Azedra

**Description**

**Azedra (iobenguane I 131)**

**Background**

Azedra (iobenguane I 131) is an I 131 labeled iobenguane. Iobenguane is similar in structure to norepinephrine (NE). Iobenguane is taken up by the NE transporter in adrenergic nerve terminals and accumulates in adrenergically innervated tissues as well as tumors of neural crest origin. Pheochromocytoma and paraganglioma (PPGL) are tumors of neural crest origin that express high levels of the NE transporter on their cell surfaces. Following IV administration, Azedra is taken up and accumulates within pheochromocytoma and paraganglioma cells, and radiation resulting from radioactive decay of I 131 causes cell death and tumor necrosis (1).

**Regulatory Status**

FDA-approved indication: Azedra is a radioactive therapeutic agent indicated for the treatment of adult and pediatric patients 12 years and older with iobenguane scan positive, unresectable, locally advanced or metastatic pheochromocytoma or paraganglioma who require systemic anticancer therapy (1).

Severe and prolonged myelosuppression can occur during treatment with Azedra. Monitor blood counts weekly for up to 12 weeks or until levels return to baseline or the normal range. Withhold and dose reduce Azedra as recommended based on the severity of the cytopenia (1).

Hypothyroidism has been reported in some patients taking Azedra. Initiate thyroid-blocking medications starting at least 1 day before and continuing for 10 days after each Azedra dose to reduce the risk of hypothyroidism or thyroid neoplasia. Evaluate for clinical evidence of
hypothyroidism and measure thyroid-stimulating hormone (TSH) levels prior to initiation of Azedra and annually thereafter (1).

Patients receiving Azedra may experience worsening of pre-existing hypertension. All changes in blood pressure occur within the first 24 hours post infusion. Monitor blood pressure frequently during the first 24 hours after each therapeutic dose of Azedra (1).

Renal toxicity and decreased glomerular filtration rate (GFR) have been reported in patients taking Azedra. Monitor renal function during and after treatment with Azedra. Patients with baseline renal impairment may be at greater risk of toxicity; perform more frequent assessments of renal function in patients with mild or moderate impairment. Azedra has not been studied in patients with severe renal impairment (creatinine clearance <30 mL/min) (1).

There is no available data on the use of Azedra in pregnant women. However, all radiopharmaceuticals, including Azedra, have the potential to cause fetal harm. Verify pregnancy status in females of reproductive potential prior to initiating Azedra. Advise females of reproductive potential to use effective contraception during treatment with Azedra and for 7 months after the final dose. Advise males with female partners of reproductive potential to use effective contraception during treatment and for 4 months after the final dose (1).

The safety and effectiveness of Azedra in pediatric patients younger than 12 years old have not been established (1).

Related policies

Policy

This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Azedra may be considered medically necessary in patients 12 years of age and older with pheochromocytoma or paraganglioma and if the conditions indicated below are met.

Azedra is considered investigational in patients less than 12 years of age and for all other indications.

Prior-Approval Requirements

Age 12 years of age and older
Diagnosis

The patient must have the following:

Unresectable, locally advanced or metastatic pheochromocytoma or paraganglioma

AND ALL of the following:
1. Iobenguane scan positive
2. Patient requires systemic anticancer therapy
3. Patient has progressed on prior therapy for pheochromocytoma or paraganglioma (PPGL) OR patient is not a candidate for chemotherapy
4. Platelet count ≥80,000 per microliter OR absolute neutrophil count (ANC) ≥1,200 per microliter
5. NO severe renal impairment (CrCl < 30 mL/min)

Prior – Approval Renewal Requirements

None

Policy Guidelines

Pre - PA Allowance

None

Prior - Approval Limits

Duration 6 months

Prior – Approval Renewal Limits

None

Rationale

Summary

Azedra is a radioactive therapeutic agent indicated for the treatment of patients 12 years and older with iobenguane scan positive, unresectable, locally advanced or metastatic pheochromocytoma or paraganglioma who require systemic anticancer therapy. The safety and effectiveness of Azedra in pediatric patients younger than 12 years old have not been established (1).
Prior authorization is required to ensure the safe, clinically appropriate and cost-effective use of Azedra while maintaining optimal therapeutic outcomes.

References

Policy History

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Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on June 20, 2019 and is effective on July 1, 2019.