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Society of Thoracic Surgeons

General Thoracic Surgery Database User Group Call

June 22, 2022

GTSD User Group Call

- Welcome and Introductions
- STS Update
- AQO 2022
- PFT’s
- Nodes Assessed
- User Feedback
  - Include Ticket Number/Case Number

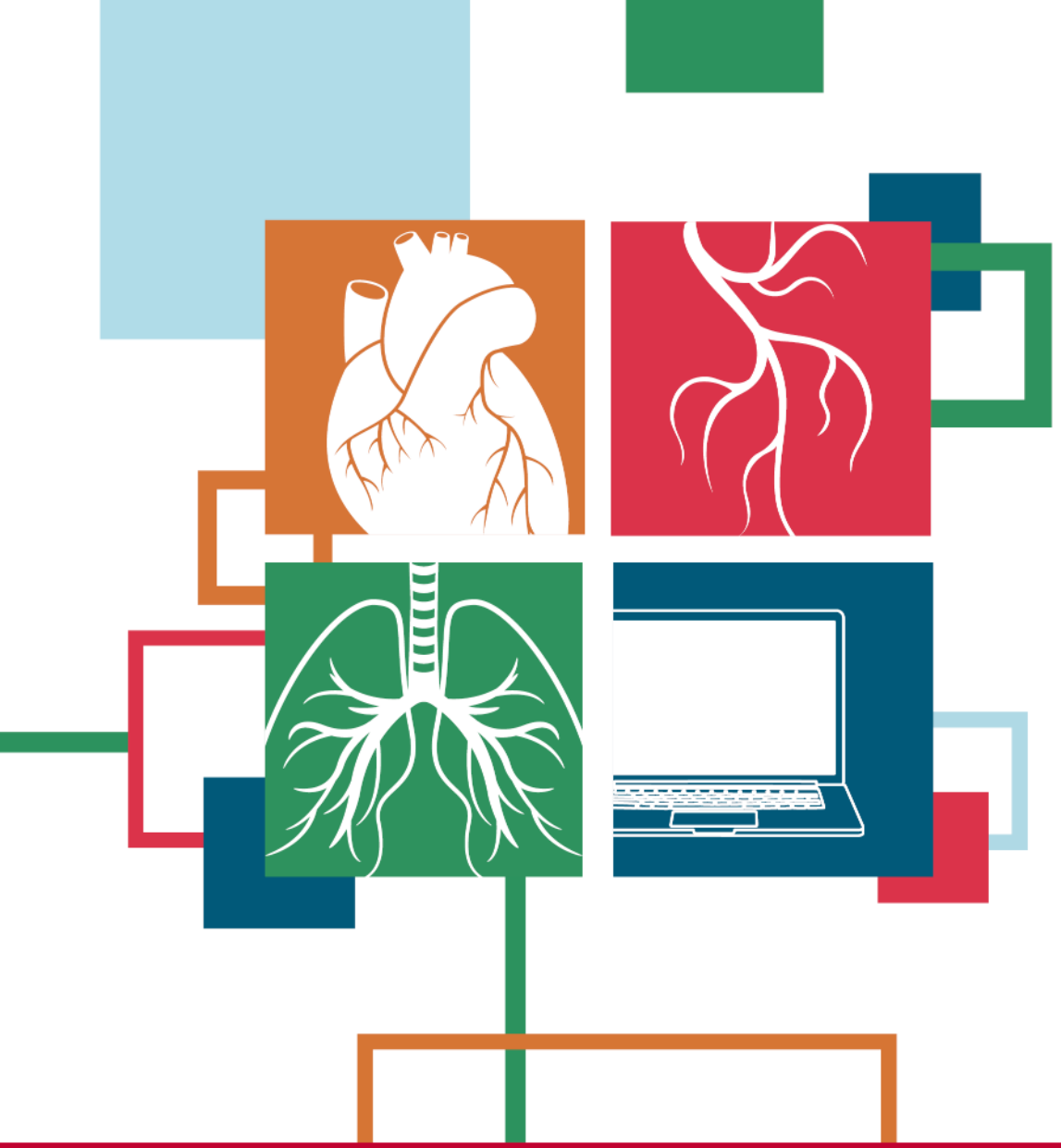
STS Updates

- **Training Manual for June is posted**

- **Spring 2022 Analysis Results Coming Soon!**
  - IQVIA implementing feedback from UAT Testers
  - Reports expected to be available by the **end of this month (June)**
  - Report related questions should be directed to gtsdtechsupport@iqvia.com

- **2022 Audit**
  - Audit Notification Letters have been sent to selected sites
  - Audit Instruction Letters have been sent – STS audit webpage has been updated with 2022 audit details

- **GTSD Public Reporting**
  - Next update is scheduled for this Summer
  - Will utilize results from Fall 2021 Harvest (July 1, 2018 – June 30, 2021)
  - Questions should be directed to Sydney Clinton (sclinton@sts.org)



ADVANCES IN QUALITY & OUTCOMES:
A Data Managers Meeting

October 26–28, 2022 ▪ PROVIDENCE, RHODE ISLAND

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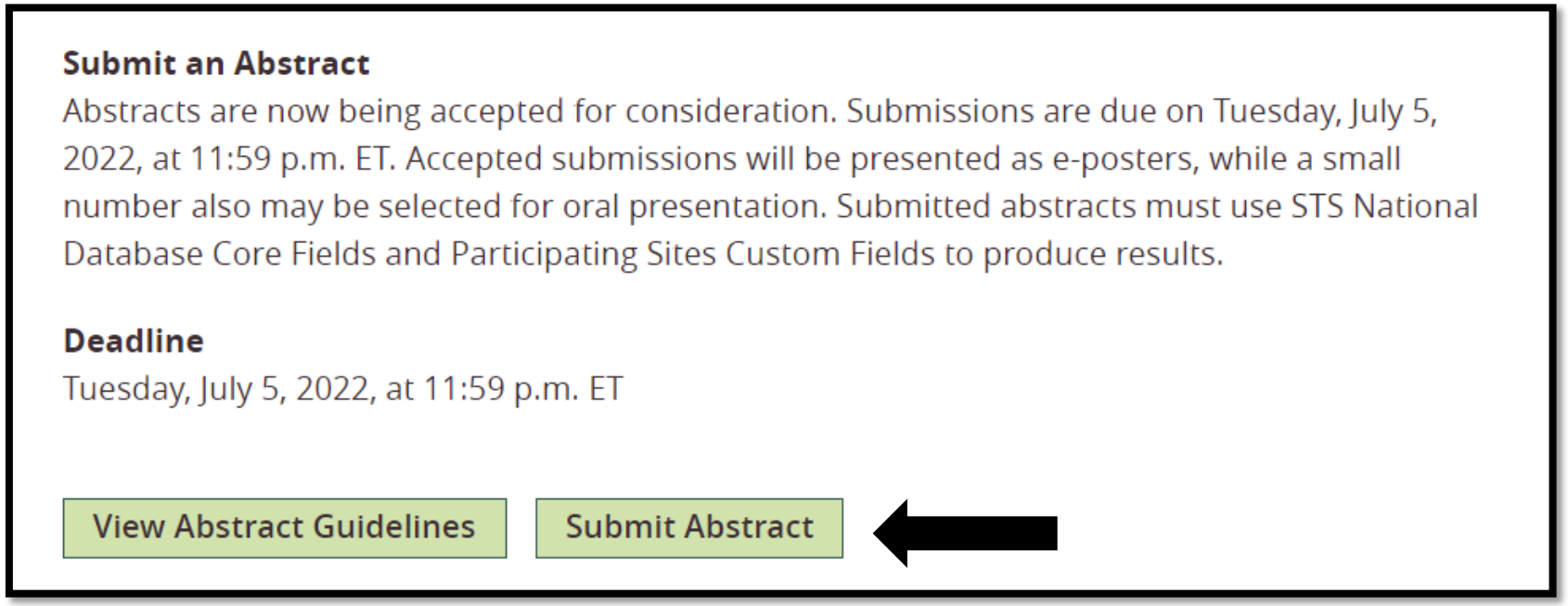
ADVANCES IN QUALITY & OUTCOMES:
A Data Managers Meeting
October 26–28, 2022 ▪ PROVIDENCE, RHODE ISLAND

Abstract Submission Deadline: Tuesday, July 5, 2022.

Click **Submit an Abstract** on the STS AQO Website.

All authors listed on the abstract are required to submit a Disclosure Form at the time of submission. Your submission will not be listed as complete unless each author has submitted a Disclosure Form.



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ADVANCES IN QUALITY & OUTCOMES:
A Data Managers Meeting
October 26–28, 2022 ▪ PROVIDENCE, RHODE ISLAND

AQO Registration is Open!

Receive Early Bird Registration Pricing through Friday, August 26.

STS MEMBER	Early Bird (August 26, 2022)	Standard
One Track	$550	$650
Two Tracks	$900	$1,100
Multi-Day (Three Tracks)	$1,150	$1,450
Virtual Pass	$300	$300

NON-MEMBER	Early Bird (August 26, 2022)	Standard
One Track	$650	$750
Two Tracks	$1,100	$1,300
Multi-Day (Three Tracks)	$1,450	$1,750
Virtual Pass	$400	$400

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Wednesday, October 26, 2022 – General Thoracic Session

	In Person	Virtual Pass
• In-person sessions with live Q&A	✓	
• On-demand content (available mid-October)	✓	✓
• Recorded archive of in-person sessions (available mid-November)	✓	✓
• Breakfast, lunch, and refreshment breaks	✓	
• Personal interactions and networking with peers	✓	
• Networking Reception with speakers, vendors, and colleagues	✓	
• Face-to-face time with exhibitors	✓	
• Complete exhibitor listing	✓	✓
• Exhibit Hall giveaways and Passport to Prizes	✓	
• AQO Hot Topics Webinar (in January)	✓	✓
• Digital conference materials (PowerPoint presentations, handouts, and case scenarios)	✓	✓
• Opportunity to view and vote on your favorite e-poster	✓	✓
• Continuing Education/CEU Credits	✓	✓
• Explore the sights and sounds of Providence, Rhode Island	✓	

GTSD Preliminary Program Topics

- Audit
- Pre-Operative Evaluation or Risk Factors (Understanding PFT's, ECHO and Pharmacy)
- Lung Cancer (Path Reports, Tumor Staging, Case Scenarios)
- Esophageal Cancer (Path Reports, Tumor Staging, Case Scenarios)
- Post-Op Complications
- Quality Improvement / Using Data to Improve Outcomes
- GTSD Research
- Hiatal Hernia

- Submit your questions or case scenarios **by Friday, August 16.**

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- Educational sessions and social events will take place at the Rhode Island Convention Center (1 Sabin St, Providence, RI 02903).

- A block of rooms have been reserved at the Omni Providence Hotel (1 West Exchange St., Providence, RI 02903). The special AQO group rate of $259, plus state and local taxes, is guaranteed through **Tuesday, October 4,** or until the group block is sold out.
- Reserve online
- Call 401-598-8000. Be sure to reference “AQO” or “Advances in Quality and Outcomes.”

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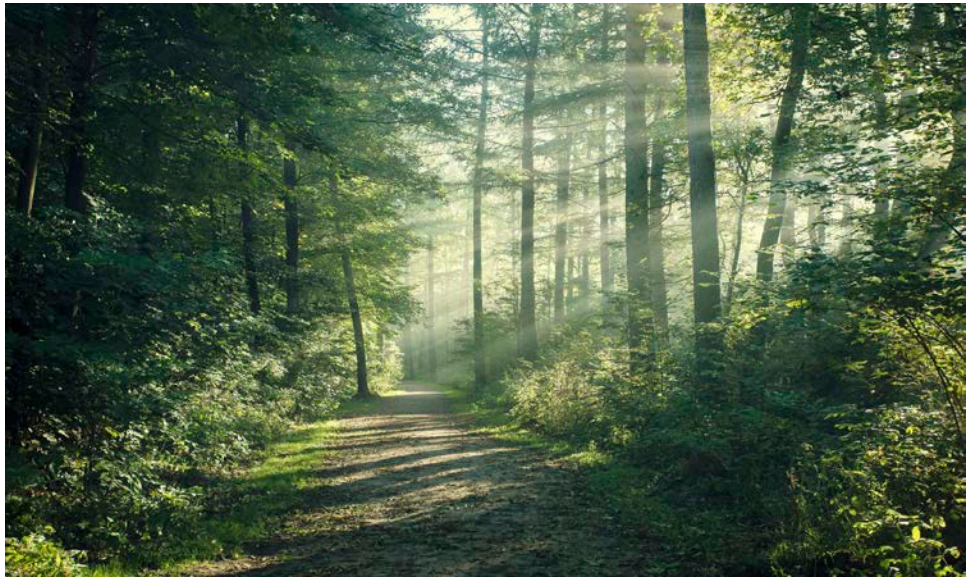
STS AQO IS GOING GREEN!!!!!

All materials will be posted and available for download.



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MORE PFT’s Please!!!!!

Seq 750: FEV1 Predicted

Intent/Clarification: Indicate the FEV1 % predicted from the most recent pulmonary function test prior to procedure. Do not use values obtained more than 12 months prior to surgery. Choose the highest value reported for % predicted, whether or not a bronchodilator was used.

June 2022: Code the highest value reported for % predicted predicted, whether or not a bronchodilator was used. If your PFT report does not provide you with calculated percentages or only gives you the percent difference between pre/post bronchodilator both values can be calculated, not just pre-bronchodialtor value as in the example above.

Seq 750: FEV1 Predicted

What value would you code for seq 750?

A. 93

B. 68

C. 71

D. 72

E. I'm not sure

	Pre-Bronch			Post-Bronch		
	Actual	Pred	%Pred	Actual	%Pred	%Chng
--- SPIROMETRY ---						
FVC (L)	2.11	2.89	73	2.34	80	+10
FEV1 (L)	1.48	2.17	68	1.54	71	+4
FEV1/FVC (%)	70	75	93	66	87	-5
FEF 25% (L/sec)	3.13	4.67	67	3.40	72	+8

Seq 750: FEV1 Predicted

What value would you code for seq 750?

A. 83

B. 91

C. 74

D. 95

E. I'm not sure

	Pre-Bronch					Post Bronch	
	Actual	Pred	%Pred	SD	LLN	Actual	%Chng
---- SPIROMETRY ----							
FVC (L)	1.84	2.59	70	0.39	1.96	2.09	+13
FEV1 (L)	1.49	1.99	74	0.34	1.44	1.81	+21
FEV1/FVC (%)	81	81	99	6	70	87	+7
FEV1/SVC (%)	64	77	83				
FEV6 (L)	1.84	2.42	75	0.39	1.78	2.09	+13
FEV1/FEV6 (%)	81	83	97	6	73	87	+7
FEV3/FVC (%)	98	106	93			100	+1

Seq 750: FEV1 Predicted

The bottom report is much easier to use as a data manager, the % predicted is given for both pre and post bronchodilator. However, if % predicted is not given it must be calculated.

Pre-Bronch: Pre-Bronch Actual/Pred

Post Bronch: Post-Bronch Actual/Pred

The predicted value which goes in the denominator will be the same pre and post and is unique to each patient. It is based on the patients age, race, height and gender.

	Pre-Bronch					Post Bronch	
	Actual	Pred	%Pred	SD	LLN	Actual	%Chng
---- SPIROMETRY ----							
FVC (L)	1.84	2.59	70	0.39	1.96	2.09	+13
FEV1 (L)	1.49	1.99	74	0.34	1.44	1.81	+21
FEV1/FVC (%)	81	81	99	6	70	87	+7
FEV1/SVC (%)	64	77	83				
FEV6 (L)	1.84	2.42	75	0.39	1.78	2.09	+13
FEV1/FEV6 (%)	81	83	97	6	73	87	+7
FEV3/FVC (%)	98	106	93			100	+1

	Pre-Bronch			Post-Bronch		
	Actual	Pred	%Pred	Actual	%Pred	%Chng
---- SPIROMETRY ----						
FVC (L)	2.11	2.89	73	2.34	80	+10
FEV1 (L)	1.48	2.17	68	1.54	71	+4
FEV1/FVC (%)	70	75	93	66	87	-5
FEF 25% (L/sec)	3.13	4.67	67	3.40	72	+8

Seq 781: DLCO Lowest Predicted

Intent/Clarification: The diffusing capacity (DLCO) may be reduced, <80% predicted, in disorders such as emphysema, pulmonary fibrosis, obstructive lung disease, pulmonary embolism, pulmonary hypertension and anemia.

DLCO>120% of predicted may be seen in normal lungs, asthma, pulmonary hemorrhage, polycythemia, and left to right intracardiac shunt.

The lowest value for DLCO uncorrected should be captured. A PFT may report DLCO_SB, DLCOcSB, DLCO/VA. The difference in the DCLO SB (simple DCLO) and the DCLOcSB is that the DCLOcSB is corrected for the hgb value. In this scenario, capture the lowest DLCO_SB or DLCO/VA value. Do not use the DLCOcSB since it is a corrected value.

Choose the value that represents the lowest % predicted unadjusted/uncorrected DLCO.

~~DO NOT USE the DLCO/VA (adjusted/corrected), regardless of altitude.~~ **(Jan 2022)**

Oct 2021: Round to the nearest whole integer at entry.

Jan 2022: Capture the lowest DLCO_SB or DLCO/VA. Values corrected for hemoglobin should not be utilized for sequence 781.

Seq 781: DLCO Lowest Predicted

What value would you code for seq 781?

A. 91
B. 133
C. 68
D. 18
E. I'm not sure

	Pre-Bronch Actual	Pred	%Pred	SD	LLN
---- DIFFUSION ----					
DLCOunc (ml/min/mmHg)	17.09	18.74	91		14.37
DLCOcor (ml/min/mmHg)		18.74			14.37
DL/VA (ml/min/mmHg/L)	5.44	4.07	133		
VA (L)	3.14	4.60	68	0.54	3.72
IVC (L)	2.02				

Seq 781: DLCO Lowest Predicted

What value would you code for seq 781?

A. 85
B. 83
C. 71
D. 18
E. I'm not sure

	Pre-Bronch		
	Actual	**Pred**	**%Pred**
--- DIFFUSION ---			
DLCOunc (ml/min/mmHg)	17.45	24.26	71
DLCOcor (ml/min/mmHg)		24.26	
DL/VA (ml/min/mmHg/L)	4.02	4.80	83
VA (L)	4.35	5.05	85
Hgb (gm/dL)		12-18	

Lung CA NODES Assessed

Seq 1880: Lung Cancer Nodes Assessed

When the July training manual is published, there will be additional guidance added for seq 1880.

- This does not go into effect until the date the July TM is published.
- The intent is to provide you with a preview now, so that when the July TM is published you have additional background surrounding the changes.
- This update only applies to patients that have had a mediastinoscopy prior to lung resection (currently about 5% of cases)

Seq 1880: Lung Cancer Nodes Assessed

The problem: Some institutions have begun issuing synoptic pathology reports where lymph nodes harvested prior to the surgical resection are included in the pathology report for the surgical procedure. They include statements such as:

'SYNOPTIC REPORTING LUNG 8th edition' OR

'Comment(s): This incorporates lymph nodes from the previous or prior...'

Prior to 5.21, guidance was to capture the pathological stage that was indicated on the pathology report for the index procedure being abstracted. However, synoptic reports required a rethinking of that guidance.

Seq 1880: Lung Cancer Nodes Assessed

The STS formed a subgroup of surgeons that specifically evaluated what to do now that synoptic reports exist. The goal of the group was to achieve a consensus definition of nodal count for the STS GTSD that is clinically justifiable, reasonable for data managers, and reliable.

We reviewed:

1. Pathology reports submitted by data managers
2. Data on the prevalence of mediastinoscopy prior to surgical resection

Seq 1880: Lung Cancer Nodes Assessed

Summary of Recommendations:

1. Nodes harvested during mediastinoscopy performed either at prior separate setting or during same anesthetic as the lung resection be included in final nodal count

2. Nodes sampled prior to induction therapy of any kind (chemo, XRT, and/or IO) are NOT included in final surgical nodal counts

3. Preoperative EBUS (performed either at a separate setting or during the same anesthetic) are NOT included in final surgical resection nodal count

An Example

SYNOPTIC REPORTING
LUNG 8th Edition - Protocol posted: 4/29/2020

SPECIMEN	
Procedure	Pneumonectomy
Specimen Laterality	Right

TUMOR	
Tumor Site	Upper lobe of lung
Histologic Type	Invasive adenocarcinoma, micropapillary predominant
Other Subtypes Present	Papillary (<5%)
Histologic Grade	G3: Poorly differentiated
Total Tumor Size (size of entire tumor)	Greatest Dimension (Centimeters): 3.7 cm
Additional Dimension (Centimeters)	2.9 cm 2.2 cm
Tumor Focality	Single focus
Visceral Pleura Invasion	Present
Direct Invasion of Adjacent Structures	No adjacent structures present
Treatment Effect	Greater than 10% residual viable tumor
Lymphovascular Invasion	Present Lymphatic Venous

MARGINS	
Margins	
Bronchial Margin	Uninvolved by invasive carcinoma
Vascular Margin	Uninvolved by carcinoma
Parenchymal Margin	Not applicable

Additional Lymph Node Procedures	
Procedure Description	Lymph Node Resection
Procedure Identifier	S21-070642
Procedure Date / Time	10/4/2021
Number of Lymph Nodes Involved	20
Nodal Stations Involved	4R: Lower paratracheal 10R: Hilar 7: Subcarinal
Extranodal Extension	Present
Number of Lymph Nodes Examined	23
Nodal Stations Examined	4R: Lower paratracheal 8R: Para-esophageal (below carina) 9R: Pulmonary ligament 10R: Hilar 7: Subcarinal

PATHOLOGIC STAGE CLASSIFICATION (pTNM, AJCC 8th Edition)	
TNM Descriptors	y (post-treatment)
Primary Tumor (pT)	pT2a
Regional Lymph Nodes (pN)	pN2

Comment(s)	
Comment(s)	This form incorporates lymph nodes from the previous resection case, S21-70642. Block D4 for ancillary testing

1. Does this path report include nodes from a prior resection? Yes.
2. Did the patient have treatment between the mediastinoscopy and the lung resection? The patient did have pre-resection treatment (note the pathological ‘y’). Not enough information here to determine WHEN the treatment occurred. If the treatment occurred prior to the mediastinoscopy, the nodes would not be included.

Why aren’t nodes from EBUS counted?

It is impossible to completely resect a lymph node during an EBUS, however a lymph node removed during a mediastinoscopy can’t be ‘re-resected’.

What other sequences does this potentially impact?

SeqNo: 2020
Long Name: Number of Malignant Nodes
Short Name: NumMaligNodes
Format: Integer

Definition: Indicate the number of malignant nodes.

Low Value: 0 **High Value:** 60

ParentLongName: Lung Cancer Nodes Assessed
ParentShortName: LungNodeAsses
ParentValue: 1
ParentHarvestCodes: = "Yes"

Intent/Clarification: Indicate the total number of malignant nodes. This is not the same as the number of malignant nodal stations.

Total number of malignant nodes will be listed on your final pathology report. Use the final pathology report from the day of surgery (resection) for the number of malignant nodes.

SeqNo: 2030
Long Name: Lung Cancer - Number of Nodes
Short Name: LungCANodes
Format: Integer

Definition: Indicate the total number of nodes sampled/harvested.

Low Value: 1 **High Value:** 60

ParentLongName: Lung Cancer Nodes Assessed
ParentShortName: LungNodeAsses
ParentValue: 1
ParentHarvestCodes: = "Yes"

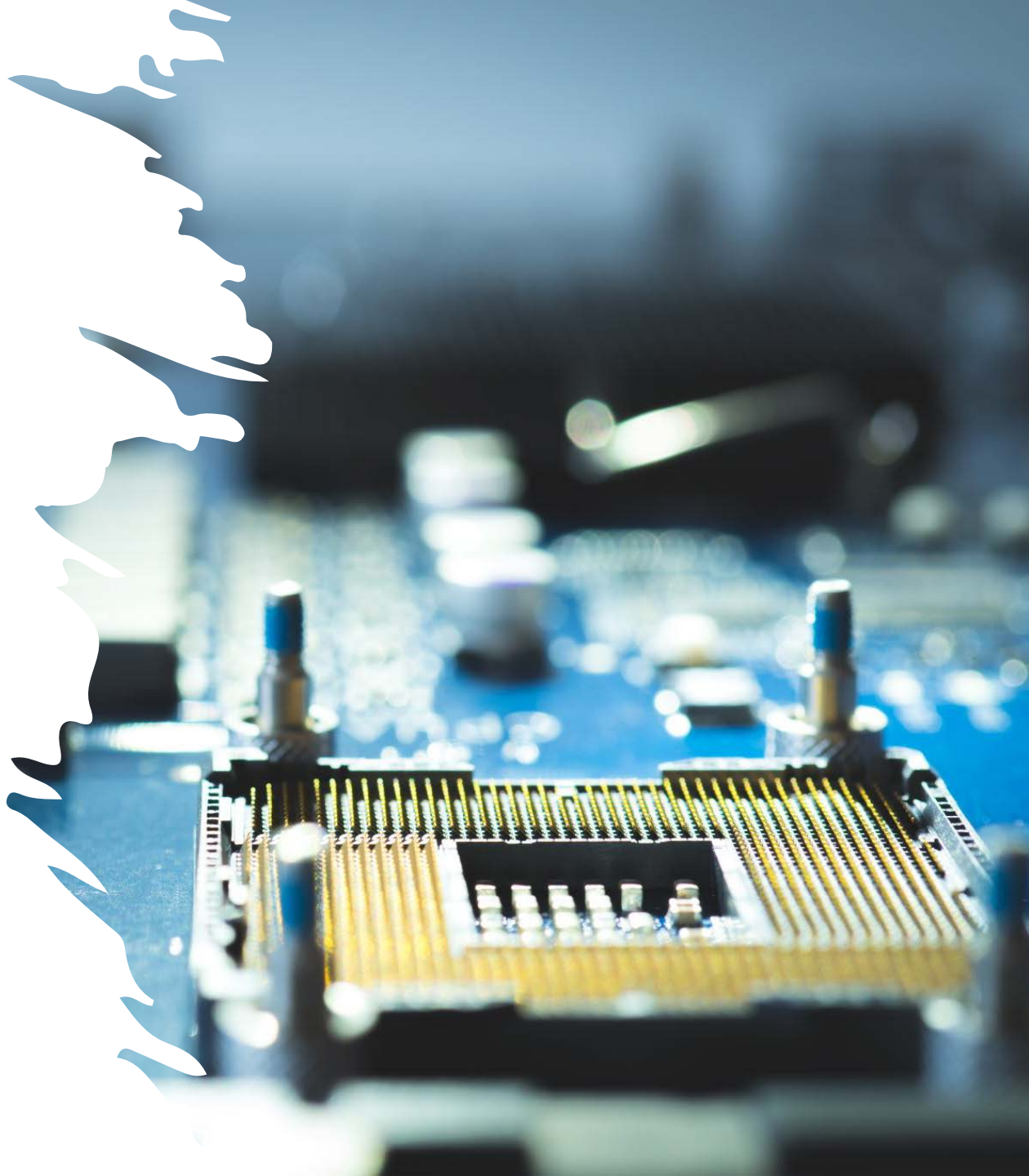
Intent/Clarification: Indicate the total number of nodes sampled. This is not the same as number of nodal stations.

SeqNo: 2040
Long Name: Pathologic Staging - Lung Cancer - N
Short Name: PathStageLungN
Format: Text (categorical values specified by STS)

Definition: Indicate the appropriate descriptor for the lung cancer regional nodes based on final pathology report.

ParentLongName: Lung Cancer Nodes Assessed
ParentShortName: LungNodeAsses
ParentValue: 1
ParentHarvestCodes: = "Yes"

IQVIA Update
Joe Brower



IQVIA Update

Please note: Submitted tickets are currently under review and the IQVIA support team will follow up on resolution and/or target release confirmation.

The IQVIA Team is currently reviewing items to be targeted for an upcoming release. Those items will be posted to the Notifications section.

Analysis Report Questions

- Please contact IQVIA Support
  - gtsdtechsupport@iqvia.com
- STS/Research Center will be looped in as needed when tickets are escalated to Tier 2

Contact Information

Leigh Ann Jones, STS National Database Manager, Congenital and General Thoracic

- Ljones@sts.org
- 312-202-5822

Database Operational Questions

- STSDB@sts.org

Upcoming GTSD Webinars

Monthly Webinar

- July 13 @ 1:30CT

User Group Call

- July 27 @ 2:30CT

Open Discussion

PLEASE USE THE Q&A FUNCTION.

WE WILL ANSWER AS MANY QUESTIONS AS POSSIBLE.

WE ENCOURAGE YOUR FEEDBACK AND WANT TO HEAR FROM YOU!

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THANK YOU FOR JOINING!