

ESMO Clinical Practice Guidelines

Early-stage locally advanced non-small cell lung cancer (NSCLC) Clinical Case Discussion

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CLINICAL PRACTICE GUIDELINES

Early and locally advanced non-small-cell lung cancer (NSCLC): ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up[†]

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on behalf of the ESMO Guidelines Committee*

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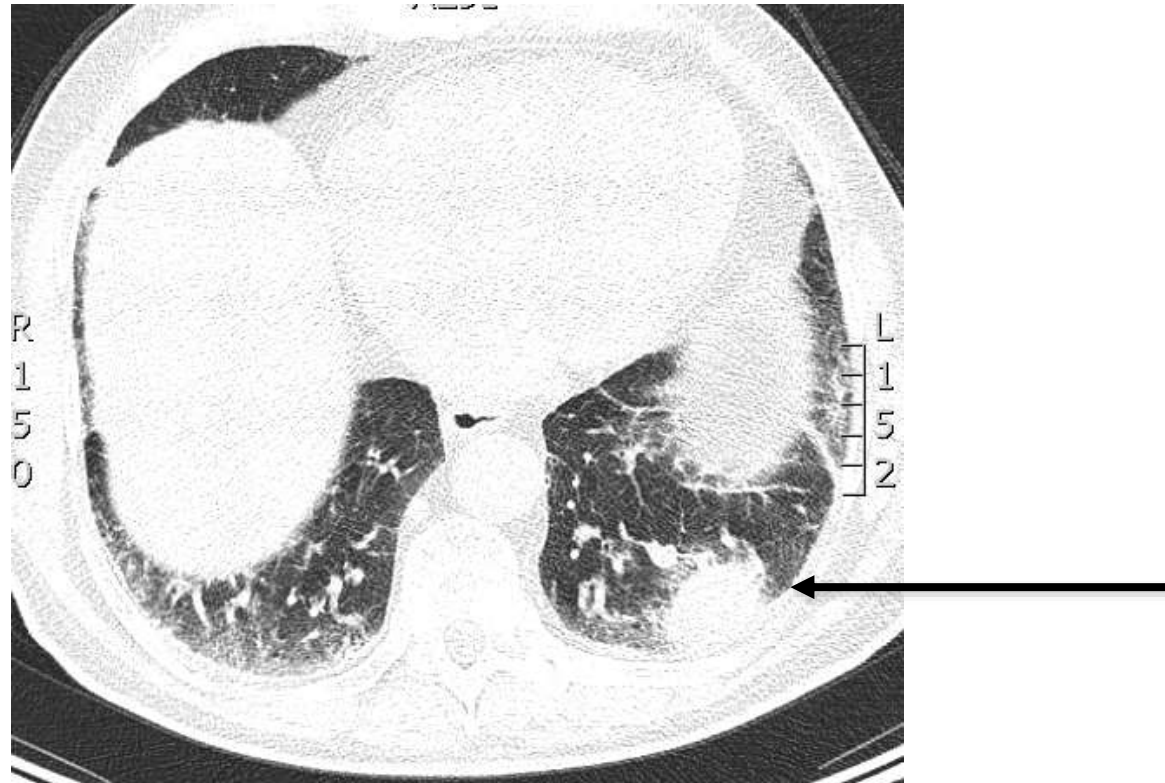
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[†]Approved by the ESMO Guidelines Committee: March 2010, last update May 2017. This publication supersedes the previously published version—*Ann Oncol* 2013; 24 (Suppl. 6): vi89–vi98.

Symptoms



Pain left shoulder

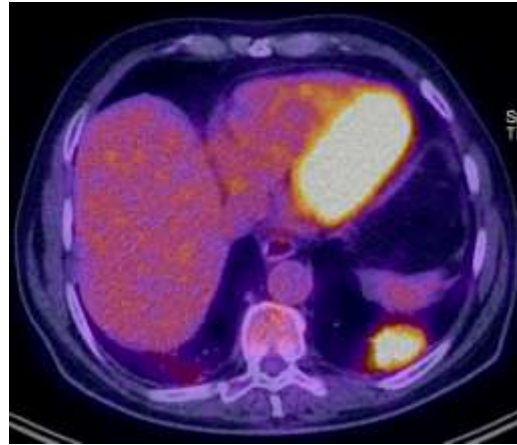
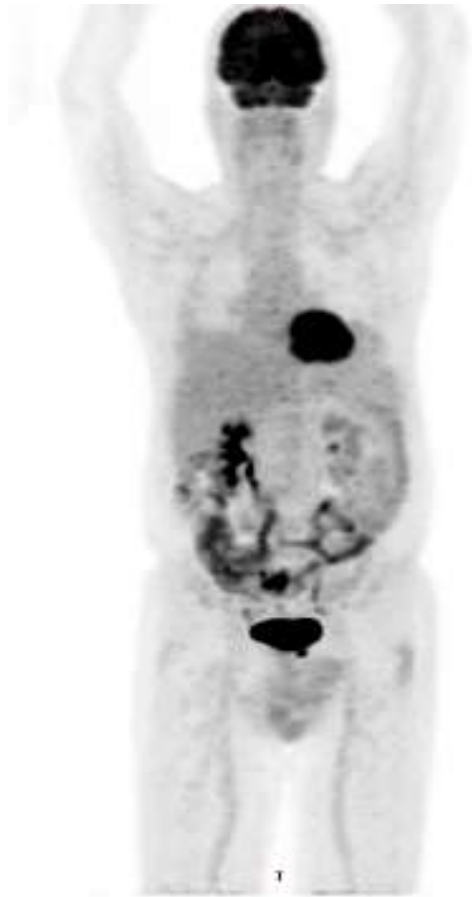


Question: Is there relation between pain left shoulder and tumour LLL?

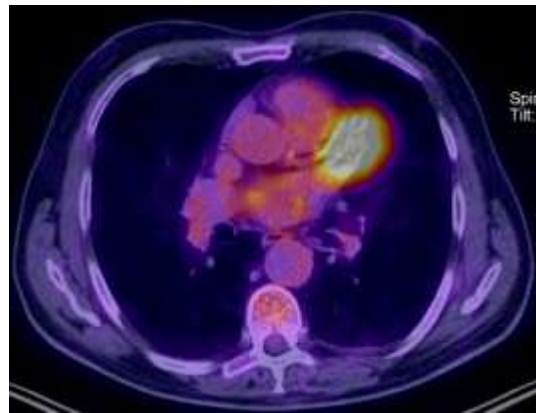
Diagnosis

Transthoracic CT guided biopsy

→ Squamous cell carcinoma p63 positive



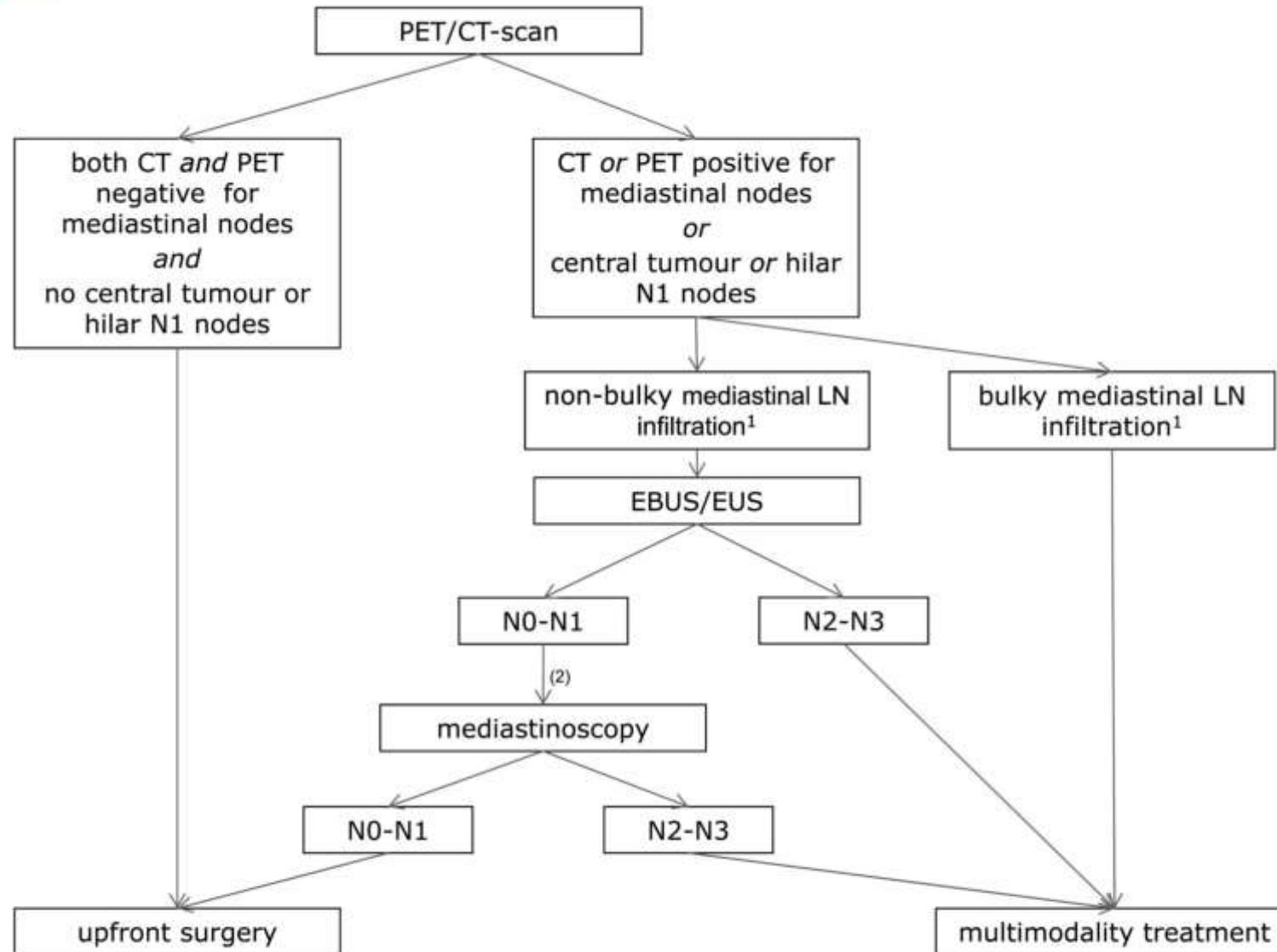
MRI brain without metastases



cT2acN0cM0, Stage IB

T3 (invading parietal pleura)
or
T4 (invading diaphragm) ????

Algorithm lymph node staging



¹ Category description according to CT (and PET) imaging as in ACCP staging document [Chest 143 Suppl 5:211S-250S, 2013], see text for more details.

² A negative result of EBUS/EUS is usually confirmed by mediastinoscopy, as the latter has the highest negative predictive value.

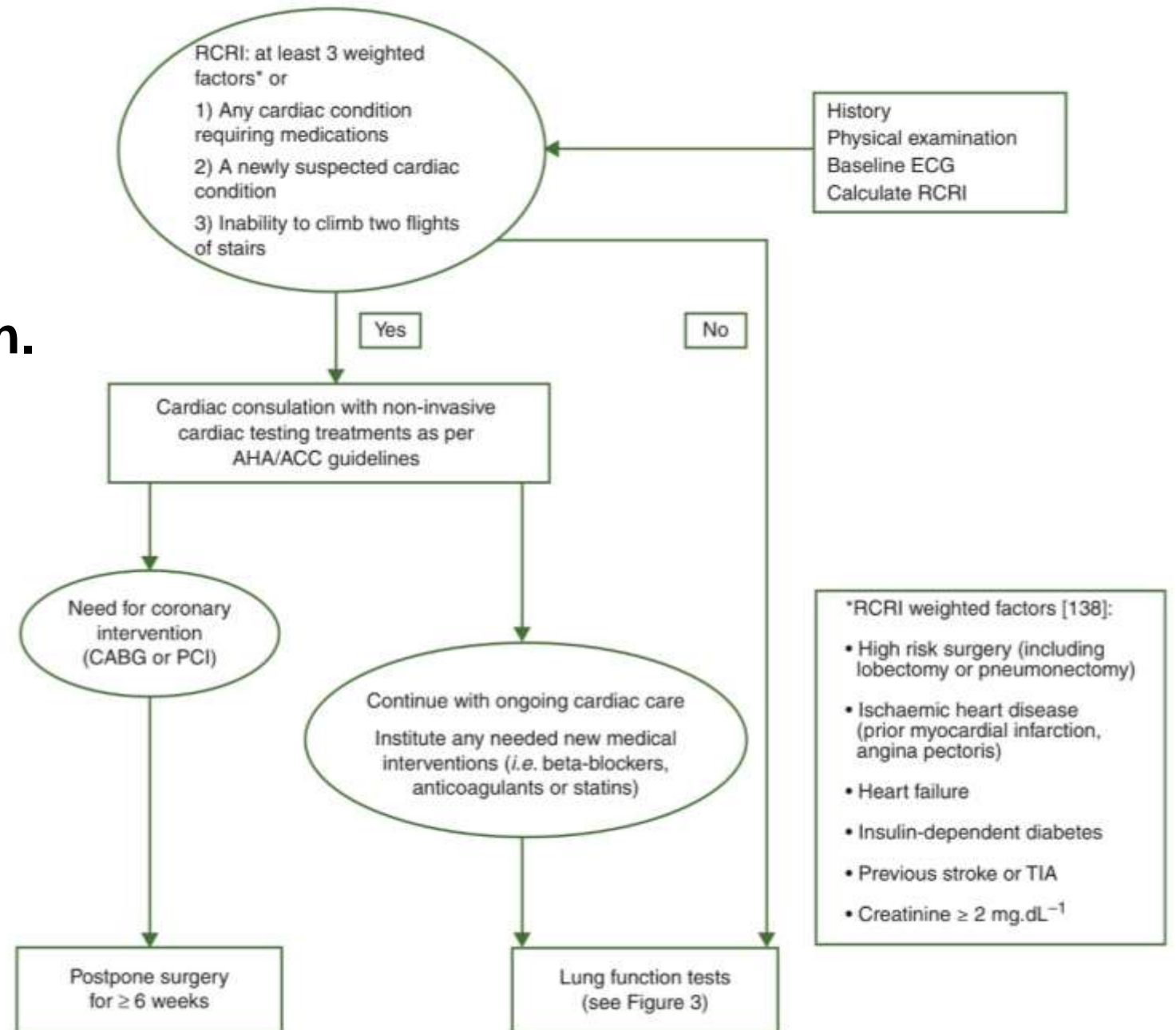


Tumour board

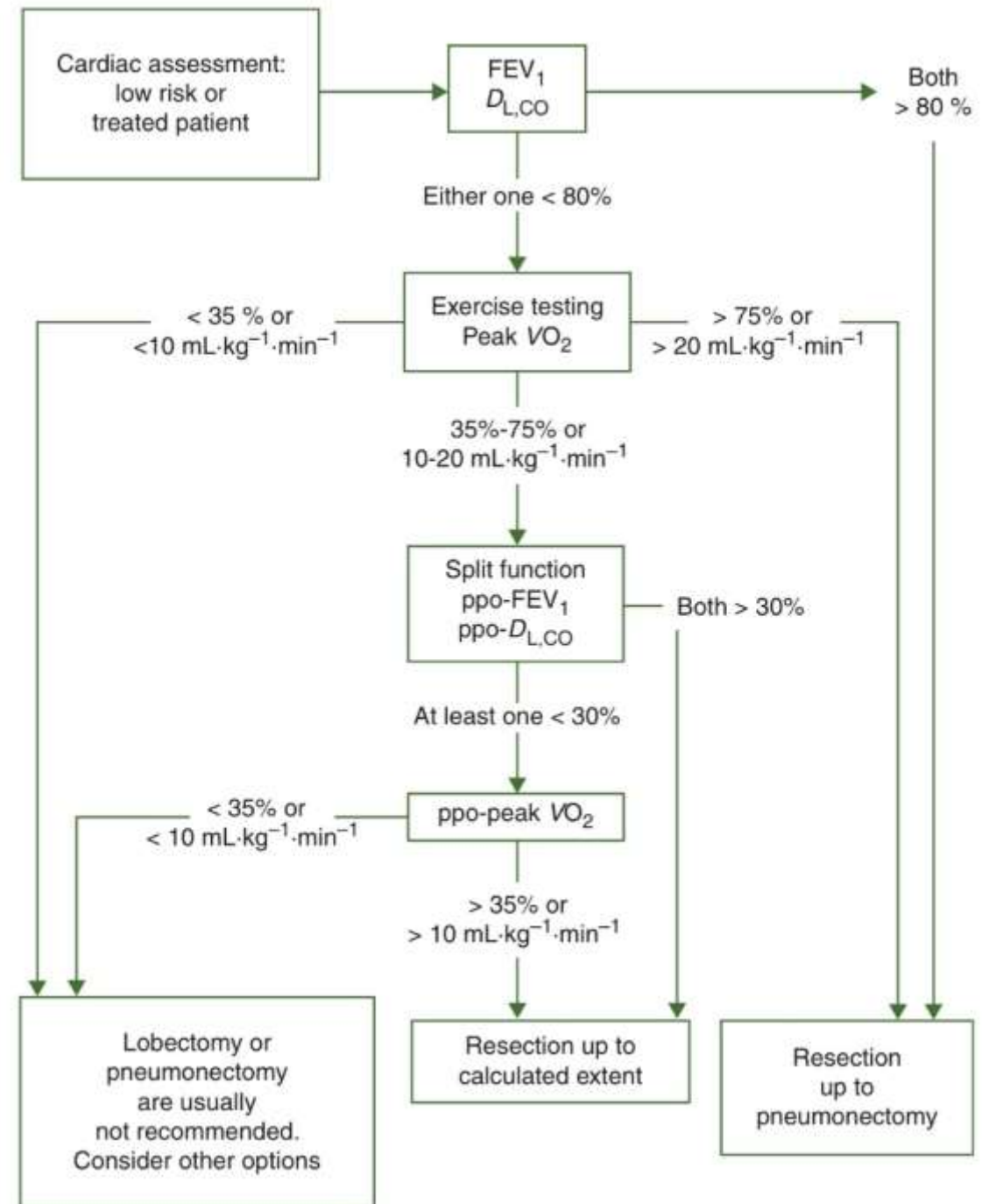
Comorbidities:

- Coronary heart disease
- COPD Stage 2, with severe diffusion impairment

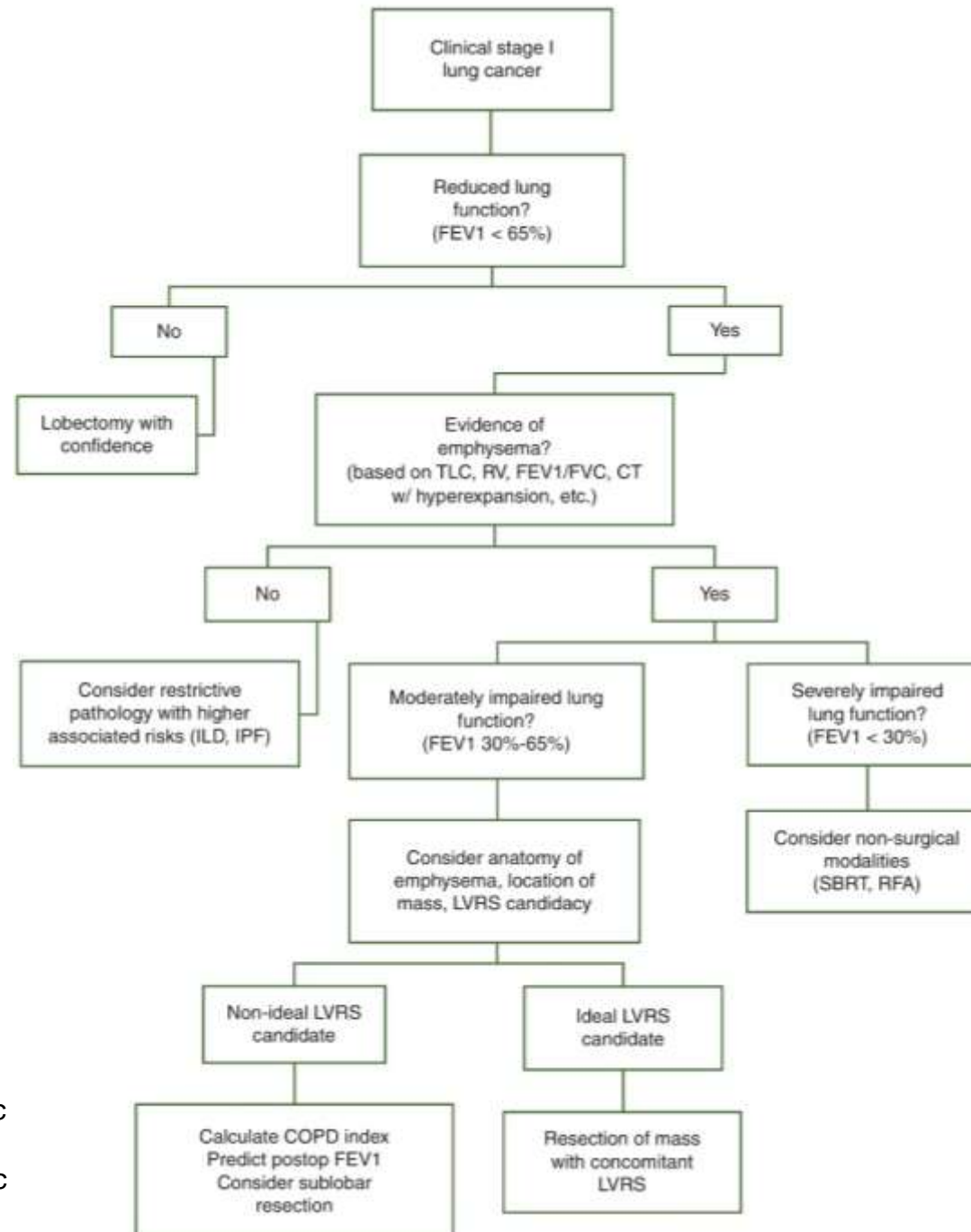
Preoperative cardiac evaluation.



Preoperative respiratory evaluation



Algorithm for patients with stage I lung cancer and emphysema



CT, computed tomography; COPD, chronic obstructive pulmonary disease; FEV1, forced expiratory volume 1; FVC, forced vital capacity; ILD, interstitial lung disease; IPF, idiopathic pulmonary fibrosis; LVRS, lung volume reduction surgery; RFA, radiofrequency ablation; RV, reserve volume; SBRT, stereotactic body radiotherapy; TLC, total lung capacity

Table 3. Recalibrated thoracic revised cardiac risk index (adapted from [47])

	Points
Weighted factors	
Ischaemic heart disease	1.5
History of cerebrovascular disease	1.5
Serum creatinine > 2 mg/dL	1
Pneumonectomy planned	1.5
Class groupings	
A	0
B	1–1.5
C	2–2.5
D	> 2.5

Ischaemic heart disease: history of myocardial infarction, history of positive exercise test, current complaint of chest pain (myocardial ischaemia), nitrate therapy, ECG with pathological Q waves. Cerebrovascular disease: transient ischaemic attack, stroke.

ECG, electrocardiogram.

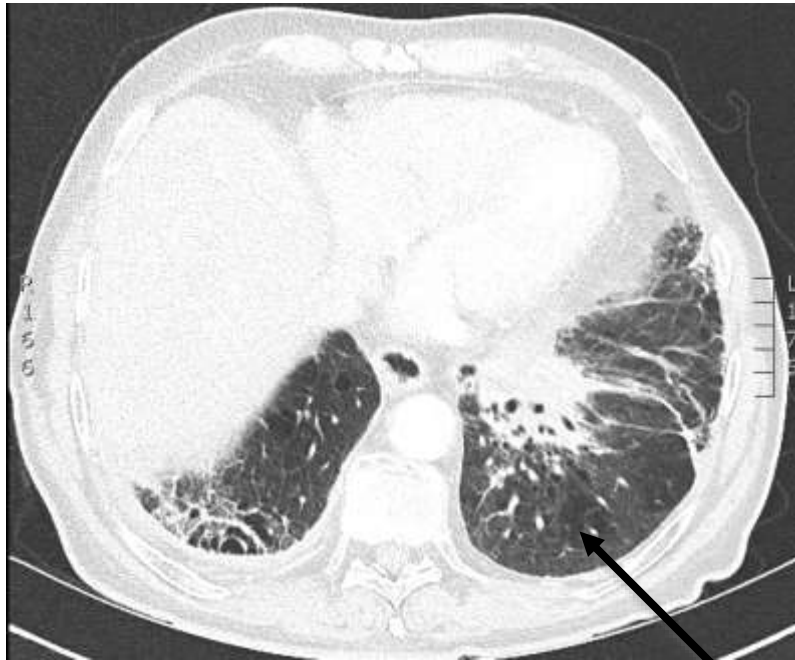


Treatment

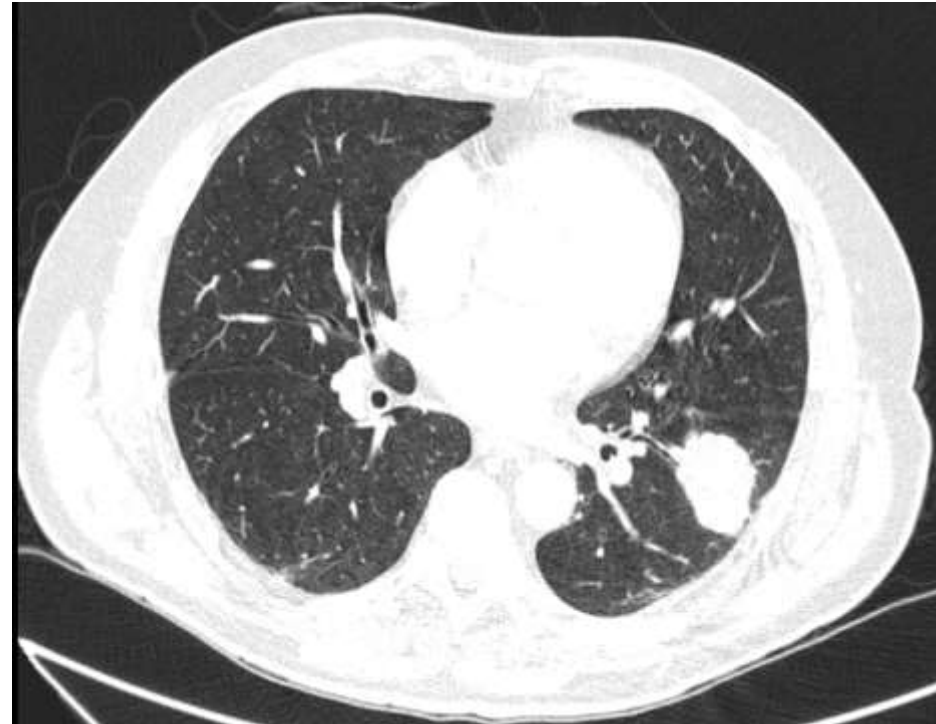
cT2acN0cM0, Stage IB

➤ Radiotherapy: 10x 6 Gy

Follow-up (3 years)



No symptoms
X-ray thorax as part of check-up



Diagnostic

rEBUS (radial endobronchial ultrasound)



Biopsy lung: adenocarcinoma cells

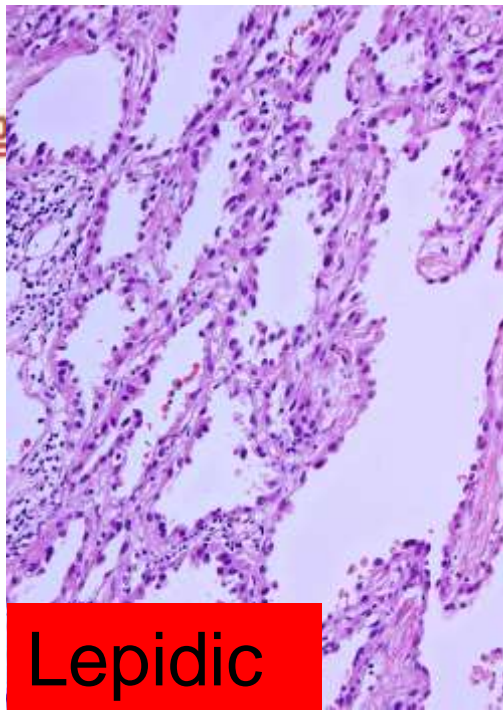
EBUS done through 21G or 22G needle usually gives only aspirate, difficult for pathologist to classify adenocarcinoma further; 19G gives tissue core

2015 WHO terminology for small biopsies and cytology

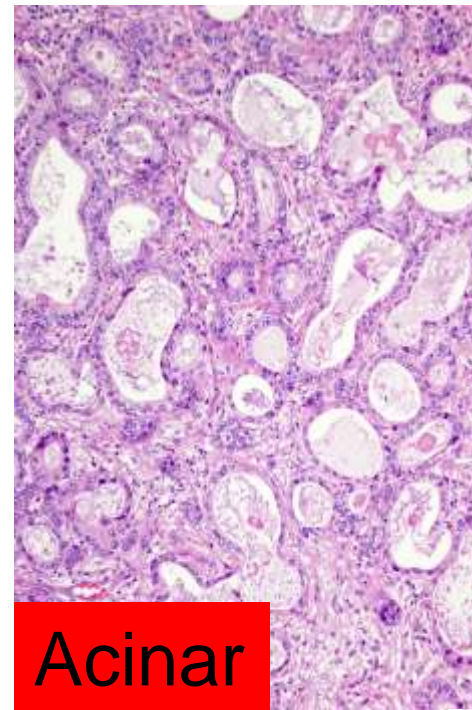
2015 WHO Classification

2015 WHO Resections	Small Biopsy/Cytology
ADENOCARCINOMA Lepidic Acinar Papillary Micropapillary Solid	<i>Morphologic adenocarcinoma patterns clearly present:</i> Adenocarcinoma, describe identifiable patterns present
No 2004 WHO counterpart – most will be solid adenocarcinomas	<i>Morphologic adenocarcinoma patterns not present (supported by special stains; i.e TTF-1 +; p40 -):</i> Non-small cell carcinoma, favor adenocarcinoma
SQUAMOUS CELL CARCINOMA Keratinizing Nonkeratinizing Basaloid	<i>Morphologic squamous cell patterns clearly present:</i> Squamous cell carcinoma
No 2004 WHO counterpart	<i>Morphologic squamous cell patterns not present (supported by stains; i.e. p40+, TTF-1 -):</i> Non-small cell carcinoma, favor squamous cell carcinoma
LARGE CELL CARCINOMA	Non-small cell carcinoma, not otherwise specified (NOS)

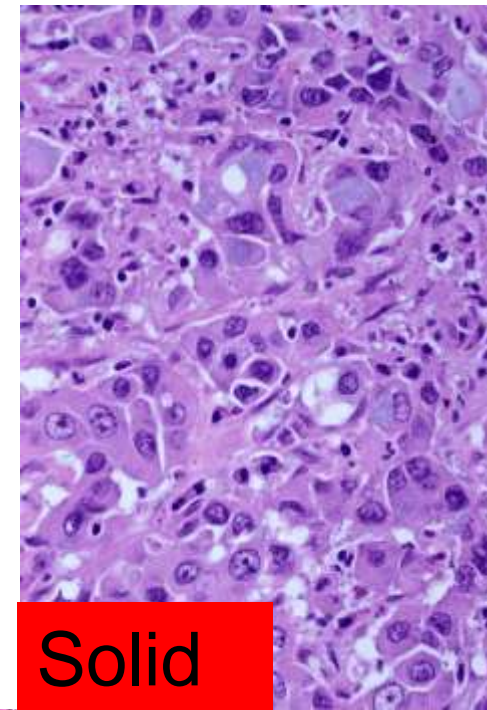
Adenocarcinoma



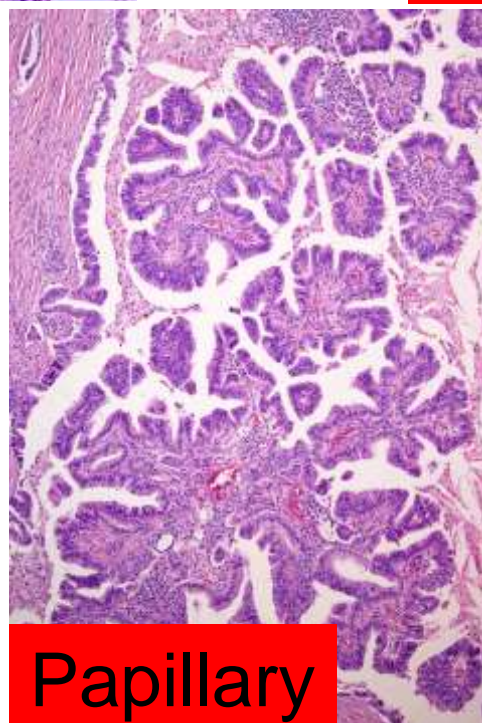
Lepidic



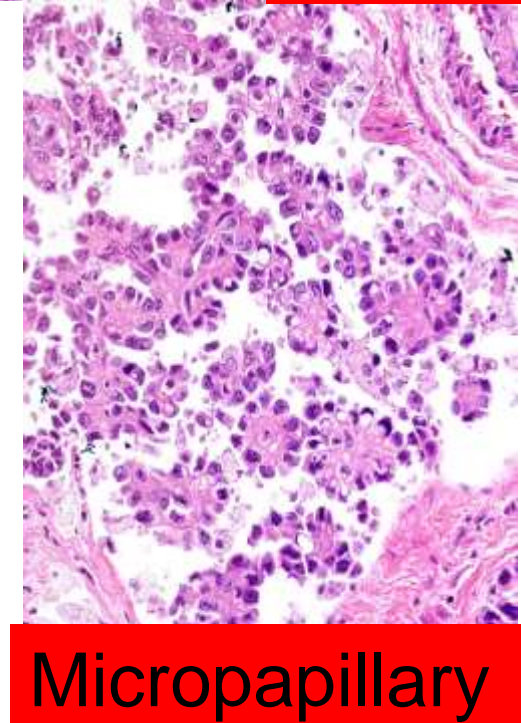
Acinar



Solid



Papillary



Micropapillary

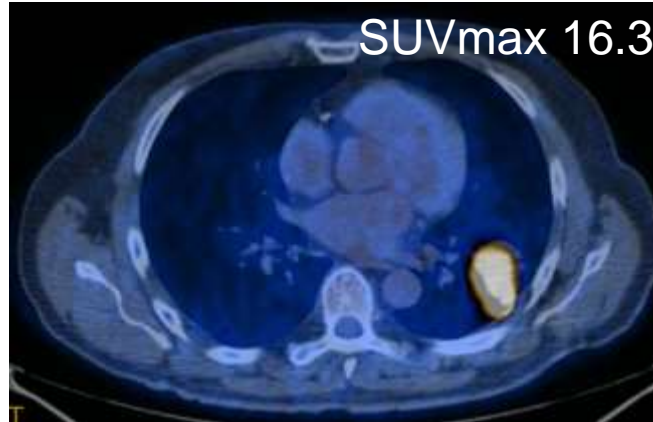
Pathology and N involvement

Type (predominant)	% with nodes	% N2
solid (SOL)	47.5	23.1
micropapillary (MIP)	47.2	23.6
variants of invasive AC (VIA)	24.0	11.3
papillary (PAP)	18.9	8.7
acinar (ACI)	18.2	8.8
lepidic (LEP)	0	0
minimally invasive AC (MIA)	0	0
AC in situ (AIS)	0	0

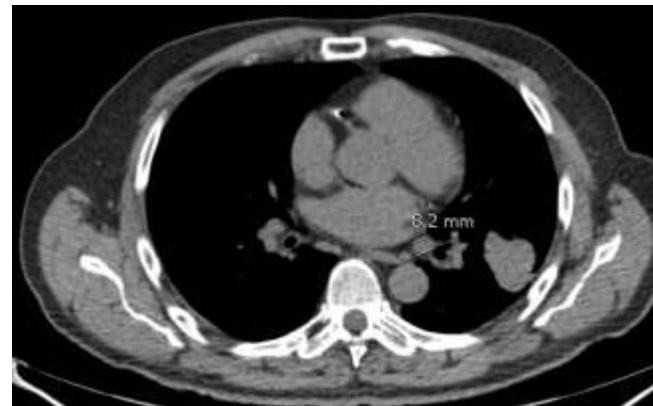
Staging



Primary tumour



Lymphnodes

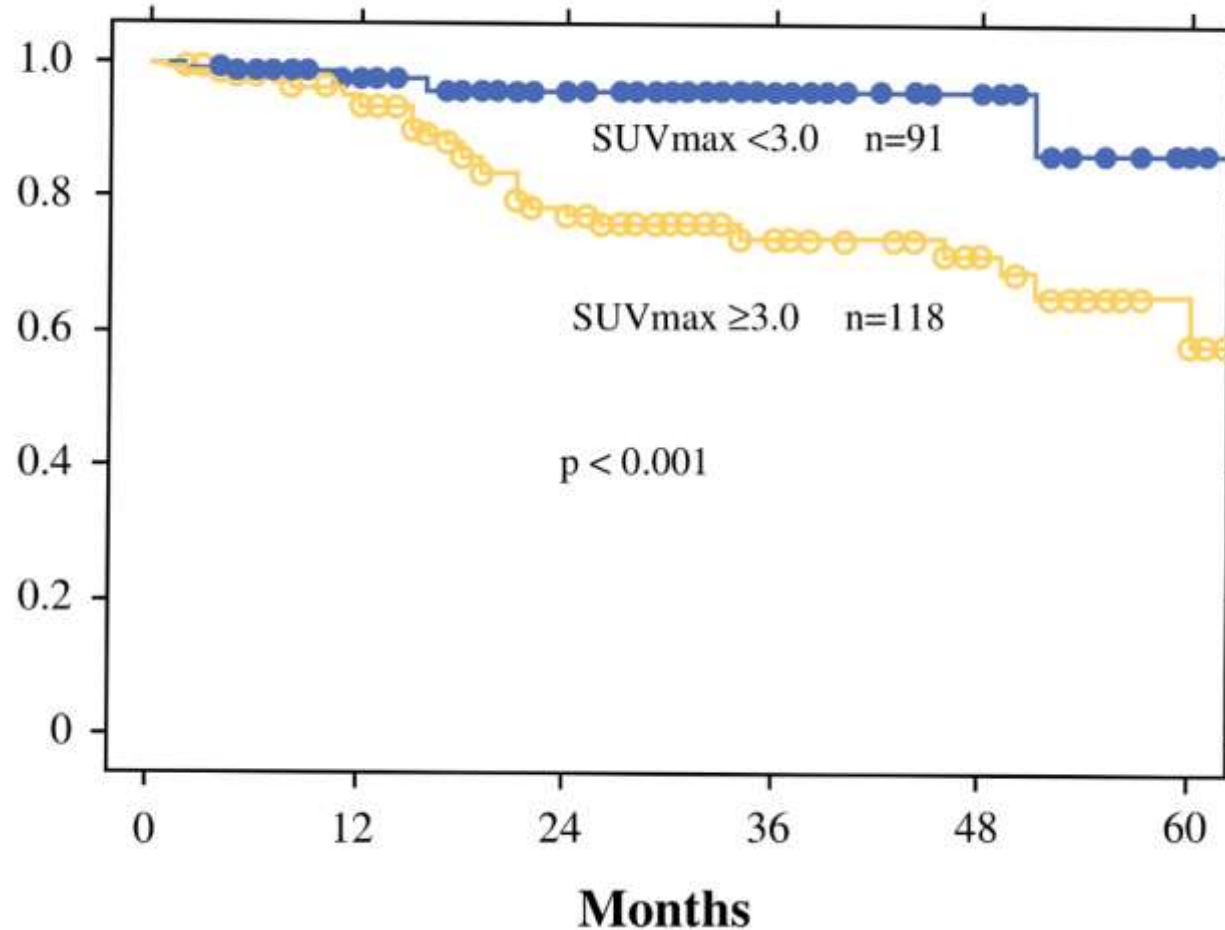


MRI brain, no metastases

SUVmax hilum: 3.0

SUV, survival and lymph node involvement

Survival

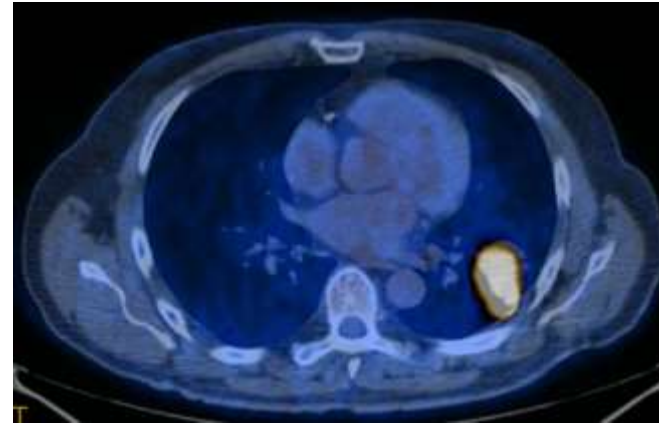


SUV _{max}	pN0	pN1-3
< 3.0	83 (91.2%)	8 (8.8%)
≥ 3.0	81 (68.6%)	37 (31.4%)
p	< 0.001	

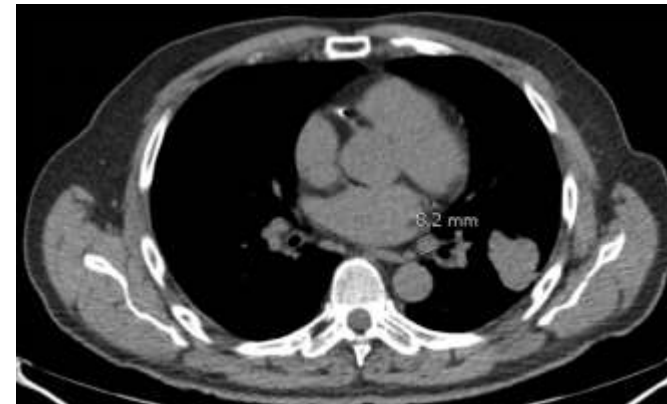
Staging



Primary tumour



Lymphnodes



cT2acN1cM0, stage IIB

Treatment

Resection:

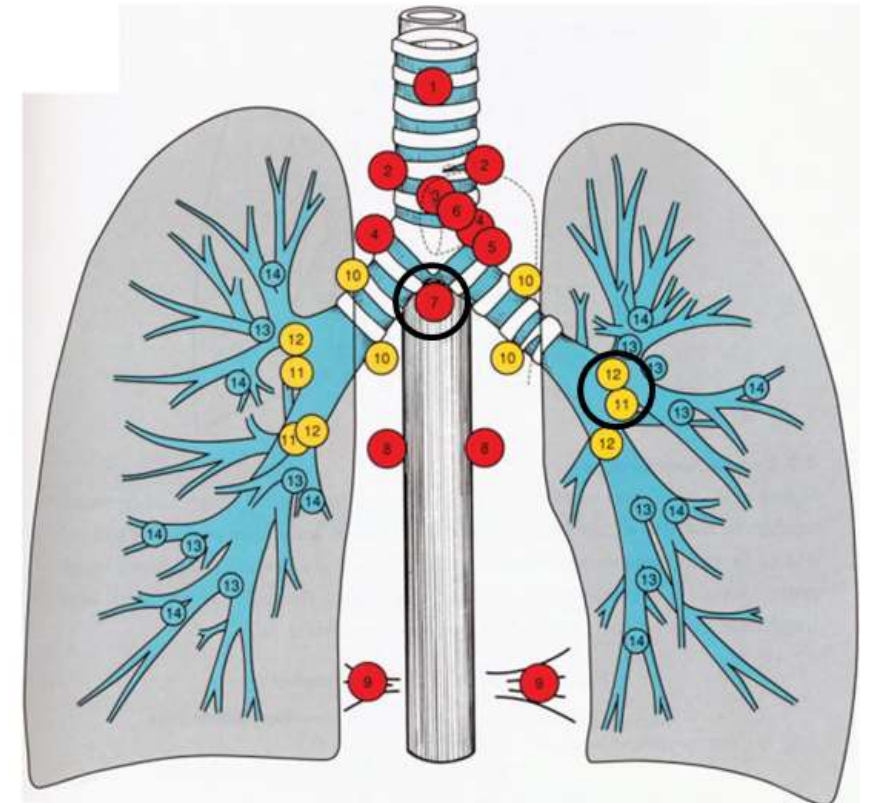
Left lower lobe resection with Lymphadenectomy
(position: left 9, 11, 8, 12 & 7, 5)

Pathology report (AJCC, 7th edition):

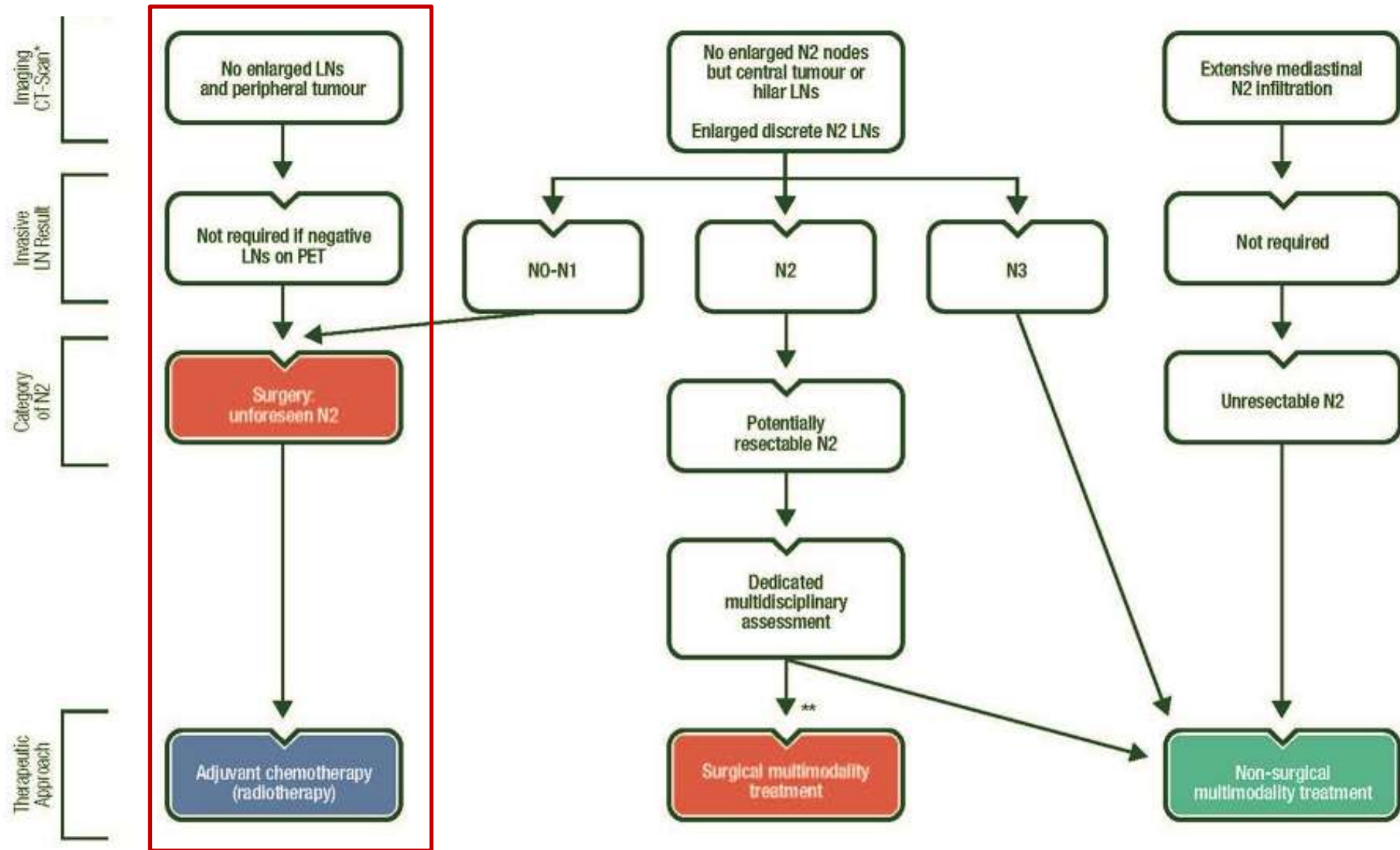
Acinar Adenocarcinoma

pT2a, pN2* (6/10), G3, R0; KRASmut, Stage IIIA

*N2: positive at level 11L & 7



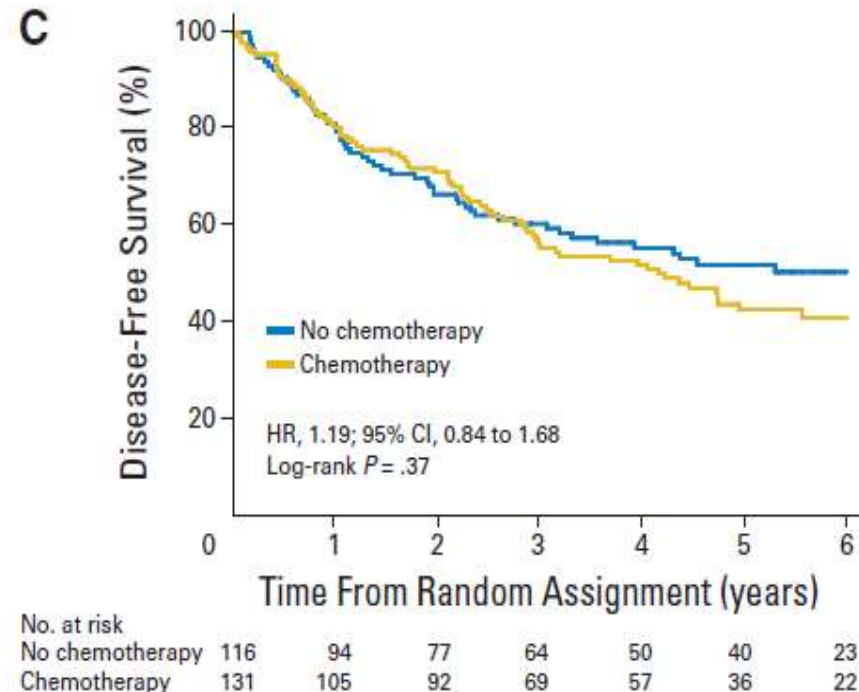
Treatment algorithm stage IIIA



Benefit of adjuvant chemotherapy after resection

- 575 Resected Adenocarcinoma from LACE-Bio study

**Disease-free survival:
Acinar/papillary subgroups
Chemotherapy versus observation**



**Disease-free survival:
Micropapillary/solid subgroups
Chemotherapy versus observation**

