To estimate the **Potential Peak Sales** for durvalumab (Imfinzi) in the indication of muscle-invasive bladder cancer (MIBC) in the US, EU5 (France, Germany, Italy, Spain, UK), China, and Japan, as well as the **$ value of a 1% share of treated patients**, we need to follow a structured approach. Since exact patient numbers, pricing, and penetration rates are not provided, I will make reasonable assumptions based on publicly available data, epidemiology, and market trends for oncology drugs. Let's break this down step by step.

Step 1: Key Assumptions

1. **Indication**: Durvalumab is approved for MIBC as neoadjuvant treatment with gemcitabine and cisplatin, followed by adjuvant treatment post-cystectomy.

2. **Market Share**: We are assuming a 20% to 30% share of treated patients for durvalumab in this indication.

3. **Geographies**: US, EU5 (combined), China, and Japan.

4. **Epidemiology**: MIBC accounts for approximately 25-30% of all bladder cancer cases. Incidence rates vary by region.

5. **Pricing**: Durvalumab's price varies by region. For simplicity, we will use approximate annual treatment costs based on typical pricing for immune checkpoint inhibitors (e.g., PD-L1 inhibitors).

6. **Treatment Duration**: Assuming a treatment duration of 1 year (neoadjuvant + adjuvant phases combined) for simplicity.

7. **Penetration Rate**: Not all eligible patients will receive treatment due to factors like access, cost, or clinical ineligibility.

8. **Peak Sales**: Peak sales are typically achieved 5-7 years after launch, assuming no major competition or patent cliffs during that time.

Incidence of MIBC

- **US**: Bladder cancer incidence is ~81,000 cases/year (American Cancer Society, 2023). MIBC accounts for ~25-30%, so ~20,000-24,000 cases/year.

- **EU5**: Bladder cancer incidence is ~120,000 cases/year (combined for EU5). MIBC is ~30,000-36,000 cases/year.

- **China**: Bladder cancer incidence is ~80,000 cases/year (due to large population and rising cancer rates). MIBC is ~20,000-24,000 cases/year.

- **Japan**: Bladder cancer incidence is ~20,000 cases/year. MIBC is ~5,000-6,000 cases/year.

Total MIBC cases across geographies: ~75,000-90,000 cases/year.

Eligible Patients

Not all MIBC patients are eligible for durvalumab due to comorbidities, advanced age, or lack of access to treatment. Assuming 60-70% eligibility:

- **US**: ~12,000-16,800 eligible patients.

- **EU5**: ~18,000-25,200 eligible patients.

- **China**: ~12,000-16,800 eligible patients.

- **Japan**: ~3,000-4,200 eligible patients.

- Total: ~45,000-63,000 eligible patients/year.

Pricing of Durvalumab

- **US**: ~$150,000-$180,000 per patient/year (based on typical pricing for PD-L1 inhibitors like Imfinzi).

- **EU5**: ~$80,000-$100,000 per patient/year (lower due to price negotiations and healthcare systems).

- **China**: ~$50,000-$70,000 per patient/year (lower pricing due to market access programs and local competition).

- **Japan**: ~$100,000-$120,000 per patient/year (similar to EU5 but with some variation).

Step 2: Potential Peak Sales Calculation

Assuming durvalumab captures **20%-30% market share** of eligible treated patients, we calculate peak sales for each region.

US
- Eligible patients: 12,000-16,800

- Treated patients (20%-30%): 2,400-5,040

- Price per patient: $150,000-$180,000

- Peak Sales: (2,400 * $150,000) to (5,040 * $180,000) = **$360M to $907M**

EU5
- Eligible patients: 18,000-25,200

- Treated patients (20%-30%): 3,600-7,560

- Price per patient: $80,000-$100,000

- Peak Sales: (3,600 * $80,000) to (7,560 * $100,000) = **$288M to $756M**

China
- Eligible patients: 12,000-16,800

- Treated patients (20%-30%): 2,400-5,040

- Price per patient: $50,000-$70,000

- Peak Sales: (2,400 * $50,000) to (5,040 * $70,000) = **$120M to $353M**

Japan
- Eligible patients: 3,000-4,200

- Treated patients (20%-30%): 600-1,260

- Price per patient: $100,000-$120,000

- Peak Sales: (600 * $100,000) to (1,260 * $120,000) = **$60M to $151M**

Total Peak Sales Across Geographies

- Low end (20% share, lower price): $360M (US) + $288M (EU5) + $120M (China) + $60M (Japan) = **$828M**

- High end (30% share, higher price): $907M (US) + $756M (EU5) + $353M (China) + $151M (Japan) = **$2,167M (~$2.17B)**

Potential Peak Sales Range: **$828M to $2.17B annually**

Step 3: $ Value of 1% Share of Treated Patients

To calculate the value of a 1% share, we divide the total number of eligible patients by 100 and multiply by the price per patient.

US
- Eligible patients: 12,000-16,800

- 1% of patients: 120-168

- Price per patient: $150,000-$180,000

- Value of 1% share: (120 * $150,000) to (168 * $180,000) = **$18M to $30.2M**

EU5
- Eligible patients: 18,000-25,200

- 1% of patients: 180-252

- Price per patient: $80,000-$100,000

- Value of 1% share: (180 * $80,000) to (252 * $100,000) = **$14.4M to $25.2M**

China
- Eligible patients: 12,000-16,800

- 1% of patients: 120-168

- Price per patient: $50,000-$70,000

- Value of 1% share: (120 * $50,000) to (168 * $70,000) = **$6M to $11.8M**

Japan
- Eligible patients: 3,000-4,200

- 1% of patients: 30-42

- Price per patient: $100,000-$120,000

- Value of 1% share: (30 * $100,000) to (42 * $120,000) = **$3M to $5M**

Total Value of 1% Share Across Geographies

- Low end: $18M (US) + $14.4M (EU5) + $6M (China) + $3M (Japan) = **$41.4M**

- High end: $30.2M (US) + $25.2M (EU5) + $11.8M (China) + $5M (Japan) = **$72.2M**

$ Value of 1% Share of Treated Patients: **$41.4M to $72.2M**

Final Answer

1. **Potential Peak Sales for Durvalumab in MIBC (20%-30% market share)**:

- **US, EU5, China, Japan combined**: **$828M to $2.17B annually**

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

- **US, EU5, China, Japan combined**: **$41.4M to $72.2M**

Note: These estimates are based on assumptions regarding patient numbers, pricing, and market penetration. Real-world figures may vary due to competition (e.g., other PD-1/PD-L1 inhibitors), reimbursement policies, and changes in treatment paradigms. For more accurate data, primary market research or company-specific guidance from AstraZeneca would be required.