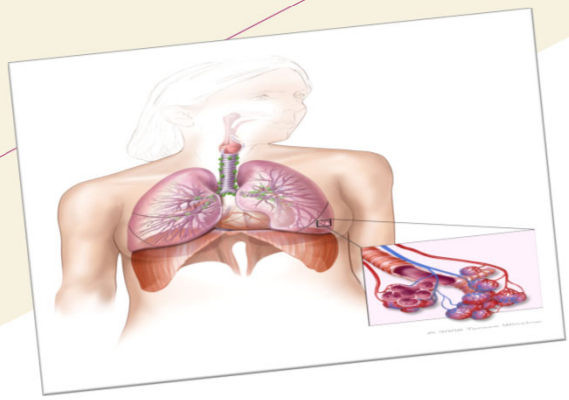


Lung 2022

January 6, 2022

NAACCR

Q&A

Please submit all questions concerning the webinar content through the Q&A panel.

If you have participants watching this webinar at your site, please collect their names and emails.

We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.

NAACCR

2

Fabulous Prizes

NAACCR 3

Guest Presenter

- Vicki Hawhee, Med, CTR
  - QC/Education Specialist, Moffitt Cancer Center

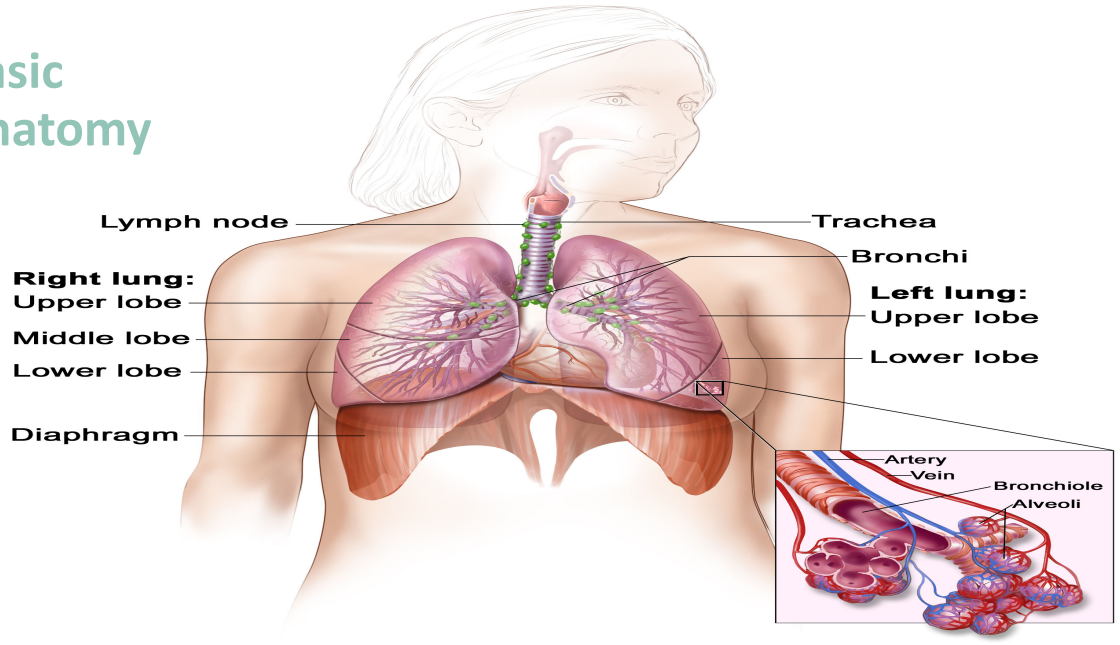
NAACCR 4

Agenda

- Anatomy
  - Basic
  - Staging perspective
- SSDIs
- Solid Tumor Rules
- Case Scenarios
- Lung Jeopardy

5

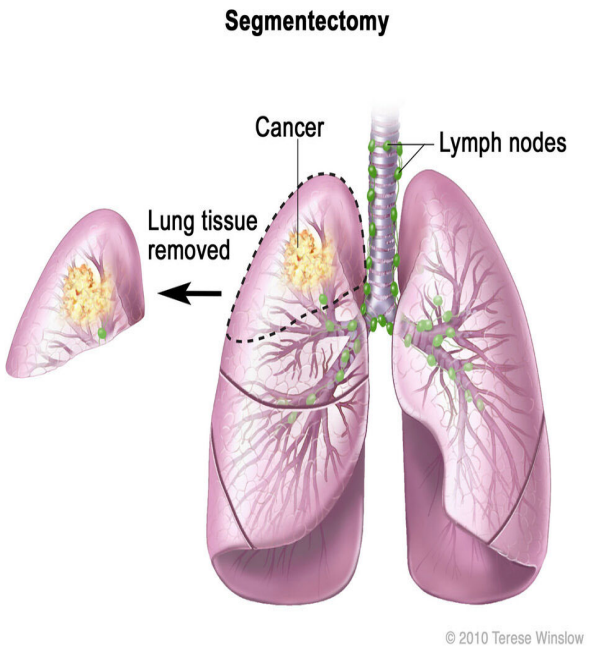
Basic Anatomy



6

Anatomy

- Right and left upper lobe
  - Apical segment
  - Posterior segment
  - Anterior segment
- Left upper lobe also has:
  - Superior lingular segment
  - Inferior lingular segment
- Right middle lobe
  - Lateral segment
  - Medial segment
- Right and left lower lobe
  - Apical segment lower lobe
  - Posterior basal segment
  - Lateral basal segment
  - Anterior basal segment
  - Medial basal segment



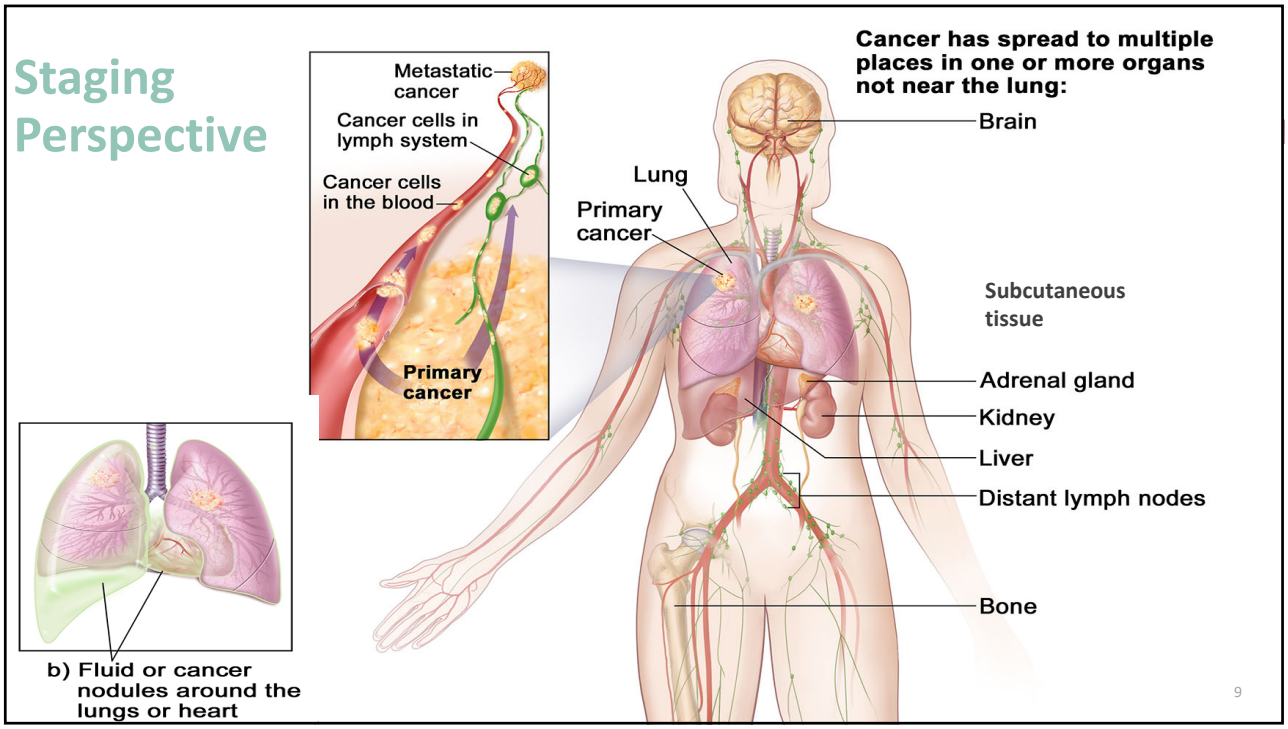
Question

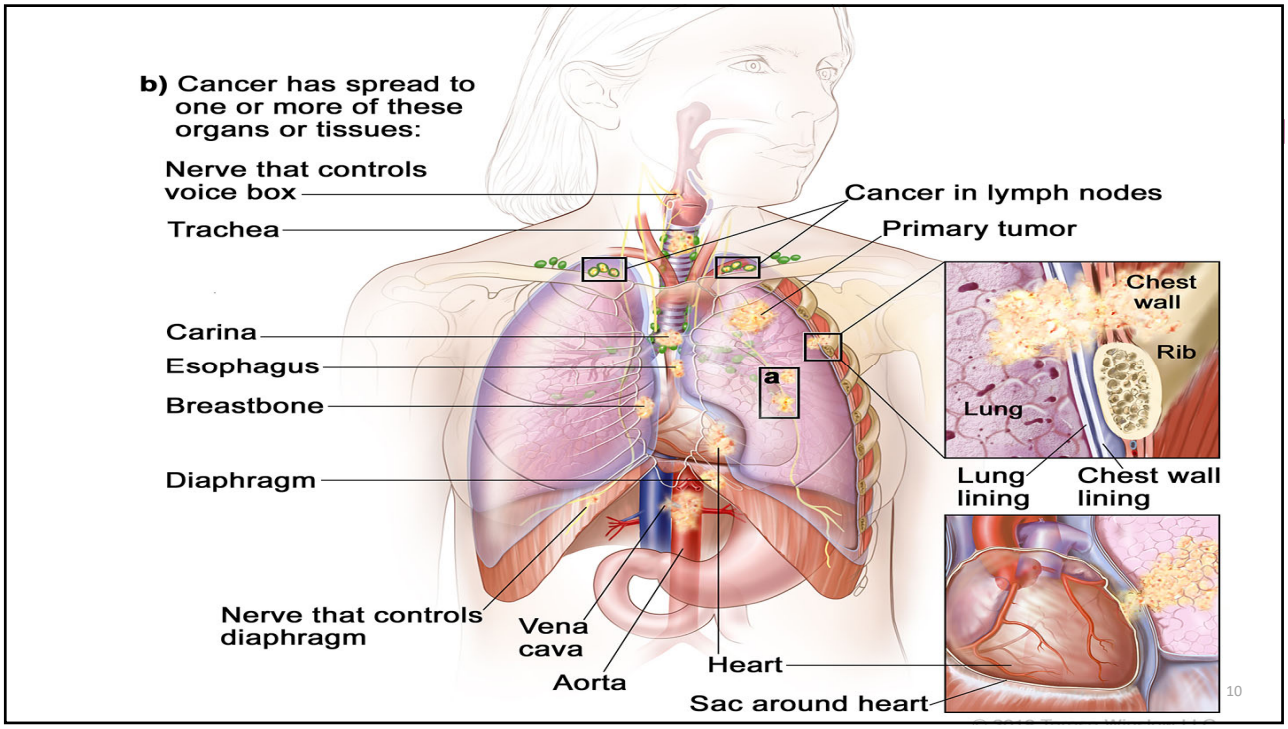
- Q: How would you code a Lingula-Sparing LUL Lobectomy & Mediastinal Lymph Node Dissection?
  - Would you assign code 33 even though the entire lobe was not removed or code 22 or something else?
- A: Assign code 22.
  - The full lobe must be removed to assign code 30 or 33.
  - Code 22 may be used if multiple segments, but less than the full lobe is removed.
- 20 Excision or resection of less than one lobe, NOS
  - 23 Excision, NOS
  - 24 Laser excision
  - 25 Bronchial sleeve resection ONLY
  - 21 Wedge resection
  - 22 Segmental resection, including lingulectomy
- 30 Resection of lobe or bilobectomy, but less than the whole lung (partial pneumonectomy, NOS)
  - 33 Lobectomy WITH mediastinal lymph node dissection

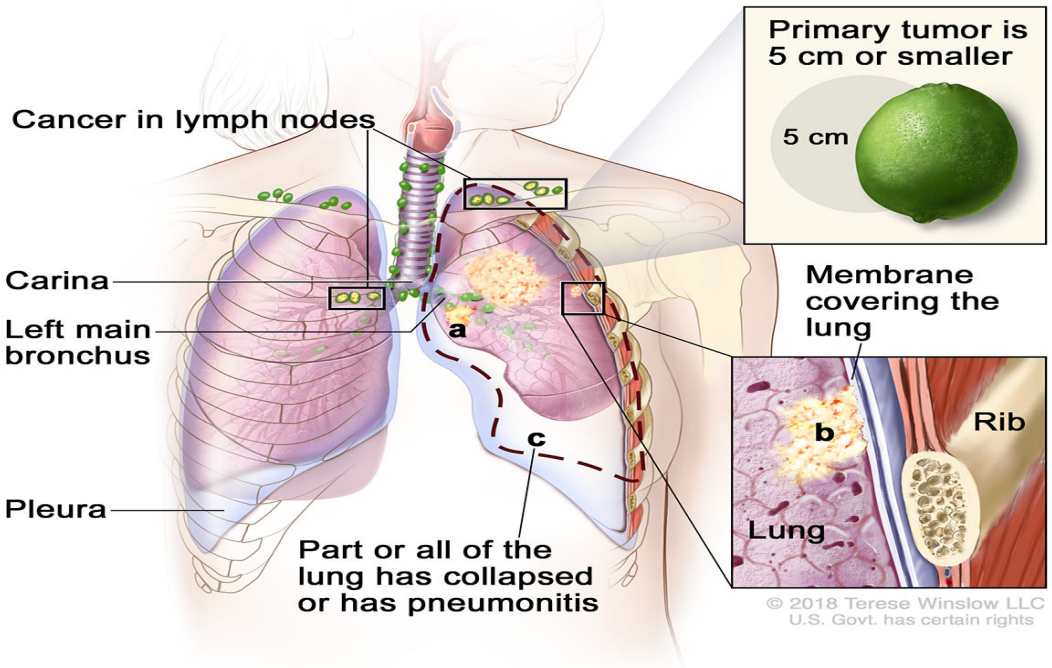
https://cancerbulletin.facs.org/forums/forum/fords-national-cancer-data-base/store/first-course-of-treatment-aa/surgery-aa/123270-lingula-sparing-lul-lobectomy

8

Staging Perspective

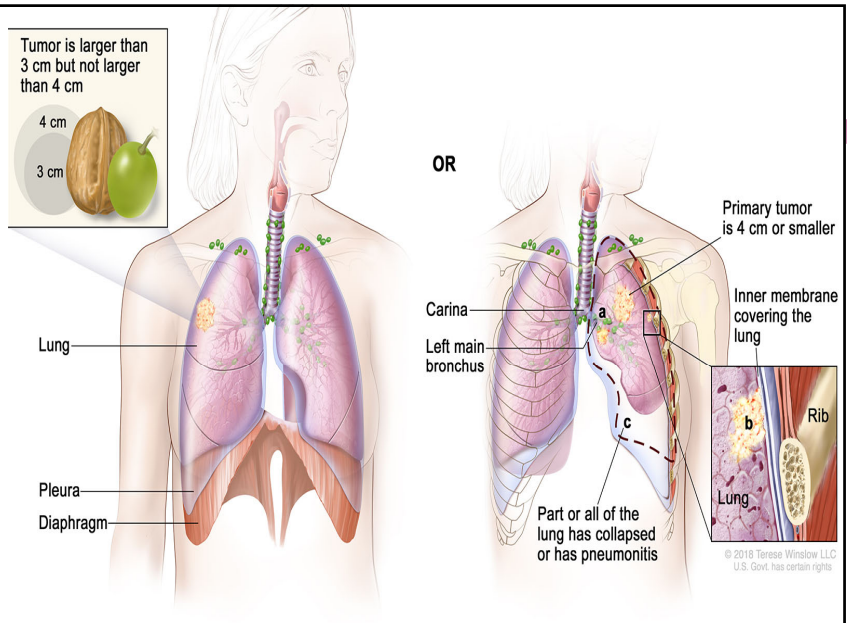






T2 based on size or size and extension

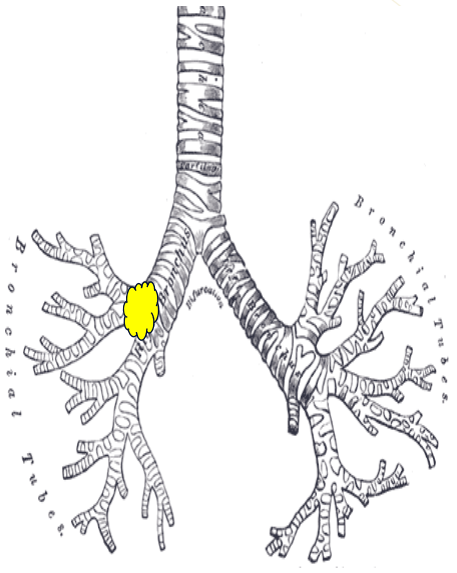
- Size >3-4cm or >4-5cm
- Size less than 5cm and
  - Main stem bronchus
  - Visceral Pleura
  - Atelectasis or obstructive pneumonitis



Page 447 AJCC 8th edition

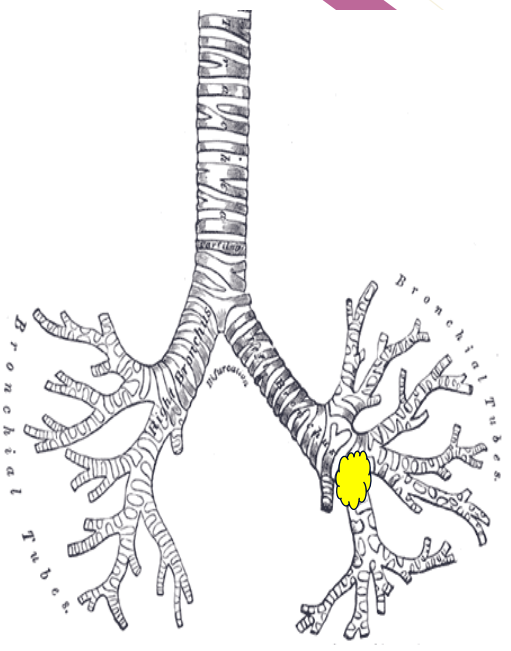
Atelectasis

- The collapse of part or (much less commonly) all of a lung
- Caused by a blockage of the air passages (bronchus or bronchioles) or by pressure on the outside of the lung.



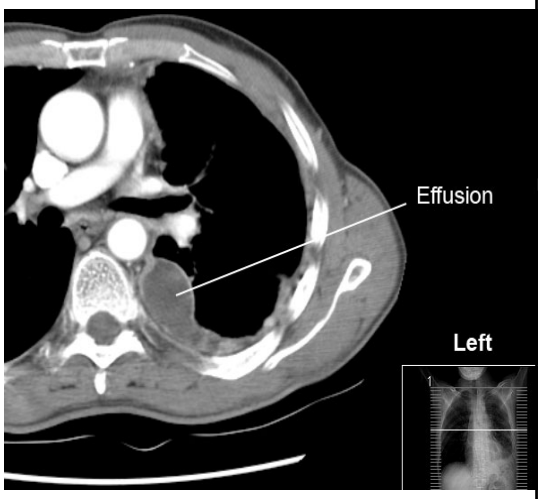
Obstructive Pneumonitis

- Combination of atelectasis, bronchiectasis with mucous plugging, and parenchymal inflammation that develops distal to an obstructing endobronchial lesion.



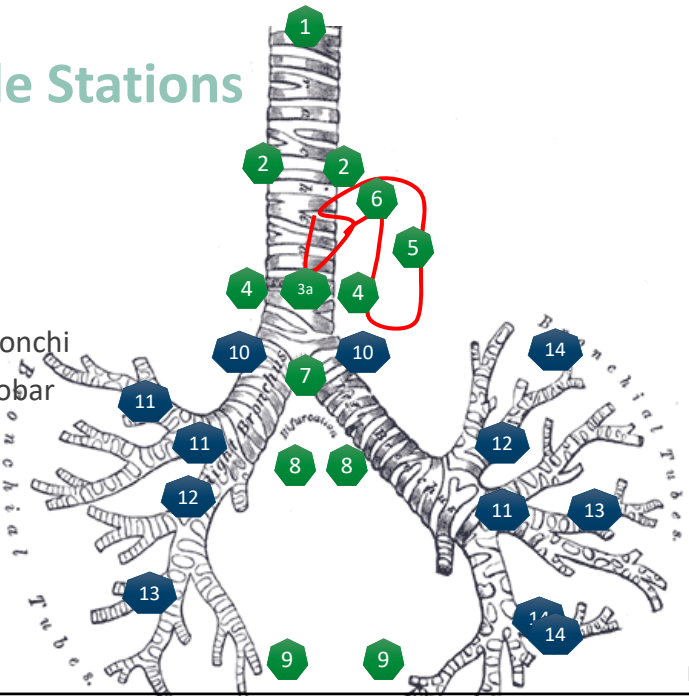
Pleural Effusion

- Caused by excess fluid accumulation between the two layers of the pleura
- Consider malignant unless multiple cytopathologic examinations of pleural and/or pericardial fluid are negative for tumor, and the fluid is non-bloody and is not an exudate



Lymph Node Stations

- 1 Supraclavicular
- 2-9 Mediastinal
- 10 hilar
- 11 interlobar
- 12 along the lobar bronchi
- 13 along segmental lobar
- 14 subsegmental



Page 434 AJCC Manual

MULTIPLE TUMORS

Synchronous primaries or intrapulmonary metastasis?

17

SSDI-Separate Tumor Nodules

Intrapulmonary metastasis

- AJCC-*T3, T4, or M1*
- AJCC T Suffix-*Blank*
- SSDI Separate Tumor Nodules-*1*

Multifocal/ Ground glass features

- AJCC-*T value based on size of largest tumor*
- AJCC T suffix-*(m)*
- SSDI Separate Tumor Nodules- *0*

18

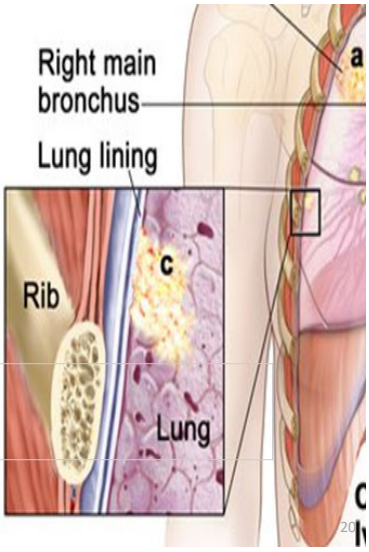
General Instructions for Multiple Tumors

- 4 disease patterns for multifocal lung disease:
- Two or more synchronous or metachronous primary tumors should be classified separately with individual TNM regardless of whether or not they are in separate lobes, same lobe, etc. (**abstract the largest and use the (m) suffix to denote multiple synchronous primaries - this is NOT reflected in the "separate tumor nodules" SSDI)**
- Separate tumor nodules of the same histopathologic type (intrapulmonary mets). This will either make the 1 primary T3, T4 or M1a depending on the location of the separate tumors. **Do NOT use the (m) suffix and DO reflect this in the "separate tumor nodules SSDI"**
- Multifocal lung adenocarcinoma with ground glass/lepidic features. **Use the T category of the highest T followed by the # of other tumors or (m). DO NOT reflect this in the "separate tumor nodules" SSDI.**
- Diffuse pneumonic-type adenocarcinomas. Base the T category on the location of the tumors, T3 or T4. **DO NOT use the (m) suffix, DO NOT reflect this in the "separate tumor nodules" SSDI**

19

SSDI-Visceral and Parietal Pleural Invasion

- PL0 - Tumor that is surrounded by lung parenchyma or invades superficially into the pleural connective tissue beneath the elastic layer but falls short of completely traversing the elastic layer of the pleura
- PL1 - Tumor that extends through the elastic layer
- PL2 - Tumor that extends to the surface of the visceral pleura
- PL3 - Tumor that extends to the parietal pleura or chest wall



4- Invasion of visceral pleura present, NOS
Stated as PL1 or PL2

See page 443 of the 8th edition

ALK REARRANGEMENT

- There are three types of *ALK* gene mutations:
  - Rearrangement (ALK-R)
  - Amplification (ALK-A)
  - Point mutation.
- For this SSDI, we are only interested in rearrangement (ALK-R)

ALK-R

- Question:
  - Primary lung adenocarcinoma - testing below all done on the resected primary lung tumor tissue. **ALK by IHC - negative**
  - Variant of uncertain clinical significance found for ALK on next generation sequencing (NGS): the specific *mutation* is ALK c.350C>G (p.P117R) (chr2:g.30143176G>C)
  - FISH for ROS1 and RET genes performed at Mayo Clinic negative for rearrangement, no testing for ALK gene at Mayo Clinic.
- Answer
  - coded to 0 since it clearly indicates there is no rearrangement.

https://cancerbulletin.facs.org/forums/forum/site-specific-data-items-grade-2018/122271-alk-mutation

EGFR MUTATIONAL ANALYSIS

- Epidermal growth factor receptor (EGFR)
  - A protein on cells that helps them grow. A mutation in the gene for EGFR can make it grow too much.

NAACCR

23

Lung

Case Scenarios

NAACCR

Case #1

- 12/02/2020 Outside Facility – CT lung screening – No pulmonary nodules seen throughout the lungs bilaterally. Moderate to severe emphysema with an upper lung predominance. No adenopathy, no pleural effusions.
- 01/02/2021 Outside facility – Chest xray for SOB – questionable 1.9 cm nodular density in the left mid lung, followup studies may be helpful to further evaluate.
- 1/10/2021 – Outside Facility – CT chest – Moderate size nodular mass 31 x 30 mm, seen in the lingula, possibility of this representing neoplastic process needs to be considered. No other findings.
- 02/01/2021 A 72 year old female with an 85-pack-year history of cigarettes presents with a newly discovered lingular mass. Pt had CT lung screening scan 12/02/2020 that showed no nodules, but presented to her primary care in January with worsening shortness of breath, chest xray was done followed by CT chest. She has moderate emphysema, no pulmonary nodules. The lingular mass has not been biopsied, but is most likely a malignancy. Discussed the natural history of lung neoplasms and diagnostic treatment options. She does not want to proceed with surgery (and is not a good candidate as she likely would not tolerate lung resection well). Recommend completing diagnostic workup and consult with radiation oncology about SBRT.

Case #1 continued

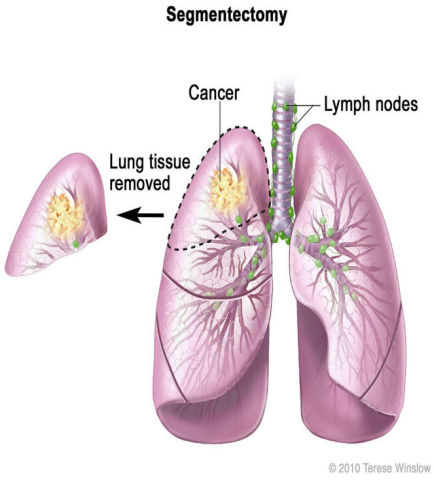
- PET SCAN – Lingular mass 4.1 x 3.5 cm with SUV max 22.5 and appears to abut the lingular bronchus. No definite PET evidence of additional FDG Avid lung nodules. Few scattered left axillary level 1-2 nodes without pathologic anatomic features.
- EBUS with biopsy - LUL endobronchial biopsy – Poorly differentiated squamous cell carcinoma.
- FNA Station 7 node – lymphoid elements (no malignancy)
- FNA Station 11L node – scant lymphoid elements and bronchial cells (no evidence of malignancy)
- MRI brain negative

- Patient found not to be a surgical candidate due to emphysema. Recommend to proceed with radiation to the left lung with 60 Gy in 8 fractions delivered on the MR linac with daily adaptive therapy given the central location.

Left Lingula

Anatomy

- Upper Lobe
  - Apical segment
  - Posterior segment
  - Anterior segment
- Left Lobe also has
  - Superior lingular segment
  - Inferior lingular segment
- Right Middle Lobe
  - Lateral segment
  - Medial segment
- Lower lobe
  - Apical segment lower lobe
  - Posterior basal segment
  - Lateral basal segment
  - Anterior basal segment
  - Medial basal segment



27

Clinical Information

Data Item	Value	Data Item	Value	Data Item Value	
Primary Site	C34.1	C Grade	3	Clin Tumor Size	041
Laterality	2 (left)	P Grade	9	Path Tumor Size	999
Histology	8070	YC Grade		Summary	041
Behavior	/3	YP Grade			
		cT	cT2b	*4.1 cm tumor*	
RLN Positive	00	cN	cN0 (f)	*Node negative*	*(by biopsy)*
RLN Examined	95	cM	cM0	*No mets*	
		cStage	IIA		

Summary Stage	1 Localized				
EOD Primary Tumor	300 Confined to the lung	EOD Regional Lymph Node	000	EOD Mets	00

Radiation delivered

Treatment Summary: Radiation Oncology- Course: 1 Protocol:						
Treatment Site	**Current Dose**	**Modality**	**From**	**To**	**Elapsed Days**	**Fx.**
L Lingula	6,000 cGy	x06	xx/2021	xx/2021	9	8

How to code the EB Planning technique

- *Dose was very high, so must check to see if SBRT or something else*

RADIATION TREATMENT PLANNING NOTE:

- The patient is to be treated to a total dose of 60 Gy in 8 fractions of 7.5 Gy each using IMRT. IMRT is necessary so as to achieve acceptable Dose Gradient and Conformity Index and reduce dose to critical surrounding normal structures. A MR-gated approach will be taken to limit dose to normal organs at risk.

This note was in the EMR for each of the 8 days the patient received a fraction:

- A new MRI was obtained today. Upon review, I recontoured all structures and determined that there were anatomic and tumor changes. I then predicted the original dose on today's images and a new IMRT plan was required based on poor tumor coverage by the prescription dose. IMRT was required due to close proximity to normal structures, dose escalation, and narrow margins. I reviewed the new optimized plan and it was acceptable for treatment. QA was performed and patient was treated with the new optimized plan.

Radiation

Data Item	Value
Primary Treatment Volume	30
Draining LN	00
Modality (x06)	02
EB Planning technique	10

Data Item	Value
Dose per FX	00750
Fractions	008
Total Dose	006000

31

Additional Treatment

- Patient with high risk stage IIA PD NSCLC, SCC histology, cure rate is significant for XRT alone but because of her high risk features chemotherapy can offer additional benefit in our goal of curative intent. Discussed the use of carboplatin + gemcitabine every 3 weeks for 4 cycles (completed all 4 cycles but dose reduced due to thrombocytopenia).

Case 1 continued answers

Data Items	Values
Diagnostic/ Staging Procedure	02
Surgical Procedure of Primary Site	00
Scope of Regional Lymph Node Surgery	01

Data Items	Values
Chemotherapy	03
Hormone Therapy	00
Immunotherapy	00

Case #2

Patient with a history of CLL, followed with scans. Recently presented to the ER for hemoptysis and SOB. Based on imaging findings, pt had biopsy of LUL nodule c/w NSCLC/SCC. He has a history of recurrent pleural effusions associated with the treatment for the CLL.

- 1/8/2021 – PET CT – Interval increased hypermetabolic uptake involving malignant mediastinal and hilar nodes from prior PET CT. New peripheral nodules and cavitary lesions demonstrating increased uptake, suspicious for septic embolism. Malignancy is also a possibility. Small right greater than left loculated pleural effusions, decreased from recent chest CT. No malignant adenopathy in the neck, abdomen or pelvis.
- 02/03/2021 CT CHEST – Left upper lobe mass, not apparent on prior CT from 2020, 3.9 x 2.7 x 2.5 cm. Associated with occlusion or possible invasion of LUL bronchus suggesting either post-obstructive pneumonia or lymphangitic carcinomatosis. (PET positive mass 01/08/21 has increased in size and infiltrates were not present on prior PET). Right apical lung 8 mm pulmonary nodule (4.4 mm on January scan), RUL anterior segment subpleural nodule 7 mm (not seen on prior imaging). LUL 15 mm pulmonary nodule (prior scan was only 5 mm), LUL 9 mm pulmonary nodule not apparent on prior imaging. Mediastinal and hilar adenopathy not present in 2020, some are increased in size compared to January PET. Persistent at least partially loculated right greater than left pleural effusions, no significant change in overall size.

Case 2 continued

02/04/2021 LUNG, LEFT UPPER LOBE NODULE, BIOPSY:
- Non-small cell carcinoma, consistent with squamous cell carcinoma (see comment).

Comment
- Immunohistochemical stains received for review with adequate controls show tumor cells positive for CK7, CK5/6, p40 and negative for CK20, TTF-1 and synaptophysin.

- SCC highly suspicious for metastatic disease and lung primary. Interval imaging showed worsening. Additional contralateral pulmonary nodules are seen consistent with likely M1a lesions at least. Awaiting PD-L1 staining and additional molecular testing, plan for Guardant360, discussed immunotherapy (possible combination with chemotherapy), will complete staging workup.

Solid Tumor Rules

- **Rule M9** Abstract a **single primary** when there are **simultaneous multiple** tumors:
- • In **both** lungs (multiple in right and multiple in left) **OR**
- • In the **same** lung **OR**
- • **Single** tumor in one lung; **multiple** tumors in **contralateral** lung

- ***Note 4:*** When there are multiple tumors in one or both lungs, the physician usually biopsies only one mass/tumor. They treat the patient based on that single biopsy, assuming all of the masses/tumors are the same histology.

36

Histology (STR)

- 3. Code the specific histology described by **ambiguous terminology** (list follows) **ONLY** when A or B is true: A. The only diagnosis available is **one histology** term described by ambiguous terminology
- B. There is a **NOS histology and a more specific** (subtype/variant) described by ambiguous terminology
- • Specific histology is clinically confirmed by a physician (attending, pathologist, oncologist, etc.) **OR**
- • Patient is receiving treatment based on the specific histology described by ambiguous term
- ***Example:*** The pathology diagnosis is NSCLC consistent with adenocarcinoma. The oncology consult says the patient has adenocarcinoma of the right lung. This is clinical confirmation of the diagnosis, code adenocarcinoma. The case meets the criteria in **bullet 1.**

37

More information

- 02/28/2021 – CTA – Numerous lung masses, dominant one noted in the left upper lobe region. No evidence of pulmonary embolism.
- 03/01/2021 – CT head – no evidence of mets.
- 03/02/2021 – PET SCAN Progression of multiple bilateral lung masses and nodules. New nodular and interstitial LUL infiltrate is likely related to lymphangitic spread of tumor. Bilateral pleural effusions with compressive lower lobe atelectasis.
- Patient is s/p Guardant360 testing (negative).
  - Precision medicine noting limited mutations amendable to on label targeted therapy, otherwise PD-L1 CPS 30%. Given his overall performance status along with clinical findings will proceed with IO monotherapy, Keytruda. Re-reviewed data from Keynote-42 [Mok, et al Lancet 2019] including median OS 17.7m, ORR 33% in TPS >20% group. Re-addressed adverse effects of immunotherapy treatment, including autoimmune phenomenon, fatigue, rash, thyroiditis, hypophysitis, pneumonitis, hepatitis, colitis, etc. Of note patient does not have any documented auto-immune conditions.
  - Of note, per NCCN guidelines Keytruda can cross cover for recurrent or metastatic SCC. Patient recently completed re-staging CT imaging in June 2021. We re-addressed goals of care including disease control and symptom management.

Clinical Information

Case 2					
Primary Site	C34.1	Clinical Grade	9	Tumor Size Clin	039
Laterality	2	Path Grade	9	Tumor Size Path	999
Histology	8070	YC Grade		Tumor Summary	039
Behavior	/3	YP Grade			
		cT	cT3	*Sep Tumor Nodule*	*Same Lobe*
RLN Positive	98	cN	cN2	*Mediastinal*	*nodes*
RLN Examined	00	cM	cM1a	*Right lung*	*Nodules*
		cStage	IVA		

Summary Stage	7 Distant				
EOD Primary Tumor	500 Separate tumor nodule(s) in the same lobe as the primary	EOD Regional Lymph Node	400 Mediastinal, ipsilateral or NOS	EOD Mets	10

Case #2 continued

- Patient started on Keytruda (pembrolizumab) 03/05/2021
- 06/11/2021 CT TAP – Favorable treatment response, resolved or smaller bilateral pulmonary nodules and smaller thoracic lymphadenopathy, persistent small to moderate loculated pleural effusions. No new sites of disease

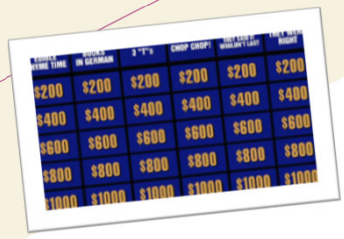
Case 2

Regional Nodes Positive	98	Regional Nodes Examined	00	
SSDIs				
Separate Tumor Nodules	1	ALK Rearrangement	9	
Pleural Invasion	9	EGFR Mutation Analysis	9	

Treatment

Surgery Codes		Systemic Therapy Codes	
Diagnostic Staging Procedure	02	Chemotherapy	00
Surgical Procedure of Primary Site	00	Hormone Therapy	00
Scope of Regional Lymph Node Surgery	00	Immunotherapy	01
Radiation			
Primary Treatment Volume	00	Dose per FX	00000
Draining LN	00	Fractions	000
Modality (x06)	00	Total Dose	000000
EB Planning technique	00		

41



Let's Play Lung Jeopardy!

1. The answer is – Pathologic GRADE 2

Code	Grade Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated
4	G4: Undifferentiated
9	Grade cannot be assessed (GX); Unknown

NAACCR

Jeopardy-1

1. Answer: Pathologic Grade 2

- 1. Patient with biopsy showing a moderately differentiated adenocarcinoma, resection showed poorly differentiated adenocarcinoma.
- 2. Patient with biopsy showing a moderately differentiated adenocarcinoma, resection showed no residual tumor.
- 3. Patient with biopsy showing a poorly differentiated adenocarcinoma, resection showed moderately differentiated adenocarcinoma
- 4. Patient with biopsy showing a moderately differentiated adenocarcinoma, patient proceeded with XRT

NAACCR

Jeopardy-1

1. Pathologic grade 2

- 1. Patient with biopsy showing a moderately differentiated adenocarcinoma, resection showed poorly differentiated adenocarcinoma. Pathologic Grade 3
- 2. Patient with biopsy showing a moderately differentiated adenocarcinoma, resection showed no residual tumor.
- 3. Patient with biopsy showing a poorly differentiated adenocarcinoma, resection showed moderately differentiated adenocarcinoma Pathologic Grade 3
- 4. Patient with biopsy showing a moderately differentiated adenocarcinoma, patient proceeded with XRT Pathologic grade 9

NAACCR Jeopardy-1

Grade Notes

Note 6: Use the grade from the clinical work up from the primary tumor in different scenarios based on behavior or surgical resection

- Behavior:
  - Tumor behavior for the clinical and the pathological diagnoses are the same AND the clinical grade is the highest grade
  - Tumor behavior for clinical diagnosis is invasive, and the tumor behavior for the pathological diagnosis is in situ
- Surgical Resection
  - Surgical resection is done of the primary tumor and there is no grade documented from the surgical resection
  - Surgical resection is done of the primary tumor and there is no residual cancer
  - Surgical resection of the primary tumor has not been done, but there is positive microscopic confirmation of distant metastases during the clinical time frame

NAACCR Jeopardy-1

2. The answer is: Pathologic Grade 3

- 1. Patient with lung biopsy revealing a poorly differentiated squamous cell carcinoma, patient with liver and bone metastasis seen on scans.
- 2. Patient with lung biopsy revealing a poorly differentiated squamous cell carcinoma, patient with suspected hilar node metastasis seen on scans, proceeded to treatment with Keytruda.
- 3. Patient with lung biopsy revealing a poorly differentiated squamous cell carcinoma, patient had resection of the primary tumor with anaplastic squamous cell carcinoma identified.
- 4. Patient with lung biopsy revealing a poorly differentiated squamous cell carcinoma, patient with liver and bone metastasis seen on scans, liver biopsy showed moderately differentiated squamous cell carcinoma.

NAACCR Jeopardy-2

2. Pathologic Grade 3

- Patient with lung biopsy revealing a poorly differentiated squamous cell carcinoma, patient with liver and bone metastasis seen on scans. Pathologic Grade 9
- Patient with lung biopsy revealing a poorly differentiated squamous cell carcinoma, patient with suspected hilar node metastasis seen on scans, proceeded to treatment with Keytruda. Pathologic grade 9
- Patient with lung biopsy revealing a poorly differentiated squamous cell carcinoma, patient had resection of the primary tumor with anaplastic squamous cell carcinoma identified. Pathologic grade 4
- Patient with lung biopsy revealing a poorly differentiated squamous cell carcinoma, patient with liver and bone metastasis seen on scans, liver biopsy showed moderately differentiated squamous cell carcinoma.

NAACCR Jeopardy-2

Grade Notes

Note 6: Use the grade from the clinical work up from the primary tumor in different scenarios based on behavior or surgical resection

- Behavior:
  - Tumor behavior for the clinical and the pathological diagnoses are the same AND the clinical grade is the highest grade
  - Tumor behavior for clinical diagnosis is invasive, and the tumor behavior for the pathological diagnosis is in situ
- Surgical Resection
  - Surgical resection is done of the primary tumor and there is no grade documented from the surgical resection
  - Surgical resection is done of the primary tumor and there is no residual cancer
  - Surgical resection of the primary tumor has not been done, but there is positive microscopic confirmation of distant metastases during the clinical time frame

NAACCR

Jeopardy-2

3. The answer is…. Lung Separate tumor nodules - 1

Code	Description
0	No separate tumor nodules; single tumor only Separate tumor nodules of same histologic type not identified/not present Intrapulmonary metastasis not identified/not present Multiple nodules described as multiple foci of adenocarcinoma in situ or minimally invasive adenocarcinoma
1	Separate tumor nodules of same histologic type in ipsilateral lung, same lobe
2	Separate tumor nodules of same histologic type in ipsilateral lung, different lobe
3	Separate tumor nodules of same histologic type in ipsilateral lung, same AND different lobes
4	Separate tumor nodules of same histologic type in ipsilateral lung, unknown if same or different lobe(s)
7	Multiple nodules or foci of tumor present, not classifiable based on Notes 3 and 4
8	Not applicable: Information not collected for this case (If this item is required by your standard setter, use of code 8 will result in an edit error.)
9	Not documented in medical record Primary tumor is in situ Separate Tumor Nodules not assessed or unknown if assessed

Jeopardy-3

3. Lung Separate tumor nodules 1

- 1. Patient presents for screening lung CT – 2 nodules are identified in the RUL, resection revealed synchronous primary tumors (lepidic adenocarcinoma and acinar adenocarcinoma)
- 2. Patient presents for screening lung CT – 1 nodule identified in the RUL and one in the RLL, biopsies revealed synchronous primary tumors (lepidic adenocarcinoma and acinar adenocarcinoma)
- 3. Patient presents for screening lung CT – 2 nodules are identified in the RUL, biopsy of the larger tumor revealed adenocarcinoma
- 4. Patient presents for screening lung CT – 1 nodule identified in the RUL and one in the RLL, biopsy of the RUL tumor revealed adenocarcinoma

NAACCR

Jeopardy-3

3. Lung separate tumor nodules 1

- Patient presents for screening lung CT – 2 nodules are identified in the RUL, resection revealed synchronous primary tumors (lepidic adenocarcinoma and acinar adenocarcinoma) Code 0
- Patient presents for screening lung CT – 1 nodule identified in the RUL and one in the RLL, biopsies revealed synchronous primary tumors (lepidic adenocarcinoma and acinar adenocarcinoma) Code 0
- Patient presents for screening lung CT – 2 nodules are identified in the RUL, biopsy of the larger tumor revealed adenocarcinoma
- Patient presents for screening lung CT – 1 nodule identified in the RUL and one in the RLL, biopsy of the RUL tumor revealed adenocarcinoma Code 2

NAACCR

Jeopardy-3

Separate Tumor Nodules - Notes

Note 3: For this item, only code separate tumor nodules of the same histologic type as the primary tumor, also referred to as intrapulmonary metastases.

- x In the case of multiple tumor nodules determined to be the same primary, if not all nodules are biopsied, assume they are the same histology

Note 4: Other situations that display multiple lesions are NOT coded in this item.

- Assign code 0 if the multiple lesions belong to one of these other situations. Refer to the AJCC Staging Manual 8th Edition for standardized and precise definitions of the situations which aren't separate tumor nodules. They are
- x second primary tumors, also called synchronous primary tumors (not the same histology as the primary tumor)
- x multifocal lung adenocarcinoma with ground glass/lepidic features
- x diffuse pneumonic adenocarcinoma

Jeopardy-3

4. Visceral and Parietal Pleural Invasion 0

Jeopardy-4

Code	Description
0	No evidence of visceral pleural invasion identified Tumor does not completely traverse the elastic layer of the pleura Stated as PL0
4	Invasion of visceral pleura present, NOS Stated as PL1 or PL2
5	Tumor invades into or through the parietal pleura OR chest wall Stated as PL3
6	Tumor extends to pleura, NOS; not stated if visceral or parietal
8	Not applicable: Information not collected for this case (If this item is required by your standard setter, use of code 8 will result in an edit error.)
9	Not documented in medical record No surgical resection of primary site is performed Visceral Pleural Invasion not assessed or unknown if assessed or cannot be determined

4. Visceral and Parietal pleural invasion 0

- 1. Patient with new lung nodule noted in the peripheral LLL, patient with wedge resection – pathology report shows a 2.2 cm mucinous adenocarcinoma. At the postop visit, the MD states the tumor extended to the elastic layer.
- 2. Patient with new lung nodule noted in the peripheral LLL, scans were suspicious for parietal pleural invasion.
- 3. Patient with new lung nodule noted in the peripheral LLL, patient with FNA – pathology report shows a mucinous adenocarcinoma that appeared to invade the visceral pleura.
- 4. Patient with new lung nodule noted in the peripheral LLL, patient with wedge resection – pathology report shows a 2.2 cm mucinous adenocarcinoma that invaded the visceral pleura only.

NAACCR

Jeopardy-4

4. Visceral and Parietal pleural invasion 0

- 1. Patient with new lung nodule noted in the peripheral LLL, patient with wedge resection – pathology report shows a 2.2 cm mucinous adenocarcinoma. At the postop visit, the MD states the tumor extended to the elastic layer.
- 2. Patient with new lung nodule noted in the peripheral LLL, scans were suspicious for parietal pleural invasion. Code 9
- 3. Patient with new lung nodule noted in the peripheral LLL, patient with FNA – pathology report shows a mucinous adenocarcinoma that appeared to invade the visceral pleura. Code 9
- 4. Patient with new lung nodule noted in the peripheral LLL, patient with wedge resection – pathology report shows a 2.2 cm mucinous adenocarcinoma that invaded the visceral pleura only. Code 4

NAACCR

Jeopardy-4

SSDI Notes:

- Note 1: Physician statement of Visceral and Parietal Pleural Invasion can be used to code this data item when no other information is available.
- Note 3: A surgical resection must be done to determine if the visceral and/or parietal pleural are involved.
- Note 4: Do not use imaging findings to code this data item
- Note 5: Code 9 when
- x A FNA only is performed. A FNA is not adequate to assess pleural layer invasion

Jeopardy-4

5. Tumor Size Summary 008

- 000 No mass/tumor found
- 001 1 mm or described as less than 1 mm
- 002-988 (exact size in mm (2 mm to 988 mm)
- 989 989 mm or larger
- 990 Microscopic Focus or foci only and no size of focus is given
- 998 Site Specific Codes Diffuse, entire lung or NOS: Lung and main stem bronchus (C34.0-C34.3, C34.8-C34.9)
- 999 Unknown/Not stated

Jeopardy-5

5. Tumor Size Summary 008

- 1. Patient with new lung nodules seen on CT chest in the RUL, 3 nodules measured as 8 cm, 4 cm and 2 cm, patient placed on Keytruda
- 2. Patient with new lung nodules seen on CT chest in the RUL, 2 nodules 8 mm and 6 mm, wedge resection performed with both nodules removed, pathology states 7 mm and 5 mm.
- 3. Patient with new lung nodules seen on CT chest in the RUL, one nodule was between 7 and 9 mm; the other was between 6 and 8 mm, patient given radiation.
- 4. Patient with new lung nodules seen on CT chest in the RUL, patient taken to surgery and had a right upper lobectomy, tumor size 8 cm and 1.4 cm.

NAACCR Jeopardy-5

5. Tumor Size Summary 008

- 1. Patient with new lung nodules seen on CT chest in the RUL, 3 nodules measured as 8 cm, 4 cm and 2 cm, patient placed on Keytruda 080
- 2. Patient with new lung nodules seen on CT chest in the RUL, 2 nodules 8 mm and 6 mm, wedge resection performed with both nodules removed, pathology states 7 mm and 5 mm. 007
- 3. Patient with new lung nodules seen on CT chest in the RUL, one nodule was between 7 and 9 mm; the other was between 6 and 8 mm, patient given radiation.
- 4. Patient with new lung nodules seen on CT chest in the RUL, patient taken to surgery and had a right upper lobectomy, tumor size 8 cm and 1.4 cm. 080

NAACCR Jeopardy-5

Tumor Size Summary notes

- First priority is size of resected surgical specimen (if no neoadjuvant)
- If no surgical resection, then largest measurement from imaging/PE or other diagnostic procedures
- 2 c. If tumor size is reported to be between two sizes, record tumor size as the midpoint between the two: i.e., add the two sizes together and then divide by two ("between 2 and 3 cm" is coded as 025).
- 12. Multifocal/multicentric tumors: If the tumor is multi-focal or if multiple tumors are reported as a single primary, code the size of the largest invasive tumor or if all of the tumors are in situ, code the size of the largest in situ tumor.

Jeopardy-5

6. Clinical Staging cTX cN0 cM0 Stage group Occult Carcinoma

- 1. Patient presents with ongoing cough and congestion. Chest CT showed infiltrates but no discrete tumor, bronchoscopy did not identify any sites of concern, bronchial washings revealed malignant cells.
- 2. Patient presents with ongoing cough and congestion. Chest CT showed infiltrates and a 1 cm RUL nodule, bronchoscopy did not identify any sites of concern, bronchial washings revealed malignant cells.
- 3. Patient presents with ongoing cough and congestion. Chest CT showed infiltrates but no discrete tumor, bronchoscopy with FNA of a level 10R node. Node was positive for adenocarcinoma.
- 4. Patient presents with ongoing cough and congestion. Chest CT showed infiltrates and a RUL nodules 1 cm, bronchoscopy with biopsy of the nodule was positive for adenocarcinoma.

Jeopardy-6

6. Clinical Staging cTX cN0 cM0 Stage group Occult Carcinoma

- 1. Patient presents with ongoing cough and congestion. Chest CT showed infiltrates but no discrete tumor, bronchoscopy did not identify any sites of concern, bronchial washings revealed malignant cells.

- 2. Patient presents with ongoing cough and congestion. Chest CT showed infiltrates and a 1 cm RUL nodule, bronchoscopy did not identify any sites of concern, bronchial washings revealed malignant cells.
  - cT1a cN0 cM0 Stage group IAI
- 3. Patient presents with ongoing cough and congestion. Chest CT showed infiltrates but no discrete tumor, bronchoscopy with FNA of a level 10R node was positive for adenocarcinoma.
  - cT0 cN1(f) cM0 Stage group unknown
- 4. Patient presents with ongoing cough and congestion. Chest CT showed infiltrates and a RUL nodule 1 cm, bronchoscopy with biopsy of the nodule was positive for adenocarcinoma.
  - cT1a cN0 cM0 Stage group IAI

NAACCR

Jeopardy-6

7. Pathological Staging pT1b(m) pN0(f) cM0 Stage group IA2

- 1. Patient with 2 RLL tumors, FNA of a level 10R node was negative, wedge resection performed along with dissection of 6 regional nodes and identified synchronous primary tumors.

- 2. Patient with 2 RLL tumors, FNA of a level 10R node was negative, wedge resection performed and identified one primary tumor and one intrapulmonary mets.

- 3. Patient with 2 RLL tumors, FNA of a level 10R node was neg. Wedge resection and removal of 6 regional nodes; 1 RLL primary tumor, 1 intrapulmonary met, and 6 neg nodes.

- 4. Patient with 2 RLL tumors, FNA of a level 10R node was negative, wedge resection performed and identified synchronous primary tumors.

NAACCR

Jeopardy-7

7. Pathological Staging pT1b(m) pN0(f) cM0 Stage group IA2

- Patient with 2 RLL tumors, FNA of a level 10R node was negative, wedge resection performed along with dissection of 6 regional nodes and identified synchronous primary tumors.
  - pT1b(m) pN0 cM0 Stage group IA2
- Patient with 2 RLL tumors, FNA of a level 10R node was negative, wedge resection performed and identified one primary tumor and one intrapulmonary mets.
  - pT3 pN0(f) cM0 Stage group IIB
- Patient with 2 RLL tumors, FNA of a level 10R node was neg. Wedge resection and removal of 6 regional nodes; 1 RLL primary tumor, 1 intrapulmonary met, and 6 neg nodes.
  - pT3 pN0 cM0 Stage group IIB
- Patient with 2 RLL tumors, FNA of a level 10R node was negative, wedge resection performed and identified synchronous primary tumors.

Jeopardy-7

8. Primary Site C34.1

- 1. Patient with a chest CT scan that identified a Pancoast Tumor
- 2. Patient with a chest CT scan that identified a mass at the carina.
- 3. Patient with a chest CT scan that identified a mass extending up to the hilum
- 4. Patient with a chest CT scan that identified a suprahilar mass

Jeopardy-8

8. Primary Site C34.1

- 1. Patient with a chest CT scan that identified a Pancoast Tumor

- 2. Patient with a chest CT scan that identified a mass at the carina.
  - C34.0
- 3. Patient with a chest CT scan that identified a mass extending up to the hilum
  - C34.9
- 4. Patient with a chest CT scan that identified a suprahilar mass
  - C34.9

Jeopardy-8

Lung Solid Tumor Rules

Lung Equivalent Terms and Definitions
C340-C343, C348, C349
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Terminology	Laterality	Site Term and Code
Bronchus intermedius **Carina** **Hilus of lung** **Perihilar**	Bilateral	Mainstem bronchus **C340** *Note*: **Bronchus intermedius** is the portion of the **right mainstem bronchus** between the upper lobar bronchus and the origin of the middle and lower lobar bronchi
Lingula of lung	Left	Upper lobe **C341**
Apex **Apex of lung** **Lung apex** **Pancoast tumor** **Superior lobar bronchus** **Upper lobe bronchi**	Bilateral	Upper lobe **C341**
Middle lobe **Middle lobe bronchi**	Right	Middle lobe **C342**
Base of lung **Lower lobar bronchus** **Lower lobe** **Lower lobe bronchi** **Lower lobe segmental bronchi**	Bilateral	Lower lobe **C343**
Overlapping lesion of lung	Bilateral	Overlapping lesion of lung **C348** *Note*: **One lesion/tumor which overlaps two or more lobes**

68

9. Histology: 8257/3 (minimally invasive mucinous adenocarcinoma)

- 1. Patient with a single tumor in the RUL: Biopsy report identifies a probable minimally invasive mucinous carcinoma, resection confirms mucinous carcinoma.
- 2. Patient with a single tumor in the RUL: Pathology report identifies a mucinous carcinoma and minimally invasive mucinous carcinoma.
- 3. Patient with a single tumor in the RUL: Pathology report identifies a mucinous adenocarcinoma with a minimally invasive pattern
- 4. Patient with a single tumor in the RUL: Pathology report identifies a minimally invasive adenocarcinoma and a mucinous adenocarcinoma.

NAACCR Jeopardy-9

9. Histology: 8257/3 (minimally invasive mucinous adenocarcinoma)

- . Patient with a single tumor in the RUL: Biopsy report identifies a probable minimally invasive mucinous carcinoma, resection confirms mucinous carcinoma. 8253/3
- 2. Patient with a single tumor in the RUL: Pathology report identifies a mucinous carcinoma and minimally invasive mucinous carcinoma.
- 3. Patient with a single tumor in the RUL: Pathology report identifies a mucinous adenocarcinoma with a minimally invasive pattern 8253/3
- 4. Patient with a single tumor in the RUL: Pathology report identifies a minimally invasive adenocarcinoma and a mucinous adenocarcinoma. 8253/3 (min invasive adenocarcinoma column 2, mucinous column 3)

NAACCR Jeopardy-9

Lung Equivalent Terms and Definitions
C340-C343, C348, C349
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Specific or NOS Histology Term and Code	Synonym of Specific or NOS	Subtype/variant of NOS and Code

Adenocarcinoma 8140
 	
Note 1: Mucinous adenocarcinoma for lung only is coded as follows:
• **8253/3*** when
  ○ Behavior unknown/not documented (use staging form to determine behavior when available)
  ○ Invasive
• **8257/3*** when
  ○ Microinvasive
  ○ Minimally invasive
• **8253/2*** when
  ○ Preinvasive
  ○ In situ
 	
Note 2: Non-mucinous adenocarcinoma for lung only is coded as follows:
• **8256/3*** when
  ○ Microinvasive
  ○ Minimally invasive
	Adenocarcinoma NOS
	Adenocarcinoma in situ **8140/2**
	Adenocarcinoma invasive **8140/3**
	Adenocarcinoma, non-mucinous, NOS
	Minimally invasive adenocarcinoma **8140/3**
		Acinar adenocarcinoma/adenocarcinoma, acinar predominant **(for lung only) 8551***
		Adenoid cystic/adenocystic carcinoma **8200**
		Colloid adenocarcinoma **8480**
		Enteric adenocarcinoma/pulmonary intestinal-type adenocarcinoma **8144**
		Fetal adenocarcinoma **8333**
		Lepidic adenocarcinoma/adenocarcinoma, lepidic predominant **8250/3***
		Mucinous carcinoma/adenocarcinoma **(for lung only)**
		in situ **8253/2***
		invasive **8253/3***
		minimally invasive **8257/3***
		microinvasive **8257/3***
		preinvasive **8253/2***
		Micropapillary adenocarcinoma/adenocarcinoma, micropapillary predominant **8265**
		Mixed invasive mucinous and non-mucinous adenocarcinoma **8254***

71

10. Summary Stage 2018 3

- 1. Patient presents with cough, Chest CT revealed a RUL mass and atelectasis extending to the hilar region.
- 2. Patient presents with cough, Chest CT revealed a RUL mass with invasion of the parietal pleura
- 3. Patient presents with cough, Chest CT revealed a RUL mass and superior vena cava syndrome.
- 4. Patient presents with cough, Chest CT revealed no evidence of tumor in the lungs, but malignant cells in the bronchial washings.

NAACCR

Jeopardy-10

10. Summary Stage 2018 3

- 1. Patient presents with cough, Chest CT revealed a RUL mass and atelectasis extending to the hilar region 2
- 2. Patient presents with cough, Chest CT revealed a RUL mass with invasion of the parietal pleura 2
- 3. Patient presents with cough, Chest CT revealed a RUL mass and superior vena cava syndrome.
- 4. Patient presents with cough, Chest CT revealed no evidence of tumor in the lungs, but malignant cells in the bronchial washings. 9

NAACCR

Jeopardy-10

Summary Stage Notes

- **Note 6:** Separate ipsilateral tumor nodules of the same histopathological type (intrapulmonary metastases) are coded either regional (code 2) for same lobe or distant (code 7) for different ipsilateral lobe or contralateral lung.
- **Note 7:** "Vocal cord paralysis," "superior vena cava syndrome," and "compression of the trachea or the esophagus" are classified as mediastinal lymph node involvement (code 3) unless there is a statement of involvement by direct extension from the primary tumor.
- **Note 8:** Most pleural and pericardial effusions with lung cancer are due to tumor. In a few patients, however, multiple cytopathological examinations of pleural and/or pericardial fluid are negative for tumor, and the fluid is nonbloody and is not an exudate. Where these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging element.
- **Note 9:** Occult carcinoma occurs when tumor is proven by the presence of malignant cells or bronchial washings, but there is no other evidence of the tumor. These cases are coded as unknown (code 9).

NAACCR

74

Fabulous Prizes

NAACCR 75

Coming UP…

- Data Item Relationships
  - Guest Host: Jennifer Ruhl, CTR
  - 2/03/2022
- Abstracting and Coding Boot Camp 2022
  - Guest Host: Nancy Etzold, CTR
  - 3/03/2022

NAACCR

CE Certificate Quiz/Survey

CE Phrase

Link

https://survey.alchemer.com/s3/6563858/Lung-2022

Thank you!

- jhofferkamp@naaccr.org
- amartin@naaccr.org

78