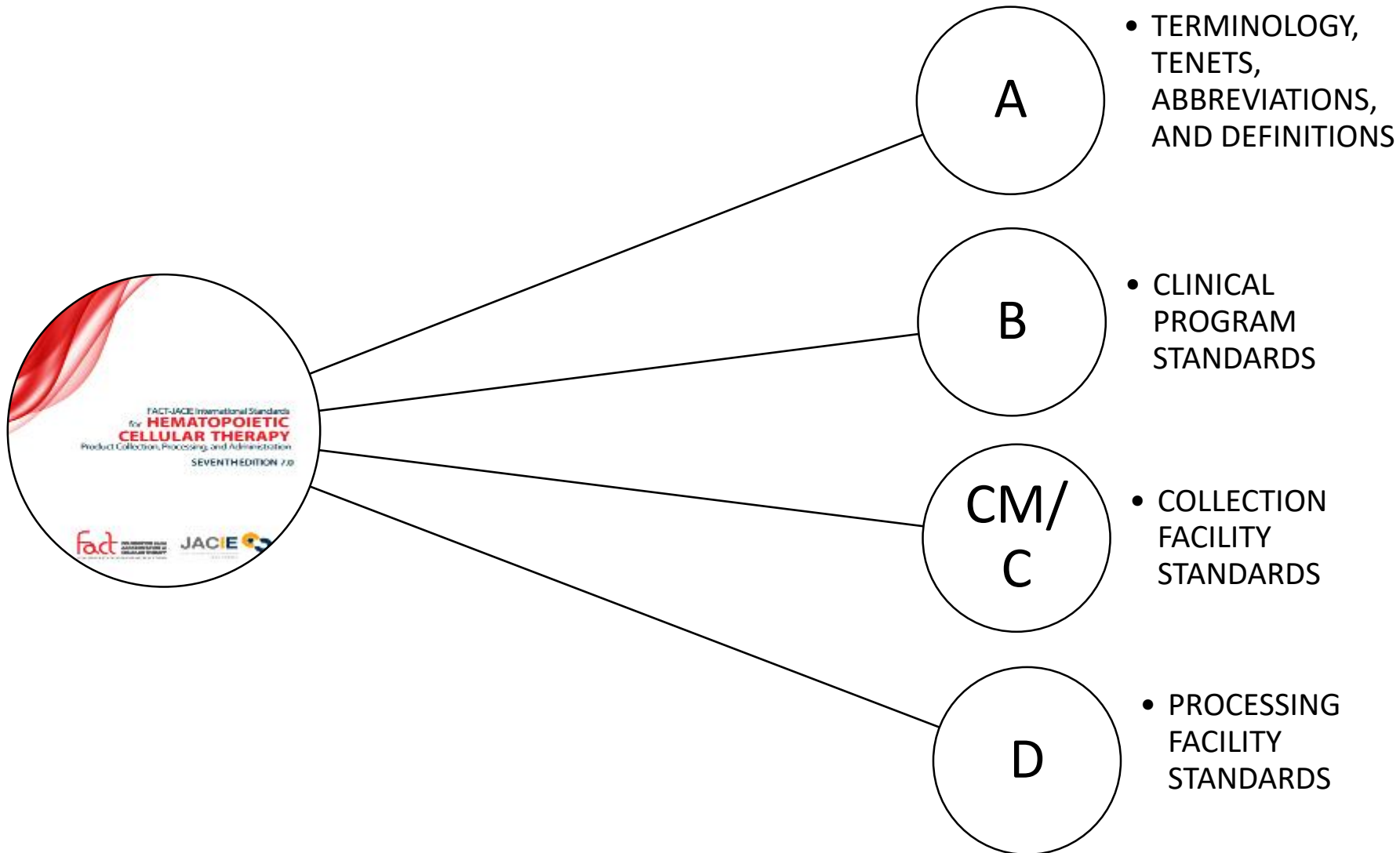


# JACIE collection standards 7<sup>th</sup> edition

FACT-JACIE International Standards  
for **HEMATOPOIETIC  
CELLULAR THERAPY**  
Product Collection, Processing, and Administration  
SEVENTH EDITION 7.0

# PARTS



Part B Clinical	Part CM Marrow	Part C Apheresis	Part D Processing
B1 General	CM1 General	C1 General	D1 General
B2 Clinical Unit	CM2 Marrow Collection Facility	C2 Apheresis Collection Facility	D2 Processing Facility
B3 Personnel	CM3 Personnel	C3 Personnel	D3 Personnel
B4 Quality Management	CM4 Quality Management	C4 Quality Management	D4 Quality Management
B5 Policies and Standard Operating Procedures	CM5 Policies and Standard Operating Procedures	C5 Policies and Standard Operating Procedures	D5 Policies and Standard Operating Procedures
B6 Allogeneic and Autologous Donor Selection, Evaluation, and Management	CM6 Allogeneic and Autologous Donor Evaluation and Management	C6 Allogeneic and Autologous Donor Evaluation and Management	D6 Equipment, Supplies, and Reagents
B7 Recipient Care	CM7 Coding and Labeling of Cellular Therapy Products	C7 Coding and Labeling of Cellular Therapy Products	D7 Coding and Labeling of Cellular Therapy Products
	CM8 Process Controls	C8 Process Controls	D8 Process Controls
	CM9 Cellular Therapy Product Storage	C9 Cellular Therapy Product Storage	D9 Cellular Therapy Product Storage
	CM10 Cellular Therapy Product Transportation and Shipping	C10 Cellular Therapy Product Transportation and Shipping	D10 Cellular Therapy Product Transportation and Shipping
B8 Clinical Research			D11 Distribution and Receipt
B9 Data Management			D12 Disposal
B10 Records	CM11 Records	C11 Records	D13 Records
	CM12 Direct Distribution to Clinical Program	C12 Direct Distribution to Clinical Program	

# Definition

- Donor: A person who is the source of cells or tissue for a cellular therapy product.
- The term “donor” is used by the Standards even in the autologous setting because considerations for informed consent and suitability (i.e. safety) of the individual include issues above and beyond the individual’s status as a transplant patient.



# Allogeneic and autologous donor evaluation and management



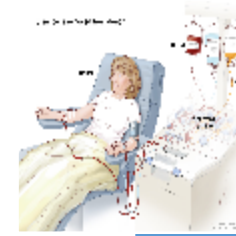
## PART B: CLINICAL PROGRAM STANDARDS

- B6.1 There shall be written criteria for allogeneic and autologous donor selection, evaluation, and management by trained medical personnel.



## PART CM: MARROW COLLECTION FACILITY STANDARDS

- CM6.1 There shall be written criteria for allogeneic and autologous donor evaluation and management by trained medical personnel.



## PART C: APHERESIS COLLECTION FACILITY STANDARDS

- C6.1 There shall be written criteria for allogeneic and autologous donor evaluation and management by trained medical personnel.



# B6: Allogeneic and autologous donor selection, evaluation, and management

- Standards are intended to promote the safety of the donor and recipient as well as the safety and efficacy of the cellular therapy product.
- For allogeneic donors, all the requirements in B6 apply, including standards to safeguard appropriate confidentiality, confirm histocompatibility matching, and help protect the recipient from the risks of transmissible disease.
- For autologous-only Clinical Programs, many, but not all, of the requirements in this section apply. The standards and substandards under B/CM/C6.1, B6.2, and B6.3 apply to autologous transplantation except for those that specify allogeneic donors only.



# B6: Allogeneic and autologous donor selection, evaluation, and management

Selection criteria to include:

Criteria for the selection  
of allogeneic donors  
who are minors or  
elderly.

Criteria for the selection  
of allogeneic donors  
when more than one  
donor is available and  
suitable.

Information regarding  
the donation process  
should be provided to  
the potential allogeneic  
donor prior to HLA  
typing

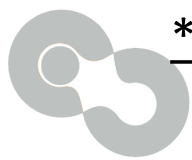


B/CM/C 6.1 There shall be written criteria for allogeneic and autologous donor selection\*, evaluation, and management by trained medical personnel.

How to check if standard is met:

- The inspector may ask to **verify** compliance with donor selection SOPs by **reviewing** a specific donor evaluation.
- Review Autologous patient notes (available for MED-A audit)
- If the program performs both allogeneic and autologous transplants, then the criteria for both types of transplant must be written
  - If a program performs only autologous transplants, then the written criteria need only reflect autologous donors
  - If a Clinical Program only performs allogeneic transplants, then the written criteria need only pertain to allogeneic donors

\*PART B only: CLINICAL PROGRAM STANDARDS





# Donor rights

KNOW  
YOUR  
RIGHTS

- Opportunity to ask questions and receive full information
- Right to refuse to donate and be informed of the potential consequences to recipient of such refusal
- The understanding of „full information” varies – some center might try to use general forms for medical procedures – some use forms developed for donors only



# Allogeneic and Autologous Donor information and consent to donate

**Apheresis, blah,  
drugs, blah, safety,  
blah, process...  
Hey, don't worry,  
I'm a doctor**



# Allogeneic and Autologous Donor information and consent to donate

**Here's a description of the process including the risks. Please take some time to read and feel free to ask questions**



# Minimum donor information



Risks  
/benefits of  
procedure



Tests and  
procedures  
performed  
on donor



Rights to  
review the  
results



Alternative  
collection  
methods



Protection  
of medical  
information  
and  
confidential  
ity



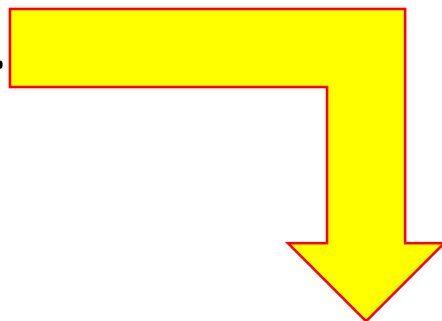
Storage &  
discard  
policy

**IN TERMS THE DONOR CAN UNDERSTAND**

# Consent

The donor shall have the right to

1. **refuse** to donate
2. **withdraw consent.**



The allogeneic donor shall be informed of the **potential consequences** to the recipient of such refusal in the event that consent is withdrawn after the recipient has begun the preparative regimen.





# Examples of written criteria for allogeneic donors

- Infectious disease markers obtained within the appropriate time frame before collection for a donor. (**EU regulations**)
- Criteria for an ineligible but acceptable donor (for example, an international donor may be ineligible but acceptable if all other donor criteria are fulfilled).
- Number of times a sibling donor can donate cells



# Translation / Interpretation

- Interpretation and translation shall be performed by individuals qualified to provide these services in the clinical setting.
- Family members and legally authorised representatives should **not** serve as interpreters or translators.



# Consent process

1. Consent from the allogeneic donor should be obtained by a licensed health care professional other than the intended recipient's primary health care professional



2. Donor shall give informed consent and authorization in advance to release the donor's health information to the transplant physician and/or the recipient as appropriate



3. Documentation of consent shall be available to the Collection Facility staff prior to the collection procedure



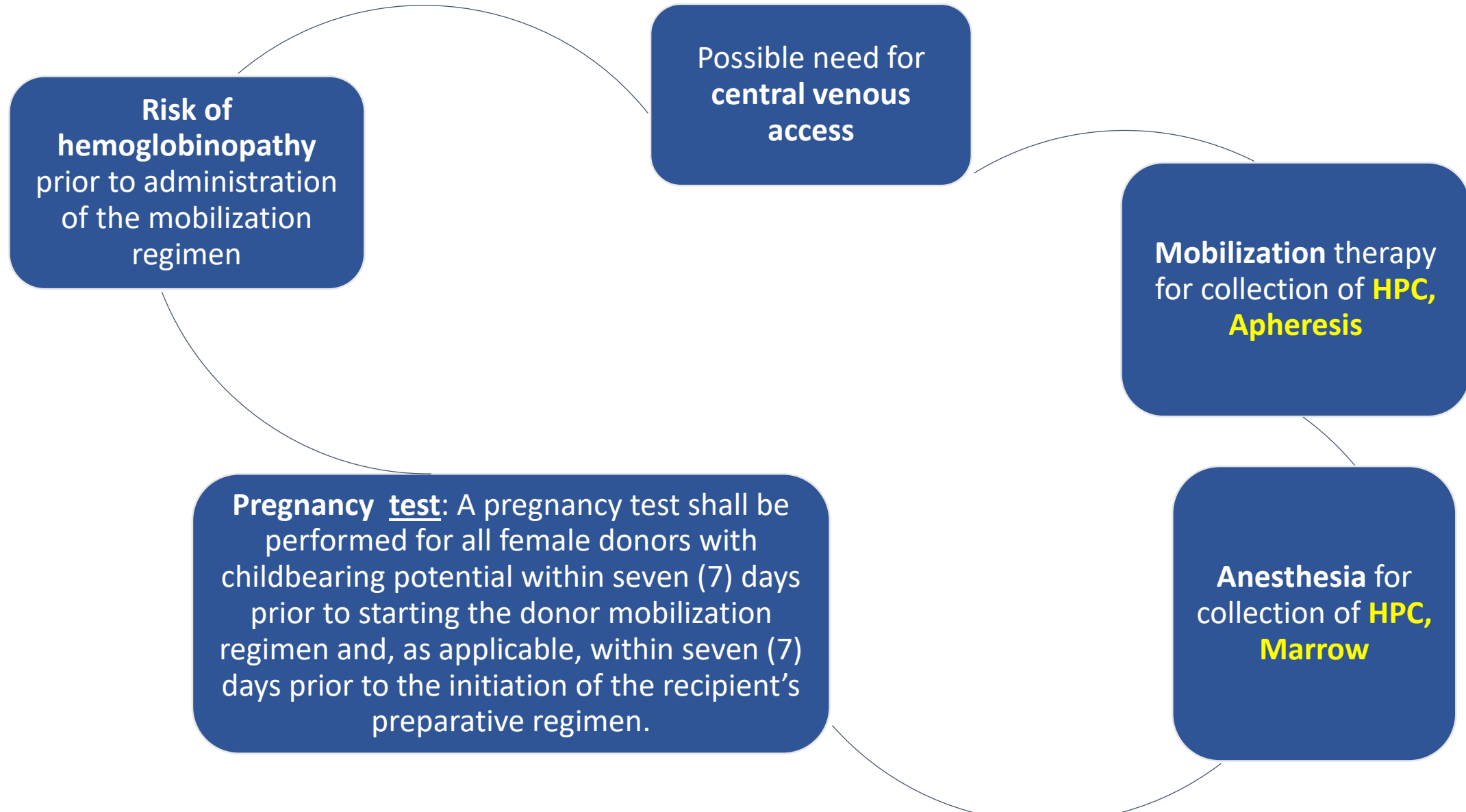
# Storage & discard policy

The donor shall be informed of

- the policy for cellular therapy product discard or disposal,
- including actions taken when an intended recipient no longer requires the cellular therapy product.

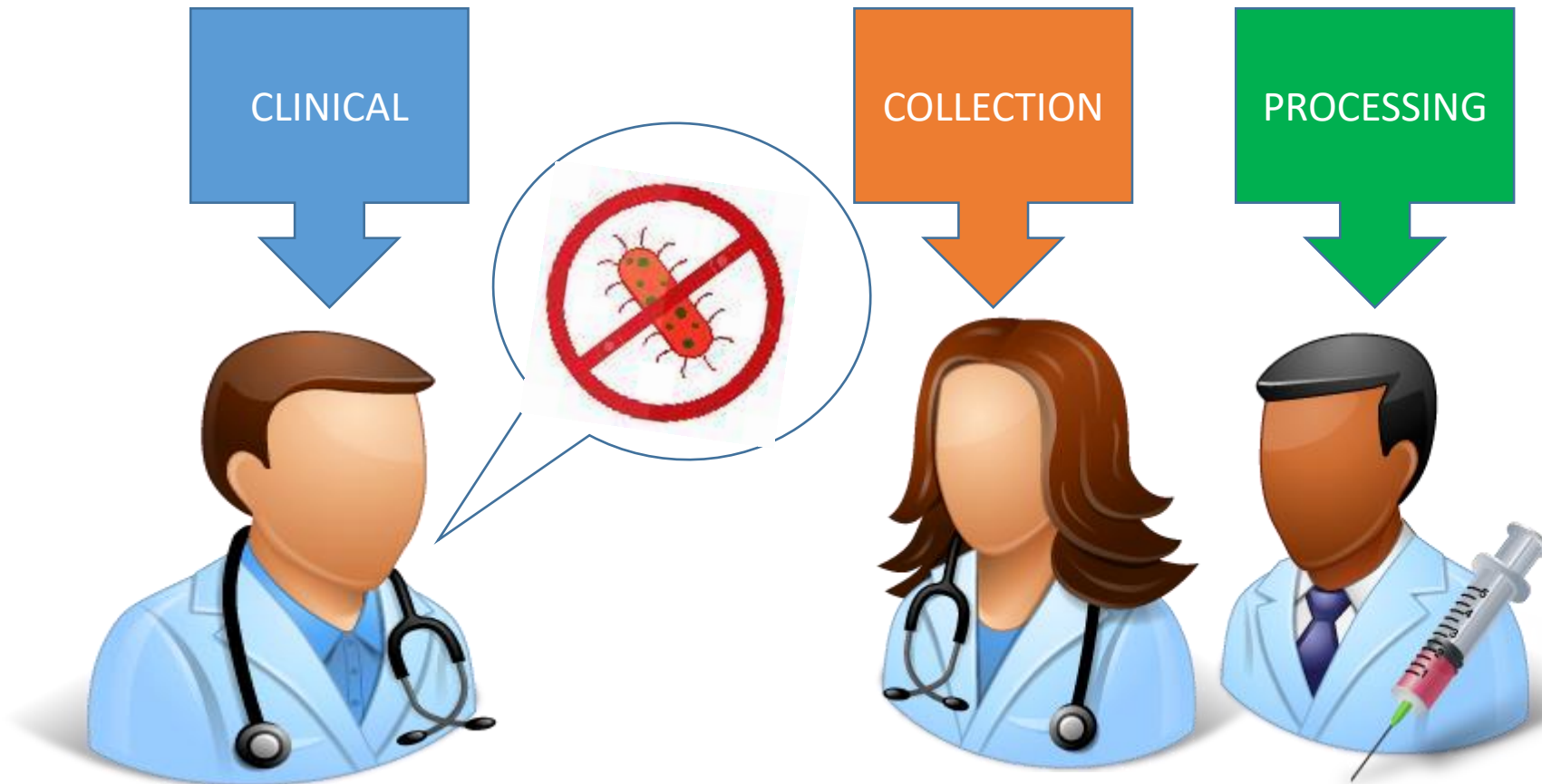


# Allogeneic and Autologous Donor Suitability for CTP Collections



# Test results communication

- The **Clinical Program** shall inform the **Collection Facility** and **Processing Facility** of donor test results or if any testing was not performed.



# Donor assessment for hemoglobinopathy

- The donor should be evaluated for the risk of hemoglobinopathy prior to administration of the mobilisation regimen.
- Inspection Manual:
  - Hemoglobinopathy risk assessment may include testing for the detection of Hemoglobin S (e.g. Sickie Dex) or an Hb-electrophoresis test, but a **test is not** required.



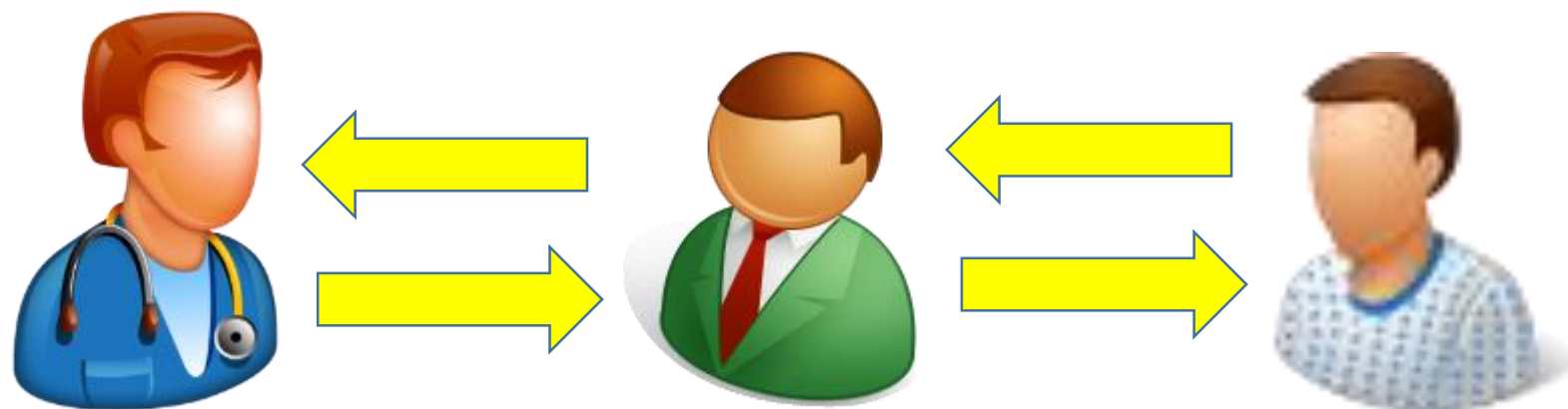
# Donor follow-up

There shall be policies or Standard Operating Procedures for:

- follow-up of donors that includes routine management and
- the management of collection-associated adverse events.



# Donor advocate



FOR WHOM?

To represent allogeneic donors who are:

- Minors

or

- Mentally incapacitated

- As defined by applicable laws



## Donor advocate

- NOT the donor's primary physician
- Objective to safeguard that the consent is made without pressure
- To facilitate the process
- *Bone Marrow Transplantation* (2010) **45**, 1269–1273; doi:10.1038/bmt.2009.354; published online 21 December 2009:Family donor care management: principles and recommendations





# Additional requirements for allogeneic donors

Allogeneic donors and allogeneic recipients shall be tested for ABO group and Rh type using two independently collected samples

A red cell antibody screen shall be performed on allogeneic recipients





# Allogeneic donors' clinical history

**Vaccination history**

**Travel history**

**Blood transfusion  
history**

**Communicable  
disease**

**Inherited  
conditions**

**Hematological or  
immunological  
disease**

**Malignant disease**

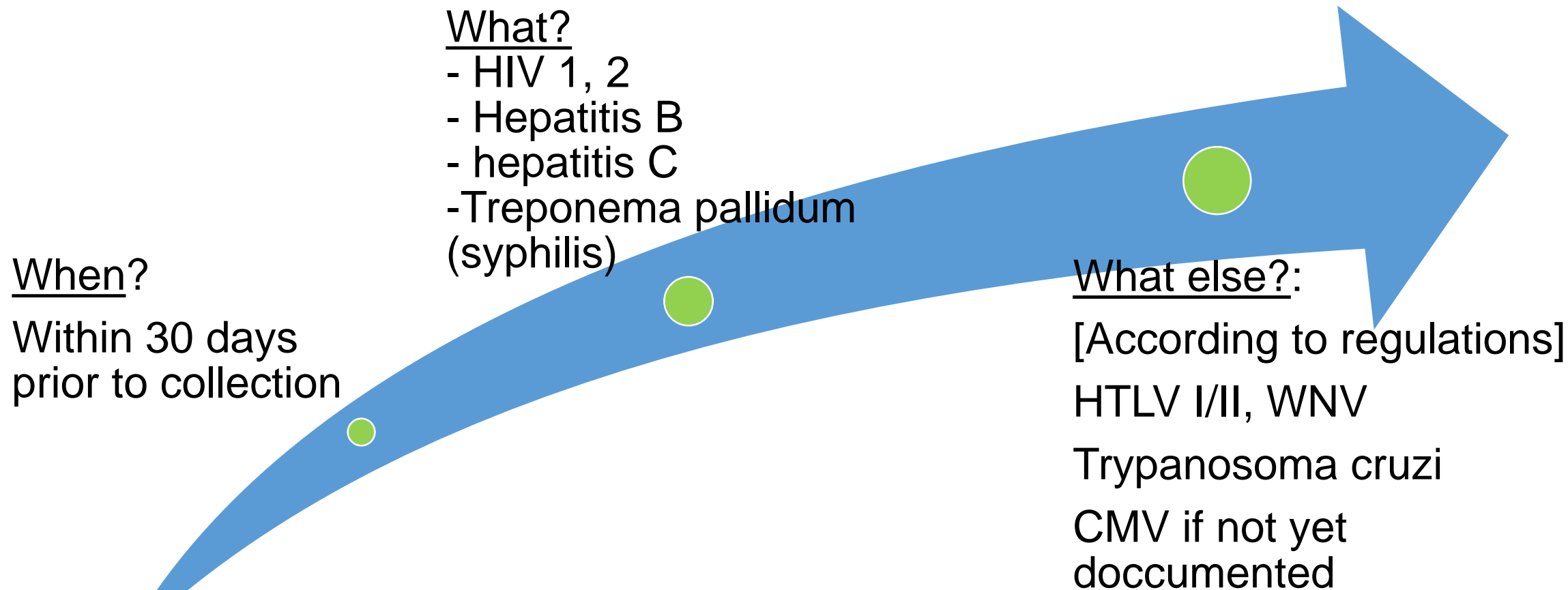


# Allogeneic donors' clinical history

- **Evidence:**
- Donor medical examination notes and questionnaire records can be reviewed to determine if all of the required screening elements were included in the eligibility determination.
- **Example(s):**
- It is recommended that the Clinical Program utilize a screening tool used by an unrelated donor registry even for related donors, such as the National Marrow Donor Program's "Donor Health History Screening Questionnaire." Information about areas of the world where CJD is a risk factor can be obtained from the interorganizational Uniform Donor History Questionnaire developed for donors of HCT/Ps and the algorithm that accompanies it. This information is available on the FACT website ([www.factwebsite.org](http://www.factwebsite.org)).
- Note: Standards point to specific questionnaire – not general medical history assesment.



# Allogeneic donors – testing for communicable disease agents



# HLA typing

B6.4.12 Allogeneic donors and recipients shall be tested at a minimum for **HLA-A, B, DRB1** type by a laboratory accredited by **ASHI, EFI**, or equivalent. **HLA-C** testing shall be performed for **unrelated allogeneic donors** and related allogeneic donors other than siblings.

B6.4.12.1 DNA **high resolution molecular typing** shall be used for DRB1 typing.

B6.4.12.2 **Verification typing/CT** shall be performed using an **independently sample** prior to allogeneic donor selection.



# Donor Eligibility & Clearance

Determined by a physician  
after review of:

History

Medical  
exam

Medical  
record  
review

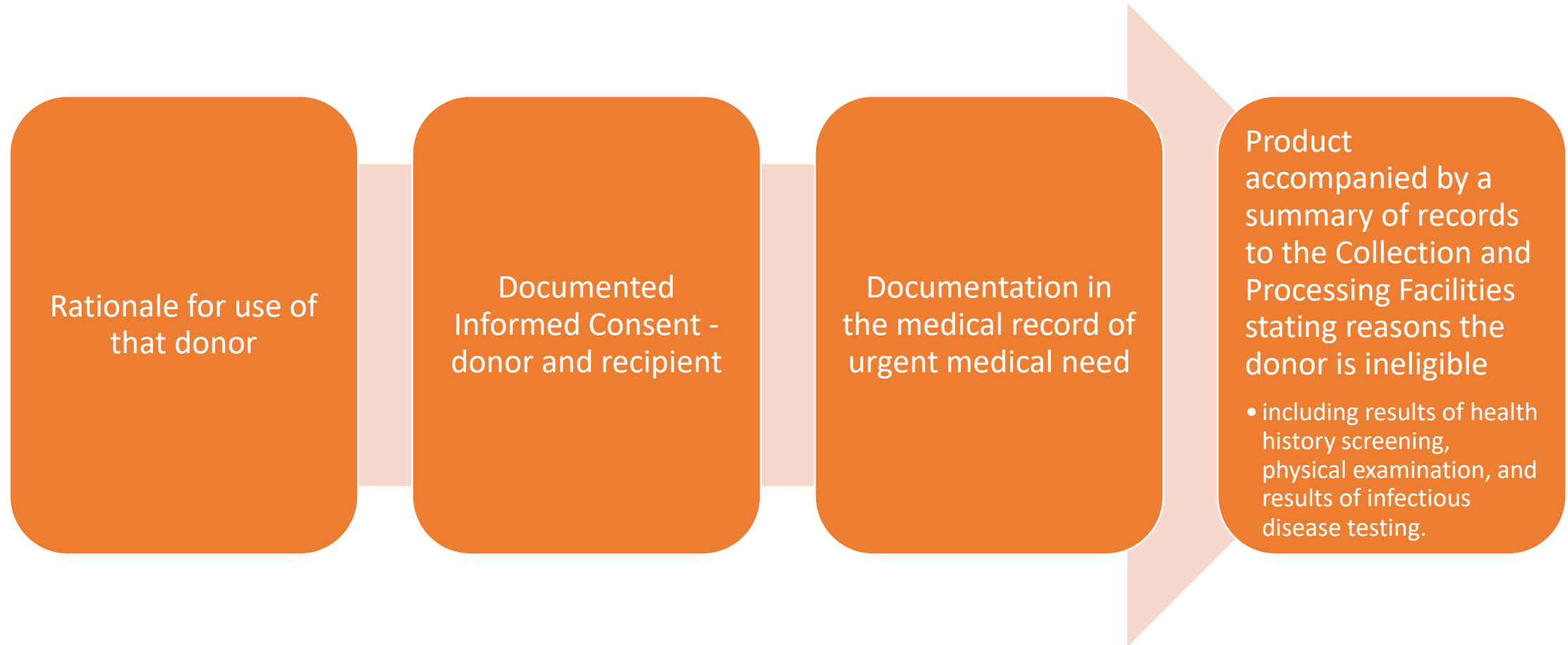
Testing /  
results

**Documented in the  
recipient's medical  
record before:**

- Recipient's preparative regimen is initiated
- Allogeneic donor begins mobilization regimen



# Use of an ineligible allogeneic donor – Requirements:



# Use of an ineligible allogeneic donor

Documented

Physician's rationale for  
donor's selection &  
suitability

Documented

Urgent medical need

Documented

Informed consent of the  
donor & patient



# Donor Records

- B6.4.17 There shall be a policy covering the creation and retention of allogeneic donor records



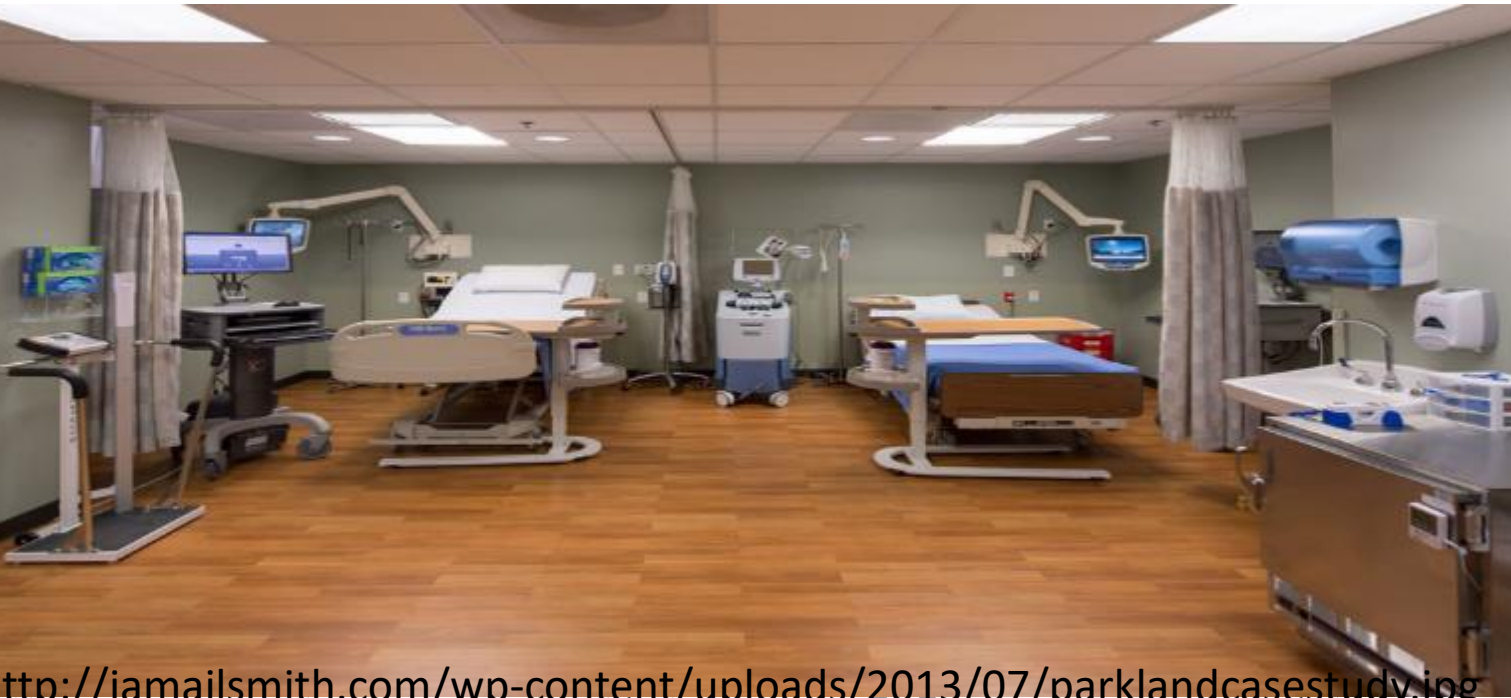


# Regulations

- The Apheresis Collection Facility shall abide by all applicable laws and regulations
  - ... licenced, registered, or accredited as required by the appropriate governmental authorities for the activities performed



# Collection Facilities



<http://jamailsmith.com/wp-content/uploads/2013/07/parklandcasestudy.jpg>



<http://www.medicaltourismmag.com/wp-content/uploads/2008/06/bone-marrow-transplantation-in-downtown-makati-main.jpg>



# Physical space

## Appropriate designated areas for

- collection of cellular therapy products
- for collected products,
- for storage of supplies, reagents, and equipment.

## Divided into defined areas of adequate size to prevent

- improper labeling
- mix-ups
- Contamination
- cross-contamination of cellular therapy products.

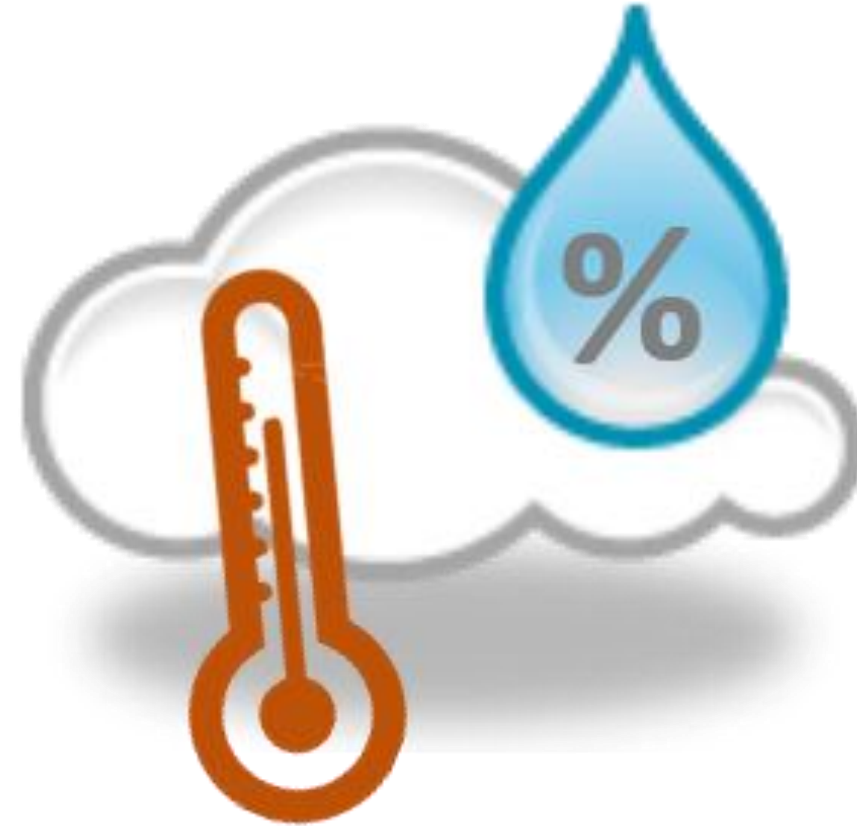
## Designated area with

- appropriate location
- adequate space
- design to minimize the risk of airborne microbial contamination in outpatient units where collection is performed.
- suitable space for confidential donor examination and evaluation



# Physical space

- Controlled environment



# Safety

- The Collection Facility shall have a written safety manual that includes instruction for action in case of exposure to communicable disease and to chemical, biological or radiological hazards
  - Hospital health & safety manuals; Hospital-wide procedures



## Physical Hazards



Flammable



Compressed Gas



Oxidizing



Corrosive



Explosive

## Health Hazards



Health Hazard



Corrosive



Skin Irritant



Toxic

## Reference Tools

<http://www.osha.gov/dsg/hazcom/ghs.html>


## Environmental Hazards



Environmental Hazard



# Personnel

- 
- **Apheresis Collection Facility shall have an**
    - **Apheresis Collection Facility Director**
    - **Medical Director**
    - **a Quality Manager**
    - **at least one additional designated staff member**
  - **Marrow Collection Facility shall have :**
    - **Medical Director**
    - **a Quality Manager**
    - **at least one additional designated staff member**

# Experience

- A minimum of **ten cellular therapy products** shall have been collected by apheresis in the twelve month period immediately preceding facility accreditation, and a minimum average of 10 cellular therapy products shall have been collected by apheresis per year within the accreditation cycle.
- A minimum of **1 marrow collection procedure** shall have been performed in the twelve month period immediately preceding facility accreditation, and a minimum average of 1 procedure per year within the accreditation cycle.



## BACKUP COVERAGE OF STAFF

Identified trained  
backup to maintain  
sufficient coverage.

Minimum  
of one  
designated  
trained  
individual



[http://www.nhsbt.nhs.uk/images/content/specialist\\_services.jpg](http://www.nhsbt.nhs.uk/images/content/specialist_services.jpg)



# Personnel

- Required staffing specified
- All staff must
  - have relevant qualifications
  - have specified training and competent in the procedures they undertake
  - have plan for continuing education








# LABELLING - ISBT 128 & EUROCODE


<https://www.iccbba.org/>

## EUROCODE-IBLS

<http://www.eurocode.org/index.html>

 <b>A9996 14 876543 8 [H]</b> Collection Center or Registry Address Anywhere, USA 00700		 <b>A</b> Rh NEGATIVE 0200	
Collection Date/Time  0140221415 <b>22 JAN 2014 14:15</b> Do Not Irradiate Do Not Use Leukoreduction Filters		For Use By Intended Recipient Only  Related Donor, First or Second Degree <b>SMITH, JOHN P</b> Donor # 123654987 Date of Birth: 17 NOV 1983	
 S1152400 DESIGNATED		 Expiration Date/Time: 0140241415 <b>24 JAN 2014 14:15</b>	
<b>HPC, MARROW</b>  Total Volume ____ mL containing approx ____ mL Heparin (____ U/mL) Store at room temperature		Intended Recipient: <b>SMITH, MARTHA P</b> Recipient ID: 123456789 Date of Birth: 12 DEC 1990 Processing Laboratory 2nd Line of Address Elsewhere, USA 00500	

<b>17195226</b>	Femurkopf, 1 Stck., h Knochenspongiosa gefr DE000181-17195226-01
<b>17195226</b>	Femurkopf, 1 Stck., h Knochenspongiosa gefr DE000181-17195226-01
<b>Ch.B.: 17195226-01</b>	Verwendbar bis: <b>07.04.2019</b>
 !TDE0001811719522600010	Entnahme: 07.04.2017
 !P736001	Femurkopf, 1 Stck., halbiert (GK) Knochenspongiosa gefrierkonserviert Charit�
Gen.-Nr.: PEI.G.03774.01.1 Transplantat humanen Ursprungs Lagertemp.: -45 bis -35 �C Verschreibungspflichtig, zur Transplantation Arzneimittel f�r Kinder unzug�nglich aufbewahren	
Pharmazeutischer Unternehmer: Sana Kliniken Berlin-Brandenburg GmbH Sana Kliniken Sommerfeld, Klinik f�r Endoprothetik Waldhausstrasse 1 - 16766 Kremen Tel: 033055 52201 Fax: 033055 52203	
 SEC: DE123456000017195226 B123456700120190407	

# LABEL CONTENT

**At all stages of collection**, the cellular therapy product shall be labeled with the proper name of the product and the unique numeric or alphanumeric identifier, at a minimum.

Labeling at the end of collection shall occur **before** the cellular therapy product bag is **disconnected** from the donor.

**At the end** of the cellular therapy product collection, the cellular therapy product label on the **primary product container** and concurrent plasma container shall bear the information in the Cellular Therapy Product Labeling table in Appendix II



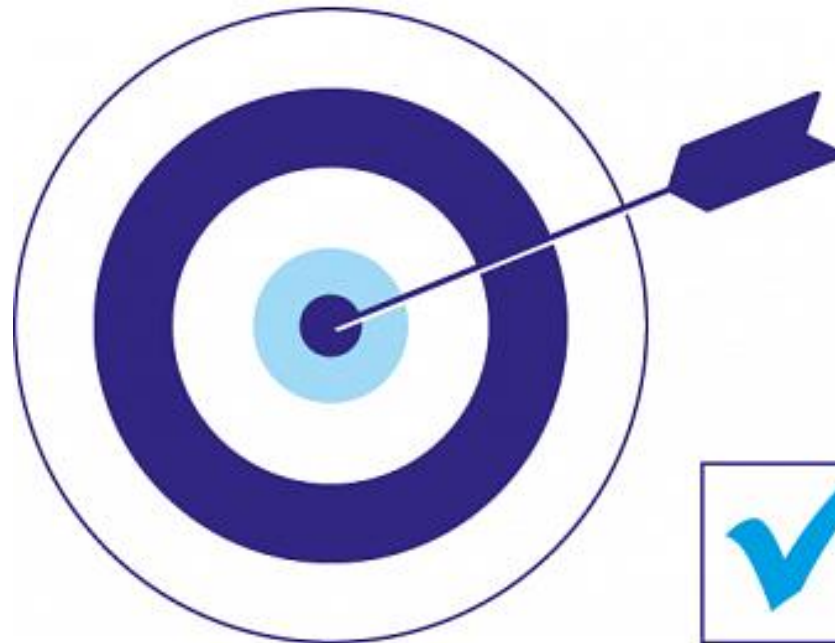
# Process Controls

- Equipment shall be inspected for cleanliness and verified to be in compliance with the maintenance schedule prior to use. Equipment shall also be standardized and calibrated on a regularly scheduled basis and after a critical repair or move as described in Standard Operating Procedures and in accordance with the manufacturer's recommendations.



# Process Controls

- All equipment with a critical measuring function shall be calibrated against a traceable standard, if available.
- Where no traceable standard is available, the basis for calibration shall be described and documented.



Calibrated



# Process Controls

Autologous and/or CMV-appropriate and irradiated blood components shall be available during the apheresis collection procedure for all donors.

Before cell collection is undertaken, there shall be a written order from a physician specifying , at a minimum, timing and goals of collection

<u>ORDER FORM</u>			
<b>3 G's Sharpening</b> P.O. Box 504 Towaco, New Jersey 07095 973-601-0287 Email: 3gsharpening@gmail.com		Date: _____	
Please complete this form and attach to your letter, check or money order.			
Name: _____			
Address: _____			
City: _____ State: _____ Zip: _____			
Your email: _____			
<u>Item</u>	<u>Quantity</u>	<u>Price each</u>	<u>Total</u>
Service (all above)	_____	\$ 5.00	\$ _____
Med. Chemoval	_____	\$ 10.00	\$ _____
Normal Antiser.	_____	\$ 5.00	\$ _____
Chemoval	_____	\$ 5.00	\$ _____
Extractions (no padding or add-on)	_____	\$ 10.00	\$ _____
Special Antiser.	_____	\$ 5.00	\$ _____
Special Term.	_____	\$ _____	\$ _____
Special Term.	_____	\$ _____	\$ _____
Refund: Shipping. Whatever costs you to ship to us, please add \$5.00 to return in the mail. \$ _____			
We always suggest the U.S. <b>POST OFFICE</b> , they do a good job, it's easy for everyone to estimate, plus it's a flat rate regardless of weight.			
<b>GRAND TOTAL: \$ _____</b>			
Please enclose this order form and your check for the total amount of sharpening and shipping in the box and mail it properly.			
Ship to: 3 G's Sharpening, P.O. Box 504, Towaco, New Jersey 07092			





# Process Controls

A complete blood count, including platelet count, shall be performed **within 24 hours prior to each subsequent cellular therapy product collection** by apheresis.

There shall be peripheral blood count **criteria** to proceed with collection.



# Process Controls

There shall be written documentation of an assessment of donor suitability for the collection procedure performed by a qualified person immediately prior to each collection procedure.

## Explanation:

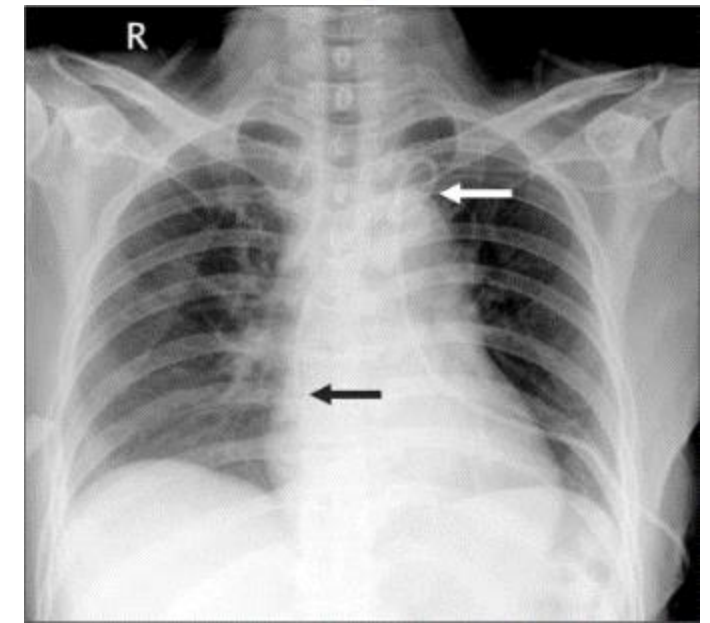
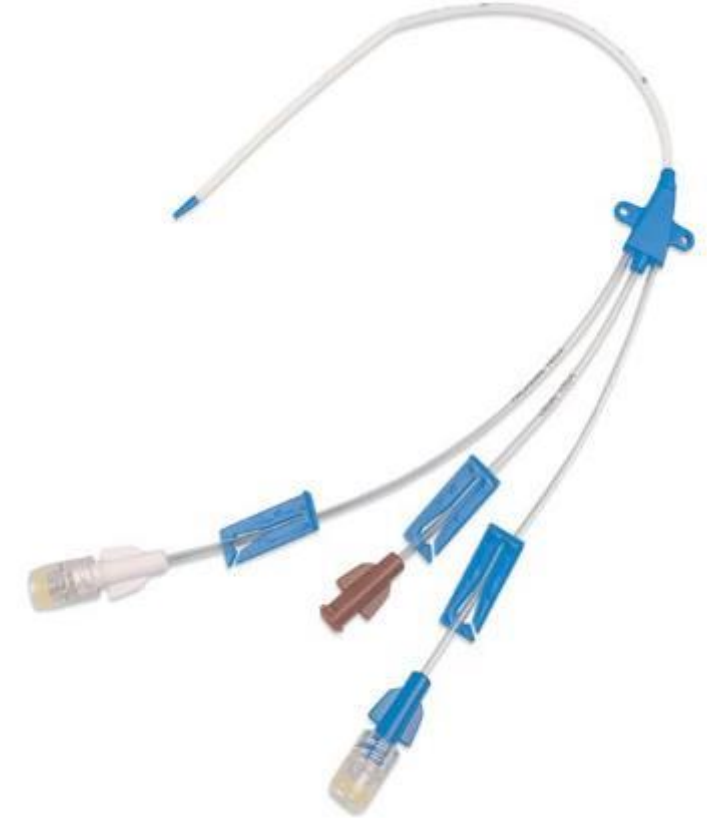
Day-to-day management of the donor is the responsibility of the Apheresis Collection Facility. It is incumbent on the collection team to confirm the health of the donor at the time of collection. This does not require a complete history and physical examination by a physician for each collection procedure. Rather, the records from the initial evaluation (including consent for the procedure and documents regarding the goals of the collection procedure) must be immediately available to and reviewed by the collection team. A physician or registered nurse on the collection team must evaluate the donor before each collection procedure to determine if there have been changes in the health of the donor or changes in medications since the last donation.



# Process Controls

If required, **central venous catheters** shall be placed by a licensed health care professional qualified to perform the procedure.

Adequacy of central line **placement shall be verified** by the Apheresis Collection Facility prior to initiating the collection procedure.



# Process Controls

Collection methods shall employ aseptic technique so that cellular therapy products do not become contaminated during collection.

Cellular therapy products shall be packaged in a closed sterile transfer pack appropriate for blood products.



# Process Controls

Records shall be made concurrently with each step of collection of each cellular therapy product in such a way that all steps may be accurately traced.

Records shall identify the person immediately responsible for each significant step, including dates and times, where appropriate.

Explanation: Records must be used during cellular therapy product collection and must be completed in real time as the procedure is performed. Records must be accurate, indelible, and legible, and must identify the person performing the work and the dates of the various entries. Records of identification codes of personnel including methods to link the name and/or signature to the initials or other identification codes used in other documents and records must be maintained. These records should include dates of employment of the personnel

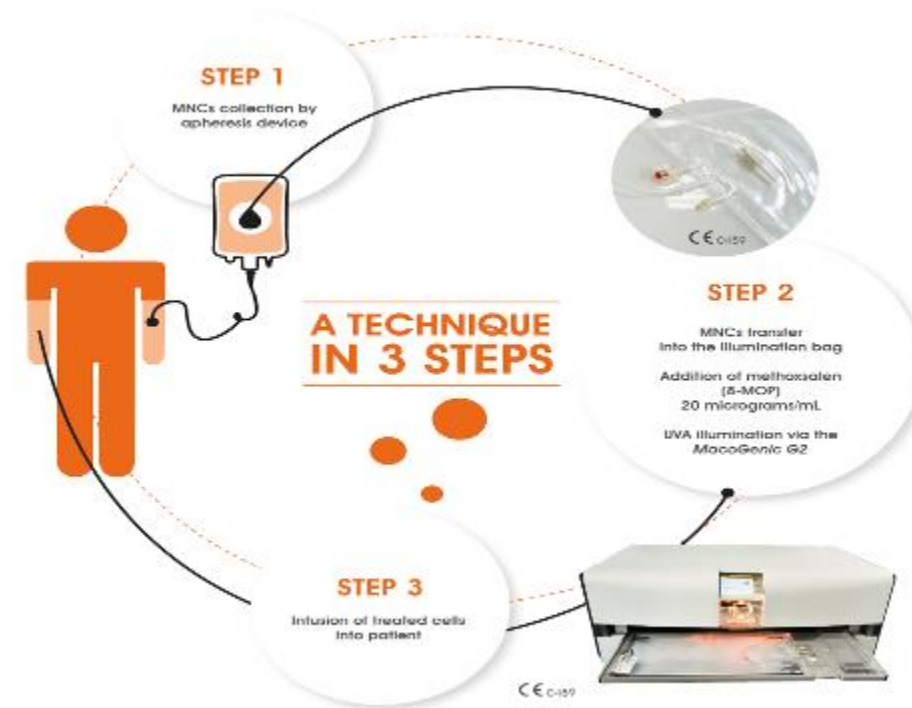


# Extracorporeal Photopheresis (ECP)

There shall be a policy addressing safe administration of ECP

The ECP procedure shall be performed according to written standard operating procedures of the facility performing the procedure appropriate for the clinical condition of the patient.

A final report of the details of ECP administered shall be documented in the patient's medical record.



# Transportation & Shipping

## Shipping:

- The physical act of transferring a cellular therapy product within or between facilities
- The product **leaves the control** of trained personnel at the distributing or receiving facility.

## Transport:

- Physical act of transferring within or between facilities.
- Product **does not leave the control** of trained personnel at the transporting or receiving facility.

# Transportation & Shipping

Products are packaged in a closed sterile transfer pack appropriate for blood products

Policies for duration and conditions of short-term storage prior to distribution

Primary cellular therapy product container shall be placed in a secondary container that is sealed

Transported and/or shipped to the Processing Facility in a validated container at a temperature defined in a SOP



# Records

- Records management often part of the hospital system – but can be stand alone
- Confidentiality of records
- Retain for **minimum of 10 years or longer** in accordance with applicable laws and regulations (program or institutional policy)
- Electronic records
  - Listing of all critical electronic systems = systems that are under the control of the Apheresis Collection Facility that are used as a substitute for paper, to make decisions, to perform calculations...
  - Must have policies, SOPs to maintain accuracy and confidentiality
  - Alternative system to allow for continuous operation if the electronic records are not available – must be validated.
  - Validated procedures for and documentation of training and competencies; monitoring of data integrity; back up & system for assigning unique identifiers.



# Electronic records

Critical electronic record systems shall include at a minimum systems

- under the control of the Collection Facility
- that are used as a substitute
  - for paper
  - to make decisions
  - to perform calculations
  - or to create or store information used in critical procedures.







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for the Quality  
of Medicines  
& HealthCare  
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de la qualité  
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Home > About us > Newsroom > Revised: "Validation of Computerised Systems" Guideline

# Revised: "Validation of Computerised Systems" Guideline

⏪ Back

AGENDA

- <https://www.edqm.eu/en/news/revised-validation-computerised-systems-guideline>

The revised guidelines are the following

- [Validation of Computerised Systems - Core Document](#)
- [Validation of Computerised Systems Annex 1: Validation of Excel Spreadsheets](#)
- [Validation of Computerised Systems Annex 2: Validation of Complex Computerised Systems](#)



# Direct distribution to clinical program

- Where cellular therapy products are distributed directly from the Apheresis Collection Facility to the Clinical Program for administration of for subsequent processing, the Standards related to labelling, documentation, distribution, transportation, and recordkeeping in Sections D7, D10, D11, D13 and the Appendices apply.

