The Society of Thoracic Surgeons

General Thoracic Surgery Database

Data Collection Form Version 5.21.1



STS National Database^{**}

Trusted. Transformed. Real-Time.

Add/Change to Field

** - Risk Model variable

BLUE Underlined Fields – Required for record inclusion

6/21/2021

A. Demographics						
Patient ID:		Med	dical Record #	t:	_	
First Name: Middle Name:			Last Name:			
SSN/National Identifier Known Ves No Pt.	. Refused (If Yes \rightarrow)		SSN:			
Permanent Street Address:		City	/:		State/ Region:	
Country:		Patient Postal Code:				
Patient participating in STS-related clinical trial: \Box (<i>If not None</i> \rightarrow) Clinical trial patient ID:			rial 2 🛛 🗆 Tr	ial 3 🛛 Trial 4	□ Trial 5 □ Trial 6	
Date of Birth://	Age: **	Gender: ** Male Female			Female	
Is the Patient's Race Documented? \Box Yes \Box No \Box Patient Declined to Disclose (If Yes, select all that apply \downarrow)						
U White/Caucasian		Black/African American **				
		merican Indian/Alaskan Native				
□ Native Hawaiian/Pacific Islander □ Oth						
Hispanic or Latino Ethnicity: Yes No Not Documented						

B. Admissio	n				
Admission Sta	tus: Inpatient Outpatient / Observation	(If Inpatient \rightarrow)	Admission Date: ////////////////////////////////////		
Payor: Indicate	the Primary Payor:	(<i>If Primary Payor is not None/Self↓</i>) Indicate the Secondary (supplemental) Payor:			
□ None/Self		□ None/Self	□ None/Self		
🗆 Medicare (in	cludes commercially managed options)	Medicare (includes commercially managed options)			
(If Medicare \rightarrow)	Commercially Managed Medicare Plan: □Yes □No (<i>If No</i> ↓)	(If Medicare \rightarrow)	Commercially Managed Medicare Plan: □Yes □No (If No ↓)		
	HICN/MBI Known: □ Yes □ No (If Yes ↓)		HICN/MBI Known: □ Yes □ No (If Yes ↓)		
	HICN/MBI:		HICN/MBI:		
	Primary Payor Medicare Part B: Yes No		Secondary Payor Medicare Part B:		

Surgeon Name:	 Medicaid (includes commercially Military Health Commercial Health Insurance Health Maintenance Organization Non U.S. Plan Other 		 Medicaid (includes commercially managed options) Military Health Commercial Health Insurance Health Maintenance Organization Non U.S. Plan Other 				
Hospital Name: (// Hospital Hospital Name: (// Hospital Name ->) Hospital Region: Hospital National Provider ID: Hospital Code: C. Pre-Operative Evaluation No (Harvest Code 10) Did the patient have a laboratory confirmed diagnosis of Covid-197 No (Harvest Code 10) Yes, in hospital prior to surgery (Harvest Code 13) Yes, in hospital after surgery (Harvest Code 13) Date of Positive Covid-19 Test (closest to OR date) //	Surgeon Name:		Surgeon's National Provider ID				
Hospital Native	Taxpayer ID#:		·				
Name ->) Hospital Postal Code: Hospital National Provider ID:	Hospital Name:	(If Hospital	Hospital Region:				
C. Pre-Operative Evaluation Did the patient have a laboratory confirmed diagnosis of Covid-19? Did the patient have a laboratory confirmed diagnosis of Covid-19? Did the patient have a laboratory confirmed diagnosis of Covid-19? Did the patient have a laboratory confirmed diagnosis of Covid-19? Did the patient have a laboratory confirmed diagnosis of Covid-19? Description Description Did the patient have a laboratory confirmed diagnosis of Covid-19? Did the patient have a laboratory confirmed diagnosis of Covid-19? Did the patient have a laboratory confirmed diagnosis of Covid-19? Description Date of Positive Covid-19 Test (closest to OR date)	Name \rightarrow)		Hospital Postal Code:				
Did the patient have a laboratory confirmed diagnosis of Covid-19?	Hospital National Provider ID:						
Did the patient have a laboratory confirmed diagnosis of Covid-19?							
□ No (Harvest Code 10) □ Yes, prior to hospitalization for this surgery (Harvest Code 11) □ Yes, in hospital prior to surgery (Harvest Code 13) □ Yes, in hospital after surgery (Harvest Code 13) □ Yes, after discharge within 30 days of surgery (Harvest Code 14) Date of Positive Covid-19 Test (closest to OR date) /							
Height: **(cm) Weight: **(kg) Calculated BMI (system calculation) Prior Surgical History in Planned Operative Field Yes No Cardiopulmonary History Image: Select all that apply or 'None' [) Image: Select all that apply or 'None' [) None Image: Hypertension ** Coronary Artery Disease (CAD) ** Atrial Fibrillation within the last Pulmonary Hypertension Coronary Artery Disease (CAD) ** Myocardial Infarction A Aortic Valve Disease Mitral Valve Disease EF% Tricuspid Valve Disease Pulmonic Valve Disease Interstitial Fibrosis/ Interstitial Lung Disease Ef% Magor Aortic or Peripheral Vascular Disease (PVD) ** Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE) Transient Ischemic Attack (TIA) Transient Ischemic Attack (TIA) Carebrovascular Accident (CVA ->) Permanent Neurologic impairment Yes No Endocrine / GI / Renal History (Select all that apply or 'None' [) History of Yascular Disease (Select all that apply or 'None' [)	 □ No (Harvest Code 10) □ Yes, prior to hospitalization for this surgery (Harvest Code 11) □ Yes, in hospital prior to surgery (Harvest 12) □ Yes, in hospital after surgery (Harvest Code 13) 						
Prior Surgical History in Planned Operative Field Yes None History of Cardiopulmonary Disease (Select all that apply or 'None' ↓) None Hypertension** Coronary Artery Disease (CAD)** Atrial Fibrillation within the last year; with or without treatment Pulmonary Hypertension Congestive Heart Failure (CHF)** (If CHF →) EF% Myocardial Infarction A ortic Valve Disease Interstitial Fibrosis/ Interstitial Lung Disease EF% Tricuspid Valve Disease Pulmonic Valve Disease Interstitial Fibrosis/ Interstitial Lung Disease EF% Masor Aortic or Peripheral Vascular Disease (Select all that apply or 'None' ↓) None E E Major Aortic or Peripheral Vascular Disease (PVD) ** Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE) Transient Ischemic Attack (TIA) Cereebrovascular Accident (CVA) (If CVA →) Permanent Neurologic impairment □ Yes □ No No Endocrine / GI / Renal History History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓) Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)	Date of Positive Covid-19 Test (clo	sest to OR date)///	(mm/dd/yyyy)				
Cardiopulmonary History History of Cardiopulmonary Disease (Select all that apply or 'None' 1) None I Hypertension** Coronary Artery Disease (CAD)** Arrial Fibrillation within the last value of the end of the en			(kg) Calculated BMI (system calculation)				
History of Cardlopulmonary Disease (Select all that apply or 'None' 1) None Hypertension** Coronary Artery Disease (CAD)** Atrial Fibrillation within the last year; with or without treatment Pulmonary Hypertension Congestive Heart Failure (CHF)** EF% Myocardial Infarction A ortic Valve Disease Mitral Valve Disease Interstitial Fibriosis/ Interstitial Lung Disease Tricuspid Valve Disease Pulmonic Valve Disease Interstitial Fibrosis/ Interstitial Lung Disease Vascular History Vascular Disease (Select all that apply or 'None' 1) None None Interstitial Fibrosis/ Interstitial Lung Disease Major Aortic or Peripheral Vascular Disease (PVD) ** E Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE) Transient Ischemic Attack (TIA) Cerebrovascular Accident (CVA) (If CVA) Permanent Neurologic impairment Yes No Endocrine / GI / Renal History (Select all that apply or 'None' 1) Endocrine / GI / Renal History							
Image: Image	Cardiopulmonary History						
Atrial Fibrillation within the last year; with or without treatment □ Pulmonary Hypertension □ Congestive Heart Failure (CHF)** (If CHF →) EF% □ Myocardial Infarction □ Aortic Valve Disease □ Mitral Valve Disease EF% □ Tricuspid Valve Disease □ Pulmonic Valve Disease □ Interstitial Fibrosis/ Interstitial Lung Disease Vascular History □ Pulmonic Valve Disease □ Interstitial Fibrosis/ Interstitial Lung Disease Vascular History Isease (Select all that apply or 'None' ↓) None □ Major Aortic or Peripheral Vascular Disease (PVD) ** □ Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE) □ Transient Ischemic Attack (TIA) □ Cerebrovascular Accident (CVA) (If CVA →) Permanent Neurologic impairment □ Yes □ No Endocrine / GI / Renal History History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)	History of Cardiopulmonary Dise	Select all that apply or 'None' ↓)					
year; with or without treatment □ Full Montaly Hypertension □ Mitral Valve Disease □ Mitral Valve Disease □ Tricuspid Valve Disease □ Pulmonic Valve Disease □ Interstitial Fibrosis/ Interstitial Lung Disease Vascular History ■ Mitral Valve Disease □ Interstitial Fibrosis/ Interstitial Lung Disease Vascular Disease (Select all that apply or 'None' ↓) ■ Mitral Valve Disease ■ Mitral Valve Disease Major Aortic or Peripheral Vascular Disease (PVD) ** ■ Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE) ■ Transient Ischemic Attack (TIA) □ Cerebrovascular Accident (CVA) [/f CVA →] Permanent Neurologic impairment □ Yes □ No Endocrine / GI / Renal History History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)		Hypertension**					
Image: Myocardial Infarction Image: Acrtic Valve Disease Image: Tricuspid Valve Disease Image: Pulmonic Valve Disease Image: Vascular Disease (Select all that apply or 'None' ↓) Image: None Image: None <		Pulmonary Hypertension	$(\text{If CHF} \rightarrow)$				
Image: Image	Myocardial Infarction	Aortic Valve Disease	Mitral Valve Disease				
History of Vascular Disease (Select all that apply or 'None' ↓) None Major Aortic or Peripheral Vascular Disease (PVD) ** Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE) Transient Ischemic Attack (TIA) Cerebrovascular Accident (CVA) (If CVA →) Permanent Neurologic impairment Yes History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)	Tricuspid Valve Disease	Pulmonic Valve Disease	Interstitial Fibrosis/ Interstitial Lung Disease				
 None Major Aortic or Peripheral Vascular Disease (PVD) ** Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE) Transient Ischemic Attack (TIA) Cerebrovascular Accident (CVA) (If CVA →) Permanent Neurologic impairment □ Yes □ No Endocrine / GI / Renal History (Select all that apply or 'None' ↓) 	Vascular History						
 Major Aortic or Peripheral Vascular Disease (PVD) ** Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE) Transient Ischemic Attack (TIA) Cerebrovascular Accident (CVA) (If CVA →) Permanent Neurologic impairment □ Yes □ No Endocrine / GI / Renal History History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓) 		ect all that apply or 'None' \downarrow)					
□ Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE) □ Transient Ischemic Attack (TIA) □ Cerebrovascular Accident (CVA) (If CVA →) Permanent Neurologic impairment □ Yes □ No Endocrine / GI / Renal History History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)							
□ Transient Ischemic Attack (TIA) □ Cerebrovascular Accident (CVA) (If CVA →) Permanent Neurologic impairment □ Yes No Endocrine / GI / Renal History History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)							
□ Cerebrovascular Accident (CVA) (If CVA →) Permanent Neurologic impairment □ Yes No Endocrine / GI / Renal History History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)							
(If CVA →) Permanent Neurologic impairment □ Yes □ No Endocrine / GI / Renal History History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)							
Endocrine / GI / Renal History History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)							
History of Endocrine/GI/Renal Disease (Select all that apply or 'None' ↓)							
□ None							
	□ None						

□ Diabetes ** (If Diabetes→)	Туре	1.2		Diet Only	□Oral	🗆 Insulin	□ Oth	er Subcutaneous Medication
Liver Dysfunction								
Dialysis**								
Cancer History								
History of Cancer (S	Select all th	hat apply or None \downarrow)						
□ None								
Coexisting Cance	r							
□ Preoperative Chemotherapy/ □ Same disease, ≤ 6 months Immunotherapy ** □ Same disease, > 6 months								
Immunotherapy ** (If Preop chemo/immunot	therapy - S	elect all that apply \rightarrow)	When	n and for what	at disease: '	×		disease, ≤ 6 months ^{**}
		11.7 /				🗆 Unre	lated	disease, >6 months
	naia Dae	listian Thereny						ase, ≤ 6 months
Preoperative Thor (If Preop Thoracic Radiat			When	and for what	at disease:	□ Sam	e dise lated	ase,> 6 months disease, ≤ 6 months
` *		± ± • /						disease, >6 months
Preoperative Medic		-						
Preoperative Medic	ation Hi	story (Select all that	apply or l	None↓)				
□ None								
Chronic Immunosu	ippressiv	e Therapy **						
Chronic anticoagul	ation (de	fined as any anticoa	gulation n	nedication oth	er than ASA			
Home Oxygen The	erapy (Ho	ome O2)						
Pre-Operative Testi	ng							
Creatinine level mea	sured	<mark>] Yes □ No</mark> (If Ye	$s \to)$	Last creatir	nine level			
Hemoglobin level me	easured I	□ Yes □ No (If Ye	es →)	Last hemo	globin level			
Pulmonary Function Tests performed? Yes No								
(If Yes →)	/1 % pre	dicted: **						
DLCO test performed? □ Yes □ Not Applicable (If Yes→) Lowest DLCO % predicted:								
Psychosocial History								
History of Substance Abuse (Select all that apply or None↓)								
Cigarette smoking: **								
(If Cigarette Smoking \rightarrow) Smoking History: \Box Past smoker (stopped >1 month prior to operation)** \Box Current smoker**								
Pack Year Known or can be estimated: □ Yes □ No (If Yes →) Pack-Years								
Substance Dependency/Abuse of Non-Prescription Medications or Illicit Drugs								
C Alcohol Abuse								
Dementia/neurocognitive dysfunction: Yes No Major Psychiatric Disorder: Yes No								
Living Status: Lives alone Lives with family or friend Assisted Living Nursing Home								
Functional Status: Independent Partially Dependent Totally Dependent Unknown								
						2 - Ambulatory and capable of all self-care		
ECOG Score:**to carry on all pre- able to carry out work of a light orbut unable to carry out any work activity and about more					but unable to carry out any work activities. Up and about more			

disease performance without restriction	sedentary nature, e.g., light housework, office work	than 50% of waking hours
□ 3 - Capable of only limited self-care, confined to bed or chair more than 50% of waking hours	4 - Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair	

Indicate the Primary Diagnosis (Category of Disease) (ICD-10).	
	ng Cancer
Lung cancer, main bronchus, carina (C34.00)	□ Lung cancer, lower lobe (C34.30)
□ Lung cancer, upper lobe (C34.10)	□ Lung cancer, location unspecified (C34.90)
□ Lung cancer, middle lobe (C34.2)	
•	agus Cancer
Esophageal cancer, esophagogastric junction (cardia) (C16.0)	□ Esophageal cancer, lower third (C15.5)
□ Esophageal cancer, upper third (C15.3)	□ (Stomach Cancer) Malignant neoplasm stomach unspecified
	(C16.9)
Esophageal cancer, middle third (C15.4)	□ (Esophageal Cancer) Malignant neoplasm of the esophagus,
Thymoma/Thymectomy/Mya	unspecified (C15.9) asthenia Gravis/Mediastinal Mass
□ Malignant neoplasm of thymus (thymoma, thymic carcinoma)	☐ Benign neoplasm thymus (D15.0)
(C37)	
Myasthenia gravis (G70.00)	Mediastinal nodes, metastatic (C77.1)
Anterior/Posterior mediastinal tumor; metastatic (C78.1)	□ Non-Hodgkin Lymphoma, intrathoracic lymph nodes (C85.92)
Posterior mediastinal malignant tumor primary (C38.2)	□ Mediastinal abscess (J85.3)
□ Anterior mediastinal malignant tumor primary (germ cell cancer, seminoma) (C38.1)	□ Disease of the mediastinum, not otherwise classified (J98.5)
□ Mediastinal Mass/Neoplasm of uncertain behavior of pleura, thymus, mediastinum (D38.2-D38.4)	☐ Mediastinal nodes, benign (D36.0)
□ Anterior/Posterior mediastinal tumor; benign (i.e. teratoma) (D15.2)	□ Unspecified disease of thymus gland (E32.9)
Т	rachea
Tracheal tumor, malignant (C33)	□ Tracheal stenosis, congenital (Q32.1)
□ Tracheal tumor, benign (D14.2)	□ Subglottic stenosis-congenital (Q31.1)
□ Tracheal tumor, metastatic (C78.30)	□ Subglottic stenosis-acquired (post intubation) (J38.6)
□ Tracheal stenosis, acquired (J39.8)	□ Tracheostomy related stenosis (J95.03)
Diaphragma	atic Hernia / GERD
Esophageal reflux (GERD) (K21.9)	Diaphragmatic Hernia with obstruction (K44.0)
□ Reflux esophagitis (K21.0)	Diaphragmatic Hernia with gangrene (K44.1)
□ Barrett's esophagus (K22.70)	Diaphragmatic Hernia without obstruction or gangrene (K44.9)
□ Barrett's esophagus with High Grade Dysplasia (K22.711)	
Cardiac tamponade (I31.4)	□ SVC Syndrome (I87.1)
Pericardial effusion, malignant (I31.3)	Pericardial disease (I31)
Pericarditis with effusion (I30.9)	Unspecified disease of the pericardium (I31.9)
\square Device weight a_{1} and a_{2} and a_{3} (104.4)	

□ Pericarditis, constrictive (I31.1)

Chest Wall								
□ Pectus carinatum (Q67.7)	□ Rib tumor, metastatic (C79.51)							
Pectus excavatum (Q67.6)	□ Thoracic outlet syndrome (G54.0)							
□ Rib tumor, benign (e.g., fibrous dysplasia) (D16.7)	Chest wall abscess (L03.31)							
□ Rib tumor, malignant (e.g., osteosarcoma, chondrosarcoma)								
(C41.3) Diaphragm								
Diaphragm tumor, benign (D21.3)	Diragm Diaphragmatic paralysis (J98.6)							
Diaphragm tumor, malignant (C49.3)	(Dischargen handing and and in the handing section A)							
(Diaphragm hernias are captured in the hernia section ↑)								
Esophagus - Other								
□ Achalasia of esophagus (K22.0)	□ Other disease of the esophagus (K22.8)							
□ Acquired absence of esophagus (post esophagectomy) (Z90.89)	□ Foreign body esophagus (T18.108a)							
Dyskinesia/spasm of esophagus (K22.4)	Gastric outlet obstruction, pyloric stenosis, acquired (K31.1)							
Epiphrenic diverticulum (K22.5)	□ Mallory Weiss tear (K22.6)							
Esophageal perforation (K22.3)	□ Tracheoesophageal fistula (J95.04)							
Esophageal stricture (K22.2)	□ Ulcer esophagus with bleeding (K22.11)							
Esophageal tumor-benign (i.e., leiomyoma) (D13.0)	□ Ulcer esophagus without bleeding (K22.10)							
□ Esophagitis (K20.9)								
Lung	– Other							
□ Acute respiratory failure (ARDS) (J96.00)	□ Chronic respiratory failure (J96.1)							
□ Aspergillosis (B44.9)	Lung tumor, benign (e.g., hamartoma) (D14.30)							
□ Bronchiectasis (J47.9)	Pneumonia (J18.9)							
□ Cystic fibrosis (E84.0)	Post inflammatory pulmonary fibrosis (J84.89)							
COPD/Emphysema (J44.9/J43.8)	Primary pulmonary hypertension (I27.0)							
Emphysematous bleb (J43.9)	Postprocedural Respiratory Failure (J95.82)							
□ Lung abscess (J85.2)	Pulmonary sequestration (Q33.2)							
□ Interstitial lung disease/fibrosis (J84.1)	□ Transplanted lung complication(s) (T86.8XX)							
Pneumothorax (J93.1)	□ Gangrene and necrosis of lung (J85.0)							
□ Solitary pulmonary nodule (not a tumor, e.g., granuloma, subpleural lymph node, pulmonary infarct) (R91.1)	□ Hemothorax (J94.2)							
□ Atelectasis (J98.11)	Lung tumor, metastatic (C78.00)							
□ Bronchopleural fistula (J98.09)	Lung nodule/Mass/Other disorders of lung (J98.4)							
P	leura							
Empyema with fistula (J86.0)	□ Pleural tumor, metastatic/Secondary malignant neoplasm of pleura (C78.2)							
Empyema without fistula (J86.9)	☐ Malignant neoplasm of pleura; other than mesothelioma (C38.4)							
□ Pleural effusion, malignant (J91.0)	☐ Mesothelioma (C45)							
Pleural effusion sterile (J90)	□ Pleural effusion, TB; (Tuberculous pleurisy) (A15.6)							
Pleural thickening (J94.9)	□ Fibrothorax (J94.1)							
Pleural tumor, benign (D19.0)								
	a & Larynx							
Dysphagia, unspecified (R13.10)	□ Vocal cord paralysis unspecified (J38.00)							
□ Tracheomalacia-congenital (Q32.0)	□ Vocal cord paralysis , unilateral (J38.01)							
□ Tracheostomy-hemorrhage (J95.01)	□ Vocal cord paralysis, bilateral (J38.02)							
Trauma								
iraulia								

□ Flail chest (S22.5)		□ Sternal fracture (S22.20)		
□ Rib fracture (S22.39xa)		□ Tracheal injury (S12.8)		
□ Rib fractures, multiple (S22.49)		□ Traumatic pneumothorax (S27.0)		
	Misce	llaneous		
□ Abnormal radiologic finding (R91)		□ Lymphadenopathy (R59.9)		
Chylothorax (189.8)		□ Malignant poorly differentiated neuroendocrine carcinoma, any site (C74.1)		
□ Disruption of internal operation, surgical wound (T81.32)		□ Other complication of procedure, not elsewhere specified (i.e. Non- healing surgical wound) (T81.89)		
□ Hemorrhage complicating a procedure (multiple codes)		□ Other post- op infection (T81.4XXA)		
□ Hematoma complicating a procedure (multiple codes)		□ Persistent post-op fistula not otherwise classified (T81.83)		
□ Hemoptysis unspecified (R04.2)		□ Post-operative air leak (J95.812)		
□ Hyperhidrosis, focal axilla (L74.510)		□ Secondary malignant neoplasm of other specified sites (C79.89)		
□ Hyperhidrosis, focal, face (L74.511)		□ Shortness of breath (R06.02)		
□ Hyperhidrosis, focal, palms (L74.512)		□ Other unlisted category of disease		
(If other unlisted category of disease \rightarrow)	Other Primary Specify:	(Refer to Diagnosis list)		
	Other Primary ICD:	(Refer to Diagnosis list)		

E. Operati	E. Operative							
Date of Surg	Date of Surgery: **//							
OR Entry Time:: Anesthesia Start Tim					Procedure Start Time::			
OR Exit Time:: Anesthesia End Time					Procedure End Time:			
Multi-Day Op	peration	(operation con	tinued through midnig	ght) 🗆 Yes 🗆 No				
Status of Op	eration*	* 🗆 Emerge	ent 🗆 Urgent	□ Elective** □ Pal	liative			
Assisted by I	Robotic	Technology:	:□Yes □No					
Unanticipate	<mark>d</mark> Surgic	al Approach	Conversion:	l <mark>Yes</mark> , VATS→ Open	🗆 <mark>Yes</mark> , Robo	tic → VATS \Box Yes, R	Robotic \rightarrow Open \Box No	
		version any	Unanticipated C	onversion Type:	Elective 🗆 E	mergent		
	'Yes'→)	Conversion Rea	son: 🗆 Vascular 🛛	Anatomy	ymph Nodes <mark>🛛 Other</mark>		
Blood transfu	Blood transfusion intraoperatively (packed red blood cells)□ Yes □ No (If Yes→) #Red Blood Cell Units:							
ASA Classificatio	<u>on:</u> **	□ I Normal, healthy	□ II Mild systemic disease	□ III Severe systemic disease	□ IV Life threatening severe systemic disease	□ V Moribund, not expected to survive without operation	□ VI Declared brain dead, organ donor	

Check ALL of the procedures performed. Indicate (circle) the Print	mary Procedure**					
Major/Analyzed Procedures						
	s that are <u>underlined and in blue</u>)					
Lung Cancer Re	Lung Cancer Resection (Required)					
Weight = 60						
◄ □ Thoracoscopy, surgical; with lobectomy (32663) **	□ Removal of lung, two lobes (bilobectomy) (32482) **					

	□ Thoracoscopy with therapeutic wedge resection (eg mass or nodule) initial, unilateral (32666) **	□ Removal of lung, single segment (segmentectomy) (32484) **					
	□ Thoracoscopy with removal of a single lung segment (segmentectomy) (32669) **	□ Removal of lung, sleeve lobectomy (32486) **					
	□ Thoracoscopy with removal of two lobes (bilobectomy) (32670) **	□ Removal of lung, completion pneumonectomy (32488) **					
	□ Thoracoscopy with removal of lung, pneumonectomy (32671) **	□ Resection and repair of portion of bronchus (bronchoplasty) when performed at time of lobectomy or segmentectomy (32501) **					
	□ Thoracotomy with therapeutic wedge resection (eg mass	Resection of apical lung tumor (e.g., Pancoast tumor), including					
	nodule) initial (32505) **	chest wall resection, without chest wall reconstruction(s) (32503)					
	□ Removal of lung, sleeve (carinal) pneumonectomy (32442)	chest wall resection, with chest wall reconstruction (32504)					
	**						
	□ Removal of lung, single lobe (lobectomy) (32480) **						
dures	□ Thoracoscopy with therapeutic wedge resection (eg mass or nodule) each additional resection, ipsilateral (32667) List separately in addition to primary procedure code	□ Thoracotomy with diagnostic wedge resection followed by anatomic lung resection (+32507), List separately in addition to primary proc code					
t Proce ht = 20	□ Thoracoscopy with mediastinal and regional lymphadenectomy (+32674) List separately in addition to primary procedure code	☐ Thoracoscopy with diagnostic wedge resection followed by anatomic lung resection (32668), List separately in addition to primary procedure code					
Concomitant Procedures Weight = 20	□ Thoracotomy with therapeutic wedge resection (eg mass nodule) each additional resection, ipsilateral (+32506) List separately in addition to primary procedure code						
0	Esonhagus Re	section (Required)					
	Esophagus Resection (Required) Weight = 70						
	anshiatal-Total esophagectomy, without thoracotomy, with call esophagogastrostomy (43107) **	Partial esophagectomy, distal two-thirds, with thoracotomy only (43121) **					
	tal esophagectomy without thoracotomy; with colon	□ Thoracoabdominal-Partial esophagectomy, thoracoabdominal					
	osition or small intestine reconstruction (43108) ** ree Incision -Total esophagectomy with thoracotomy; with	approach (43122) **					
	al esophagogastrostomy (43112) **	small intestine (43123) **					
	tal esophagectomy with thoracotomy; with colon interposition all intestine reconstruction (43113) **	□ Total or partial esophagectomy, without reconstruction with cervical esophagostomy (43124)					
🗆 Pa	rtial esophagectomy, cervical, with free intestinal graft, ling microvascular anastomosis (43116)	☐ Minimally invasive three incision esophagectomy (McKeown) (43288)					
□ Ivo	r Lewis-Partial esophagectomy, distal two-thirds, with cotomy and separate abdominal incision (43117) **	□ Minimally invasive esophagectomy, Ivor Lewis approach (43287) **					
🗆 Pa	rtial esophagectomy, with thoracotomy and separate	Minimally invasive esophagectomy, Abdominal and neck approach					
abdoi (4311	ninal incision with colon interposition or small intestine	(43286) **					
(4311	Hiatal Hernia / GERI	D Procedures (Optional)					
Weight = 30							
Nisse	paroscopy, surgical, esophagogastric fundoplasty (e.g., n, Toupet procedures) (43280)	□ Repair, paraesophageal hiatal hernia via laparotomy with mesh (43333)					
(fund	paroscopy, surgical with repair of paraesophageal hernia oplasty) without mesh (43281)	□ Repair, paraesophageal hiatal hernia via thoracotomy without mesh (43334)					
(fund	paroscopy, surgical with repair of paraesophageal hernia oplasty) with mesh (43282)	 Repair, paraesophageal hiatal hernia via thoracotomy with mesh (43335) 					
🗆 Nis	sen fundoplasty- laparotomy (includes partial plication/wrap) (43327)	Repair, paraesophageal hiatal hernia via thoracoabdominal approach without mesh (43336)					
🗆 Tra	ansthoracic Fundoplication- open thoracotomy (includes y/Nissen) (43328)	□ Repair, paraesophageal hiatal hernia via thoracoabdominal approach with mesh (43337)					
🗆 Re	pair, paraesophageal hiatal hernia via laparotomy without (43332)	LINX Procedure (43284)					

Tracheal Resection (Optional) Weight = 40						
□ Carinal reconstruction (31766)	□ Tracheal tumor or carcinoma excision; cervical (31785)					
Excision tracheal stenosis, cervical (31780)	□ Tracheal tumor or carcinoma excision; thoracic (31786)					
Excision tracheal stenosis, thoracic (31781)						
	Mass Resection (Optional) ght = 50					
☐ Thoracoscopy, surgical; with excision of mediastinal cyst, tumor, or mass (32662)	Thymectomy, transcervical approach (60520)					
☐ Thymus, resection via Thoracoscopy unilateral or bilateral (32673)	□ Thymectomy, transthoracic approach (60521)					
☐ Mediastinal tumor, excision, open, Transthoracic approach (39220)	☐ Thymectomy, transthoracic approach, with radical mediastinal dissection (60522)					
	lures (Concomitant Procedures) ght = 10					
	Bronchi, Larynx					
Laryngectomy, partial (31370)	□ Tracheostomy replacement (tube change) prior to est. of fistula tract (31502)					
□ Tracheal wound or injury suture repair; cervical (31800)	Tracheostomy, planned (31600)					
□ Tracheal wound or injury suture repair; intrathoracic (31805)	□ Tracheostomy revision simple, without flap (31613)					
Unlisted procedure, trachea, bronchi (31899)	□ Tracheostomy revision complex, with flap (31614)					
□ Bronchopleural fistula closure (32906)	□ Tracheoplasty; cervical (31750)					
Bronchogenic cyst removal	Tracheoplasty; intrathoracic (31760)					
Bronchial laceration suture	Bronchial sleeve resection					
□ Bronchoplasty, graft repair (31770)	Tracheostomy mediastinal					
□ Bronchoplasty; excision stenosis and anastomosis (31775)	□ Rigid stent removal					
Brone	choscopy					
□ Tracheobronchoscopy through established tracheostomy incision (31615)	□ Bronchoscopy, with transbronchial lung biopsy(s), each additional lobe (31632)					
☐ Endobronchial ultrasound (EBUS) during bronchoscopy diagnostic or therapeutic intervention(s) (31620)	☐ Bronchoscopy, with transbronchial needle aspiration biopsy(s), each additional lobe (31633)					
□ Bronchoscopy, diagnostic, with or without cell washing (31622)	□ Bronchoscopy, with removal of foreign body (31635)					
□ Bronchoscopy, with brushing or protected brushings (31623)	□ Bronchoscopy, with placement of bronchial stent(s) (includes tracheal/bronchial dilation as required), initial bronchus (31636)					
□ Bronchoscopy, with bronchial alveolar lavage (BAL) (31624)	□ Bronchoscopy, each additional major bronchus stented (31637)					
□ Bronchoscopy, with bronchial or endobronchial biopsy(s), single or multiple sites (31625)	□ Bronchoscopy, with revision of tracheal or bronchial stent inserted at previous session (31638)					
□ Bronchoscopy, with placement of Fiducial markers (31626)	□ Bronchoscopy, with excision of tumor (31640)					
Bronchoscopy, navigational (31627)	□ Bronchoscopy, with destruction of tumor or relief of stenosis by any method other than excision (e.g., laser therapy) (31641)					
□ Bronchoscopy, with transbronchial lung biopsy(s), single lobe (31628)	□ Bronchoscopy, with placement of catheter(s) for intracavitary radioelement application (31643)					
□ Bronchoscopy, with transbronchial needle aspiration biopsy(s) (31629)	□ Bronchoscopy, with therapeutic aspiration of tracheobronchial tree, initial (drainage of lung abscess) (31645)					
□ Bronchoscopy, with tracheal/bronchial dilation or closed reduction of fracture (31630)	☐ Bronchoscopy, with therapeutic aspiration of tracheobronchial tree, subsequent (31646)					
□ Bronchoscopy, with placement of tracheal stent(s) (includes tracheal/bronchial dilation as required) (31631)						
Pleural Space and Lung						
□ Thoracostomy; with rib resection for empyema (32035)	□ Insertion indwelling tunneled pleural catheter (32550)					
□ Thoracostomy; with open flap drainage for empyema (32036)	□ Thoracoscopy, diagnostic lungs and pleural space, without biopsy (32601)					
□ Thoracotomy with biopsy(s) lung infiltrate(s) (e.g. wedge), unilateral (32096)	□ Thoracoscopy, diagnostic; with biopsy(s) of lung infiltrate(s) (e.g. wedge), unilateral (32607)					

□ Thoracotomy with biopsy(s) lung nodule(s) or masses (e.g. incisional), unilateral (32097)	□ Thoracoscopy, diagnostic; with biopsy(s) of lung nodule(s) or mass(es) (eg incisional), unilateral (32608)
□ Thoracotomy with biopsy(s) of pleura (32098)	□ Thoracoscopy, diagnostic; with biopsy(s) of pleura (32609)
☐ Thoracotomy, with exploration (32100)	□ Thoracoscopy, surgical; with pleurodesis (e.g., mechanical or chemical) (32650)
□ Thoracotomy, major; with control of traumatic hemorrhage and/or repair of lung tear (32110)	□ Thoracoscopy, surgical; with partial pulmonary decortication (32651)
□ Thoracotomy, major; for postoperative complications (32120)	□ Thoracoscopy, surgical; with total pulmonary decortication (32652)
Pneumolysis, any approach (32124)	☐ Thoracoscopy, surgical; with removal of intrapleural foreign body or fibrin deposit (32653)
☐ Thoracotomy, major; with cyst(s) removal, with or without a pleural procedure (32140)	□ Thoracoscopy, surgical; with control of traumatic hemorrhage (32654)
☐ Thoracotomy, major; with excision-plication of bullae, with or without any pleural procedure (32141)	☐ Thoracoscopy, surgical; with excision-plication of bullae, including any pleural procedure (32655)
□ Thoracotomy, major; with removal of intrapleural foreign body or hematoma (32150)	☐ Thoracoscopy, surgical; with parietal pleurectomy (32656)
□ Thoracotomy with cardiac massage (32160)	☐ Thoracoscopy with resection-plication for emphysematous lung (bullous or non-bullous) for lung volume reduction- LVRS, unilateral including any pleural procedure (32672)
□ Decortication, pulmonary, total (32220)	□ Repair lung hernia through chest wall (32800)
□ Pleural scarification for repeat pneumothorax (32215)	□ Closure of chest wall following open flap drainage for empyema (Clagett type procedure) (32810)
□ Decortication, pulmonary, partial (32225)	□ Total lung lavage (for alveolar proteinosis) (32997)
□ Pleurectomy, parietal (32310)	□ Radio-frequency ablation (RFA) lung tumor (32998)
□ Decortication and parietal pleurectomy (32320)	□ Removal of lung, total pneumonectomy; extrapleural (32445)
□ Removal of lung, excision-plication of emphysematous lung(s) for lung volume reduction (LVRS) (32491)	
Lung Oth	er Procedures
□ Open closure of major bronchial fistula (32815)	Pulmonary artery arterioplasty (33926)
□ Single lung transplant (32851)	□ Double lung transplant (32853)
□ Single lung transplant with CPB (32852)	□ Double lung transplant with CPB (32854)
□ Cryoablation (32994)	□ Unlisted procedure, lung (32999)
Mediastinun	n and Diaphragm
□ Thoracoscopy, diagnostic; mediastinal space, with biopsy (32606)	Diaphragmatic hernia repair (other than neonatal), traumatic; acute (39540)
Mediastinotomy with exploration or biopsy; cervical approach (39000)	Diaphragmatic hernia repair (other than neonatal), traumatic; chronic (39541)
Mediastinotomy with exploration or biopsy; transthoracic approach (39010)	Diaphragm imbrication (i.e., plication) of (39545)
D Mediastinal cyst, excision, open, Transthoracic approach (39200)	□ Diaphragm; resection with simple repair (e.g., primary suture) (39560)
□ Mediastinoscopy, with or without biopsy (39400)	Diaphragm; resection with complex repair (e.g., prosthetic material, local muscle flap) (39561)
□ Unlisted procedure, mediastinum (39499)	Unlisted procedure, diaphragm (39599)
□ Diaphragm, laceration repair, any approach (39501)	
Esopi	nagoscopy
Esophagoscopy (43200)	□ Upper gastrointestinal endoscopy with endoscopic ultrasound examination limited to the esophagus (43237)
□ Esophagoscopy with biopsy (43202)	Upper gastrointestinal endoscopy with transendoscopic ultrasound- guided FNA (43238)
□ Esophagoscopy with removal of foreign body (43215)	Upper gastrointestinal endoscopy with biopsy (43239)
□ Esophagoscopy with insertion of stent (43219)	□ Upper gastrointestinal endoscopy with dilation of gastric outlet for obstruction (43245)
□ Esophagoscopy with balloon dilation (43220)	□ Upper gastrointestinal endoscopy with directed placement of percutaneous gastrostomy tube (43246)

	cellaneous
□ Unlisted procedure, neck or thorax (21899)	······································
□ Major reconstruction, chest wall (posttraumatic) (32820)	procedure), with thoracoscopy (21743) Intercostal nerve block (64220-1)
Excision first and/or cervical rib; with sympathectomy (21616)	□ Reconstructive repair of pectus, minimally invasive approach (Nuss
Excision first and/or cervical rib (21615)	(21825) □ Removal of sternal wire(s)
tissue of neck or thorax (21557) □ Excision of rib, partial (21600)	□ Open treatment of sternum fracture with or without skeletal fixation
intramuscular (21556) Radical resection of tumor (e.g., malignant neoplasm), soft	□ Reconstructive repair of pectus, minimally invasive approach (Nuss
(21555)	□ Reconstructive repair of pectus excavatum or carinatum; open (21740)
(19271)	Division of scalenus anticus; with resection of cervical rib (21705)
Excision of chest wall tumor involving ribs, with reconstruction	Division of scalenus anticus; without resection of cervical rib (21700)
 Muscle flap; trunk (i.e., intercostal, pectoralis or serratus muscle) (15734) Excision of chest wall tumor including ribs (19260) 	 □ Radical resection of sternum; with mediastinal lymphadenectomy (21632) □ Hyoid myotomy and suspension (21685) secondary procedure code
Muscle flap, neck (15732)	Radical resection of sternum (21630)
	Vall and Neck
Unlisted procedure, esophagus (43499)	
□ Free jejunum transfer with microvascular anastomosis (43496)	□ Ligation or stapling at gastroesophageal junction for esophageal perforation (43405)
Esophagomyotomy (Heller type); thoracic approach (43331)	Esophageal lengthening procedure - open (Collis) Secondary Procedure code (43338)
□ Esophagoplasty with repair TEF, thoracic approach (43312)	Trans oral fundoplication
□ Esophagoplasty with repair of TEF, cervical approach (43305)	Per oral endoscopic myotomy (POEM)
□ Unlisted laparoscopy, esophagus (43289)	Conduit revision s/p esophagectomy
Laparoscopy, surgical, esophageal lengthening procedure (Collis) (43283) Secondary Procedure code	□ Total gastrectomy with Roux-en-Y reconstruction (43621)
thoracic approach (43135) Laparoscopic esophageal myotomy (Heller Myotomy, with or without fundoplication) (43279) 	□ Total gastrectomy with esophagoenterostomy (43620)
myotomy; cervical approach (43130)	approach (43415) Closure of esophagostomy or fistula; cervical approach (43420)
approach (eg: leiomyoma) (43101)	Suture of esophageal wound or injury; transthoracic or transabdominal
approach (43100) Excision Esophageal lesion with primary repair, thoracic	interposition or small intestine (43361) Suture of esophageal wound or injury; cervical approach (43410)
Excision esophageal lesion with primary repair, cervical	stomach (43360) Gastrointestinal reconstruction for previous esophagectomy with colon
(32665) Cricopharyngeal myotomy (43030)	approach (43352) Gastrointestinal reconstruction for previous esophagectomy with standard (42000)
Thoracoscopy, surgical; with esophagomyotomy (Heller type)	Esophagostomy, fistulization of esophagus, external; cervical
	Other Procedures
□ Endoflip endoluminal balloon (91040)	Depengastion testinar endoscopy with abiation of turnor (45250)
needle aspiration (43232) Upper gastrointestinal endoscopy, diagnostic (43235)	placement (43256) Upper gastrointestinal endoscopy with ablation of tumor (43258)
(43231) □ Esophagoscopy with transendoscopic ultrasound-guided fine	(43249)
 Esophagoscopy with ablation of tumor (43228) Esophagoscopy with endoscopic ultrasound examination (EUS) 	 Upper gastrointestinal endoscopy with insertion of guide wire followed by dilation of esophagus (43248) Upper gastrointestinal endoscopy with balloon dilation of esophagus

Thoracoscopy, diagnostic pericardia	al sac, with biopsy (32604)	□ SVC resection and reconstruction (34502)					
Thoracoscopy, surgical; with remova from pericardial sac (32658)	al of clot or foreign body	Ligation thoracic duct (38381)					
□ Thoracoscopy, surgical; with creatio	n of poricardial window or	Omental fla	n (40004)				
partial resection of pericardial sac for c			p (49904)				
· ·			sie thurside stemu (60270)				
□ Thoracoscopy, surgical; with total pe	encardiectomy (32660)		cic thyroidectomy (60270)				
□ Thoracoscopy, surgical; with excision	on of pericardial cyst, tumor,	□ Removal su	bsternal thyroid, cervical approach (60271)				
or mass (32661)							
□ Thoracoscopy, surgical; with thoraci	ic sympathectomy (32664)	□ Application	of wound vac (97605, 97606)				
□ Stereotactic radiosurgery (SRS) and	stereotactic body	Pericardial \	window (33025)				
radiotherapy (SBRT), surgeon participa							
□ Tube pericardiostomy (33015)	× <i>1</i>	Other Minor Procedure					
□ Insertion of Tunneled CV Catheter (36561)	□ Robotic-Assisted Surgery (capture as an additional code) (S2900)					
□ Other							
(If "Other Minor Procedure", "Other" or	Enter Name of unlisted Proc	edure(s):					
one of the "unlisted" procedures \rightarrow)	Enter 5 digit CPT code(s) of	unlisted procedure, if known:					
Procedure Laterality: Right Left	Bilateral I Not applicable						
Primary Lung Cancer Resection Per	formed	□ Yes □ No	(If yes, complete Section F)				
Esophageal Cancer Resection Perfo	ormed	□ Yes □ No	(If yes, complete Section G)				
Thymus / Mediastinal Mass Resection	on/ <mark>Myasthenia Gravis</mark>	□ Yes □ No	(If yes, complete Section H)				
Tracheal Resection		□ Yes □ No	(If yes, complete Section I)				
Hiatal Hernia / Diaphragmatic Hernia	a / GERD	□ Yes □ No	(If yes, complete Section J)				

Diagnosis	<u></u>							
Clinical St	aging Done	□ Yes □	No (If yes ↓)					
	Clinical Sta	iging Metho	ds: (Select all that apply ↓)					
	Clinical Stag	ging:	PET/CT CT Brain CT Brain MRI Invasive mediastinal staging p	performed				
			(If Invasive mediastinal staging performed - select all that apply →) □ Cha □ Med					
	Lung CA tur	nor size in c	m (the dominant/most concerning lesion per CT	Scan)cm (ex. 2.3cm)				
	Lung CA T S	Stage (tumo	r stage) 🗆 Tis 🗆 T1 🗆 T2 🗆 T3 🗆 T4					
			□ N0 No regional lymph node metastasis	□ N1 Metastasis in ipsilateral peribronchial or hilar and intrapulmonary nodes. Includes direct extension.				
Lung CA Nodes:		JUES.	Metastasis in ipsilateral mediastinal and/or subcarinal lymph nodes	N3 Metastasis in contralateral mediastinal or contralateral hilar nodes, ipsilateral or contralatera scalene or supraclavicular nodes				
	Lung CA Metastases: M0 Immunolity No distant metastasis Distant Metastasis							

Lung Cancer <mark>Tumo</mark>	r Present:	<mark>∃ No</mark> (If yes ↓)							
(If Cancer Tumor	Indicate Final Patholog	cal Tumor Staging							
Present→) **		be assessed, or tumor prover ant cells in sputum or bronchi lized by imaging or	y No evidence of primary tumor						
	(SCIS); Adenocarcinon	amous cell carcinoma in situ na in situ (AIS): adenocarcino n, <u><</u> 3 cm in greatest dimensio							
	spreading tumor of any is limited to the bronchi	st dimension. A superficial, size whose invasive compon al wall and may extend proxir Iso is classified as T1a, but nmon.							
	□ T1c Tumor > 2 cm but <u><</u> 3 cm in greatest dimension								
	having any of the follow main bronchus regardle but without involvemen pleura (PL1 or PL2); 3.	m at greatest dimension, or ving features: 1. involves the ess of distance to the carina, 2 t of the carina; invades viscer associated with atelectasis o s that extends to the hilar regi ne lung.	\Box T2b Tumor > 4 cm but \leq 5 cm at greatest dimension						
	T3 Tumor > 5 cm but \leq 7 c directly invading any of (PL3), chest wall (include)	m in greatest dimension or the following: parietal pleura ding superior sulcus tumors), pericardium; or separate tumo	□ T4 Tumor > 7 cm or tumor of any size invading one or more of the following: diaphragm, mediastinum, heart, great vessels, trachea, recurrent laryngeal nerve, esophagus, vertebral body, or carina; separate tumor nodule(s) in an ipsilateral lobe different from that of the primary						
			ura Invasion □ Yes □ No						
	Invasion of Adjacent St	Invasion of Adjacent Structures (Select all that apply or None)							
		Esophagus 🛛 Hea	renic nerveChest wallartPericardiumcurrent Laryngeal NerveGreat Vessels						
	Lung CA Nodes Assess	sed: 🗆 Yes 🗆 No							
		Node Station:							
		1 (N3)	□ Not Sampled □ Malignant □ Benign						
		2 (N2)	□ Not Sampled □ Malignant □ Benign						
	(If Nodes Assessed Yes	3 (N2)	□ Not Sampled □ Malignant □ Benign						
	\rightarrow)	4 (N2)	□ Not Sampled □ Malignant □ Benign						
		5 (N2)	□ Not Sampled □ Malignant □ Benign						
		6 (N2)	□ Not Sampled □ Malignant □ Benign						
		7 (N2)	□ Not Sampled □ Malignant □ Benign						

	8 (N2)		C	Not Sampled	□ Ma	alignant	🗆 Benig	n
	9 (N2)		C	Not Sampled	□ Ma	alignant	🗆 Benig	n
	10 (N1) (Hilai	r)	C	Not Sampled	□ Ma	alignant	🗆 Benig	n
	11 (N1) (Inter	rlobar)	C	Not Sampled	□ Ma	alignant	🗆 Benig	n
	12-14 (N1) (L			□ Not Sampled		alignant	🗆 Benig	
	Contralateral			Not Sampled		alignant	🗆 Benig	n
	Total number							
	Total number							
	Lung CA Nod	les: **	□ N0 I	No regional lymph	node	metastasis	s/ <mark>All benign</mark>	
			nodes	Vetastasis in ipsila and intrapulmona ion/ <mark>No N2 or N3 r</mark>	iry nod	es, include	es involvem	silateral hilar lymph ent by direct
				Vetastasis in ipsila) <mark>/No N3 marked r</mark>			al and/or sub	ocarinal lymph
			ipsilate	Metastasis in cont eral or contralatera <mark>rked malignant</mark>				ateral hilar, lymph node(s)/ <mark>Any</mark>
			□ NX	Regional lymph n	odes c	annot be a	assessed/ <mark>No</mark>	ot Sampled
Lung CA Metastases:	☐ M0 No distant metastasis	pleural	ant pleura or perica	al or pericardial effus rdial nodules or sep in contralateral lobe	sion; arate	☐ M1b Single ext metastasis	rathoracic	Multiple extrathoracic metasteses (1 or >1organ)
	□ Adenocarc	inoma		□ Squamous cell			□ Large cell	
Lung CA Histology:	Small cell			□ Mixed			Low Grade Neuroendocrine (typical carcinoid)	
	Intermediate grade neuroendocrine, atypical carcinoid			Carcinoma in situ				,
Grade:	Low grade (well differentiated)					∃ High gra poorly diffe	de erentiated)	Unknown / Not reported
Lung CA Resection Margins Positive:	□ Yes □ No							
(If Margins Positive	Lung CA Res Positive Path		largins	□ R1 (micros residual tumor	,		R2 (macroso	opic (gross) residual

G. Esophageal Cancer (If Esophageal Cancer Resection Performed is Yest)						
Clinical Staging: Pre-	-treatment Esophage	eal cancer staging.	- Clinical staging de	termines the treatment p	lan.	
Pre-Operative Evalua	<u>ition</u>					
Has the patient lost 10	% of body weight in th	ne last 3 months?	🛛 Yes 🛛 No 🗆 Not Do	ocumented		
Staging Procedures						
Clinical Staging Done	e_(Select all that apply o	r 'None'↓)				
□ None	PET/CT	PET/CT CT Bronchoscopy EUS				
VATS – for staging	Laparoscop	y – for staging	Endoscopic Mucos	al/Submucosal Resection	Other	
(If Clinical Staging Done is not 'None' \rightarrow)		□ T0 No evidence of prim	nary tumor	□ Tis High grade dysplasia		

	Esoph Tumor		□ T1 Tumor invades lamina	propria, mucosa	<mark>□ T1a</mark>	<mark>□ T1b</mark>	T1 unspecified			
			□ T2 Tumor invades muscularis propria							
			□ T3	□ T3 □ T4						
			Tumor invades adventi	1	Tumor invades a	idjacent sti	uctures			
	Clinica	l Diagnosis	of Nodal Involvement:	□ Yes (N1, N □ No	2 OF IN3)					
	Esophageal CA Metastases				□ M0 No <i>Distant Metastasis</i> □ M1 Distant <i>Metastasis</i>					
	Tumo	r Location	(Select all that $apply_{\downarrow}$):							
		Cervica	Il Esophagus (15 – < 20 c	cm)		/				
		🗖 Upper 🛛	Thoracic (20 - < 25 cm))				
		Diddle	Thoracic (25 - < 30 cm)		ζ	\sim)			
			Thoracic, EG Junction (30 – 42 cm)		Incisors	FS)				
					UES-	St	-15 cm-	-Cervical esophagus		
					Sternal note	h R	20 cm -	- Upper thoracic		
					Azygos vei		25 cm -	-Middle thoracic		
					Inferior pulmona	ry vein ————————————————————————————————————	30 cm -			
								-Lower thoracic		
					EG]	42 cm	Cardia		
(If Esophageal Cancer R	Resection	Performed is	Yes↓)							
Planned, staged proce	edure?	□ Yes □	No							
		□ None	Open Cervicosco	pic 🛛 Robotic						
Neck Approach:		(If Necl	k Approach is not 'None' \rightarrow)	Neck lymphac	lenectomy perforr	ned? □ \ □ \ □ N	′es – Witho	Neck dissection ut Neck dissection		
Thorax Approach:		□ None		oracoscopic	Robotic D Thor	acoabdomi	nal			
Abdomen Approach:		□ None	□ Laparotomy □ Lapa	roscopic 🛛 🗆 R	<mark>obotic</mark>					
(If 'Lapa			aparoscopic' or 'Robotic' $ ightarrow$)		□Yes □No					
Anastomotic Method:			ial hand-sewn							
Esophageal Conduit:	□ Stom	ach 🛛 Sm	nall bowel 🛛 Colon 🔲	Supercharged S	mall Bowel 🛛 S	upercharge	ed Colon			
Pylorus Management	:	<mark>□ N</mark> o	ne 🛛 Botox Injection	🗆 Balloon Dilati	on 🛛 Pyloroplas	sty 🗆 Pyl	oromyotom	у		
(Select all that apply or	'None' →)									
J-Tube Placement:] None	Pre-exis	ting During Surgery	Post Surger	У					
Pathological Staging		-								
Esophagus to be co Esophageal Cancer			geal cancer documented	l <u>AND</u> esophag	eal resection pe	rformed (F	Pre-Operati	ve Evaluation –		

Esophageal Canc	er Present: Yes	No						
(If Cancer Present is 'Yes' →)			□ T0 No evidence of primary		□ Tis High Grade dysplasia, defined as malignant cells confined to the epithelium by the basement membrane			
	Esophageal Tumor: **		□ T1a Tumor invades lami muscularis mucosa	na propria	or	□ T1b Tumor invades submucosa		
			□ T2 Tumor invades muscula	aris propria		□ T3 Tumor in	vades adve	ntitia
		☐ T4a Tumor invades pleura, pericardium, azygos vein, diaphragm or peritoneum				□ T4b Tumor invades other adjacent structures suc as aorta, vertebral body, or airway.		
	Esophageal CA Nodes:		□ NX □ N0 Regional lymph No regional lym nodes cannot be metastasis assessed			oh node	□ N1 <i>Metastasi</i>	s in 1-2 regional nodes
			□ N2 Metastasis in 3-6 regional lymph nodes			□ N3 Metastasis in 7 or more regional lymph nodes		
	Esophageal CA Metast	tases:	☐ M0 No distant metastasis			□ M1 Distant metastasis		
	Esoph Histopathologic	Type: **	H1 Squamous Carcinoma			2 Adenoca	arcinoma	□ Other
	Esophageal CA Histologic Grade:		□ GX □ G1 Grade cannot be Well assessed differentiated		ted	G2 Moderately differentiated		□ G3 Poorly differentiated, undifferentiated
	Total # of Lymph Node	s sampled/	/harvested:					
	Esophageal CA Resection Margins Positive: Yes No							
		$(If Resection Margins Positive is 'Yes', select all that apply \rightarrow)$					ophageal) □ Radial	

H. Thymoma/Thymectomy/Mediastinal Mass Resection/Myasthenia Gravis									
(If Thymus / Mediastinal Mass Resection/ Myasthenia Gravis is Yes↓)									
Preoperative									
Symptomatic myasthenia	□ Yes □	□ Yes □ No							
(If Yes, s	elect all that apply) $ ightarrow$	Chronic Medical Treatment: 🗖 Mestinon 🗧 Steroids 📮 Other Immunosuppressive Therapy							
Preoperative man	agement								
IVIG: □ Yes □ No)								
Plasmaphereis:	Yes 🗆 No								
Size of mass know	n: 🗆 Yes 🗆 No								
	(If Size Known is 'Yes' →)	Largest diameter in cm derived from preop axial, coronal or sagittal imagecm							
Operative									
Initial Surgical App	roach								

Full Sterno	otomy	Clamshell or Hemiclamshell			Transcervical				
□ Partial Ste	rnotomy	□ Rob	Robotic VATS				Thoracotomy		
(If 'R	Robotic', 'VATS	, or 'Thora	$cotomy' \rightarrow)$	Loca	ition: 🗆 Righ	t 🗆 Left 🗆	Bilateral		
(If 'T	ranscervical',	Robotic' or	r 'VATS' →)	Conv	/ersion to open □ Yes, Plan	approach durir ned D Y		⊐ No	
					(If Yes,	/unplanned→)	Conversion approach:		
Intentional res	section of fun	ctioning p	ohrenic nerve:] Yes	□ No				
Was a thymo	ma procedu	ire perfor	rmed? 🗆 Yes 🗆 N	١o					
(If Thymoma performed is	Pathologic	Staging							
'Yes' →)	>) □No Cancer Found				e I and microscop spread beyond		ated. Also called a	noninvasive thymoma. That is, it	
	of the thyn	nus) and i	les beyond the cap into the nearby fatty ng of the lung). Sol	y tissu	e or to the	invasion	transcapsular	□ Stage IIb Macroscopic capsular invasion	
		oic invasio st area, in						ues or organs of the lower neck or od vessels leading into or exiting	
		pericardia	l dissemination. Tl ghout the pleura ar					dissemination. The thymoma has	
			WHO classification	on	∃ Туре А	□ Type AB			
	(If not 'No can found' \rightarrow)	ancer	(from path report		∃ Type B1	□ Type B2			
	/		Thymoma only)	^{у)} 🗆 Туре В3		Thymic Carcinoma or Type C			
Completenes	s of resectior	ı (from op	erative note or pat	hology	/ report): 🛛 🛛 🛛	80 □ R1 □	R2		
Patient alive a	at 30 days po	st-op: D	∃Yes □No						
	Myastheni	c crisis re	quiring return to IC	U or ir	ntervention (int	ubation, plasma	ipheresis) 🗆 Yes	□ No	
(If Yes \rightarrow)	Unintentional phrenic nerve palsy Yes No								
	Patient alive at 90 days post-op:								
		Adjuva	ant thoracic radiation	on 🗆 Y	∕es □No				
	(If Yes \rightarrow)	Persis	tent unintentional p	ohrenio	c nerve palsy C]Yes □ No			
		(If Trachea	al Resection is Yes↓)						
Pre-Operativ	e								

Pre-Operative					
Current Airway	□ Native □ Oral ETT □ Trach □ T-Tube				
Prior tracheostomy					
Prior intubation					
Prior Tracheal Resection					
Recent Bronchoscopic Interv	Recent Bronchoscopic Intervention (within 6 weeks)				
Recurrent nerves intact preoperatively					
(If Nerves Intact is 'No' \rightarrow) Which nerve? \Box Right \Box Left \Box Both					
Operative					

Airway management during resection (Select all that apply or 'None'↓) □ None □ Cross – table ventilation □ VA ECMO □ Jet ventilation □ VV ECMO □ Cardiopulmonary bypass							
Incision (Select all that apply, must have at least one indicated↓) □ Cervical □ Partial sternotomy □ Full sternotomy □ Right thoracotomy □ Clamshell							
Length of tracheal resection cm (Surgical or pathological measurement acceptable)							
Cricoid resection required 🛛 Yes 🗆 No							
Carinal resection required							
Release Maneuvers Type: None Suprahyoid Suprathyroid Hilar Suprahyoid - Hilar Suprathyroid - Hilar							
Additional Post-Operative Events (Select all that apply or 'None'↓)							
 None Anastomotic dehiscence requiring drainage, revision, stent, tracheostomy, T-tube Anastomotic stricture requiring intervention Airway obstruction requiring intervention (e.g., unscheduled bronchoscopy) Recurrent nerve palsy 							
$(If Recurrent nerve palsy \rightarrow) \qquad Which nerve? \qquad \Box Right \Box Left \Box Bilateral$							
Did the patient leave the hospital with tracheal appliance? (tracheostomy, T-tube or stent)							
Stent/tube free at 30 days post procedure							
(If No→) Stent/tube free at 90 days post procedure □ Yes □ No □ Patient died within 90 days of procedure							
J. Hiatal Hernia / GERD (If Hiatal Hernia / GERD is Yes↓)							
Symptoms (Select all that apply or None↓) None□ Heartburn□ Hoarseness□ Dysphagia□ Early satiety Asthma Reflux laryngitis							
PPIs							
PPI use □ Yes □ No (If Yes →) PPI relief □ Complete □ Partial □ No							
EGD Done: Yes No							
Esophagitis \Box Yes \Box No (If Yes \rightarrow)LA Grade: \Box A \Box B \Box C \Box D							
(<i>lf</i> Yes→) Barrett's metaplasia (<i>lf</i> Yes→) Barrett's metaplasia grade: Low grade dysplasia Indeterminate for dysplasia High grade dysplasia Without dysplasia							
pH Testing Yes \Box No (If Yes \rightarrow) DeMeester score							
Manometry							
Manometry performed:							
Motility: Normal Decreased Aperistalsis							
(If Manometry performed is 'Yes' →) LES resting pressure							
% of failed swallows							
Radiology Imaging							
Imaging performed □ Yes □ No (If Yes, Select all that apply→) Type of imaging: □ Barium swallow / Upper GI □ CT Scan □ CXR							
Hiatal hernia type:							

	-1								
Hernia repair status	□ Primary repair	□ Re-operation		1					
(If Re-operation \rightarrow) Surgical approach used in the			he initial procedure.	□ Laparoscopic	🗆 Lap	parotomy			
	Curgice			□ Thoracotomy		Not documented			
Procedure Approach (Select all that $apply \downarrow$)									
Laparoscopic Robotic Chest Robotic Abdomen									
Laparotomy D Thoracotomy D Thoracoscopic									
Fundoplication	$\Box \operatorname{Yes} \Box$ (If Yes \rightarrow)	No Type:	□ Pa	rtial	ete				
Gastroplasty	□ Yes □	No							
Mesh	□ Yes □	No							
Relaxing incision	🗆 Yes 🗆	No							
Magnetic sphincter au		🗆 Yes 🗆 No							
Is patient alive at 30 d	lays post – Op? □ Ye (If Patient alive at 30 d		Le patient alive at	1 year past Op2		,			
	(If Patient alive at 30 c	ays post-Op is Yes ↓-		1 year post – Op?)			
30 Day I	Post-Operative Follow	Up:	1 Y	ear Post-Operative	Follow Up:				
(If Yes, 🛛 🗖 None				None					
Select all that apply	graphic recurrence		Select all that apply Radiographic recurrence						
or 'None') 🗖 Symp	tomatic recurrence		or 'None') Symptomatic recurrence						
→) 🗖 Endo	scopic Intervention	→) <mark>□</mark> E	Endoscopic Interven	tion					
🗖 Redo	Operation		🗖 F	Redo operation					
K. Post-Operative									
Indicate all adverse ev admission, regardless	of the length of stay.			the hospital or thos	e that occur	during the same			
Postoperative Event	<u>s?</u> □ Yes □ No <mark>□</mark>	No – Patient Died i	OR						
(If Post-Operative	Did the patient have	another operation t	hrough a new or exist	ing incision? 🗆 Yes	<mark>⊨ No</mark>				
Events Yes \rightarrow)		(If Yes \rightarrow)	Was reoperation relat	ed to bleeding:	∕es □ No				
	Pulmonary								
	Air leak > 5 days duration								
	Therapeutic Bronchoscopy	□ Yes □ No							
	Pleural Effusion requiring drainage	□ Yes □ No							
			irade:						
			Grade 2 – Moderate symptoms; oral intervention indicated (oral antibiotics, tifungal, or antiviral)						

Grade 5 - Death

intervention indicated

Pneumonia

Grade 3 – Invasive intervention indicated; IV antibiotic, antifungal, or antiviral

□ Grade 4 – Urgent Intervention indicated; Life threatening consequences (escalation of care/intubation/hemodynamic support)

	Acute Respiratory Distress Syndrome (ARDS)	□ Yes □ No (If Yes, Grade →)	Grade: Grade 3 - Present with radiologic findings; intubation not indicated Grade 4 - Life-threatening respiratory or hemodynamic compromise; intubation or urgent intervention indicated Grade 5 - Death			
-	Respiratory Failure	□ Yes □ No				
	Bronchopleural Fistula	□ Yes □ No				
-			Grade: Grade 1 - Medical intervention not indicated Grade 2 - Medical intervention indicated			
	Pulmonary Embolus		□ Grade 3 - Urgent medical intervention indicated			
		(If Yes, Grade→)	Grade 4 - Life-threatening consequences with hemodynamic or neurologic instability			
			Grade 5 - Death			
-	Pneumothorax req. CT reinsertion	□Yes □No				
	Initial Vent Support > 48 Hr	□ Yes □ No				
	Tracheostomy	□ Yes □ No				
-	Cardiovascular					
	Atrial arrhythmia	$\Box \operatorname{Yes} \Box \operatorname{No}_{(If \ \operatorname{Yes} \rightarrow)}$	Discharged on Anticoagulation : Yes No			
-	Ventricular arrhythmia (Requiring Treatment) VentArrth (3850)	□ Yes □ No				
-			Grade: □Grade 2 - Asymptomatic and cardiac enzymes minimally abnormal and no evidence of ischemic ECG changes			
	Myocardial infarct	$\Box \operatorname{Yes} \Box \operatorname{No}_{(If \ Yes \rightarrow)}$	□Grade 3 - Severe symptoms; cardiac enzymes abnormal; hemodynamically stable; ECG changes consistent with infarction			
			Grade 4 - Life-threatening consequences; hemodynamically unstable			
	Deep venous thrombosis (DVT) req. treatment	□ Yes □ No	Grade 5 - Death			
-			Gastrointestinal			

lleus	□ Yes	□ No						
Delayed conduit emptying requiring intervention (pyloric dilatation or botox) or maintenance of NG drainage > 7days post-op	□ Yes	No						
				Type:				
Esophagogastric leak anastomosis, staple li	line or			Type 1 - Local defect requiring no change in therapy or treated medically or with dietary modification				
localized conduit necr	rosis			Type 2 - Localized defect requiring interventional but not surgical therapy				
				Type 3 - Localized defect requiring surgical therapy				
				Type:				
				Type 1 - Identified endoscopically; additional monitoring or non- surgical therapy				
Conduit necrosis/Failt	<mark>□ Yes □ No</mark> (If Yes →)		□ Type 2 - Identified endoscopically; not associated w/ free anastomotic or conduit leak; surgical therapy w/out esophageal diversion					
				□ Type 3 - Exte	ensive necrosis; co	onduit resection/divers	ion	
				Hematolo	ogy			
Packed red blood cell	□ Yes □ No (If Yes→)		*transfusions documented here do not include blood given in OR*		# Units			
				Urologi	c	•	-	
Urinary tract infection	□ Yes	□ No		y retention req. erization	□ Yes □ No	Discharged with Foley catheter	□ Yes □ No	
				Infectio	n			
Empyema requiring treatment		□ Yes	□ No					
Surgical Site Infection				Superficial 🗆 Deep 🖾 Organ space				
Sepsis								
Other infection requiri antibiotics	ing IV	□ Yes	□ No					
				Neurolo	gy			

			Event Type:				
	New central neurological event	□ Yes □ No (If Yes →)	 Postoperative transient neurologic deficit (TIA recovery within 24 hours) RIND recovery within 72 hours 				
			Central neurologic deficit persisting postoperatively for > 72 hours				
				ive coma that persists for at least 24 hours c/ischemic and/or metabolic encephalopathy, rent			
			Severity:	Unilateral Bilateral			
	Recurrent laryngeal nerve paresis- <mark>new onset</mark>	□ Yes □ No (If Yes →)	Grade:	Medical Therapy/Dietary Modification Only			
				Elective Procedural Intervention			
				Emergent Procedural Intervention			
	Delirium	□ Yes □ No					
	Miscellaneous						
	New renal failure per RIFLE criteria	$\Box \operatorname{Yes} \Box \operatorname{No}_{(If \ Yes \rightarrow)}$	Discharged on Dia	lysis: 🔲 Yes 🗌 No 🔲 Patient died in hospital			
	Unexpected <mark>escalation of care</mark>	□ Yes □ No					
	Chyle Leak	<mark>□ Yes □ No</mark> (If Yes →)	Severity:	 < 1 liter per day maximum >= 1 liter per day maximum 			
			Grade:	Type I - Enteric dietary modifications Type II - TPN Type III Treatment			
		1	(If Type III -	IR Embolization			
			(11 1990 111 -	Surgical ligation			

L. Discharge/Mortality	
Patient still in the hospital \Box Yes \Box No(If No \downarrow)	
Hospital Discharge Date://	/
Status at <mark>Hospital</mark> Discharge: **	 Discharged Alive, last known status Alive (other than hospice) Discharged Alive, died after discharge Discharged to Hospice Died in Hospital
(If 'Discharge Alive, last known status alive' OR 'Discharged Alive, died after discharge' →)	Discharge location:□ Home □ Extended Care/Transitional Care Unit /Rehab □ Other Hospital □ Nursing Home □ Other
	Discharged with chest tube: □ Yes □ No

		Discharged w (new; not usir	rith home O2 ng O2 pre-op)	□ Yes	□ No	
		$(If Yes \rightarrow)$	On O2 at 30 days postoperative?		□ Yes □ No □ □ Patient Died V	∃ Unknown Vithin 30 Days Post Op
		Readmit to ar 30 days of dis	ny hospital within scharge:	□ Yes	□ No □ Unknow	n
			se Screening and erformed (NQF 259	97):	🗆 Yes 🗆 No	□ Not Applicable
	(If Status at Hospital Discharge is 'Discharged Alive, Died after discharge' OR 'Discharged to Hospice' \rightarrow)	<u>Mortality – Da</u>	ate//		_ (mm/dd/yyyy)	
Status at 30 days after surgery (either discharged or in-hospital): **						