

Carefully follow these instructions for acquiring the images and labeling the films. If you are REPEATING due to a deficiency, you must submit the following cases for the NOT ACCEPTABLE categories:

- NOT ACCEPTABLE Breast Ultrasound – submit **both** a new solid mass **and** a new cyst case
- NOT ACCEPTABLE Core Needle Biopsy – submit a new Core Needle Biopsy case
- NOT ACCEPTABLE FNAC Biopsy – submit a new FNAC Biopsy case

GENERAL INSTRUCTIONS

A. Required items for testing

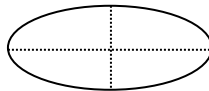
1. Barcode identification labels to be affixed to the images and the application forms.
2. Mailing labels for sending your films to the ACR.

The enclosed labels show when your testing materials are due to the ACR. Failure to meet this due date will jeopardize completion of your accreditation. If your facility is renewing its accreditation, we cannot guarantee completion before your ACR certificate expires.

3. One Test Image Data form.

B. Important considerations when selecting clinical cases

1. Submit 1 simple cyst and 1 solid mass for breast ultrasound accreditation; submit a solid mass for the biopsy module. Sonograms and correlating mammograms that demonstrate multiple cysts or masses may be submitted. However, the **cyst/mass being evaluated must be well visualized and clearly circled** on both mammographic views. This allows the ACR reviewer to determine if the physician can appropriately triangulate the cyst/mass. If you do not **circle** the cyst/mass, you will **fail accreditation**.
2. Submit 2 **orthogonal ultrasound projections** (e.g., if 1 image is in the transverse plane, the other should be in the sagittal plane) without calipers **and** 1 projection with appropriate caliper measurements of the cyst/mass in its **longest** dimension. The cyst/mass must be visible on both projections. **Only** print the requested sonographic images; do **not** submit split-screen images; do **not** submit additional images/frames. ACR reviewers will **only** evaluate the requested images.
3. To make the caliper measurements, record the dimensions to the nearest mm. For example, 4.5 to 4.9 mm rounds up to 5 mm (0.5 cm); 4.1 to 4.4 mm rounds down to 4 mm (0.4 cm). Provide the long axis measurement (image showing the longest diameter of the lesion) along with its perpendicular measurement. See below:



Note that the scan plane of the lesion's longest diameter may not correspond to the radial or anti-radial scan planes.

4. Clearly label **each image** with the information below. If the required items are absent, the case will fail.
 - Patient's first and last names (**required**)
 - Identification number and/or date of birth (**required**)
 - Examination date (**required**)
 - Facility name (**required**)
 - Facility location
 - Designation of right or left breast (**required**)
 - Anatomic location using clock face notation or labeled diagram of the breast (**required**)
 - Transducer orientation
 - Distance from the nipple to the abnormality (**required**)
 - Sonographer's and/or physician's identification number, initials or other symbol
5. Submit **original** sonograms on either film or high quality photographic paper. CDs are **not** accepted at this time. Print each case on a **separate film** (or paper).

6. Submit 2 **orthogonal views of correlating mammograms** (either copies or originals) with each case.
 - Mammograms** must have been taken **within 60 days prior to** the sonograms.
 - Mammogram copies** must be good quality and clearly labeled with the patient ID and exam date.
 - Digital mammograms** must be printed “true size” (i.e., without magnification or minification) or with a scale.
 - The cyst/mass must be visible** on both views.
 - The cyst/mass must be circled** on both views (do **not** use a radiopaque marker).
7. Label each image and form with the appropriate ACR bar-coded label (see Labeling Guide at end).
8. Do **not** submit images that are performed on models or volunteers.
9. All images for each exam must be from the same patient.
10. Do **not** send the mammography or pathology reports; they will **not** be sent to the ACR reviewers.
11. Submit examples of your best work. The ACR reviewers will evaluate your images accordingly. The facility's **breast ultrasound supervising physician must review and approve the hardcopy** images prior to labeling and sending them to the ACR for review.

BREAST ULTRASOUND CLINICAL IMAGES

- A. **Simple cyst** (Submit 1 case. Mammograms must have been taken within 60 days prior to the sonograms. The sonograms must **not be older than 6 months from the date on the application.**)

IMPORTANT: The cyst must meet the BI-RADS[®] criteria for a simple cyst: a) anechoic, b) circumscribed margin, and c) posterior enhancement. Do not submit images using methods such as compound imaging which may diminish posterior enhancement.

1. Mammograms
 - Submit **only 2** orthogonal projections (e.g., CC and MLO, CC and ML, CC and LM) of the breast being evaluated by ultrasound. **The cyst must be visible on both mammographic views.**
 - Circle only the cyst being evaluated** on each mammogram (do **not** use a radiopaque marker).
 - Label the mammograms with the **Cyst Mammo 1** and **Cyst Mammo 2** labels.
2. Sonograms **without** calipers (*print only the requested sonographic images/frames*)
 - Print 2 **orthogonal** sonographic images of the cyst **without calipers** (e.g., if 1 image is in the transverse plane, the other should be in the sagittal plane).
 - Label these images with the **Cyst Sono 1** and **Cyst Sono 2** labels.
3. Sonogram **with** calipers (*print only the requested sonographic image/frame*)
 - Print another sonographic image (of either plane) showing the appropriate **caliper measurements**.
 - Label this image with the **Cyst Sono with Calipers** label.
4. Complete the appropriate section of the **Test Image Data** form.

AND

- B. **Solid mass** (Submit 1 case with a breast mass. Do not select an intramammary node or dermal lesion. Mammograms must have been taken within 60 days prior to the sonograms. The sonograms must **not be older than 6 months from the date on the application.**)
1. Mammograms
 - Submit **only 2** orthogonal projections (e.g., CC and MLO, CC and ML, CC and LM) of the breast being evaluated by ultrasound. **The mass must be visible on both mammographic views.**
 - Circle only the mass being evaluated** on each mammogram (do **not** use a radiopaque marker).
 - Label the mammograms with the **Solid Mammo 1** and **Solid Mammo 2** labels.

2. Sonograms **without** calipers (print **only** the requested sonographic images/frames)
 - Print 2 **orthogonal** sonographic images of the cyst **without calipers** (e.g., if 1 image is in the transverse plane, the other should be in the sagittal plane).
 - Label these images with the **Solid Sono 1** and **Solid Sono 2** labels.
3. Sonogram **with** calipers (print **only** the requested sonographic image/frame)
 - Print another sonographic image (of either plane) showing the appropriate **caliper measurements**.
 - Label this image with the **Solid Sono with Calipers** label.
4. Complete the appropriate section of the **Test Image Data** form.

ULTRASOUND-GUIDED BREAST BIOPSY MODULE CLINICAL IMAGES

Options:

- Core needle biopsy (CNB) for facilities that perform **only** CNB
- Fine needle aspiration cytology (FNAC) for facilities that perform **only** FNAC of breast masses (not cysts or axillary lymph nodes)
- CNB and FNAC for facilities that perform **both** types of biopsy procedures

A. **CNB - Core Needle Biopsy** (Submit 1 BI-RADS® Category 4 or 5 case. Mammograms must have been taken within **60 days prior to the sonograms**. The sonograms must **not be older than 6 months from the date on the application**.)

1. Devices used in fire mode (i.e., fired into tissue sampling position)

a. Mammograms

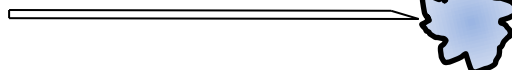
- Submit **only 2** orthogonal projections (e.g., CC and MLO, CC and ML, CC and LM) of the breast being evaluated by ultrasound. **The mass must be visible on both mammographic views.**
- Circle only the mass being evaluated** on each mammogram (do **not** use a radiopaque marker).
- Label the mammograms with the **CNB Mammo 1** and **CNB Mammo 2** labels.

b. **Pre-biopsy** sonograms in 2 views (print **only the** requested sonographic images/frames)

- Print 2 **orthogonal** sonographic images of the mass to be biopsied (e.g., if 1 image is in the transverse plane, the other should be in the sagittal plane).
- Label these images with the **CNB Pre Biopsy Sono 1** and **CNB Pre Biopsy Sono 2** labels.

c. **Pre-fire** sonogram with needle (print **only the** requested sonographic image/frame)

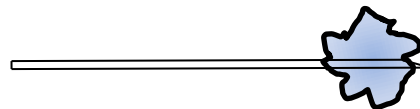
- Print a pre-fire sonographic image demonstrating the **needle aiming towards the mass just prior to insertion**. The position of the **needle should be in the long axis and approximately parallel to the chest wall**.



- Label this image with the **CNB Pre Fire Sono 1** label.

d. **Post-biopsy** (post-fire) sonogram (print **only the** requested sonographic image/frame)

- Print a post-biopsy (post-fire) sonographic image (from the same mass) demonstrating the position of the **needle in the long axis**.



- Label this image with the **CNB Post Fire Sono** label.

e. Complete the appropriate section of the **Test Image Data** form.

2. **Devices used in non-fire mode (i.e., manually advanced into biopsy position)**

a. Mammograms

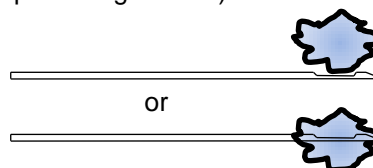
- Submit **only 2** orthogonal projections (e.g., CC and MLO, CC and ML, CC and LM) of the breast being evaluated by ultrasound. **The mass must be visible on both mammographic views.**
- Circle only the mass being evaluated** on each mammogram (do **not** use a radiopaque marker).
- Label the mammograms with the **CNB Mammo 1** and **CNB Mammo 2** labels.

b. **Pre-biopsy** sonograms in 2 views (*print only the requested sonographic images/frames*)

- Print 2 **orthogonal** sonographic images of the mass to be biopsied (e.g., if 1 image is in the transverse plane, the other should be in the sagittal plane).
- Label these images with the **CNB Pre Biopsy Sono 1** and **CNB Pre Biopsy Sono 2** labels.

c. **Post-biopsy** sonogram (print **only** the requested sonographic image/frame)

- Print a post-biopsy sonographic image (from the same mass) demonstrating the long axis of the needle in tissue acquiring position, either under or through the mass.
- Label this image with the **CNB Biopsy Sono** label.



d. Complete the appropriate section of the **Test Image Data** form.

B. **FNAC - Fine Needle Aspiration Cytology** (*If your facility performs FNAC, submit 1 BI-RADS® Category 4 or 5 case. Mammograms must have been taken within **60 days prior to the sonograms**. The sonograms must **not be older than 6 months from the date on the application.***)

Only submit images from a solid mass for FNAC; do not submit images from cyst aspirations or axillary lymph nodes.

1. Mammograms

- Submit **only 2** orthogonal projections (e.g., CC and MLO, CC and ML, CC and LM) of the breast being evaluated by ultrasound. **The mass must be visible on both mammographic views.**
- Circle only the mass being evaluated** on each mammogram (do not use a radiopaque marker).
- Label the mammograms with the **FNAC Mammo 1** and **FNAC Mammo 2** labels.

2. **Pre-biopsy** sonograms in 2 views (*print only the requested sonographic images/frames*)

- Print 2 orthogonal sonographic images of the mass to be biopsied (e.g., if 1 image is in the transverse plane, the other should be in the sagittal plane).
- Label these images with the **FNAC Pre Biopsy Sono 1** and **FNAC Pre Biopsy Sono 2** labels.

3. **Post-biopsy** sonogram (print **only** the requested sonographic image/frame)

- Print a post-biopsy sonographic image (from the same mass) demonstrating the **needle positioned clearly within the mass in the long axis.**
- Label this image with the **FNAC Biopsy Sonogram** label.

4. Complete the appropriate section of the **Test Image Data** form.

MAILING INSTRUCTIONS

WARNING: Before sending your images to the ACR be sure that the cyst/mass is clearly circled on each submitted mammogram so the ACR reviewers will be able to determine if the intended cyst/mass was imaged with ultrasound or biopsied. ***If the cyst/mass is not circled on each mammogram, your facility will fail accreditation.***

Send the Quality Assurance Questionnaire, Test Image Data form and clinical images to the following address by ***a traceable method***:

**Breast Ultrasound Accreditation Program
American College of Radiology
1891 Preston White Drive
Reston, VA 20191-4397**

Your clinical images will be returned once the accreditation evaluation is complete. Please ***maintain copies of all images submitted to the ACR***, and record the names of those patients whose clinical images were sent for accreditation until you receive official notification your accreditation is approved.

- Print each ultrasound case on a **separate film** (or paper).
- Only submit the requested sonographic images; do **not** submit additional images/frames.
- Place the appropriate label **below each required image** (e.g., the "Cyst Sono 1" label below the transverse sonogram image; the "Cyst Sono 2" label below the sagittal sonogram image.) See Sonogram Labeling Samples pictures. If this is impossible due to insufficient room on the film, draw an arrow from the label to the image it is referencing.
- **Do not** cover any pertinent clinical or identification information on either the mammogram or the sonogram images. For example, you may cover the pectoralis muscle with the label as long as it does not cover any breast tissue.

Breast Ultrasound Clinical Images

SIMPLE CYST	
IMAGES	LABELS
2-view mammogram with the cyst circled	Cyst Mammo 1 Cyst Mammo 2
2 orthogonal views (e.g. 1 transverse, 1 sagittal) with no calipers visible on the cyst	Cyst Sono 1 Cyst Sono 2
1 image with appropriate caliper measurements	Cyst Sono with Calipers

AND

SOLID MASS	
IMAGES	LABELS
2-view mammogram with the mass circled	Solid Mammo 1 Solid Mammo 2
2 orthogonal views (e.g. 1 transverse, 1 sagittal) with no calipers visible on the mass	Solid Sono 1 Solid Sono 2
1 image with appropriate caliper measurements	Solid Sono with Calipers

Ultrasound-Guided Breast Biopsy Clinical Images

CORE NEEDLE BIOPSY	
Devices Used in Fire Mode	
IMAGES	LABELS
2-view mammogram with mass circled	CNB Mammo 1 CNB Mammo 2
Pre-biopsy sonogram showing mass in 2 orthogonal views (e.g. 1 transverse, 1 sagittal)	CNB Pre Biopsy Sono 1 CNB Pre Biopsy Sono 2
Pre-fire sonogram showing needle in the long axis	CNB Pre Fire Sono 1
Post-biopsy (post-fire) sonogram showing needle in the long axis	CNB Post Fire Sono

OR

CORE NEEDLE BIOPSY	
Devices Used in Non-Fire Mode (i.e., manually advanced)	
IMAGES	LABELS
2-view mammogram with the mass circled	CNB Mammo 1 CNB Mammo 2
Pre-biopsy sonogram showing mass in 2 orthogonal views (e.g. 1 transverse, 1 sagittal)	CNB Pre Biopsy Sono 1 CNB Pre Biopsy Sono 2
Post-biopsy sonogram showing the long axis of the needle in tissue acquiring position, either under or through the mass	CNB Biopsy Sono

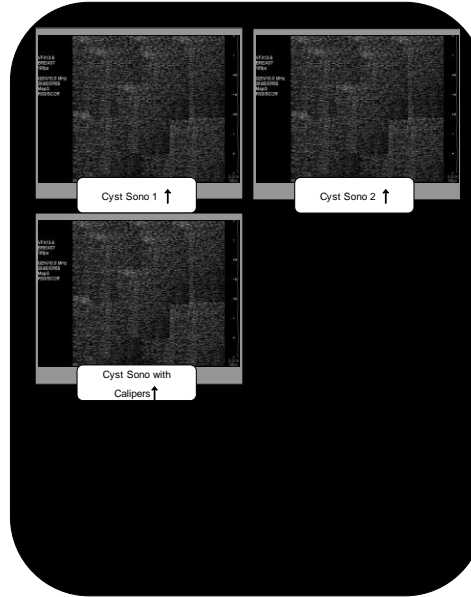
AND (if applicable)

FINE NEEDLE ASPIRATION CYTOLOGY	
IMAGES	LABELS
2-view mammogram with the mass circled	FNAC Mammo 1 FNAC Mammo 2
Pre-biopsy sonogram showing mass in 2 orthogonal views (e.g. 1 transverse, 1 sagittal)	FNAC Pre Biopsy Sono 1 FNAC Pre Biopsy Sono 2
Post-biopsy sonogram showing the needle clearly within the mass in the long axis	FNAC Biopsy Sonogram

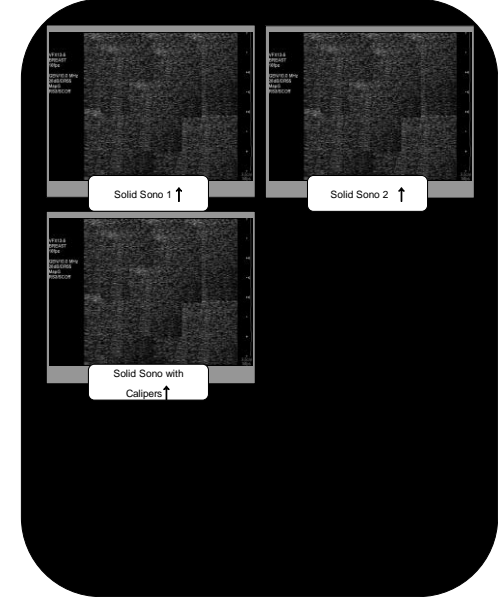
SONOGRAM LABELING SAMPLES

IMPORTANT: Only print the requested images/frames. Be sure that the ACR bar-coded labels are placed *below* the requested image *without covering any pertinent clinical or identification information* on either the mammograms or the sonographic images.

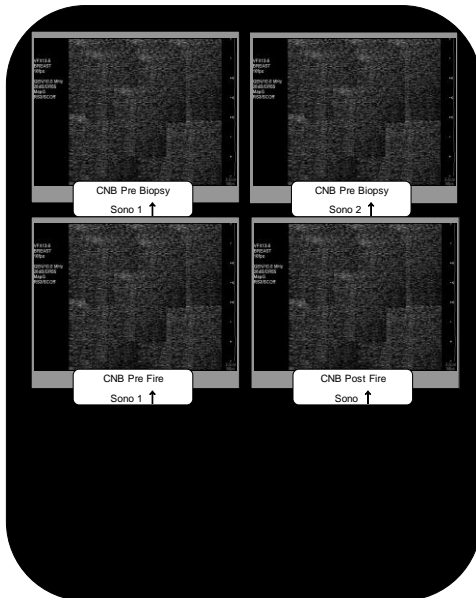
Breast Ultrasound – Simple Cyst



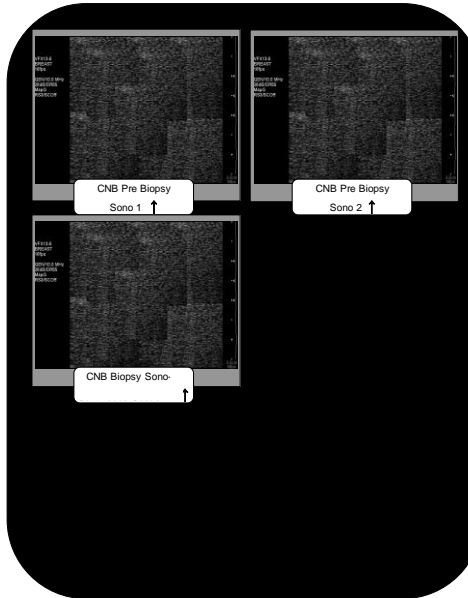
Breast Ultrasound – Solid Mass



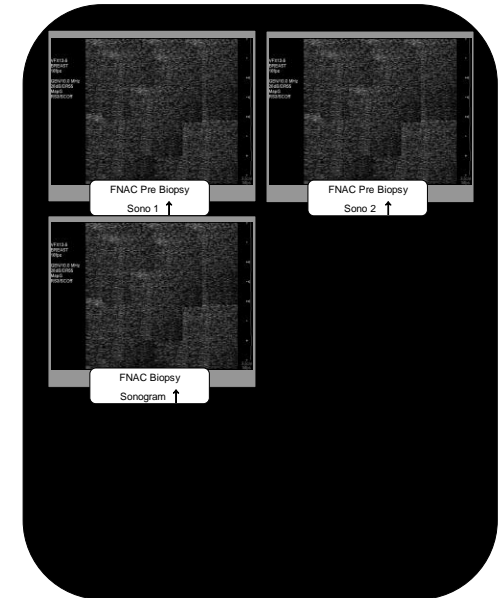
CNB – FIRED DEVICES



CNB – NON-FIRED DEVICES



FNAC



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