

Business Situation

- The Client wanted to augment and enhance their understanding of drug uptake and utilization, seeking support in building a tool that would inform on Compliance and Persistence rates for various product analogs in a diverse group of specialty markets.

Approach & Methodology

- Foster Rosenblatt built a tool that leveraged patient claims data to inform product analog Compliance & Persistence rates; the tool enabled users to identify analogs based on 12 pre-defined product or market variables
- Compliance was evaluated in the claims data by measuring the Proportion of Days Covered (PDC) for patient-specific sequential claims that formed a course of treatment
- Persistence was evaluated as the total time (months and years) from the start of therapy until the end of therapy, for each patient-specific course of treatment
- The final Compliance Tool encompassed 31 specialty markets, providing Compliance & Persistence insights for 114 product analogs

Deliverables & Business Outcomes

- An Excel-based Compliance Tool was created and delivered to the client, that enabled users to filter and analyze results across 12 different indication- and product-specific characteristics
- A companion PowerPoint report summarizing the methodology and all assumptions used by the FIR team to analyze the patient claims data to arrive at Compliance & Persistence calculations

Outputs & Variables Overview

The Compliance Tool provides three primary output metrics, which can be analyzed across 3 market-level variables and 9 product-level variables

- The Compliance Tool provides 3 key output metrics:
 - Individual product compliance
 - Aggregate weighted indication-level compliance
 - Product persistence
- For the outputs, the associated sample size (N) of patient-treatment courses identified in the LAAD dataset is provided
- All outputs can subsequently be analyzed in sub-groups by applying filters across any of the 12 Market or Product Variables available in the tool; specific characteristics can be applied to identify the analogs most synonymous with the product of interest

Output Metric	Parameter	Type of Variable	Parameter
Product Compliance	6-month	Market Variables	Disease Mortality Level
	12-month		Disease Morbidity Level
	18-month		Disease Severity
Indication Compliance	6-month	Product Variables	Product Efficacy in Treating Disease
	12-month		Product Use Safety
	18-month		Product Tolerability
Product Persistence	Months		Therapeutic Class
	Years		Marketing Company
			Dosing Frequency
			Product Cost
			Product Market Access

Market Selection	Product	Generic Name	Route of Administration	Dosing Frequency	AVERAGE	Product Compliance 6 mth	Product Compliance 12 mth	Product Compliance 18 mth	Persistence # mths	Persistence # yrs
Alpha-1 antitrypsin (AAT) congenital deficiency	Prolastin-C	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Amniotrophic lateral sclerosis (ALS)	Valis	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Ankylosing spondylitis	Canaris	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Arthritis, psoriatic	Canaris	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Arthritis, rheumatoid	Canaris	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Crohn's disease	Canaris	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Fabry disease	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Gaucher's disease	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Haemolytic uremic syndrome (HUS)	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Herededitary angioedema	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Hunter syndrome (Mucopolysaccharidosis type II)	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Hypersomnia, idiopathic	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Hypophosphataemic rickets	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Lambert-Eaton myasthenic syndrome	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Liposomal acid lipase deficiency	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Macular oedema	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Maroteaux-Lamy disease (Mucopolysaccharidosis type VI)	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Marquio syndrome (Mucopolysaccharidosis type VII)	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Multiple Sclerosis	Alacera	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
Ankhis, psoriatic	Canaris	alpha-1 proteinase inh.	Intravenous Infusion	Every 1 Week						
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