Adequacy of peripheral lymph node (PLN) specimens for proper lung cancer (LC) characterization



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Methods. We retrospectively analysed 85 patients with LC who had PLN puncture (with or without ultrasound -US guidance) as the first invasive diagnostic procedure in three year period at University Clinic Golnik (2018-2021). Molecular tests and IHC were performed sequentialy.



US guided cytology puncture (US-ABTI)



21 G cytologic needles for PLNp and US-ABTI



70	Histology type of lung cancer in different sampling techniques				
60					
50					
40					
30					
20					
10					
O	Small cell carcinoma	Adenocarcinoma	Squamous cell carcinoma	Non-small cell carcinoma	

■PLN ■US-ABTI ■US-DIB

PLN characteristics and success rates for predictive marker tests of selected techniques

Sampling method	Sampling without US	Sampling with US guidence	
	PLNp	US-ABTI	US-DIB
	N=32	N=27	N=26
Location			
SCL/axilla (No)	31/1	25/2	22/4
Size (mm)	12 (10-16)	14 (9-18)	14 (11-19)
No of punctures	1 (1-1)	2 (2-2)	2 (2-3)
Diagnosis of malignoma (%)	87.5	96.3	80.8
PDL1 (%)	48	63.6	50
EGFR, KRAS (%)	52.1	61.1	52.9
ALK (%)	38.9	36.4	42.9
ROS1 (%)	33.3	36.4	42.9
NTRK (%)	33.3	36.4	30
BRAF (%)	33.3	36.4	30
Final Th decision (%)	50	70.4	57.7

Conclusion. Metastatic PLN sampling provided sufficient material for treatment decision in more then half of the patients. Our results further show superiority of cytological puncture with US guidence compared to the other two techniques.