

RECOMMENDED GUIDELINES FOR BONE MARROW HARVEST FOR PURGING IN PATIENTS WITH NEUROBLASTOMA

Questions/problems regarding bone marrow harvesting can be directed to Dr. Villablanca (323)-669-4565 or Dr. Reynolds (323) 669-5646.

PRE-HARVEST SPECIMEN:

A pre-harvest diagnostic bone marrow aspirate (bilateral) to assess tumor cell content by immunocytology and marrow recovery is required 10 days prior to bone marrow harvest. Call CHLA ASCT Office to schedule at 323-669-4565. **Specimen tubes must be labeled appropriately. See separate instruction sheet included in this packet.**

BONE MARROW HARVEST:

The **goal is to obtain 1×10^9 nucleated cells/kg** at time of harvest; a minimum of 0.8×10^9 nucleated cells/kg is required. Since 400-700 ml of bone marrow are usually harvested, 1-2 units of PRBC are given during the procedure. Any blood products administered before or during the procedure must be irradiated. The bone marrow will be harvested from either the posterior and/or anterior iliac crests. The patients bone scan should be carefully reviewed to ensure that there is no active disease in the pelvis. If disease is present, the area of the pelvis with tumor metastases must be avoided at the time of harvest.

Each aspiration should contain 5 ml or less of marrow. The medium for collection of the marrow is L-15 made under FDA certified GMP conditions and containing <0.005 ng/ml endotoxin. The medium which meets these standards is L-15 medium, catalogue #9083, Irvine Sci. Co., Santa Ana, CA (phone 800-437-5706, ext 231). Prior to harvest, 10,000 units of preservative free heparin (sterile, suitable for injection) should be added to 100 ml of L-15. **Do not add DNase or any other additives to the medium for the harvest.** Put 50ml of heparin/medium in the bottle in which the marrow will be collected. Use remaining heparin/medium as syringe wash during bone marrow harvest procedure. During the harvest, add 2000u preservative free heparin to the collection bottle for each 150ml of bone marrow collected. Do not strain marrow; straining the marrow may break up tumor clumps and decrease the efficacy of purging. After collection, the marrow should be placed into one or more plastic bags suitable for blood products with double seal entrance ports, and labeled with patients name, birth date, sex, collection date, institution, medical record number, and unique component identification number (if available).