

Right Test, Right Treatment, Right Time: Navigating Lung Cancer Diagnostics, Decisions, and Supportive Care

**Right Test, Right Treatment, Right Time:
Navigating Lung Cancer Diagnostics, Decisions, and
Supportive Care**

Sarah Tangerini, FNP-BC
Family Nurse Practitioner
Thoracic Oncology


Jill Wines, RN, BSN
Thoracic Nurse Navigator




1

How to Claim Your CE Credit


For CE credit, please visit:
<https://www.lecturepanda.com/r/2026NCODASpringForum>




- Credit requirements must be completed within 60 days of the program activity date.
- Upon completion, credit will be transmitted electronically to ACPE.
- All transmitted credit will be viewable in your CPE Monitor profile within 24 hours.
- CE codes will be displayed at the end of the presentation and will not be redistributed after this presentation.



2

OBJECTIVES 

1. List the key diagnostic tests and biomarkers used to stage and classify non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC).
2. Explain how staging results and biomarker profiles influence treatment planning decisions for patients with NSCLC and SCLC.
3. Identify nursing interventions for patients receiving common NSCLC treatment regimens, including chemotherapy, targeted therapy, and immunotherapy.
4. Describe evidence-based navigation strategies and supportive care that minimize care delays and enhance interdisciplinary communication in lung cancer care coordination.



3

DISCLOSURES 2026 NCCO INTERNATIONAL
SPRING FORUM

There are no relevant conflicts of interest to disclose for this presentation for the following planners and speakers of this CE activity:

- Sarah Tangerini, FNP-BC
- Jill Wines, RN, BSN
- Mary Anderson, BSN, RN, OCN
- Tahsin Imam, PharmD

2026 NCCO INTERNATIONAL
SPRING FORUM

4

Q1

What Type of practice do you work in?

- a. Academic medical center
- b. Community hospital
- c. Private oncology practice
- d. Health system-owned outpatient clinic
- e. Specialty pharmacy or infusion center

2026 NCCO INTERNATIONAL
SPRING FORUM

5

Q2

How Frequently do you care for patients with thoracic cancer?


- a. Daily
- b. Weekly
- c. Monthly
- d. Almost Never

2026 NCCO INTERNATIONAL
SPRING FORUM

6

Patient Case: Initial workup

- **Patient:**
 - John M., 64-year-old male
 - Presents to primary care physician with persistent cough and mild weight loss
- **History**
 - 40 pack-year smoking history
 - Hypertension, Chronic Obstructive Pulmonary Disorder (COPD)
- **Initial Imaging**
 - Chest CT shows 3.2 cm right upper lobe mass with mediastinal lymphadenopathy
- **Question to the audience**
 - What tests are needed to diagnose and stage this patient?



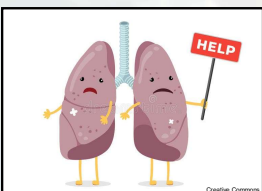
Creative Commons

2025 NCI NATIONAL INTERNATIONAL SPRING FORUM

7

The Silence of Lung Cancer

- **Asymptomatic in early stages**
 - Early lung cancers often cause no symptoms
 - Lung parenchyma has few pain receptors
- Often found incidentally
- Found on imaging done for unrelated reasons:
 - Trauma CT scans
 - Cardiac imaging
 - Pre-operative chest imaging
 - Evaluation of infection or pulmonary embolism
- **Implication for clinicians**
 - Careful review of incidental nodules is critical
 - Appropriate follow-up imaging or referral can enable earlier stage diagnosis




Creative Commons

2025 NCI NATIONAL INTERNATIONAL SPRING FORUM

8

Multidisciplinary Care Team

- Pulmonary
- Thoracic surgery
- Medical Oncology
- Radiation Oncology
- Palliative Medicine
- Advanced Practice Providers
- Dietitian
- Social Work
- Pharmacy
- Nurse Navigators
- Spirituality




Creative Commons

2025 NCI NATIONAL INTERNATIONAL SPRING FORUM

9

Tumor Boards/Multidisciplinary Clinics


- Tumor board discussions can include
 - Work up options
 - Scan review
 - Treatment decisions
 - Clinical trials available
- Multidisciplinary Clinics (MDC)
 - Minimize number of appointments for patients
 - Maximize real time decision making
 - Decrease time from consult to treatment




10

Overview of NSCLC vs SCLC

- Initial Diagnostic Workup for Suspected Lung Cancer
 - Imaging
 - Chest X-ray (often first clue)
 - Contrast-enhanced CT chest/abdomen
 - PET-CT for metabolic activity & staging
 - Brain MRI (especially in SCLC or stage III/IV NSCLC)
 - Tissue Acquisition
 - Bronchoscopy ± Endobronchial Ultrasound (EBUS)
 - CT-guided needle biopsy
 - Surgical biopsy (if needed)
 - Thoracentesis (if pleural effusion)





Creating Commons



11

Overview of Lung Cancer Classification


Non-Small Cell Lung Cancer (NSCLC) <ul style="list-style-type: none">• ~85%• Adenocarcinoma• Squamous cell carcinoma• Large cell carcinoma• Adenosquamous carcinoma	 <p>Creating Commons</p>	Small Cell Lung Cancer (SCLC) <ul style="list-style-type: none">• ~15%• Limited vs. Extensive stage• Neuroendocrine features
--	---	---



12

Tumor Staging

- Staging Systems
 - NSCLC Staging
 - TNM system (Tumor, Node, Metastasis)
 - Stages I-IV
 - Guides treatment decisions
 - Surgery, radiation, systemic therapy
 - SCLC Staging
 - Limited Stage
 - Extensive Stage
 - TNM system

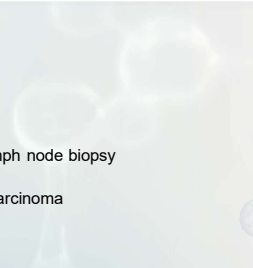


Microsoft Office
SPRING FORUM

13

Patient Case: Diagnostic Testing

- Diagnostic Workup for John
 - **Imaging**
 - CT chest with contrast
 - PET-CT
 - Brain MRI
 - **Tissue Diagnosis**
 - Bronchoscopy with EBUS-guided lymph node biopsy
 - **Pathology Result**
 - Non-small cell lung cancer – adenocarcinoma
 - **Biomarker Testing**
 - Next-generation sequencing panel
 - PD-L1 testing

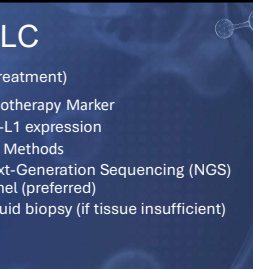


Microsoft Office
SPRING FORUM

14

Biomarker Testing in NSCLC


- Biomarker Testing in NSCLC (Essential Before Treatment)
 - Actionable Driver Mutations
 - EGFR
 - ALK
 - ROS1
 - BRAF
 - KRAS (especially KRAS G12C)
 - MET exon 14 skipping
 - RET
 - NTRK
 - ERBB2 (HER2)
 - NRG1
 - Immunotherapy Marker
 - PD-L1 expression
 - Testing Methods
 - Next-Generation Sequencing (NGS) panel (preferred)
 - Liquid biopsy (if tissue insufficient)



Microsoft Office
SPRING FORUM

15

Biomarker Testing in SCLC

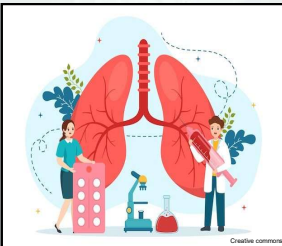


- Biomarker Testing in SCLC
 - SCLC traditionally no routine broad molecular profiling (yet)
 - Emerging & Investigational Biomarkers
 - DLL3 (Delta-like ligand 3)
 - Overexpressed in ~80–85% of SCLC
 - Minimal expression in normal tissue
 - Target of antibody-drug conjugates and T-cell–redirecting therapies
 - Most notably studied with Tarlatamab (a DLL3-targeting bispecific T-cell engager)

© 2024 NATIONAL INTERNATIONAL SPRING FORUM

16

Nursing Impact on Right Test, Right Treatment, Right Time



- Ensure comprehensive biomarker testing upfront
- Track pending molecular testing
- Avoid treatment before results return (when clinically safe)
- Educate patients on why waiting matters
- Identify and resolve imaging barriers
- Streamlined communication with thoracic surgery, interventional pulmonology, radiation oncology, and medical oncology
- Use tumor boards to accelerate decisions

© 2024 NATIONAL INTERNATIONAL SPRING FORUM

17

Q3

What is the most common delay in your setting?

- a. Tissue acquisition
- b. Biomarker turnaround time
- c. Insurance authorization
- d. Coordinating with other specialties (e.g., thoracic surgery, radiation oncology, etc.)

© 2024 NATIONAL INTERNATIONAL SPRING FORUM

18

How Stage & Biomarkers Drive Therapy


NSCLC — Stage Determines Intent

Stage	Treatment Goal	Typical Approach
I-IIIa	Curative	Surgery ± adjuvant therapy
III	Curative/Control	Chemoradiation ± immunotherapy
IV	Disease control, Palliation	Systemic therapy


© Peters K, Kim MG, Gadgeel SM, et al. Adjuvant Systemic Therapy and Adjuvant Radiation Therapy for Stage I-IIIa Completely Resected Non-Small-Cell Lung Cancer: ASCO Guideline Report Recommendation Update. Journal of Clinical Oncology. Published online February 01, 2019. doi:10.1200/JCO.2018.16.3551

19


NSCLC — Biomarkers Direct First-Line Therapy



If Actionable Mutation:
→ Targeted therapy



If No Driver Mutation:
→ PD-L1 guides:
• Immunotherapy alone
• Chemo + immunotherapy



Clinical Pearl:
Do not start immunotherapy before ruling out EGFR/ALK (when clinically stable).

© Peters K, Kim MG, Gadgeel SM, et al. Adjuvant Systemic Therapy and Adjuvant Radiation Therapy for Stage I-IIIa Completely Resected Non-Small-Cell Lung Cancer: ASCO Guideline Report Recommendation Update. Journal of Clinical Oncology. Published online February 01, 2019. doi:10.1200/JCO.2018.16.3551

20

SCLC — Stage Drives Treatment

Limited Stage

- Concurrent chemoradiation
- Possible prophylactic cranial irradiation

Extensive Stage

- Platinum + etoposide+ Immunotherapy
- Maintenance immunotherapy

Unlike NSCLC:

- We do not delay treatment waiting for broad molecular panels.

© Peters K, Kim MG, Gadgeel SM, et al. Adjuvant Systemic Therapy and Adjuvant Radiation Therapy for Stage I-IIIa Completely Resected Non-Small-Cell Lung Cancer: ASCO Guideline Report Recommendation Update. Journal of Clinical Oncology. Published online February 01, 2019. doi:10.1200/JCO.2018.16.3551

21


Patient Case: Staging

John's Staging Results

- **Tumor:** 3.2 cm right upper lobe mass
- **Nodes:** Multi-station Mediastinal lymph node involvement (N2b)
- **Metastases:** None on PET or brain MRI


- **Biomarker results**
- EGFR: negative
- ALK: negative
- KRAS G12C mutation
- PD-L1 expression: **60%**

→ Stage IIIB NSCLC




22

Surgical considerations

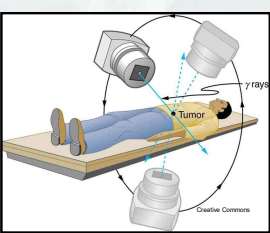


- Overall health and history (comorbidities)
- Pulmonary function
- Previous chest surgery
- Cardiac surgery
- Tumor location
- Lymph node involvement
- Patient preference



23

Radiation Considerations in NSCLC



Curative Treatment (Early Stage Disease)

- Stage I-II NSCLC (medically inoperable or surgery declined)

Definitive Therapy for Locally Advanced Disease


- Stage III NSCLC
- Concurrent chemoradiation
- Often followed by consolidation immunotherapy (e.g., Durvalumab)
- Standard for unresectable disease

Adjuvant / Postoperative Radiation

- After surgery in selected patients
- Positive surgical margins
- N2 nodal disease in select cases

Palliative Radiation

- Symptom control in advanced disease




24

NSCLC: Common Chemotherapy Agents


- NSCLC
 - Platinum Backbone
 - Cisplatin
 - Carboplatin
 - Combined With:
 - Pemetrexed (non-squamous only)
 - Paclitaxel
 - Docetaxel
 - Used in:
 - Neoadjuvant/ adjuvant therapy (early stage)
 - Stage III chemoradiation
 - Metastatic disease (often + immunotherapy)

© National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Non-Small Cell Lung Cancer, Version 2.2025. <https://www.nccn.org/guidelines/guidelines/docs/pdf/nscl.pdf>




28

SCLC: Common Chemotherapy Agents



- **First-Line Standard**
 - Platinum (cisplatin or carboplatin)
 - Etoposide
 - Often combined with immunotherapy in extensive-stage disease
 - For appropriate patients, consider adding lurbinectedin + atezolizumab for maintenance therapy
- **Second-line (relapsed):**
 - **Chemotherapy Options**
 - Topotecan
 - Lurbinectedin
 - Taxanes
 - Irinotecan
 - **Targeted / Immune-Redirecting Therapy**
 - Tarlatamab (DLL3-directed)

© National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Small Cell Lung Cancer, Version 2.2025. <https://www.nccn.org/guidelines/guidelines/docs/pdf/scl.pdf>




29

Key Nursing Themes Across All Chemotherapy

- **Myelosuppression**
 - Neutropenia → infection risk
 - Anemia → fatigue
 - Thrombocytopenia → bleeding
- **Nausea/Vomiting**
 - Especially with cisplatin
- **Neuropathy**
 - Platinum + taxanes
- **Renal Monitoring**
 - Critical with cisplatin
- **Patient Education**
 - Fever = emergency
 - Hydration importance
 - When to call clinic

© National Cancer Institute. Nursing Education. Published September 13, 2014. https://www.nccn.org/guidelines/guidelines/docs/pdf/nci_nurse_education.pdf



30

Immunotherapy: Nursing Considerations/Side Effect Management

Common Agents:	Pembrolizumab Nivolumab Atezolizumab Durvalumab
Used In:	NSCLC (metastatic & post-chemoradiation) Extensive-stage SCLC
Key Immune-Related Adverse Events (irAEs)	Skin: Rash, pruritus Lungs: Pneumonitis → new cough, dyspnea GI: Colitis → diarrhea, abdominal pain Liver: Hepatitis → AST/ALT Endocrine: Hypothyroidism, adrenal insufficiency, hypophysitis

© 2024 American Association of Cancer Nurses and Oncology. All rights reserved. For personal use only. For more information, visit www.aacno.org. Contact: 800-458-5232. Email: info@aacno.org

31

Patient Case: Nursing Implications During Treatment


<p>Chemotherapy Phase</p> <ul style="list-style-type: none"> Monitor for <ul style="list-style-type: none"> Esophagitis Radiation Pneumonitis Fatigue Myelosuppression Nausea/vomiting Nursing Interventions: <ul style="list-style-type: none"> Nutrition support Symptom monitoring Early symptom reporting 	<p>Immunotherapy Phase</p> <ul style="list-style-type: none"> Possible immune-related toxicities: <ul style="list-style-type: none"> Pneumonitis Colitis Hepatitis Endocrinopathies Nursing role: <ul style="list-style-type: none"> Early symptom recognition Patient education Coordination with oncology team
--	--

© 2024 American Association of Cancer Nurses and Oncology. All rights reserved. For personal use only. For more information, visit www.aacno.org. Contact: 800-458-5232. Email: info@aacno.org

32

Targeted Therapies

- Often Oral Agents
 - Common Issues:
 - Rash
 - Diarrhea
 - Hepatotoxicity
 - Adherence challenges
 - Nursing Role:
 - Early toxicity recognition
 - Reinforce daily adherence
 - Manage financial toxicity




© 2024 American Association of Cancer Nurses and Oncology. All rights reserved. For personal use only. For more information, visit www.aacno.org. Contact: 800-458-5232. Email: info@aacno.org

33

Patient Case: Nursing Considerations for KRAS G12C Inhibitors

Common side effects:	Nursing role:
<ul style="list-style-type: none">• Diarrhea<ul style="list-style-type: none">○ Nausea• Fatigue<ul style="list-style-type: none">○ Elevated liver enzymes• Musculoskeletal pain	<ul style="list-style-type: none">• Monitor LFTs• Manage GI symptoms• Reinforce adherence to twice daily oral therapy

© 2024 American Association of Thoracic Nurses. All rights reserved. 2024. www.aathn.org. For personal use only. All other rights reserved. All trademarks are the property of their respective owners. April 2024




37

Q 4

Do you have a thoracic nurse navigator in your practice?

- a. Yes
- b. No


© 2024 American Association of Thoracic Nurses. All rights reserved. 2024. www.aathn.org. For personal use only. All other rights reserved. All trademarks are the property of their respective owners. April 2024




38

Value of Nurse Navigation

Patients are more connected to their healthcare team
Patients feel heard
Single focus of contact
Increased adherence to care plans
Higher clinical trial participation
Offers hope and support
Better educated and engaged in treatment decisions
Can address health equities
Nurse Navigation is the thread that strings it all together




© 2024 American Association of Thoracic Nurses. All rights reserved. 2024. www.aathn.org. For personal use only. All other rights reserved. All trademarks are the property of their respective owners. April 2024



39

Why is Communication in Healthcare Important?

- Interdisciplinary communication is the key to "keeping the ball rolling"
- Decreases time from diagnosis to treatment
- Improves patient satisfaction
- Builds trust
- Prevents errors
- Warm handoffs
- Standard documentation templates




© 2014 American International Spring Forum

40

How Nurse Navigation Enhances Interdisciplinary Communication

- Patient-provider communication
- Multidisciplinary communication
- Family/caregiver communication
- Cultural sensitivity
- Non-verbal communication
- Updates on even small things go a long way with patients



© 2014 American International Spring Forum

41

Navigation Strategies in Lung Cancer Care Coordination

- Diagnostic Pathway**
 - Guide patients through staging workup, biomarker testing, and treatment sequencing
 - Track completion of testing
 - Reduce delays and barriers
- Early Identification and access**
 - Facilitate rapid referrals
 - Reduce time to specialty consults and treatment
- Multidisciplinary care coordination**
 - Serve as a central point of contact between departments
 - Coordinate appointments between specialists
 - Organize tumor boards
- Patient Education**
 - Education on diagnosis, treatment, and care planning
 - Assess educational needs and learning barriers
 - Use patient-friendly language
- Barrier Assessment and Mitigation**
 - Assess social determinants of health barriers
 - Connect patients and caregivers to resources
- Psychosocial Support**
 - Spend extra time with patient
 - Acknowledge impact of the disease
 - Address emotional needs
- Transition and survivorship planning**
 - Facilitate smooth transitions between phases of care
 - Coordinate survivorship and palliative care referrals


© 2014 American International Spring Forum

42

Q 5

What is the most common supportive service you refer a patient to?


- a. Dietitian
- b. Social work
- c. Financial Counselors
- d. Palliative Care
- e. Mental Health provider



43

Supportive Care

Dietitian	Physical therapy
Mental health therapy	Pulmonary rehabilitation
Social work	Oxygen support
Smoking cessation	Caregiver support
Palliative care	





Pratt L, Napolitano M, Salsbery J, et al. Supportive Care and Symptom Management. *Journal of Thoracic Oncology*. 2022;17(10):1029-1033. doi:10.1016/j.jtho.2022.06.014

44

What does supportive care look like?

- **Dietitian:**
 - Weight loss
 - Loss of appetite
 - Taste changes
 - Mouth sores
 - Changes in dietary needs
- **Social Worker:**
 - Financial strain
 - Transportation issues
 - Mental health care / Support groups
 - Wigs
 - Caregiver assistance
- **Palliative Care**
 - Refer early = better quality of life and symptom control
 - Anticipate what's ahead
 - Informed decision-making
 - Focus on the person, not the disease




© Association for Cancer Care and Research. All rights reserved. www.aacr.org

45

Supportive Care Continued

- **Shared decision making**
 - o Education on diagnosis and treatment
 - o What to expect?
 - o Allow time for questions
 - o Empowers patients
- **Energy Conservation**
 - o Rest before activity
 - o Pace activities
 - o Ask for help!
 - o Good nutrition
 - o Hydration
- **Oxygen Support**
 - o Reduce breathing effort and fatigue
 - o Medication for air hunger (dyspnea)
 - o Durable medical equipment for portability
 - o Education on smoking dangers with oxygen use
- **Mental Health**
 - o Acknowledge and normalize feelings
 - o Anxiety
 - o Stress
 - o Depression
 - o "Being a burden"


Yee, Miraluz, et al. "Lung Cancer Supportive Care and Symptom Management." *Hematology/Oncology Clinics of North America*, vol. 37, no. 3, June 2023, pp. 409-422. <https://doi.org/10.1016/j.hoc.2023.02.001>




46

Smoking Cessation

- 80-90% of lung cancers are caused by tobacco use
- Only 28.1% are caught at an early stage and 43% in late stages
- It's the elephant in the room. Bring it up!
- Emphasize it can be hard to quit and may need to try multiple times for success
- Vaping can also pose significant cancer risks that patient are not aware of
- Medications, patches, lozenges, inhalers, acupuncture, and "cold turkey" approach can all be effective treatment options
- Verbal support and regular check-ins are an important component of cessation programs



Creative Commons



47

Hospice Enrollment - Nursing Role

- Education on what to expect
- Acknowledge the patient's illness, experience, and emotional needs
- Active listening
- Family/caregiver support
- Inpatient hospice versus home hospice




Creative Commons



48

Lung Cancer Resources

- American Cancer Society
- Cancer Nursing Today
- Lung Cancer Alliance
- National Comprehensive Care Network
- Oncology Nursing Society
- American Lung Association
- Up to Date
- Freedom from Smoking
- Mayo Clinic
- National Cancer Institute
- NCODA
- LUNGevery
- International Association for the Study of Lung Cancers
- GO2 for Lung Cancer
- 4th Angel Mentoring Program




49

SUMMARY

RIGHT TEST, RIGHT TREATMENT, RIGHT TIME!

- Utilize the right work up to save time, prevent unnecessary care, and reduce costs
- Early detection increases survival
- Innovation in diagnostic testing, new medications, and treatment protocols are extending lives
- Nursing plays a critical role in enhancing interdisciplinary communications and reducing time to treatment
- Nurses can help shape the lung cancer patient's care and quality of life through comprehensive education and holistic support




50

QUESTION & ANSWER

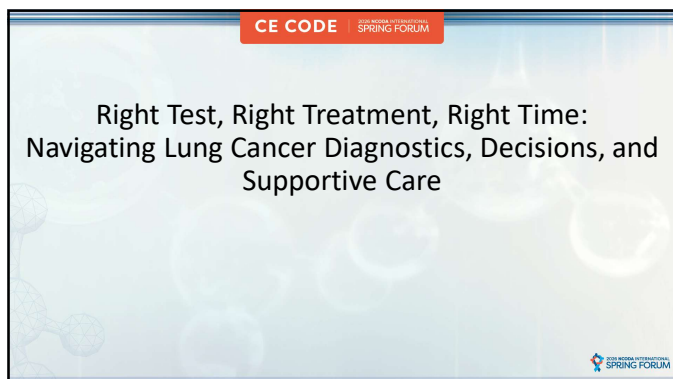
Right Test, Right Treatment, Right Time: Navigating Lung Cancer Diagnostics, Decisions, and Supportive Care

Sarah Tangerini, FNP-BC
Family Nurse Practitioner
Thoracic Oncology

Jill Wines, RN, BSN
Thoracic Nurse Navigator



51



52



53
