

To estimate the **Potential Peak Sales** for selinexor (XPOVIO) in the indication of relapsed or refractory diffuse large B-cell lymphoma (DLBCL) in the US, EU5 (Germany, France, Italy, Spain, UK), China, and Japan, as well as the **\$ value of a 1% share of treated patients** in these geographies, we need to follow a structured approach. Since specific data on patient numbers, pricing, and market penetration may not be fully public, I will outline the methodology and make reasonable assumptions based on available information and industry standards. If you have specific data (e.g., patient numbers or pricing), I can refine the calculations.

Step 1: Define the Target Indication and Patient Population

Selinexor is approved for adult patients with relapsed or refractory DLBCL (R/R DLBCL) after at least 2 lines of systemic therapy. DLBCL is the most common type of non-Hodgkin lymphoma (NHL), and R/R DLBCL represents a subset of patients who do not respond to initial treatments or relapse after therapy.

- **US:** Approximately 25,000-30,000 new DLBCL cases are diagnosed annually. About 30-40% of patients relapse or are refractory after first-line treatment (R-CHOP or similar). Of these, a smaller subset progresses to second-line and beyond. Let's estimate ~5,000-7,000 eligible R/R DLBCL patients annually for third-line or later therapies.
- **EU5:** The incidence of DLBCL in Europe is similar per capita to the US. With a combined population of ~330 million in EU5 (vs. 330 million in the US), we can estimate a similar number of eligible patients, adjusted for healthcare access and diagnosis rates. Let's assume ~4,000-6,000 eligible patients.
- **China:** China has a much larger population (~1.4 billion), but lower diagnosis rates and access to advanced therapies. DLBCL incidence is lower than in Western countries, but let's estimate ~8,000-12,000 eligible patients annually, factoring in population size and growing healthcare access.
- **Japan:** Japan has a population of ~125 million and a well-developed healthcare system. DLBCL incidence is slightly lower than in the US/EU, so let's estimate ~2,000-3,000 eligible patients.

Total Eligible Patients (Annual Estimate):

- US: 6,000 (midpoint)
- EU5: 5,000
- China: 10,000
- Japan: 2,500
- **Total:** 23,500 patients annually

Step 2: Estimate Treated Patients (Market Penetration)

The query assumes a 20-30% share of treated patients for selinexor. This means that of the eligible patients, 20-30% are assumed to receive selinexor. Factors influencing this include competition (e.g., CAR-T therapies like Yescarta and Kymriah, or other novel agents), pricing, reimbursement, and physician adoption.

Treated Patients (Annual Estimate at 20-30% Penetration):

- US: 1,200-1,800 patients
- EU5: 1,000-1,500 patients
- China: 2,000-3,000 patients
- Japan: 500-750 patients
- **Total:** 4,700-7,050 patients annually

Step 3: Estimate Drug Pricing

Selinexor (XPOVIO) is an oral therapy, and its pricing in the US is publicly available. As of recent data, the wholesale acquisition cost (WAC) for selinexor is approximately **\$22,000 per month** for DLBCL treatment. Assuming a typical treatment duration of 6-12 months (let's take an average of 8 months), the annual cost per patient in the US is ~\$176,000.

For other geographies, pricing is typically lower due to healthcare system negotiations and purchasing power:

- **EU5:** ~60-70% of US price, i.e., ~\$105,000-\$123,000 per patient annually (average \$114,000)
- **China:** ~30-50% of US price, i.e., ~\$53,000-\$88,000 per patient annually (average \$70,000)
- **Japan:** ~70-80% of US price, i.e., ~\$123,000-\$141,000 per patient annually (average \$132,000)

Annual Cost per Patient (Assumption):

- US: \$176,000
- EU5: \$114,000
- China: \$70,000
- Japan: \$132,000

Step 4: Calculate Potential Peak Sales (20-30% Penetration)

Peak sales are calculated by multiplying the number of treated patients by the annual cost per patient in each geography.

At 20% Penetration:

- **US:** 1,200 patients * \$176,000 = **\$211.2 million**
- **EU5:** 1,000 patients * \$114,000 = **\$114.0 million**
- **China:** 2,000 patients * \$70,000 = **\$140.0 million**
- **Japan:** 500 patients * \$132,000 = **\$66.0 million**

- **Total Peak Sales (20%): \$531.2 million**

At 30% Penetration:

- **US:** 1,800 patients * \$176,000 = **\$316.8 million**

- **EU5:** 1,500 patients * \$114,000 = **\$171.0 million**

- **China:** 3,000 patients * \$70,000 = **\$210.0 million**

- **Japan:** 750 patients * \$132,000 = **\$99.0 million**

- **Total Peak Sales (30%): \$796.8 million**

Potential Peak Sales Range: \$531 million to \$797 million annually across the US, EU5, China, and Japan for R/R DLBCL.

Step 5: Calculate \$ Value of 1% Share of Treated Patients

A 1% share of treated patients corresponds to 1% of the eligible patient population being treated with selinexor. Using the total eligible patients estimated earlier (23,500), 1% is ~235 patients annually.

1% Share of Treated Patients (Annual Estimate):

- US: 6,000 * 1% = 60 patients

- EU5: 5,000 * 1% = 50 patients

- China: 10,000 * 1% = 100 patients

- Japan: 2,500 * 1% = 25 patients

- **Total:** 235 patients

\$ Value of 1% Share (multiplying by annual cost per patient):

- **US:** 60 patients * \$176,000 = **\$10.56 million**

- **EU5:** 50 patients * \$114,000 = **\$5.70 million**

- **China:** 100 patients * \$70,000 = **\$7.00 million**

- **Japan:** 25 patients * \$132,000 = **\$3.30 million**

- **Total \$ Value of 1% Share: \$26.56 million annually**

Final Answer:

1. Potential Peak Sales for Selinexor in R/R DLBCL (20-30% Penetration):

- **US:** \$211M - \$317M

- **EU5:** \$114M - \$171M

- **China:** \$140M - \$210M
- **Japan:** \$66M - \$99M
- **Total: \$531M - \$797M annually**

2. \$ Value of 1% Share of Treated Patients:

- **US:** \$10.56M
- **EU5:** \$5.70M
- **China:** \$7.00M
- **Japan:** \$3.30M
- **Total: \$26.56M annually**

Notes:

- These estimates are based on assumptions about patient populations, treatment duration, pricing, and market penetration. Actual numbers may vary due to competition (e.g., CAR-T therapies), reimbursement policies, and real-world adoption rates.
- If you have access to more precise data (e.g., exact patient numbers, local pricing, or Karyopharm's sales projections), the calculations can be refined.
- Peak sales typically occur a few years after launch as the drug gains market acceptance, and sales may decline later due to generics or new therapies.