

# 2024 Lung Wedge Resection

---

## *Surgical Services*

SURG-THORACIC-HH  
Copyright © 2025 WNS (Holdings) Ltd.

**Last Review Date: 10/31/2024**  
Previous Review Date: 12/22/2023  
Guideline Initiated: 06/30/2019





A WNS COMPANY

## Table of Contents

Lung Wedge Resection Guideline .....	3
Lung Wedge Resection Procedure Codes .....	4
Lung Wedge Resection Summary of Changes .....	4
Lung Wedge Resection Definitions .....	4
Lung Wedge Resection References .....	6
Disclaimer section .....	6
Purpose .....	6
Clinician Review .....	7
Payment .....	7
Registered Trademarks (®/™) and Copyright (©) .....	7
National and Local Coverage Determination (NCD and LCD) .....	7
Background .....	7
Medical Necessity Codes .....	8

## Lung Wedge Resection Guideline

A lung wedge resection is considered medically appropriate when the documentation demonstrates **ALL** of the following: [3]

1. Pulmonary function test (PFT) with a forced expiratory volume in 1 second (FEV1) of more than 2 L.<sup>1</sup>
2. Clinical condition includes **ANY** of the following conditions:
  - a. Cancer, with computed tomography/positron emission tomography (PET)/CT completed within 60 days before proceeding with surgical evaluation and **ANY** of the following: [7]
    - i. Non-small cell lung cancer (stage I or II) and **ALL** of the following:
      - i. Able to achieve parenchymal resection margins 2 cm or greater and sample appropriate N1 and N2 lymph node stations.
      - ii. Lesion 2 cm or less in size
      - iii. Surgically resectable
      - iv. Unable to tolerate lobectomy (eg, poor pulmonary reserve or other major comorbidity that contraindicates lobectomy)
    - ii. Non-small cell lung cancer (stage III):
      - The role of this therapy is uncertain/unclear in the current evidence. Requests for this therapy require review by a physician reviewer, medical director and/or the individual's healthplan.
    - iii. Pulmonary metastasis and **ANY** of the following: [1] [5]
      - i. Completely resectable pulmonary metastasis
      - ii. Extrathoracic metastases are (or can be) controlled (eg, colorectal with resectable hepatic metastases).
      - iii. Primary malignancy is (or can be) controlled.
      - iv. **NO** alternative medical treatment with lower morbidity available or appropriate
      - v. **NO** extrathoracic metastases

---

<sup>1</sup>Studies have shown pulmonary complications are more frequent when the preoperative FEV1 is 60% or less and diffusing capacity for carbon monoxide (DLCO) is 50% or less, and when the estimated postoperative FEV1 or DLCO is 50% or less [2]

- b. Disease (eg, hemothorax, interstitial lung disease, pneumothorax, trauma), CT scan prior to surgical evaluation and **ANY** of the following: [4]
  - i. Diagnostic procedure for evaluation of interstitial lung disease [8]
  - ii. Intervention for recurrent spontaneous pneumothorax [6]

## Lung Wedge Resection Procedure Codes

**Table 1. Thoracoscopy/Thoracotomy Lung Wedge Resection Associated Procedure Codes**

CODE	DESCRIPTION
32096	Thoracotomy, with diagnostic biopsy(ies) of lung infiltrate(s) (eg, wedge, incisional), unilateral
32097	Thoracotomy, with diagnostic biopsy(ies) of lung nodule(s) or mass(es) (eg, wedge, incisional), unilateral
32505	Thoracotomy; with therapeutic wedge resection (eg, mass, nodule), initial
32506	Thoracotomy; with therapeutic wedge resection (eg, mass, nodule), initial
32607	Thoracoscopy; with diagnostic biopsy(ies) of lung infiltrate(s) (eg, wedge, incisional), unilateral
32608	Thoracoscopy; with diagnostic biopsy(ies) of lung nodule(s) or mass(es) (eg, wedge, incisional), unilateral
32666	Thoracoscopy, surgical; with therapeutic wedge resection (eg, mass, nodule), initial unilateral
32667	Thoracoscopy, surgical; with therapeutic wedge resection (eg, mass or nodule), each additional resection, ipsilateral (List separately in addition to code for primary procedure)

## Lung Wedge Resection Summary of Changes

Lung Wedge Resection clinical guidelines from 2023 to 2024 had the following version changes:

- Added "Able to achieve parenchymal resection margins 2 cm or greater and sample appropriate N1 and N2 lymph node stations" under cancer indication per current research.
- Citations updated per the evidence.
- Removed "Nodule has greater than or equal to 50% ground glass appearance on CT" under cancer indication as not supported by current research.
- Removed "Pure adenocarcinoma in situ (AIS) histology" under cancer indication as not supported by current research.
- Removed "Radiologic surveillance confirms a long doubling time (greater than or equal to 400 days)" under cancer indication as not supported by current research.

## Lung Wedge Resection Definitions

A **comorbidity** is a condition of having two or more diseases at the same time.

**Computed tomography (CT)** refers to a computerized X-ray imaging procedure in which a three-dimensional image of a body structure is revealed through a series of cross-sectional images or "slices."

**Diffusing capacity for carbon monoxide (DLCO)** measures the ability of the lungs to transfer gas from inhaled air to the red blood cells in pulmonary capillaries.

**Extrathoracic** (region that includes the nasal and oral passages, pharynx, and larynx) is the entrance to the human respiratory tract and the first line of defense against inhaled air pollutants.

**Forced expiratory volume in 1 second (FEV1)** is a measurement in liters taken from a pulmonary function test (PFT) (a noninvasive test that measures lung volume, capacity, rates of flow and gas exchange). It calculates the amount of air that a person can force out of their lungs in 1 second.

**Interstitial lung disease** is a large group of disorders, most of which cause progressive scarring of lung tissue.

**Lobectomy** is the surgical removal of a lobe of an organ such as the thyroid gland, lung, or liver.

**Lung parenchymal resection** is a surgical procedure that removes the part of the lung that contains a cancer lesion, along with the lymph nodes in the area to check for cancer metastasis.

**Lung wedge resection** is a non-anatomic resection of the lung. It is considered therapeutic when it includes a nodule that is sent for diagnosis. It is considered diagnostic when performed for a diffuse or localized process, such as for interstitial lung disease.

**Metastasis** is the spread of a disease-producing agency (such as cancer cells) from the initial or primary site of disease to another part of the body.

**Morbidity** is the state of being symptomatic or unhealthy for a disease or condition. It is usually represented or estimated using prevalence or incidence. Prevalence describes the proportion of the population with a given symptom or quality.

**Nodule** is a growth of abnormal tissue. Nodules can develop just below the skin. They can also develop in deeper skin tissues or internal organs.

**Parenchymal** the essential and distinctive tissue of an organ or an abnormal growth as distinguished from its supportive framework.

**Positron emission tomography (PET) scan** is a procedure in which a small amount of radioactive glucose (sugar) is injected into a vein, and a scanner is used to make detailed, computerized pictures of areas inside the body where the glucose is taken up. It is a medical imaging test that shows the metabolic or biochemical function of organs and tissues.

**Pulmonary Function Test (PFT)** is a noninvasive test that shows how well the lungs are working. The tests measure lung volume, capacity, rates of flow, and gas exchange.

**Pulmonary reserve** is the additional volume of air that the lungs can inhale and exhale when breathing to the limit of capacity in times of stress.

**Recurrent** is when a disease is occurring often or repeatedly.

**Resectable tumor** is a tumor that is able to be removed with surgery.

**Spontaneous pneumothorax** is an abnormal condition of the lung characterized by the collection of gas in the pleural space between the lungs and the chest wall. This condition occurs without an obvious etiology and can be classified as either primary or secondary. Patients may present with symptoms such as tachycardia and dyspnea.

## Lung Wedge Resection References

- [1] Arenberg, D.A. & Reddy, R.M. (2022). Metastatic Malignant Tumors. V.C. Broaddus (Ed.). *Murray & Nadel's Textbook of Respiratory Medicine*. (7), (pp. 1080-1090.e5). Philadelphia: Elsevier.
- [2] Cao, C., Louie, B.E., . . . Park, B.J. (2020). Impact of pulmonary function on pulmonary complications after robotic-assisted thoracoscopic lobectomy. *European Journal of Cardio-Thoracic Surgery*, 57(2), 338-342.
- [3] Carr, S.R. & Friedberg, J. (2022). Thoracic Surgery. V.C. Broaddus (Ed.). *Murray & Nadel's Textbook of Respiratory Medicine* (7), (pp. 412-423.e2). Philadelphia: Elsevier.
- [4] Coimbra, R. & Hoyt, D.B.(2023). Chest Wall Trauma, Pneumothorax, and Hemothorax. A.M. Cameron & J.L. Cameron (Eds.). *Current Surgical Therapy* (14), (pp. 1264-1269. Philadelphia, PA: Elsevier.
- [5] Handy, J.R., Bremner, R.M., . . . Varghese, T.K. (2019). Expert Consensus Document on Pulmonary Metastasectomy. *The Annals of Thoracic Surgery*, 107(2), 631-649.
- [6] Parikh, M. (2024). Pneumothorax, Spontaneous. F.F. Ferri (Ed.). *Ferri's Clinical Advisor 2024* , (pp. 1117-1120.e1). Philadelphia, PA: Elsevier.
- [7] Reily, G.J., Wood, D.E., . . . Yau, E. (2024). Non-Small Cell Cancer Version 8.2024. *National Comprehensive Cancer Network*. Retrieved: August 2024. <https://www.nccn.org/guidelines/guidelines-detail?category=1&id=1450>
- [8] Venado, A. (2024). Interstitial Lung Disease. F.F. Ferri (Ed.). *Ferri's Clinical Advisor 2024*, (pp. 805-808.e1). Philadelphia, PA: Elsevier.

## Disclaimer section

### Purpose

The purpose of the HealthHelp's clinical guidelines is to assist healthcare professionals in selecting the medical service that may be appropriate and supported by evidence to safely improve outcomes. Medical information is constantly evolving, and HealthHelp reserves the right to review and update these clinical guidelines periodically. HealthHelp reserves the right to include in these guidelines the clinical indications as appropriate for the organization's program objectives. Therefore the guidelines are not a list of all the clinical indications for a stated procedure, and



A WNS COMPANY

associated Procedure Code Tables may not represent all codes available for that state procedure or that are managed by a specific client-organization.

## Clinician Review

These clinical guidelines neither preempt clinical judgment of trained professionals nor advise anyone on how to practice medicine. Healthcare professionals using these clinical guidelines are responsible for all clinical decisions based on their assessment. All Clinical Reviewers are instructed to apply clinical indications based on individual patient assessment and documentation, within the scope of their clinical license.

## Payment

The use of these clinical guidelines does not provide authorization, certification, explanation of benefits, or guarantee of payment; nor do the guidelines substitute for, or constitute, medical advice. Federal and State law, as well as member benefit contract language (including definitions and specific contract provisions/exclusions) take precedence over clinical guidelines and must be considered first when determining eligibility for coverage. All final determinations on coverage and payment are the responsibility of the health plan. Nothing contained within this document can be interpreted to mean otherwise.

## Registered Trademarks (®/™) and Copyright (©)

All trademarks, product names, logos, and brand names are the property of their respective owners and are used for purposes of information and/or illustration only. Current Procedural Terminology (CPT)®™ is a registered trademark of the American Medical Association (AMA). No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from HealthHelp.

## National and Local Coverage Determination (NCD and LCD)



### NOTICE

To ensure appropriate review occurs to the most current NCD and/or LCD, always defer to <https://www.cms.gov/medicare-coverage-database/search.aspx>.

## Background

National Coverage Determinations (NCD) and Local Coverage Determinations (LCD) are payment policy documents outlined by the Centers for Medicare and Medicaid Services (CMS) and



A WNS COMPANY

the government's delegated Medicare Audit Contractors (MACs) that operate regionally in jurisdictions.

CMS introduced variation between different jurisdictions/Medicare Audit Contractors (MACs) and their associated covered code lists with the transition to ICD 10. The variation resulted in jurisdictions independently defining how codes are applied for exclusions, limitations, groupings, ranges, etc. for the medical necessity indications outlined in the NCD and LCD. Due to this variation, there is an inconsistent use/application of codes and coverage determinations across the United States between the different MACs.

In addition, **WITHOUT** notice, CMS can change the codes that indicate medical necessity and the format of the coverage determinations/associated documents (eg, Articles). This is an additional challenge for organizations to keep up with ongoing, unplanned changes in covered codes and medical necessity indications.

## Medical Necessity Codes

Due to the variation in code application between jurisdictions/MACs and that updates can happen without notification, HealthHelp is not able to guarantee full accuracy of the codes listed for any Coverage Determination, and advises that prior to use, the associated Coverage Determination Articles are reviewed to ensure applicability to HealthHelp's programs and any associated NCDs and LCDs.

## For Internal Use Only:

11248 11249 11253 11282 11325 11328 11333 11349 11350 11351 11352 11354 11355 11356  
11358 11359 11360 11361 11362 11365 11366 11367 11368 11369 11370 11374 11375 11394  
11395 11396 11565