

## **ESMO Clinical Practice Guidelines**

# **Early-stage NSCLC**

Clinical Case Presentation



Department Hematology and Oncology
Division of Oncology, Cancer Center Zurich
University Hospital Zurich, Switzerland









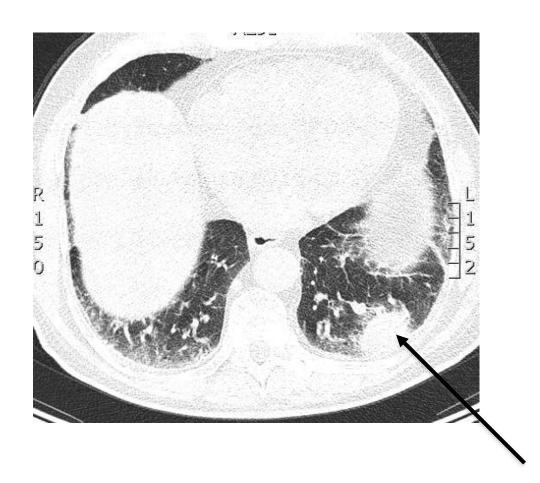


## **Symptoms**

Pain left shoulder



# **Findings**





## Q1. Which diagnostic procedure?

- 1. Bronchoscopy
- 2. EBUS
- 3. CT-guided transthoracic biopsy
- 4. Sputum Analysis
- 5. Liquid biopsy



#### **Diagnosis**

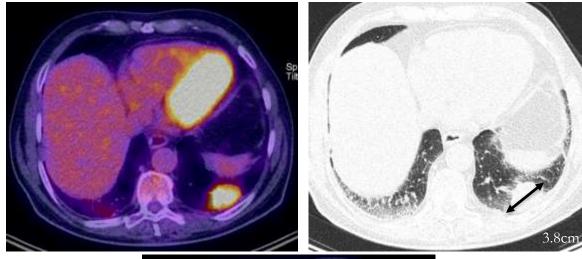
Transthoracic CT guided biopsy

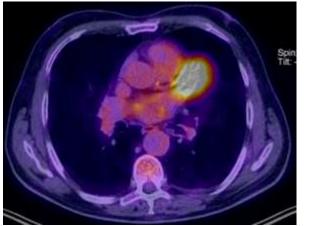
→ Squamous cell carcinoma p63 positive

## **Staging**









MRI brain without metastases



# Q2. What is the clinical/radiological stage (TNM, 7th edition)?

- 1. pT1cN0cM0
- 2. pT2cN0cM0
- 3. cT2acN0cM0
- 4. pT2cN1cM0
- 5. cT1pN1cM0



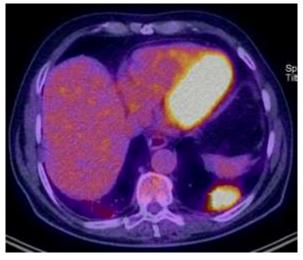
# TNM Staging & UICC classification lung cancer (comparison of the 7th and the 8th editions)

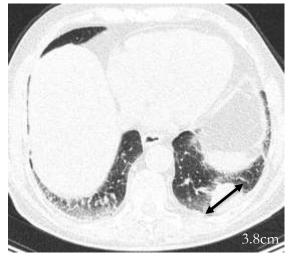
DESCRIPTOR	SEVENTH EDITION	EIGHTH EDITION
T component		
0 cm (pure lepidic adenocarcinoma ≤3 cm total size)	T1a if $\leq$ 2 cm; T1b if $>$ 2-3 cm	Tis (AIS)
$\leq$ 0.5 cm invasive size (lepidic predominant adenocarcinoma $\leq$ 3 cm total size)	T1a if $\leq$ 2 cm; T1b if $>$ 2-3 cm	T1mi
≤1 cm	T1a	T1a
>1-2 cm	T1a	T1b
>2-3 cm	T1b	T1c
>3-4 cm	TZa	T2a
>45 cm	T2a	T2b
>5-7 cm	T2b	T3
>7 cm	T3	T4
Bronchus <2 cm from carina	T3	T2
Total atelectasis/pneumonitis	T3	T2
Irwasion of diaphragm	Т3	T4
Invasion of mediastinal pleura	T3	÷
N component		
No assessment, no involvement, or involvement of regional lymph nodes	NX, N0, N1, N2, N3	No change
M component		
Metastases within the thoracic cavity	M1a	M1a
Single extrathoracic metastasis	M1b	M1b
Multiple extrathoracic metastases	M1b	M1c

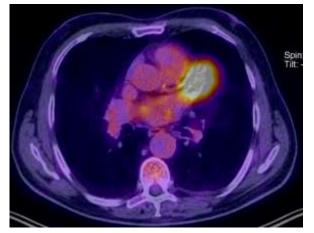
## **Staging**











cT2acN0cM0, Stage IB

#### **Tumour board**



#### Comorbidities:

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



#### Q3. How would you treat?

- 1. Resection
- 2. SBRT
- 3. Chemo/Radiotherapy
- 4. Chemotherapy
- 5. Immunotherapy

#### **Treatment**

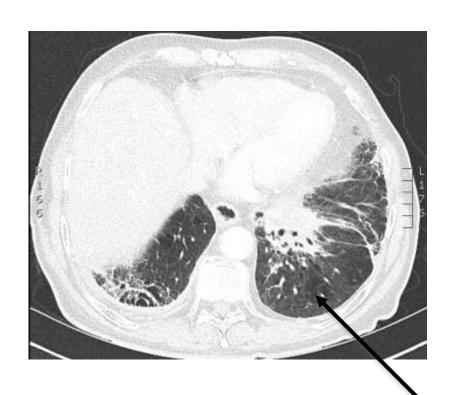


cT2acN0cM0, Stage IB

➤ Radiotherapy: 10x 6 Gy

# Follow-up (3 years)









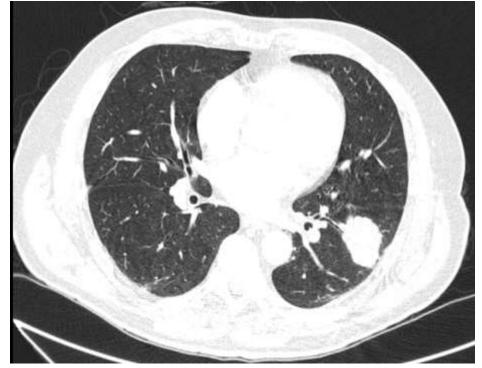
## **Symptoms**

None X-ray thorax as part of check-up

# **Findings**









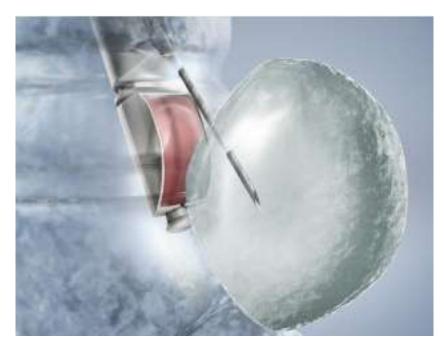
## Q4. Which diagnostic procedure?

- 1. Bronchoscopy
- 2. EBUS
- 3. CT-guided transthoracic biopsy
- 4. Sputum Analysis
- 5. Liquid biopsy



## **Diagnostic**

#### rEBUS (radial endobronchial ultrasound)

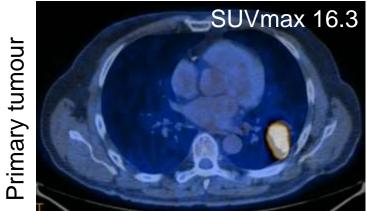


Biopsy lung: adenocarcinoma cells

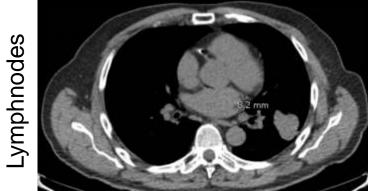
## **Staging**













MRI brain, no metastases

SUVmax hilum: 3.0



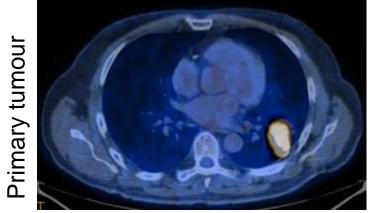
# Q5. What is the clinical/radiological stage (TNM, 7th edition)?

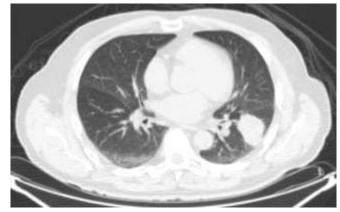
- 1. cT1cN2cM0
- 2. cT2cN1cM0
- 3. cT2pN1cM0
- 4. pT2cN1cM0

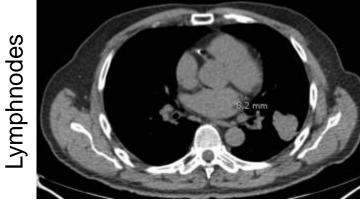
## **Staging**

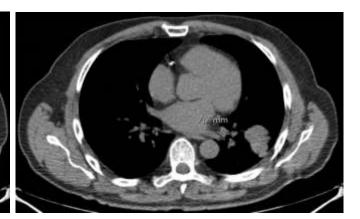












cT2acN1cM0, stage IIB



#### Q6. How would you treat?

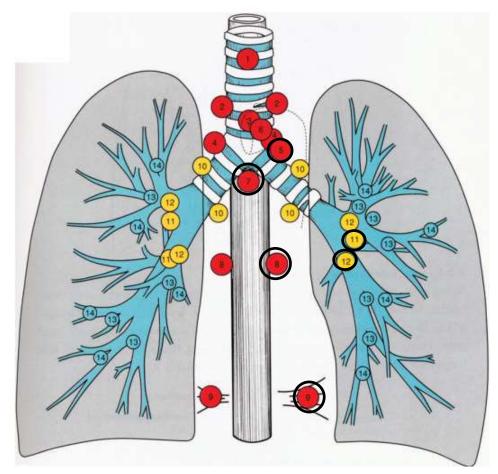
- 1. Resection
- 2. SBRT
- 3. Chemo/Radiotherapy
- 4. Chemotherapy
- 5. Immunotherapy

# congress

#### **Treatment**

#### Resection:

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



Rush, JTO 2009

#### **Treatment**



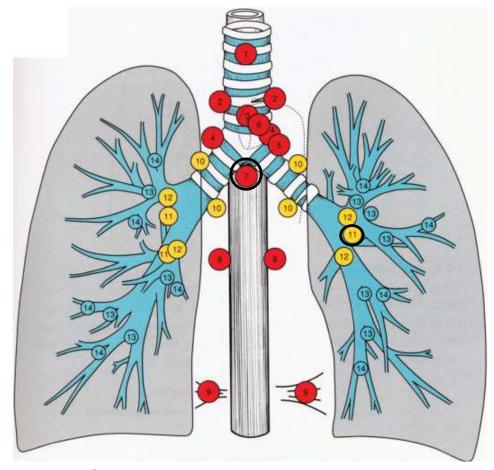
#### Resection:

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



Rush, JTO 2009



#### Q7. How would you treat?

- 1. Radiotherapy (Mediastinum)
- 2. Chemo/Radiotherapy
- 3. Chemotherapy, adjuvant
- 4. Immunotherapy, adjuvant
- 5. Analysis of mutational load

#### **Treatment**



#### Resection:

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

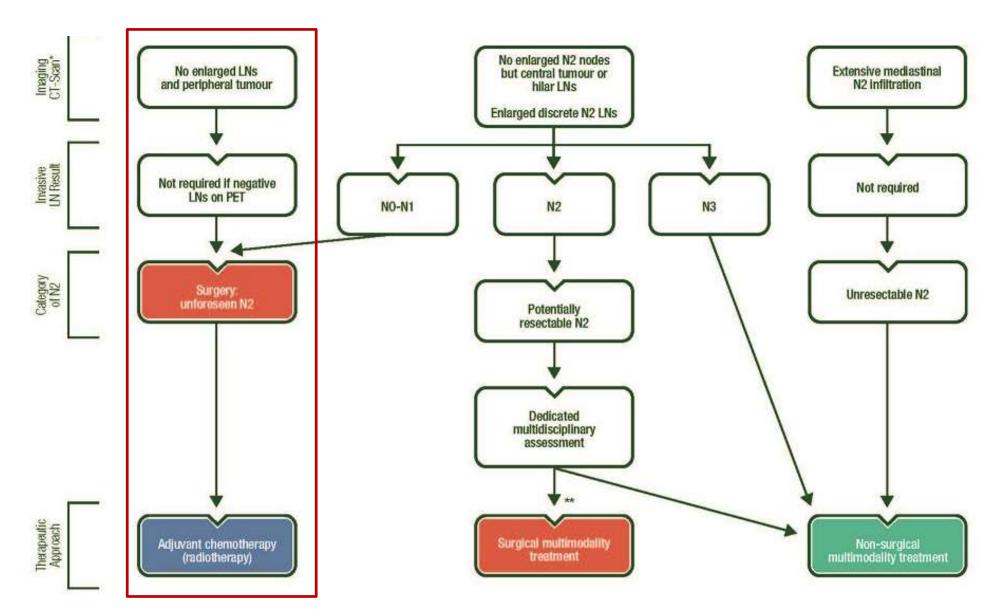
#### Pathology report (AJCC, 7th edition):

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

#### **Adjuvant chemotherapy**

4 cycles cisplatin pemetrexed

## **Treatment algorithm stage IIIA**



#### **University Hospital Zurich**



# Department of Oncology

Markus Manz Rolf Stahel Christian Britschgi Svenja Bihr Raphael Delaloye

#### Department of Thoracic Surgery

Walter Weder
Isabelle Schmitt-Opitz
Sven Hillinger
Didier Schneiter
Claudio Caviezel

# Department of Radio-Oncology

Matthias Guckenberger Nicolaus Andratschke Oliver Riesterer

# Department of Pneumology

Malcom Kohler Daniel Franzen

# Institute of Pathology

Holger Moch
Alex Soltermann
Peter Wild
Bart Vrugt