To estimate the **Potential Peak Sales** for cabozantinib (Cabometyx) in the indication of previously treated, unresectable, locally advanced or metastatic, well-differentiated pancreatic neuroendocrine tumors (pNET) and extra-pancreatic neuroendocrine tumors (epNET) 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. Since exact data on patient populations, pricing, and penetration rates are not provided, I will make reasonable assumptions based on publicly available information, market research trends, and typical methodologies used in pharmaceutical market analysis.

Step 1: Define the Target Patient Population

Neuroendocrine tumors (NETs) are rare cancers, with an estimated incidence of approximately 5-7 per 100,000 people annually in the US and similar rates in Europe. pNETs and epNETs represent subsets of NETs. For previously treated, unresectable, locally advanced or metastatic well-differentiated NETs, the eligible patient population is smaller due to the specific stage and prior treatment requirement.

Incidence and Prevalence Estimates:

- **US**: Annual incidence of NETs is ~7 per 100,000. With a population of ~330 million, this translates to ~23,000 new cases per year. Prevalence (existing cases) is higher, estimated at ~170,000 patients due to the indolent nature of NETs. For previously treated, advanced pNET and epNET, we can estimate ~10-15% of prevalent cases, or ~17,000-25,000 patients.

- **EU5**: Combined population of ~320 million with similar incidence rates. Annual new cases ~22,000, prevalence ~165,000. Eligible patients ~16,500-24,500.

- **China**: Population of ~1.4 billion, but lower diagnosis rates and access to care. Incidence estimated at ~3-5 per 100,000, leading to ~42,000-70,000 new cases annually, prevalence ~300,000-500,000. Eligible patients ~30,000-50,000 (factoring in lower access to advanced treatments).

- **Japan**: Population of ~125 million, incidence ~5-7 per 100,000, new cases ~6,000-8,750, prevalence ~40,000-60,000. Eligible patients ~4,000-6,000.

Treated Patient Population (Assumption):

Assuming only a fraction of eligible patients receive treatment due to access, affordability, and clinical decisions:

- US: ~50% of eligible patients treated $\rightarrow$ 8,500-12,500 patients.

- EU5: ~40% treated $\rightarrow$ 6,600-9,800 patients.

- China: ~20% treated $\rightarrow$ 6,000-10,000 patients.

- Japan: ~50% treated $\rightarrow$ 2,000-3,000 patients.

Total treated patients across geographies: ~23,100-35,300.

Step 2: Market Share Assumption

The query assumes a **20%-30% share of treated patients** for cabozantinib. Applying this:

- Total treated patients captured by cabozantinib: 20%-30% of 23,100-35,300 = ~4,620-10,590 patients.

Breaking it down by geography (proportional to treated patients):

- US: 20%-30% of 8,500-12,500 = ~1,700-3,750 patients.

- EU5: 20%-30% of 6,600-9,800 = ~1,320-2,940 patients.

- China: 20%-30% of 6,000-10,000 = ~1,200-3,000 patients.

- Japan: 20%-30% of 2,000-3,000 = ~400-900 patients.

Step 3: Pricing per Patient per Year

Cabozantinib (Cabometyx) is a high-cost targeted therapy. Pricing varies by region due to healthcare systems and negotiations:

- **US**: Annual cost ~$150,000-$200,000 per patient (based on pricing for other indications like renal cell carcinoma).

- **EU5**: Annual cost ~$80,000-$120,000 per patient (lower due to price controls and negotiations).

- **China**: Annual cost ~$30,000-$50,000 per patient (lower pricing due to market dynamics and generics competition).

- **Japan**: Annual cost ~$100,000-$140,000 per patient (similar to EU5 but with premium for innovation).

For simplicity, using midpoint estimates:

- US: $175,000

- EU5: $100,000

- China: $40,000

- Japan: $120,000

Step 4: Calculate Potential Peak Sales

Peak sales are calculated as (number of treated patients captured by cabozantinib) × (annual cost per patient).

Low-End Estimate (20% share, lower patient numbers):

- US: 1,700 patients × $175,000 = $297.5 million

- EU5: 1,320 patients × $100,000 = $132 million

- China: 1,200 patients × $40,000 = $48 million

- Japan: 400 patients × $120,000 = $48 million

- **Total Low-End Peak Sales**: $525.5 million

High-End Estimate (30% share, higher patient numbers):

- US: 3,750 patients × $175,000 = $656.25 million

- EU5: 2,940 patients × $100,000 = $294 million

- China: 3,000 patients × $40,000 = $120 million

- Japan: 900 patients × $120,000 = $108 million

- **Total High-End Peak Sales**: $1,178.25 million

Potential Peak Sales Range: Approximately **$525 million to $1.18 billion** annually across the US, EU5, China, and Japan for this indication.

Step 5: Calculate $ Value of 1% Share of Treated Patients

A 1% share of treated patients corresponds to 1% of the total treated patient population (23,100-35,300), which is ~231-353 patients.

Breaking down by geography:

- US: 1% of 8,500-12,500 = 85-125 patients → Value = 85-125 × $175,000 = **$14.9M - $21.9M**

- EU5: 1% of 6,600-9,800 = 66-98 patients → Value = 66-98 × $100,000 = **$6.6M - $9.8M**

- China: 1% of 6,000-10,000 = 60-100 patients → Value = 60-100 × $40,000 = **$2.4M - $4.0M**

- Japan: 1% of 2,000-3,000 = 20-30 patients → Value = 20-30 × $120,000 = **$2.4M - $3.6M**

Total $ Value of 1% Share: Approximately **$26.3M - $39.3M** annually across all geographies.

Final Answer:

- **Potential Peak Sales for Cabozantinib** (20%-30% share of treated patients) in the US, EU5, China, and Japan for the indication of previously treated, unresectable, locally advanced or metastatic, well-differentiated pNET and epNET: **$525 million to $1.18 billion annually**.

- **$ Value of 1% Share of Treated Patients**: **$26.3 million to $39.3 million annually** across the same geographies.

Notes:

- These estimates are based on assumptions for patient populations, treatment rates, market share, and pricing, which may vary based on real-world data, competition (e.g., other NET therapies like somatostatin analogs, everolimus, or sunitinib), and market access.

- Peak sales could be influenced by duration of therapy (often 6-12 months or more for NETs), reimbursement policies, and patent exclusivity.

- For more precise figures, primary market research or access to proprietary data (e.g., from Exelixis or industry reports) would be required.