Why do pharmacies buy drugs from non-primary vendors?

Pharmacies typically engage with a single pharmaceutical distributor to purchase all the drugs they need. This type of arrangement is governed by a contract called a Prime Vendor Agreement (PVA), which the pharmacy enters into with the distributor for a specific number of years defined in the agreement itself. The PVA also stipulates what percentage of its drugs a pharmacy must buy from the distributor in order to be compliant with the agreement. A pharmacy may choose to purchase drugs from a distributor other than the one it has a PVA with; this is referred to as "leakage," and it can sometimes be significant.

Your challenge is to determine which drugs are being bought outside the PVA from other distributors, hypothesize why this is happening, and recommend where AmerisourceBergen should concentrate efforts to reduce this leakage and regain lost revenue and profit.

Your analysis needs to answer question #1 as well as address one or more of questions #2 through #4.

1. Which drug families appear to be purchased outside the PVA most often?
2. Is leakage based on quantity? Based on $? Based on Therapeutic Class or disease state?
3. Is price always the cause of leakage? Or are there other reasons for it?
4. Where should AmerisourceBergen focus its efforts to reduce leakage to regain revenue and profit?

Data

Extracted, anonymized and modified from the AmerisourceBergen Data Warehouse.

The basic data set is Dispense Usage Transactions Top 50 GCN Seq Nbrs Week 201836. This is an Excel file that only contains 1 tab called "Trans".

- Included in the data set are descriptions of key data elements or code fields
- Hint: To determine aggregated Purchase $ you can use the field COGS_PRC_MTRC to multiply

2nd data set is a Data Dictionary for the transaction data set

In addition, if you care to take a deeper dive on your analysis, you may want to register for the United States National Library of Medicine as a public data source. Registration appears to take about 3 days. Here is a link.

- https://www.nlm.nih.gov/research/umls/
    - Request access as a "researcher"
    - Then look for RxNorm files to download
        - From here…have fun researching files and determining which files to join to perform more in-depth analysis for the challenge