



Standard Treatment Workflow (STW)

LUNG CANCER

ICD-10-C34.90

Evaluation and management by multidisciplinary team (MDT) of oncology experts

Pulmonary

function

Age and

comorbidities

status



PRESENTATION

- · Cough
- · Chest pain
- Hemoptysis Hoarseness

Breathlessness

- Non resolving pneumonia
- Mass lesion Symptoms persist even

after treating pneumonia

Performance

Clinical examination:

IMPORTANT ASSESSMENT PARAMETERS

- · Palpable lymph nodes
- · Chest wall tenderness
- · Skeletal tenderness
- Pleural effusion

INITIAL EVALUATION

CXR

Sputum cytology

- Pulmonary reserve:
- Effort tolerance
- Walk test
- Pulmonary function tests (PFT)

LIMITED DISEASE

- · CECT thorax and upper abdomen
- Obtain tissue for diagnosis percutaneously by image guidance or by bronchoscopy

DIAGNOSTIC CONFIRMATON

ADVANCED DISEASE

- Pleural fluid cytology
- Pleural biopsy (image guidance if available)
- Cervical lymph node aspiration cytology / biopsy

All lung shadows are not tuberculosis! Obtain diagnostic investigations before starting empirical ATT!

PATHOLOGY ASSESSMENT

Biopsy/ cell block/ smear

Histopathology

adenocarcinoma, squamous carcinoma, poorly differentiated carcinoma, small cell carcinoma

Immunohistochemistry

TTF 1, p40, synaptophysin/ chromogranin

Preserve tissue for molecular analysis

Molecular tests for adenocarcinoma: EGFR, ALK, ROS-1

SMALL CELL LUNG CARCINOMA

Do CECT thorax and abdomen

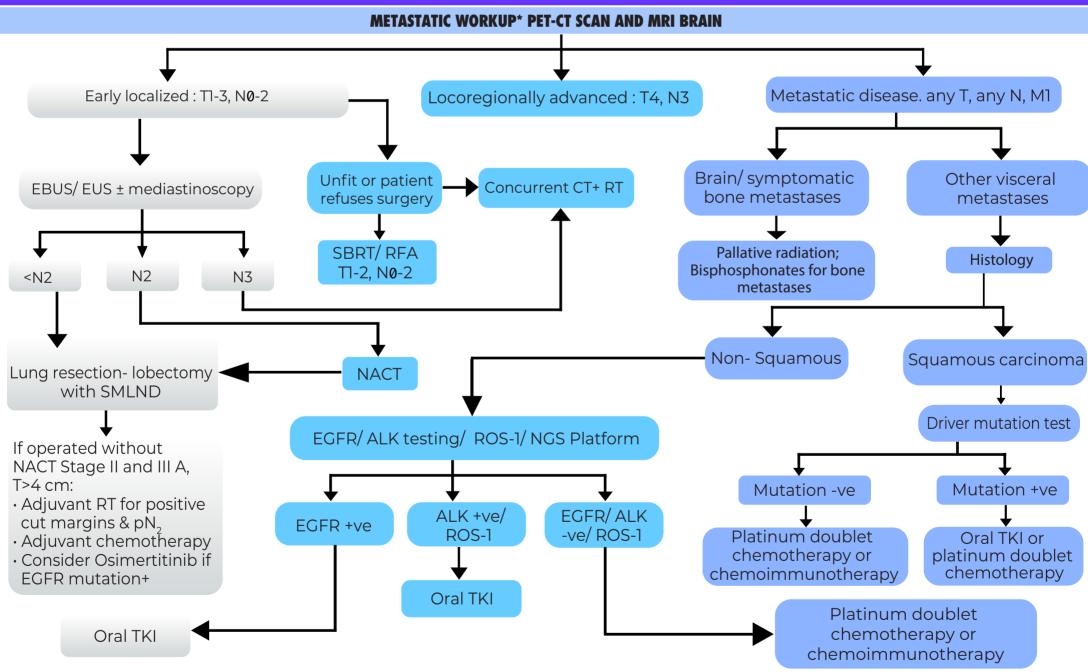
- Non metastatic disease TI-4, N0-3, M0
 - · Metastatic work up: PET CT & MRI brain
 - · Consider surgery for TI-2, N0
 - · Concurrent CT + RT
- Metastatic disease Any T, any N, M1
- Prophylactic cranial irradiation · Symptomatic & supportive care
- Palliative chemotherapy carboplatin + etoposide

NON SMALL CELL LUNG CARCINOMA

Do CECT thorax and abdomen

- Non metastatic disease: □-4, №-3
 - · Metastatic work up: PET CT and MRI brain
- Metastatic disease: Any T, any N, M1
 - · Symptomatic & supportive care
 - · Refer to oncology centre
- · Palliative chemotherapy (platinum doublet in fit patients, single agent chemotherapy for PS 2)
- · Oral TKI if target mutation detected
- · Immunotherapy may be an option in some patients

MANAGEMENT OF NSCLC



AVAILABLE TREATMENT OPTIONS

- · Chemotherapy doublet:
 - · Carboplatin or cisplatin with pemetrexed or paclitaxel or gemcitabine or etoposide
- · EGFR mutation positive: gefitinib, afatinib, osimertinib, erlotinib, dacomitinib
- · Immune checkpoint inhibitors: nivolumab, atezolizumab,
- pembrolizumab, ipilimumab

- Radiotherapy
- · Pain management

 - · Opioids: morphine, tramadol, oxycodone
 - · Paracetamol, nonsteroidal anti-inflammatory drugs

PALLIATIVE CARE

- Cough suppressants
- Treatment of chronic obstructive pulmonary disease
- · Treatment of anemia, anorexia, electrolyte abnormalities

TKI: Tyrosine kinase inhibitors

SMLND: Systematic lymph node dissection

T, N, M: Tumour (T), Nodes (N), and Metastases (M)

ABBREVIATIONS

ALK: Anaplastic lymphoma kinase

ATT: Anti tubercular therapy

CECT: Contrast-enhanced computed tomography

COPD: Chronic obstructive pulmonary disease

CT: Computed tomography **CXR:** Chest X Ray

EBUS: Endobronchial ultrasound

EGFR: Epidermal growth factor receptor

NACT: Neoadjuvant chemotherapy **NGS:** Next generation sequencing

PET CT: Positron emission tomography

NSCLC: Non-small cell lung cancer

PFT: Pulmonary function test

pN2: Pathological node

RFA: Radiofrequency ablation

ROS: Ros proto-oncogene 1

RT: Radiotherapy

SBRT: Stereotactic body radiotherapy

KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES.

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of DHR for more information: (stw.icmr.org.in) for more information. Department of Health Research, Ministry of Health & Family Welfare, Government of India.