



# Cancer Profiles Specimen Requirements and Handling Procedures

The quality of laboratory results is highly dependent upon proper specimen collection and handling. Listed below are specimen requirements and handling procedures for Cancer Profiles.

|                                     | Profile   | Peripheral Blood   | Bone Marrow   | Paraffin Block or Cut Slides  | Fresh Tissue  | Fine Needle Aspirate (FNA)  |
|-------------------------------------|---|--|---|---|---|---|
| <b>Heme</b>                         | <b>AML Favorable-Risk, AML Prognostic, JMML, MDS, MPN, Myeloid Disorders (54 genes)</b>   | EDTA 5 mL (purple top)   | EDTA 2 mL (purple top)  | N/A   | N/A   | N/A   |
|                                     | <b>AITL/Peripheral T-Cell Lymphoma</b>  | EDTA 5 mL (purple top)   | EDTA 2 mL (purple top)  | Paraffin block preferred. Please use 10% buffered formalin fixative. Do not use zinc fixatives. | N/A   | N/A   |
|                                     | <b>CLL Prognostic</b>   | EDTA 5 mL (purple top)   | EDTA 2 mL (purple top)  | N/A   | 0.5 - 1 cm <sup>3</sup> in RPMI   | N/A   |
|                                     | <b>Lymphoma</b>   | EDTA 5 mL (purple top)   | EDTA 2 mL (purple top)  | Paraffin block preferred. Please use 10% buffered formalin fixative. Do not use zinc fixatives. | 0.5 - 1 cm <sup>3</sup> in RPMI   | N/A   |
| <b>Solid Tumor</b>                  | <b>Brain, Breast, Cervical, Colorectal**, Endometrial**, Esophageal**, Gastric**, GI Predictive**, GIST, Head &amp; Neck, Lung, Liver/Biliary, Melanoma, Other Solid Tumor, Ovarian**, Pancreas**, Soft Tissue, Thyroid</b> | N/A  | N/A   | Paraffin block preferred. Please use 10% buffered formalin fixative. Do not use zinc fixatives. | 1 cm <sup>3</sup> tissue that is mostly tumor in RPMI                                   | Requisition must note specimen is FNA. FFPE cell blocks are acceptable if pathologist attaches note verifying sample has >30% tumor or abnormal cells (required). FNA smears or cells in suspension are not accepted. |
|                                     | <b>Colorectal** Endometrial**, Esophageal**, Gastric**, GI Predictive**, Ovarian**, Pancreas**</b>  | **These 7 Profiles include MSI Analysis which requires an additional sample of normal, non-tumor tissue for comparison testing. Please submit all specimens with one test requisition form. Specimen requirements for normal tissue in order of preference are: 1) 5 mL peripheral blood in EDTA tube OR 2) FFPE tissue slides or block containing only non-tumor tissue. Please label these as "normal tissue". OR 3) In cases where no alternative tissue is available, we can attempt to isolate non-tumor tissue from FFPE tumor specimen submitted. Note "Use tumor sample for normal tissue" on requisition. |   |   |   |   |
|                                     | <b>Precision (48 genes)</b>   | N/A  | N/A   | Paraffin block preferred. Please use 10% buffered formalin fixative. Do not use zinc fixatives. | 1 cm <sup>3</sup> tissue that is mostly tumor in RPMI                                   | Requisition must note specimen is FNA. FFPE cell blocks are acceptable if pathologist attaches note verifying sample has >30% tumor or abnormal cells (required). FNA smears or cells in suspension are not accepted. |
|                                     | <b>Discovery (315+ genes) Liposarcoma Fusion</b>  | N/A  | N/A   | Paraffin block preferred. Please use 10% buffered formalin fixative. Do not use zinc fixatives. | N/A   | N/A   |
| <b>Storage &amp; Transportation</b> |   | Use cool pack during transport. Overnight delivery or courier pick-up.*  | Use cool pack during transport. Overnight delivery or courier pick-up.* | Paraffin block preferred. Please use 10% buffered formalin fixative. Do not use zinc fixatives. | Refrigerate and use cool pack during transport. Overnight delivery or courier pick-up.* | Use cool pack during transport. Overnight delivery or courier pick-up.  |

\* Ship same day as drawn whenever possible; specimens < 72 hours old preferred. (Does not apply to fixed specimens.)

GSPMC cannot accept any specimens (fresh or fixed) infected with Category A pathogens including, but not limited to, variant Creutzfeldt-Jakob (mad cow), Tularemia, Brucella, etc. FFPE specimens are acceptable for Tuberculosis only.