

# Genie-powered Self-serve Pharma Analytics

## Business Problem



- Business terminology and data structures lacked alignment when analyzing complex pharmaceutical KPI, hindering reliable analytics and reporting
- There were limitations of pre-configured dashboards in reporting only fixed metrics such as Sales MTD and YTD targets. There was no mechanism to perform ad-hoc analysis on molecule-level or therapy-area trends
- Precise brand-level filtering required explicit canonical SKU mappings, which was not possible with current broad pattern-based filters
- Business rules, hierarchy logic, fact table structures, and KPI formulas changed repeatedly during implementation, triggering rework across Genie instructions, SQL examples, and Metric View definitions, which caused delayed production readiness.
- Without proper context, Genie fabricated plausible but incorrect SQL, producing unreliable outputs

## Solution



- **Metric View Creation:** A single governed YAML-defined Metric View replaced multiple tables and SQL Queries and scattered text instructions.
- **Materialized Metric Views:** Therapy-area and molecule-level roll-ups now return in real time via NLQ, eliminating full table scans and enabling consistent performance in across analytics queries across geographies.
- **SME Alignment:** Prompt-a-thon workshops with medical reps, regional managers, and finance teams captured 20+ gold benchmark questions. Requirement freeze before development ensured all KPI formulas were finance approved, preventing scope creep and repeated rework.
- **Benchmarking framework:** Every Genie iteration scored against 13-20 SME benchmark questions with gold SQL references. Objective accuracy scores replaced subjective demos- stakeholders tracked progress from 30-40% to ~92%.
- **Dimension Explanations & Synonym Mapping:** Provided business explanations and synonym mappings for each key dimension, enabling Genie to correctly interpret user terminology and map it to the right data fields.
- **Resolution Approach & Canonical KPI Repository:** Genie was strengthened with curated instructions, finance-approved KPIs, drug-name synonyms, SQL expressions, benchmark SQL, and business-approved join logic.

## Value Delivered



- ✓ **20-20% → ~95%** Genie benchmark accuracy improvement
- ✓ **Consistent outputs:** Finance-approved KPI formulas for all pharma business users
- ✓ **Reduced query ambiguity:** Curated synonyms, instructions and business-approved join logic
- ✓ **Materialized metric view:** Centralized semantic layer

 **~95%**

Genie Accuracy Improvement

 **1000s**

of Data Points Monitored

 **1000s**

of Business Users Empowered