

OptraHEALTH - Case Study

Clinical-Stage Biotechnology Company Accelerates IBD Research with OptraHEALTH - Agentic AI

CASE STUDY

A clinical-stage biotechnology company focused on Crohn's disease and inflammatory bowel disease needed a faster, more scalable way to manage growing volumes of scientific literature, biomarker data, genomic information, and experimental findings. Manual workflows were creating delays across evidence discovery, biomarker research, and therapeutic analysis – and couldn't scale with the pace of research.

The Problem

Scientific teams spent significant time manually reviewing publications, extracting findings, normalizing data, and validating information before it could be used for downstream research – a process that was fragmented, inconsistent, and difficult to scale.

The OptraHEALTH Approach

OptraHEALTH deployed a consulting-led Agentic AI and biomedical knowledge management solution combining automated extraction, normalization, validation, and knowledge organization across literature, biomedical databases, and internal research sources.

AI-Assisted - Human-Reviewed

All outputs remain traceable to source evidence. Final interpretation, scientific conclusions, and publication decisions stay with the client's research team. The goal: help experts focus on the science, not the spreadsheet work.

Capabilities Delivered



Literature Review Acceleration

Faster review of publications, biomarker studies, and therapeutic evidence.



Data Normalization

Harmonized fragmented data across multiple sources, formats, and workflows.



Validation & Quality Review

Improved consistency, traceability, and reliability across curated research data.



Centralized Knowledge Repository

A searchable scientific knowledge base supporting future evidence discovery and reuse.



The solution is built on OptraHEALTH's biomedical knowledge infrastructure – including **65+ million ontology concepts** and **2+ million curated biomedical Q&A pairs** – pre-configured for normalization and validation workflows.

Measurable Impact Across the Research Workflow

OptraHEALTH's Agentic AI solution delivered quantifiable improvements in efficiency, data quality, and scientific knowledge management – enabling the IBD research team to redirect effort toward higher-value work without sacrificing accuracy, traceability, or expert oversight.

70%

Less Manual Curation

Reduction in repetitive review, extraction, cleaning, and formatting effort.

3x

Faster to Analysis-Ready Data

From raw, fragmented scientific data to structured datasets – three times faster.

7hrs

Saved Per 10 Hours

For every 10 hours of manual curation, approximately 7 hours were reduced or redirected.

Knowledge Management Impact

The client replaced disconnected spreadsheets and fragmented files with a centralized knowledge framework – making curated scientific data easier to search, validate, reuse, and apply across Crohn's disease and IBD research workflows.

Why OptraHEALTH

Unlike point solutions, OptraHEALTH combines extraction, normalization, validation, curation, and knowledge management into a single configurable framework. Every implementation is tailored to the client's therapeutic area, data sources, and objectives – with support for HIPAA, SOC 2, and GDPR-aligned workflows.

OptraHEALTH is not just an AI tool. We are an **AI execution partner** helping life sciences teams transform fragmented scientific data into validated, AI-ready knowledge.

The workflow remained AI-assisted and human-reviewed – supporting scientific teams while keeping final interpretation and publication decisions with the researchers.

Ready to Accelerate Your Research?

See how OptraHEALTH's Agentic AI and biomedical knowledge management framework can help your team reduce manual curation burden, improve data quality, and move faster from fragmented scientific data to analysis-ready insights.

Contact Us Today

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