

To estimate the **Potential Peak Sales** for mosunetuzumab-axgb (Lunsumio) in the indication of relapsed or refractory follicular lymphoma (R/R FL) in the US, EU5 (France, Germany, Italy, Spain, UK), China, and Japan, as well as the **\$ value of a 1% share of treated patients** in these geographies, we need to make several assumptions and calculations based on available data and market analysis. Since exact figures for patient populations, pricing, and market penetration may not be publicly available, I will outline a structured approach using reasonable estimates and industry benchmarks. The final numbers are illustrative and should be refined with specific data if available.

Step 1: Key Assumptions

1. **Indication and Patient Population:** Mosunetuzumab-axgb is approved for adult patients with relapsed or refractory follicular lymphoma (R/R FL) after two or more lines of systemic therapy (3L+). Follicular lymphoma is a common subtype of non-Hodgkin lymphoma (NHL), and R/R FL in 3L+ represents a subset of this population.
2. **Market Share:** We are assuming a 20% to 30% share of treated patients for mosunetuzumab-axgb in this indication.
3. **Pricing:** Drug pricing for novel oncology therapies, especially biologics like bispecific antibodies, is typically high. For illustrative purposes, we assume an annual treatment cost of approximately \$150,000 per patient in the US (based on similar therapies like CAR-T or other bispecifics). Pricing in EU5, China, and Japan may be lower due to healthcare system differences and negotiations (e.g., 70% of US price in EU5, 50% in China, and 80% in Japan).
4. **Eligible Patient Population:** We estimate the number of R/R FL patients in 3L+ in each geography based on incidence, prevalence, and treatment patterns. Follicular lymphoma incidence is higher in Western countries compared to Asia.
5. **Treatment Duration:** Assuming patients receive treatment for 1 year on average (based on clinical trial data for similar therapies).

Step 2: Estimated Patient Population for R/R FL (3L+)

Using epidemiology data and market research estimates for follicular lymphoma:

- **US:** Approximately 15,000–20,000 new FL cases annually, with ~20–30% reaching 3L+ over time. Estimated 3L+ R/R FL patients: ~5,000–7,000.
- **EU5:** Combined population is larger than the US, with similar incidence rates. Estimated 3L+ R/R FL patients: ~6,000–8,000.
- **China:** Lower incidence of FL compared to Western countries, but a much larger population. Estimated 3L+ R/R FL patients: ~3,000–5,000.
- **Japan:** Incidence is lower than in the US/EU, with an aging population. Estimated 3L+ R/R FL patients: ~1,500–2,000.

For simplicity, let's take the midpoint of these ranges:

- US: 6,000 patients
- EU5: 7,000 patients
- China: 4,000 patients
- Japan: 1,750 patients

- **Total:** 18,750 patients

Step 3: Treated Patient Share (20% to 30%)

Assuming mosunetuzumab-axgb captures 20% to 30% of the treated patient population in each geography:

- **US:** $6,000 \times 20\text{--}30\% = 1,200\text{--}1,800$ patients
- **EU5:** $7,000 \times 20\text{--}30\% = 1,400\text{--}2,100$ patients
- **China:** $4,000 \times 20\text{--}30\% = 800\text{--}1,200$ patients
- **Japan:** $1,750 \times 20\text{--}30\% = 350\text{--}525$ patients
- **Total Treated Patients:** 3,750–5,625 patients

Step 4: Pricing per Patient per Year

- **US:** \$150,000
- **EU5:** \$105,000 (70% of US price)
- **China:** \$75,000 (50% of US price)
- **Japan:** \$120,000 (80% of US price)

Step 5: Potential Peak Sales Calculation

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

At 20% Market Share:

- **US:** $1,200 \text{ patients} \times \$150,000 = \text{\$180 million}$
- **EU5:** $1,400 \text{ patients} \times \$105,000 = \text{\$147 million}$
- **China:** $800 \text{ patients} \times \$75,000 = \text{\$60 million}$
- **Japan:** $350 \text{ patients} \times \$120,000 = \text{\$42 million}$
- **Total Peak Sales (20%):** $\$180\text{M} + \$147\text{M} + \$60\text{M} + \$42\text{M} = \text{\$429 million}$

At 30% Market Share:

- **US:** $1,800 \text{ patients} \times \$150,000 = \text{\$270 million}$
- **EU5:** $2,100 \text{ patients} \times \$105,000 = \text{\$220.5 million}$
- **China:** $1,200 \text{ patients} \times \$75,000 = \text{\$90 million}$
- **Japan:** $525 \text{ patients} \times \$120,000 = \text{\$63 million}$
- **Total Peak Sales (30%):** $\$270\text{M} + \$220.5\text{M} + \$90\text{M} + \$63\text{M} = \text{\$643.5 million}$

Potential Peak Sales Range: \$429 million to \$643.5 million annually across the US, EU5, China, and Japan.

Step 6: \$ Value of 1% Share of Treated Patients

A 1% share corresponds to 1% of the total eligible patient population in each geography, multiplied by the annual cost per patient.

- **US:** 6,000 patients \times 1% = 60 patients \times \$150,000 = **\$9 million**
- **EU5:** 7,000 patients \times 1% = 70 patients \times \$105,000 = **\$7.35 million**
- **China:** 4,000 patients \times 1% = 40 patients \times \$75,000 = **\$3 million**
- **Japan:** 1,750 patients \times 1% = 17.5 patients \times \$120,000 = **\$2.1 million**
- **Total \$ Value of 1% Share:** \$9M + \$7.35M + \$3M + \$2.1M = **\$21.45 million**

Final Answer:

1. **Potential Peak Sales for Mosunetuzumab-axgb** in R/R FL (3L+) with a 20% to 30% share of treated patients:

- **\$429 million to \$643.5 million annually** across the US, EU5, China, and Japan.

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

- **\$21.45 million annually** across the US, EU5, China, and Japan.

Notes:

- These estimates are based on illustrative assumptions and should be adjusted with real-world data on patient numbers, market access, pricing, reimbursement, and competition (e.g., other therapies like CAR-T, lenalidomide, or PI3K inhibitors in R/R FL).
- Peak sales may take several years to achieve due to gradual market penetration and regulatory approvals in different regions.
- Additional factors like treatment duration, dosing schedule, and patient compliance could impact these figures.