

SUPPLEMENTAL TABLES & FIGURES

Supplemental Table 1. Complication Severity Definitions

Major

Acute / Chronic Respiratory Failure
Bronchopulmonary Fistula
Cardiac Arrest
Cerebral Vascular Accident / Stroke
Congestive Heart Failure
Hemothorax
Myocardial Infarction
Respiratory Arrest
Pulmonary Embolus / Emboli
Wound Dehiscence

Intermediate

Blood Loss Requiring a Transfusion
Cardiac Arrhythmia
Fever Requiring Antibiotics
Hospitalization
Pain Requiring Referral to an Anesthesiologist / Pain Specialist
Pneumothorax
Rib Fracture(s)
Vocal Cord Immobility / Paralysis
Infection and Fever
Pneumonia and Fever
Infection
Wound Infection
Deep Venous Thrombosis (DVT)
Hemoptysis
Bleeding
Pneumonia

Minor

Allergic Reaction
Bronchospasm
Atelectasis
Hypotension / Vasovagal Reaction
Hypokalemia
Other Specify
Urinary

Supplemental Table 2. Complication Category Definitions

Respiratory

Acute / Chronic Respiratory Failure

Bronchopulmonary Fistula

Respiratory Arrest

Pneumothorax

Hemothorax

Bronchospasm

Atelectasis

Hemoptysis

Cardiac

Cardiac Arrhythmia

Congestive Heart Failure

Cardiac Arrhythmia

Myocardial Infarction

Cerebral vascular accident

Infectious

Fever Requiring Antibiotics

Infection

Pneumonia and Fever

Wound Infection

Infection and Fever

Pneumonia

Supplemental Table 3. Other Procedure Categories

Other Procedure

Cytology (sputum, bronchial, washing/brushing)

Other (biopsy):

Other Lymph Node Biopsy

Other Organ Biopsy

Scalene Node Biopsy

Surgical Open Biopsy

Lymphadenectomy

Bx, lymph node – other

Bx, other – adrenal

Other (no biopsy):

Fluroscopy

CT – brain/head/skull

Bx, other – non-lung cytology

Bx, other non-lung histology

Other – cytology, other

Other – echocardiography

Other – radionucleotide, Fusion PET/CT

Other – radionucleotide, Somatostatin receptor

Other – autopsy

Other – laser resection

Other – pleurectomy

Death Certificate Confirmation

Other (Specify)

Supplemental Table 4. Clinical and procedure characteristics stratified by confirmed pathology (n=3006)

Characteristic	Benign (n=276)	Malignant (n=2730)	P-Value
Clinical Features			
°°Age (mean, SD)	64.38 (4.91)	64.19 (5.13)	0.55
Male	193 (69.9%)	1733 (62.7%)	0.02
BMI (≥30)	53 (19.3%)	526 (19.5%)	0.92
°°Pack Years (mean, SD)	55.28 (30.0)	62.41 (31.33)	<0.001
Pack Years (≥30)	222(80.4%)	2443 (89.5%)	<0.001
Smoking Status			
CS	96 (34.8%)	1319 (48.3%)	<0.001
FS	180 (65.2%)	1411 (51.7%)	
Comorbidities			
COPD	33 (12.0%)	523 (19.2%)	0.003
History of Myocardial Infarction	35 (12.7%)	397 (13.2%)	0.40
Hypertension	79 (28.7%)	954 (35.3%)	0.03
History of Stroke	9 (3.3%)	100 (3.3%)	0.73
Diabetes	18 (6.5%)	226 (7.5%)	0.31
Liver Disease	13 (4.7%)	123 (4.5%)	0.88
Any History of Cancer	16 (5.8%)	166 (6.1%)	0.85
DCCI	0.33 (0.67)	0.37 (0.62)	0.88
Procedure			
Surgical Biopsy	78 (28.3%)	1010 (37.0%)	0.004
Bronchoscopy	108 (39.1%)	1560 (57.1%)	<0.001
Needle Biopsy	118 (42.8%)	1416 (51.9%)	0.004
Mediastinoscopy	14 (5.1%)	377 (13.8%)	<0.001
Other Procedure	160 (58.7)	1599 (58.6%)	0.97
°°Procedure category sum	1.74 (0.909)	2.18 (1.211)	<0.001
Complications			
Major	9 (3.3%)	146 (5.4%)	0.14
Intermediate	34 (12.3%)	531 (19.5%)	0.004
Minor	5 (1.8%)	138 (5.1%)	0.02
Any Complication	38 (13.8%)	648 (23.7%)	<0.001
Respiratory	25 (9.1%)	428 (15.7%)	0.003
Cardiac	9 (3.3%)	127 (4.7%)	0.29
Infectious	7 (2.5%)	161 (5.9%)	0.02

*() Indicates percentage for categorical variables and SD for linear variables.

** Deyo Charleson Comorbidity Index

°°Pooled-t test was employed. For all other variables chi-squared test was applied.