capestart

CASE STUDY

How CapeStart Document Intelligence Turned Unstructured Medical Literature Into Structured, Regulatory-Ready Data At A Top 15 Pharmaceutical Manufacturer

Problem

The clinical team for existing products at a top 15 pharmaceutical manufacturer sat on large volumes of unstructured medical literature across multiple therapeutic areas, and their internal efforts to structure it proved costly and unsuccessful. The team required a comprehensive platform that could:

- Handle diverse literature types, including studies, clinical trials, and case reports
- Process content across ten therapeutic areas, including Oncology, Neuroscience, and Immunology
- Integrate with existing systems such as Ovid and iMedical Search
- Provide single sign-on and an easy-to-use interface for internal employees and service providers

Solution

CapeStart worked with the client to customize its Document Intelligence literature-review platform — a pipeline that turns unstructured documents into structured, screened, regulatory-ready data. The AI-enabled solution provided:

AI-aided screening of titles and abstracts, classifying studies against the research criteria based on PICOS and keywords

A collaboration platform centralizing and streamlining end-to-end literature review — search, screening, extraction, and reporting in one place

Single- and multi-article summaries assembled from screened, extracted content, accelerating first drafts and synthesis of key insights

Clinical Overview Reports and regulatory-submission documentation built from extracted, validated fields

Living Literature Review, keeping completed reviews current with automatic monitoring

To effectively develop and deploy the platform, the CapeStart team worked with the client to implement the following strategies:

- Designed the platform for direct use by the client and their CRO partners
- Ran a collaborative feedback loop with platform users, led by CapeStart's subject-matter experts
- Delivered seamless integration with existing systems
- Provided AI-seasoned expert oversight of product development to hone the solution
- Managed AI optimization and a validation workflow process
- Provided comprehensive training and support from the CapeStart team

Results

The development and implementation of the CapeStart Document Intelligence platform delivered significant improvements for the client:

90% **Screening & Extraction Precision**

High-precision screening and data structuring, meeting exceptional quality standards for medical research.

40% **Faster Review Timelines**

Cut end-to-end literature-review timelines by 40% while increasing team efficiency and productivity.

Cost Effectiveness

Lowered operational costs and reduced resource requirements compared to internal development.

Scalability

Deployed across ten therapeutic areas — Oncology, Neuroscience, Immunology, and more — handling varying volumes of literature.

From costly, unsuccessful internal builds to a validated, scalable platform — CapeStart Document Intelligence turned literature review into a faster, auditable, regulatory-ready workflow across the client's therapeutic portfolio.

Oncology | Neuroscience | Immunology | PICOS Screening | AI Summaries | Clinical Overview Reports | Living Literature Review | Ovid & iMedical Search | SSO

Document Intelligence gets the data into shape; CapeStart Conversational Search gets answers out of it — a natural-language layer over the structured corpus.

CapeStart Document Intelligence is available for life-sciences and medtech organizations.

For more information, contact hello@capestart.com · www.capestart.com

capestart

Production AI for regulated life sciences