

 <b>NATIONAL ORTHOPAEDIC HOSPITAL</b> CAPPAGH	<b>Document Number:</b>	IM-HVO-4
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<b>National Orthopaedic Hospital Cappagh, Finglas, Dublin 11.</b>		<b>INDICATIONS FOR CMV NEGATIVE AND/OR IRRADIATED RED CELLS, PLATELETS &amp; GRANULOCYTES</b>

Note: All platelets and granulocytes are irradiated by the IBTS. If CMV negative and/or irradiated products are requested; Blood Transfusion will issue units that are CMV negative and irradiated (CMV-IRR)

#### **CMV NEGATIVE**

- Pregnant women; not required during labour, delivery or thereafter
- Granulocytes; must be considered for CMV seronegative recipients
- Intrauterine transfusions and neonates up to 28 days post expected date of delivery

#### **IRRADIATED**

***It is the responsibility of the clinical team involved with the patient's care to identify patients at risk of Transfusion Associated Graft versus Host Disease (TA-GvHD); to inform the Blood Transfusion Laboratory, and to request and prescribe / authorise cellular blood components as irradiated (BSH, 2020)***

- Autologous transplant recipients (bone marrow/peripheral blood stem cells) and patients undergoing peripheral blood lymphocyte collections for future CAR-T cell re-infusion from 7 days before harvest to 6 months post transplant, review after 6 months
- Allogeneic bone marrow and stem cell transplant recipients from time of initiation of conditioning chemoradiotherapy, review after 6 months
- Allogeneic bone marrow and stem cell donors from 7 days before harvest until harvest is completed

#### ***The following require irradiated blood indefinitely***

- Hodgkin's lymphoma
- Suspected / severe T lymphocyte immunodeficiency syndromes e.g. DiGeorge Syndrome, CHARGE Syndrome
- If chronic Graft versus Host Disease (GvHD) is present following Haematopoietic Stem Cell Transplant (HSCT), or if continued immunosuppressive treatment is required following HSCT; irradiated blood components should be given indefinitely
- Intrauterine transfusions, neonatal exchange transfusions and newborns up to 6 months post expected date of delivery

***Pharmaceutical Agent / Medication that require irradiated blood indefinitely*** - this list may not be all inclusive:

- Alemtuzumab
- Anti-thymocyte globulin (ATG)
- Bendamustine
- Cladribine
- Clofarabine
- Fludarabine
- Pentostatin / Deoxycoformicin

These pharmaceutical agents/ medications may be used for the treatment of leukaemia, lymphoma including myeloma, aplastic anaemia, multiple sclerosis and other conditions not listed here.

#### **REFERENCES**

- National Transfusion Advisory Group. (2020). Guidelines for use of CMV antibody screened negative (CMV negative) cellular blood components (red cells, platelets and granulocytes) in the Irish healthcare setting. Accessed online 19.10.21
- British Society for Haematology. (2020). Guidelines on the use of irradiated blood components. British Journal of Haematology. 191: 704-724.
- O Connor F. Drugs that may predispose to Transfusion Associated Graft versus Host Disease (TA-GvHD). Medicines Information, Pharmacy Department, MMUH. November 202