

Identifying Rare Disease Patients for Pre-Launch Target Identification, Leading to Post-Launch Sales Support

INTRODUCTION

Specialty and rare diseases have undefined patient populations who are undiagnosed or misdiagnosed, health care providers (HCPs) who are unaware of disease states and their manifestations, as well as treatment journeys that are not well-understood. IPM.ai transforms real world data into real world insights that uncover the ideal patient, their treatment journey and their healthcare ecosystem so that life sciences companies can accelerate the successful development and commercialization of life-saving therapies for specialty and rare diseases that lead to optimal patient outcomes quicker, with less risk.

THE CHALLENGE

A leading RNAi-focused biopharma client was advancing a mid-stage program for a rare genetic condition with severe quality-of-life manifestations and attacks that were potentially life-threatening. The disease state was not cleanly coded in ICD-10 and the number of positive, genetically confirmed patients was low, though that information was becoming increasingly available over time.

THE SOLUTION

IPM.ai created an ideal patient profile (IPP) to find targeted rare disease patients. The parameters for an IPP were established based on patient history through a combination of medical claims, ICD-10 codes, prescription history, and lab data including genetic testing. Once the IPP was confirmed, AI/ML technology generated lookalike patients

via an extensive ranking system that encompassed a much broader patient universe. De-identified patients that matched the control group were discovered through the model diagnostics. The client was then linked to a relevant patient physician based on a recent visit, frequent visits, or a triggered visit. To ensure our client maintains relevant data, new lookalike patient updates are provided on a continual bi-weekly basis.

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THE OUTCOME

IPM.ai trained multiple AI models as well as demonstrated predictability and clinical significance by uncovering a target database prioritizing the HCPs treating the ~1500 most likely patients. Our client leveraged outputs for initial target list development and prioritization pre-launch and implemented a third iteration of the model using ~120 known patients post-product launch to support sales efforts.

About IPM.ai

IPM.ai (www.ipm.ai), a part of Real Chemistry, is an Insights as a Service (IaaS) provider that empowers the world's leading life sciences companies to better understand and improve the lives of patients through the commercialization of precision medicine for specialty and rare diseases. IPM.ai's system of insight optimizes drug development, clinical study, product launch and commercial operations by utilizing granular-level longitudinal analytics, artificial intelligence and machine learning in conjunction with a real world data universe of over 300 million de-identified patient journeys and 65 billion anonymized social determinants of health signals.