

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 cooperative groups and organizations:
 - SWOG
 - Children's Oncology Group (COG)
 - NRG Oncology
 - NCI Early-Phase and Experimental Clinical Trials (EET)
 - GOG Foundation
 - Leukemia and Lymphoma Society (LLS)
 - Sarcoma Alliance for Research through Collaboration (SARC)

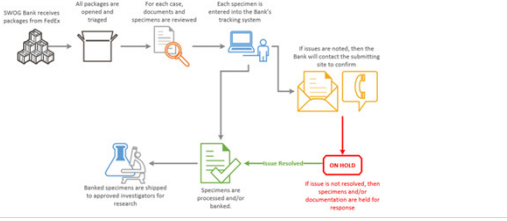


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Overview of Specimen Receipt

On an average day, the BPC receives 100-170 packages, which may contain 1,250 or more specimens for all groups!



The flowchart illustrates the specimen receipt process: SWOG Bank receives packages from FedEx, all packages are opened and staged, and for each case, documents and specimens are reviewed. Each specimen is entered into the bank's tracking system. If issues are noted, the bank will contact the submitting site to confirm. Specimens are processed and/or banked, and then shipped to approved investigators for research. If an issue is not resolved, the specimen and/or documentation are held for response, marked as 'ON HOLD'.

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Overview of Specimen Receipt

- Common specimen types included in SWOG protocols:
 - FFPE tissue (blocks, slides)
 - Fresh biofluids (e.g., blood, bone marrow, stool, etc.)
 - Frozen blood products (buffy coat, plasma, serum), urine, and frozen pancreatic fluid
- We accept all specimen types Monday – Friday.
 - Shipments of fresh biofluids (e.g., blood, bone marrow, and stool) 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 complete list of specimen collection time points.
 - 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).

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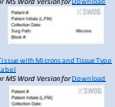

Specimen Labeling: Identifiers

- At least two participant identifiers are required on the label for all submissions, otherwise a waiver will need to be completed
- Acceptable identifiers:
 - SWOG Participant ID
 - Participant Initials
 - Should match exactly what is listed on the STS Packing List
 - L, F M (Last, First Middle) or L, F (*preferred*)
 - FML (First Middle Last) or FL
 - Surgical Pathology ID (SPID)
 - Note: This is sometimes called the Accession Number on the corresponding pathology report
 - Applicable for tissue only

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Standard Specimen Labeling: Tissue

Specimen Container/Type	Required Data	Required on each specimen	Can be on package (e.g., plastic bag) for identical specimens	Label Templates
FFPE Block Cassette	<ul style="list-style-type: none"> SWOG Participant ID Participant initials (Last, First Middle) Collection date Surgical Pathology ID (SPID)¹ Block Number² 	<ul style="list-style-type: none"> SWOG Participant ID Surgical Pathology ID² Block number² 	<ul style="list-style-type: none"> Participant initials (Last, First Middle) Collection date Tissue type (if required) <ul style="list-style-type: none"> Primary tumor (P) Metastatic tumor (M) Normal tissue (N) 	Tissue Label with Tissue Type or MS Word Version for Download  Tissue with Microns Label or MS Word Version for Download 
FFPE Tissue Slide	<ul style="list-style-type: none"> SWOG Participant ID Participant initials (Last, First Middle) Collection date Surgical Pathology ID (SPID)¹ Block Number² 	<ul style="list-style-type: none"> SWOG Participant ID Surgical Pathology ID² Block Number² Tissue thickness (microns, if required) 	<ul style="list-style-type: none"> Participant initials (Last, First Middle) Collection date Tissue type (if required) <ul style="list-style-type: none"> Primary tumor (P) Metastatic tumor (M) Normal tissue (N) 	Tissue with Microns and Tissue Type Label or MS Word Version for Download 

¹From the pathology report corresponding to the tissue removal procedure


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Tissue Labeling Examples



FFPE Tissue Slides in slide case

- Slides labeled with SPID, Block #, and SWOG participant ID
- All other labeling requirements on slide case








FFPE Tissue Block

- Block labeled with SPID, Block #, and SWOG participant ID
- All other labeling requirements on plastic bag

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Standard Specimen Labeling: Biofluids

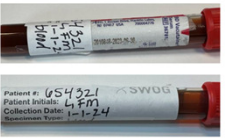
Includes blood, bone marrow, plasma, serum, urine, stool, etc.

Specimen Container/Type	Required Data	Required on each specimen	Can be on package (e.g., plastic bag) for identical specimens	Label Templates
Collection tubes	<ul style="list-style-type: none"> SWOG participant ID Participant initials (Last, First Middle) Collection date Specimen type (blood, bone marrow, stool, etc.) 	<ul style="list-style-type: none"> SWOG Participant ID Participant initials (Last, First Middle) Specimen type Laterality (bone marrow) – right (R) or left (L), if more than one 	<ul style="list-style-type: none"> Collection date 	Basic Label or MS Word Version for Download  Time Sensitive Label or MS Word Version for Download  Basic Label with Laterality or MS Word Version for Download 
Cryovial	<ul style="list-style-type: none"> SWOG participant ID Participant initials (Last, First Middle) Collection date Specimen type (plasma, serum, etc.) 	<ul style="list-style-type: none"> SWOG Participant ID Participant initials (Last, First Middle) Specimen type 	<ul style="list-style-type: none"> Collection Date 	Basic Label or MS Word Version for Download  Basic Label with Laterality or MS Word Version for Download 

Note: Missing or **discrepant** information will result in the Bank contacting the submitting institution, which can delay specimen processing, and may require a waiver. **We cannot assume any information!**


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Biofluid Labeling Examples



Blood Tube

- Labeled with SWOG Participant ID, initials (Last, First Middle order), collection date, and specimen type
- Label can be placed horizontally or vertically, **not covering manufacturer information and expiration date**



Frozen plasma or serum

- Labeled with SWOG participant ID, initials (Last, First Middle order), collection date, and specimen type
- Label wrapped around the vial with a flag, or overlapping the label itself on the tube
- Label prior to freezing to help the label adhere

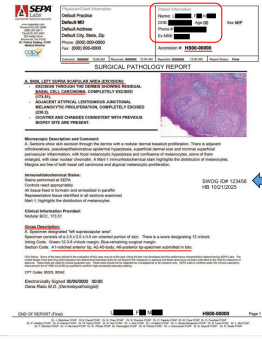
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- ### Preparing the Shipment
- Verify that **all specimen labels include all required information**.
 - Requirements are located in Section 15 of the protocol and/or the SWOG Biospecimen Resources webpage.
 - Verify that the information on **STS packing list matches the specimens shipped**.
 - Double check specimen label information (e.g., collection dates, initials).
 - Ensure that the number of specimens matches the number on the STS packing list (e.g., for two 10-ml tubes of blood, quantity = 2, not 20).
 - Specimens listed on the Packing List match specimen types included in the shipment (e.g., separate stained and unstained slides)
 - Confirm that all **required paperwork** is included.
 - Packing List
 - Redacted Pathology Report (FFPE tissue only)
 - Redacted Bone Marrow Report (if required)
 - Include SWOG patient ID# on all paperwork.

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Redaction of Reports



- Example of properly redacted pathology report:
 - Full name redacted while retaining participant initials. Do not redact the comma in the name field, if applicable.
 - Redact:** MRN, DOB.
 - Retain:** Date of procedure, surgical pathology ID (accession #), block number, gross description, anatomic site, and diagnosis (underlined in example).
 - SWOG participant ID# added to each page of report (can be handwritten).



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Shipping Considerations

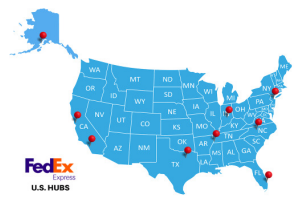


- Unless otherwise stated in the protocol, frozen specimens or FFPE tissues (blocks, slides, or scrolls) may be batch shipped.
 - Do not include more than 5 participants in one shipment.
 - Package specimens for each participant separately.
 - If there are multiple time points per participant, then include up to 5 participants or 100 total vials in the shipment.
- Pack specimens according to the season
 - Frozen Specimens
 - ALWAYS include plenty of dry ice to prevent thawing, regardless of weather. Dry ice sublimates at a rate of 5-10 lbs. every 24 hours during shipment.
 - Ambient Specimens
 - Warmer months (April-September): Include a cold pack (not frozen!), unless otherwise stated in the protocol or kit instructions (e.g., Streck cDNA tubes must remain room temperature).
 - 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.
- For holiday closure notices and instructions, watch the Trials & Business Updates for memos from the SWOG Biospecimen Bank. Whenever possible, wait to ship frozen biospecimens until after major holidays.

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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 to the FedEx Hub bank in Columbus, Ohio and package the specimens carefully to prepare for potential delays.
- Check FedEx and UPS website(s) for weather delay alerts. Severe weather in one area will impact overnight shipments to ALL states, not just the part of the country with the bad weather.

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

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Common Shipment Issues

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

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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-collection-and-submission-procedures>

BPC Kit Management

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







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Contact Information

<p>Solid Tissue, Myeloma & Lymphoma Division</p> <p>SWOG Biospecimen Bank #201 614-722-2865 bpcbank@nationwidechildrens.org</p>	<p>Leukemia Division</p> <p>SWOG Biospecimen Bank #200 614-722-3270 bpcmlab@nationwidechildrens.org</p>
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Remember, use our new address:
 SWOG Biospecimen Bank
 Nationwide Children's Hospital
 2200 International Street
 Columbus, OH 43228

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Questions?



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