BlueCross BlueShield Federal Employee Program

TUKYSA
(tucatinib)

RATIONALE FOR INCLUSION IN PA PROGRAM

Background

Tukysa (tucatinib) is a tyrosine kinase inhibitor of HER2. Tukysa inhibits phosphorylation of HER2 and HER3, resulting in inhibition of downstream MAPK and AKT signaling and cell proliferation and shows anti-tumor activity in HER2 expressing tumor cells. The combination of Tukysa and trastuzumab showed increased anti-tumor activity compared to either drug alone (1).

Regulatory Status

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

- In combination with trastuzumab and capecitabine for treatment of adult patients with advanced unresectable or metastatic HER2-positive breast cancer, including patients with brain metastases, who have received one or more prior anti-HER2-based regimens in the metastatic setting.
- In combination with trastuzumab for the treatment of adult patients with RAS wild-type HER2-positive unresectable or metastatic colorectal cancer that has progressed following treatment with fluoropyrimidine-, oxaliplatin-, and irinotecan-based chemotherapy.

Tukysa can cause severe diarrhea including dehydration, hypotension, acute kidney injury, and death. If diarrhea occurs, antidiarrheal treatment should be administered as clinically indicated. Based on the severity of the diarrhea, Tukysa should be interrupted and then reduced or permanently discontinued (1).

Tukysa can also cause severe hepatotoxicity. ALT, AST, and bilirubin should be monitored prior to starting Tukysa, every 3 weeks during treatment, and as clinically indicated (1).

Tukysa can cause fetal harm when administered to a pregnant woman. Females of reproductive potential should be advised to use effective contraception during treatment with Tukysa and for at least 1 week after the last dose. Male patients with female partners of reproductive potential should be advised to use effective contraception during treatment with Tukysa and for at least 1 week after the last dose (1).

The safety and effectiveness of Tukysa in pediatric patients less than 18 years of age have not

been established (1).

Summary

Tukysa (tucatinib) is a tyrosine kinase inhibitor of HER2. Tukysa inhibits phosphorylation of HER2 and HER3, resulting in inhibition of downstream MAPK and AKT signaling and cell proliferation and shows anti-tumor activity in HER2 expressing tumor cells. The combination of Tukysa and trastuzumab showed increased anti-tumor activity compared to either drug alone. The safety and effectiveness of Tukysa 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 Tukysa while maintaining optimal therapeutic outcomes.

References

1. Tukysa [package insert]. Bothell, WA: Seattle Genetics, Inc.; January 2023.
2. NCCN Drugs & Biologics Compendium® Tucatinib 2025. National Comprehensive Cancer Network, Inc. Accessed on January 24, 2025.