



# Strategy and Portfolio Optimization

## Patient-level forecasting for four drugs with \$1b+ in total revenue

A top-10 global pharmaceutical company had multiple drugs in their Immunology Business Unit indicated for both acute and prophylactic treatments, including the market-leading therapy with \$1B+ in annual revenue. They needed to better understand the impact of new entrants across the complete product portfolio.

Viscadia was asked to design, build and deploy forecasting platforms that addressed the end-to-end forecasting needs of the full portfolio, including short-term evaluations, long-range planning, market forecasting and patient analytics.

Informed **key forecast drivers** such as **persistency, titration curves, and compliance** through real time patient data

## Challenges



### Patient-level data capture

- › Formulating business rules for translating raw patient data into key metrics such as new starts, continuing patients, drops, and more.



### Evolving patient preference

- › Modeling for a changing treatment paradigm; addressing migration of a considerable patient population from acute treatment to prophylactic therapies.



### Portfolio management

- › Managing evolving forecasting needs for all the drugs in the portfolio, with each drug located at a different position in their respective life cycles.



# Approach



## Patient flow modeling design

Constructed comprehensive patient flow model, capturing complex fulfillment dynamic with intuitive UI design.



## Market modeling

Designed and built an integrated market forecast model to comprehensively evaluate the overall market, with a particular focus on the client's portfolio and associated interplay between products.



## Data extraction and deep dives

Built capability to streamline data extraction and processing from multiple sources to ensure consistency.

Informed key forecast drivers such as persistency, titration curves, and compliance – with ability to update them in real-time.

Performed deep dives into patient-level data to generate valuable new business KPIs.



## Cannibalization matrix

Created cannibalization matrix to track movement of patients across different products and segments in market with new product launches.



## Portfolio management

Managed client's complete portfolio through dynamic, individual asset level modelling and aggregation that caters to different cross functional needs.

# Outcomes

## End Deliverables

- Patient flow model with comprehensive set of insights, analytics, and output views.
- Market forecast model supporting evolving market landscape with view of patient switches and market share movement.

## Key Highlights

- Enabled leadership to track and incorporate trends from actual patient-level data into forecast planning and goal setting.
- Provided constant support through multiple planning and budget cycles, helping turn around updates and refinements in a time-sensitive manner.
- Designed and built a custom event palette in market model to help configure events using either market research-driven insights or custom business inputs with scalability.

## Impact

- Reduced cycle time for data updates by 50% through automation and quality control management to ensure accurate forecasting.
- Increased confidence of forecast assumptions by employing rigorous patient data analytics to test and validate business hypothesis.
- Empowered leadership to seamlessly track the entire market and portfolio with real-time insights on its share of business.