FDA Approves Xpovio for Diffuse Large B-Cell Lymphoma

The SADAL study showed a 29% response rate for treatment-experienced people with DLBCL.

June 24, 2020 By Food and Drug Administration (FDA)

FDA approves selinexor for relapsed/refractory diffuse large B-cell lymphoma

On June 22, 2020, the Food and Drug Administration granted accelerated approval to selinexor (XPOVIO, Karyopharm Therapeutics) for adult patients with relapsed or refractory diffuse large B-cell lymphoma (DLBCL), not otherwise specified, including DLBCL arising from follicular lymphoma, after at least 2 lines of systemic therapy.

Approval was based on SADAL (KCP-330-009; NCT02227251), a multicenter, single-arm, open-label trial in patients with DLBCL after 2 to 5 systemic regimens. Patients received selinexor 60 mg orally on days 1 and 3 of each week.

Efficacy was based on overall response rate (ORR) and response duration, as assessed by an independent review committee using Lugano 2014 criteria. In 134 patients, the ORR was 29% (95% CI: 22, 38), with complete response in 13%. Of the 39 patients who achieved a partial or complete response, 38% had response durations of at least 6 months and 15% had response durations of at least 12 months.

The most common adverse reactions (incidence ≥20%) in patients with DLBCL, excluding laboratory abnormalities, were fatigue, nausea, diarrhea, appetite decrease, weight decrease, constipation, vomiting, and pyrexia. Grade 3-4 laboratory abnormalities in ≥15% were thrombocytopenia, lymphopenia, neutropenia, anemia, and hyponatremia. Serious adverse reactions occurred in 46% of patients, most often from infection. Thrombocytopenia was the leading cause of dose modifications. Gastrointestinal toxicity developed in 80% of patients and any grade hyponatremia developed in 61%. Central neurological adverse reactions occurred in 25% of patients, including dizziness and mental status changes.

The prescribing information provides warnings and precautions for thrombocytopenia, neutropenia, gastrointestinal toxicity, hyponatremia, serious infection, neurological toxicity, and embryo-fetal toxicity.

The recommended selinexor dosage for patients with DLBCL is 60 mg taken orally on days 1 and 3 of each week with antiemetic prophylaxis.

View full prescribing information for XPOVIO.

This indication was approved under accelerated approval based on response rate. Continued approval for these indications may be contingent upon verification and description of clinical benefit in confirmatory trials.

This application was granted priority review and Fast Track designation. A description of FDA expedited programs is in the Guidance for Industry: Expedited Programs for Serious Conditions-Drugs and Biologics.

Healthcare professionals should report all serious adverse events suspected to be associated with the use of any medicine and device to FDA's MedWatch Reporting System or by calling 1-800-FDA-1088.

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