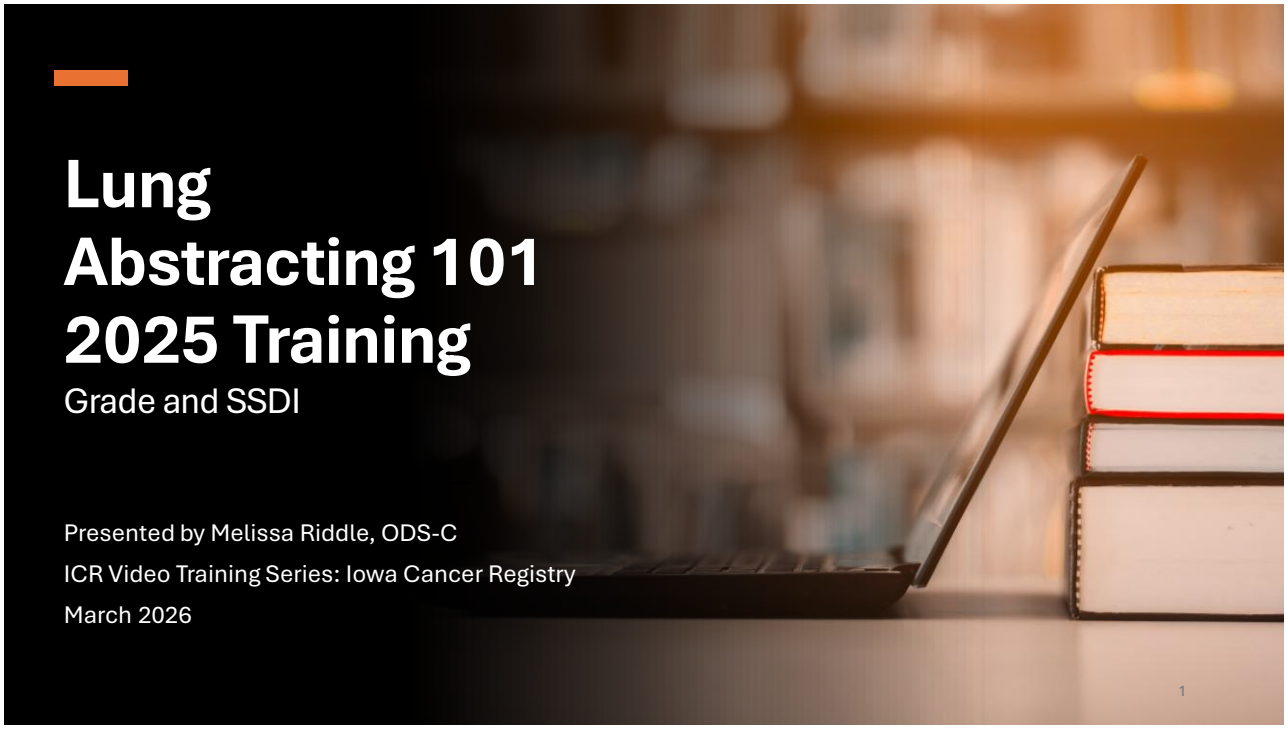
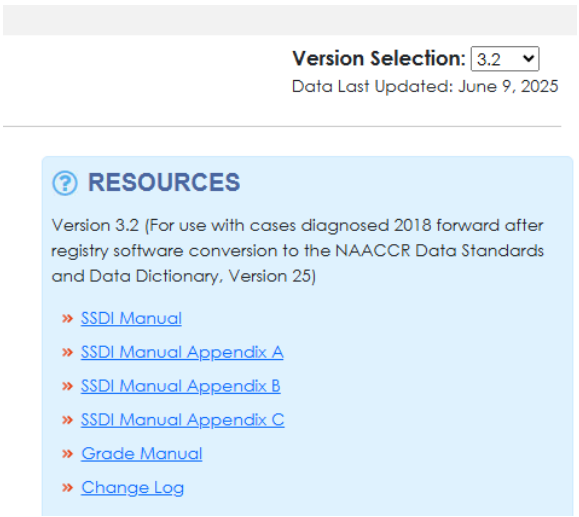


1

Grade Manual v3.2

- Grade Manual
  https://www.naaccr.org/wp-content/uploads/2024/10/Grade-Coding-Instructions-and-Tables-v3.2_printed.pdf?v=1762363228
- **Grade Table 02** - Lung
  - 2018-2024 Schema 00360
  - 2025+ Schema 09360



2

Grade Clinical

Can **NOT** be blank

- Assign the **highest grade** during the clinical timeframe
- Multiple tumors abstracted as a single primary with different grades – code the highest grade
- No clinical workup done – **code 9**

3

3

Grade Pathological

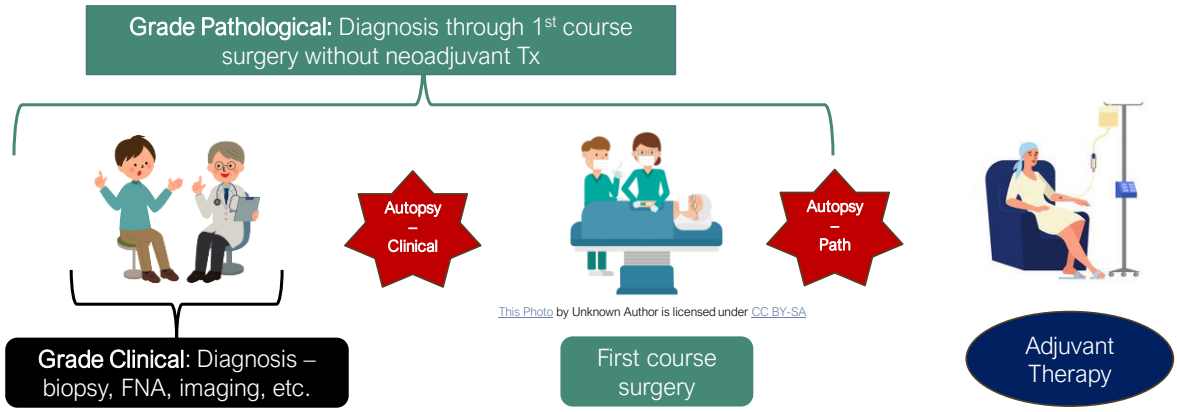
Can **NOT** be blank

- Assign the **highest grade** during this time frame
  - Date of diagnosis until the completion of first course surgery(ies)
- Use Grade Clinical for Grade Pathological when:
  - **Behavior**
    - Clinical and pathologic behavior is the **SAME** and clinical grade is higher
    - Clinical is invasive and pathologic is in situ
  - **Surgical Resection**
    - No grade documented or no residual cancer on surgical resection
  - **No Surgical Resection**
    - No primary site surgery, but positive microscopic confirmation of distant mets during clinical time frame
  - ***EXCEPTION***: if clinical grade uses preferred grade system and path grade does **NOT**, don't record Grade Clinical in Grade Pathological field

4

4

Clinical & Path Grade Coding Timeframe



5

5

Grade Post-Therapy Clin (yc)

- Leave blank when…
  - No neoadjuvant therapy
  - Neoadjuvant therapy complete, but no microscopic exam prior to primary site resection
- Assign **highest grade** during the Post-Therapy Clinical time frame
- Microscopic exam (biopsy, FNA, etc.) after neoadjuvant therapy but no grade or no residual cancer

6

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Grade Post-Therapy Path (yp)

- Leave blank when…
  - No neoadjuvant therapy
  - Neoadjuvant therapy complete, but no primary site surgery/resection
- Assign the **highest grade** during this time frame
- Use Grade Post-Therapy Clin for Grade Post-Therapy Path
  - **Behavior**
    - Post-therapy clinical and post-therapy path behavior is the **SAME** and post-therapy clinical grade is higher
    - Post-therapy clinical is invasive and post-therapy path is in situ
  - **Surgical Resection**
    - No grade documented or no residual cancer on surgical resection
  - ***EXCEPTION***: if post-therapy clinical grade uses preferred grade system and post-therapy path grade does **NOT**, don't record Post-Therapy Grade Clin in Post-Therapy Grade Path field

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Post-Therapy Grade Coding Timeframe

Autopsy – Clinical

Grade Clinical: Diagnosis – biopsy, FNA, imaging, etc.

Neoadjuvant Therapy

Autopsy – Post Therapy Clin

Grade Post-therapy Clin

Autopsy – Post Therapy Path

Grade Post-therapy Path

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Grade Table 02

Description	Notes	Code
G1: Well differentiated		**1**
G2: Moderately differentiated		**2**
G3: Poorly differentiated		**3**
G4: Undifferentiated; Anaplastic	Code small cell carcinoma as anaplastic even if there is no grade on path report	**4**
Not documented; Not assessed, unknown if assessed	Primary site grade isn't documented; "not applicable" marked on CAP protocol	**9**

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Small Cell Carcinoma

- By its definition it is anaplastic per SSDI Working Group
  - It is **always** the highest grade, which is 4
- If biopsy path report states Small Cell Carcinoma without a grade for a lung mass, code Grade Clinical – **4**
- If lobectomy (primary site resection) and path report states Small Cell Carcinoma, grade 3
  - Code Grade Pathological - **4**

Resource: https://cancerbulletin.facs.org/forums/forum/site-specific-data-items-grade-2018/124735-small-cell-carcinoma-grade

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Lung SSDI

Separate Tumor Nodules

Visceral and Parietal Pleura Invasion

ALK Rearrangement

EGFR Mutational Analysis

PD-L1

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SSDI Manual

- **SSDI Manual v3.2**

  https://www.naaccr.org/wp-content/uploads/2024/10/Site-Specific-Data-Item-SSDI-Manual_v3.2_printed.pdf?v=1762377311

Version Selection: 3.2

Data Last Updated: June 9, 2025

RESOURCES

Version 3.2 (For use with cases diagnosed 2018 forward after registry software conversion to the NAACCR Data Standards and Data Dictionary, Version 25)

- SSDI Manual
- SSDI Manual Appendix A
- SSDI Manual Appendix B
- SSDI Manual Appendix C
- Grade Manual
- Change Log

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Separate Tumor Nodules

- This is a single tumor with intrapulmonary metastasis
  - Ipsilateral lung – same or different lobes
- Biopsy of the additional tumors may or may not be performed
  - There needs to be a strong suspicion the multiple lesions are of the same histological type by imaging, physician judgement, or microscopically
- Source documents: imaging and pathology reports
  - Physician statement can be used when there is no other information

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Separate Tumor Nodules

- Do **NOT** code these situations as STN
  - Second primary tumor – not the same histology
    - AKA synchronous primary tumors
  - Multifocal lung adenocarcinoma w/ ground glass/lepidic features
    - GGN/GGO
    - Not solid tumors
    - Minimally invasive adenocarcinoma
  - Diffuse pneumonic adenocarcinoma
  - AJCC T (m) suffix used
    - Multifocal lung adenocarcinoma with ground glass or lepidic features

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Separate Tumor Nodules

Description	Notes	Code
No separate tumor nodules (STN)	Non-invasive behavior (/2); Single tumor only; No mention of STN	**0**
STN in ipsilateral lung, **SAME** lobe	Same lobe – Same histology	**1**
STN in ipsilateral lung, **DIFFERENT** lobe	Different lobe – Same lung/histology	**2**
STN in ipsilateral lung, **SAME & DIFFERENT** lobes	Same & Different lobes – Same lung/histology	**3**
STN in ipsilateral lung	Unknown which lobe (same or different)	**4**
Multiple nodules/foci present, not classified as STN	Terminology not used for these multiple nodules as a situation in *Note 3* – second primary, GGN/GGO, lepidic, etc.	**7**
Not documented; No relevant imaging or primary resection	Unknown if assessed or not assessed	**9**

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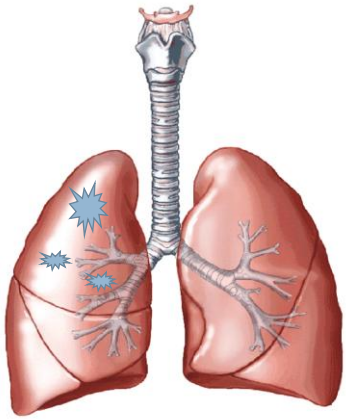
Code 1



- Separate tumor nodules:
  - same histo type
  - same lobe
- Look at cT3

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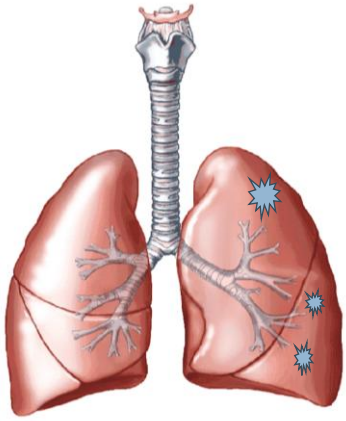
Code 2



- Separate tumor nodules:
  - same histo type
  - same lung
  - different lobe
- Look at cT4

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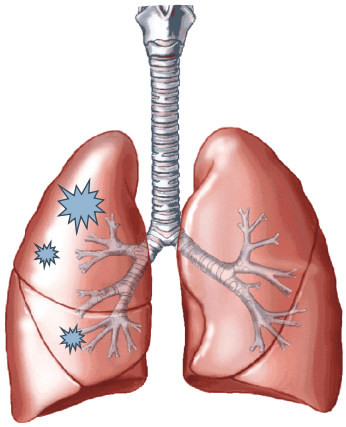
Code 3



- Separate tumor nodules:
  - same histo type
  - same lung
  - Same **AND** different lobes

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Forum Q & A

Q: Does there have to be proof that nodules are the same histologic type to be coded 1-4? Or can the assumption be made that they are of the same histologic type unless specified otherwise?

A: Per *note 2*, separate tumor nodules can be defined clinically by imaging, so **not all separate tumor nodules need to be confirmed microscopically**. Unless specified otherwise, you can assume they are all the same histologic type.

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Visceral & Parietal Pleural Invasion

- Invasion beyond the elastic layer or to the surface of the visceral pleura
  - Elastic stain is not needed in most cases to assess for invasion
- Visceral pleural invasion (VPI) relevant for peripheral lung tumors
- **Source document**: surgical pathology report
  - Surgical resection **MUST** be done to determine pleura involvement
  - Do ***NOT*** use imaging to code this data item
  - Physician statement can be used without more information

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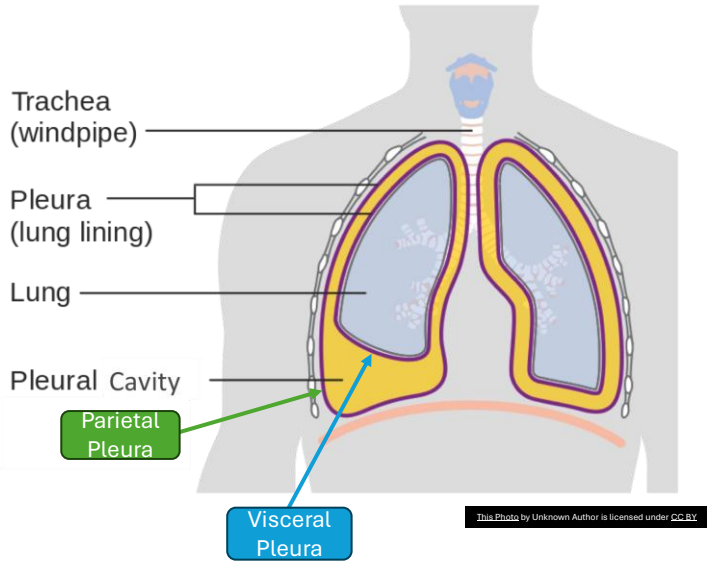
Visceral & Parietal Pleura

- **Visceral pleura**
  - Inner layer – directly covers the surface of the lung
  - Maintains lung shape & position
  - Lacks pain receptors
- **Parietal pleura**
  - Outer layer – lines the inner surface of the thoracic cavity
  - Produces pleural fluid, acts as a lubricant between the pleural layers, reduce friction while breathing
  - Helps maintain negative pressure within pleura cavity, which is essential for lung inflation
  - Highly sensitive and innervated



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Visceral & Parietal Pleural Invasion

Description	Notes	Code
No evidence of VPI	Non-invasive behavior (/2); No evidence of primary tumor; Stated as PL0; Extends to elastic layer (not through)	**0**
VPI, NOS	Stated PL1 or PL2; No specification of visceral or parietal pleura	**4**
Invade into or through parietal pleura **OR** chest wall	Stated PL3	**5**
Tumor extends to pleura, NOS	Not stated visceral or parietal pleura	**6**
Not documented; No surgical resection of primary site	Only FNA performed; Unknown if visceral/parietal pleura examined; No information in medical record	**9**

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ALK Rearrangement

Applies to cases diagnosed 2021+

- **ALK** – Anaplastic Lymphoma Kinase gene or makes too much ALK protein
  - Performed for advanced non-small cell lung cancer to identify tumors which are sensitive to ALK kinase inhibitors
    - Will it respond to specific treatments
- **Source documents**: pathology report, clinical lab report, molecular report, IHC report
  - Physician statement can be used if there is no other information
  - Applies to rearrangements, ignore amplifications or point mutations
- **Neoadjuvant Therapy**
  - Record from tumor specimen prior to neoadjuvant therapy
  - If there is no results from pre-treatment specimens, then report findings from post-treatment specimens

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ALK Rearrangement

Description	Notes	Code
Normal; ALK negative	No rearrangements	**0**
Abnormal rearrangement	EML4-ALK; KIF5B-ALK; TFG-ALK; KLC1-ALK	**1**
Abnormal rearrangement	ALK rearrangement not listed in code 1	**2**
Rearrangement, NOS		**4**
Test ordered, results not in chart	You know physician ordered the test but don't have results in chart	**7**
Not documented; Not assessed or unknown if assessed	Insufficient amount of tissue available to perform test; Test done – results equivocal; No microscopic confirmation of tumor	**9**

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EGFR Mutational Analysis

Applies to cases diagnosed 2021+

- **EGFR** – Epidermal Growth Factor Receptor
  - Performed on patients with advanced non-small cell lung cancer
    - Test to determine if tumor sensitive to tyrosine kinase inhibitors (TKI)
    - Presence of Exon 20 EGFR associated with resistance to EGFR TKI drugs
    - Recommended by treatment guidelines as prognostic marker and factor to determine appropriate therapy
- **Source documents**: pathology report or clinical lab report
  - Physician statement can be used if there is no other information
- **Neoadjuvant Therapy**
  - Record from tumor specimen prior to neoadjuvant therapy
  - If there is no results from pre-treatment specimens, then report findings from post-treatment specimens

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EGFR Mutational Analysis

Description	Notes	Codes
Normal; EGFR negative/wild type		**0**
Abnormal (mutated)	Exon(s) 18, 19, 20, and/or 21	**1**
Abnormal (mutated)	**NOT** in Exon(s) 18, 19, 20, and/or 21	**2**
Abnormal (mutated)	Exons not specified; NOS	**4**
Test ordered, results not in chart		**7**
Not documented; Unknown if assessed/Not assessed	Insufficient amount of tissue to perform test; Test done – results equivocal; No microscopic confirmation of tumor	**9**

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PD-L1

Applies to cases diagnosed 2025+

- **PD-L1** – Programmed Death-Ligand 1
  - Protein found on the surface of many normal cells and certain cancer cells
  - Plays a crucial role in the immune system by acting as a checkpoint that helps regulate immune responses
    - Allows some cancer cells to go undetected and evade the immune system
- Usually test on metastatic non-small cell lung cancer
  - Pathologist determines a tumor proportion score (TPS)
  - Treating physician uses that information to determine what type of treatment the patient will receive
- **Source document**: pathology report
  - Physician statement can be used if there is no other information available
- **Code the actual TPS** (0.0-100.0)

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PD-L1

Description	Notes	Code
No PD-L1 expression	TPS = 0%	**0.0**
Actual TPS	TPS = 0.1-100.0%	**0.1-100.0**
PD-L1 absent **AND** TPS negative	If there is an actual TPS, then code that; don't use these codes	**XXX.2**
PD-L1 present **AND** TPS low		**XXX.3**
PD-L1 present **AND** TPS high/positive		**XXX.4**
Test ordered, results not in chart		**XXX.7**
Not documented; PD-L1 not determined	No microscopic confirmation of tumor; PD-L1 not assessed or unknown if assessed;	**XXX.9**
Diagnosed before 2025		***Blank***

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SEER*Educate Cases

- **Coding – CEs**
  - Dx 2021-2026 EOD, Summary Stage, Grade, SSDI mashup
    - **Lung Cases 1-5** (CE closes 1/2028)

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Questions? Contact me.

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