European Directorate for the Quality of Medicines & HealthCare

Council of Europe



COUNCIL OF EUROPE



Ensuring the Quality and Safety of Substances of Human Origin Council of Europe/EDQM's role

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SoHO Oversight System

8 April 2025



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CONSEIL DE L'EUROPE



European **Directorate for** the Quality of Medicines & **HealthCare**

COUNCIL OF EUROP

European Directorate | Direction europé or the Quality de la qualité of Medicines du médicament & HealthCare & soins de santé

edom



Council of Europe

 ★ Established in 1949
 ★ 46 member states
 ★ Based in Strasbourg
 ★ Founded on three main values: human rights, democracy and the rule of law



Committee of Ministers

The Congress

Le Congrès

Congress of Local

and Regional

authorities

Commissioner of Human Rights



Parliamentary Assembly



EUROPEAN COURT OF HUMAN RIGHTS COUR EUROPÉENNE DES DROITS DE L'HOMME

European Court of Human Rights



Conference of INGOs





European Directorate Direction europé for the Quality de la qualité of Medicines du médicament & HealthCare & soins de santé



Conseil de l'Europe

EDQM

★ Founded in **1964**

Partial agreement (39 members states & the EU + 33 observers)

 ★ Contributes to public health and access to good quality medicines and healthcare in Europe
 ★ Wide scope of activities

Our vision Together for better health, for all

Our mission

To contribute to public health protection by engaging with an international community of experts and stakeholders



* EU: European Union; TFDA: Taiwan Food and Drug Administration; WHO: World Health Organization

Four policy areas & a wide portfolio of activities

EDQM 2025

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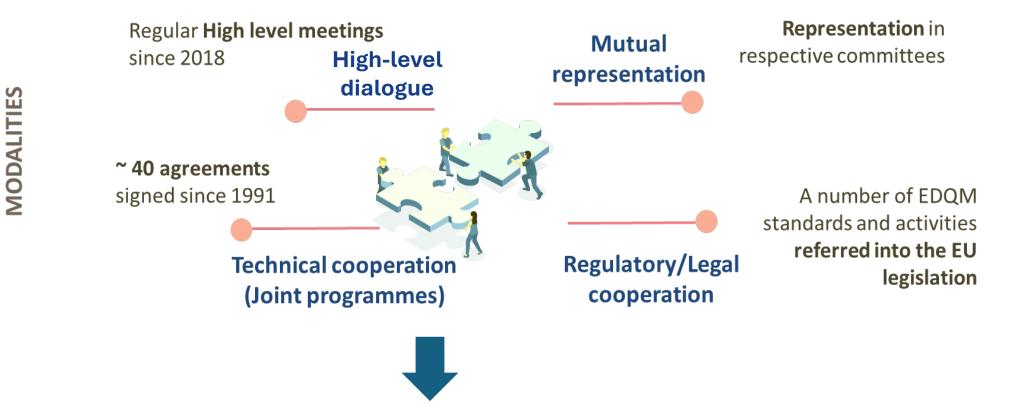
Medicinal	Substances of human origin	Pharmaceutical	Consumer
products		care	health
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Governance of SoHO activities

EDQM	Intergovernmental Committees and Networks Department (ICND) SoHO Division			
COMMITTEES	Europear	committee on Organ Transplant n Committee on blood Transfus 1ember States (MS) including the 2	sion (CD-P-TS)	
PRINCIPLES	Non-commercialisation of substances of human origin	Mutual assistance	Protection of donors & recipients	
WORKING GROUPS				
ACTIVITIES	1. Standard-setting: legal instruments, technical standards, policies	2. Monitoring data & practices Annual reports (Blood and Transplant)	3. Capacity building supporting SoHO establishments in implementing CoE standards & EU legislation	

EDQM and EU cooperation

COOPERATI



- The EDQM a regulatory and technical partner of the EU
 - 60 years of collaboration in the field of medicinal products
 - 15 years of collaboration in the field of SoHO

New EU SoHO legislation and EDQM Role

<u>Regulation (EU) 2024/1938</u> of the European Parliament and of the Council of 13 June 2024 on standards of quality and safety for substances of human origin intended for human application and repealing Directives 2002/98/EC and 2004/23/EC

From the scope:

- SoHO intended for human application and SoHO used to manufacture products regulated by other Union legislation, as referred to in paragraph 6, and intended for human application
- SoHO are substances collected from the human body, whether contain cells or not and whether those cells are living or not, including SoHO preparations resulting from the processing of such substance
- solid organs are excluded from the scope of this Regulation (covered in Directive 2010/53/EU)

Entry into force: 7 August 2024 Application date: 7 August 2027 = 3-year transitional period

EDQM Role: "SoHO entities shall follow the highest available levels of standards (Art. 56 & 59)" standards are to be based on the fundamental principle that the human body or its parts as such are not to be a source of financial gain (in accordance with Article 3 of the Charter of Fundamental Rights of the European Union)

New EU SoHO legislation and EDQM role

Implementation of high-level standards through technical guidelines

- staying up to date with the science

Level 1	Commission Implementing Legislation	"where the Commis	sion deems necessary" Article 56, 59
If none: Level 2	a. Technical Guidance on the EU SoHO Platform OR:	Published & updated by ECDC/ EDQM	Shall be considered as standards Articles 27 inspection-standards recognition; 37 QMS; 39 authorisation-monographs; 56 donor protection; 59 recipients/offspring protection.
	D. Equivalent Outdance	by CAs to achieve nt standards	"When adopting such other guidelines, Member States should verify and document that those guidelines achieve compliance with the (EDQM or ECDC) standards"
If none: Level 3	Methods based on international standards or	scientific evidence	Compliance with the standard to be demonstrated at the entity level

The CoE/EDQM and the EU in SoHO field

Council of Europe/EDQM

- Leading standard-setting organisation in the field of SoHO
- Develops legally binding texts on the topic (1997 Oviedo Convention and the Additional Protocol on transplantation of organs and tissues of human origin, 2015 Convention against Trafficking in Human Organs)
- Non-legally binding texts: recommendations, resolutions, technical guides, reports and other publications

The European Union/European Commission

- Address risks emerging SoHO through its mandate to set high standards of quality and safety of SoHO, in accordance with Art. 168(4)(a) of the Treaty on the functioning of the EU
- Undertake a range of activities, drafting legislation and developing guidance, assisting national authorities with its implementation, conducting vigilance activities and supporting projects

COMMON GOAL: TO PROTECT CITIZENS

Selected activities under the Contribution Agreement 2025-27

- Revision of the Guides Blood, Tissues and Cells, Organs
 - Scientific-evidence re-enforcement
 - Digitalised interactive web-based format
- Harmonisation of SoHO activity reporting datasets
 - Extended to blood
- Supporting the exchange and implementation of good practices and the development of an action plan for achieving and maintaining sustainable supplies of SoHO – Blood and plasma, Tissues and Cells, Organs
 - new in the Contribution Agreement

Standard-setting on quality and safety

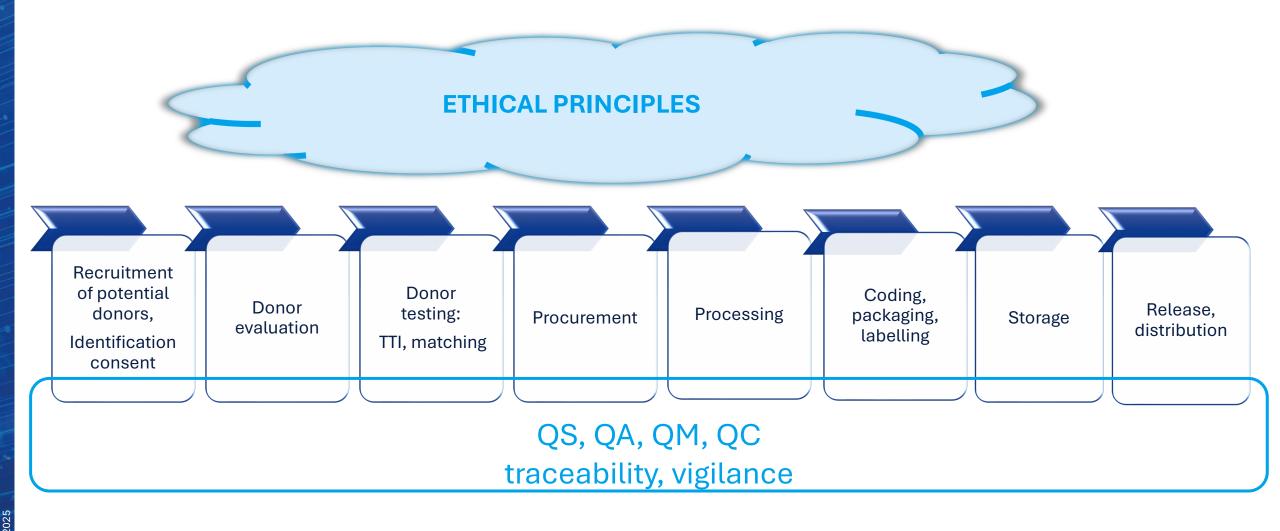


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Funded by the European Union and the Council of Europe	**** **** EUROPEAN UNION	CONSEIL DE L'EUROPE	Implemented by the Council of Europe

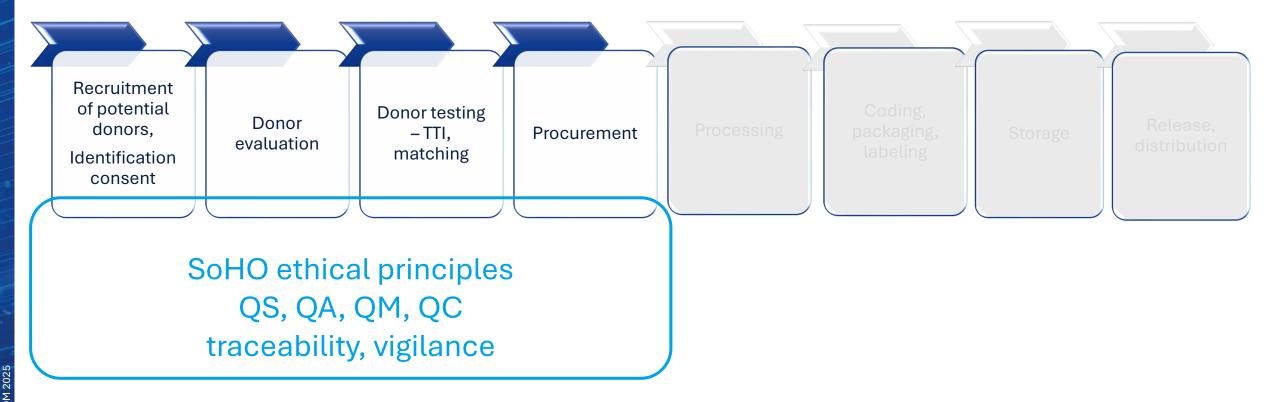
- Comprehensive guidelines **based on best available scientific evidence** to provide professionals with a useful overview of the most recent developments in the field.
- Ensure high level of quality and safety.
- Contribute to the **harmonisation of standards and practices** among European countries.
- Continuous update and maintenance.
- **Consensus documents** elaborated by working groups (under the aegis of the CD-P-TO, CD-P-TS) composed of experts nominated by Member States and observers (including professional associations).



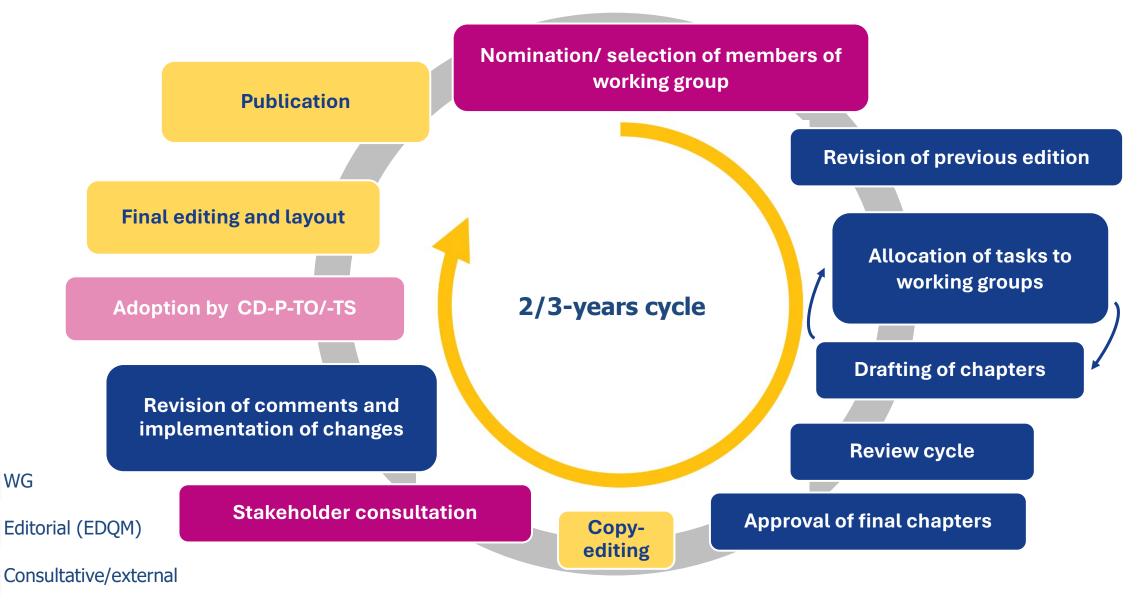
Scope of the EDQM Guides on quality and safety of SoHO for human application



Scope of the EDQM Guides on quality and safety for all products, regardless their final destiny



Development/revision cycle process



EDOM 202

Stakeholders' engagement throughout the cycle

★ Working group

- Working group composed of 40 experts nominated by member states and observers (including professional associations).
- Final composition of WG is decided by the Secretariat and the Chairs of the CD-P-TO or CD-P-TS and the chair of the previous edition of the Guide, taking into account:
 - a) technical and scientific expertise in the required fields experts
 - b) drafting needs
 - c) active participation in the elaboration of previous editions of the Guide
 - d) broad and balanced geographic representation
- Declaration of interest form (Dol) and confidentiality undertaking form.

***** Stakeholder consultation

- Invitations sent to National Health Authorities (via CD-P-TO and CD-P-TS members, participants and observers, and the EC NCA mailing list); relevant scientific/professional associations; and others designated by any of the above.
- Consultation period: 6 weeks.
- Each comment is assessed and decisions on acceptance are justified.

Blood components monographs (37)

Guide to the preparation, use and quality assurance of blood components

Component monographs

Part A. Whole Blood components

A-1. Whole Blood

Definition and properties

Whole Blood is blood taken from a suitable donor using a sterile and pyrogen-free anticoagulant and container. Whole Blood is a source material for Whole Blood, Leucocyte-Depleted and for component preparation, which is its major use.

Whole Blood for transfusion is used without further processing.

Whole Blood for transfusion should not contain irregular antibodies of clinical significance.

Preparation

By definition, no (post-donation) preparation is required to produce a unit of *Whole Blood*.

Requirements and quality control

Table 5A-1 lists the requirements for *Whole Blood* for direct transfusion. Additional testing may be required to comply with national requirements (see also Chapter 10, Screening for markers of transfusion-transmissible infection).

Table 5A-1

Parameter to be checked	Requirements	Frequency of control
ABO, RhD	Grouping	All units
Anti-HIV 1 & 2	Negative by approved screening test	All units
HBsAg	Negative by approved screening test	All units
Anti-HCV	Negative by approved screening test	All units

Chapter 5	Blood component monographs
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Parameter to be checked	Requirements	Frequency of contro
Volumeª	450 mL \pm 50 mL volume (excluding anticoagulant)	
A non-standard donation should be labelled accordingly	as determined by SPC	
Haemoglobin per final unit ^a	Minimum 45 g	as determined by SPC
Haemolysis at the end of storage ^a	< 0.8 % of red cell mass	as determined by SPC

^a A minimum of 90 % of units tested should meet the required value.

Storage and transport

Whole Blood for transfusion must be kept at a controlled temperature, i.e. between + 2° C and + 6° C (Directive 2004/33/EC, Annex IV). The storage time depends on the anticoagulant/preservative solution used and should be validated.

Validated transport systems should ensure that the temperature of not go below + 1°C or exceed + 10°C over a maximum transit of 24 hours. Transport times may exceed 24 hours if temperator conditions are maintained between + 2°C and + 6°C.

Whole Blood for preparation of blood components may be between $+ 2^{\circ}C$ and $+ 6^{\circ}C$. Alternatively, it may be kept for up t hours between $+ 20^{\circ}C$ and $+ 24^{\circ}C$, which is a prerequisite for production of platelet preparations from Whole Blood.

Labelling

The labelling should comply with relevant legislation and, whe place, international agreements. The following information on *W Blood* for transfusion must be shown on the label or contained ir component information leaflet, as appropriate (*Directive 2002/9 Annex III*):

- The name of the blood component and the applicable pro code;
- The volume or weight of the blood component;

Blood component

- Definition and properties
- Preparation
- Requirements and quality control

Chapter 5

- Storage and transportation
- Labelling
- Warnings

Guide to the preparation, use and quality assurance of blood components

- The unique donation (identity) number;
- The producer's identification;
- The ABO and RhD groups;
- The date of expiry;
- The storage temperature;
- The name of the anticoagulant solution.

The following additional information should be shown on the label or contained in the component information leaflet, as appropriate:

- The date of donation;
- Blood group phenotypes other than ABO and RhD (optional);
 Additional component information: irradiated, etc. (if
- appropriate);
 That the component should not be used for transfusion if there is abnormal haemolysis or other deterioration;
- That the component should be administered through an approved blood administration set.

Warnings

Compatibility of *Whole Blood* for transfusion with the intended recipient should be verified by suitable pre-transfusion testing.

RhD-negative female recipients of childbearing age or younger should not be transfused with Whole Blood from RhD-positive donors.

Microaggregates may form on storage.

Whole Blood for transfusion is not recommended in cases of:

- Anaemia without blood volume loss;
- Plasma intolerance;
- Intolerance due to alloimmunisation against leucocyte antigens.
- Adverse reactions include:
- Haemolytic transfusion reaction;
- Non-haemolytic transfusion reaction (mainly chills, fever and urticaria):
- Anaphylaxis;

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- Alloimmunisation against red cell and HLA antigens;
 Transfusion-related acute lung injury (TRALI);
- Post-transfusion purpura;
- Transfusion-associated graft-versus-host disease (TA-GvHD);
- Sepsis due to inadvertent bacterial contamination;
- Viral transmission (hepatitis, HIV, etc.) is possible, despite careful donor selection and screening procedures;

Blood component monographs

- Syphilis can be transmitted if components are stored for less than 96 hours at + 4 °C;
- Protozoal transmission (e.g. malaria) may occur in rare instances;
- Transmission of other pathogens that are not tested for or recognised;
- Citrate toxicity in neonates and in patients with impaired liver function;
- Metabolicimbalanceinmassivetransfusion (e.g. hyperkalaemia);
 Transfusion-associated circulatory overload (TACO);
- Iranstusion-as
 Iron overload.

A-2. Whole Blood, Leucocyte-Depleted

Definition and properties

Whole Blood, Leucocyte-Depleted (LD) is a component for transfusion or a source material for component preparation derived from Whole Blood by removing the leucocytes to a minimal residual content.

Whole Blood, LD contains a minimum haemoglobin content of 43 g. Whole Blood, LD contains less than $1 \times 10^{\circ}$ leucocytes.

Whole Blood, LD for transfusion should not contain irregular antibodies of clinical significance.

Preparation

Generally a filtration technique is used to produce *Whole Blood, LD.* Pre-storage leucocyte depletion within 48 hours after donation is the standard.

Tissue / Cell Monographs (43)

GUIDE TO THE QUALITY AND SAFETY OF TISSUES AND CELLS FOR HUMAN APPLICATION

24.2. Haematopoietic progenitor cells from peripheral blood apheresis – HPC(A)

Tissue/cell product	Haematopoletic progenitor cells from peripheral blood apheresis – HP- C(A)
Definition	HPC(A) are procured by aphrenesis from the mononuclear cell fraction of circu- lating blood after their mobilisation from the bone marrow. The infused HPC(A) can originate from the recipient (autologous) or from another individual (allo- geneic). They can be used as fresh unmanipulated product or further processed (e.g. cell selection, cryopreservation).
Established clinical Indications	 Restoration of haematopoiesis after chemo- and/or radiation therapy (autol- ogous and allogeneic transplantation). Establishment of donor chimerism (allogeneic transplantation).
Critical properties	 Cellularity/viability a. for autologous transplantation: -viable CD34' cell dose: > 2.0 × 10⁴/kg recipient body weight; b. for allogeneic transplantation: -target viable CD34' cell dose: approximately > 5.0 × 10⁹/kg recipient body weight, -minimum viable CD34' cell dose: 1.5-3.5 × 10⁹/kg body weight. Absence of microbial contamination (the presence of microbial contami- nation may not preclude release but may indicate the need for antibiotic treatment in the recipient, In case of ABO incompatibility, red cell volume should be limited to 0.2 to 0.4 mL/kg or to-30 mL recipient weight. In case of cryopreserved HPC(A), DMSO volume should be less than 1 mL/kg recipient body weight.
Quality control requirements	Nucleated cell count Viable CD34; cell enumeration Microbiogical testing ABO Rh blood group for allogeneic products Measurement of residual ABO-incompatible red cell volume
Storage and transport	 Fresh HPC(A) can be stored and transported up to 72 hours at room temper- ature (h2-55⁴C) or refrigerated (2-8⁴C), as requested by the transplant centre. Fresh HPC(A) can be stored up to 72 hours without cryopreservation. Cryopreserved HPC(A) are stored and transported at temperatures equal to or below - 140⁵C. Cryopreserved HPC(A) can be stored for up to 19 years or longer. Thawed HPC(A) are stored and transported refrigerated (2-8⁵C).
Special labelling and accompanying Information	 Placed in a container, and when applicable the accompanying documentation, must be appropriately labelled with a uniquely identifying code. In the EU, when grafts are distributed for human application, they must be labelled with the Single European Code (SEC) as applicable. If applicable: warning statements and/or biohazard label. Specific information not coded in the SEC that must be included in accompanying documentation: donor name (autologous or related donors) or donor ID (unrelated donors) recipient name (if permitted), recipient ID (if applicable) wable CD34* cell enumeration ABO Rh blood group volume identity of processing and distribution facility identity of processing and distribution facility identity of processing and distribution facility
Special warnings	Do not irradiate. Properly identify intended recipient and product. For use by intended recipient only. For autologous use only, if applicable. Do not use leukoreduction filters. Use immediately after thawing. If presence of microbial contamination, consider antibiotic treatment in the recipient.

PART D: TISSUE AND CELL MONOGRAPHS

24.3.Mononuclear cells from unstimulated peripheral blood apheresis – MNC(A)

Tissue/cell product	Mononuclear cells from unstimulated peripheral blood apheresis – MNC(A)
Definition	Unstimulated mononuclear cells are procured by apheresis from the circulatin blood. The procured cells can originate from the recipient (autologous) or form another individual (allogeneic). Unstimulated mononuclear cells can be used as fresh non-manipulated products or further processed (e.g. cryopreservatior cell selection, starting material for ATMP3.
Established clinical indications	 MNC(A) after allogeneic stem cell transplantation from the original HPC donor are used in cases of relapse and mixed chimerism or as relapse propi ylaxis to enhance the graft-versus-malignancy effect, to promote immune reconstitution and prevent infection complications. MNC(A) for generation of cellular therapies and ATMPs (e.g. NK-cell therapy virus-specific I-cells, CAR-T cells).
Critical properties	 Cellularity/viability After allogeneic transplantation to enhance immunity and graft-versus-ma- lignancy effect: escalating cell doses of CD3⁺ cells, depending on the clinical situation and the transplant setting (e.g. in case of relapse from 1.0 × 10⁷/kg to 1.0 × 10⁷/ kg body weight), CD3⁺ cell dose > 1.0 × 10⁹/kg body weight per infusion should be avoided due to increased risk of graft-versus-host disease; As starting material for generation of cellular therapy and ATMPs: -required cell dose according to the specific protocol. Absence of microbial contaminiation (the presence of microbial contami- nation may not preclude release but may indicate the need for antibiotic treatment in the recipient).
Quality control requirements	Nucleated and mononuclear cell count Viability Viability Viable CD3; cells enumeration Microbiological testing ABO Rh blood group for allogeneic products
Storage and transport	 Fresh NMC(A) can be stored and transported up to 72 hours at room tempe ature (r5-95 °C) or refrigerated (2-8°C) as requested by the transplant centre Fresh NMC(A) can be stored up to 72 hours without cryopreservation. Cryopreserved MNC(A) are stored and transported at temperatures equal to or below - 140 °C. Cryopreserved MNC(A) can be stored for up to 10 years or longer. Thawed MNC(A) are stored and transported efficiented (2-6°C).
Special labelling and accompanying information	 Placed in a container, and when applicable the accompanying documentation, must be appropriately labelled with a uniquely identifying code. In the EU, when grafts are distributed for human application, they must be labelled with the Single European Code (SEC) as applicable. If applicable: warning statements and/or biohazard label. Specific information not coded in the SEC that must be included in accompanying documentation: donor name (autologous or related donors) or donor ID (unrelated donors) recipient name, recipient 1D (if applicable) total nucleated and mononuclear cell count vable CD3: cell count ABO Rh blood group (allogeneic products) volume identity of the collection facility and /or donor registry identity of processing and distribution facility
Special warnings	Do not irradiate. Properly identify intended recipient and product. For use by intended recipient only. For autologous use only, if applicable. Do not use leuknoeduction filters. Use immediately after thawing (if applicable). If presence of microbial contamination, consider antibiotic treatment in the recipient.

Tissue/Cell product

- Definition
- Established clinical indications
- Critical properties
- Quality control requirements
- Storage and transportation
- Special labelling and accompanying information
- Special warnings

Upcoming upgrades of the Guides

- Scientific-evidence re-enforcement
- Digitalisation
 - Advantages:
 - prompt upgrade/changes feasible
 - improved access to the content of the guides quick search, advanced search and filters
 - user-customised home page (favourites, proposed content based on user profile, ...)
 - better visibility of changes
 - accurate publishing of additional useful information



Editions and Timelines



22nd Edition of Guide – layout and design in progress - Publication expected April 2025 23rd Edition of Guide – Kick-off meeting 4-5 March 2025

• Publication Q2 2027 - tentative





9th Edition of Guide – layout and design in progress - Publication expected April 2025
10th Edition of Guide – scope of revision about to start
Publication Q1 2028 - tentative

6th Edition of Guide – development in progress

• Publication expected October 2026

Putting standards into practice

Monitoring data/practices

- Annual reports: Newsletter Transplant and Reports on the collection, testing, and use of blood and blood components in Europe;
- Analysis of biovigilance data in the EU (Blood and Tissues & Cells) (SARE);
- Harmonisation of data collection on T&C.

Capacity building activities

- Best practices:
 - Biovigilance best reporting practices (Blood and Tissues & Cells)
 - Optimal use of plasma and plasma-derived medicinal products (PDMP) and rare disease treatments
- Quality management programmes







Putting standards into practice – Quality Management Programme

Blood Est

European Bl

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Ectablishmont

- ► Trainings
- Audits and training visits

3rd European Training Course

ESTABLIS

QUALITY MANAGEMENT

EDOM, Strasbourg

September-October 202

Trainee toolki

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Blood-Proficiency Testing Scheme (B-PTS)



	Nucleic Amplification Technique (NAT)
QM Quality rammes for blishments	HBV, HCV, HIV
	Serology
REPULE	Anti-HCV Anti-HIV/p24 Anti- <i>Treponema</i> HBsAg/Anti-HBC
Systems	Immunohaematology
try language ge that Counsil of Langua	ABO, Rhesus, Kell, extended phenotyping and irregular antibodies
	Bacterial testing

https://www.edqm.eu/en/blood-conference

Supply - Previous projects, deliverables and experience in Blood

Blood Supply Contingency and Emergency Plan (B-SCEP) Project (2022)

Toolkit

- Recommendations
 - Provides support in establishing, implementing and maintaining a B-SCEP
 - General Recommendations
 - Recommendations for Stakeholders
- Model Preparedness Plan
 - Provides a template to assist in developing a B-SCEP, building upon the Recommendations

https://www.edqm.eu/en/blood-supplycontingency-and-emergency-plan-b-scep-

Plasma Stakeholder Event on Plasma Supply Continuity

Jointly organised by EU Commission and EDQM – 26th and 27th March 2025

Attended by more than 150 participants from 33 countries

Plasma Supply Management WG meeting Jointly organised by EU Commission and EDQM – 29th and 30th January 2019

Proceedings

Recommendations to stakeholders https://www.edqm.eu/en/plasma-supplymanagement



Data harmonisation activities

- Data harmonisation Tissues and Cells
 - Project started in 2019
 - Built on the experience from member states and relevant professional societies in the field of tissues and cells
 - Aimed at agreeing on a minimum dataset that would serve the purposes of transparency for citizens and as denominators for the EU biovigilance exercises
 - Agreement on the parameters, units and expected quality of the data to be collected
 - Produced recommendations on who should be accountable for the collection and validation of this data and ensure dissemination among all relevant stakeholders
 - Web page: Harmonising activity data collection exercises in the field of tissues and cells in Europe
 - Data harmonisation activities in Blood will run 2025-2027 and will rely on previous experience in Tissues and Cells field

All these contributions position the EDQM as a leading standard-setting organisation in the SoHO sector, reinforcing pivotal role in shaping European standards for the quality and safety of blood, tissues and cells.

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Our work is the result of collaboration. We believe in a culture of cohesion. Our experts recognise the value of togetherness.

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We do not just protect public health. We strive and work for a world where everyone can enjoy better health.

better health,

We think global, and our mandate concerns all citizens in Europe and beyond.

for all.

More information



www.edqm.eu



https://go.edqm.eu/Newsletter

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