# AUSTIN RADIOLOGICAL ASSOCIATION ULTRASOUND PROTOCOLS

# **Procedure Name:** Liver Elastography

#### **Indications:**

Fibrosis staging of chronic liver disease, with the main objective of determining the presence or absence of advanced fibrosis.

### **General Description:**

This is a screening to access the stiffness of the liver and thus stage the degree of fibrosis.

#### **Patient Preparation:**

NPO for 6 hours.

## **Equipment Selection and Settings:**

Select abdomen from preset menu. A curvilinear 6 MHz transducer will be used for most patients.

### Positioning of Patient, Transducer and ROI:

- 1. Patient should be supine or slight (30°) left lateral decubitus position with right arm elevated above the head to increase intercostal space
- 2. An intercostal approach to the right lobe of the liver is preferred
- 3. Measurement should be taken during breath hold in a neutral breathing position.
- 4. Optimize the B-mode image for the best acoustical window avoiding large vessels, bile ducts, gallbladder, rib shadows and bowel gas
- 5. ROI should be placed 2cm below Glisson capsule
- 6. ARFI pulse should be perpendicular to the liver capsule

#### **Imaging:**

- 1. Image patient data (demographics page)
- 2. If abdomen complete or limited is also requested, perform those required images first
- 3. With elastography turned on, choose liver assessment, site 1
- 4. The patient only needs to hold his or her breath for a few seconds; it may be helpful to practice the breath hold with the patient prior to initiating elastography; obtaining a measurement in deep inspiration or with a Valsalva maneuver can give inaccurate measurement
- 5. Obtain ten measurements in the same location
- 6. Fill out worksheet