PDL
Pathologists Diagnostic Laboratory, PA

BONE MARROW/ FLOW SPECIMEN COLLECTION AND HANDLING

All patient samples should be properly labeled with the patient's full name, date of collection and date of birth.

RPMI Media must be kept refrigerated before use and specimens must be transported with an ice pack. If your practice does not have a refrigerator available for storage of RMPI then please follow the steps below and use streck cell media instead of RPMI.

Bone Marrow:

1. Aspirate a minimum of 2 ml of bone marrow into a NON-Heparinized syringe. Place a small portion of the aspirate within the syringe onto a slide in a petri dish (enough to form a clot to be placed in 10% formalin fixative) and evaluate for the presence or absence of spicules. If spicules are present, the remainder of the bone marrow aspirate in the Non-Heparinized syringe should be transferred to a purple top EDTA tube. Mix as quickly as possible, by inverting the EDTA tube several times, to prevent clotting. Label tube with "BM" so it is not confused with peripheral blood.
2. Draw 0.5 cc of preservative-free sodium heparin into another syringe, coat the interior of the syringe, then expel 0.25 cc of the sodium heparin leaving 0.25 cc of the sodium heparin in the syringe. Aspirate a minimum of 2ml of bone marrow into this syringe. Transfer the aspirate from the preservative-free sodium heparin coated syringe into a green top sodium heparin tube (split between 2 green tops if flow and cytogenetics are being requested). Label tubes as "BM".
3. If a bone marrow aspirate specimen is unobtainable, please collect a second bone core and place in RPMI transport media which is provided by our laboratory.
4. The bone marrow specimen should be sent to the Flow Cytometry laboratory the same day it is collected.
5. Send at **ROOM TEMPERATURE - DO NOT PUT ON ICE.**

   NOTE: In order for a bone marrow to be processed on **Friday**, the patient sample must be drawn and received in the Flow Cytometry lab no later than **12:00 noon**. This time requirement is due to the time consuming process involved in performing this assay.

Solid Tissue:

1. 1.0 - 3.0 grams of fresh solid tumor or lymph node trimmed free of fat. Tissue should be submitted in RPMI immediately after surgical removal.
2. **Refrigerate** tissue specimens in RPMI at 4^{o} C until processed.

Effusions:

1. Body cavity fluids should be collected in sterile containers. Specimen should be sent to the Flow Cytometry laboratory the same day it is collected.
2. Send at **ROOM TEMPERATURE - DO NOT PUT ON ICE.**
3. Samples of less than 10 cc will not be accepted unless approved by the Laboratory Director or Pathologist.

Peripheral Blood:

1. Blood collected for immunophenotyping should be drawn in an EDTA purple top tube and submitted to the Flow Cytometry lab as soon as possible.
2. Send at **ROOM TEMPERATURE.**

Fine-Needle Aspirates of Solid Tissue:

1. If collecting a cytology specimen in addition to a Flow Cytometry specimen, please refer to cytology collection instructions. Then proceed with the collection of one or two drops of aspirated material from the same pass to be expelled into a 1 ml RPMI container. The sample tube should be delivered to the laboratory immediately.
2. Specimens should be **Refrigerated.**
3. If cytology will not be collected at the same time then at least one slide should be made in the routine unstained fashion. This is submitted along with the RPMI container.

SPECIAL NOTES: If the RPMI media is cloudy or has changed colors prior to use please discard.

- **All Specimens** should be submitted in a biohazard bag and tagged with an orange FLOW label along with a PDL requisition.
- Please remember to package Pathologist Diagnostic Services specimens separately.

It is recommended that you notify the Flow Cytometry Lab at (336) 718-3743 before sending a specimen.

Please contact the courier for a STAT pick up at 336-406-2219 or 336-406-3637