Genetic testing: lung disorders

These services may or may not be covered by your HealthPartners plan. Please see your plan documents for your specific coverage information. If there is a difference between this general information and your plan documents, your plan documents will be used to determine your coverage.

Administrative Process

Prior authorization is not required for genetic testing for lung disorders unless testing is associated with a procedure code listed in "Box A", below.

Prior authorization is not applicable for Emerging Evidence Donor-Derived Cell-free DNA for Lung Transplant Rejection tests as they are considered investigational and therefore not covered.

Box A: Genetic testing procedure codes that require prior authorization
Molecular pathology procedures, Tier 2 or unlisted (CPT 81400-81408, 81479)
Unlisted multianalyte assays (CPT 81599)
Any other listed or unlisted laboratory/pathology CPT code when it is used in association with a genetic test.

Tests that require prior authorization will be reviewed for medical necessity of the testing as a whole. That is, a single coverage decision will apply to all of the tests, services, and/or procedure codes associated with the genetic test, whether they are requested/billed together or separately.

Policy Reference Table

If available, codes are listed below for informational purposes only, and do not guarantee member coverage or provider reimbursement. The list may not be all-inclusive.

Coverage Criteria Sections	Example Tests (Labs)	Common CPT Codes	Common ICD Codes
Alpha-1 Antitrypsin Deficiency			
SERPINA1 Common Variant Analysis or Sequencing and/or Deletion/Duplication Analysis	Alpha-1 Antitrypsin (AAT) Mutation Analysis (Quest Diagnostics)	81332	E88.01
	SERPINA1 Full Gene Sequencing and Deletion/Duplication (Invitae)	81479	
Donor-Derived Cell-Free DNA for Lung Transplant Rejection			
Evidence-Based Donor-Derived Cell-free DNA for Lung Transplant Rejection	Prospera Lung (Natera)	81479	T86.810, Z48.24, Z94.2
	Allosure Lung (CareDx)		
Emerging Evidence Donor-Derived Cell-free DNA for Lung Transplant Rejection	Viracor TRAC Lung dd-cfDNA (Viracor-IBT Laboratories)	0118U	
Other Covered Lung Disorders			
Other Covered Lung Disorders	See list below	81400, 81401, 81402, 81403, 81404, 81405, 81406, 81407, 81408	

Coverage

Alpha-1 Antitrypsin Deficiency

***SERPINA1* Common Variant Analysis or Sequencing and/or Deletion/Duplication Analysis**

1. *SERPINA1* common variant analysis or sequencing and/or deletion/duplication analysis to establish a diagnosis of alpha-1 antitrypsin (AAT) deficiency is considered **medically necessary** when:
   A. The member has any of the following:

i. Abnormally low (less than 120mg/dL) or borderline (90-140mg/dL) alpha-1 antitrypsin levels (as measured by nephelometry), **or**
ii. Early-onset emphysema (age 45 years or younger), **or**
iii. Emphysema in the absence of additional risk factor (e.g., smoking, occupational dust exposure), **or**
iv. Emphysema with prominent basilar hyperlucency, **or**
v. Otherwise unexplained liver disease, **or**
vi. Necrotizing panniculitis, **or**
vii. C-ANCA positive vasculitis (i.e., granulomatosis with polyangiitis), **or**
viii. Bronchiectasis without evident etiology, **or**
ix. A sibling with known AAT deficiency.

2. *SERPINA1* common variant analysis or sequencing and/or deletion/duplication analysis to establish a diagnosis of alpha-1 antitrypsin deficiency is considered **investigational** for all other indications.

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Donor-Derived Cell-Free DNA for Lung Transplant Rejection

Evidence-Based Donor-Derived Cell-free DNA for Lung Transplant Rejection

1. The use of peripheral blood measurement of donor-derived cell-free DNA tests with sufficient evidence of clinical utility and validity in the management of patients after lung transplantation is considered **medically necessary** when:
   A. The member has undergone lung transplantation, **and**
   B. The test has not been performed in the last 12 months, **and**
   C. The member meets at least one of the following:
      i. The member has clinical signs of acute rejection, **or**
      ii. A biopsy was done and is inconclusive for rejection, **or**
      iii. The member is being monitored for adequate immunosuppression.
2. The use of peripheral blood measurement of donor-derived cell-free DNA tests in the management of patients after lung transplantation is considered **investigational** for all other indications.

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Emerging Evidence Donor-Derived Cell-free DNA for Lung Transplant Rejection

1. Donor-derived cell-free DNA tests with insufficient evidence of clinical validity in the management of patients after lung transplantation are considered **investigational.**

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Other Covered Lung Disorders

1. Genetic testing to establish or confirm one of the following genetic lung disorders to guide management is considered **medically necessary** when the member demonstrates clinical features* consistent with the disorder (the list is not meant to be comprehensive, see 2. below):
   A. Familial Pulmonary Fibrosis
   B. Primary Ciliary Dyskinesia
   C. Pulmonary lymphangioleiomyomatosis (LAM)
   D. Pulmonary alveolar proteinosis (PAP)
2. Genetic testing to establish or confirm the diagnosis of all other lung disorders not specifically discussed within this or another medical policy will be evaluated by the criteria outlined in **General Approach to Genetic and Molecular Testing** (see policy for coverage criteria).

*Clinical features for a specific lung disorder may be outlined in resources such as GeneReviews, OMIM, National Library of Medicine, Genetics Home Reference, or other scholarly source.

Products

This information is for most, but not all, HealthPartners plans. Please read your plan documents to see if your plan has limits or will not cover some items. If there is a difference between this general information and your plan documents, your plan documents will be used to determine your coverage. These coverage criteria do not apply to Medicare Products. For more information regarding Medicare coverage criteria or for a copy of a Medicare coverage policy, contact Member Services at 952-883-7272 or 1-877-778-8384.

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References

1. American Thoracic Society; European Respiratory Society. American Thoracic Society/European Respiratory Society statement: standards for the diagnosis and management of individuals with alpha-1 antitrypsin deficiency. Am J Respir Crit Care Med. 2003;168(7):818-900. doi:10.1164/rccm.168.7.818
2. Adam MP, Ardinger HH, Pagon RA, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2024. Available from: https://www.ncbi.nlm.nih.gov/books/NBK1116/

3. Online Mendelian Inheritance in Man, OMIM®. McKusick-Nathans Institute of Genetic Medicine, Johns Hopkins University (Baltimore, MD). World Wide Web URL: https://omim.org/
4. MedlinePlus [Internet]. Bethesda (MD): National Library of Medicine (US). Available from: https://medlineplus.gov/genetics/.
5. Centers for Medicare & Medicaid Services. Medicare Coverage Database: Local Coverage Determination. MolDX: Molecular Testing for Solid Organ Allograft Rejection (L38582). Available at: https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=38582