BlueCross BlueShield Federal Employee Program

GILOTRIF (afatinib)

RATIONALE FOR INCLUSION IN PA PROGRAM

Background

Gilotrif is a tyrosine kinase inhibitor that blocks proteins that promote the development of cancerous cells in patients with metastatic non-small cell lung cancer (NSCLC). It is intended for first line treatment in patients who have non-resistant epidermal growth factor receptor (EGFR) mutations as detected by an FDA-approved test. The most commonly found of these mutations are exon 21 L858R substitutions and exon 19 deletions, however, patients with non-resistant, less common mutations of EGFR may also receive benefit from this agent. Gilotrif is also indicated for patients with metastatic squamous NSCLC progressing after platinum-based chemotherapy (1).

Regulatory Status

FDA-approved indications: Gilotrif is a kinase inhibitor indicated for: (1)

1. First-line treatment of patients with metastatic non-small cell lung cancer (NSCLC) whose tumors have non-resistant epidermal growth factor receptor (EGFR) mutations as detected by an FDA-approved test
2. Treatment of patients with metastatic, squamous NSCLC progressing after platinum-based chemotherapy

Limitations of Use

Safety and efficacy of Gilotrif have not been established in patients whose tumors have resistant EGFR mutations (1).

Off-Label Uses: (2)

1. Very advanced and recurrent/persistent head and neck cancers, therapy as a single agent for non-nasopharyngeal cancer if disease progression on or after platinum containing chemotherapy
2. Treatment for recurrent stable systemic disease as a single agent for brain metastases if active against primary tumor (EGFR sensitizing mutation-positive non-small cell lung cancer)

Diarrhea has resulted in dehydration and renal failure; some of these cases were fatal. Withhold Gilotrif for diarrhea that is severe (Grade 2 or higher) and persisting for 2 or more consecutive

days while taking antidiarrheal agents. Gilotrif treatment should be withheld if renal function is Grade 2 or higher. Treatment can be resumed when the adverse reaction fully resolves, returns to baseline, or improves to Grade 1 (1).

Discontinue Gilotrif in patients who develop life-threatening bullous, blistering, or exfoliating lesions. For patients who develop prolonged Grade 2 cutaneous adverse reactions lasting more than 7 days, intolerable Grade 2, or Grade 3 cutaneous reactions, withhold Gilotrif until the adverse reaction resolves to Grade 1 or less, and resume Gilotrif with appropriate dose reduction (1).

Gilotrif may cause interstitial lung disease (ILD) or ILD-like adverse reactions (e.g., lung infiltration, pneumonitis, acute respiratory distress syndrome, or alveolitis allergic). Withhold Gilotrif during evaluation of patients with suspected ILD, and discontinue Gilotrif in patients with confirmed ILD (1).

Gilotrif may cause hepatic impairment; some cases were fatal. Periodic liver testing should be conducted in patients during treatment with Gilotrif. Withhold Gilotrif in patients who develop worsening of liver function. In patients who develop severe hepatic impairment while taking Gilotrif, treatment should be discontinued (1).

Gilotrif may cause keratitis, characterized as acute or worsening eye inflammation, lacrimation, light sensitivity, blurred vision, eye pain, and/or red eye. Gilotrif can cause fetal harm when administered to a pregnant woman. Gilotrif is a pregnancy category D (1).

Safety and effectiveness of Gilotrif in pediatric patients have not been established (1).

Summary

Gilotrif is a tyrosine kinase inhibitor indicated for the first-line treatment of patients with metastatic non-small cell lung cancer (NSCLC) who have non-resistant epidermal growth factor receptor (EGFR) mutations as detected by an FDA-approved test, in patients with metastatic squamous non-small cell lung cancer (NSCLC); advanced, recurrent, persistent head and neck cancers; or recurrent brain metastases. Safety and efficacy of Gilotrif have not been established in patients whose tumors have resistant EGFR mutations. Gilotrif therapy may cause diarrhea, bullous and exfoliative skin disorders, interstitial lung disease, hepatic toxicity, keratitis, and

embryofetal toxicity. Safety and effectiveness of Gilotrif in pediatric patients have not been established (1).

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

References

1. Gilotrif [package insert]. Ridgefield, CT: Boehringer Ingelheim Pharmaceuticals, Inc; April 2022.
2. NCCN Drugs & Biologics Compendium® Afatinib 2025. National Comprehensive Cancer Network, Inc. Accessed on January 14, 2025.