To estimate the **Potential Peak Sales** for glofitamab-gxbm (Columvi) in the indication of relapsed or refractory diffuse large B-cell lymphoma (DLBCL) or large B-cell lymphoma (LBCL) arising from follicular lymphoma after two or more lines of systemic therapy, and to calculate the **$ value of a 1% share of treated patients** in the US, EU5 (Germany, France, Italy, Spain, UK), China, and Japan, we need to follow a structured approach based on available data and reasonable assumptions. Since specific data (e.g., exact patient numbers, pricing, or market penetration) may not be publicly available, I will outline the methodology and use realistic estimates based on industry trends, epidemiology, and market dynamics for such therapies.

Step 1: Define Key Parameters

1. **Target Patient Population**: Identify the number of eligible patients for glofitamab-gxbm in the specified indication (relapsed/refractory DLBCL or LBCL after ≥2 lines of therapy).

2. **Treatment Rate**: Estimate the percentage of eligible patients who receive treatment.

3. **Market Share**: Use the given assumption of 20% to 30% market share of treated patients for glofitamab-gxbm.

4. **Pricing**: Estimate the annual cost of therapy per patient for glofitamab-gxbm, a bispecific antibody therapy.

5. **Peak Sales**: Calculate peak sales based on the above parameters.

6. **1% Share Value**: Calculate the revenue associated with 1% of treated patients.

Step 2: Epidemiology of DLBCL/LBCL (Relapsed/Refractory)

DLBCL is the most common type of non-Hodgkin lymphoma (NHL), and a subset of patients relapse or become refractory after initial therapies. The target population here is patients who have failed ≥2 lines of therapy.

- **US**: Approximately 80,000 new cases of NHL annually, with DLBCL accounting for ~30-40% (24,000-32,000 cases). Of these, ~30-40% relapse or are refractory after first-line therapy, and a smaller subset (~10-15% of total DLBCL cases) fail ≥2 lines of therapy. Estimated eligible patients: ~3,000-5,000.

- **EU5**: Incidence rates are similar to the US, with a combined population of ~450 million (vs. 330 million in the US). Scaling by population, eligible patients: ~4,000-7,000.

- **China**: With a population of ~1.4 billion, NHL incidence is lower per capita than in the US/EU, but total cases are significant. Estimated DLBCL cases: ~50,000-60,000 annually, with ~5,000-8,000 eligible for ≥3rd-line therapy.

- **Japan**: Population ~125 million, with a high standard of healthcare. Estimated DLBCL cases: ~10,000-12,000 annually, with ~1,000-1,500 eligible for ≥3rd-line therapy.

Total Eligible Patients (Approximate):

- US: 4,000

- EU5: 5,500

- China: 6,500

- Japan: 1,250

- **Total across geographies**: ~17,250 patients

Step 3: Treatment Rate

Not all eligible patients receive treatment due to factors like comorbidities, access to healthcare, or palliative care preferences. A reasonable treatment rate for advanced therapies like glofitamab-gxbm in relapsed/refractory settings is ~60-80%.

- **Assumed Treatment Rate**: 70%

- **Treated Patients**:

- US: 4,000 × 0.7 = 2,800

- EU5: 5,500 × 0.7 = 3,850

- China: 6,500 × 0.7 = 4,550

- Japan: 1,250 × 0.7 = 875

- **Total Treated Patients**: ~12,075

Step 4: Market Share for Glofitamab-gxbm

Assuming a market share of 20% to 30% among treated patients:

- **20% Share**: 12,075 × 0.2 = ~2,415 patients

- **30% Share**: 12,075 × 0.3 = ~3,623 patients

Step 5: Pricing of Glofitamab-gxbm

Glofitamab-gxbm is a bispecific antibody therapy, and similar therapies (e.g., CAR-T therapies or other targeted immunotherapies for DLBCL) have high annual costs. For instance:

- CAR-T therapies like axicabtagene ciloleucel (Yescarta) cost ~$373,000 per treatment in the US.

- Bispecific antibodies may have recurring dosing, so annual costs could range from $100,000 to $200,000 per patient in the US.

Assumed Annual Cost per Patient (accounting for differences in pricing across geographies):

- US: $150,000

- EU5: $120,000 (lower due to pricing negotiations and healthcare systems)

- China: $80,000 (lower due to market access and pricing constraints)

- Japan: $130,000 (similar to EU, slightly higher due to advanced healthcare system)

Step 6: Calculate Potential Peak Sales

Peak sales are calculated as: (Number of treated patients with glofitamab-gxbm) × (Annual cost per patient).

At 20% Market Share:

- **US**: 2,800 × 0.2 × $150,000 = $84 million

- **EU5**: 3,850 × 0.2 × $120,000 = $92.4 million

- **China**: 4,550 × 0.2 × $80,000 = $72.8 million

- **Japan**: 875 × 0.2 × $130,000 = $22.75 million

- **Total Peak Sales (20% Share)**: $84M + $92.4M + $72.8M + $22.75M = **$271.95 million**

At 30% Market Share:

- **US**: 2,800 × 0.3 × $150,000 = $126 million

- **EU5**: 3,850 × 0.3 × $120,000 = $138.6 million

- **China**: 4,550 × 0.3 × $80,000 = $109.2 million

- **Japan**: 875 × 0.3 × $130,000 = $34.125 million

- **Total Peak Sales (30% Share)**: $126M + $138.6M + $109.2M + $34.125M = **$407.925 million**

Potential Peak Sales Range: **$272 million to $408 million** annually across the US, EU5, China, and Japan.

Step 7: Calculate $ Value of 1% Share of Treated Patients

A 1% share of treated patients corresponds to 1% of the total treated patient population (12,075 patients) = ~121 patients.

- **US**: 2,800 × 0.01 × $150,000 = $4.2 million

- **EU5**: 3,850 × 0.01 × $120,000 = $4.62 million

- **China**: 4,550 × 0.01 × $80,000 = $3.64 million

- **Japan**: 875 × 0.01 × $130,000 = $1.1375 million

- **Total $ Value of 1% Share**: $4.2M + $4.62M + $3.64M + $1.1375M = **$13.5975 million**

Final Answer:

1. **Potential Peak Sales for Glofitamab-gxbm** (20%-30% market share) in the US, EU5, China, and Japan for relapsed/refractory DLBCL/LBCL after ≥2 lines of therapy:

- **Range**: **$272 million to $408 million annually**

2. **$ Value of 1% Share of Treated Patients** across these geographies:

- **Total**: **$13.6 million annually**

Notes:

- These estimates are based on assumptions about patient numbers, treatment rates, market share, and pricing. Real-world data may vary due to competition (e.g., CAR-T therapies, other bispecific antibodies), market access challenges, reimbursement policies, and regional differences.

- Pricing in China may be significantly lower due to government negotiations and local production, which could impact total sales.

- Peak sales may take several years to achieve post-launch, depending on adoption rates and regulatory approvals in each region.