



## Tips for Specimen Submission to the SWOG Biospecimen Bank



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## Overview of the Biopathology Center (BPC)

- The SWOG Biospecimen Bank is part of the Biopathology Center at The Abigail Wexner Research Institute at Nationwide Children's Hospital.
- We serve as the biorepository for several other major groups and organizations:
  - SWOG
  - Children's Oncology Group (COG)
  - NRG Oncology - Columbus
  - GOG Foundation
  - Sarcoma Alliance for Research through Collaboration (SARC)
  - NCI Early-Phase and Experimental Clinical Trials (EET)




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## Overview of Specimen Receipt

- On an average day, the BPC receives 100-160 packages, which may contain upwards of 1,000 specimens for all groups!
- We receive several different specimen types for SWOG protocols:
  - FFPE tissue (blocks, slides)
  - Fresh blood, bone marrow, stool, and urine
  - Frozen blood products and urine
  - Frozen tissue
- We accept all specimen types Monday – Friday.
  - Shipments of fresh blood and bone marrow may be received on Saturday for immediate processing.
- Accurate specimen submission is crucial to our day-to-day operations.

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### Specimen Collection

- Protocol sections that provide guidance for specimen collection are:
  - 9.0 Study Calendar
    - Includes general information about specimen collection time points.
    - Refer to section 15.0 for additional details on specimen collection.
  - 12.0 Discipline Review
    - States whether the protocol includes quality control pathology review or central review.
  - 15.0 Special Instructions
    - Provides details about specimen requirements (specimen types and time points), collection, specimen labeling, processing and shipment.
- Biospecimen Processing and Submission Procedures
  - Located under the Biospecimen Resources tab on the SWOG website.
  - Provides **general** specimen processing instructions (instructions in the protocol take precedence over these instructions).
  - Provides instructions for specimen labeling (including templates) and shipment (including **laboratory addresses for labs 200 and 201**).



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### Specimen Labeling Requirements

Label all specimens with the following:

- SWOG patient ID#
- Patient Initials
- Date of specimen collection
- Specimen type (whole blood, serum, etc.)

Additional labeling for FFPE tissue blocks and slides:

- Tissue type (Primary, Metastatic, Normal)
- Surgical pathology ID (SPID or Accession #)
- Block Number (from pathology report)

Note: Missing information will result in the Bank contacting the submitting institution, which can delay specimen processing, and may require a waiver. Some submission issues may result in a query.

We cannot assume any information!



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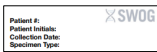
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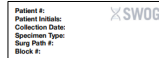
### Labeling Templates

- Specimen Labels, Avery 5160
- Every specimen submitted must be labeled!
- Biospecimen Processing and Submission Procedure Page on swog.org

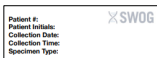
Basic Labels (Fresh or Frozen Blood/Bone Marrow/Urine Products)



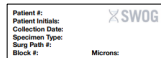
Tissue Labels (FFPE, Snap Frozen)



Time-Based Labels (for studies where collection time is a labeling requirement)



Tissue with Microns Labels (for specimens that require micron thickness)



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### Preparing the shipment

- Verify that **all specimen labels** include **all required information**.
  - Requirements are located in Section 15 of the protocol and/or the SWOG Biospecimen Resources webpage.
- Verify that the information on **STS packing list matches the specimens shipped**.
  - Double check specimen label information (e.g., collection dates). It should match the **example label that populates on the packing list**.
  - Ensure that the number of specimens matches the number on the STS packing list (e.g., for 2 10-mL tubes of blood, quantity = 2, not 20).
- Confirm that all **required paperwork** is included.
  - STS Packing List
  - Redacted Pathology Report (FFPE tissue only)
    - Do not remove surgical pathology ID (SPID), block number, collection date, diagnosis, results, gross description, or other information about the specimen.
    - Additional guidelines will be posted to the SWOG website.

.....Include SWOG patient ID# on every page of all paperwork.....



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### Shipping Considerations

- Unless otherwise stated in the protocol, frozen specimens or FFPE tissues (blocks, slides, or scrolls) may be batch shipped.
  - Do not include more than 5 patients in one shipment (no more than 50 vials/200 slides, whichever is fewer).
  - Package each patient's specimens separately.
  - If there are multiple time points per patient, then include fewer than 5 patients in the shipment.
- Pack specimens according to the season
  - Frozen Specimens
    - ALWAYS include plenty of dry ice to prevent thawing, regardless of weather.
  - Ambient Specimens
    - Warmer months (April-September): Include a cold pack (not frozen!), unless otherwise stated in the protocol or kit instructions (e.g., cfDNA Streck tubes).
    - Colder months (October-March): Insulate well (e.g., bubble wrap) to prevent specimens from freezing.
- Specimens shipped **FedEx Priority Overnight** arrive in the morning

.....other carriers or shipping methods may delay receipt.....



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### Shipping Considerations

- Remember when shipping, that even if weather is fine where you are, the specimens are traveling from your city ➡ FedEx Hub ➡ SWOG Bank in Columbus, Ohio.

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### Common Specimen Quality Issues

Issue	Prevention
Specimen that should be frozen arrived thawed or with insufficient dry ice	<ul style="list-style-type: none"> <li>Choose an appropriately-sized container.</li> <li>Add dry ice to the bottom ~1/3, add the specimens, and then add dry ice to the top of the container.</li> </ul>
Blood / bone marrow is hemolyzed or clotted	<ul style="list-style-type: none"> <li>Thoroughly mix the specimen with anticoagulant in the tube immediately after collection. Do not shake or vortex, but gently invert tube 8 – 10 times after collection.</li> </ul>
Specimen arrived in a cracked, broken, or leaking container	<ul style="list-style-type: none"> <li>Always use plastic collection tubes if submitting frozen specimens.</li> <li>Do not overfill cryovials (~1.5 mL liquid can be frozen in a 2-mL cryovial).</li> <li>Package specimens carefully – if it rattles, don't ship it!</li> <li>Be generous with bubble wrap – it's both a good insulator and specimen protectant.</li> <li>Do not ship cracked, broken, or leaking specimens.</li> </ul>
Incorrect specimen type received (e.g., protocol indicates to send whole blood, and blood arrives processed)	<ul style="list-style-type: none"> <li>Refer to the protocol - verify that you are using the correct version.</li> <li>If the protocol is unclear – email the Bank.</li> </ul>


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### Common Shipment Issues

Issue	Prevention
Missing Paperwork	<ul style="list-style-type: none"> <li>STS packing list is <i>always</i> required.</li> <li>Pathology reports are required for all formalin-fixed paraffin-embedded (FFPE) tissue submissions – including blocks, slides, and scrolls.</li> </ul>
Missing information on specimen label	<ul style="list-style-type: none"> <li>Include all required labeling information on all specimens submitted.</li> <li>Refer to protocol for any protocol-specific labeling requirements.</li> </ul>
STS Packing List does not match specimens	<ul style="list-style-type: none"> <li>All specimen labeling information (identifiers, collection date, etc.) must correspond with the information entered in the STS.</li> <li>The number of specimens (e.g., number of tubes, vials, glass slides, etc.) received must match the STS packing list.</li> </ul>
Insufficient dry ice	<ul style="list-style-type: none"> <li>Include lots of dry ice <i>all year round</i>.</li> <li>Keep in mind that dry ice will sublimate at a rate of 5-10 lbs. every 24 hours.</li> </ul>


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### Helpful Sites

**SWOG Biospecimen Processing and Submission Procedures**

- General SWOG specimen submission guidelines, links to labeling templates, and more!
- <https://www.swog.org/clinical-trials/biospecimen-resources/biospecimen-processing-and-submission-procedures>

**BPC Kit Management**

- Order biospecimen collection kits (when provided, refer to protocol) – select SWOG sponsor group.
- Users must be registered.
- <https://kits.bpc-apps.nchri.org/>


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### Contact Information

<b>Solid Tissue, Myeloma &amp; Lymphoma Division</b>	<b>Leukemia Division</b>
SWOG Biospecimen Bank #201 614-722-2865 <a href="mailto:bpcbank@nationwidechildrens.org">bpcbank@nationwidechildrens.org</a>	SWOG Biospecimen Bank #200 614-722-3270 <a href="mailto:bpcmlab@nationwidechildrens.org">bpcmlab@nationwidechildrens.org</a>
SWOG Biospecimen Bank Nationwide Children's Hospital 700 Children's Drive, WA1340 Columbus, Ohio 43205	SWOG Biospecimen Bank Nationwide Children's Hospital 700 Children's Drive, C0825 Columbus, Ohio 43205

*Use the group emails above and please **Reply All** when responding so that our team can better assist you!*



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### Questions?



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