

To provide a detailed analysis of the Potential Peak Sales for the drug “nan” in the specified indication across 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 follow a structured approach. Since the drug “nan” and the specific indication are not detailed in the query, I will outline a general methodology and provide illustrative numbers based on typical market dynamics for a pharmaceutical product. Additionally, the context provided about fluorouracil injection products seems unrelated to “nan,” so I will focus on the query as posed.

Step 1: Define Key Assumptions

1. **Indication and Patient Population:** Without specific details on “nan” or the indication, let’s assume it targets a common condition (e.g., oncology, like breast cancer, or a chronic disease like diabetes) with a significant patient pool.
2. **Treated Patient Share:** The query assumes a 20% to 30% share of treated patients for “nan.” We will calculate Peak Sales based on this range.
3. **Total Addressable Market (TAM):** Estimate the total number of treated patients in each geography for the indication.
4. **Pricing:** Assume an annual treatment cost per patient, which varies by geography due to differences in healthcare systems and pricing regulations.
5. **Peak Sales Timeline:** Assume peak sales are achieved 5–7 years post-launch when market penetration stabilizes.
6. **Market Growth and Penetration:** Account for epidemiology trends, diagnosis rates, and treatment adoption.

For illustrative purposes, let’s assume “nan” is an oncology drug targeting a cancer indication with a treated patient population as follows (hypothetical numbers based on typical cancer indications like non-small cell lung cancer or colorectal cancer):

- **US:** 200,000 treated patients annually
- **EU5:** 250,000 treated patients annually (combined)
- **China:** 500,000 treated patients annually (larger population, higher incidence)
- **Japan:** 100,000 treated patients annually

Annual treatment cost per patient (hypothetical, reflecting oncology drug pricing):

- **US:** \$100,000
- **EU5:** \$60,000 (lower due to price controls)
- **China:** \$20,000 (emerging market pricing)
- **Japan:** \$80,000 (high pricing similar to the US but slightly lower)

Step 2: Calculate Potential Peak Sales

Peak Sales = (Number of Treated Patients) × (Market Share) × (Annual Cost per Patient)

US

- Treated Patients: 200,000
- Market Share: 20% to 30%
- At 20%: $200,000 \times 0.2 = 40,000$ patients
- At 30%: $200,000 \times 0.3 = 60,000$ patients
- Annual Cost: \$100,000
- Peak Sales:
- At 20%: $40,000 \times \$100,000 = \textbf{\$4.0 billion}$
- At 30%: $60,000 \times \$100,000 = \textbf{\$6.0 billion}$

EU5

- Treated Patients: 250,000
- Market Share: 20% to 30%
- At 20%: $250,000 \times 0.2 = 50,000$ patients
- At 30%: $250,000 \times 0.3 = 75,000$ patients
- Annual Cost: \$60,000
- Peak Sales:
- At 20%: $50,000 \times \$60,000 = \textbf{\$3.0 billion}$
- At 30%: $75,000 \times \$60,000 = \textbf{\$4.5 billion}$

China

- Treated Patients: 500,000
- Market Share: 20% to 30%
- At 20%: $500,000 \times 0.2 = 100,000$ patients
- At 30%: $500,000 \times 0.3 = 150,000$ patients
- Annual Cost: \$20,000
- Peak Sales:
- At 20%: $100,000 \times \$20,000 = \textbf{\$2.0 billion}$
- At 30%: $150,000 \times \$20,000 = \textbf{\$3.0 billion}$

Japan

- Treated Patients: 100,000
- Market Share: 20% to 30%
- At 20%: $100,000 \times 0.2 = 20,000$ patients
- At 30%: $100,000 \times 0.3 = 30,000$ patients

- Annual Cost: \$80,000
- Peak Sales:
- At 20%: $20,000 \times \$80,000 = \1.6 billion
- At 30%: $30,000 \times \$80,000 = \2.4 billion

Total Peak Sales Across Geographies

- At 20% Market Share: \$4.0B (US) + \$3.0B (EU5) + \$2.0B (China) + \$1.6B (Japan) = **\$10.6 billion**
- At 30% Market Share: \$6.0B (US) + \$4.5B (EU5) + \$3.0B (China) + \$2.4B (Japan) = **\$15.9 billion**

Thus, the Potential Peak Sales for “nan” in this indication across the specified geographies range from **\$10.6 billion to \$15.9 billion** annually, assuming a 20% to 30% share of treated patients.

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

1% share of treated patients corresponds to 1% of the total treated patient population in each geography multiplied by the annual treatment cost.

US

- Treated Patients: 200,000
- 1% Share: $200,000 \times 0.01 = 2,000 \text{ patients}$
- Annual Cost: \$100,000
- Value of 1% Share: $2,000 \times \$100,000 = \200 million

EU5

- Treated Patients: 250,000
- 1% Share: $250,000 \times 0.01 = 2,500 \text{ patients}$
- Annual Cost: \$60,000
- Value of 1% Share: $2,500 \times \$60,000 = \150 million

China

- Treated Patients: 500,000
- 1% Share: $500,000 \times 0.01 = 5,000 \text{ patients}$
- Annual Cost: \$20,000
- Value of 1% Share: $5,000 \times \$20,000 = \100 million

Japan

- Treated Patients: 100,000
- 1% Share: $100,000 \times 0.01 = 1,000 \text{ patients}$
- Annual Cost: \$80,000

- Value of 1% Share: $1,000 \times \$80,000 = \text{\$80 million}$

Total Value of 1% Share Across Geographies

- \$200M (US) + \$150M (EU5) + \$100M (China) + \$80M (Japan) = **\$530 million**

Final Answer

1. **Potential Peak Sales for “nan”** in the specified indication (assuming 20% to 30% share of treated patients):

- **US:** \$4.0B to \$6.0B

- **EU5:** \$3.0B to \$4.5B

- **China:** \$2.0B to \$3.0B

- **Japan:** \$1.6B to \$2.4B

- **Total: \$10.6 billion to \$15.9 billion** annually

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

- **US:** \$200 million

- **EU5:** \$150 million

- **China:** \$100 million

- **Japan:** \$80 million

- **Total: \$530 million**

Caveats

- These calculations are based on hypothetical patient numbers and pricing assumptions. Actual figures would depend on the specific indication, drug type (e.g., small molecule, biologic), competition, reimbursement policies, and market access challenges.

- Epidemiology data, diagnosis rates, and treatment rates for the specific indication would need to be sourced for accurate estimates.

- Pricing can vary widely based on negotiations with payers and government policies, especially in markets like China and the EU5.

If you have specific details about “nan” (e.g., indication, target patient population, or pricing), I can refine the analysis accordingly.