

SUPPLY CHAIN HEALTH COMMODITY ANALYSIS

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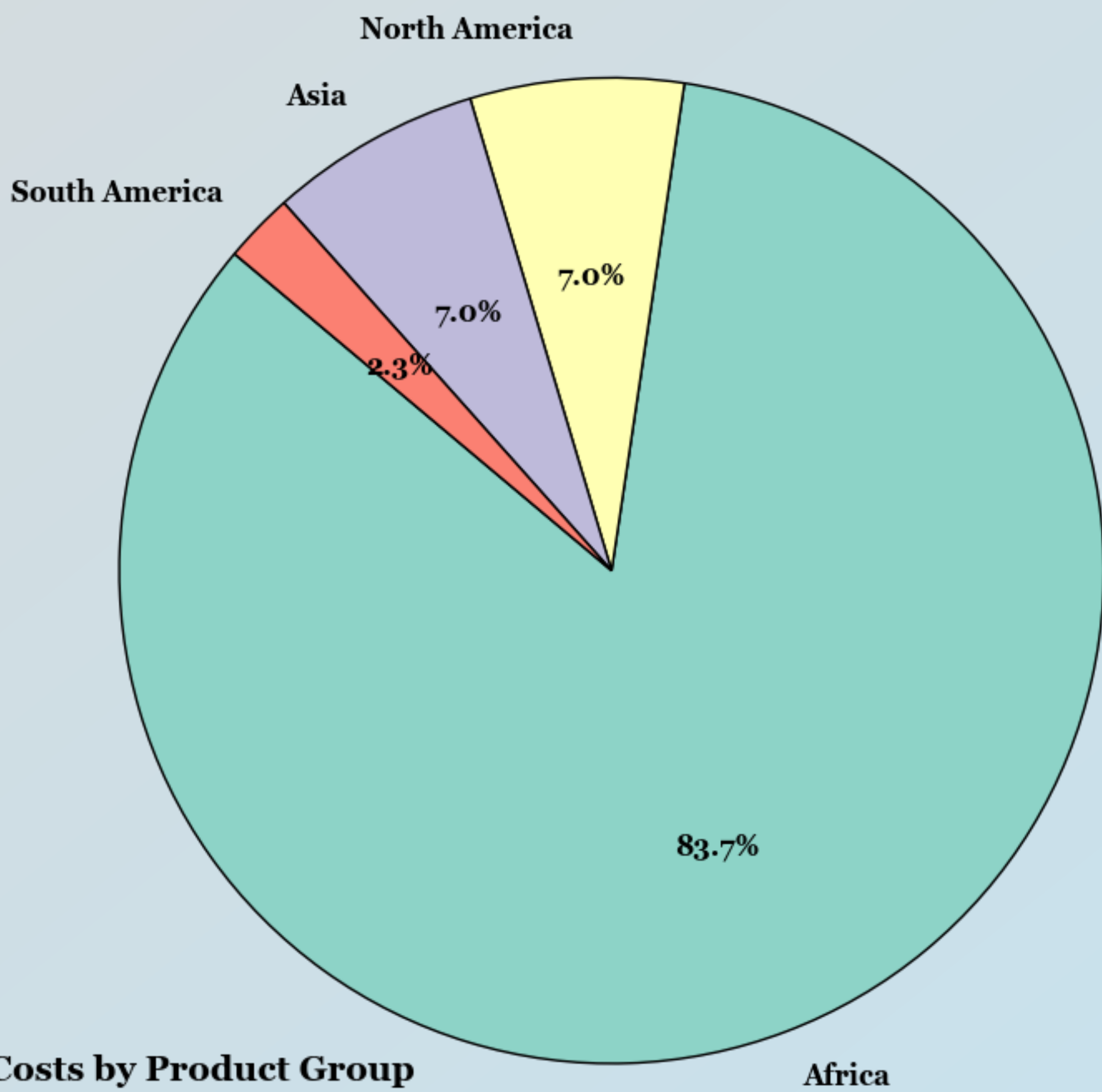
KEERTHI KRISHNA



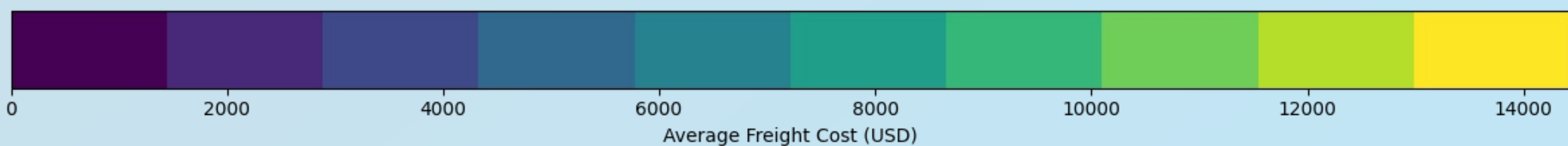
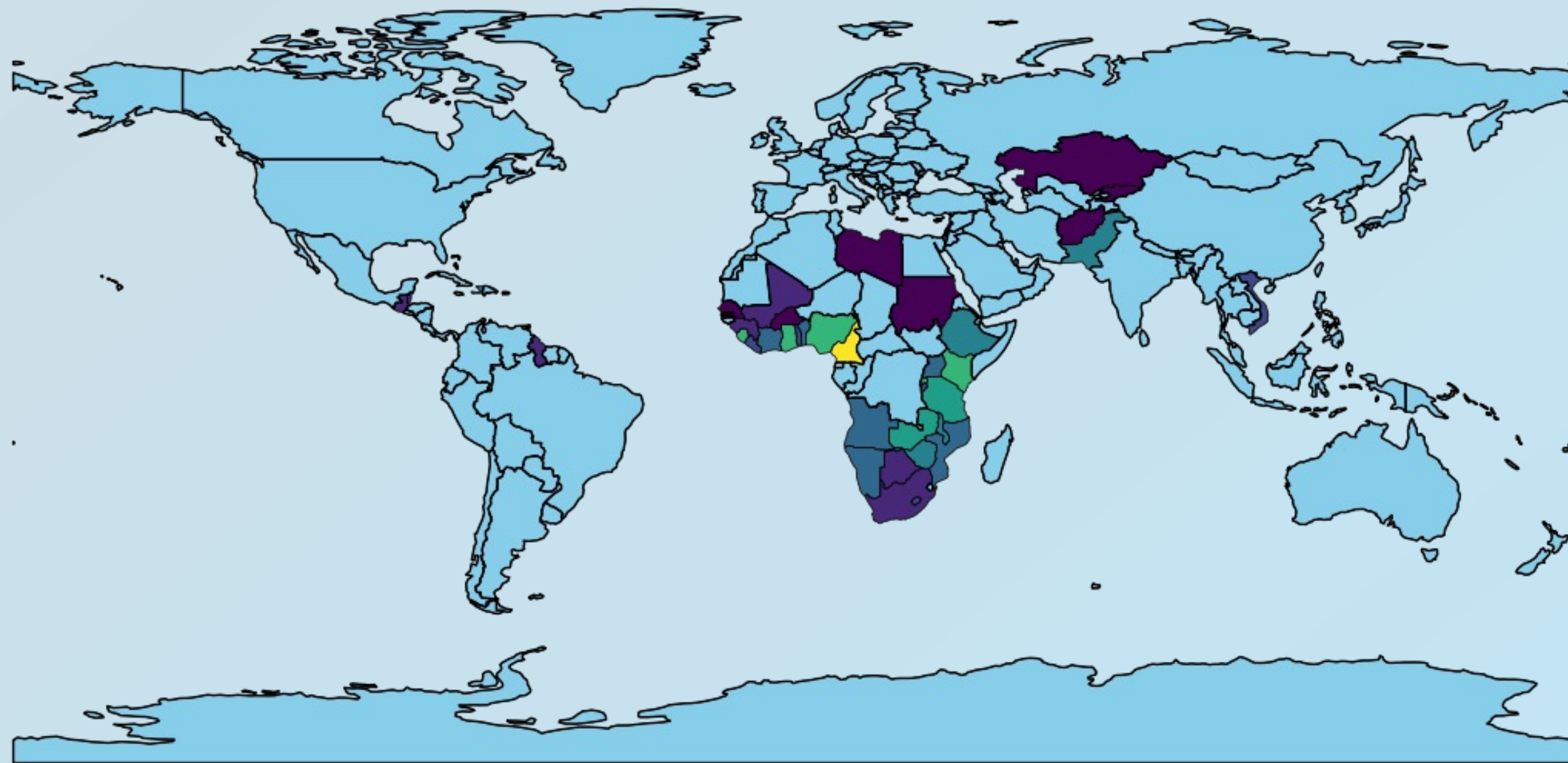
THE DATASET

"Supply Chain Shipment Pricing Data" comprises 10,324 rows and 33 columns, detailing the distribution and pricing of health commodities, focusing on Antiretroviral (ARV) and HIV lab shipments to various countries. It encompasses a wide range of data categories, including shipment mode, country of destination, product descriptions, quantities, values, and pricing, among others. Almost 84% of the dataset contains orders from Africa.

Transactions Per Continent

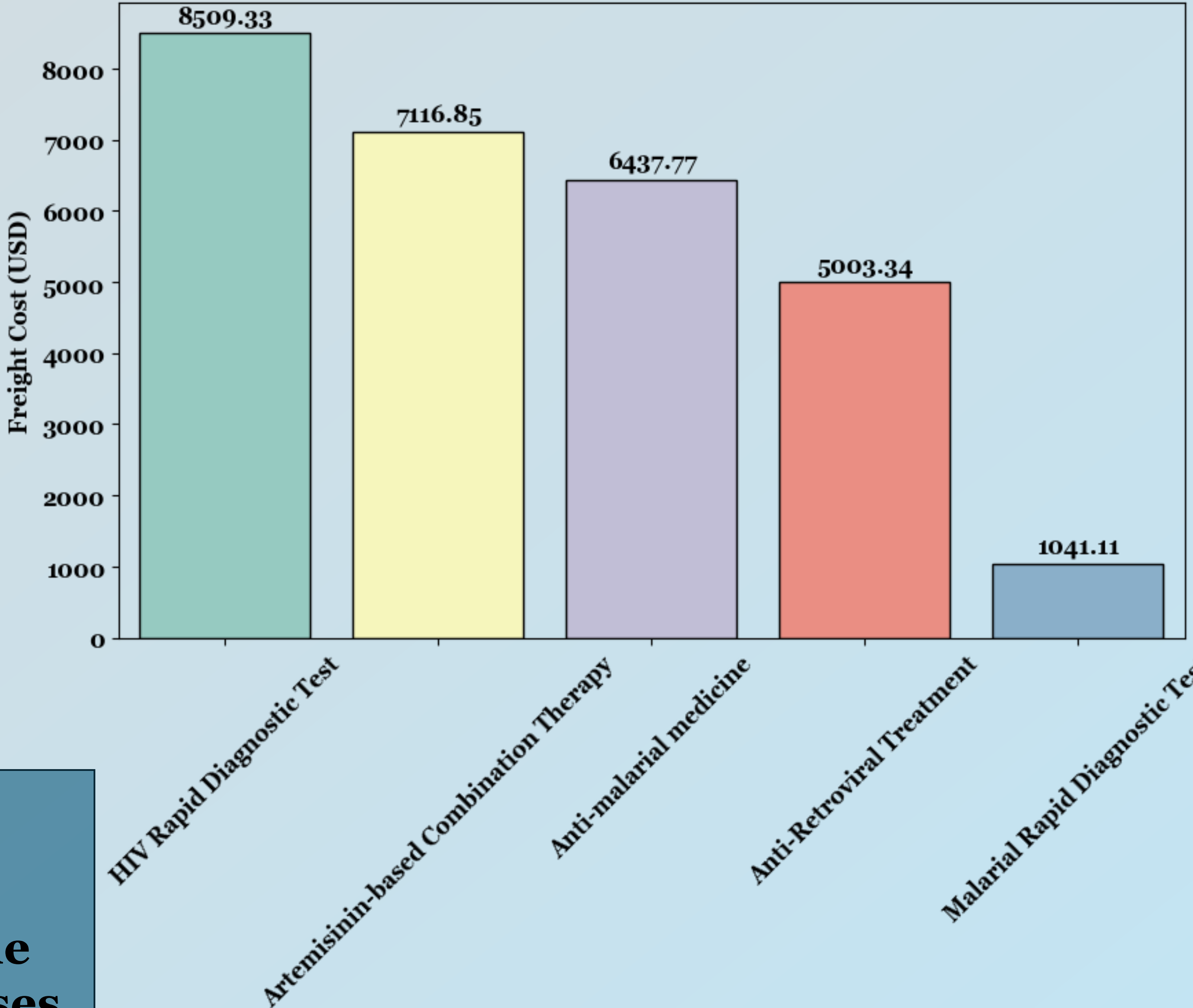


Average Freight Cost by Country

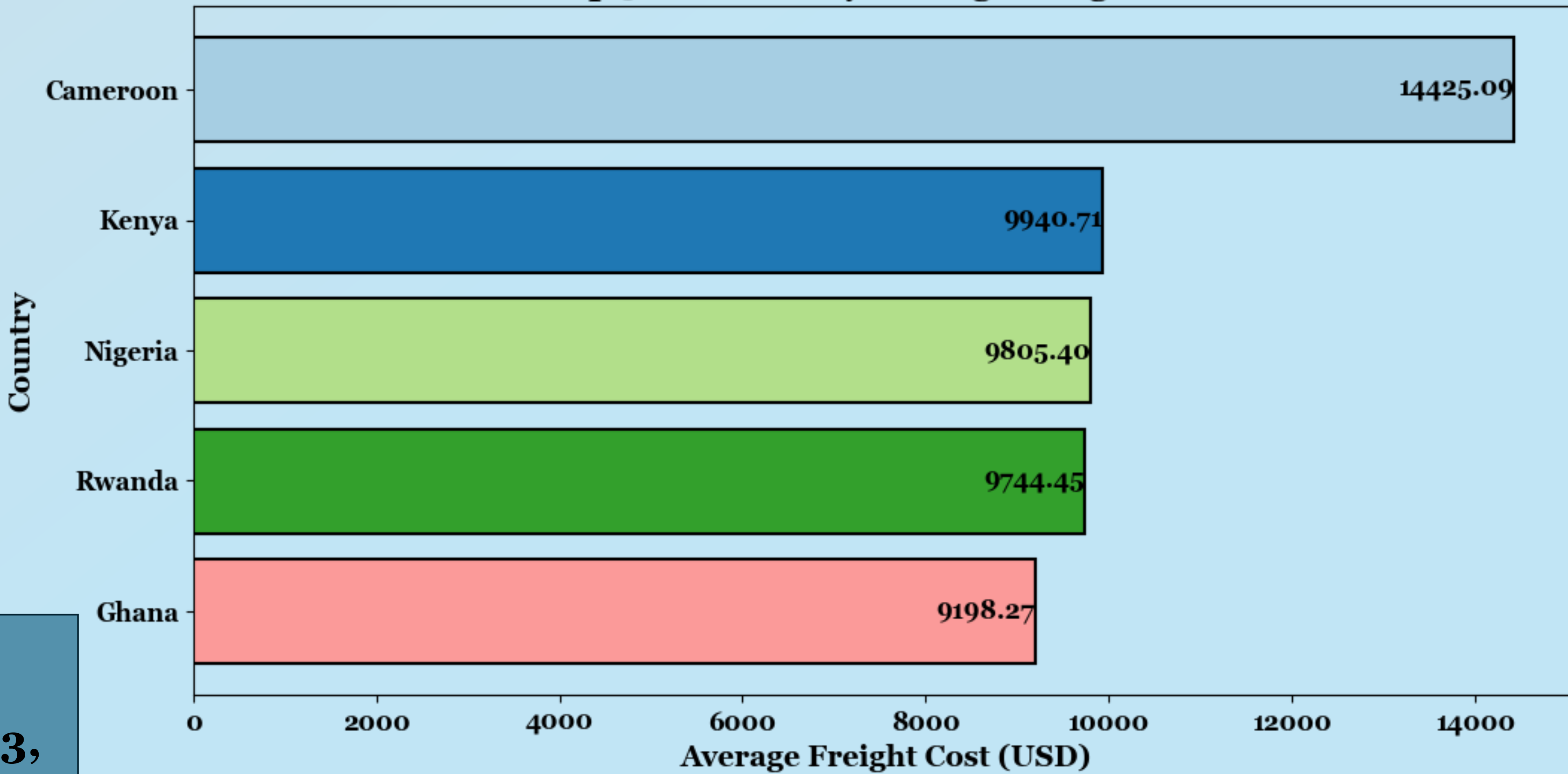


FINDINGS: African countries have higher freight costs compared to other continents. All the top five countries with the highest average freight costs are from Africa, with Cameroon leading the way and Kenya, and Nigeria rounding the top three as seen above and below.

Mean Freight Costs by Product Group



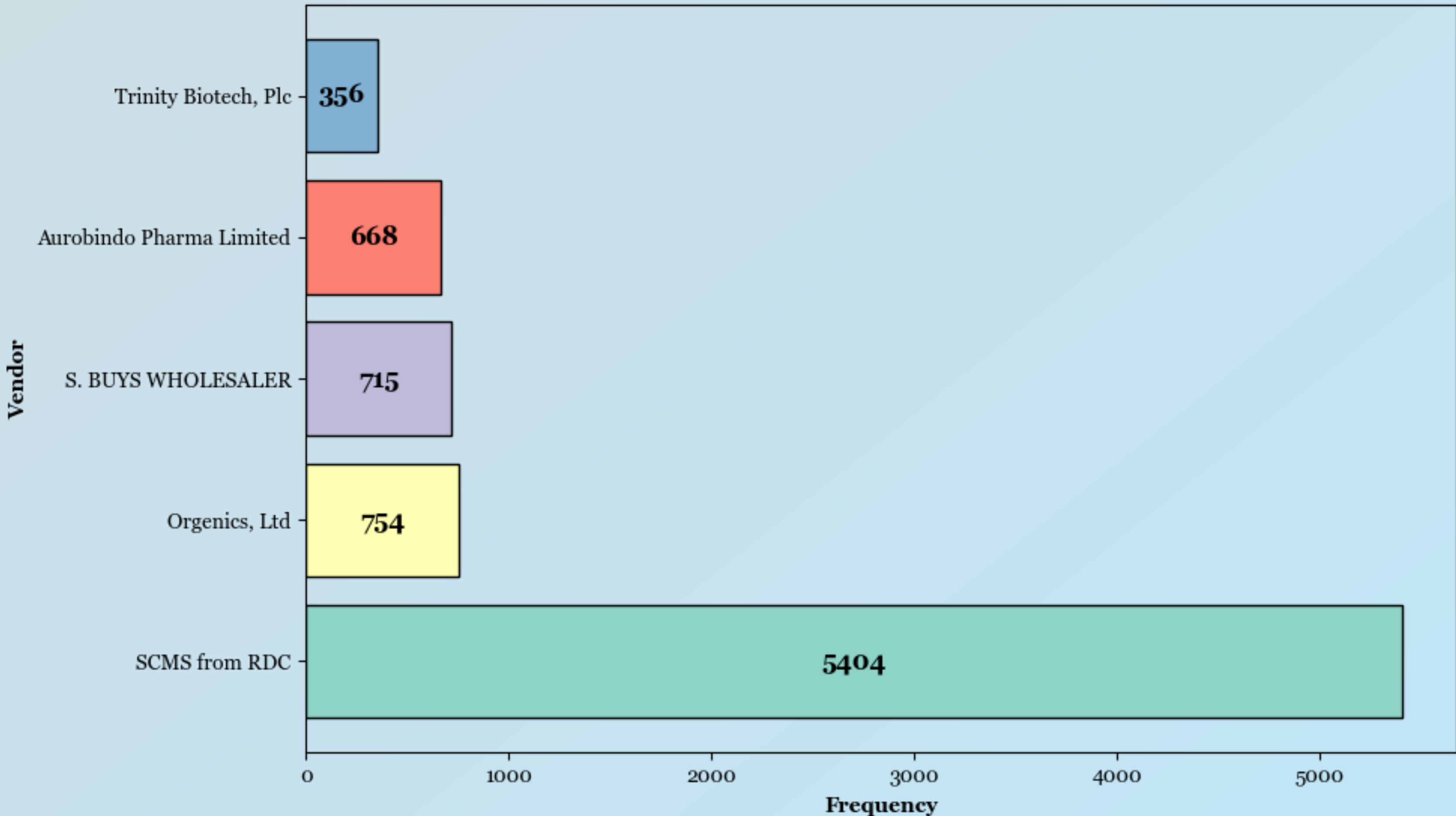
Top 5 Countries by Average Freight Cost



FINDINGS: Air transportation dominates freight expenses with a substantial 62.1% share, amounting to over \$35 million. While trucking incurs 17.8%, ocean freight comprises 5.6%, and air charter services account for 12.3% of the costs as seen above.

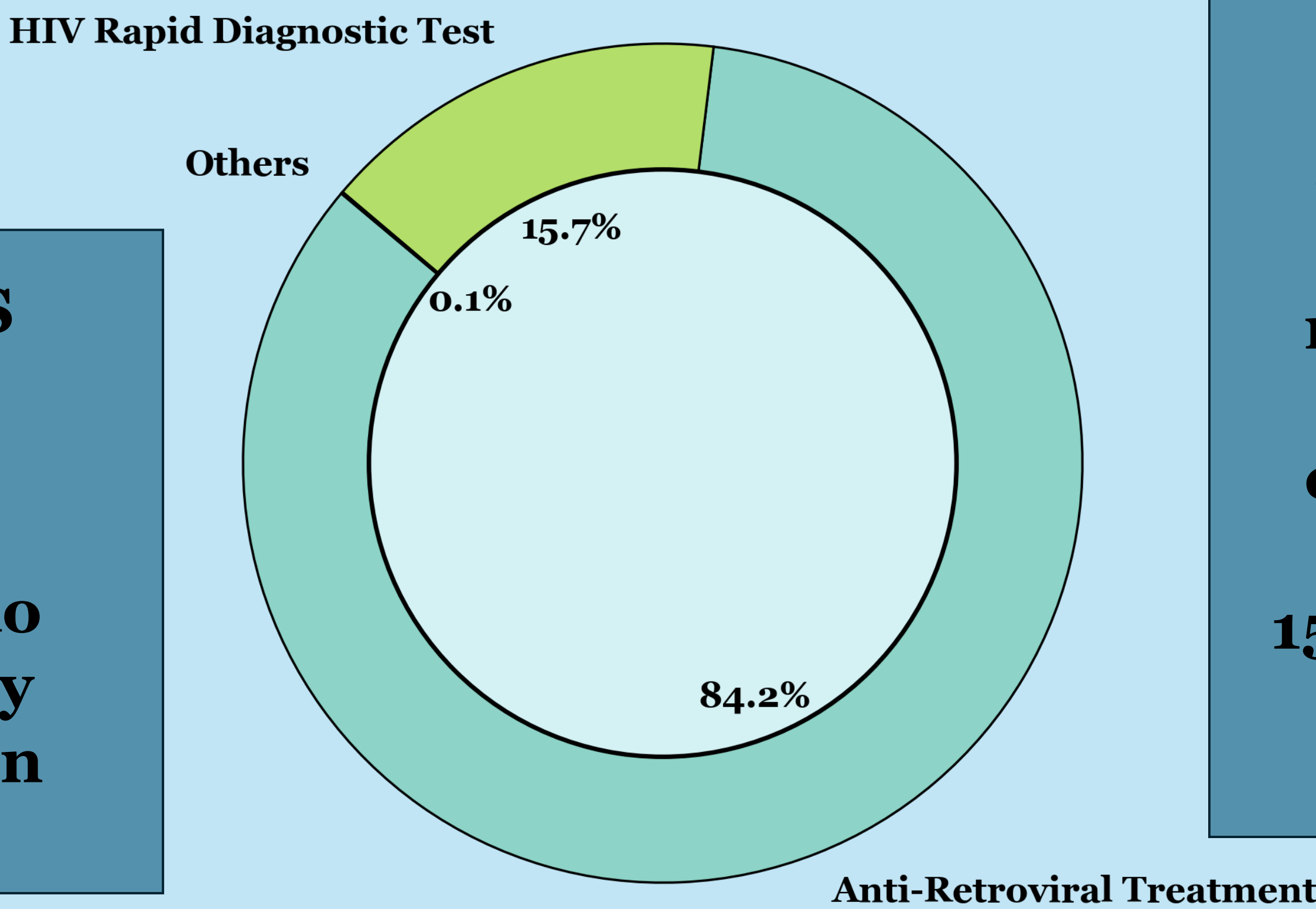
FINDINGS: HRDTs incur the highest average costs at \$8,509.33, followed by ASCT, AMM, and ART. MRDT have the lowest mean freight cost at \$1,041.11 as seen above.

Top 5 Most Frequent Vendors



FINDINGS: Among vendors, 'SCMS from RDC' leads significantly with 5,404 transactions, followed by 'Orgenics, Ltd' at 754, 'S. BUYS WHOLESALER' with 715, 'Aurobindo Pharma Limited' at 668, and 'Trinity Biotech, Plc' trailing with 356 as seen on the left.

Total Insurance Cost Distribution



FINDINGS: The donut chart displays insurance cost distribution for medical items, with Anti-Retroviral Treatment commanding 84.2%, HIV Rapid Diagnostic Test at 15.7%, and other categories barely visible at 0.1%.