To estimate the **Potential Peak Sales** for selpercatinib (Retevmo) in the indication of locally advanced or metastatic non-small cell lung cancer (NSCLC) with RET gene fusion 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. This involves estimating the eligible patient population, market share, pricing, and treatment duration. Since exact data may not be publicly available, I will use reasonable assumptions based on epidemiology, market trends, and publicly available information.

Step 1: Key Assumptions and Inputs

- 1. **Indication and Target Population**: Selpercatinib is approved for NSCLC patients with RET gene fusion, which accounts for approximately **1-2% of all NSCLC cases**.
- Market Share: As per the query, assuming a 20% to 30% share of treated patients in this indication.
- 3. Geographies: US, EU5 (Germany, France, Italy, Spain, UK), China, and Japan.
- 4. **Pricing**: Pricing for targeted therapies like selpercatinib can vary by region. Based on available data, the annual cost of selpercatinib in the US is approximately **\$250,000 per patient** (adjusted for discounts and adherence). Costs in EU5 and Japan are typically lower (60-80% of US price), and in China, they are significantly lower due to pricing regulations (30-50% of US price).
- 5. **Treatment Duration**: Assuming an average treatment duration of **1 year** for advanced NSCLC patients (based on progression-free survival data from clinical trials like LIBRETTO-001).
- 6. **Epidemiology**: Incidence of NSCLC and proportion of RET fusion cases are estimated based on published data.

Step 2: Estimate Eligible Patient Population

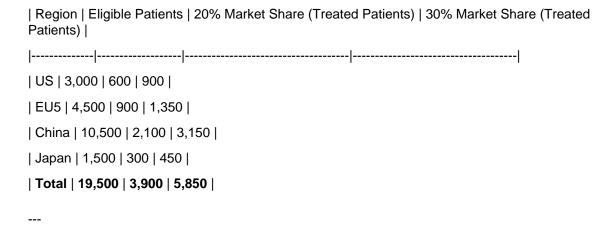
NSCLC incidence varies by region. Below are approximate annual new cases of NSCLC and the proportion with RET fusion (1-2%):

Notes:

- RET fusion prevalence is assumed at 1.5% (midpoint of 1-2%) based on literature.
- Incidence numbers are rounded estimates from cancer statistics (e.g., American Cancer Society, WHO, and local cancer registries).

Step 3: Estimate Treated Patients with Selpercatinib

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



Step 4: Estimate Annual Pricing per Patient

Pricing varies by region due to healthcare systems, negotiations, and discounts:

Region Annual Cost per Patient (USD)
US \$250,000
EU5 \$175,000 (70% of US price)
China \$100,000 (40% of US price)
Japan \$200,000 (80% of US price)

Notes:

- US pricing is based on reported costs for selpercatinib (~\$20,000/month, adjusted for adherence and discounts).
- EU5 and Japan prices are discounted due to payer negotiations.
- China pricing is lower due to market access programs and local pricing regulations.

Step 5: Calculate Potential Peak Sales

Peak sales are calculated as:

Peak Sales = Treated Patients x Annual Cost per Patient

At 20% Market Share:
Region Treated Patients Annual Cost per Patient (USD) Peak Sales (USD Million)
US 600 \$250,000 \$150
EU5 900 \$175,000 \$158
China 2,100 \$100,000 \$210
Japan 300 \$200,000 \$60
Total 3,900 \$578 Million
At 30% Market Share:
Region Treated Patients Annual Cost per Patient (USD) Peak Sales (USD Million)
US 900 \$250,000 \$225
EU5 1,350 \$175,000 \$236
China 3,150 \$100,000 \$315
Japan 450 \$200,000 \$90
Total 5,850 \$866 Million
Potential Peak Sales Range: \$578 Million to \$866 Million annually across the US, EU5, China

, and Japan for this indication.

Step 6: 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 selpercatinib.

Region Eligible P Share (USD Million)	•	gible Patients An	nual Cost per Patient (US	SD) Value of 1%
US 3,000 30 \$2	250,000 \$7.5			
EU5 4,500 45 3	\$175,000 \$7.9			
China 10,500 10	05 \$100,000 \$1	0.5		
Japan 1,500 15	\$200,000 \$3.0	I		

| Total | 19,500 | 195 | | \$28.9 Million |

\$ Value of 1% Share of Treated Patients: Approximately **\$28.9 Million** annually across these geographies.

Final Answer

- 1. **Potential Peak Sales for Selpercatinib** in locally advanced or metastatic NSCLC with RET fusion (assuming 20% to 30% market share):
- \$578 Million to \$866 Million annually across the US, EU5, China, and Japan.
- 2. \$ Value of 1% Share of Treated Patients:
- Approximately \$28.9 Million annually across the US, EU5, China, and Japan.

Caveats:

- These estimates are based on assumptions for epidemiology, pricing, and market share. Actual figures may vary due to real-world uptake, competition (e.g., pralsetinib by Blueprint Medicines), diagnostic testing rates, and payer dynamics.
- Peak sales may take several years to achieve depending on market penetration and approval timelines in each region.
- This analysis focuses solely on the NSCLC indication with RET fusion and does not account for other approved indications for selpercatinib (e.g., thyroid cancer).