

# WHAT IS A PATHOLOGY REPORT?

A pathology report is a medical document created by pathologists and laboratory professionals that displays laboratory results and, if applicable, a diagnosis. There are two main types of pathology reports:

## SIMPLE REPORT

A simple pathology report has a single result, meaning a number of value, a yes/no, or positive/negative. Examples of such reports are pregnancy, hemoglobin A1C, or cholesterol test results. An example of a typical simple report results is:



Simple reports include the below core information. Please note that the bolded parts are the most important for the patient:

- Patient identifiers
  - » Name
  - » Date of Birth
- Insurance Information
- Name of clinician who ordered the test
- Clinical contact information
- ICD-11 code (a code that informs your health insurance why the test was ordered)
- **Name of test**
- **Result of test**
- **Reference range or explanation of reference range**

## COMPLEX REPORT

A complex report has all the above information, but rather than a single result, it involves interpretation of multiple tests in order to form a diagnosis. An example is a surgical pathology report, such as for the diagnosis of cancer. Additional complex reports include those for flow cytometry, HLA-antibody typing, and almost all genetic testing. Such a pathology report includes a narrative or expanded result that are unique to each patient.

Core information on complex reports include the following. Please note that the bolded parts are the most important for the patient:

- Patient identifiers
  - » Name
  - » Date of Birth
- Insurance Information
- Name of clinician who ordered the test
- Clinical contact information
- ICD-11 code (diagnostic code that states why test was ordered)
- Name of test(s)
- Result of test(s)
- Reference range or explanation of reference range
- Gross description
- **Narrative or expanded result**
- **Comments**

# SPECIALIZED SECTIONS ON PATHOLOGY REPORTS

## COMMENTS

The comment section of a pathology report includes relevant information that is not the actual diagnosis. Information in the comments may include previous diagnoses, abnormal findings, or relevant clinical history of the patients.

## GRADING

The grading of cancer indicates how fast a cancer grows, with the lower grading indicating a slower-growing cancer. The grading is determined by the appearance of the cancer cells under a microscope.

## GROSS DESCRIPTION

This is a narrative description of information seen by the naked eye, so not through a microscope. Such information can include, size, shape, and appearance of a specimen.

## IMMUNOHISTOCHEMISTRY

This is the application of specific staining to pathology slides so that abnormalities can be visible under a microscope.

## LYMPH NODE STATUS

This section describes whether cancer has spread to the nearby lymph nodes. This information is important as it informs the staging of the cancer (see below).

## NARRATIVE OR EXPANDED RESULTS

This is a diagnosis based on the interpretation of multiple lab results and is unique to each patient.

## ASK YOUR DOCTOR

- What lab tests are you ordering and why?
- What are we looking for in the lab results?
- When can I anticipate my lab test results?
- How can I get access/get a copy of my lab results?
- What is my treatment based on my lab results?
- Will I have follow-up lab tests to see if the treatment is working?
- If I have any questions about my diagnosis or lab results, who can I speak to?
- Is the laboratory in-house or are my samples sent to a reference lab?

## REFERENCE RANGES

These are the range of values that are deemed standard for healthy individuals. Pathologists compare a patient's values against the reference ranges their laboratory has set.

## STAGING

The stages of cancer determine how far the cancer has spread and what parts of the body it has spread to. Your treatment plan and prognosis will depend on the staging portion of your diagnosis.

## SUMMARY DIAGNOSIS

This section summarizes the entire pathology report and provides a concise diagnosis.

# TYPES OF SPECIMEN COLLECTED FOR LAB TEST

In order to conduct a lab test, a specimen or a sample needs to be collected from your body. Most laboratory tests are conducted by analysis of your blood, but there are many other types of samples that are collected. There are three main categories, ones that the body naturally eliminates, ones that are easily obtained, and ones that involve a procedure in order to obtain the sample.

## SAMPLES OBTAINED THROUGH MEDICAL PROCEDURE

### AMNIOTIC FLUID

This fluid is located in a pregnant person's uterus and surrounds the baby or babies. The fluid cushions the fetus but it also helps provide exchanges between baby and parent such as nutrients and biochemical products.

### BONE MARROW

This is a substance found in the center of bones and it consists of stems cells and other substances that create red blood cells.

### CEREBROSPINAL FLUID

This fluid is located in the brain and surrounds the spinal cord in order to protect both. CS also delivers nutrients, filters blood, and removes metabolic waste products.

### PERITONEAL FLUID

This fluid is located in the abdominal and pelvic cavities and it covers most of the organs in the abdomen. This fluid reduces friction of your organs during movement and digestion.

### PLEURAL FLUID

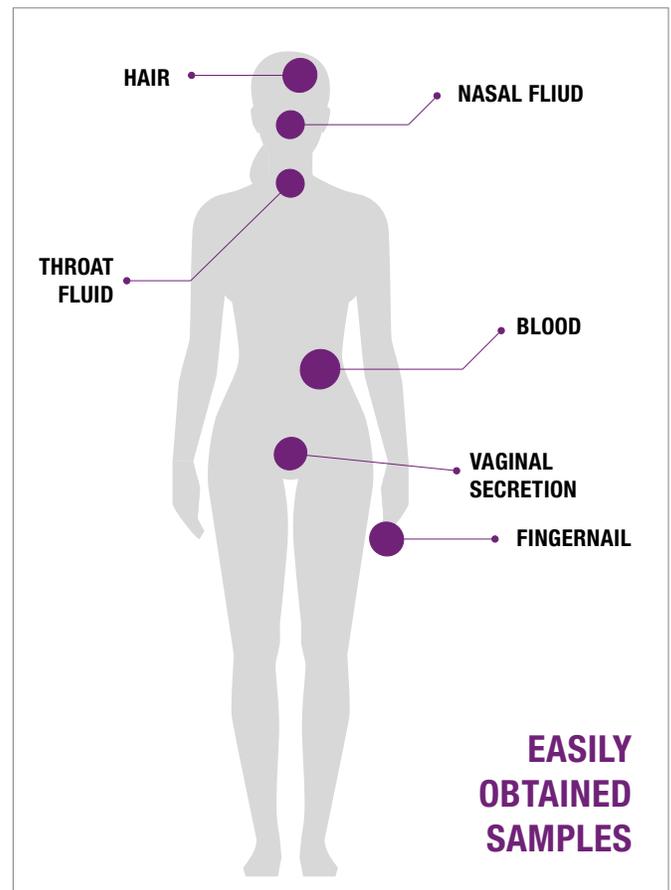
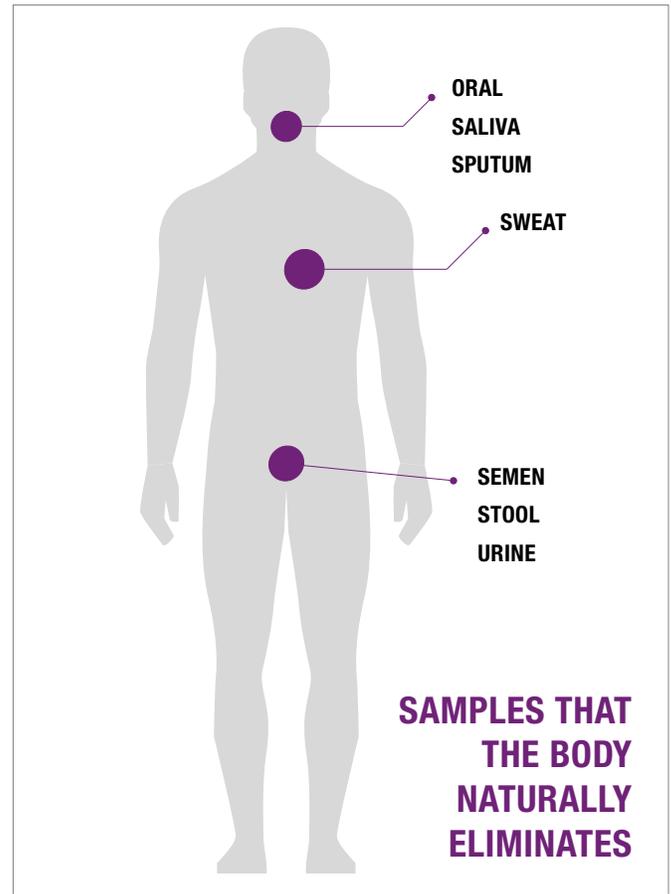
This fluid is located in the chest cavity, near the lungs. It reduces friction from the chest wall and ribs during inhalation and exhalation.

### PERICARDIAL FLUID

This fluid is located in the inner layer of your heart and helps reduce friction when your heart of pumping.

### SYNOVIAL FLUID

This fluid is located in your joints and it cushions the end of your bones and reduces friction when moving.



# MEET OUR CHAMPIONS



***“Lab results are very important to me in my breast cancer journey. I review my results to validate the information that my doctors give me. They might be difficult to understand, but learning about them will be worth it.”***

Anne, Stage 3 Breast  
Cancer Survivor



***“My pathology reports show me if I am doing well or if my treatment needs adjusting. Lab test are your map and success is your destination, but only if you check your map regularly to ensure that you are on that path to success.”***

Anthony, Kidney  
Transplant Recipient



***“Laboratory results help me to navigate my treatment so that I could understand what was working and what needed to be adjusted. Reference ranges were especially important because they let me know what was normal or abnormal from MY demographics.”***

Crystal, Lupus Patient

To learn more and watch videos about our champions, go to [ascp.org/patient-champion](https://www.ascp.org/patient-champion)

**#TheLabSavedMyLife**

# COMPLEX PATHOLOGY REPORT EXAMPLE

## INVASIVE CARCINOMA OF THE BREAST SYNOPTIC REPORT

Jane Doe

DOB: 01/01/1970

XX Insurance Information

Dr. M. Smith

Phone: xxx-xxx-xxxx

ICD-11

Pathologist: Dr. S. Jones

Pathology Accession: SP21 001

Date of Service: 05/20/21

### PROCEDURE AND SPECIMEN LATERALITY:

Right Breast Mastectomy

### SUMMARY DIAGNOSIS:

#### INVASIVE CARCINOMA:

- Maximum Tumor Size: 3.5 cm
- Multifocal/single focus: Single focus
- Histologic type: Ductal (of no special type)
- Histologic grade: Poorly Differentiated
  - » Tubules: Score 3
  - » Nuclear grade: Score 2
  - » Mitotic counts: Score 3
- Extensive intraductal component (EIC): Negative
- Lymphovascular invasion (LVI): Present, focal
- Dermal lymphovascular invasion: Absent
- Skin invasion: Absent
- Skeletal muscle invasion: Absent
- Nipple invasion: Present, without epidermal ulceration

#### MARGINS (INVASIVE):

- Deep: Negative
- Superficial: Negative

#### DUCTAL CARCINOMA IN SITU:

- Types: Solid
- Nuclear grade: Intermediate
- Calcifications in DCIS: Present
- Necrosis in DCIS: Present
- Paget's Disease of the Nipple: Absent
- Extent of DCIS: Number of blocks/total: 5/10 blocks:

#### MARGINS (DCIS):

- Deep: Negative
- Superficial: Negative

**LOBULAR CARCINOMA IN SITU:** Absent

### LYMPH NODES:

#### SENTINEL LYMPH NODES:

- Number of positive sentinel nodes: Not Applicable
- Number of sentinel nodes examined: Not Applicable

#### AXILLARY LYMPH NODES:

- Number of positive axillary nodes: 18
- Number of axillary nodes examined: 22

#### TOTAL POSITIVE LYMPH NODES/TOTAL NODES:

**(all specimens):** 5/10

- Size of largest metastatic focus: 1.4 cm
- Extranodal extension: (largest focus size: < 0.1cm)

**AJCC Classification (8th edition):** pT3 N3a

### BREAST BIOMARKERS:

Immunoperoxidase studies were performed with the following results for invasive carcinoma

- ESTROGEN RECEPTOR: POSITIVE (>95% strong)
- PROGESTERONE RECEPTOR: POSITIVE (95% strong)
- HER2/NEU POSITIVE (3+)