BlueCross BlueShield Federal Employee Program

BRUKINSA
(zanubrutinib)

RATIONALE FOR INCLUSION IN PA PROGRAM

Background

Brukinsa (zanubrutinib) is a small-molecule inhibitor of Bruton's tyrosine kinase (BTK). Brukinsa forms a covalent bond with a cysteine residue in the BTK active site, leading to inhibition of BTK activity. BTK is a signaling molecule of the B-cell antigen receptor (BCR) and cytokine receptor pathways. In B-cells, BTK signaling results in activation of pathways necessary for B-cell proliferation, trafficking, chemotaxis, and adhesion. Brukinsa inhibits malignant B-cell proliferation and reduced tumor growth (1).

Regulatory Status

FDA-approved indications: Brukinsa is a kinase inhibitor indicated for the treatment of adult patients with: (1)

- Mantle cell lymphoma (MCL) who have received at least one prior therapy.
- Waldenström's macroglobulinemia (WM).
- Relapsed or refractory marginal zone lymphoma (MZL) who have received at least one anti-CD20-based regimen.
- Chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL).
- Relapsed or refractory follicular lymphoma (FL), in combination with obinutuzumab, after two or more lines of systemic therapy.

Fatal and serious hemorrhagic events have occurred in patients with hematological malignancies treated with Brukinsa monotherapy. Bleeding events have occurred in patients with and without concomitant antiplatelet of anticoagulation therapy. Co-administration of Brukinsa with antiplatelet or anticoagulant medication may further increase the risk of hemorrhage. Patients should be monitored for signs and symptoms of bleeding (1).

Significant adverse reactions may occur with Brukinsa therapy including fatal and serious infections, cytopenia, cardiac arrhythmias, and second primary malignancies including non-skin carcinoma. Patients should have the following monitored while on Brukinsa therapy: fever, infections, complete blood counts, and signs and symptoms for atrial fibrillation and atrial flutter (1).

BlueCross BlueShield Federal Employee Program

BRUKINSA
(zanubrutinib)

Advise women to avoid becoming pregnant while taking Brukinsa and for at least 1 week after the last dose. Advise men to avoid fathering a child during treatment and for at least 1 week after the last dose. If this drug is used during pregnancy or if the patient becomes pregnant while taking this drug, the patient should be apprised of the potential hazard to a fetus (1).

The safety and effectiveness of Brukinsa in pediatric patients less than 18 years of age have not been established (1).

Summary

Brukinsa (zanubrutinib) is a small-molecule inhibitor of Bruton's tyrosine kinase (BTK). Brukinsa forms a covalent bond with a cysteine residue in the BTK active site, leading to inhibition of BTK activity. BTK is a signaling molecule of the B-cell antigen receptor (BCR) and cytokine receptor pathways. In B-cells, BTK signaling results in activation of pathways necessary for B-cell proliferation, trafficking, chemotaxis, and adhesion. Brukinsa inhibits malignant B-cell proliferation and reduced tumor growth. The safety and effectiveness of Brukinsa in pediatric patients less than 18 years of age have not been established (1).

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

References

1. Brukinsa [package insert]. San Mateo, CA: BeiGene USA, Inc.; June 2024.
2. NCCN Drugs & Biologics Compendium® Zanubrutinib 2025. National Comprehensive Cancer Network, Inc. Accessed on January 14, 2025.