

Federal Employee Program.
Blue Cross Blue Shield Association
750 9th St NW, Suite 900
Washington, D.C. 20001
1-800-624-5060
Fax 1-877-378-4727

# 5.45.004

Section: Prescription Drugs Effective Date: January 1, 2025

Subsection: Respiratory Agents Original Policy Date: November 7, 2014

Subject: Esbriet Page: 1 of 7

Last Review Date: December 13, 2024

# **Esbriet**

# Description

Esbriet (pirfenidone)

Pirfenidone

## **Background**

Idiopathic pulmonary fibrosis is a progressive condition in which the lungs develop abnormal tissue changes (fibrosis) over time. As a result, patients with IPF experience shortness of breath, and worsening lung function (1).

Esbriet (pirfenidone) belongs to the chemical class of pyridone which acts on multiple pathways that may be involved in the development of fibrotic lung tissue. Its exact mechanism of action is unknown; however, Esbriet may exert antifibrotic properties by decreasing fibroblast proliferation and the production of fibrosis-associated proteins and cytokines; may decrease the formation and accumulation of extracellular matrix (i.e., collagen) in response to transforming growth factor-beta and platelet derived growth factor. Esbriet is also believed to exert anti-inflammatory properties by decreasing the accumulation of inflammatory cells resulting from a variety of stimuli (2-3).

# **Regulatory Status**

FDA-approved indication: Esbriet is a pyridone indicated for the treatment of idiopathic pulmonary fibrosis (IPF) (2).

Section: Prescription Drugs Effective Date: January 1, 2025

Subsection: Respiratory Agents Original Policy Date: November 7, 2014

Subject: Esbriet Page: 2 of 7

Patients eligible for clinical studies were to have percent forced vital capacity (%FVC) greater than or equal to 50% at baseline and a percent predicted diffusing capacity of the lungs for carbon monoxide (%DL<sub>CO</sub>) greater than or equal to 30%. The primary endpoint was the change in percent predicted forced vital capacity (%FVC) from baseline to study end (2).

Esbriet is metabolized primarily (70 to 80%) via CYP1A2 with minor contributions from other CYP isoenzymes including CYP2C9, 2C19, 2D6 and 2E1. A drug interaction assessment needs to be performed before the start of the medication (2).

Esbriet carries warnings for elevated liver enzymes, drug-induced liver injury, photosensitivity, rash, and gastrointestinal disorders. Cases of drug-induced liver injury have been observed with Esbriet. Liver function tests should be conducted prior to the initiation of therapy with Esbriet. Smoking causes decreased exposure to Esbriet, which may alter the efficacy profile of Esbriet. Patients should be advised to stop smoking prior to treatment with Esbriet and to avoid smoking when using Esbriet (2).

Safety and effectiveness of Esbriet in patients less than 18 years of age have not been established (2).

## **Related policies**

Ofev

### Policy

This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Esbriet may be considered **medically necessary** if the conditions indicated below are met.

Esbriet may be considered **investigational** for all other indications.

# **Prior-Approval Requirements**

**Age** 18 years of age or older

#### **Diagnosis**

Patient must have the following:

Idiopathic pulmonary fibrosis (IPF)

Section: Prescription Drugs Effective Date: January 1, 2025

Subsection: Respiratory Agents Original Policy Date: November 7, 2014

Subject: Esbriet Page: 3 of 7

## AND ALL of the following:

- 1. Idiopathic (i.e., no identifiable cause for pulmonary fibrosis) diagnosis confirmed by **ALL** of the following:
  - a. Physical exam
  - b. Pulmonary Function Tests
    - i. FVC ≤ 90% of predicted **OR** DL<sub>CO</sub> ≤ 90% of predicted
    - ii. Pre-bronchodilator FEV₁/FVC ratio ≥ 70%
  - c. CT with classic findings of usual interstitial pneumonitis (UIP)
- 2. Must be prescribed by a pulmonologist
- 3. **NO** concurrent therapy with another Prior Authorization (PA) medication for idiopathic pulmonary fibrosis (see Appendix 1)
- 4. Drug interaction assessment has been performed by the physician
- 5. NO known cause of the interstitial lung disease / fibrosis
- 6. Patient has had baseline liver function tests performed

# Prior - Approval Renewal Requirements

**Age** 18 years of age or older

## **Diagnosis**

Patient must have the following:

Idiopathic pulmonary fibrosis (IPF)

#### AND ALL of the following:

- Assessment by the healthcare professional that the medication is helping the patient by meeting at least **ONE** of the following criteria (while taking this medication):
  - a. Slowed the rate of decline of lung function
  - b. Improved (or no decline in) symptoms of cough or shortness of breath
  - c. Improved sense of well-being
- 2. **NO** concurrent therapy with another Prior Authorization (PA) medication for idiopathic pulmonary fibrosis (see Appendix 1)
- 3. Drug interaction assessment has been performed by the physician

Section: Prescription Drugs Effective Date: January 1, 2025

Subsection: Respiratory Agents Original Policy Date: November 7, 2014

Subject: Esbriet Page: 4 of 7

# **Policy Guidelines**

# Pre - PA Allowance

None

# **Prior - Approval Limits**

**Duration** 6 months

# Prior - Approval Renewal Limits

**Duration** 12 months

#### Rationale

### **Summary**

Esbriet (pirfenidone) is a pyridone indicated for the treatment of idiopathic pulmonary fibrosis (IPF). Esbriet carries warnings for elevated liver enzymes, drug-induced liver injury, photosensitivity, rash, and gastrointestinal disorders. Safety and effectiveness of Esbriet in pediatric patients have not been established (2).

Prior approval is required to ensure the safe, clinically appropriate, and cost-effective use of Esbriet while maintaining optimal therapeutic outcomes.

#### References

- U.S. National Library of Medicine. (August 2020). Idiopathic pulmonary fibrosis: MedlinePlus Genetics. MedlinePlus. https://medlineplus.gov/genetics/condition/idiopathic-pulmonary-fibrosis/.
- 2. Esbriet [package insert]. South San Francisco, CA: Genentech USA, Inc.; February 2023.
- 3. Esbriet. Drug Facts and Comparisons. eFacts [online]. Last updated February 2021. Available from Wolters Kluwer Health, Inc.
- 4. Pirfenidone [package insert]. Berkeley Heights, NJ: Laurus Generics Inc.; April 2022.

# **Policy History**

Date Action

November 2014 Addition to PA

Section:Prescription DrugsEffective Date:January 1, 2025Subsection:Respiratory AgentsOriginal Policy Date:November 7, 2014

Subject: Esbriet Page: 5 of 7

December 2014 Annual editorial review and reference update

Removal of baseline reading of percent forced vital capacity (%FVC)

greater than or equal to 50% per PMPC

March 2015 Annual editorial review and reference update

April 2015 Addition of Idiopathic diagnosis confirmed by the following: CT, Pulmonary

Function Test, and Physical exam; no known cause of the interstitial lung disease / fibrosis; also drug interaction assessment has been performed; must be prescribed by a pulmonologist; assessment by the healthcare professional that the medication is helping the patient by meeting at least **ONE** of the following criteria (while taking this medication): slowed the rate of decline of lung function, improved (or no decline in) symptoms of cough

or shortness of breath, improved sense of well-being. Removal of

predicted diffusing capacity for carbon monoxide (%DLco) greater than or

equal to 30% per SME

June 2015 Annual editorial review and reference update

February 2016 Change of the FVC from 80% to 82%

March 2016 Annual review

Policy number changed from 5.13.04 to 5.45.04

September 2016 Annual editorial review and reference update.

Addition of the age to renewal requirement

March 2017 Annual editorial review and reference update
March 2018 Annual editorial review and reference update

March 2019 Annual review and reference update

March 2020 Annual editorial review and reference update. Addition of baseline liver

function tests requirement

March 2021 Annual review

June 2021 Revised requirement to "no concurrent therapy with another PA

medication for IPF" and added Appendix 1

September 2021 Annual review and reference update
March 2022 Annual review and reference update

September 2022 Addition of Pirfenidone (branded generic) to policy

December 2022 Annual review March 2023 Annual review

December 2023 Annual review and reference update. Per SME, added smoking warning to

regulatory status section

March 2024 Annual review

December 2024 Annual review. Per SME, adjusted pulmonary function tests for initiation to

FVC≤90% or DLCO≤90% and pre-bronchodilator FEV1/FVC ratio ≥70%

**Keywords** 

Section: Prescription Drugs Effective Date: January 1, 2025

Subsection: Respiratory Agents Original Policy Date: November 7, 2014

Subject: Esbriet Page: 6 of 7

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on December 13, 2024 and is effective on January 1, 2025.

Section:Prescription DrugsEffective Date:January 1, 2025Subsection:Respiratory AgentsOriginal Policy Date:November 7, 2014

Subject: Esbriet Page: 7 of 7

# Appendix 1 - List of PA Medications for IPF

Generic Name	Brand Name
nintedanib	Ofev
pirfenidone	Esbriet