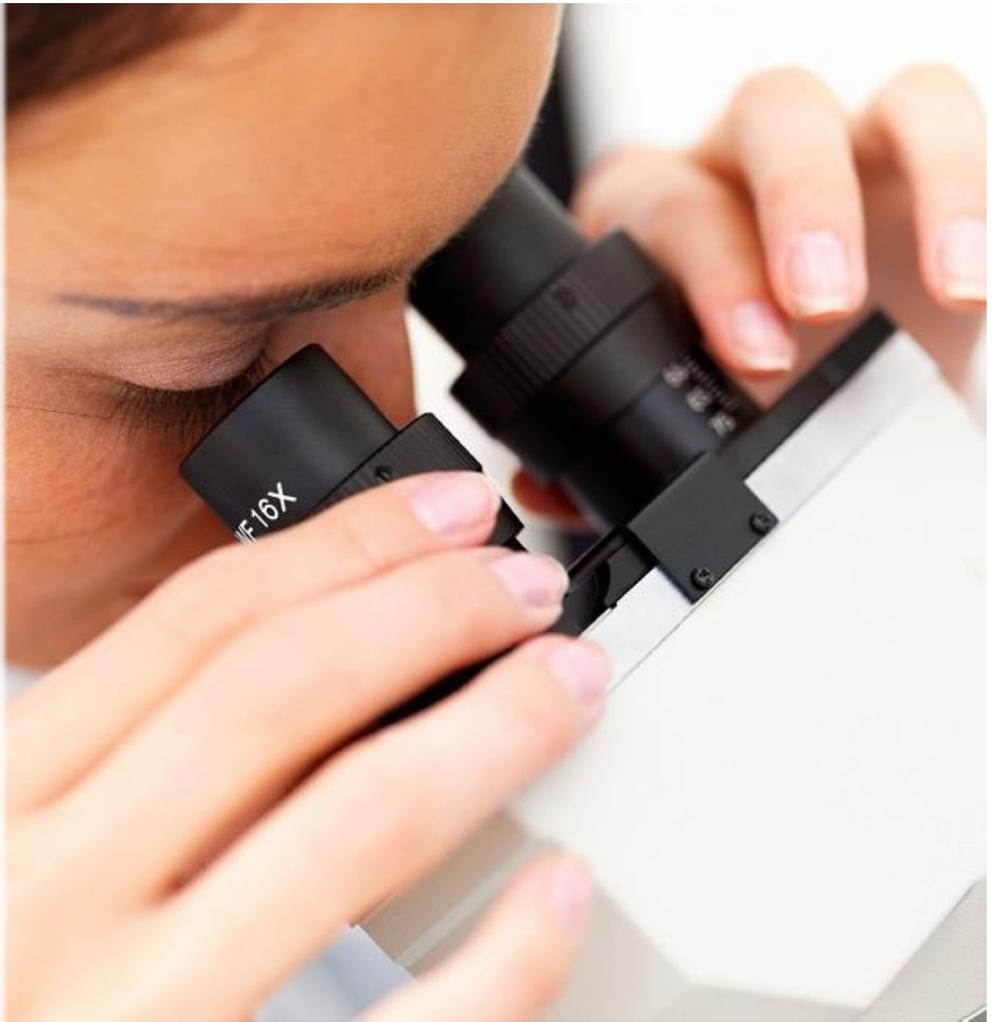


**Vista Pathology Laboratory
User's Guide**

2018



Welcome

This manual outlines information about Vista Pathology Laboratory, including a summary of services and information about submitting specimens.



Vista Pathology Laboratory, LLC
1032 E. Jackson Street
Medford, OR 97504
Phone: 541.770.4559
Fax: 541.770.4511
www.vistapathology.com

Contents

Who We Are.....	1
What We Do.....	3
How to Submit a Specimen.....	4
I. <i>Submitting a Surgical (Tissue) Specimen</i>	4
II. <i>Completing a Vista Surgical Pathology Requisition Form</i>	6
III. <i>Submitting a Body Fluid Specimen for Cytology Examination</i>	6
IV. <i>Completing a Vista Non-Gynecologic Cytology Requisition Form</i>	7
V. <i>Submitting a Gynecological Specimen (Pap)</i>	8
VI. <i>Completing a Vista Gynecological Cytology (Pap) Requisition Form</i>	8
VII. <i>Submitting a Vaginal Specimen for testing of Candida, Gardnerella and Trichomonos (BD Affirm-Vaginitis Panel)</i>	9
VIII. <i>Completing a Vista Gynecological Cytology (Pap/HPV) Test Requisition Form</i>	9
IX. <i>Hematopathology Specimen Requirements and Handling</i>	10
FAQs.....	11
Laboratory Supply Order Form.....	13

Who We Are



Reedy, Michael MD
Pathology



Loudermilk, Allison MD
Pathology
Hematopathology



Pike, Robin MD
Pathology
Cytopathology



Nixon, Randal MD, PhD
Pathology
Neuropathology



Wu, Bryan MD
Pathology
Breast Pathology
Dermatopathology



Huang, Anne MD,MPH
Pathology



Steidler, Nichole MD
Pathology
Hematopathology



Kyle, Michael MD
Pathology
Cytopathology



NewBill, Colin MD
Pathology
Breast & Gynecologic



Barry, Todd MD, PhD
Pathology
Hematopathology



Kahn, Melissa, MD
Pathology



Grange, Jacob, MD
Pathology
Cytopathology

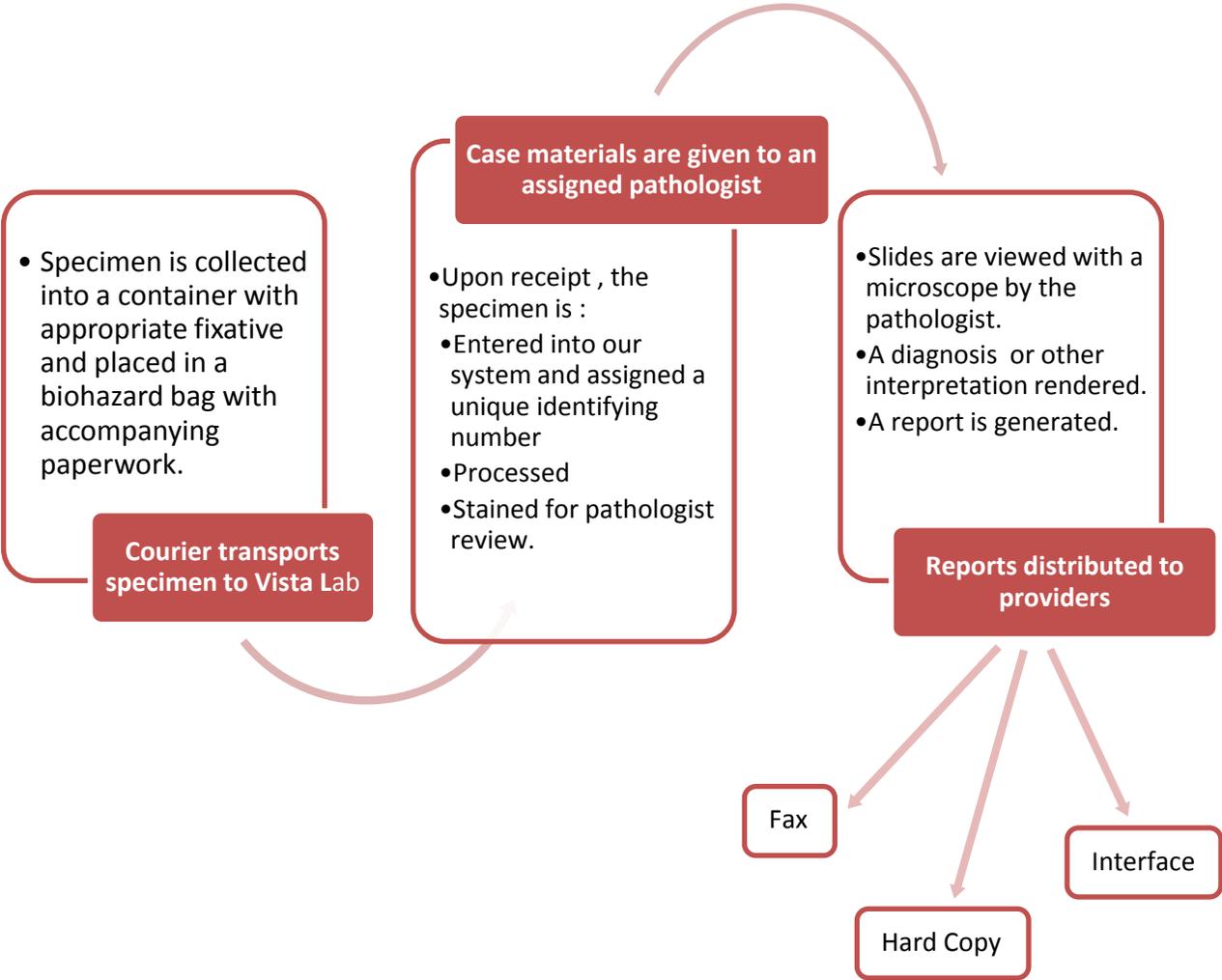


Tran, Thu, MD
Pathology
Genitourinary Pathology

What We Do

Vista Pathology Laboratory, LLC, provides surgical pathology and cytology services for hospitals, surgery centers, clinics, and independent health care providers throughout Southern Oregon. As board-certified pathology physicians with sub-specialty certification in diseases of the skin, brain/nervous system, breast, medical chemistry, blood and bone marrow, body fluids and Pap tests, we take pride in providing timely and comprehensive medical diagnostic services for the regional medical community.

Below is a graphic that represents the process of specimen analysis, from collection to reporting:

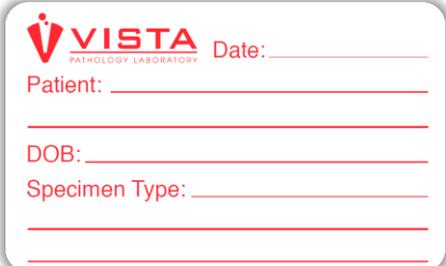


How to Submit a Specimen

Correctly submitting a specimen for surgical or cytological analysis is one of the most important things a clinic can do to help insure patient safety and accurate test results. A mislabeled specimen or incomplete requisition can delay a diagnosis, creating anxiety for the patient at a time when prompt results are most needed. Please follow these directions in order to ensure timely results:

I. *Submitting a Surgical (Tissue) Specimen*

Specimen Container Labeling: Regulatory agencies require that all containers be labeled with two unique patient identifiers, typically the patient's name and date of birth. It is imperative that the container itself, *and not the lid*, be labeled, as lids can be easily switched. The container label must also include the specimen source, with specific site information such as "left" or "right", and date of collection. If more than one specimen on a given patient is submitted, number the specimen containers as #1, #2, #3, etc., in addition to the above information. An example of available labels is shown below:



VISTA
PATHOLOGY LABORATORY

Date: _____
Patient: _____
DOB: _____
Specimen Type: _____

- **Specimens submitted in formalin:** Most routine biopsies and other surgically-removed specimens are submitted in the tissue fixative, formalin, a formaldehyde-based solution. Formalin preserves the tissue and prevents deterioration. For optimal preservation, specimens must be placed into formalin as soon as possible after excision from the patient. For adequate tissue fixation, please ensure that the specimen floats freely within formalin in the container. If in doubt, use a larger container, especially when handling large specimens such as from a mastectomy or colectomy. Never force a large specimen into a small container, as the tissue will deteriorate and may not be suitable for microscopic examination. If a container of sufficient size is not available, please call Vista Pathology for additional options. Secure the lid to prevent formalin leakage. **Formalin is toxic and should be handled with care.**
- **Specimens submitted out of formalin:** Some tissues must be submitted unfixed ("fresh"), or in an alternative fixative or preservative. These include specimens for frozen section, muscle and nerve biopsies, a specimen for immunofluorescence, or any specimen requiring a culture. If you are unsure as to whether or not the specimen can

be placed into formalin, please call us to discuss. Once in formalin, the tissue fixation process cannot be reversed.

- **Frozen Section:** A frozen section provides a rapid, intraoperative diagnosis, with a turnaround time typically of 20 minutes or less from the time of receipt in our laboratory. It is useful when surgical margins require intraoperative assessment or in other situations that would affect the subsequent course of the surgery or procedure. Please call Vista Pathology at (541) 770-4559 if you have a procedure that may require a frozen section. Once the procedure is scheduled, please call Vista Pathology prior to specimen collection to schedule a STAT courier pick-up. Once collected, **DO NOT PLACE THE SPECIMEN INTO FORMALIN.** Instead, place the fresh tissue on the smooth side of a lightly moistened Telfa to prevent the tissue from drying out, and then place the Telfa into the specimen container. Refer to appropriate specimen labeling above.
- **Muscle or Nerve Biopsy:** Due to the delicate nature of this tissue and special handling requirements, please call Vista Pathology at (541) 770-4559 to schedule a muscle or nerve biopsy. Once the procedure is scheduled, please call Vista Pathology at the time of collection for a STAT pick-up. For proper processing, the specimen must be received by Vista Pathology Laboratory before noon on the day of specimen collection. The specimen should be wrapped in a gauze sponge that is lightly moistened in saline. The specimen and gauze then should be placed in a sealed container, and the container placed on wet ice in a zip-lock bag. Refer to appropriate specimen labeling above.
- **Specimens for Immunofluorescence:** Providers requesting immunofluorescence testing on tissue are advised to call ahead, before scheduling the procedure, and speak with one of our pathologists to discuss the appropriate test. Once the testing procedure has been established, place the tissue in Michel's transport medium. Michel's is necessary to preserve immuno-antigenicity of the tissue so that the fluorescent stains can be visualized. Michel's transport medium is supplied by our laboratory. Please call (541) 770-4559 to place an order. The specimen must be received by noon on the day of collection.
- **Microbiologic Culture:** Vista Pathology does not perform clinical laboratory testing, including specimen cultures. *These must be submitted to a hospital lab or other clinical laboratory.* If cultures are needed on a surgical pathology specimen, we recommend that these be submitted from the site at the time of the procedure, as this lessens the risk of contamination. If you have questions about a specimen that may require a culture, please contact one of our pathologists at (541) 770-4559.

○

II. **Completing a Vista Surgical Pathology Requisition Form**

Requisitions are supplied by Vista upon request. In addition, PDF versions are accessible through our website (www.vistapathology.com) under the tab “Referring Providers.” All areas of the requisition form must be completed legibly. Please include the following information:

- Patient first and last name and date of birth.
- Gender.
- Submitting provider.
- Date collected.
- For biopsies and other surgical specimens, time into formalin (**required for breast specimens and recommended for all others**). If there is a greater than one-hour delay in placing the tissue into formalin, this should also be noted.
- Specimen source and specifications such as “Left” or “Right.” Avoid the abbreviations “L” or “R” as these descriptors are often illegible.
- Brief clinical history.
- ICD-10 code.

Attach the patient demographic and insurance information to the requisition slip.

III. **Submitting a Body Fluid Specimen for Cytology Examination**

Specimen Container Labeling: Laboratory compliance standards require that each container (*not* the lid) be labeled with two unique patient identifiers, typically name and date of birth, as well as the specimen type and submitting provider.

As a general rule, never place a cytology specimen into formalin.

- **Urine/ Bladder wash/Loop urine:** In general, a first morning urine specimen produces an inferior specimen for cytological examination, as the cells present in the urine have extensively degraded. The best specimens typically are from a well-hydrated patient who has already voided at least 1-2 times on the day of collection. Specimens can be submitted unfixed, in Cytolyt© preservative solution or in Saccomanno solution, which is an alcohol-based fixative. If the specimen is not placed into Cytolyt© preservative or Saccomanno fixative, it must be refrigerated until it is picked up by the courier. Submit the specimen with a completed Vista Pathology Laboratory’s non-gyn cytology requisition form and include the information listed below in “Completing a Vista Non-Gynecologic Cytology Requisition.”

- **Body Fluids and Washes (Pleural, Pericardial, Ascites, Joint Aspirate, Bronchial Wash, BAL, etc.) and Sputum:** Specimens typically are submitted fresh (unfixed) in a sterile container. These should be refrigerated until pick-up by the courier. Use Vista Pathology Laboratory's non-gyn cytology requisition and include the information listed below in "Completing a Vista Non-Gynecologic Cytology Requisition."
- **Nipple Discharge:** Nipple discharge is expressed directly on to a charged glass slide and gently spread with a second slide. The slide with the specimen can then be either fixed in 95% alcohol or air-dried. Use Vista Pathology Laboratory's non-gyn cytology requisition and include the information listed below in "Completing a Vista Non-Gynecologic Cytology Requisition."
- **CSF:** This is a delicate specimen that requires careful handling. It is generally submitted unfixed so that low cellularity is not further diluted by fixative. CSF must be refrigerated until courier pick-up. If a CSF is collected on a Friday, please contact Vista Pathology Laboratory to arrange a same-day pick-up. Use Vista Pathology Laboratory's non-gyn cytology requisition and include the information listed below in "Completing a Vista Pathology Laboratory Non-Gynecologic Cytology Requisition Form."
- **Fine Needle Aspiration Biopsy (FNA):** A specimen is collected with a thin (23-27) gauge needle attached to a syringe. The aspirated material is then expressed onto a charged glass slide and gently spread with a second slide. These slides can be fixed in 95% alcohol or air-dried. Cyst fluid and needle rinses may be collected into saline or Saccomanno fixative; specimens in saline must be refrigerated. Each glass slide must be labeled with two patient identifiers. Providers unfamiliar with FNA techniques are encouraged to contact Vista Pathology Laboratory for more detailed specimen collection instructions. Use Vista Pathology Laboratory's non-gyn cytology requisition and include the information listed below in "Completing a Vista Non-Gynecologic Cytology Requisition."

IV. **Completing a Vista Non-Gynecologic Cytology Requisition Form**

All areas of the requisition slip must be completed legibly. Please include the following information:

- Patient name and date of birth.
 - Submitting provider.
 - Gender.
 - Date collected.
 - Specimen source and specifications such as "Left" or "Right." Check the appropriate box describing the specimen you are submitting.
 - Pertinent clinical history.
 - ICD-10 code.

Attach the patient demographic and insurance information to the requisition slip.

V. ***Submitting a Gynecological Specimen (Pap)***

Pap tests can be collected from vaginal or cervical sites into ThinPrep® Pap vials provided by Vista. The vial(s) must be labeled with the patient's first and last name, date of birth, and date collected, and then submitted with a ***Vista Gynecologic Cytology (Pap) / HPV Test Requisition*** that includes all the necessary patient information and indicates requested ancillary testing.

VI. ***Completing a Vista Gynecological Cytology (Pap) Requisition Form***

All areas of the requisition form must be completed legibly. Please include the following information:

- Patient first and last name and date of birth.
- Gender.
- Submitting provider.
- Date collected.
- Menstrual status/LMP.
- Pertinent clinical history.
- ICD-10 code.
- Cervical or vaginal specimen site.
- Ancillary testing desired, such as: HPV, Chlamydia, Gonorrhea, Herpes, etc.

Attach the patient demographic and insurance information to the requisition slip.

Use the following as a guide for requesting the proper ancillary testing. Refer to complete cervical cancer screening guidelines available at www.asccp.org.

- ***Pap+hr-HPV co-testing:*** Regardless of Pap diagnosis an HPV test will be run and the results will be printed on the Pap report.
- ***Reflex to HPV genotyping:*** If the HPV result is positive and the Pap result is "Negative for Intraepithelial Lesion or Malignancy," genotyping for HPV types 16 and 18 will be performed. All results will be included on the pathologist-signed Pap report.
- ***Pap+Reflex HPV:*** An HPV test will be run only if the Pap diagnosis is ASC-US and the results will be printed on the pathologist-signed report.
- ***N.gonorrhea/C.trachomatis:*** If this test is requested and the "without Pap" box is not selected, we will run a Pap also.
- ***Herpes Simplex Virus:*** If this test is requested and the "without Pap" box is not selected, a Pap also will be run.
- ***Pap only:*** No ancillary testing will be performed and only a Pap test will be performed.
- ***Note:*** *If there are no tests selected on the requisition and we receive a ThinPrep vial, we will perform a Pap test.*

VII. *Submitting a Vaginal Specimen for testing of Candida, Gardnerella and Trichomonos (BD Affirm-Vaginitis Panel)*

Vaginal sample collection is a critical step. Personnel collecting vaginal fluid specimens should be well trained to ensure adequate sample collection. All samples must be collected using the materials (swabs and tubes) provided in the set.

- Place the patient in position for a pelvic examination. Insert an UNLUBRICATED speculum (WITHOUT JELLY OR WATER) into the vagina to permit visualization of the posterior vaginal fornix.
- Using the sterile swab, obtain a sample from the posterior vaginal fornix. Twist or roll the swab against the vaginal wall two or three times, ensuring the entire circumference of the swab has touched the vaginal wall. Swab the lateral vaginal wall while removing the swab.
- Immediately place the swab in the Sample Collection Tube
- With the swab touching the BOTTOM of the collection tube, grasp the pre-scored handle of the swab just above the top of the tube and bend until the swab breaks (Figure 2). When the swab is fully inserted into the collection tube, the score mark on the swab is approximately 1 cm above the top of the collection tube. Discard the broken handle into an infectious waste container.
- Place the cap over the exposed end of the swab and firmly press the cap onto the tube. The cap will “snap” onto the tube when it is properly seated.
- Label the Sample Collection Tube with the patient identification information; patient’s first and last name, date of birth and date collected. Include the time the sample was collected.
- Place the capped Sample Collection Tube into the plastic Sample Transport Bag for transport for testing with the Affirm VPIII Microbial Identification Test.

VIII. *Completing a Vista Gynecological Cytology (Pap/HPV) Test Requisition Form*

All areas of the requisition form must be completed legibly. Please include the following information:

- Patient first and last name and date of birth.
- Gender.
- Submitting provider.
- Date collected.
- Pertinent clinical history.
- ICD-10 code.
- Indicate test Vaginitis Panel.
- Time collected.

Attach the patient demographic and insurance information to the requisition slip.

IX. Hematopathology Specimen Requirements and Handling

	Flow Cytometry	FISH	PCR	Cytogenetics	Storage/Transport
Peripheral Blood	2.0 mL in GREEN (Heparin) or LAVENDER (EDTA) tubes	2.0 mL in GREEN (Heparin) or LAVENDER (EDTA) tubes	2.0 mL in LAVENDER (EDTA) tubes	2.0 mL in GREEN (Heparin) or LAVENDER (EDTA) tubes	Room temperature/Cold pack, if necessary to avoid excessive heat
Bone Marrow Aspirate	1.0 mL in GREEN (Heparin) or LAVENDER (EDTA) tubes	1.0 mL in GREEN (Heparin) or LAVENDER (EDTA) tubes	1.0 mL in LAVENDER (EDTA) tubes	1.0 mL in GREEN (Heparin) or LAVENDER (EDTA) tubes	Room temperature/Cold pack, if necessary to avoid excessive heat
Bone Marrow Core/Clot	In RPMI -or- In SALINE (minimum of 2mm ³)	In RPMI -or- In SALINE (minimum of 2mm ³)	In RPMI -or- In SALINE (minimum of 2mm ³)	In RPMI -or- In SALINE (minimum of 2mm ³)	Room temperature/Cold pack, if necessary to avoid excessive heat
Fresh Tissue Biopsy	In RPMI -or- In SALINE (minimum of 2mm ³)	In RPMI -or- In SALINE (minimum of 2mm ³)	In RPMI -or- In SALINE (minimum of 2mm ³)	In RPMI -or- In SALINE (minimum of 2mm ³)	Room temperature/Cold pack, if necessary to avoid excessive heat
Fine Needle Aspirate (FNA)	In RPMI -or- In SALINE	Room temperature/Cold pack, if necessary to avoid excessive heat			
Cerebral Spinal Fluid (CSF)	2.0 mL in sterile tube (mix with RPMI)	2.0 mL in sterile tube (mix with RPMI)	2.0 mL in sterile tube (mix with RPMI)	2.0 mL in sterile tube (mix with RPMI)	Room temperature/Cold pack, if necessary to avoid excessive heat

Peripheral Blood and Bone Marrow Aspirate Specimens

Peripheral blood and bone marrow aspirate specimens should be anticoagulated and transported at room temperature as quickly as possible to the Vista Pathology Laboratory. For peripheral blood, in most cases, 10 mL is adequate for all analyses; however, greater volumes may be required for peripheral blood samples with very low white blood counts. For bone marrow, 1 ml of anticoagulated marrow from the first aspirate pull is sufficient. Larger volumes of marrow and post-first marrow aspirate pulls contain significant amounts of peripheral blood dilution and should be avoided. In the absence of a suitable marrow aspirate, a marrow biopsy may be submitted fresh in tissue culture media (RPMI) or saline.

For flow cytometric testing, EDTA is the preferred anticoagulant, although heparin is also acceptable. Our testing does not require preservative-free heparin.

For molecular testing, EDTA anticoagulation should be used as heparin can interfere with the assays; therefore, when requesting both molecular testing and flow cytometry on a shared sample, use EDTA anticoagulation. If specimens for DNA-RNA based molecular testing will arrive in the laboratory greater than 24 hours after collection, please refrigerate the sample to preserve the integrity of the DNA/RNA.

Specimen requirements and handling may vary depending on a number of clinical factors; therefore if additional questions arise, please contact the laboratory for more specific instructions.

Fresh Tissue Specimens

Lymph nodes or other tissues should be transported from the operating room in sterile saline or tissue culture media (we use RPMI). A representative section of lymph node or tissue should be placed in tissue culture media (RPMI) and transported to Vista Pathology Laboratory as soon as possible. A supply of tissue culture media may be obtained from Vista Pathology Laboratory. Specimens for immunophenotyping by flow cytometry should never be placed in fixative. If the specimen will take greater than 12 hours to reach the laboratory, it should be transported in RPMI with cold packs.

If additional questions arise, please contact the laboratory for more specific instructions.

CSF, pleural fluid, peritoneal fluid, vitreous fluid, etc

Fluids should be mixed with an equal volume of tissue culture media (RPMI). At minimum 1 ml of fluid (and ideally more if possible) will be needed for analysis. A supply of tissue culture media may be obtained from Vista Pathology Laboratory.

FAQs

How are specimens delivered to Vista?

We rely on couriers to transport specimens to our lab. If you would like to receive a regularly scheduled pick-up, please call our office at (541) 770-4559 and ask to speak with our client services representative. If you would like to know the time of the next scheduled pick-up or would like to schedule a pick-up, please call our office at (541) 770-4559 and we will assist you. For urgent or STAT pick-ups during business hours, including for frozen section services, please call our office at the above number.

If you have a question about an urgent or STAT pick-up after hours or during a weekend or holiday, please consult with the on-call pathologist by dialing 541-770-4559.

What is the timeline for tissue specimen processing?

Upon arrival at Vista, tissue specimens are assigned a unique accession number, provided a gross (“naked-eye”) description, and prepared for overnight processing, which dehydrates and preserves the tissue. The following morning, very thin slices of processed tissue are placed onto glass slides and stained for microscopic examination. The assigned pathologist then reviews the glass slides with the aid of a microscope, and compiles the pathology report based upon this examination. Most routine biopsy cases are completed within 24 hours of receipt in the Vista Lab.

When can I expect to receive my report?

Vista Pathology's turnaround time for most routine biopsies is typically within one working day of specimen receipt. Some cases requiring special testing or consultant review may take longer. Pathologists are available to discuss cases by calling (541) 770-4559.

What is immunohistochemical testing and why does it delay the report?

Immunohistochemistry (IHC) involves the use of specialized, antibody-based stains to more completely detect and characterize some processes, typically cancers. These tests require an overnight incubation step, so that cases undergoing IHC analysis typically have a longer turnaround time as compared with cases determined on routine histologic examination. Pathologists are available at any time during the processing and analysis of these complex cases to discuss preliminary results.

How can I order more supplies?

Vista Pathology Laboratory provides specimen collection containers, requisitions, transport bags, slides, and other biopsy and cytology collection supplies. To order supplies, please refer to your office's personalized Vista **Laboratory Supply Order Form** (see page 11 of this manual for the generic version). This form lists the supplies and the available units per package. If you would like to order supplies that are not listed on this form, write the description of the item and quantity desired at the bottom of the page.

The completed form can be faxed to (541) 770-4511, placed in the specimen pick-up bin for our courier to collect, or you can call us and we will complete the form and fill the order.

Is it safe to put a specimen in a drop box outside during summer and winter months?

Formalin is stored at room temperature, but is stable over a wide temperature range. In nearly all conditions in the Rogue Valley, a specimen will not be compromised if placed in a lock box. Formalin should not be frozen, however, if you have a specimen on a late Friday afternoon during cold winter months, please call for a courier pick-up (if the specimen is urgent) or hold the specimen inside for a Monday pick-up. ThinPrep Pap specimens should be kept between 60-85 degrees; these are best held inside for pick-up during very hot and very cold weather. Urine for cytologic examination, if not in fixative, should be refrigerated until pick-up. Urine in fixative is stable at a wide temperature range.

What should I do if I need to speak with a pathologist after hours?

The pathologist on-call can be reached by calling (541) 770-4559. Our answering service will connect you after hours and on weekends and holidays.

Our routine contact information is:

Phone: (541) 770-4559 Fax: (541) 770-4511

www.vistapathology.com

1032 East Jackson Street, Medford, Oregon, 97504

Days and hours of operation: Monday-Friday, 8am to 5pm. An on-call pathologist is available after hours and on weekends and holidays.



For Laboratory Use Only
 Date Filled: _____
 Initials: _____

Laboratory Supply Order Form

Office Name: _____ Request Date: _____

Address: _____ Supplies Needed By: _____

Form Completed By: _____ Phone: _____

SPECIMEN COLLECTION	UNITS/PKG	QUANTITY
Specimen Container (7mL) – 10% Zinc Formalin	Each	
Specimen Container (20mL) – 10% Zinc Formalin	32/Box	
Specimen Container (40mL) – 10% Zinc Formalin	32/Box	
Specimen Container (60mL) – 10% Zinc Formalin	32/Box	
Specimen Container (90mL) – 10% Zinc Formalin	24/Box	
Specimen Container (120mL) – 10% Zinc Formalin	24/Box	
Prostate Biopsy Kit (12 vial)	Each	
Empty Specimen Container (90 mL)	Each	
Formalin (Gallon)	Each	
5-Slide Vial / 95% Ethanol	Each	
Empty 5-Slide Mailer	Each	
Microscope Slides	Box	

FORMS & TRANSPORT BAGS	UNITS/PKG	QUANTITY
Surgical Pathology Requisitions	50/Pkg	
Non-Gyn Cytology Requisitions	50/Pkg	
Gyn Cytology Requisitions	50/Pkg	
Supply Order Forms	Each	
Biohazard Transport Bags	100/Pkg	

CYTOLOGY SUPPLIES	UNITS/PKG	QUANTITY
ThinPrep Bottles	25/Pkg	
Brushes / Spatulas	25/Pkg	
Cervical Papette Brooms	25/Pkg	

OTHER:

*Fax completed form to **541.770.4511** or send with Courier.*