with was knowing status for storage in liquid LN2. There are other standards to address prevention of cross-contamination, but not specifically to this point.	NO	The committee noted this comment and does not believe a change is warranted as preventing contamination is covered in other standards.
5.12.2.7	Please reconsider the removal of this language – "Autologous" products are/may be processed in locations other than where they are collected and other regulatory agencies or facilities may have differing definitions for "autologous".	NO	The committee reviewed this comment but did not feel that the change suggested was appropriate. The situation described in the comment should be covered by the facility's policies, processes and procedures.
5.12.2.7	My major concern with 5.12.2.7 relates to the fact that storage of cryopreserved products from donors who are not tested (auto donors) together with allo donors who are tested provides an opportunity for a disaster: bag breakage and leakage of potentially infectious material from an auto donor product into the tank due to unexpected bag breakage. Although extremely rare, there is a case report of	NO	The committee noted this comment and does not believe a change is warranted as preventing contamination is covered in other standards.

	hepatitis B transmission due to this problem. This is obviously a catastrophe affecting the disposition of all products stored in the tank. Consideration would have to be given to possibly discard all of the products in the tank!! Even if cryopreservation of allogeneic products is not performed or cryopreserved allogeneic products are stored separately from autologous products, the same problem arises for storage of cryopreserved autologous products from different donors in the same tank. Would suggest retaining the original wording for Standard 5.12.2.7: 5.12.2.7 Infectious disease testing shall be performed for all allogeneic products and autologous products that will be cryopreserved.		
5.12.2.7	This change should be reevaluated for family cord blood banks. Many facilities may claim the CB is for autologous use only to avoid testing, when in reality the cords are collected for related, allogeneic use.	NO	The committee noted this comment and feels that the addition of the clause "…donors of products with potential for…" will address the issue, and that products for allogeneic use will be tested for infectious diseases at this time.
5.12.2.7	The Standards no longer require testing of cryopreserved autologous products, which is in line with other standards and FDA regulations. My concern is for un-tested autologous products that with time, might be banked for "other" purposes, other than autologous use. One way to deal with this issue is to have Standard 5.12.2.7.1 state that such products don't need to be tested as long the link between the donor and recipient remains.	NO	The committee noted this comment and feels that the addition of the clause "…donors of products with potential for…" will address the issue, and that products for allogeneic use will be tested for infectious diseases at this time.
5.12.2.7	Will Autologous Cord Blood products fall into this category? Autologous cord blood products are frequently crossed-over to be used for family members. Certain countries only allow the autologous collection, cryopreservation and storage of cord blood products if the unit is not to be preferentially used in a ('public') bank for allogeneic use. Then, consequently, if the product is required for a family member, the product can be designated for use for a specific first or second degree relative. This would not be possible if donor eligibility had not already been performed. In fact, this is the most common use at present for "family" banked cord blood units. In many facilities, somatic cells are manufactured by various extraction, processing, and culturing techniques from cord blood, umbilical cord tissue, placental tissue, etc. and these can be for autologous or allogeneic use. The management of these cells would be fraught with risk if donor qualification testing had not been performed initially. Alternatively – It is possible that there could be a process for cell therapy facilities which manufacture autologous-only products to apply for an exception from certain donor qualification standards (at the time of accreditation application for a new facility and / or when a facility adds an applicable product) for autologous products which will be manipulated so that there is no	NO	The committee noted this comment and feels that the addition of the clause "…donors of products with potential for…" will address the issue, and that products for allogeneic use will be tested for infectious diseases at this time.

	longer a risk specific to the IDM markers for which DQ testing is performed. There would need to be very specific clauses "forbidding" the cross-over of these products from autologous use to allogeneic use (including related). It is possible that AABB would need to have a specialist panel of experts to approve the exceptions (this would NOT be equivalent to the current practice of applying for and the granting of a "Variance to Standards"). FDA approval of the process (under IND or equivalent) without donor qualification testing might be all that is needed, in which case the facility would submit that approval paperwork.		
5.12.2.8	Would AABB consider removing the additional requirement for NAT testing for HBV. If AABB are not entirely comfortable removing it, we propose that at this time it could be inserted into the standards as a supplemental test. Suggested wordage – "Maternal samples that are Hepatitis B core antibody positive shall be HBV negative by DNA testing and Hepatitis B Surface Antigen (HbsAg) nonreactive/negative.	NO	The committee noted this comment but did not feel that a change was needed. The Standards can be more stringent than other standards or regulations where they feel patient safety is of paramount importance.
5.12.2.9 (Proposed Edition – Deleted)	During the comment period, the CT Standards Committee received many comments that resulted in the creation of new standard 5.12.2.9 (since deleted). Examples of the themes of the comments are listed below: • The new standard is saying that I could wait until I'm ready to issue a product to the transplant unit before I look at ID test results. In addition, this conflicts with standard 5.14.3, which states that donor eligibility is verified on the day of procurement. • Please edit the standard as such:5.12.2.9 Infectious disease testing shall be performed in a manner that permits the **timely** determination of donor eligibility before issue. **(For cryopreserved products, the donor eligibility shall be determined prior listing).** • It might be helpful to emphasize that standards 5.12.2.2 and 5.12.2.6 apply. (Current standard numbers of 8th ed.) The phrase "before issue" has been interpreted by some to mean that samples can be obtained at a future time without regard to product collection date, and/or samples may be retained indefinitely for testing only when an issue date is determined. Some test methods currently in use have strict criteria for age of sample at testing, e.g., some syphilis test methods. • Without any time reference, facilities might propose not to send donor IDM testing samples for analysis until distribution, which could be weeks, months or years. By that time these IDM samples might not be viable, or samples requirements might change. If donor testing is not completed before the end of processing, product label cannot be	YES	The committee reviewed the comments received and agreed with their intent. The committee deleted proposed standard 5.12.2.9 from the edition and elected to create the content that now appears as standard 5.12.2 which requires that donor eligibility be determined before the initiation of any intervention that could potentially affect the health of the recipient.

	created. The donor can't be informed of abnormal results in a "timely manner" to seek medical advice. I believe this change is counter-intuitive and inconsistent with AABB "donor and patient safety" moto. This is easily fixable if Standard 5.12.2.2 is changed from "collect" to "collect and test" within a specific period of time, according to the product type in question. • This standard is of concern because this would allow facilities to store cells for transplant and not test the product until release which could be many years. Timely decisions could not be made regarding donor eligibility and timely decisions regarding the health of the donor could not be made (Standard 5.12.6). The problem is that facilities will propose to not send donor IDM testing samples until distribution – this could be many years.		
5.12.4	Please put the term "international" back in the standard. You are losing the original intent to make sure international shipments meet country-specific requirements, aren't you? Also, as newly worded, this would apply if I'm transporting from procurement site to processing site in U.S.	NO	The committee reviewed this comment but did not feel that reverting to the previous language was appropriate. There are instances where cellular therapy products are transported within the same country and this evaluation would need to occur.
5.12.10, 5.12.10.1	Regarding 5.12.10, 5.12.10.1 and reference standard 5.12C, I would ask clarification regarding quarantine (or not) of these unscreened, untested, properly labeled Autologous CT products. If possible, we would like to see this addressed here with the standard group (5.12.10), or a referral (example: standard XX.XX.X applies…)	NO	The committee noted this comment but did not feel that a change was needed at this time. The requirements state that these products have to be labeled, "Not evaluated for infectious substances" as per reference standard 5.12C.
5.14.3	Is the determination that the donor's health history hasn't changed a matter of asking the donor the simple question "Has anything changed in your health history?" (or similar wording)? Otherwise one might have to repeat the collection of health history to compare for change. The wording "confirm that the donor's health history hasn't changed" seems to allow room for the latter interpretation as a requirement.	NO	The committee reviewed the comment but did not feel that a change was needed and that this could be covered in guidance. The guidance to standard 5.14.3 has been updated accordingly.
5.14.5.1	This change would have significant impact on cord blood banking and recommend that it be permissive, rather than mandatory (shall vs should). The unique identifier assigned by the processing facility. The information is maintained in the processing records of standard 5.17.2	YES	The committee noted this comment and agreed with the intent. As a result, a cross reference to standard 5.8.1 was added to the standard to ensure it was understood that at this point in the process for cord blood products, final labeling would not be required.
5.17.2, #2	Division Code would only be needed if applicable?	NO	The committee reviewed this comment but did not think that the addition of the clause would be

			appropriate as a division code would be applicable to both allogeneic and autologous products.
5.19.3, #9 (New)	Should this also state Date and Time of Cryopreservation?	YES	The committee agreed with this comment and added new subnumber 9 to the standard requiring that records of date and time of cryopreservation be included.
5.20.2.1	Please edit the standard as such: 5.20.2.1 At a minimum, the stability program shall include product container integrity**, microbial contamination, potency** and viable cell recovery of the relevant cell population(s).	NO	The committee reviewed this comment but did not feel the edit would be appropriate at this time. The committee notes that "microbial contamination and potency" would be covered in the requirements that are focused on container integrity.
5.22	For Cryopreserved Products: Pre-release acceptable criteria shall be defined based on clinical or published data to addressed identity, purity or potency of the product prior to distribution.	NO	The committee noted this comment but felt that this inclusion in the standards would be too prescriptive. They will consider such a change for a future edition as needed.
5.23, #3	The clause "shall be reviewed" indicates looking at a record. If the intent is to inspect the condition of the product, then, it should read: "Upon request for distribution, the following shall be reviewed or performed: 3) Visual inspection of the product condition.	NO	The committee reviewed the suggestion and felt that the standard as written was appropriate. The feeling was that the addition to the standard would not add to the content.
5.24.1	Please add "Product intended for use" to this list.	NO	The committee reviewed this comment but did not feel that this addition was needed and that this is already inherently required by other standards.
5.28.2	Does the admin group need to review the product code and attributes? Product code and attributes are verified prior to release, and there are already significant verification activities to complete at the time of administration. Requiring another verification of product code and attributes on every product label for a multi-bag infusion seems cumbersome without adding value or safety.	NO	The committee reviewed the comment and notes that all of the items included in standard 5.28.2 need to be verified and confirmed at the time indicated. The committee feels that there is value in staff being trained on the proper review of these elements.
5.29.3, #2	Please add the term "mitigation" to the standard following the term "prevention" in number 2. I'm not sure we can guarantee prevention and I can see an AABB assessor going down that path.	NO	The committee noted this comment but did not feel that this addition would be appropriate at this time. The term in question has legal ramifications and suggests that facility should put this information in their policies, processes and procedures.
5.8.2A, #1	This change would have significant impact on cord blood banking and recommend that it be permissive (eg shall vs should) rather than mandatory. The unique identifier assigned by the processing facility.	YES	The committee noted this comment and as has been done previously, a footnote referencing standard 5.8.1 was added to the entry.

5.8.2A, #4	Unnecessary, may be difficult to comply if the procurement site does not use ISBT labels.	YES	The committee noted this comment and as has been done previously, a footnote referencing standard 5.8.1 was added to the entry.
5.12A, III, 1, a)	Please edit letter a) as such: a) For cord blood donors, in addition to evaluating the mother's medical history and infectious disease risk, the facility shall have policies, processes, and procedures to assess the health status of the neonatal donor that may potentially affect the safety of the recipient or the therapeutic value of the cellular therapy product **prior to listing and/or distribution** (for allogenic use)	NO	The committee reviewed this comment but did not feel that this change would be appropriate at this time.
5.12A, III, 2, a)	Please edit letter a) as such: For cord blood donors, the suitability shall be determined by a health-care professional **(The donor suitability shall be determined by the Medical Director as not all healthcare professionals are qualified to perform such activities).**	NO	The committee reviewed this comment but did not feel that this change would be strengthen or clarify the Standards.
5.12A, B, #3	Should this extend up to 30 days as the Maternal blood for communicable disease testing can be obtained up to 7 days post collection of cord blood.	NO	The committee noted this comment but did not feel that a change was needed at this time. The committee does not feel that this change would be appropriate.
5.12C, II	Please reconsider removing this requirement, especially since many autologous HPC-C products are currently used in the further manufacture of non-FDA approved products being used in humans.	NO	The committee reviewed this comment but did not feel a change was needed at this time. The committee notes that products that may be used for allogeneic (non-autologous) purposes should follow the standards related to allogeneic donors.
5.12C, II	Currently autologous cord blood donors need to be evaluated based on Maternal Blood testing results, with the proposed changes, would the autologous cord blood donors still be required for maternal blood testing to evaluate the risk of infectious diseases?	NO	The committee reviewed this comment. Standard 5.12.2.7 states "infectious disease testing shall be performed on all donors of products with the potential for allogeneic use."
5.17A	Please could this Standard be divided into more categories so that each category has similar testing requirements. It does not make sense for HPC-A and HPC-M to be included together with any non-specific cells. Those other types of cells may require extensive manipulation. Possibly all HPCs could be together with subcategories - that would make more sense. HLA typing is important for HPC-A and HPC-M but this requirement is only mentioned in the cord blood section. Also, Standard 5.12.1.5 NCs are not mentioned in 5.17A. Also, see below in (ii) the microbial testing requirements for cord blood are cumbersome and on occasion not pertinent. Reference Standard 5.17A is not succinct, not complete, is difficult to assess, difficult to cite as a nonconformance, and is difficult for facilities to understand.	NO	The committee reviewed this comment but did not feel that a change was needed at this time. The committee feels that the requirements suggested are already contained in the reference standard and satisfy products that fall into this category. It should be noted that HLA typing is not a processing test and would therefore not be covered by the reference standard in question. Regarding nucleated cells, those are covered in reference standard 5.17B.

5.17A, #3, #4	Why is the microbial testing Standard different for the 2 categories, especially now when there are several licensed cord blood banks? It does not make sense for 5.17A 3) and 5.17B 4) to be different. It is understood that microbial testing should be performed at the completion of the process, the wording in 5.17B 4) is not helpful. Conversely, if the Standards Committee needs the wording to stay as is then it should be equivalent in all processing standard sections. During manipulations such as for cultured products it may be necessary to culture at receipt of cells and at different stages, not simply at the end.	NO	The committee noted this comment but did not feel that a change was appropriate at this time. The standards are not the same in the two categories due to differences between the products in question.
5.17B, #1	Please edit number 1 as such: 1. Testing for ABO group and Rh type shall be performed ~~and the results reported within 7 days of cryopreservation~~. What is the rationale behind ABO results reported within 7 days of cryopreservation? To whom the results to be reported? Recommend removing the timeline.	NO	The committee reviewed this comment but did not feel that it was appropriate to make this change at this time. The committee feels that this notification is important for ensuring the safest possible product.
5.17B, #2	Please edit number 2 as such: 2. HLA testing shall be performed on all products designated for possible allogeneic use. The test shall be performed on a sample obtained from the product ~~or from the donor~~. As these products are cryopreserved for future use, recommend to perform HLA from the product. This will help to perform HLA confirmatory typing prior distribution).	NO	The committee reviewed this comment but did not feel that removing the clause, "or from the donor" would be appropriate. The committee feels that this option is necessary to remain in the standards.
5.17B, #3(b), (c), (d)	Please adjust the entries as such: b) **Nucleated** Cell viability. c) **Enumeration of CD34+ cells and its viability** d) Nucleated red cell count ~~or corrected total nucleated cell count~~ Most transplant centres request nRBC numbers to be reported rather than corrected TNC. This can be either reported in % or absolute count.	NO	The committee reviewed this comment but did not feel that a change was needed at this time. The committee notes that the allowance of options is appropriate for the standard.
5.17B, #4	Regarding the final sentence in the requirement: As this test is performed solely for the presence of microbial contamination, this is not a diagnostic test. As the standard does not require to identify the microorganism if the bank do not store contaminated products, notification shall be exempted.	NO	The committee noted this comment but did not feel that a change was needed at this time.
5.17B, #4	Can the wording for 5.17B 4) be made the same as for 5.17A 3) please? Or in the event the Standard is changed for multiple categories of products can the microbial testing requirements please be consistent across categories.	NO	The committee reviewed this comment but did not feel that a change was needed at this time.
5.17B, #5(b)	We request that the standards committee revise the requirement for hemoglobinopathy testing to apply only to products that will be used for	NO	The committee reviewed this comment but did not feel that a change was needed at this time.

	hematopoietic reconstitution. As it is currently stated in Reference Standard 5.17B 5) b), hemoglobinopathy testing of the cord blood unit or donor is required for all allogeneic uses (prior to issue). The standard does not distinguish between transplant (hematopoietic reconstitution) and infusion (e.g. for brain injury/dysfunction such as CP or ASD). Since the cells infused will not reconstitute hematopoiesis it seems reasonable to make this distinction in this standard.		
5.17B, #5(c)	Please remove the "or" in subletter c. Both CFU assay (for functional property) and CD34+ enumeration shall be performed to determine the quality of the product that are subjected to cryopreservation.	NO	The committee noted this comment but did not feel that a change was needed at this time and feels that the allowance of the two options is appropriate for the standard.
6.2.10	Please add 'specifications of the facility' to the standard.	NO	The committee noted this comment but did not feel that a change was needed at this time. The committee points out that the facility already has to comply with all policies, processes and procedures as detailed throughout the Standards.
8.2	Is it must to participate in an external assessment program? If so at what extent. Recommend the term "shall" be changed to "should"	NO	The committee reviewed this comment and notes that yes, this is a requirement that must be accomplished. Including the term "should" would imply guidance and not a requirement.
10.1.3.1 (New)	This Standard is too wordy and seems to indicate that you need 2 systems – a monitoring system and an alarm system. Normally your monitoring system is also your alarm system as they go hand in hand. "The facility shall have an oxygen monitoring system that will trigger an alarm when dangerous levels of oxygen exist."	NO	The committee reviewed this comment but did not feel that the suggested language would strengthen the standard.
10.1.3.1.1 (New)	There is no need to say "Alarm activation shall require personnel to investigate, etc. "Personnel shall take immediate appropriate actions in response to alarm conditions. Trained personnel shall investigate the cause and undertake necessary corrective measures."	NO	The committee noted this comment but did not agree with the statement. The committee felt that pointing out the response necessary for staff was too important to remove from the standard.
10.1.3.1.1 (New)	Oxygen sensor placement in "worst case" locations, such as knee level near a filling station, may result in frequent nuisance alarms that are obviously due to actions currently taking place, which there would be little value in documenting. Recommend modifying this draft standard to require documentation of low oxygen alarms in the absence of obvious causes of the alarm or an alarm lasting for more than several minutes. If documentation is to be required this standard should also have a pen icon on it.	YES	The committee noted this comment and felt that the intent was appropriate. As a result, the committee added a record retention requirement to ensure that records were kept of the alarm's activation and subsequent investigation.
Glossary - Agreement	For verbal agreements, the 'should' sounds like it is not necessary to write down the verbal agreement, but the parent standard has a pen. Rephrase so that verbal	YES	The committee agreed with this comment and the change was made.

	agreements have to be written down in a certain timeframe. Please make the verbiage for the timeframe assessable.		
Glossary - Attributes	Please remove the term "requirements" from the definition. Identification of Core Condition requirements do not belong in a glossary - move to a standard.	YES	The committee agreed with the intent of this comment and made the definition more general and more universally acceptable.
Glossary - Attributes	Suggest the inclusion that the provision of partial label may not have adequate space to include all attributes and minimum ISBT labelling requirement applies.	YES	The committee reviewed this comment and added the wording from this standard to be placed as a footnote in reference standard 5.8.2A for clarity.
Glossary - Consenter	What about recipient consent?	NO	The committee reviewed this comment and noted that the term is focused on the donor in the edition of Standards, and as such, not focused on recipient consent.
Glossary – Donation Identification Number	Could the "Intended use" be defined here?	NO	The committee reviewed this comment but did not feel that a glossary entry needed to be edited at this time. The term as used in the Standards matches how it is used in common parlance.
Glossary – Ineligible donor	Is this always related to infectious diseases? What about sickle cell disease?	NO	The committee reviewed this comment and noted that yes, eligibility is always related to infectious disease. In this case, sickle cell disease would not apply. "Suitability" refers to "risks related to the donation process and potential noninfectious risks to the recipient"
Glossary – Healthcare Professional	Healthcare professionals are usually physicians, nurses, midwives, etc. who hold a professional licence by law to provide healthcare services	NO	The committee reviewed this comment and noted that this can be the case and that it is the responsibility of the facility to define these individuals.
Glossary - Qualification	Suggest splitting this definition into three separate definitions as listed below: Qualification (individuals): The aspects of an individual's education, training, and experience that are necessary for the individual to successfully meet the requirements of a position. Qualification (equipment and suppliers): Verification that specified attributes required to accomplish the desired task have been met. Qualification (materials): For materials that come into contact with the patient or cellular therapy product, verification that the materials are sterile, the appropriate grade and suitability for the intended use and, whenever possible, approved for human use by the United States Food and Drug Administration (FDA) or relevant Competent Authority.	YES	The committee agreed with this suggestion and separated the definition into three separate definitions for equipment or suppliers, individuals and materials.