

ERS Training programme
Endobronchial ultrasound - Part 1
Online modules

Module number	Module	Faculty member	Syllabus item
1	Lymph node map		1
2	Mapping in the airways		2
3	Positron emission tomography – computed tomography (PET-CT)		3
4	Indication assessment		4
5	Planning of the procedure & preparation of the patient and monitoring		5, 6
6	EBUS		11
7	EUS-B		12
8	Complications		15

Please allow approximately 20-30 minutes to complete each module.

Please note that the online modules should be completed before attending the on site course. The modules will be available on the [Learning Resources website](#) 4 weeks prior to the course taking place.

ERS Training programme
Endobronchial ultrasound - Part 1
Onsite programme
27-28 June 2017

Tuesday, 27 June 2017

Session 1	Min		Format	Faculty member	Syllabus item
08:00–08:15		Course registration			
08:15–08:45		Welcome and introduction of the training programme		Organising committee	
08:45–09:30	45	Lightening lecture with summary of all pre-procedure topics	Lecture		1, 2, 3, 4, 5, 6
Chairs: P. Clementsen, L. Konge					
09:30–09:45	15	Case example 1 - Staging of lung cancer	Case example		4, 12 incl. 1-6
09:45–10:00	15	Case example 2 - EUS-B enlarged LN 8+9	Case example		4, 13 incl. 1-6
10:00–10:15	15	Case example 3 - Sarcoidosis	Case example		4, 12 incl. 1-6
10:15–10:30	15	Case example 4 - LN position (not reachable by EUS-B)	Case example		4, 12 incl. 1-6
10:30–11:00	30	<i>Coffee break</i>			
Session 2					
11:00–11:45	45	EBUS & EUS-B indications and contraindications	Lecture		4, 6, 11, 12
11:45–12.25	40	EBUS-TBNA: technique and performance	Lecture		11, 13, 14, 15
12:25–13.00	35	EUS and EUS-B: technique and performance	Lecture		12

13:00–14:00	60	Lunch			
Session 3 Workshops 14:00 – 17:30					
The participants will be divided into groups of 10 and will rotate the four workshops. Each workshop is repeated four times.					
	45	Workshop 1 - EBUS. Cases presenting specific decisions related to EBUS.	Workshop		11 incl. Aspects of 1-15
	45	Workshop 2 - Pathology, microbiology and monitoring of results. Handling and microscopy of biopsy material will be discussed. Selected pathologies will be presented on monitors in an interactive manner.	Workshop		14, 16, 17
	30	Coffee break			
	45	Workshop 3 Equipment handling (Scope and processor knobology + needle handling) Handling of the equipment including endoscope and needles. Small team-based simulations of the biopsy procedure will be performed to practice the collaborator and communicator roles.	Workshop		9, 10, 11
	45	Workshop 4 Simulation All participants will get supervised hands-on experience with two different virtual-reality simulators for practising EBUS	Workshop		12
17:30		Concluding remarks - Course organisers			

Wednesday, 28 June 2017

Session 4	Min		Format	Faculty member	Syllabus item
09:00-10:00		PATIENT 1 EBUS PRE-PROCEDURE Relevant scans + images, indication assessment, overview of the procedure plan, overview of the preparation of the patient and monitoring. A brief overview of the pre-procedure topics			1, 2, 3, 4, 5, 6
		PROCEDURE Including: Sedation used, interpretation of the endoscopic ultrasound, scope and processor knobology, needle handling, EBUS procedure and specimen handling.	Live demo		7, 8, 9, 10, 11, 13, 14, 15
		POST-PROCEDURE Including: reporting, pathology and microbiology, and monitoring of results.			16, 17
	15	<i>Break</i>			
10:15-11:15		PATIENT 2 EBUS PRE-PROCEDURE Relevant scans + images, indication assessment, overview of the procedure plan, overview of the preparation of the patient and monitoring. A brief overview of the pre-procedure topics			1, 2, 3, 4, 5, 6
		PROCEDURE Including: Sedation used, interpretation of the endoscopic ultrasound, scope and processor knobology, needle handling, EBUS procedure and specimen handling.	Live demo		7, 8, 9, 10, 11, 13, 14, 15
		POST-PROCEDURE Including: reporting, pathology and microbiology, and monitoring of results.			16, 17
	15	<i>Coffee break</i>			

11:30–12:30		PATIENT 3 EUS-B PRE-PROCEDURE Relevant scans + images, indication assessment, overview of the procedure plan, overview of the preparation of the patient and monitoring. A brief overview of the pre-procedure topics			1, 2, 3, 4, 5, 6
		PROCEDURE Including: Sedation used, interpretation of the endoscopic ultrasound, scope and processor knobology, needle handling, EBUS procedure and specimen handling.	Live demo		7, 8, 9, 10, 12, 13, 14
		POST-PROCEDURE Including: reporting, pathology and microbiology, and monitoring of results.			16, 17
12:30–13:30	60	<i>Lunch</i>			
Session 5					
13:30–14:00	30	Planning of the procedure, preparation of the patient and monitoring	Lecture		5, 6
14:00–14:30	30	Indication assessment	Lecture		4
14:30–15:00	30	Specimen handling	Lecture		14
15:00–15:30	30	<i>Coffee break</i>			
15:30–16:00	30	Complications	Lecture		15
16:00–16:30	30	Question and answer session and next steps in training programme & an overview of Part 2 & Part 3	Discussion		