# CORRELATIVE SCIENCE PROCEDURE MANUAL

## 1. Purpose

This document describes the procedures required for the collection, shipping, and processing of biospecimens that are being submitted for patients enrolled or registered on A071702. This document also describes the procedures that will be followed subsequent to the receipt of biospecimens by the Alliance Biorepository at Mayo Clinic (ABMAYO) or at Foundation Medicine (FM) prior to their use for protocol-specified and future, unspecified correlative science research studies. This document should be used by staff involved with any aspect of the A071702 biospecimen collection, processing, and submission, including staff at satellite institutions.

## 2. Scope

This document applies to all biospecimens collected specifically for the A071702 clinical trial study. Please refer to the trial protocol-specific language for additional details regarding eligibility, participant enrollment, and data submission. **Please ensure that you are reading the most updated version of this document. This document may experience minor updates, revisions, and clarifications independent of a formal protocol amendment. The most recent version of this document may be found on the Alliance website and CTSU.**

## 3. Definitions

| Term | Definition |
|---|---|
| ABMAYO | Alliance Biorepository at Mayo Clinic |
| DOB | Date of Birth |
| FFPE | Formalin Fixed, Paraffin Embedded |
| FM | Foundation Medicine |
| GBM | Glioblastoma |
| TMB | Tumor Mutational Burden |

## 4. Contact Information

**4.1** For questions and problems related to protocol administration, eligibility, patient registration, and data submission, relevant contact information is listed on protocol pages 1 and 2.

**4.2** For information on using the BioMS system, please refer to the 'Help' links on the BioMS webpage to access the online user manual, FAQs, and training videos. To report technical problems, such as login issues or application errors, please contact: 1-855-55-BIOMS or **bioms@alliancenctn.org**. For assistance in using the application or questions or problems related to specific specimen logging, please contact: 1-855-55-BIOMS or **bioms@alliancenctn.org**.

**4.3** For all other questions regarding biospecimen procurement and shipping procedures, please contact:

**ABMAYO**

- Paraffin-embedded tissue samples:
  Amanda Sand
  Phone: 1-507-284-3559
  Email: sand.amanda@mayo.edu
- Blood samples:
  Katie Halverson
  Phone: 1-507-293-7147
  Email: halverson.katie@mayo.edu

**Foundation Medicine**

- Clinical Operations team
  Email: clinical.operations@foundationmedicine.com

## 5. Site Preparation

**5.1** Please refer to A071702 protocol document for any specific requirements related to patient enrollment, registration, and regulatory compliance.

**5.2** Please ensure that you have appropriate log on credentials and can successfully access the BioMS application. The BioMS application is used for both requesting biospecimen collection kits and for logging the collection and shipment of biospecimens to the Alliance Biorepository at Mayo Clinic and to Foundation Medicine. For training and assistance in using the application or questions or problems related to specific specimen logging, please contact: 1-855-55-BIOMS or **bioms@alliancenctn.org**.

**5.3** Prior to collection of tissue submitted to Foundation Medicine or of stool or whole blood specimens in Streck BCT tubes, a biospecimen collection kit must be at the collection site. Please see section 7 for requesting biospecimen collection kits. Please allow at least 10 working days to receive the collection kit.

**5.4 Please confirm that your institutional pathology department is willing to submit:**

**a. Eleven (11) 4-5 micron unstained slides from the most recent recurrent resection or biopsy to Foundation Medicine for FoundationOne CDx test for eligibility, AND**

**b. All diagnostic H&E stained slides from primary and recurrent biopsy or resection for registration.**

**An institution whose pathology department is unwilling to comply with mandatory block or slide submission should not enroll patients to this study.**

## 6. Collection Schema

The following biospecimens are to be collected at each of the time points listed in the table below. Please refer to individual collection kit instructions, biospecimen collection and processing methods, and specific shipping procedures that are detailed in this manual.

| Time Point | Kit (Y/N) | Biospecimen | Quantity | Collection / Processing Method | Shipping | Recipient | Notes |
|---|---|---|---|---|---|---|---|
| **Mandatory for all patients pre-registered to A071702** | | | | | | | |
| ≤ 7 days after pre-registration | Y | **Unstained Tumor Tissue Slides** (from **most recent** recurrent resection or biopsy) | 11 | Fixed tissue for FoundationOne CDx test (9.2) | Ambient | FM (12.2) | 1 |
| **Mandatory for all patients registered to A071702** | | | | | | | |
| Prior to protocol treatment | N | All Diagnostic H&Es (from recurrent biopsy or resection; and from primary disease if available) | Case dependent | H&E Stained Slides for Central Pathology Review (9.3) | Ambient | ABMAYO-FFPE Tissue (12.3) | 2 |
| **For patients registered to A071702 Biobanking** | | | | | | | |
| Prior to Protocol Treatment | Y | Stool | 3 x 25 ml | Stool (11) | Frozen / Dry Ice | ABMAYO-BAP Freezer (12.4) | 3 |
| **For patients registered to A071702-ST1** | | | | | | | |
| Prior to Protocol Treatment | N | **Primary tumor** Fixed tissue block (1) **OR** unstained tumor tissue slides (30) | 1 block **OR** 30 slides | Fixed tissue block (9.4) **OR** Unstained tissue slides (9.5) | Ambient | ABMAYO-FFPE Tissue (12.3) | 3, 4, 7 |
| Prior to Protocol Treatment | N | **Recurrent tumor** Fixed tissue block from resection (1) **OR** unstained tumor tissue slides (30) from resection | 1 block **OR** 30 slides | Fixed tissue block (9.4) **OR** Unstained tissue slides (9.5) | Ambient | ABMAYO-FFPE Tissue (12.3) | 3, 5, 7 |
| Prior to Protocol Treatment | N | **Recurrent tumor** Fixed tissue block from needle biopsy (1) | 1 block (containing 1-2 biopsy cores) | Fixed tissue block (9.4) | Ambient | ABMAYO-FFPE Tissue (12.3) | 3, 5, 7 |
| Prior to Protocol Treatment | N | **Recurrent tumor** Fresh tissue cores (2) from needle biopsy **OR** fresh tissue cubes (2) from resection | 2 cores **OR** 2 cubes | Frozen tissue (9.6.2) | Frozen / Dry Ice | ABMAYO-BAP Freezer (12.4) | 3, 6 |
| Prior to Protocol Treatment | Y | Whole blood (Streck BCT tube) | 2 x 8.5 ml | Plasma for cfDNA (10.1) | Ambient | ABMAYO-BAP Freezer (12.4) | 3 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1st on-treatment brain MRI | Y | Whole blood (Streck BCT tube) | 2 x 8.5 ml | Plasma for cfDNA (10.1) | Ambient | ABMAYO-BAP Freezer (12.4) | 3 |
| | | | | | | | |
| 2nd on-treatment brain MRI | Y | Whole blood (Streck BCT tube) | 2 x 8.5 ml | Plasma for cfDNA (10.1) | Ambient | ABMAYO-BAP Freezer (12.4) | 3 |
| | | | | | | | |
| Progression | N | **Recurrent tumor** Fixed tissue block from resection (1) **OR** unstained tumor tissue slides (30) from resection | 1 block **OR** 30 slides | Fixed tissue block (9.4) **OR** Unstained tissue slides (9.5) | Ambient | ABMAYO-FFPE Tissue (12.3) | 3, 5 |
| Progression | N | **Recurrent tumor** Fixed tissue block from needle biopsy (1) | 1 block (containing 1-2 biopsy cores) | Fixed tissue block (9.4) | Ambient | ABMAYO-FFPE Tissue (12.3) | 3, 5 |
| Progression | N | **Recurrent tumor** Fresh tissue cores (2) from needle biopsy **OR** fresh tissue cubes (2) from resection | 2 cores **OR** 2 cubes | Frozen tissue (9.6.2) | Frozen / Dry Ice | ABMAYO-BAP Freezer (12.4) | 3, 6 |
| Progression | Y | Whole blood (Streck BCT tube) | 2 x 8.5 ml | Plasma for cfDNA (10.1) | Ambient | ABMAYO-BAP Freezer (12.4) | 3 |

**Notes:**

1. Submission of **most recent recurrent** tissue to Foundation Medicine for real time TMB analysis is mandatory. See additional details in **section 9.2.**
2. Histopathology review will be conducted using the fixed brain tumor tissue from either diagnostic brain tumor biopsies or surgical resection. The submission of these samples for histopathology review is required for all patients registered to this study. Tissue submission prior to patient receiving protocol treatment is preferred, but submission within 30 days of registration is also acceptable. See additional details in **section 9.3**.
3. Collection for A071702 Biobanking and for A071702-ST1 is optional for patients but requires all sites offer to patients to consent. Please see protocol-specific consent documents.
4. A paraffin tissue block from the primary tumor **OR** 30 unstained slides @ 5 micron thickness from such block should be submitted for patients opting in for A071702-ST1, if tissue is available. If fewer than 30 unstained slides can be submitted, please submit as many as possible (up to 30 slides).
5. A paraffin tissue block from the recurrent tumor resection **OR** 30 unstained slides @ 5 micron thickness from such block should be submitted for patients opting in for A071702-ST1, if tissue is available. If fewer than 30 unstained slides can be submitted, please submit as many as possible (up to 30 slides). If tissue from resection is not available, a paraffin tissue block with 1-2 cores from a needle biopsy is acceptable.
6. For sites that can submit additional frozen tissue, 1-2 cores are requested from needle biopsy. Needle biopsies should be collected as per standard institutional procedure. If patient undergoes resection, 1-2 tissue cubes (1x1x1 cm—2x2x2 cm) should be submitted.

7. Once central pathology review has been completed, ABMAYO will inform sites of preferred block for tissue submission. Tissue submission prior to protocol treatment is preferred. However, if central pathology review results are not available prior to treatment, tissue may be submitted up to 30 days following receipt of block request from ABMAYO.

## 7. Biospecimen Collection Kits

**7.1** To facilitate the proper collection and shipping of tissue specimens to Foundation Medicine and blood and stool specimens to ABMAYO, biospecimen collection kits and materials will be provided. The cost of the kit and shipping the kit to the site will be paid for. The institution is expected to pay for shipping the kit with the biospecimens back to Foundation Medicine or to ABMAYO via priority overnight shipping. **NOTE: Kits will be sent via FedEx Ground at no additional cost to the participating institutions. Kits will not be sent via rush delivery service unless the participating institution provides their own FedEx account number or alternate billing number for express service. The study will not cover the cost for rush delivery of kits.**

**7.2** **Upon receipt of the tissue collection kit from Foundation Medicine, the commercial test requisition paperwork enclosed within the kit should be removed and disposed. This paperwork should NOT accompany tissue submission to Foundation Medicine.**

**7.3** Kits should be requested at least 10 working days in advance of the anticipated collection date. As many as 3 kits can be requested at one time. Since the collection materials (vacutainer tubes) have expiration dates, do not request kits more than 90 days prior to their anticipated use. All kits must be requested by using the BioMS system.

**7.4** Kit contents and specific instructions for use of the kit are provided in the kit box.

**7.5** Well in advance of collecting biospecimens, inspect the biospecimen collection kit to ensure that all components are present and not expired, particularly if the kit has been onsite for longer than 30 days.

**7.6** If a biospecimen collection component (e.g. vacutainer collection tube) is missing, damaged, or expired, the institution may substitute a like-kind collection tube from their own supply. However, note that some kit components are highly specialized (e.g. Streck BCT) and probably are not available at the institution.

**7.6.1** Note that protocol requirements are based on blood volumes, not tube sizes. If the protocol requires the collection of 8 ml of whole blood, generally a 10 ml tube is provided in the kit for convenience. If desirable or necessary to collect 8 ml in 3 x 3 ml tubes (for example), that is permissible.

### 7.7 Tissue Specimens for ABMAYO

**7.7.1** There is no independent "kit" for submission of paraffin blocks or slides to ABMAYO.

**7.7.2** Blocks and slides should be packaged to avoid breakage using a padded envelope or, preferably, a small Styrofoam container.

**7.7.3** During warm weather months, paraffin blocks and slides should be shipped in an insulated container that contains a refrigerant pack, to avoid heat > 25 degrees C (77 degrees F) that may melt paraffin and damage the tissue specimens.

**7.7.4** Please see **Section 12 – Biospecimen Shipping** for specific instructions on shipping to FM and to ABMAYO.

## 8. Biospecimen Labeling and Tracking

**8.1** All research biospecimens, with exception of surgical pathology blocks and tissue slides, MUST be labeled with the Alliance study number, Alliance patient ID number, patient initials (Last, First, Middle), the date and time (if applicable) of collection and specimen type. Specimen labels must match BioMS records.

**8.2** Surgical pathology tissue blocks should be labeled according to institutional standards, including the surgical pathology number (e.g. "S16-1234") and the individual block identifier (e.g. "A3"). **Adhesive labels should not be used to cover the institutional label.** If tissue section slides are being submitted instead of the block, each tissue section slide should be labeled with the Alliance study number, Alliance patient ID number, surgical pathology number (SPN) and institutional block ID, slide serial section number (1, 2, 3, etc.), and thickness.

**8.3** A **de-identified copy of the surgical pathology report**, labeled with the Alliance patient ID number, is required to accompany **all** tissue submissions to ABMAYO. Usually, this is generated by obscuring all PHI (names and dates) with white-out or a black magic marker, labeling each page of the report with the Alliance patient ID number, and photocopying the report. However, please make sure to **maintain the pathology accession numbers** so the submitted slides can be matched directly to the pathology report. **For tissue submission to Foundation Medicine, a partially de-identified surgical pathology report is required. The partially redacted report should include the Alliance patient ID number, surgical pathology number and block ID, patient's gender, and DOB. For the H&E stained slide submission to ABMAYO, a paper copy of the FounationOne result report is required.**

**8.4** Label all containers and vials with an indelible, solvent-resistant marker when they are at ambient temperature.

**8.5** Do not affix any labels to vials, slides or tubes. Label the collection containers directly with the marking pen.

**8.6** All biospecimens that are collected and sent to FM or to ABMAYO must be **logged and tracked in BioMS** under A071702. Do not send samples to the Biorepository in which the patient has not been registered onto the study. The BioMS system is a web-based application that tracks the collection and shipping of biospecimens. Once individual biospecimens are logged and 'shipped' in the BioMS system, a packing manifest will be created by the system. **This manifest must be printed out and must accompany all biospecimen shipments**. To become familiar with the BioMS system and for further information about training, access, and use, please contact the BioMS Help desk at: 1-855-55-BIOMS or **bioms@alliancenctn.org**.

**8.7** **Tissue sent to Foundation Medicine must be accompanied by the Foundation Medicine test requisition form which can be downloaded from the Alliance website under the protocol A071702. Please DO NOT return the commercial test requisition paperwork that is enclosed within the tissue collection kits. This paperwork should be removed and disposed.**

**8.8** In the event that BioMS cannot be accessed, please complete a BioMS Specimen Log and Shipping Manifest form which can be found here- **http://tinyurl.com/alliance-bioms-contingency**.

## 9. Tissue Collection

### 9.1 Overview.

**9.1.1** Please refer to protocol-specific instructions for procedures related to actual tissue procurement from individual participants. The method for research tissue procurement (needle core biopsy, sampling of surgically resected tumor) is dependent upon the disease site and the individual patient.

**9.1.2** When procuring tissue biospecimens by any method, when possible, avoid tissue that is grossly necrotic, hemorrhagic, fatty, or fibrous. If in doubt, briefly (1 min or less) place the tissue segment in a sterile specimen cup containing physiologic (normal) saline to rinse the tissue. Necrotic, hemorrhagic, and fatty tissue will generally dissolve or float on the surface while tumor and parenchymal tissue will remain intact and sink to the bottom of the cup.

### 9.2 Fixed Tumor Tissue for FoundationOne CDx Test

**9.2.1** Eligibility determination requires TMB analysis in real time. Eleven unstained slides will be submitted directly to FM.

**9.2.2** FM will return results directly to sites within 14 calendar days.

**9.2.3** Eleven (11) unstained tissue slides from the **most recent** recurrent resection or biopsy should be submitted.

**9.2.4** Include a copy of a partially de-identified pathology report with slide submission. The pathology report should be labeled with Alliance patient ID number, surgical pathology number / block ID, patient gender, and patient DOB. **A copy of the A071702 FoundationOne CDx requisition form must also be included with all tissue submissions.**

**9.2.5** Unstained slides should be prepared following instructions below. **Tissue should represent greater than 20% nuclei content with tissue volume of at least 0.6 $mm^3$**.

| # of slides | Section thickness | Slide type | Sample Types | Purpose |
|---|---|---|---|---|
| 11 | 4-5 microns | Positively Charged | **Most recent** recurrent resection or biopsy | FoundationOne CDx Eligibility Testing |

**9.2.5.1** Serial, tissue sections should be **cut fresh** from the appropriate formalin fixed, paraffin embedded tissue block.

**9.2.5.2** Cut sections at 4-5 micron thickness as indicated onto positively-charged slides

**9.2.5.3** Ensure that each slide is labeled with the Alliance study number (A071702), Alliance patient ID number, surgical pathology number (SPN) and institutional block ID, slide serial section number (1, 2, 3, etc.), and thickness (4-5 microns). Please make sure to maintain the pathology accession numbers so the submitted slides can be matched directly to the pathology report.

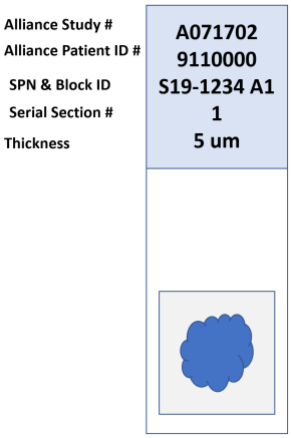
**9.2.5.4** Do not label slides with adhesive labels. Write or print information on the textured surface of the slide with indelible, solvent-resistant ink.

**9.2.5.5** No adhesives or other additives should be used in the water bath.

**9.2.5.6** Mount only one tissue section per slide. Make certain sections are placed on the painted / textured side of the slide.

**9.2.5.7** When placing the sections onto the slides, ensure that the tissue is placed on the bottom third of the slide. Ensure that each serial section from the block is placed in the same orientation on each slide.

**9.2.5.8** See figure below for proper mounting and labeling.




**9.2.5.9** Air dry slides for 12-24 hours prior to shipping. Do not oven dry slides.

## 9.3 H&E Stained Slides for Central Pathology Review

**9.3.1** For patients found to have hypermutated disease, sites will submit tissue to Dr. Caterina Giannini for central pathology review for confirmation of recurrent GBM.

**9.3.2** All H&E stained slides from recurrent (biopsy or resection) disease should be submitted. All H&E stained slides from primary disease are also requested, if available.

**9.3.3** De-identified pathology reports should accompany slide submission. The pathology reports should be labeled with Alliance patient ID number, surgical pathology numbers and block IDs corresponding to the slides submitted. A paper copy of the FoundationOne result report should also accompany slide submission.

**9.3.4** Patients who are not found to have recurrent GBM will be excluded from final analysis.

**9.3.5** Upon completion of central pathology review, ABMAYO will contact sites with specific block ID(s) requested for submission for ST1.

### 9.4 Pathology Fixed Tissue Blocks from Primary and Recurrent Tumors for ST1

**9.4.1** This protocol requests submission of one representative, diagnostic pathology, formalin fixed paraffin embedded block from the primary tumor and one representative, diagnostic pathology formalin fixed, paraffin embedded block from the recurrent tumor.

**9.4.2** Tissue should be submitted upon request from ABMAYO, based on the results of the central pathology review. Tissue submission prior to treatment is preferred. However, if central pathology results are not available prior to initiation of treatment, tissue may be submitted up to 30 days following receipt of request from ABMAYO.

**9.4.3** Any clinical surgical pathology block that is submitted for research studies will not be exhausted or rendered unsuitable for future diagnostic use. Any clinical surgical pathology block that is submitted will be returned within ten working days of written request, when needed for clinical management or clinical trial enrollment for a specific patient. Otherwise, all blocks will be returned to the submitting institution when the trial and correlative science study end points have been met.

**9.4.4** In the event that an institution will not release a tissue block, the institution may instead submit tissue sections, mounted and unstained to glass slides.

**9.4.5** For recurrent tumor, if a patient only has tissues from a needle biopsy available, please submit a paraffin block with 1-2 cores embedded inside.

### 9.5 Unstained Slides from Primary and Recurrent Fixed Tissue Blocks for ST1

**9.5.1** In cases where institutions are unable or unwilling to submit the requested tissue block from the primary tumor or from resection of recurrent tumor, a set of 30 unstained slides can be submitted as an alternative. If tissue is limited, please submit as many slides as possible. Please follow the procedures below for submitting unstained tissue slides. If your pathology department is unwilling or unable to follow these tissue-sectioning instructions, please consider submission of a tissue block, which can be cut at the biorepository and returned to your institution at a later date.

| # of slides | Section thickness | Slide type | Purpose |
|---|---|---|---|
| 30 | 5 micron | Positively Charged | DNA, RNA |

**9.5.2** Serial, tissue sections should be cut fresh from the appropriate formalin fixed, paraffin embedded tissue block.

**9.5.3** Cut sections at 5 micron thickness as indicated onto positively charged slides.

**9.5.4** **Slides should be labeled as instructed in section 9.2.**

**9.5.5** Include a copy of a **de-identified pathology report with all slide submissions to ABMAYO.**

**9.5.6** Block alternative is not provided for recurrent tumor from a needle biopsy.

### 9.6 Fresh Tissue Biopsy

**9.6.1** For sites who can submit additional tissue from fresh biopsy of recurrent lesions, cores are requested from needle biopsies and cubes are requested from resection. Biopsy tissue shall be submitted as flash frozen tissue (**see section 9.6.2**). Tissue should be collected as per standard institutional procedure.

#### 9.6.2 Frozen Tissue

**9.6.2.1** Prior to procurement, prepare tissue for freezing by placing approximately six pounds of crushed dry ice into the bottom compartment of a Styrofoam cooler. Place a metal freezing plate on top of the dry ice and allow the surface of the plate to reach the approximate temperature of the dry ice.

**9.6.2.2** An alternative method is to use the freezing plate found on a pathology cryostat.

**9.6.2.3** An alternative method is to use a flat surface of a dry ice block.

**9.6.2.4** An alternative method is to use a commercially available Cryocooler (OPS Diagnostics) which uses a metal platform and a liquid nitrogen saturated “pillow” to achieve freezing temperatures of -130 degrees C.

**9.6.2.5** Do not freeze tissue by placing warm tissue in a -70 to -90 degree Celsius ultralow freezer.

**9.6.2.6** Do not freeze tissue using a dry ice ethanol bath.

**9.6.2.7** Do not freeze tissue by submersion in an isopentane cryobath.

**9.6.2.8** Label one tissue cryomold for every tissue core or cube that is to be frozen. Ensure that the cryomold(s) and tissue bag(s) are labeled with the Alliance patient ID number as instructed in **section 8**.

**9.6.2.9** Working quickly, gently place the tissue length-wise in the mold. Place the cryomold on the level cold plate or flat, level surface of dry ice. Allow the tissue to freeze for 3-5 minutes.

**9.6.2.10** Once frozen, quickly wrap the mold with the tissue block in cooled foil and place the block in the corresponding labeled tissue bag. Maintain the tissue block buried in dry ice, in a -70 to -90 degree C freezer, or in liquid nitrogen vapor (not liquid phase) until ready for shipment.

**9.6.2.11** Repeat the above steps for each individual tissue core or cube specimen that is to be frozen.

## 10. Blood Collection Methods

### 10.1 Plasma Nucleic Acid (Streck) Tube Processing

**10.1.1** Collect 8.5 ml of blood into each of the Streck BCT tubes using standard venous phlebotomy. Invert tubes 10 times.

**10.1.2** Store Streck tubes with whole blood at room temperature. Do not freeze or refrigerate the tubes. The tubes may be stored for up to 72 hours at ambient temperature before shipment. If blood must be collected on Friday, it can be shipped on Friday for Saturday delivery. Ensure that the Streck tubes are shipped at ambient temperature to avoid freezing.

## 11. Stool Collection

**11.1** Stool collection will be performed using a Comprehensive Kit, developed at Mayo Clinic, that includes a 9x9x9" cardboard box with a Styrofoam container, two (2) nitrile gloves, a Ziploc bag with absorbent material containing 3 x 25 mL fecal collection vials with spoons for the stool sample, a disposable "specimen collection toilet adapter with white container" to be placed over the toilet bowl to collect the bowel movement, Wypall absorbent material, parafilm, and patient instruction sheet. Samples should be frozen on dry ice. Fecal samples should be stored in patient's freezer until able to take to site for shipping on dry ice.

**11.2** Instruct patients to collect stool following the instructions outlined in **Appendix 1.**

## 12. Biospecimen Shipping

### 12.1 Overview

**12.1.1** Please see the instruction document that is included in each kit for specific directions on how to package and ship biospecimens.

**12.1.2** Place the original, completed copy of the BioMS packing manifest in the shipment. If sending tissue, include a de-identified copy (for ABMAYO) or a partially de-identified copy (for FM) of the surgical pathology report labeled with the Alliance patient ID number. Do not send specimens without a completed BioMS Packing Manifest or substitute "BioMS Downtime Form." Biospecimens cannot be accepted without this completed form. **Tissue sent to Foundation Medicine must also be accompanied by the A071702 FoundationOne CDx requisition form which is available for download from the Alliance website under protocol A071702.**

**12.1.3** All biospecimens collected on the study should be shipped on the same day that they are collected. Biospecimens must be received by the recipient lab within 24 hours of collection. If biospecimens cannot be shipped on the same day they are collected, please contact appropriate personnel listed in **section 4.3** for further instructions, at least 24 hours prior to anticipated collection.

### 12.2 Shipping to Foundation Medicine for FoundationOne CDx

**12.2.1** Include the following items together in the shipment container (Testing will not be initiated until all specimens, corresponding unstained slides, and completed paperwork are received):

- The BioMS shipping manifest.
- Foundation Medicine test requisition form. This form is available for download on the Alliance website. **DO NOT submit commercial test requisition paperwork that is enclosed within the tissue collection kits. This paperwork should be removed and disposed.**
- A copy of the partially de-identified pathology report corresponding to the tissue submitted for testing. **Note: It is essential that the Alliance patient ID number, institutional surgical pathology number, block ID, patient gender, and DOB are clearly visible on the pathology report.**

**12.2.2** Ship for PRIORITY OVERNIGHT DELIVERY according to IATA guidelines and standard institutional policies. **Ship specimens to Foundation Medicine on Monday through Thursday only. Do not ship on Fridays, Saturdays, or on the day before a national holiday.**

Using the preferred vendor (i.e. FedEx), ship to:

**Attn: Accessioning Lab**
**Foundation Medicine**
**150 Second Street**
**Cambridge, MA 02141**
**Phone: 888-988-3639**

**12.3 Shipping to ABMAYO- FFPE Tissue**

**12.3.1** Ship container for PRIORITY OVERNIGHT DELIVERY according to IATA guidelines and standard institutional policies and using the preferred vendor. **Ship specimens to ABMAYO on Monday through Friday only. Do not ship on Saturdays or on the day before a national holiday.**

Ship to:

**Alliance Biorepository at Mayo Clinic- FFPE Tissue**
**Attn: PC Office (Study A071702)**
**RO-FF-03-24-CC/NW Clinic**
**200 First Street Southwest**
**Rochester, MN 55905**
**Phone: 507-266-0724**

**12.4 Shipping to ABMAYO- BAP Freezer**

**12.4.1** Ship container for PRIORITY OVERNIGHT DELIVERY according to IATA guidelines and standard institutional policies and using the preferred vendor. **Ship specimens to ABMAYO on Monday through Friday only. Do not ship on Saturdays or on the day before a national holiday.**

Ship to:

**Alliance Biorepository at Mayo Clinic- BAP Freezer**
**ST-SL-16**
**150 Third Street SW**
**Rochester, MN 55902**
**Phone: 507-538-0602**

## 13. ABMAYO Biospecimen Receipt and Quality Assurance Measures

**13.1** All biospecimens sent to ABMAYO will be accessioned into the informatics system BioMS, at ABMAYO Research Laboratory Information Management System (RLIMS) which interfaces with BioMS.

**13.2** All biospecimens received at the ABMAYO will be logged, associated, and tracked by the Alliance patient ID number.

**13.3** Upon receipt, all physical biospecimens received will be reconciled with what is recorded on the BioMS packing manifest. Any discrepancies noted will be communicated to submitting site for reconciliation.

**13.4** Upon receipt, any biospecimen received that is not in appropriate physical condition (broken vials, frozen samples that are thawed, ambient samples that are frozen) will be reported to the Program Manager, who will contact the submitting site for reconciliation.

**13.5** All biospecimens submitted to ABMAYO will remain in storage until exhausted. In the event the patient withdraws consent, the specimens will be disposed/returned according to Alliance Policy and Procedure Chapter 11.

## 14. Document History

| Version | Description and Justification of Change | Author | Effective Date |
|---|---|---|---|
| 3.1 | Removed reference to kits being available for fresh tissue cores in the scollection table | KAL | 05/03/2023 |
| 3.0 | Instructing sites to include FoundationOne result report with diagnostic slides | AAW | 07/15/2022 |
| 2.0 | Updated contact information for Mayo<br>Removed cryopreserved tissue | PAA | 10/12/2021 |
| 1.6 | Updated contact information for Mayo | PAA | 08/12/2021 |
| 1.5 | Instructing sites to remove commercial testing forms from tissue kits | PAA | 08/20/2020 |
| 1.4 | Updated contact information for Mayo | PAA | 08/18/2020 |
| 1.3 | Clarified time point for tissue submission | PAA | 05/01/2020 |
| 1.2 | Updated recipient laboratory for frozen tissue | PAA | 03/11/2020 |
| 1.1 | Updated tissue requirements for ST1 | PAA | 03/10/2020 |
| 1.0 | New | PAA | 03/09/2020 |

Appendix 1- Patient Stool Collection Instructions

## Stool Collection Instructions for Patients

1. Place the holder under the seat of the toilet bowl towards the center back.
2. Lower the toilet seat onto the holder.


3. Have a bowel movement into the bowl taking care to not urinate into the bowl.
4. Place Wypall pad on flat surface with the tubes, film, and gloves.
5. Put on gloves.
6. Place holder containing stool on Wypall pad to stabilize it.
7. Using the “spoons” attached to the caps, carefully place some of the bowel movement into the three (3) tubes. If a “spoon” should break, then use the flat wooden blade to transfer the stool.
8. Place the caps on the tubes and wrap the film around the cap of the tubes to seal the tube closed.
9. After the stool is collected, it needs to be divided into the smaller containers; once divided, place the stool containers into a Ziplock bag and seal. Place the bag into a refrigerator freezer until it is frozen and can be taken to the next appointment for the study.