



COLLABORATIVE STAGE
DATA COLLECTION SYSTEM

FAQs from the CAnswer Forum - Collaborative Stage

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This presentation was supported by the Cooperative Agreement Number 5U58DP001864-04 from The Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of The Centers for Disease control and Prevention.

Learning Objectives

- Understand the CS rules on the FAQ topics
- Recognize how the data fields are used
- Comprehend the rationale behind the rules
- Accurately apply the rules to case scenarios

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Counting Lymph Nodes

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Regional Nodes Positive/Examined General Rules

- Counting nodes (positive or examined)
 - Do not count positive aspiration or core biopsy of node in same chain removed at surgery
 - Do count positive aspiration or core biopsy of node in different region
 - If location of biopsied/aspirated node unknown, do not count
- Priority of node counts
 - Final dx, synoptic report, microscopic, gross



CS Nodes Eval – Rules

- Linked to CS Lymph Nodes
- Code as clinical or pathologic based on *intent of procedure and assessment of T*
 - If LN procedure part of workup, staging basis is clinical (codes 0, 1, 5, 9)
 - If LN procedure part of treatment, code as pathologic (codes 2, 3, 6)
 - Must have resection of primary site meeting pT criteria



CS Nodes Eval – Rules, cont'd

- Sentinel nodes
 - Code as pathologic when tumor size/extension meets criteria for pT
 - When no pT, exam of single LN or sentinel nodes is clinical
 - Code as pathologic when there is a positive biopsy of node in highest N category



Counting Lymph Nodes

Case 1

- 8/22/11-RUL lung bx – pd squamous cell ca
- 8/31/11-Mediastinoscopy-5 lymph nodes removed
 - (1) Station 4L (1) – negative
 - (2) Station 4R (1)– negative
 - (3) Precarinal (2) – positive for metastatic squamous cell carcinoma
 - (4) Station 7 (1) – negative
- Neoadjuvant chemotherapy started on 9/07/11



Counting Lymph Nodes

Case 1

- 12/6/11 – Pneumonectomy – 5cm pd sq cell ca
 - Right hilar lymph nodes (11) – three positive for metastatic squamous cell carcinoma; eight negative
 - Left hilar lymph node (1) - negative



Counting Lymph Nodes

- Code LN positive and LN examined
 - 05 positive; 17 examined
- Code CS lymph nodes
 - 200 Precarinal lymph nodes
- Code CS eval field
 - 5 - Regional lymph nodes removed for examination AFTER neoadjuvant therapy AND lymph node evaluation based on clinical evidence, unless the pathologic evidence at surgery (AFTER neoadjuvant) is more extensive.



Sentinel Lymph Nodes

Case 2

- 6/2/11 – Rt UOQ breast bx – infil ductal carcinoma
 - FNA right axillary lymph node – positive for metastatic infil ductal carcinoma
- Physical exam revealed palpable, moveable right axillary lymph node
- Patient elected total mastectomy over neoadjuvant chemotherapy followed by surgery



Sentinel Lymph Nodes

Case 2

- 6/15/11-Total Mastectomy with sentinel lymph node biopsy and axillary lymph node dissection
 - 2cm infil ductal carcinoma of UOQ right breast; margins negative
 - Sentinel lymph nodes (R) axilla (4) positive for metastatic infil ductal carcinoma; largest met measures 1.0cm in size.
 - Axillary lymph nodes (R) – (8) – negative for carcinoma



Sentinel Lymph Nodes

- Code LN positive and LN examined
 - 04 positive; 12 examined
- Code CS lymph nodes
 - 250 axillary lymph nodes - Movable axillary lymph node(s), ipsilateral, positive with more than micrometastasis
- Code CS eval field
 - 3 - Any microscopic assessment of regional nodes (including FNA, incisional core needle bx, excisional bx, sentinel node bx or node resection), WITH removal of the primary site adequate for pathologic T classification (treatment) or biopsy assessment of the highest T category.



HER2 for Breast Cases

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HER2

- Human Epidermal Growth Factor Receptor 2
- HER2+ cancers tend to be
 - Larger and faster growing
 - Higher grade
 - More likely to spread to regional lymph nodes
 - More likely to recur
- ~ 25% of patients overexpress HER2
 - HER2+ patients respond to anti-HER2 drugs such as trastuzumab (Herceptin)



HER2 – 8 Site-Specific Factors

- Value and Interpretation for
 - Immunohistochemistry
 - FISH
 - CISH
- Result of Other or Unknown Test
- Summary Result of Testing
- All fields required by all standards setters
 - Do not use code 988



SSFs 8-9 HER2 Immunohistochemistry

- Most common in US
- Pathologic stain looking for HER2 surface marker expression
 - Codes, Values and Interpretation
 - 000 0 Negative
 - 010 1+ Negative
 - 020 2+ Borderline / Weak positive → likely to retest
 - 030 3+ Positive

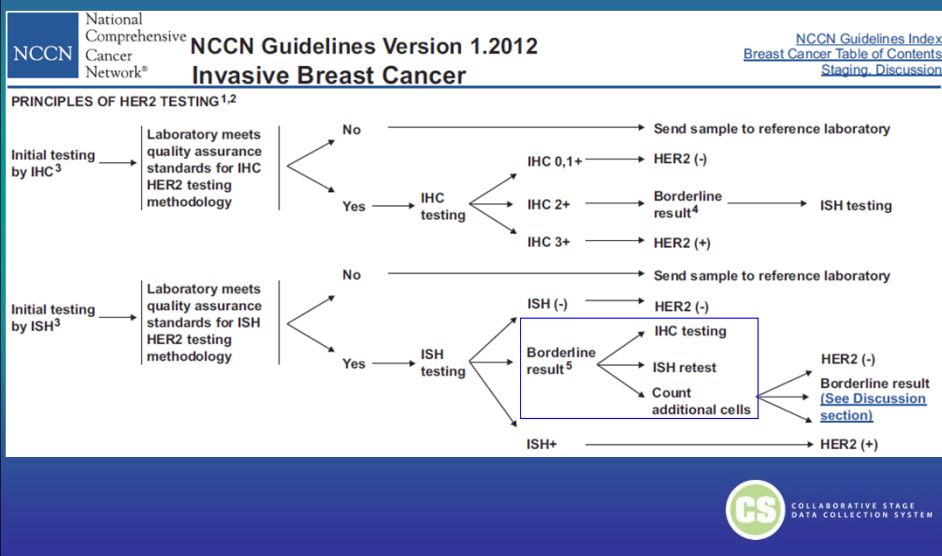


SSFs 10-11 HER2 FISH

- Fluorescence In Situ Hybridization
- DNA probe of intracellular HER2 expression
 - Expressed as ratio of patient's HER2 copies to control
 - Values and Interpretation
 - 0 – 1.8: Negative
 - 1.81 – 2.2: Borderline → likely to retest
 - 2.2 and higher: Positive
- Code result (value)
 - 100 (1.00) to 979 (9.79)
 - 980 (9.80 or greater)
 - 991 – Ratio of < 1.00



NCCN/ASCO/CAP HER2 Retesting



SSFs 12-13 HER2 CISH

- Chromogenic In Situ Hybridization
- Most common in Canada
- DNA probe of intracellular HER2 expression
 - Expressed as mean or average
 - Values and Interpretation
 - <4 Negative/non-amplified
 - 4-6 Borderline/equivocal
 - >6 Positive/amplified
- Code result (value)
 - 100 (1.00) to 979 (9.79)
 - 980 (9.80 or greater)
 - 991 – Mean of < 1.00



SSF 14 HER2 Result of Other or Unknown Test

- Record other HER2 test or unknown type of test
- Code interpretation only
 - Positive/negative/borderline
- Use this field to code
 - Type of test (IHC, FISH, CISH) not stated or lab value label unknown
 - 'patient admitted following positive HER2'
 - Other tests: RISH, SISH, dual ISH



SSF 15 HER2 Summary Result of Testing

- Summary of SSFs 9, 11, 13, 14
- Record final decision (result) if multiple tests
 - If single test, copy that
 - If >1 test
 - IHC then ISH → code result of ISH
 - ISH then IHC → code result of IHC



HER2 Case Example

- | | | |
|------------------------|-----------------|---------|
| • Grade iii 3.5 cm | 8 IHC Val | 020 |
| invasive breast | 9 IHC Interp | 030 |
| primary, node +, | 10 FISH Val | 330 |
| perimenopausal | 11 FISH Interp | 010 |
| woman; total | 12 CISH Val | 999/998 |
| mastectomy and | 13 CISH Interp | 999/998 |
| axillary LN dissection | 14 Other Interp | 999 |
| – IHC 2+ | 15 Summary | 010 |
| – FISH 2.02 | | |
| – FISH 3.3 | | |



Grade Path Value, Grade Path System, SSF Grade

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Grade Data Fields

- Grade Path Value & Grade Path System
 - Identifies grade for that patient
 - Identifies type of grading system utilized
- SSF Grade
 - Named grading systems used for specific sites
 - Breast, Kidney, Urinary System
- Grade/Differentiation
 - Traditional data field
 - Converts all data to a 4 grade system

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Grade Path Value & Grade Path System

- **Value** – numerator or first number
- **System** – denominator or second number
- Only for grades using a 2, 3, or 4 grade system
- Do not convert terms or systems, record as stated
- Allows specificity of grade to be maintained
- Do not report named grading systems
- Code grade as reported anywhere in the medical record

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SSF Grade and Grade/Differentiation

- SSF Grade fields
 - Named systems: Nottingham, Gleason, Fuhrman, WHO/ISUP
 - Specific systems needed for staging (does not use Grade/Differentiation field)
- Grade/Differentiation
 - Keep integrity of historical data
 - Maintain easy analysis of future data

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Breast Case

- Bx: Infiltrating duct ca, Nottingham score 5, Nottingham grade 1/3.
- Lumpectomy: Infiltrating duct ca, 1.2cm, Nottingham score 4, Nottingham grade 1/3.
- Grade Path: Value= System=
- SSF7= 050
- Grade/Differentiation= 1
- Nottingham is a 3 grade system, and the score takes precedence for SSF 7.

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Prostate Case

- Bx: Adenoca, Gleason 3+4=7 in 3 cores, and Gleason 4+3=7 in 3 cores.
- Prostatectomy: Adenoca, Gleason 3+3=6.
- Grade Path: Value= System=
- SSF7= 043 SSF8= 007 SSF9= 033 SSF10= 006
- Grade/Differentiation= 3
- Gleason reported separately for bx and resections, using highest score or most aggressive pattern. The info is converted for the grade field.

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Endometrium Case

- Hysterectomy: Adenocarcinoma, Grade 1/3.
- Grade Path: Value= 1 System= 3
- SSF – N/A
- Grade/Differentiation= 2
- Three grade system with a value of 1. This is converted to the four-grade system for the grade/differentiation field.

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Bladder Case

- Urothelial (transitional cell) ca, high grade, TUR bladder.
- Grade Path: Value= System=
- SSF1= 020
- Grade/Differentiation= 4
- SSF1 WHO/ISUP grade is only for urothelial ca. Can assume LG or HG is a WHO/ISUP grade.

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Lung Case

- Bx: Adenocarcinoma, poorly differentiated, Grade 3/4.
- Lobectomy: Adenocarcinoma, Grade 3/4.
- Grade Path: Value= 3 System= 4
- SSF – N/A
- Grade/Differentiation= 3
- Four grade system with a value of 3. Is the same as grade/differentiation.

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Interrelated SSFs

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Interrelated SSFs

- Many data items are related
- How you code one data item WILL affect how another data item will be coded
- Many of these “data relationships” are found during edits
- Understanding these relationships will:
 - Provide better quality data
 - Decrease the number of occurring edits
 - Increase understanding of the edits

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Common Interrelated Fields

- Primary site/histology
- Primary site/sex/age
- Regional Nodes Positive/Examined

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Common Interrelated Fields

- CS Extension and SSFs
- CS Lymph Nodes and SSFs
- CS Mets at Dx and CS Mets at Dx: Bone, Brain, Liver and Lung
- Eval codes and other data fields
- Think about what you are coding and how that may affect another data item

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Example: Prostate

- Prostate: Gleason's score
 - SSF 8=Sum of primary & secondary from SSF 7
 - SSF 10=Sum of primary & secondary from SSF 9
 - *Example: Code 022 in SSF 7, SSF 8 MUST be 004*
- SSF 7/9: Primary pattern can be unknown but overall Gleason score known (SSF 8/10)
- If SSF 7/9 is known, SSF 8/10 CANNOT be unknown

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Example: Prostate

- SSF 3: Pathologic Extension
 - If SSF 3 is coded to 200-750, 950, 985 & 990, then Surgery of Primary site **MUST** be Prostatectomy
 - Surgery codes 30, 50, 70, 80
 - If SSF 3 is coded to:
 - 960: unknown if prostatectomy done
 - 970 & 980: prostatectomy not done as 1st course treatment
 - Then Surgery of Primary site **CANNOT** be Prostatectomy
 - Surgery codes 00-26

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Example: Breast

- SSF 3: Number of Positive Ipsilateral Level I-II Axillary Lymph Nodes:
 - Number **CANNOT** be greater than regional nodes pos
- SSFs 4&5: If CS Lymph nodes not equal to 000, then code 987
- SSF 21: If Eval code is 5 or 6 (indicating neoadjuvant therapy), cannot code 987

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Example: Kidney

- SSF 1: Invasion beyond capsule
 - If SSF is 010, 020, 030 (indicating capsule invasion)
 - then CS Extension must be \geq 460 or 999.
 - Rationale: any Extension code prior to 460 would not be for extension beyond capsule
- SSF 2: Vein Involvement
 - If SSF is 010-030 (indicating vein involvement)
 - then CS Extension must be \geq 601 or 999.
 - Rationale: any Extension code prior to 601 would not be for extension with vein involvement

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Example: Head and Neck

- SSF 1, 3-9: All Lymph node related fields
- If CS Lymph nodes=000 (clinically or pathologically), then SSFs=000
- SSF 9: Extracapsular Extension Pathologically
 - “Assessment based on histopathologic examination of surgically resected involved regional nodes.”
 - *If there is no surgical lymph node resection, cannot use codes 010-050, 997.*

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Conclusion

- Think about what you are coding
- Ask yourself:
 - Is there another data item that could be affected by this answer
 - Does my data make sense?

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CAnswer Forum

- Submit questions to CS Forum
 - Located within the CAnswer Forum
 - Provides information for all
 - Allows tracking for educational purposes
 - Includes archives of Inquiry & Response System
- <http://cancerbulletin.facs.org/forums/>



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You Tube – AJCC Channel

- Short 5-15 minute videos
- AJCC and CS topics
- Cover important concepts
- <http://www.youtube.com/AJCCancer>



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Questions



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