VENTURA COUNTY
HEALTH CARE PLAN

Prior Authorization DRUG Guidelines

Vandetanib (Brand Name: Caprelsa®)

Effective Date: 1/31/12

Date Developed: 12/14/11 by Albert Reeves MD

Last Approval Date: 1/26/16, 1/24/17, 1/23/18, 1/22/19, 2/18/20, 2/2/21, 2/1/22, 1/31/23, 2/13/24, 2/18/25

Vandetanib is an Antineoplastic Agent, Tyrosine Kinase Inhibitor; Epidermal Growth Factor Receptor (EGFR) Inhibitor; Vascular Endothelial Growth Factor (VEGF) Inhibitor. It selectively blocks intracellular signaling, angiogenesis and cell proliferation.

Pre-Authorization Criteria:

Treatment of metastatic or unresectable locally advanced medullary thyroid cancer (symptomatic or progressive).

NOTE: VCHCP requires that Vandetanib be prescribed by an Oncologist and Endocrinologist.

NOTE: This medication is in a class the Institute for Safe Medication Practices (ISMP) includes among its list of drug classes which have a heightened risk of causing significant patient harm when used in error. Therefore, use in indolent, asymptomatic, or slowly progressing disease only after careful considerations of vandetanib treatment-related risks. See Warnings/Precautions.

Dosing: Adult
Note: Do not initiate treatment unless QTcF <450 msec. Avoid concomitant use of QT-prolonging agents and strong CYP3A4 inducers. To reduce the risk of QT prolongation, maintain serum calcium and magnesium within normal limits and maintain serum potassium ≥4 mEq/L.

Medullary thyroid cancer, locally advanced or metastatic: Oral: 300 mg once daily, continue treatment until no longer clinically benefiting or until unacceptable toxicity.

Dosage Forms: U.S.
Tablet, oral: 100 mg, 300 mg

Contraindications

Congenital long QT syndrome
QT prolongation/sudden
death:
[U.S. Boxed Warning]: May prolong the QT interval; torsade de pointes and sudden death have been reported. Do not use in patients with hypocalcemia, hypokalemia, hypomagnesemia, or long QT syndrome.

WARNINGS / PRECAUTIONS:

Concerns related to adverse effects:

Diarrhea: Diarrhea has been reported with use; may cause electrolyte imbalance (closely monitor electrolytes). Routine antidiarrheals are recommended. Withhold treatment until resolution for severe diarrhea; dose reduction is recommended when treatment is resumed.

Heart failure: Heart failure (HF) has been reported; monitor for signs and symptoms of HF. May require discontinuation. HF may not be reversible upon discontinuation.

Hemorrhage: Serious and sometimes fatal hemorrhagic events have been reported with use. Discontinue in patients with severe hemorrhage. Do not administer in patients with a recent history of hemoptysis with ≥2.5 mL of red blood.

Hypertension: Hypertension and hypertensive crisis have been observed with vandetanib. Monitor blood pressure and initiate or adjust antihypertensive therapy as needed. May require vandetanib dosage adjustment or treatment interruption; discontinue vandetanib (permanently) if blood pressure cannot be adequately controlled.

Hypothyroidism: Increased doses of thyroid replacement therapy have been required in patients with prior thyroidectomy. Obtain TSH at baseline, at 2-4 weeks, 8-12 weeks and every 3 months after vandetanib initiation. If signs and symptoms of hypothyroidism occur during treatment, evaluate thyroid hormone levels and adjust replacement therapy if needed.

Ischemic events: Ischemic cerebrovascular events (some fatal) have been observed with vandetanib. Discontinue treatment in patients with severe ischemic events. The safety of resuming treatment after an ischemic event has not been studied.

Pulmonary toxicity: Interstitial lung disease (ILD) or pneumonitis (including fatalities)

has been reported with vandetanib. consider interrupting treatment for moderate symptoms (may require corticosteroids or antibiotics). Discontinue treatment for severe symptoms; may require corticosteroids and antibiotics, and permanent discontinuation.

Reversible posterior leukoencephalopathy syndrome (RPLS): RPLS been observed with vandetanib. Symptoms of RPLS include altered mental function, confusion, headache, seizure, or visual disturbances; generally associated with hypertension. Consider discontinuing treatment if RPLS occurs.

Skin reactions: Stevens-Johnson syndrome and other serious skin reactions (including fatal) have been reported. Mild-to-moderate skin reactions, including acne, dermatitis, dry skin, palmar-plantar erythrodysesthesia syndrome, pruritus, and rash have also been reported. Withhold treatment for dermatologic toxicity of grade 3 or higher; consider a reduced dose or permanent discontinuation upon improvement in symptoms. Severe dermatologic toxicity has been managed with corticosteroids (systemic) and treatment discontinuation; mild-to-moderate toxicity has responded to corticosteroids (systemic or topical), oral antihistamines, and antibiotics (topical or systemic). Increased risk of photosensitivity is associated with vandetanib; effective sunscreen and protective clothing are recommended during and for at least 4 months after treatment discontinuation.

Disease-related concerns:

Hepatic impairment: Not recommended for use in patients with moderate to severe hepatic impairment.

Renal impairment: Dosage reduction is recommended in patients with moderate-to-severe renal impairment. Exposure is increased in patients with impaired renal function; closely monitor QT interval. It has not been studied in patients with end stage renal disease requiring dialysis.

REFERENCES

1. National Comprehensive Cancer Network® (NCCN), "Clinical Practice Guidelines in Oncology™: Thyroid Carcinoma," Version 1.2011. Available at http://www.nccn.org/professionals/physician_gls/PDF/thyroid.pdf

2. Robinson BG, Paz-Ares L, Krebs A, et al, "Vandetanib (100 mg) in Patients With Locally Advanced or Metastatic Hereditary Medullary Thyroid Cancer," J Clin Endocrinol Metab, 2010, 95(6):2664-71. [PubMed 20371662]

3. Wells SA Jr, Gosnell JE, Gagel RF, et al, "Vandetanib for the Treatment of Patients With Locally Advanced or Metastatic Hereditary Medullary Thyroid Cancer," J Clin Oncol, 2010, 28(5):767-72. [PubMed 20065189]

4. Wells SA, Robinson BG, Gagel RF, et al, "Vandetanib (VAN) in Locally Advanced or Metastatic Medullary Thyroid Cancer (MTC): A Randomized, Double-Blind Phase III Trial (ZETA)," J Clin Oncol, 2010, 28(15s):5503 [abstract 5503 from 2010 ASCO Annual Meeting].

5. Wells SA Jr, Robinson BG, Gagel RF, et al. Vandetanib in patients with locally advanced or metastatic medullary thyroid cancer: a randomized, double-blind phase III trial. J Clin Oncol. 2012;30(2):134-141.

6. Caprelsa (vandetanib) [prescribing information]. Cambridge, MA: Genzyme Corporation; December 2024

7. Lacouture ME, Ciccolini K, Kloos RT, et al. Overview and management of dermatologic events associated with targeted therapies for medullary thyroid cancer. Thyroid. 2014;24(9):1329-1340

8. Wells SA Jr, Robinson BG, Gagel RF, et al. Vandetanib in patients with locally advanced or metastatic medullary thyroid cancer: a randomized, double-blind phase III trial. J Clin Oncol. 2012;30(2):134-141

9. Lacouture ME, Ciccolini K, Kloos RT, et al. Overview and management of dermatologic events associated with targeted therapies for medullary thyroid cancer. Thyroid. 2014;24(9):1329-1340.

10. Thomas N, Glod J, Derse-Anthony C, et al. Pregnancy on vandetanib in metastatic medullary thyroid carcinoma associated with multiple endocrine neoplasia type 2B. Clin Endocrinol (Oxf). 2018;88(5):754-756.

Revision History:

Date Reviewed/No Updates: 1/16/13 by A. Reeves MD
Date Approved by P&T Committee: 1/31/12; 1/29/13
Date Reviewed/No Updates: 1/28/14 by C. Sanders MD
Date Approved by P&T Committee: 1/28/14
Date Reviewed/No Updates: 1/13/15 by C. Sanders, MD
Date Approved by P&T Committee: 1/27/15

Date Reviewed/No Updates: 1/26/16 by C. Sanders, MD; R. Sterling, MD
Date Approved by P&T Committee: 1/26/16
Date Reviewed/No Updates: 1/24/17 by C. Sanders, MD; R. Sterling, MD
Date Approved by P&T Committee: 1/24/17
Date Reviewed/No Updates: 1/23/18 by C. Sanders, MD; R. Sterling, MD
Date Approved by P&T Committee: 1/23/18
Date Reviewed/No Updates: 1/22/19 by C. Sanders, MD; R. Sterling, MD
Date Approved by P&T Committee: 1/22/19
Date Reviewed/No Updates: 2/18/20 by H. Taekman, MD; R. Sterling, MD
Date Approved by P&T Committee: 2/18/20
Date Reviewed/No Updates: 2/2/21 by H. Taekman, MD; R. Sterling, MD
Date Approved by P&T Committee: 2/2/21
Date Reviewed/Updated: 8/3/21 by H. Taekman, MD; R. Sterling, MD
Date Approved by P&T Committee: 8/3/21
Date Reviewed/No Updates: 2/1/22 by H. Taekman, MD; R. Sterling, MD
Date Approved by P&T Committee: 2/1/22
Date Reviewed/No Updates: 1/31/23 by H. Taekman, MD; R. Sterling, MD
Date Approved by P&T Committee: 1/31/23
Date Reviewed/No Updates: 2/13/24 by H. Taekman, MD; R. Sterling, MD
Date Approved by P&T Committee: 2/13/24
Date Reviewed/Updated: 2/18/25 by H. Taekman, MD; R. Sterling, MD
Date Approved by P&T Committee: 2/18/25

Revision Date	Content Revised (Yes/No)	Contributors	Review/Revision Notes
1/24/17	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
1/23/18	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
1/22/19	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
2/18/20	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
2/2/21	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
8/3/21	Yes	Howard Taekman, MD; Robert Sterling, MD	Numerous deletions, added references, reformatting
2/1/22	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
1/31/23	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
2/13/24	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
2/18/25	Yes	Howard Taekman, MD; Robert Sterling, MD	Updated Vandetanib description. Added "Therefore, use in indolent, asymptomatic, or slowly progressing disease only after careful considerations of vandetanib treatment-related risks. See Warnings/Precautions." Modified Pulmonary toxicity section under Warnings/precautions. References updated