# The Society of Thoracic Surgeons

# General Thoracic Surgery Database Monthly Webinar

October 14, 2026

STS National Database™
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# Agenda

- Welcome and Introduction
- STS Updates
- Data Manager Education
  - Dr. Seder – IMS Quality Metric
  - Ruth Raleigh
- Q&A

# Advances in Quality and Outcomes – A Data Managers Meeting - AQO 2026

- Thank you to those who attended AQO in person!
- Content for virtual attendees will be available in the coming weeks
  - STS will send a formal communication to all attendees when online content is available
  - Didn't register but still interested in the virtual component?
    - Can purchase through Dec 2026

- Where will AQO 2027 be held?
  - Virtual for all!



# ADVANCES IN QUALITY & OUTCOMES:

A Data Managers Meeting

**Sept. 30 - Oct. 2, 2026**
**New Orleans, LA**

C E / C E U  &  E V A L U A T I O N S

## Claim your continuing education credit

**S T E P  1**

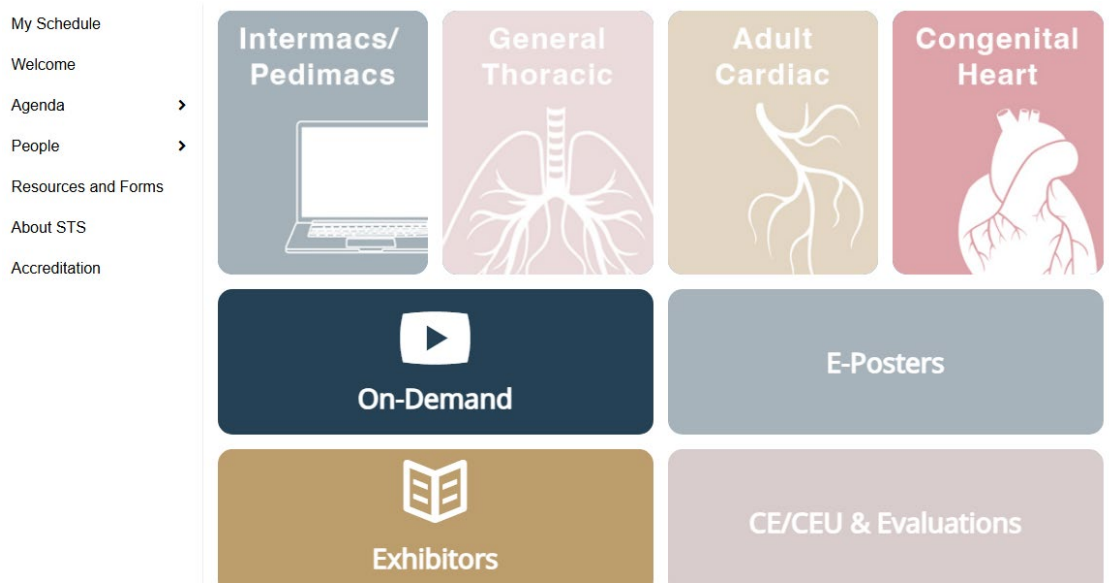
View all AQO content before you start your evaluation

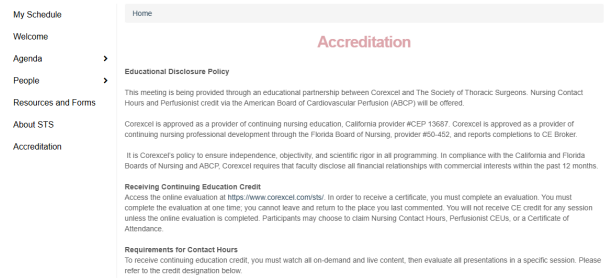
**S T E P  2**

Complete the evaluation in one sitting — you cannot leave and return

**D E A D L I N E**

Claim your credit by Monday, January 4, 2027






# STS Updates

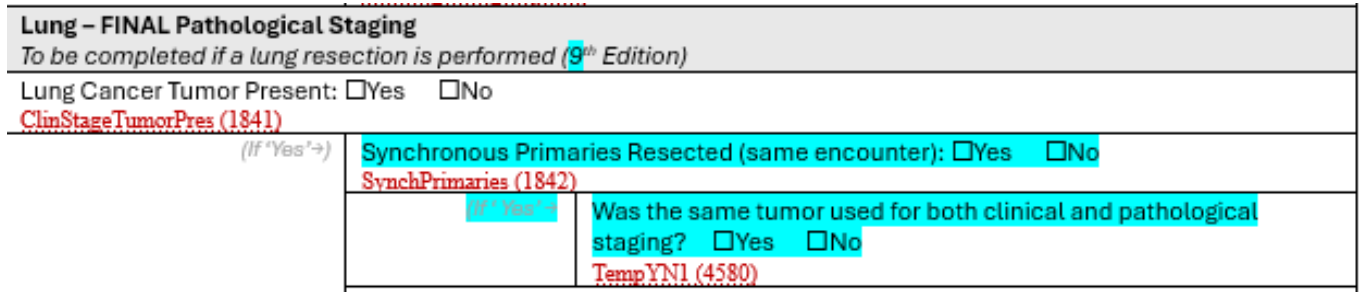
- AQO Hot Topics date coming soon!
  - Looking at the first or third week of November
- October Training Manual posting this week!!!
- Fall 26 Report Analysis will be released mid-November
  - Updated Analysis Overview will be available in the IQVIA Library
- GTSD Public Reporting
  - Next update scheduled for January 2027
  - **Consent deadline is October 19th**
  - **Questions should be sent to publicreporting@sts.org**



# STS Updates

## New Temporary Field Activation

- **Seq. 4580 (TempYN1) Temp Yes/No Field #1**
- Parent field: Seq.1842 (SynchPrimaries) Synchronous primaries Resected (same encounter) = Yes
- Variable: Was the same tumor used for both clinical and pathological staging?




  - Data collection for the new temp field will begin with surgery dates September 1, 2026 and forward
  - Updated Data Collection form will be posted by Friday, 10/16

# STS Updates




## New Data Manager Webinar Series

- ✓ October 7th 1:00 - 2:00ET Kick off call – DCF Sections A,B
- October 21st 1:00 - 2:00ET DCF Sections C,D,E
- November 4th 1:00 - 2:00ET DCF Sections F,G
- November 18th 1:00 - 2:00ET DCF Sections H,I
- December 2nd 1:00 - 2:00ET DCF Sections J,K
- December 16th 1:00 - 2:00ET DCF Sections L,M

# STS Education

Dr. Christopher Seder,
GTSD Workforce Chair

Ruth Raleigh, GTSD
Clinical Consultant



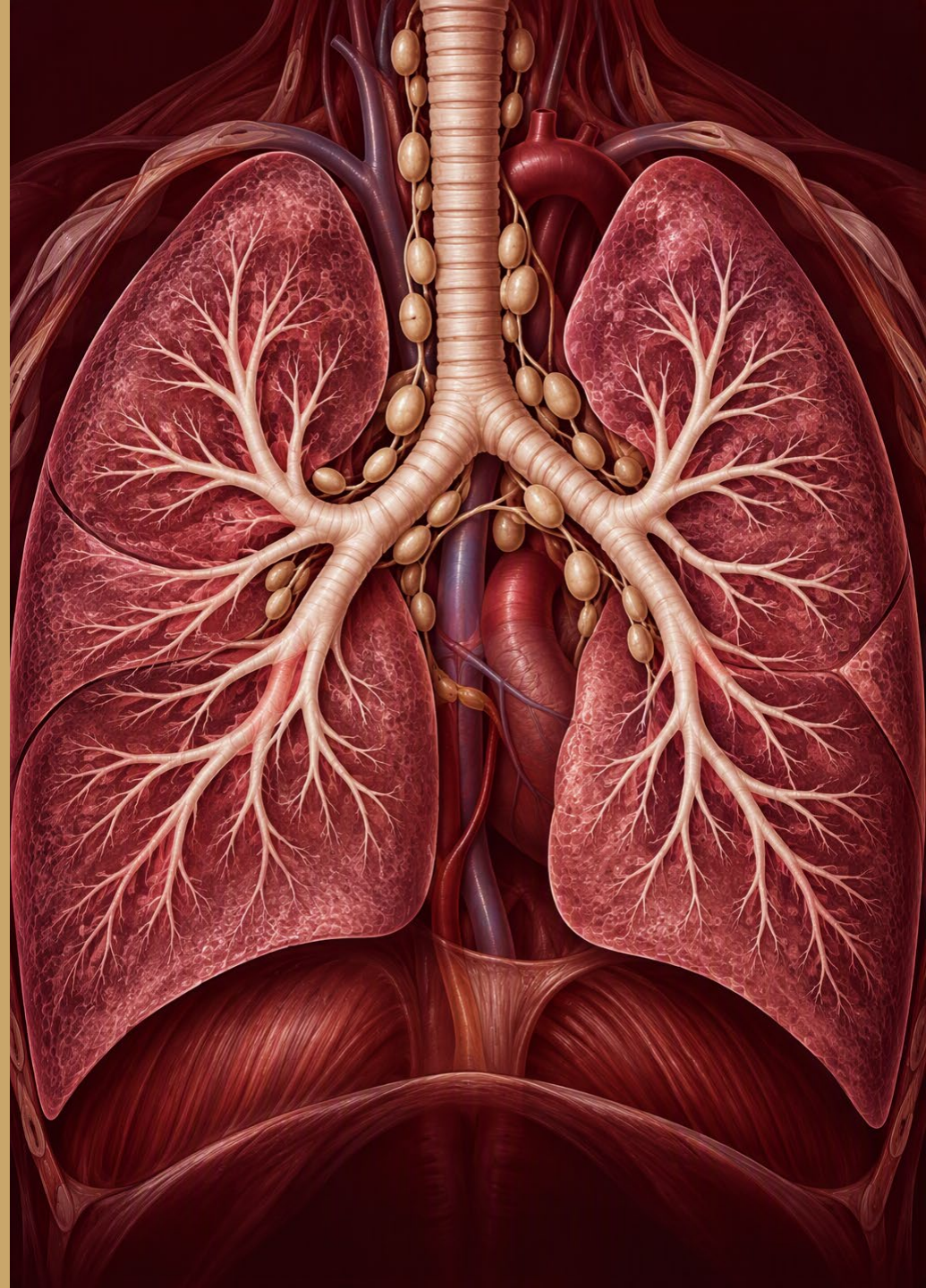
STS GENERAL THORACIC SURGERY DATABASE

# Invasive Mediastinal Staging for NSCLC Tumors ≥3 cm

*A New Quality Metric for the STS GTSD*

Bondzi-Simpson A, Bonnell L, Towe CW, Habib RH, Seder CW, Woodard GA

*On behalf of the STS Task Force on Quality, Risk Modeling and Reporting*



INTRODUCTION

# Quality Measurement Must Evolve

## Traditional focus: perioperative outcomes

- Mortality
- Major morbidity
- Readmission
- Length of stay

*Still critically important*

## Contemporary thoracic oncology also demands

- Quality of decision-making and staging
- Access to modern therapies (precision medicine, perioperative immunotherapy)
- Multimodality treatment strategies

**IMS** is a measurable process of care directly linked to treatment selection and oncologic outcomes in resectable NSCLC.

BACKGROUND

# Guidelines & the Task Force Mandate

## Guidelines recommend considering IMS for:

| NCCN | ESTS | CHEST | IASLC |
|---|---|---|---|

- Tumors ≥3 cm
- Central tumors
- Suspicious nodal disease on imaging

## STS Task Force on Quality, Risk Modeling & Reporting

*Established 2025 under the GTSD Workforce*

1. Identify clinically meaningful thoracic surgery quality metrics
2. Develop standardized reporting and benchmarking
3. Leverage the GTSD platform for research and QI

**IMS for NSCLC ≥3 cm is the Task Force's first major initiative**

CLINICAL CONTEXT

# A Paradigm Shift in Resectable NSCLC



## Landmark trials of neoadjuvant / perioperative chemoimmunotherapy

| IMpower010 | CheckMate-816 | KEYNOTE-671 | AEGEAN | CheckMate-77T |
|---|---|---|---|---|

Improvements in event-free survival, disease-free survival, pathologic response, and overall survival in appropriately selected patients

## Detecting nodal disease before surgery:

1. Enables evaluation for neoadjuvant or perioperative systemic therapy when indicated

2. Permits treatment modification — intensification or de-escalation — based on accurate pathologic staging and multidisciplinary discussion

THE CLINICAL PROBLEM

# Occult Nodal Disease Remains Common

Imaging alone misses a subset of patients: some who appear clinically node-negative harbor mediastinal nodal disease found only after resection.

**~6%**

Unsuspected pN2 disease among clinically node-negative patients

*National Cancer Database (NCDB)*

**11.2%**

Pathologic nodal upstaging in a clinically node-negative cohort undergoing pulmonary resection

*STS GTSD*

CLINICAL IMPACT

# Why It Matters: A Missed Window

## Systemic therapy completion

**~94%**

**Neoadjuvant**
CheckMate-816

**~64%**

**Adjuvant**
IMpower010



*Patients completing planned treatment (approximate)*

### Higher completion

Substantially more patients complete systemic therapy when it is given before surgery.

### Long-term survival

Contemporary trial data increasingly support perioperative approaches.

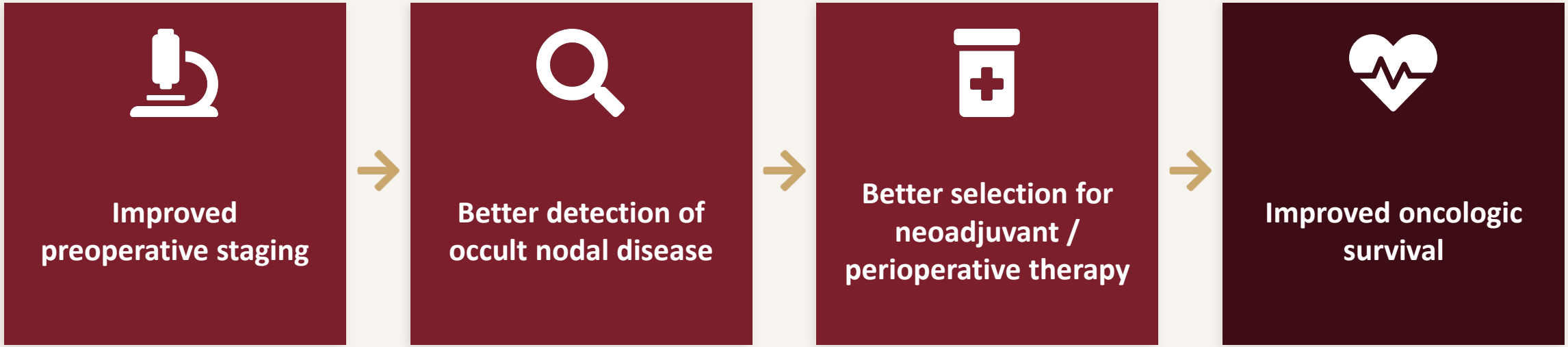
### Adjuvant benefit wanes

5-year adjuvant immunotherapy follow-up has been disappointing, especially with lower PD-L1 expression.

*No randomized trial directly compares neoadjuvant vs. adjuvant chemoimmunotherapy in occult nodal disease; evidence is indirect.*

THE METRIC

# IMS as a Quality Metric: Rationale




## Why IMS works as a metric

**Measurable**
at the time of surgical resection

**Evidence-informed**
and guideline-supported

**Actionable**
directly linked to downstream treatment selection

THE METRIC

# Measure Specification

**IMS rate** = eligible patients with preoperative IMS ÷ all eligible patients (institution-level proportion)

## Denominator

- Patients ≥18 years
- Elective lung cancer resection
- Tumor clinically staged ≥3 cm
- Wedge, segmentectomy, lobectomy, bilobectomy, pneumonectomy

## Numerator

Eligible patients with preoperative pathologic evaluation of mediastinal or hilar nodes:

- EBUS-TBNA
- EUS
- Mediastinoscopy
- VATS / lymph node biopsy
- Other invasive nodal assessment captured in GTSD

## Exclusions

- Tumors <3 cm
- Emergent pulmonary resections

*Focuses on patients with time and rationale for complete preoperative staging*

REPORTING

# How the Metric Will Be Reported

### Continuous
Proportional IMS rate reported for each institution

### Binary
“Meeting expectation” indicator showing whether a benchmark for guideline concordance is met

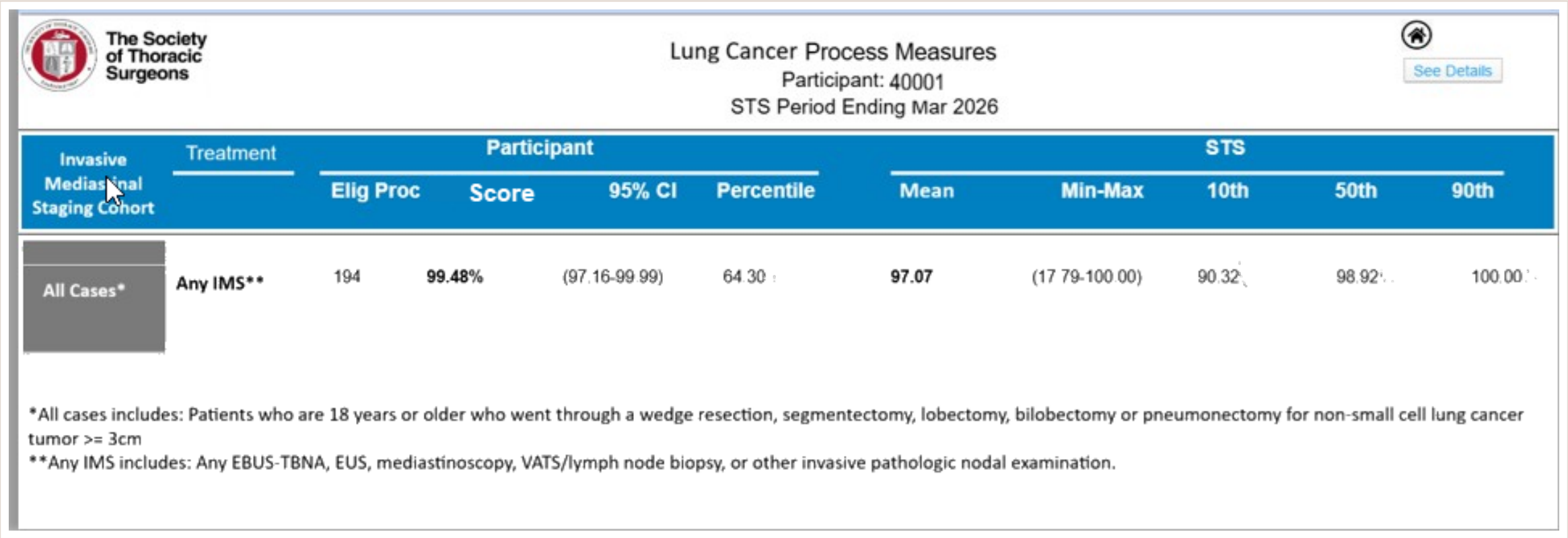
### No new registry infrastructure
Uses data elements already collected in the GTSD — scalable, longitudinal, ready for future public reporting

## Setting the benchmark

The binary threshold will not be set in advance. It will be informed by GTSD Workforce quality improvement work:

1. Explore practice variation across centers with a broad range of IMS rates
2. Link to institutional survey responses on patient, provider, workflow, and institutional factors
3. Establish pragmatic, data-driven benchmarks

# Invasive Mediastinal Staging for NSCLC Tumors ≥3 cm



The Society of Thoracic Surgeons

Lung Cancer Process Measures
Participant: 40001
STS Period Ending Mar 2026

See Details

| Invasive Mediastinal Staging Cohort | Treatment | Participant | | | | STS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Elig Proc | Score | 95% CI | Percentile | Mean | Min-Max | 10th | 50th | 90th |
| All Cases* | Any IMS** | 194 | 99.48% | (97.16-99.99) | 64.30 | 97.07 | (17.79-100.00) | 90.32 | 98.92 | 100.00 |

*All cases includes: Patients who are 18 years or older who went through a wedge resection, segmentectomy, lobectomy, bilobectomy or pneumonectomy for non-small cell lung cancer tumor >= 3cm

**Any IMS includes: Any EBUS-TBNA, EUS, mediastinoscopy, VATS/lymph node biopsy, or other invasive pathologic nodal examination.

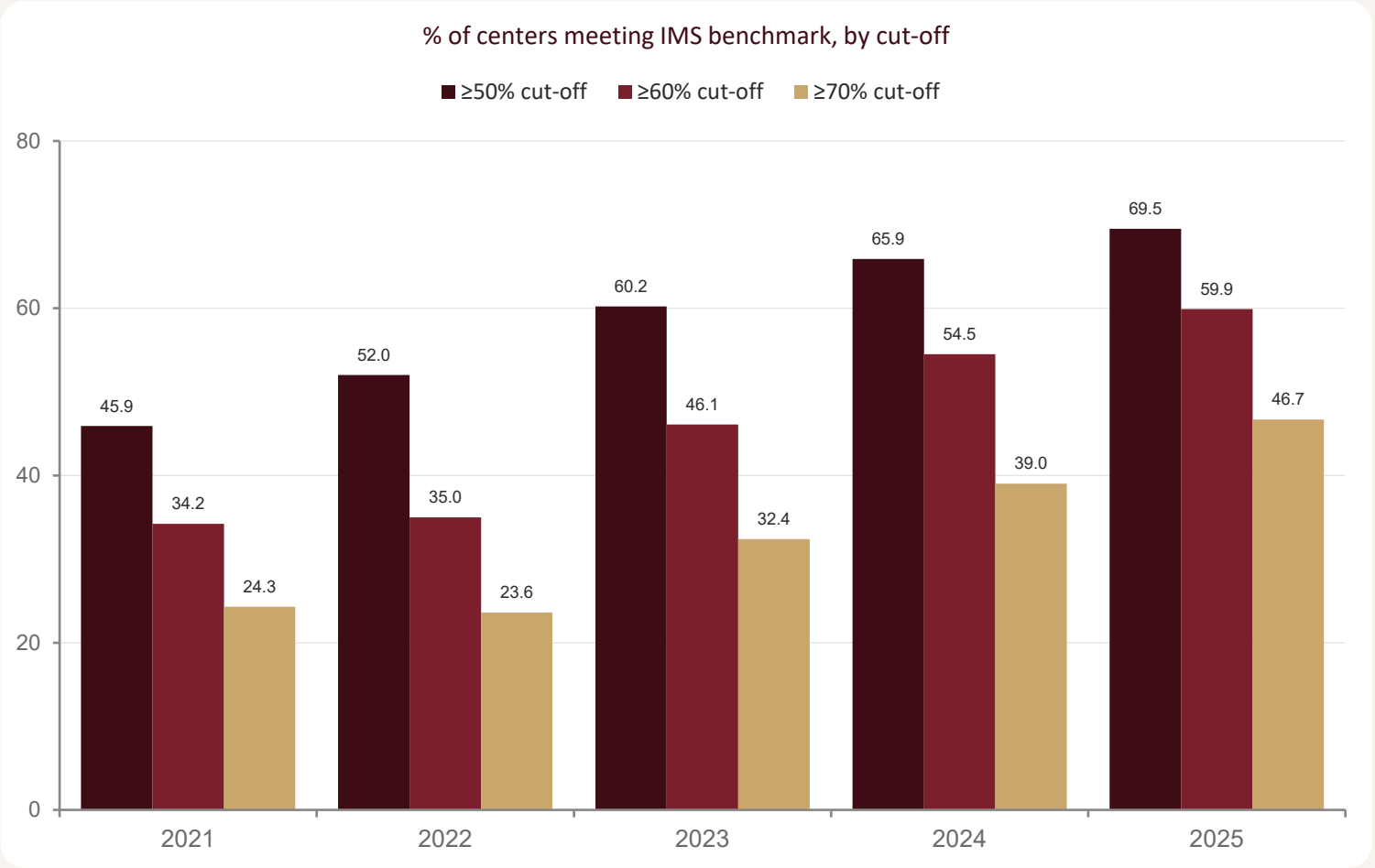
# An Important Quality Gap

**55.6%**

of patients with tumors ≥3 cm had preoperative IMS

**50.5%**

for tumors 3–4 cm — fewer than half staged before surgery



FUTURE DIRECTIONS

# From Measurement to Implementation

## STEP 1
### Measurement & Reporting

- Defining the measure
- Collecting the measure
- Public quality reporting

## STEP 2
### Research & Evidence Generation

- Factors associated with meeting the QM
- QM associations with oncologic outcomes
- QM associations with other aspects of quality care

## STEP 3
### Quality Improvement & Best Evidence

- Understand barriers to implementation
- QI strategies: education, audit/feedback, society & patient-group collaboration, media campaigns
- Track performance over time

*A continuous cycle to drive high-quality care and improve outcomes for patients with NSCLC*




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# Upcoming GTSD Webinars

## Monthly Webinars

- November 11 @ 2:30ET (1:30CT)
- December 9 @ 2:30 ET (1:30CT)

## New Data Manager Series

- October 21 @ 1:00ET (12:00CT)
- November 4 @ 1:00ET (12:00CT)

# Contact Information

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

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

**Helpdesk Support**

**(Harvest Questions/Analysis Report Questions)**

- STSDB_helpdesk@sts.org

**Database Operational Questions**

**(Database Participation, Contracts, etc.)**

- STSDB@sts.org

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# THANK YOU FOR JOINING!