
Haemopoietic Progenitor Cell (HPC) Collection Policy

POLICY

Collection of Haemopoietic Progenitor Cells derived from Peripheral Blood (HPC-A) or Bone Marrow (HPC-M) involves the co-ordination and co-operation of multiple Departments within The Royal Children's Hospital (RCH), in particular within the Children's Cancer Centre (CCC). The Head of the Haemopoietic Stem Cell Transplant (HSCT) Programme together with the Bone Marrow Transplant Clinical Nurse Coordinator (BMT CNC) within the CCC essentially oversee and co ordinate the process. All colleagues involved with donors requiring HPC collection should be aware and follow associated Standard Operating Procedures as authorised by the HSCT Programme. These documents provide instructions to ensure a safe, co-ordinated, consistent and systematic approach to HPC collection.

NOTE: In accordance with RCH policy and Australian Federal Requirements, HPC collection cannot commence unless the mandatory pre collection testing and documentation is completed.

- The Primary Consultant will explain the concepts of the mode of HPC collection to the donor and donor's family/care giver and obtain informed consent. Consent for Collection, Storage and Disposal of Haemopoietic Progenitor Cells.
- The Primary Consultant will initiate all donor testing requirements as applicable for HPC collection.
- All donors **MUST** be tested for relevant viral markers and ABO blood group within 30 days before collection.
- If the donor is ineligible (eg. Positive virology screen), The Head of the HSCT Programme **MUST** be informed.
- The Primary Consultant will complete and forward a HPC Harvest Booking Form, CL-F-003 and a Request for Stem Cell Processing, CT-F-089 to the BMT CNC.
- The BMT CNC will co-ordinate the HPC collections informing all relevant Departments.
- HPC-A collections will be performed by Apheresis Nurses in the Ambulatory Care Centre, collections from **donors <15kg MUST** be performed in the Paediatric Intensive Care Unit.
- HPC-M collections will be performed in the Theatre Operating Suites.
- The Primary Consultant in communication with the BMT CNC is responsible for co-ordinating admissions for donors requiring mobilisation with combination chemotherapy.
- The Primary Consultant will ensure their donor receives appropriate supportive care during and post mobilisation with G-CSF + chemotherapy or G-CSF alone.
- The Head of the HSCT Programme will be available to confirm the optimum mobilisation regimen for the donor.
- The Apheresis Nurse will assess the donor for suitable vascular access for the HPC-A collection.
- The BMT CNC will co ordinate Vascath insertion as applicable.
- **ALL** colleagues will ensure that **ALL** donor testing has been completed prior to the HPC collection.
- The Primary Consultant in communication with the BMT CNC will monitor cell recovery and peripheral blood CD34 concentration.
- The Head of the HSCT Programme will authorise initiation of **ALL** HPC-A and HPC-M collections.
- The Apheresis Nurse will perform HPC-A collection according to Standard Operating Procedures and as prescribed on CT-F-089.
- The Scientists in the Cell Therapy Flow Cytometry Laboratory will process the HPC collection according to Standard Operating Procedures and as prescribed on CT-F-089.
- The Head of the HSCT Programme will oversee the HPC-M and HPC-A collection according to Standard Operating Procedures and as prescribed on CT-F-089.
- The Head of the HSCT Programme will ensure the donor receives appropriate supportive care for the entire duration of the HPC-A and HPC-M collection(s) process.
- The Head of the HSCT Programme will liaise with the Primary Consultant as required.

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DEFINITIONS

Donor – A person who is the source of cells or tissue for a cellular therapy product.