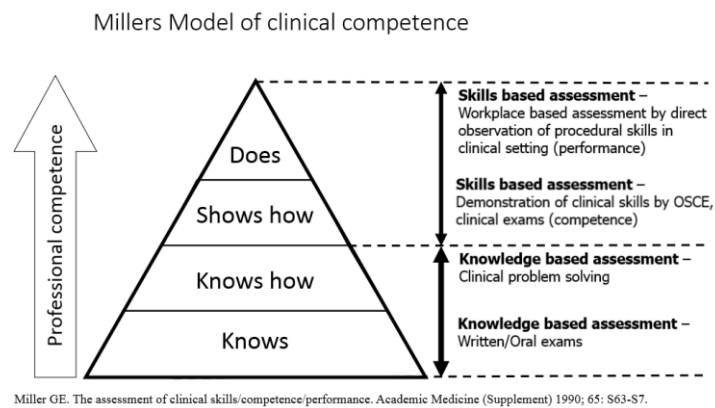


ERS training programme Endobronchial ultrasound (EBUS) – Part 2

LEARNING OUTCOMES

Building on the knowledge gained in part 1 of the training programme this part will further develop the skills and attitudes required to independently perform EBUS.

Part 2 of the EBUS training programme will cover all learning outcomes in the curriculum up to the 'knows how' and 'shows how' (level 2-3) of the Millers Model of clinical competence.



TEACHING AND LEARNING METHODS

Directed learning
Self-regulated learning
Independent learning
Observation of EBUS procedures in a clinical setting

ASSESSMENTS

EBUSAT and direct observation

AMSTERDAM

Monday	Active clinical observation	Amsterdam UMC, location VUMC
09:00 – 09:30	Introduction to the procedure	J. Annema
09:30 – 15:30	Active observation and discussion of EBUS procedures	J. Annema
Tuesday	Simulator training	Amsterdam UMC, location AMC
09:00 – 09:30	Introduction to the simulator	L. Crombag
09:30 - 16:30	Directed, self-regulated learning	M. van de Pol
Wednesday	Active clinical observation	Amsterdam UMC, location AMC
09:00 – 12:30	Active observation and discussion of EBUS procedures	J. Annema, L. Crombag, P. Bonta

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	Simulator training	Amsterdam UMC, location AMC
13:00 - 15:30	Directed, self-regulated learning	M. van de Pol
15:30 – 16:15	Test and certification (participant 1)	J. Annema, L. Crombag, P. Bonta
16:15 – 17:00	Test and certification (participant 2)	J. Annema, L. Crombag, P. Bonta

ANCONA

Thursday	Active clinical observation	
09:00 – 12:30	Observation and discussion of EBUS procedures	S.Gasparini, L. Zuccatosta
	Simulator training	
13:00 – 14:30	Introduction to the procedure and the simulator	S.Gasparini, L. Zuccatosta
14:30 – 17:00	Directed, self-regulated learning	Simulator assistant S. Gasparini, L. Zuccatosta, F. Gonelli, L. Cirilli, F. Porcarelli
Friday	Active clinical observation	
09:00 – 12:30	Observation and discussion of EBUS procedures	S.Gasparini, L. Zuccatosta
	Simulator training & assessment	
13:00 – 15:30	Directed self-regulated learning	Simulator assistant S. Gasparini, L. Zuccatosta, F. Gonelli, L. Cirilli, F. Porcarelli
15.30-16.15	Test and certification (participant 1)	S.Gasparini, L. Zuccatosta
16.15-17.00	Test and certification (participant 2)	S.Gasparini, L. Zuccatosta

ATHENS

Thursday	Active Clinical observation	
09:00 – 12:30	Observation and discussion of EBUS procedures	Gr. Stratakos, S. Chrysikos
	Simulator training & assessment	
13:00 – 14:30	Introduction to the procedure and the simulator	Gr.Stratakos S. Chrysikos
14:30 – 17:00	Directed, self-regulated learning	Gr. Stratakos S. Chrysikos N.Anagnostopoulos Ph.Emmanouil
Friday	Simulator training & assessment	
9:00 – 12:30	Observation and discussion of EBUS procedures	Gr. Stratakos Ph. Emmanouil

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13:00 – 15:30	Directed, self-regulated learning	Simulator assistant S. Chrysikos, N.Anagnostopoulos, Ph.Emmanouil
15:30 – 16:15	Test and certification (participant 1)	Gr.Stratakos, S.Chrysikos
16:15 – 17:00	Test and certification (participant 2)	Gr.Stratakos, S.Chrysikos

COPENHAGEN

Monday	Simulator training (CAMES)	
13:00 – 14:30	Introduction to the procedure and the simulator	Paul Frost Clementsen
14:30 – 17:00	Directed, self-regulated learning	Simulator assistant
Tuesday	Simulator training & assessment (CAMES)	
09:00 – 12:30	Directed, self-regulated learning	Simulator assistant
13:00 – 13:30	Test and certification (participant 1)	Paul Frost Clementsen
13:30 – 14:00	Test and certification (participant 2)	Paul Frost Clementsen
Wednesday	Active clinical observation (Bispebjerg University Hospital)	
08:00 – 15:00	Active observation of procedures in a clinical setting	

HEIDELBERG

Tuesday	Active clinical observation	
09:00 – 12:30	Active observation and discussion of EBUS procedures	F. Herth, K. Kontogianni
	Simulator training	
13:00 – 14:30	Introduction to the procedure and the simulator	F. Herth, K. Kontogianni
14:30 – 17:00	Directed, self-regulated learning	Simulator assistant
Wednesday	Simulator training & assessment	
09:00 – 15:30	Directed, self-regulated learning	Simulator assistant
15:30 – 16:15	Test and certification (participant 1)	F. Herth, K. Kontogianni
16:15 – 17:00	Test and certification (participant 2)	F. Herth, K. Kontogianni



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PROGRAMME SESSION DESCRIPTION:

ACTIVE CLINICAL OBSERVATION

This part of the training allows you to see the EBUS procedure in a real-life setting. The teacher (expert) should take time prior to the procedure to talk you through the indications, the planning of the procedure and how the patient will be prepared for the procedure.

To ensure that you make the most of this active observing opportunity, you will be asked to rate the teachers performance on **three cases** using the EBUSAT framework (directly in the assessment platform). You will also have the opportunity to note down any comments or reflections you have during the procedure to discuss with the teacher at an appropriate moment during or after the procedure. Participants should enter this data onsite and in any case no longer than 5 days after the end of the course. This is a requirement for participants to pass Part 2 and be eligible to go on with Part 3 of the training programme. Detailed instructions on how to enter the necessary data follow:

1. Please access the platform using your personal login:
<http://education.ersnet.org/course/view.php?id=16>
2. Within the first module, choose the case that you want to rate:

3. Click on the 'grade' icon:



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4. Complete all 12 criteria (lines) of the grading table

Grade

Grade

Grade:

Please evaluate the actions of the expert.
You can add comments for your personal reference.

When you have completed the grading, please change the "Marking workflow state" to "Marking completed"

	1	2	3	4	5
Insertion of the endoscope (incl. passage of vocal cords)	Unable to insert endoscope <i>1 points</i>	<i>2 points</i>	Needs several attempts to insert endoscope <i>3 points</i>	<i>4 points</i>	Perfect insertion of endoscope at first attempt <i>5 points</i>
Presentation of region 4 L (including aorta & a.pulm)	Not visualized <i>1 points</i>	<i>2 points</i>	Visualized with difficulty or badly presented <i>3 points</i>	<i>4 points</i>	Perfectly visualized with apparent ease <i>5 points</i>
Presentation of region	1	2	3	4	5

5. Scroll down to "Marking workflow state" and
- Change the 'Marking workflow state' to 'Released'
 - Add any comment or reflection that you want save for your personal use
 - Click 'Save changes'

Marking workflow state ? Released

Allocated Marker ? Pascal Kurosinski (ERS)

Current grade in gradebook 4.00

Feedback comments

really an expert

Notify students No

Save changes Cancel

Back

6. Click 'Continue', scroll down and click 'Back to the course homepage'.

7. Participants are recommended to enter the required data during their training onsite. Should it not be possible, please use the below paper form for your reference and transfer the data to the online platform as soon as possible.

	Performed by supervisor	Performed with guidance	Performed by trainee with no or minimal guidance
Insertion of the endoscope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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SIMULATION BASED TRAINING

After the introduction to the simulated EBUS procedure, you will have the opportunity to practice the EBUS procedure on the simulator. During the self-training session, you will follow the programme that is provided, completing the tasks and cases on the EBUS module. A training assistant will be available for support and guidance.

SIMULATED EBUS ASSESSMENT

The test consists of 2 EBUS procedures on simulator patient cases. The participant will have to perform a complete procedure including introduction of the scope, identification of the six anatomical landmarks in the correct order, checking for enlarged lymph nodes and obtaining two biopsies from one of the stations.

The targeted goal is to perform the procedure consistently and in a secure fashion in less than 10 minutes. You will have a maximum of 2 opportunities to pass the test onsite. If the assessment is failed you will need to re-sit part 2 of the training programme.