

# Biogen

## INTRODUCTION

Rare diseases have undefined patient populations who are undiagnosed or misdiagnosed, healthcare providers who are unaware of disease states and their manifestations, and 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-changing therapies for specialty and rare diseases that lead to optimal patient outcomes.

## THE CONDITION

Systemic Lupus Erythematosus (SLE) and Cutaneous Lupus Erythematosus (CLE).

SLE is a chronic autoimmune disease that affects multiple organ systems, with periods of illness or flares alternating with periods of remission. SLE can present itself in several ways including rash, arthritis, anemia, thrombocytopenia, serositis, nephritis, seizures or psychosis. SLE is associated with a greater risk of death from causes such as infection and cardiovascular disease.

CLE is a chronic autoimmune disease where the body's immune system attacks healthy skin, often causing rashes and skin lesions which can be painful or itchy. CLE is associated with a decrease in quality of life and increased depression. In some forms of the disease, patients may experience scarring, skin atrophy and alopecia. CLE may occur in the presence of, or more frequently, in the absence of systemic disease.

## THE CHALLENGE

In the midst of conducting a clinical trial for a Lupus treatment, Biogen had to confront that very few target enrollees were actually trial-eligible. To solve this and continue trials on spec, the company had to identify a pool of trial-eligible patients and the HCPs treating them.

## THE SOLUTION

Finding the ideal patient pool is the most crucial component of both launching a successful drug and treating the patient population at large. In order to trial the right patients, IPM.ai leveraged our real world data universe of 300 million de-identified patients to build an ideal patient profile, uncover those who were treatment-appropriate, and leverage machine learning and AI to discover look-alike patients, as well as their treating health care providers (HCPs).

## THE OUTCOME

IPM.ai uncovered a substantial group of treatment-ready and progressing patients, while an active database of HCPs provided the client with prioritized total treatment potential. Biogen was also given the number of referrals (more patients in play) and the number of connections within the network (a high number of connections reflects more trust). The collaboration allowed trial recruitment to progress successfully. To further advance their drug to market, Biogen partnered with our sister company, Swoop, to build non-branded clinical study-specific messaging targeting HCPs.

## About IPM.ai

IPM.ai, 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 development and commercialization of precision medicine for specialty and rare diseases. IPM's system of insight optimizes drug development, clinical study, product launch and commercial operations through granular-level longitudinal analytics, artificial intelligence and machine learning in conjunction with a real world data universe of over 300 million de-identified patients and 65 billion anonymized social determinants of health signals.