PRIOR AUTHORIZATION POLICY

POLICY: Idiopathic Pulmonary Fibrosis and Related Lung Disease – Pirfenidone Prior Authorization Policy

• Esbriet[®] (pirfenidone capsules and film-coated tablets – Genentech, generic)

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OVERVIEW

Pirfenidone, a pyridone, is indicated for the treatment of idiopathic pulmonary fibrosis (IPF).¹ The safety and effectiveness of pirfenidone in pediatric patients have not been established.

Disease Overview

IPF is a form of chronic interstitial lung pneumonia associated with histologic pattern of usual interstitial pneumonia (UIP).² The condition is specific for patients that have clinical features and the histologic pattern of UIP or a classical high-resolution computed tomography scan for IPF. In this lung condition there is cellular proliferation, interstitial inflammation, fibrosis, or the combination of these findings, within the alveolar wall that is not due to infection or cancer.³ IPF is rather rare and the prevalence in the US ranges from 10 to 60 cases per 100,000. However, in one study, the prevalence was 494 cases per 100,000 in 2011 in adults > 65 years of age, which is higher than previous information. The disease mainly impacts older adults.² Symptoms include a progressive dry cough and exertional dyspnea. Patients experience a high disease burden with hospital admissions. The clinical course varies among patients but the mean survival after symptom onset is usually 3 to 5 years. The cause is unknown but environmental and occupational hazards may play a role, as well as a of smoking. Medical therapy is only modestly effective and mainly shows the rate of disease progression. Agents FDA-approved for IPF are Ofev[®] (nintedanib capsules) and pirfenidone. Lung transplantation is a therapeutic option.

Clinical Efficacy

The efficacy of pirfenidone was assessed in patients with IPF in three Phase III, randomized, double-blind, placebo-controlled, multicenter, multinational trials (n = 1,247).^{1,4,5} Patients were required to have a percent predicted forced vital capacity (%FVC) \geq 50% at baseline. Pirfenidone 2,403 mg/day led to a statistically significant change in the %FVC at 52 weeks and 72 weeks, respectively. Also, a reduction in the mean decline in forced vital capacity (in mL) was observed in both studies for patients receiving pirfenidone 2,403 mg/day compared with placebo.¹⁻³ Some information suggests that patients who have %FVC < 50% may also have some benefits from therapy.⁶⁻⁹

Guidelines

In 2015, the clinical practice guideline from the American Thoracic Society (ATS), European Respiratory Society (ERS), the Japanese Respiratory Society (JRS), and Latin American Thoracic Association (ALAT) on the treatment of IPF was updated.¹⁰ Regarding pirfenidone, the guideline suggests use of this medication (conditional recommendation, moderate confidence in estimates of effect). The guideline notes that the data with pirfenidone cannot be generalized to patients with IPF who have more severe impairment of pulmonary function tests or for patients with other significant comorbidities.¹⁰ Updated recommendations by this group in 2022 support use of pirfenidone in patients with IPF.¹¹

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POLICY STATEMENT

Prior Authorization is recommended for prescription benefit coverage of pirfenidone. All approvals are provided for the duration noted below. Because of the specialized skills required for evaluation and diagnosis of patients treated with pirfenidone, approval requires pirfenidone to be prescribed by or in consultation with a physician who specializes in the condition being treated.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of pirfenidone is recommended in those who meet the following criteria:

FDA-Approved Indication

- 1. Idiopathic Pulmonary Fibrosis. Approve for 1 year if the patient meets one of the following criteria (A <u>or</u> B):
 - A) <u>Initial Therapy</u>. Approve if the patient meets the following (i, ii, iii, <u>and</u> iv):
 - i. Patient is ≥ 18 years of age; AND
 - ii. Forced vital capacity is $\geq 40\%$ of the predicted value; AND
 - **iii.** Diagnosis of idiopathic pulmonary fibrosis is confirmed by one of the following (a <u>or</u> b):
 - a) Findings on high-resolution computed tomography indicate usual interstitial pneumonia; OR
 - b) A surgical lung biopsy demonstrates usual interstitial pneumonia; AND
 - iv. Medication is prescribed by or in consultation with a pulmonologist; OR
 - **B**) <u>Patient is Currently Receiving Pirfenidone</u>. Approve if the patient meets the following (i, ii, <u>and</u> iii):
 - i. Patient is ≥ 18 years of age; AND
 - **ii.** Patient has experienced a beneficial response to therapy over the last year while receiving pirfenidone; AND

<u>Note</u>: For a patient who has received less than 1 year of therapy, response is from baseline prior to initiating pirfenidone. Examples of a beneficial response include a reduction in the anticipated decline in forced vital capacity, six-minute walk distance, and/or a reduction in the number or severity of idiopathic pulmonary fibrosis exacerbations.

iii. Medication is prescribed by or in consultation with a pulmonologist.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of pirfenidone is not recommended in the following situations:

- 1. Pirfenidone is Being Used Concomitantly with Ofev (nintedanib capsules). Ofev is another medication indicated for the treatment of IPF. The effectiveness and safety of concomitant use of pirfenidone with Ofev have not been established. The 2015 ATS/ERS/JRS/ALAT clinical practice guideline regarding the treatment of idiopathic pulmonary fibrosis (an update of the 2011 clinical practice guideline) does not recommend taking Ofev and pirfenidone in combination.¹⁰ A small exploratory study was done in which patients with IPF receiving Ofev added on pirfenidone.¹² Further research is needed to determine the utility of this combination regimen.
- **2.** Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

Idiopathic Pulmonary Fibrosis and Related Lung Disease – Pirfenidone PA Policy Page 3

- 1. Esbriet[®] capsules and film coated tablets [prescribing information]. South San Francisco, CA: Genentech; February 2022.
- 2. Lederer DJ, Martinez FJ. Idiopathic pulmonary fibrosis. N Engl J Med. 2018;378(19):1811-1823.
- 3. Lynch JP, Huynh RH, Fishbein MC, et al. Idiopathic pulmonary fibrosis: epidemiology, clinical features, prognosis, and management. *Semin Respir Crit Care Med.* 2016;37:331-357.
- 4. King TE, Bradford WZ, Castro-Bernardini S, et al, for the ASCEND Study Group. A phase 3 trial of pirfenidone in patients with idiopathic pulmonary fibrosis. *N Engl J Med.* 2014;370(22):2083-2092.
- 5. Noble PW, Albera C, Bradford WZ, et al, for the CAPACITY Study Group. Pirfenidone in patients with idiopathic pulmonary fibrosis (CAPACITY): two randomized trials. *Lancet*. 2011;377:1760-1769.
- 6. King CS, Nathan SD. POINT: Should all patients with idiopathic pulmonary fibrosis, even those with more than moderate impairment, be treated with nintedanib or pirfenidone? Yes. *Chest.* 2016;150(2):273-275.
- 7. Nathan SD, Costabel U, Albera C, et al. Pirfenidone in patients with idiopathic pulmonary fibrosis and more advanced lung function impairment. *Respir Med.* 2019;153:44-51.
- 8. Costabel U, Albera C, Glassberg MK, et al. Effect of pirfenidone in patients with more advanced idiopathic pulmonary fibrosis. *Respir Research*. 2019;20:55.
- 9. Richeldi L, Crestani B, Azuma A, et al. Outcomes following decline in forced vital capacity in patients with idiopathic pulmonary fibrosis: results from the INPULSIS and INPULSIS-ON trials of nintedanib. *Respir Med.* 2019;156:20-25.
- Raghu G, Rochwerg B, Zhang Y, et al, on behalf of the ATS, ERS, JRS, and ALAT. An official ATS/ERS/JRS/ALAT clinical practice guideline: treatment of idiopathic pulmonary fibrosis. Executive summary. An update of the 2011 clinical practice guideline. *Am J Respir Crit Care Med.* 2015;192(2):238-248.
- Raghu G, Remy-Jardin M, Richeldi L, et al, on behalf of the ATS, ERS, JRS, and ALAT. Idiopathic pulmonary fibrosis (an update) and progressive pulmonary fibrosis in adults. An official ATS/ERS/JRS/ALAT clinical practice guideline. *Am J Respir Crit Care Med.* 2022;205(9):e18-e47.
- 12. Vancheri C, Kreuter M, Richeldi L, et al, INJOURNEY trial investigators. Nintedanib with add-on pirfenidone in idiopathic pulmonary fibrosis: results of the INJOURNEY trial. *Am J Respir Crit Care Med.* 2018;197(3):356-363.