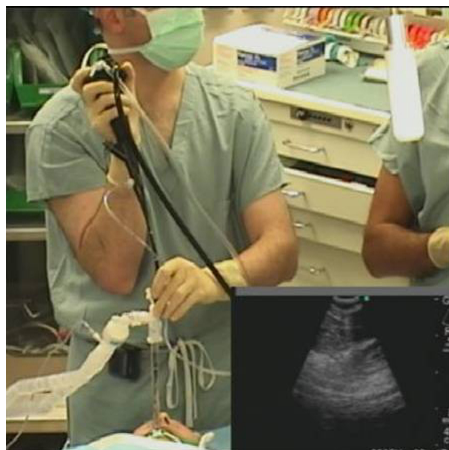


INSTRUCTIONS AND ANSWERS

EBUS Skills and Tasks Assessment Tool (EBUS-STAT)



- Items 1-10 may be scored separately.
- A passing score of 100 is expected to reflect competency.
- Scores >100 should initiate instructor-learner feedback
- Assessments may be performed in models or in patients.
- Knowledge of nomenclature (common language) for EBUS imaging can be assessed using the quiz. Recognition of findings can also be assessed during procedures, in which case instructors may prefer to use the quiz as a learning guide.
- The combined use of the 10 items pertains to technical skills needed to climb the learning curve from novice to competent bronchoscopist able to independently perform EBUS and EBUS-TBNA.
- This assessment tool is complementary to other methods of assessment such as practical approach exercises, checklists, logbooks of numbers of procedures performed, and outcomes.



USER INSTRUCTIONS

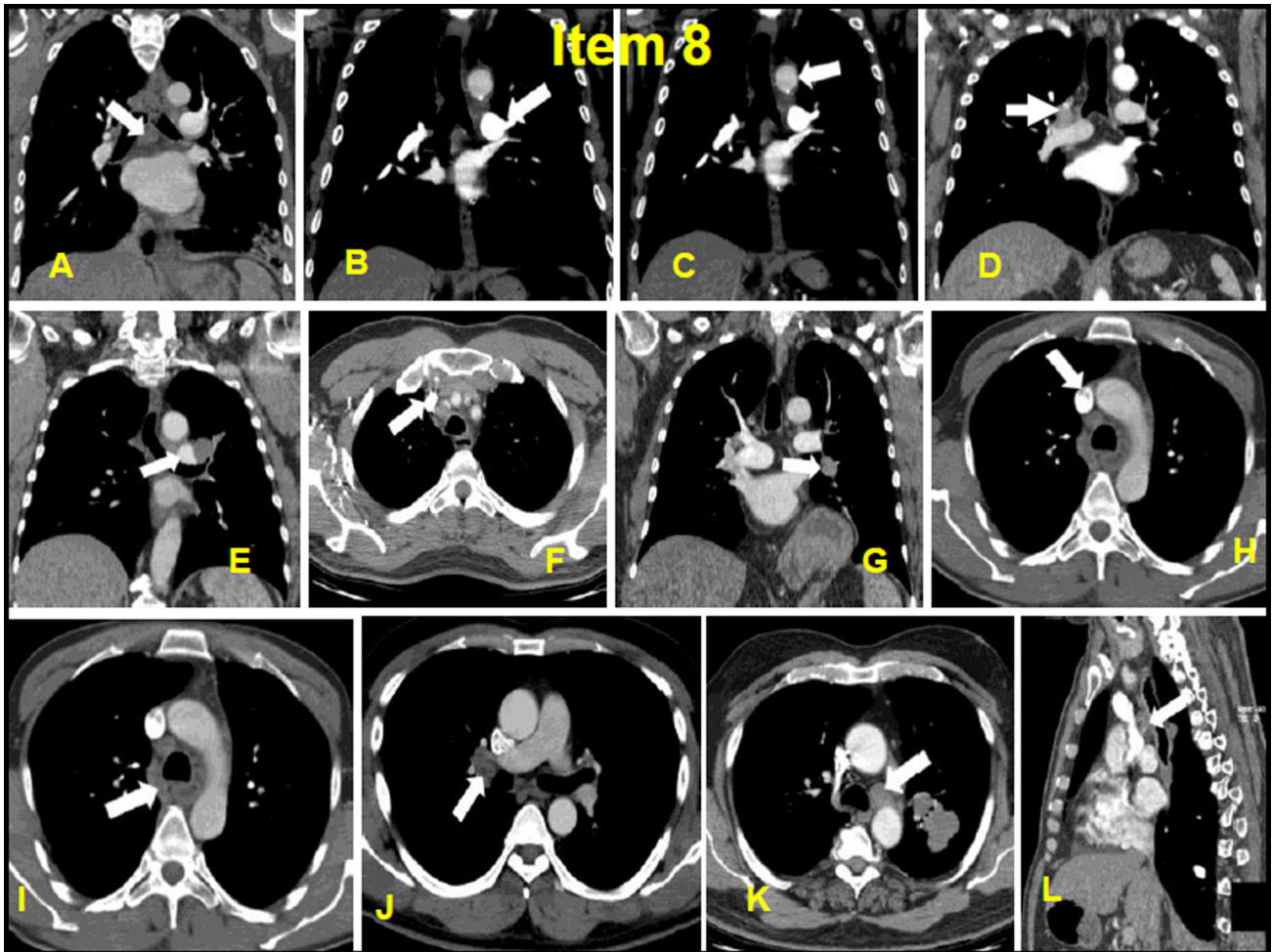
EBUS-STAT 10 Point Assessment Tool

Learner _____ Training Year _____

Faculty _____ Date _____

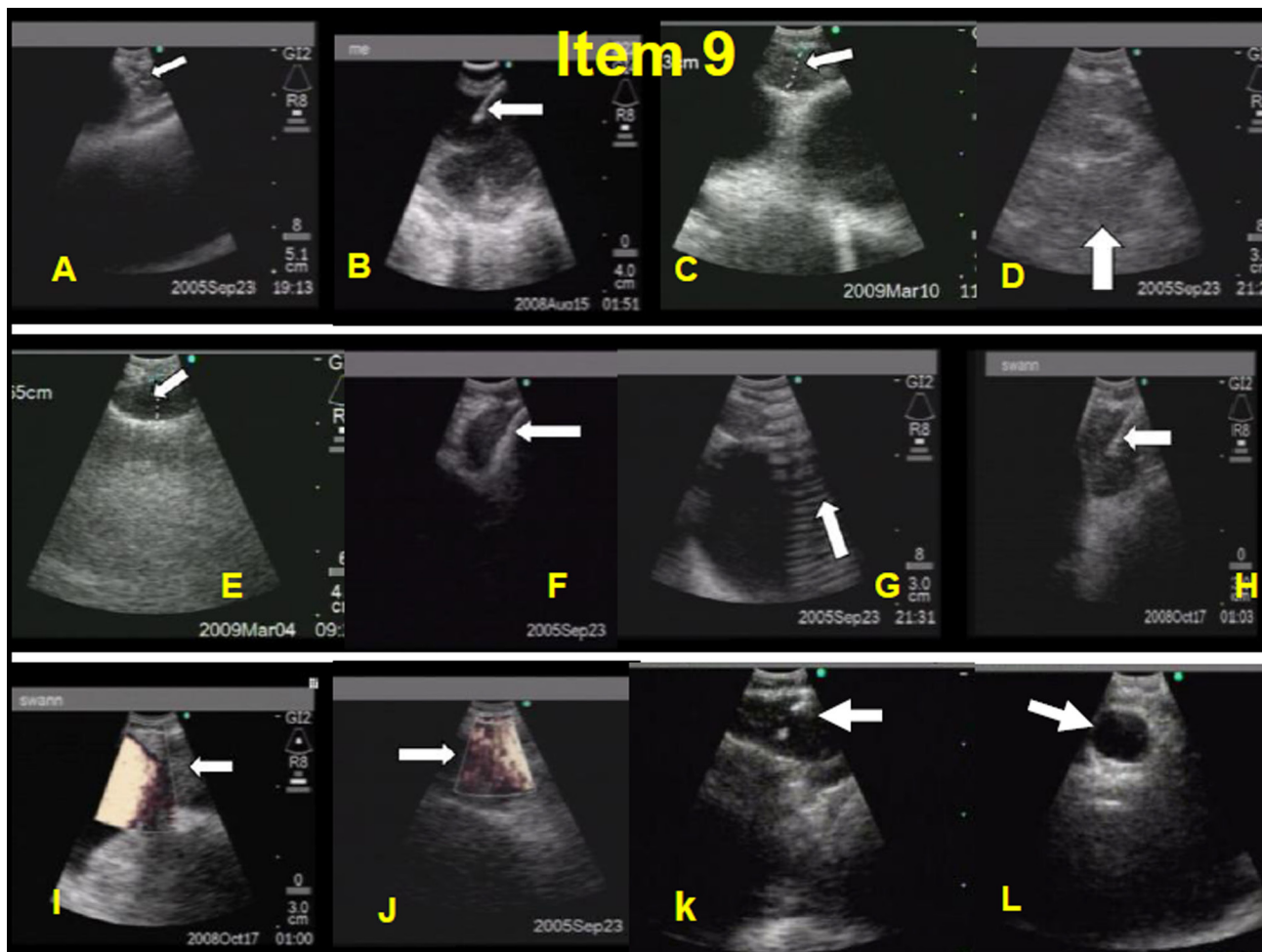
Educational Item* Items 1-10 each scored separately	Satisfactory Yes/No
<p>1. Able to maneuver the scope through upper airway into trachea, without trauma or difficulty (5 points for single item tested)</p> <p><input type="checkbox"/> Mouth and Vocal cords <input type="checkbox"/> ET Tube <input type="checkbox"/> Laryngeal mask airway</p> <p>* Educators may wish to “test” only one technique applicable to their institution. This is an “All or None” exercise. No partial points are given. When EBUS-STAT is used as a learning instrument, all THREE techniques should be demonstrated in order to obtain FIVE points.</p>	<p>Yes / No</p> <p>Score ____ /5</p>
<p>2. Able to maneuver scope using white light bronchoscopy within tracheobronchial tree without trauma (4 points, no partial points)</p> <p><input type="checkbox"/> Scope centered in airway lumen avoiding airway wall trauma</p> <p>*The learner should be able to maneuver between lateral and medial walls without traumatizing main and minor carinas.</p>	<p>Yes / No</p> <p>Score ____ /4</p>
<p>3. Ultrasound image obtained without artifacts (5 points, no partial points)</p> <p><input type="checkbox"/> Absence of artifacts on image, any target</p> <p>*Targeting any nodal station, a sharp image without artifacts should be obtained.</p>	<p>Yes / No</p> <p>Score ____/5</p>
<p>4. Identify major mediastinal vascular structures (4 points per item)</p> <p><input type="checkbox"/> Aorta <input type="checkbox"/> Pulmonary artery <input type="checkbox"/> Superior vena cava <input type="checkbox"/> Azygos vein <input type="checkbox"/> Left atrium</p> <p>*Each of the vascular structures should be identified on demand. It may be necessary to score this item in several patients.</p>	<p>Yes / No</p> <p>Score ____/20</p>
<p>5. Identify lymph node station (Select 3 targets, 5 points each)</p> <p><input type="checkbox"/> 2R <input type="checkbox"/> 2L <input type="checkbox"/> 4R <input type="checkbox"/> 10R <input type="checkbox"/> 7 <input type="checkbox"/> 4L <input type="checkbox"/> 10L <input type="checkbox"/> 11L <input type="checkbox"/> 11Rs <input type="checkbox"/> 11Ri</p> <p>* Target stations are selected based on indication, anatomy, and instructor preference. To identify all nodal stations, more than one patient may be necessary. In this case, instructors may choose to readminister EBUS-STAT. Stations 2, 4, and 7 can be scored in a low-fidelity model.</p>	<p>Yes / No</p> <p>Score ____/15</p>

EBUS Skills and Tasks Quiz Answers



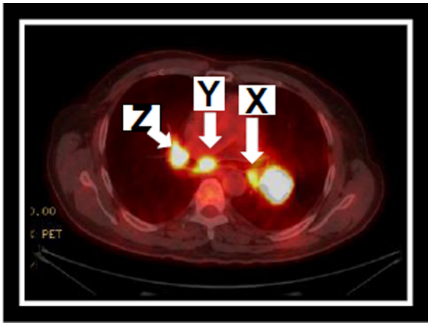
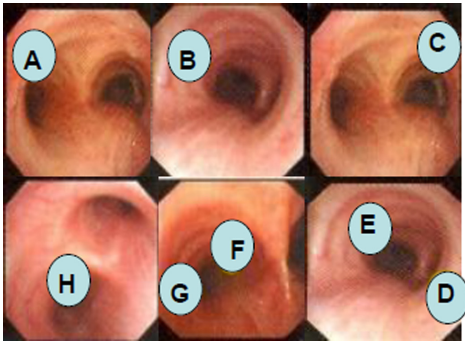
ITEM 8: Match the photo (A-L) to the corresponding 10 CT scan descriptions (Only one response per description)			
<p>H Superior vena cava adjacent to 4R</p>	<p>F Inominate vein adjacent to 2R</p>	<p>B Pulmonary artery adjacent to 4L</p>	<p>C Aortic arch adjacent to 4L</p>
<p>I Azygos vein adjacent to 4R</p>	<p>A Station 7 adjacent to left atrium</p>	<p>G Station 11L with adjacent lung</p>	<p>D Station 10R</p>
<p>K Station 4L in axial view</p>	<p>E Pulmonary artery adjacent to 10L</p>	<p>NO RESPONSE</p>	

EBUS Skills and Tasks Quiz Answers

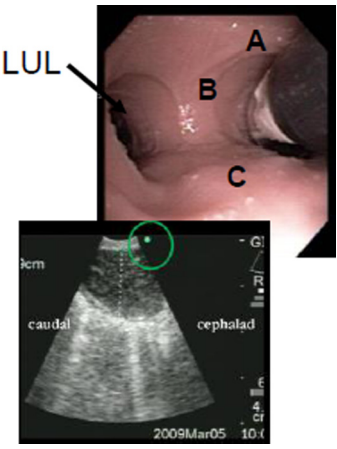
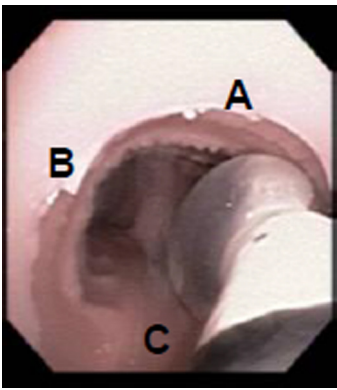
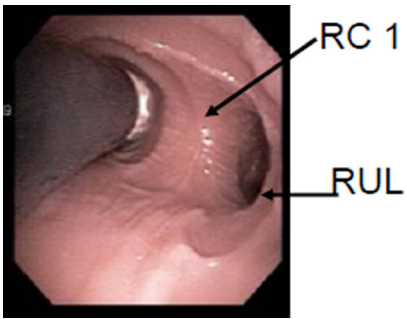


ITEM 9: Match the photo (A-L) to the corresponding 10 EBUS views (Only one response per description)			
<p>A Station 4R adjacent to pulmonary artery superior vena cava and ascending aorta</p>	<p>F Needle penetrating through and through</p>	<p>B Needle missing target node</p>	<p>C Station 4L adjacent to aorta and pulmonary artery</p>
<p>I Station 4L adjacent to pulmonary artery</p>	<p>H Needle within lymph node</p>	<p>D Normal lung</p>	<p>G Reverberation artifact</p>
<p>J Station 7 adjacent to left atrium</p>	<p>E Hilar node adjacent to normal lung</p>	<p>NO RESPONSE</p>	

ITEM 10: Choose **One** best answer for each question

<p>1. Three FDG avid nodes are noted on Fusion PET-CT in a patient with a Left Upper Lobe PET positive mass. Which node (x, y or z) should be sampled first?</p>	<p>2. Where is the node located (needle insertion site A, B, C, D, E, F, G or H) using white light bronchoscopy?</p>
	
<p>Answer Z</p>	<p>Answer H</p>

ITEM 10: Choose **One** best answer for each question

<p>3. To sample level 11L, point the scope towards (A), (B), (C).</p>	<p>4. When sampling level 4R, consider pointing the scope towards A, B or C).</p>	<p>5. The Interlobar Pulmonary Artery is most likely seen when sampling level (A) 10R, (B) 11R, or (C) 12R</p>
		
<p>Answer B</p>	<p>Answer A</p>	<p>Answer B</p>

END