Polivy (polatuzumab vedotin-piiq)





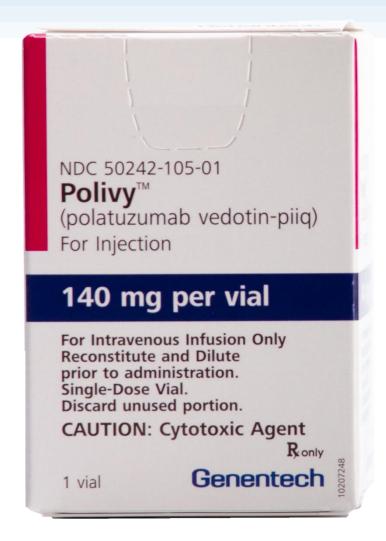
NEW PRODUCT SLIDESHOW



Introduction

- Brand name: Polivy
- Generic name: Polatuzumab vedotin-piiq
- Pharmacological class: CD79b-directed antibody-drug conjugate
- Strength and Formulation: 140mg; per vial; lyophilized pwd for IV infusion after reconstitution and dilution; preservative-free
- Manufacturer: Genentech
- How supplied: Single-dose vial—1
- Legal Classification: Rx

Polivy





Indication

 In combination with bendamustine and a rituximab product for the treatment of relapsed or refractory diffuse large B-cell lymphoma after at least 2 prior therapies

Dosage & Administration

- Pre-medicate with antihistamine and antipyretic ≥30–60mins prior to dosing
- Give by IV infusion
- Initially 1.8mg/kg over 90mins every 21 days for 6 cycles; if tolerated, may give subsequent doses over 30mins
- Dose modifications for adverse reactions: see full labeling

Considerations for Special Populations

- Pregnancy: Embryo-fetal toxicity; exclude status prior to initiation
- Nursing mothers: Not recommended (during and for ≥2 months after last dose)
- Pediatric: Not established
- Elderly: Number of patients aged 65 years and older was not sufficient to determine whether they respond differently
- Hepatic impairment: Avoid administration in patients with moderate to severe impairment

Warnings/Precautions

- Monitor for peripheral neuropathy; interrupt, reduce dose, or discontinue based on severity if occurs
- Monitor CBCs during treatment; interrupt, reduce dose, or discontinue if cytopenias occur; consider granulocyte colony stimulating factor prophylaxis
- Monitor closely for tumor lysis syndrome, serious/fatal infections (eg, sepsis, pneumonia, herpes, CMV); give prophylaxis for Pneumocystis jiroveci pneumonia and herpes virus

Warnings/Precautions

- Monitor closely for infusion-related reactions; interrupt and treat if occurs; permanently discontinue based on severity
- Monitor for progressive multifocal leukoencephalopathy (PML); withhold if suspected and permanently discontinue if confirmed
- Risk of hepatotoxicity; monitor LFTs
- Advise patients on use of effective contraception during and for ≥3 months (females) and ≥5 months (males w. female partners) after last dose

Interactions

- May be potentiated by strong CYP3A4 inhibitors; monitor for toxicity
- May be antagonized by strong CYP3A4 inducers

Adverse Reactions

- Most common (≥20%): neutropenia, thrombocytopenia, anemia, peripheral neuropathy, fatigue, diarrhea, pyrexia, decreased appetite, and pneumonia
- Also: infusion-related reactions, infection, tumor lysis syndrome, PML, hepatotoxicity

Mechanism of Action

 Polatuzumab vedotin-piiq is a CD79b-directed antibody-drug conjugate consisting of 3 components: 1) the humanized immunoglobulin G1 (IgG1) monoclonal antibody specific for human CD79b; 2) the small molecule anti-mitotic agent MMAE; and 3) a protease-cleavable linker maleimidocaproyl-valine-citrulline-p aminobenzyloxycarbonyl (mc-vc-PAB) that covalently attaches MMAE to the polatuzumab antibody

Mechanism of Action

- The monoclonal antibody binds to CD79b, a Bcell specific surface protein, which is a component of the B-cell receptor
- Upon binding CD79b, polatuzumab vedotin-piiq is internalized, and the linker is cleaved by lysosomal proteases to enable intracellular delivery of MMAE
- MMAE binds to microtubules and kills dividing cells by inhibiting cell division and inducing apoptosis

Clinical Studies

- The efficacy of Polivy was evaluated in an openlabel trial that included 80 patients with relapsed or refractory DLBCL
- Patients were randomized to receive either Polivy in combination with bendamustine and a rituximab product (BR; n=40) or BR alone (n=40) for six 21day cycles
- Efficacy was based on complete response (CR) rate at the end of treatment and duration of response (DoR), as determined by an independent review committee

Clinical Studies

- Complete response rate: 40% for Polivy plus BR vs 18% for BR alone (difference in CR rates: 22%)
- Of the 25 patients who achieved a partial or complete response to **Polivy plus BR**, 16 (64%) had a DoR of at least 6 months and 12 (48%) had a DoR of at least 12 months
- In the BR arm, of the 10 patients who achieved a partial or complete response, 3 (30%) had a DoR of at least 6 months, and 2 (20%) had a DoR of at least 12 months

New Product Monograph

For more information view the product monograph available at:

https://www.empr.com/drug/polivy/