

# NVIR PROCEDURE WORKFLOW

**730 AM – NVIR TEAM MEETS TO GO OVER CASES FOR THE DAY. AT LEAST ONE SONOGRAPHER IS REQUIRED TO BE THERE TO TAKE NOTES.**

**Current procedural assistant hours are 7am -330pm M-F, with lunch from 12-1pm**

## NVIR SCHEDULE IN EPIC

*Go to Status Board at top of screen (may need to set up this tab in Settings). Choose **NVI Body** if it is not set as the default.*

### **COLOR CODING:**

Beige – Scheduled

Blue – Checked in

Yellow – “In Pre” status - means they are in a Bay or getting into room

Pink - RN work up is done

Green – “In Room” status means they are in a procedure room

Dark Blue- RN completed documentation

### **NOTE FIELDS:**

#### Order Notes:

- Study Note – Will show up on general US board but not NVIR board. Use to put in your name and US room # so others can see where you are at. This section does not show up until the patient arrives.
- Appointment Request – Will show up on NVIR White Board, use for RN number or calling patient down, also add your name and US room #

#### Appt Notes:

- Used by doctors and APPs for protocol info. Shows up as “Scheduling Note” in header.

## ROOMING THE PATIENT & TRAY SET UP

- Set up tray according to the procedure being performed. See below for trays set ups.
- When patient is roomed, go to “Move patient” tab and choose “Events” and then scroll down to “In Room.”

# BEFORE THE PROCEDURE

## 1. PRINT LABELS –

- **PATIENT LABELS** print to **U-RAD-E032**. The Procedural Assistant will usually print them all in the morning. If you need to print them, it is the same process as when printing labels for the Trophon. At least two should be printed for the consent form. If it is a research patient additional labels are needed.
- **SPECIMEN LABELS** print to **U-RAD-E030** (or U-RAD-E022 in the ultrasound office.) Always PAUSE and double check the correct printer is selected before proceeding, specimen labels cannot be reprinted easily. If we need to have them reprinted, we need to call the lab to have them print it there or print the paper sheet and use patient labels. Pathology specimens can be reprinted from the same screen.

To print labels:

- In the End Navigator, Select “Next Step,”
- In right hand column select “**Specimen Collection**”
- If order is not released, or you do not see it, ask APP or doctors to release so that you can print it.
- For some of the orders, we can release them in the “Jump to Order Review” so always look there also.



## 2. BEGIN TIMEOUT IN EPIC–

- When an RN is involved in case, they will fill out the timeout.

- When no RN, the sonographer should fill out the **Pre-Procedure and Final Verification** in advance and put in pending status to return to at time of procedure.

- In End Exam Navigator - Select “Next Step”
- In right hand column select “**Timeout**”
- Select Yes to all, except for - Antibiotics Available – select N/A for that.
- Choose the appropriate Sedation to be used. Lidocaine is considered “Local Anesthesia”
- Enter all names of people involved in procedure, even if they are just observing.
- Put in **Pending** status and return to sign it at time of SCOAP 1 and 2.

Preparation

Introductions / appropriate staff present?	Yes	No	
Consents verified?	Yes	No	N/A
Pre-procedure H&P or MD/APP Moderate Sedation Pre-procedure Asmt/H&P	Yes	No	N/A
Allergies reviewed?	Yes	No	N/A
Pre-Operative orders reviewed?	Yes	No	N/A
Antibiotics ordered & given?	Yes	No	N/A
Imaging studies available?	Yes	No	N/A
Lab results available & reviewed?	Yes	No	N/A
Availability of special equipment / meds / blood?	Yes	No	N/A
All syringes labeled with contents?	Yes	No	N/A
Safety / fire precautions reviewed?	Yes	No	N/A
Procedure plan reviewed?	Yes	No	N/A
Yes all			
Sedation / Anesthesia plan:		No Sedation	Local Anesthesia
		Minimal Sedation	Moderate Sedation
		Anesthesia MAC	Anesthesia GA

## DURING THE PROCEDURE

1. **CHECK THAT THE PATIENT HAS A WRIST BAND.** All procedure patients need one regardless of if they are being admitted or not.

<p style="text-align: center;"><b>PAUSE!!!</b></p> <p><b>BEFORE GOING IN ROOM...DID YOU...</b></p> <ol style="list-style-type: none"><li>1. <b>Close patient in EPIC on workstation so you can open it in room.</b></li><li>2. <b>Print specimen labels</b></li><li>3. <b>Confirm target location</b></li><li>4. <b>Start timeout</b></li></ol>
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2. **LOOK FOR TARGET –**

- Attach biopsy guide if needed, set appropriate angle to be used.
- Measure lesion if targeted.
- Measure distance to target or region of interest.
- Check for blood vessels within superficial tissues as well as path to target, ALWAYS double check with **light pressure** to look for compressible veins.
- TIP: Use Max View for bigger image and Wide Screen to see needle in superficial tissues better.

3. **MARK SITE –**

- Mark needle entrance site with doctor or APP present.
- It is helpful to mark the position of transducer to make it easier to reproduce.
- If using a biopsy guide, make sure it is on before you mark the patient.

4. **TAKE IMAGE** with color proving you looked for vessels (with light pressure also) and showing the decided-on path to target.

5. **USE MAX VIEW** for bigger image and Wide Screen to see needle in superficial tissues better.

6. **TIMEOUT COMPLETED IN EPIC WHEN ALL PARTIES ARE PRESENT -**

The RN, sonographer or IR tech are the only ones who can complete the timeout.

- Check wrist band – correct patient?
- Check ultrasound machine – Correct patient info on screen?
- Review order in EPIC –
  - Correct patient?
  - Correct procedure and side?
  - Relevant Allergies?
  - Labs have been checked and meet requirements?
  - Post procedure plan gone over – going to floor, home or PACU?
- If you do not have access to EPIC at the time of exam, this should still be done. Take note of the time and the time stamp should be changed to match when EPIC is available.

# DURING THE PROCEDURE *continued...*

## 7. STERILE GLOVES AND PROBE

### COVER -

- Before putting on gloves, make sure they do not need help with lidocaine or other supplies.
- If using a biopsy guide, double check that the angle is set to correspond to what was selected on the screen before putting the cover on.

### **PAUSE!!!**

#### **BEFORE PUTTING ON GLOVES ... DID YOU ...**

- 1. Do Timeout**
- 2. Adjust biopsy guide angle if using one**
- 3. Put gel on probe**
- 4. Put screen in Max view**
- 5. Check the team doesn't need any supplies or help with lidocaine.**

## 8. PROVIDE GUIDANCE FOR THE RADIOLOGIST

- Communicate clearly about where the needle tip is and how they should adjust to be lined up with the probe and target.
- If you cannot see the needle and they need to readjust, ask them if they would like you to find the needle or if they are going to come to you. Avoid having two moving targets, this will be hard to find each other.
- Some radiologists prefer to scan for themselves, that is fine! Try to keep your right hand sterile in case they need to hand you the probe or change their mind about having you scan.

## 9. IMAGES TO DOCUMENT

- Document a color image verifying you looked for vessels again before starting.
- Each pass should be documented with 2D image showing needle track Label each image with Pass 1, Pass 2 etc

## 10. TAKE POST IMAGES

- 2D image showing no hematoma and color image showing no active bleeding along path of biopsy.
- If there is active bleeding, inform the radiologist and they can apply pressure, or you can. Look again after pressure has been applied for a few minutes to see if the active bleeding has stopped. If not, continue to apply pressure or until the radiologists says it looks ok.

## AFTER THE PROCEDURE - WHILE IN ROOM

### 1. SPECIMEN COLLECTION-

- Attach specimen labels to corresponding specimen before scanning.
- In End Navigator, select “Next Step.” In right hand column select “Specimen Collection”
- Click on any specimen with “Collect” next to it.
- It will prompt you to scan patient wristband.
- Scan corresponding specimen label. It should always be attached to the specimen before scanning! If there are multiple barcodes it is usually the one that says ACC on the right hand side.

### 2. CHARGE FOR SUPPLIES –

- In End Navigator, Select “Next Step”, in right hand column select “Supplies”
- There is a list of chargeable supplies hanging in the rooms.

### 3. OUTPATIENT - GIVE POST PROCEDURE PAPERWORK

### 4. INPATIENT - ORDER TRANSPORT if it is an inpatient, or talk to Marie to arrange transport back to room.

### 5. END THE EXAM IN EPIC

### 6. CLEAN UP – Be sure to grab consent form!

## AFTER THE PROCEDURE - IN OFFICE AREA

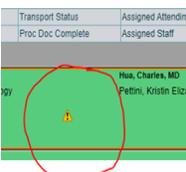
### 1. CONSENT FORM – Put in file bin on PSS’s desk.

### 2. SAMPLE – The radiologists should take the sample from the room, but if they did not, put the sample on the procedure assistant’s desk in either routine bin or same day bin depending on what was ordered. If it is after 3:30pm, the procedural assistant will be gone for the day, so please remind the doctor or APP who did the procedure to take the samples to the lab.

### 3. EPIC - When patient has left room, and RN charting is complete, go to “Move patient” tab and choose "Events" and then scroll down to "Out of room". It will fall to the end of the list.

### 4. The exam will turn dark blue when the nurse are done or the charting column will have a check mark. If it is the caution sign they are still with patient.

### 5. VIEWPOINT - Put exam in “Procedure/Powerscribe” status in Viewpoint.



### **PAUSE!!!**

#### **BEFORE MOVING ON ...DID YOU...**

- 1. Document Timeout with accurate time**
- 2. Scan specimen & put where needs to go**
- 3. Add supply charges**
- 4. Order transport if inpatient**
- 5. Give patient post procedure care form**
- 6. Take consent form out of room**
- 7. End Exam**

## SPECIMENS

\*\*Ensure every container/vial are labeled with correct patient specimen label

### Fluids (Ascites/Pleural effusion/body fluids)

- a) Microbiology testing: 20-30 mL syringe with red cap
- b) Biochemistry testing (protein, glucose, LDH, etc): 20-30 mL syringe with red cap



- c) Cytology non-GYN: Send 1 liter bottle (plastic Merit bottle or glass bottle) Red cap and close valve on the plastic bottle. Minimal of 100 ML is needed for cytology testing.



- d) EVAL HD fluid: 30 mL syringe with red cap



## Tissue

a) Pathology: Orange cap: formalin



b) EVAL HD: At least one sample in RPMI and one sample into Formalin



c) Microbiology: Cores on Telfa or into saline (squirt into blue top sterile container)



## **Thyroid/Lymph node FNA Samples:**

- a) Cytolyte: 22g needle on 10 mL syringe, do passes and squirt specimen into Cytolyte container. Suck up some Cytolyte fluid and push back out to “wash” out needle.



- b) Flow cytometry: 1 pass into RPMI tube



## **Native Renal Tissue:**

- a) Three vials (Green top, Red Top, Blue Top): Tissue in each vial



# NVIR TRAY SET UP

## FNA SET UP



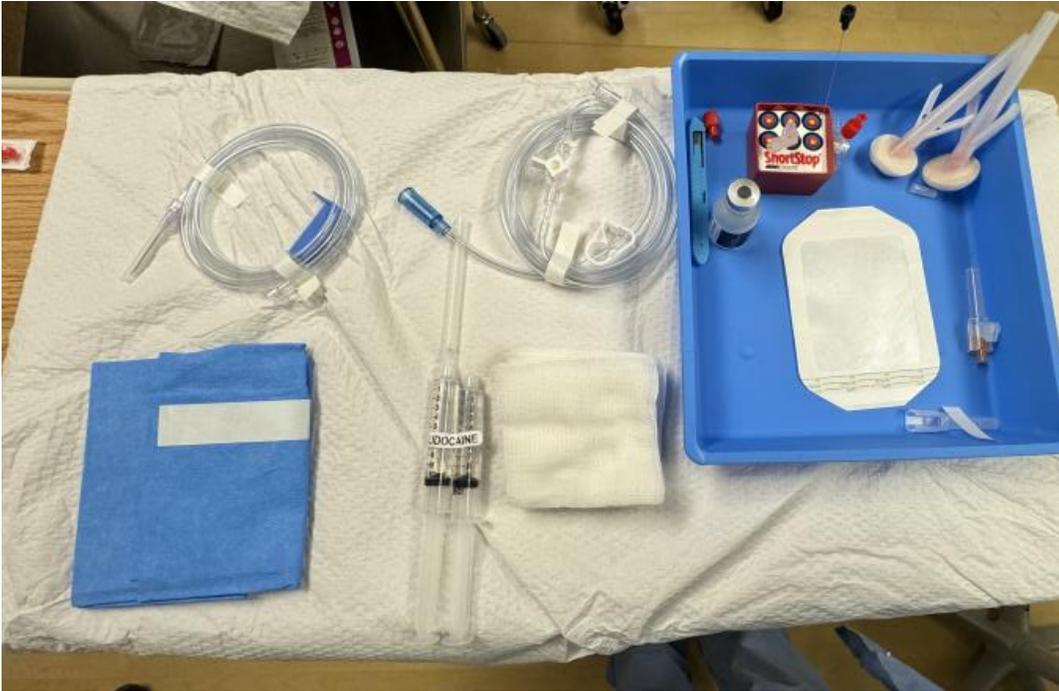
**BIOPSY KIT**  
**TOWEL PACK**  
**5 -10CC SYRINGES**  
**5 -22g NEEDLES**  
**25g NEEDLE for lido**

## BIOPSY SET UP



**BIOPSY KIT**  
**TOWEL PACK**  
**25g NEEDLE for lido**  
**TELFA PAD**  
**(SALINE SYRINGE – Packaging is not sterile so do not put on tray. Only the solution itself is sterile.)**

## PARA/ THORA SET UP



**THORA KIT**  
**RED CAP**  
**25g NEEDLE** for lido

**IF DIAGNOSTIC:**  
**2 - 20 or 30cc syringe**  
**with extra red caps**