

## SoHO Regulation: “Significant Risk”

### I. Setting the scene: Apheresis and Peripheral Blood Stem Cells

According to Article 3 (70) of the proposal for a SoHO Regulation proposed by the European Commission and the ENVI Committee, **apheresis** means a *process by which a specific blood component or type of stem cell is separated from whole blood during the donation, allowing the remaining blood components to be returned immediately to the donor*. **As defined, apheresis is a blood donation collection process that is safe and routinely conducted by trained medical professionals and should be differentiated from medical interventions.**

There are different types of apheresis to collect different specific components, such as plasma, and platelets whose collection by apheresis accounts for 6.5 million in the EU, and **peripheral blood stem cells (PBSC)** for which the collection by apheresis accounts for about 73 thousand in the EU<sup>1</sup>. In the case of the specific apheresis procedure of peripheral blood stem cells (PBSC collection), the process can be used for hematopoietic progenitor cell transplantation (HPCT), a widely accepted and safe cell therapy for various hematologic and immunologic disorders.

### II. Prioritising patient safety

- **Safety Recognized by Scientific and Medical Communities:** PBSC collection is considered safe for donors, with 55% reporting complete recovery after only one week and an impressive 99% recovering fully after nine weeks (Pulsipher MA, 2014; Burns, 2016). Such high recovery rates demonstrate the minimal risk involved in PBSC collection, underlining its safety and feasibility.
- **Routine Implementation and High Donor Satisfaction:** Ongoing efforts by medical professionals and the industry focus on improving the process, prioritizing donor safety and well-being, and facilitating life-saving transplants. Remarkably, 95% of donors express their willingness to donate again when surveyed (Schmidt, 2017), illustrating the donor community's confidence in the safety and effectiveness of PBSC collection.

### III. Differentiating PBSC collection and PBSC mobilization in the SoHO Regulation

Recital 13 of the Proposal for a SoHO Regulation was introduced by the Commission (Annex 1) **with the intention to delineate and differentiate different procedures and their associated risks, including those that need pre-treatment with medicinal products, medical interventions for substance collection, or repeated donor involvement**. In this context, Peripheral Blood Stem Cells (PBSC) were explicitly mentioned to refer to the “**mobilization**” of PBSCs which requires a hormonal pre-treatment, instead of referring to the collection of PBSC. Therefore, **any mention of PBSC as a higher risk in the regulation should be succeeded by the word “mobilization” to differentiate between the procedure that involves a hormonal pre-treatment (PBSC mobilization) and the PBSC collection.**

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<sup>1</sup> Data on file.

Furthermore, it is important to note that references to **PBSC mobilization within the Regulation's content should be appropriately grouped with oocytes**. Similar to oocytes, PBSC mobilization undergoes treatment with medicinal products before their collection rather than the procedure being a medical intervention.

#### **IV. Ensuring Clarity and Patient Safety: Inaccuracy of using “significant risk” on Recital 13 in the SoHO Regulation**

1. **Clear Definition Needed:** A **precise and unambiguous definition** must be established before including "significant risk" in the SoHO Regulation. Without clarity, confusion and inconsistent interpretations may hinder life-saving therapies, necessitating clear guidelines to ensure meaningful implementation.
2. **Robust Existing Regulation and Compliance:** The SoHO sector is already subject to rigorous EU, national, and international laws. The industry and blood establishments diligently comply with these regulations, prioritizing donor and patient safety. Introducing "significant risk" implies doubt in the current measures, which is unnecessary given their proven effectiveness.
3. **Patient-Focused Approach:** Patient well-being is paramount. Peripheral blood stem cell collection shows exceptional safety records (99% recovery after nine weeks) and high donor satisfaction (95% willing to donate again). Adding "significant risk" without justification may cause unnecessary burdens, discouraging both the donations and the receiving treatments.

#### **References:**

- Burns, L. J. (2016). Recovery of Unrelated Donors of Peripheral Blood Stem Cells versus Recovery of Unrelated Donors of Bone Marrow: A Prespecified Analysis from the Phase III Blood and Marrow Transplant Clinical Trials Network Protocol 0201. *Biology of blood and marrow transplantation: journal of the American Society for Blood and Marrow Transplantation*, 1108–1116.
- Pulsipher MA, C. P. (2014). Lower risk for serious adverse events and no increased risk for cancer after PBSC vs BM donation. *Blood*, 3655-63.
- Schmidt, A. H.-F. (2017). Retrospective Analysis of 37,287 Observation Years after Peripheral Blood Stem Cell Donation. *Biology of blood and marrow transplantation: journal of the American Society for Blood and Marrow Transplantation*, 1011–1020.