



HILL RESEARCH CLINICAL AI SOLUTIONS GUIDE

2025

Hill Research's 2025 showcase of cutting-edge AI-powered solutions and services accelerating clinical trials and regulatory success.



At Hill Research, we help our clients accelerate drug development, reduce costs, and achieve regulatory success with next-generation AI solutions.

This Solution Guide introduces our full suite of offerings, from automated SAS programming and AI-powered biostatistics to flexible FSP models and our flagship TriClick™ GenAI platform. You’ll discover how our proprietary tools, including LLM-augmented analytics, data compliance agents, CRF annotation automation, and evidence summary solutions, are transforming clinical data workflows.

By leveraging our expertise and technology, sponsors, CROs, and biotech innovators can streamline operations, ensure compliance, and bring life-changing therapies to market faster.





ABOUT US



Hill Research harnesses the power of Generative AI to accelerate the final mile of clinical trials, delivering end-to-end, AI-driven solutions that guide pharmaceutical companies from trial design through FDA submission.

Our platform integrates intelligent decision support, compliance optimization, and predictive safety modeling to streamline operations and strengthen regulatory outcomes. At the core of our technology lies a multi-agent large language model architecture, purpose-built to optimize every stage of the clinical trial process. By automating critical workflows and amplifying data-driven insights, Hill Research empowers sponsors to shorten development timelines, lower costs, and maximize the probability of drug approval.



TABLE OF CONTENTS

SAS Programming with GenAI	p.1
TriClick™ Platform	p.2-5
TriClick™ Annotation	
TriClick™ Recruitment	
TriClick™ Compliance	
TriClick™ Stats	
TriClick™ Evidence	
Our AI Capabilities	p.5-12
LLM-Augmented Clinical Analytics System	p.6
Data Compliance Agent	p.7
Relational Information Extraction	p.8
Data Reverse Engineering	p.9
CRF Annotation Agent	p.10
Data Management Platform	p.11
Evidence Summary Tool	p.12
Trusted by Global Leaders	p.13
Contact Information	p.14

SAS PROGRAMMING WITH GEN AI

AI-driven automation for faster, compliant, and smarter clinical submissions

Key Capabilities

Gen AI SAS Programming

- Automated aCRF Implementation
- Patient Profile Generation
- Study TLF production
- CDISC Dataset Automation (SDTM and ADaM, SDRG, ADRG)
- Clinical Study Reports ISS/ISE

AI-Augmented Statistical Analysis & Data Validation

- Derived Efficacy Endpoints (Time-To-Event, PRO, Response)
- Development of Customized application macros
- Automated Data Quality Check (RECIST, iRECIST, Lugano, RECIL, PCWG, MACE, HbA1c, viral load/PCR negativity)
- Data Visualization
- Interactive Data Review
- Ad hoc Analysis

How It Works

At Hill Research, we go beyond traditional SAS programming and clinical data management by integrating AI-driven automation and intelligent analytics into every stage of clinical data processing and submission.

Our expertise extends across NDA and BLA submissions, with a focus on CDISC compliance, FDA electronic submission requirements, and industry-standard statistical programming.

By leveraging AI-powered automation, we accelerate CDISC dataset creation, statistical programming, and submission preparation, significantly reducing manual effort, validation time, and regulatory review cycles.

Our proprietary AI-driven Submission Validation Agent ensures real-time data quality checks, automated error detection, and AI-assisted dataset standardization, making regulatory submissions more efficient and compliant.

We provide flexible engagement models, including full project outsourcing, functional insourcing (FSP), and contract staffing, ensuring seamless integration into your clinical research workflows.

Why Choose Hill Research?

High Efficiency Powered by AI

Reduce manual programming effort by up to 60% while enhancing compliance.

Regulatory-Ready Submissions

AI-driven error detection and real-time compliance monitoring.

Flexible Engagement Models

Choose from outsourcing, functional insourcing (FSP), or contract staffing.

Seamless Integration

AI-powered solutions work with existing clinical trial management systems (CTMS).



Our One-Stop Gen AI Platform

TriClick™ is an extensible agentic AI platform built to solve complex clinical data and documentation challenges. Integrated with most of our AI functions, it can be offered as an all-in-one solution to pharmaceutical clients.

Optimized Workflows

Automating CRF annotation, patient recruitment, compliance, and data analysis, making those tasks up to 100x faster.

Unmatched Accuracy

Achieving 99%+ precision through fine-tuned AI models and continuous learning.

Built with data security

Whether it's proprietary company data or protected health information, modules are built to avoid unwanted data releases

3 CLICKS AT A TIME

TriClick™ is Hill Research's all-in-one AI platform that simplifies clinical trial workflows into just three clicks. It automates critical tasks like CRF annotation, patient recruitment, compliance, and statistical reporting—making them up to 100x faster with over 99% accuracy. This means shorter timelines, lower costs, and higher success rates for drug development.

TriClick™ Compliance

Automatic desensitization of medical information to ensure compliance with regulations

TriClick™ Evidence

Extracting clinical information from various sources to support regulatory filings and scientific decisions

TriClick™ Recruitment

Automates the patient recruitment process for clinical trials

TriClick™ Annotation

Automating the preparation of CRFs for FDA submissions

TriClick™ Stats

Automatically generates TLF by integrating SAP, SDTM-compliant datasets, etc. This modular, step-by-step system enables automated interpretation of SAP logic and streamlined output generation—ensuring consistency, traceability, and compliance throughout the reporting process.

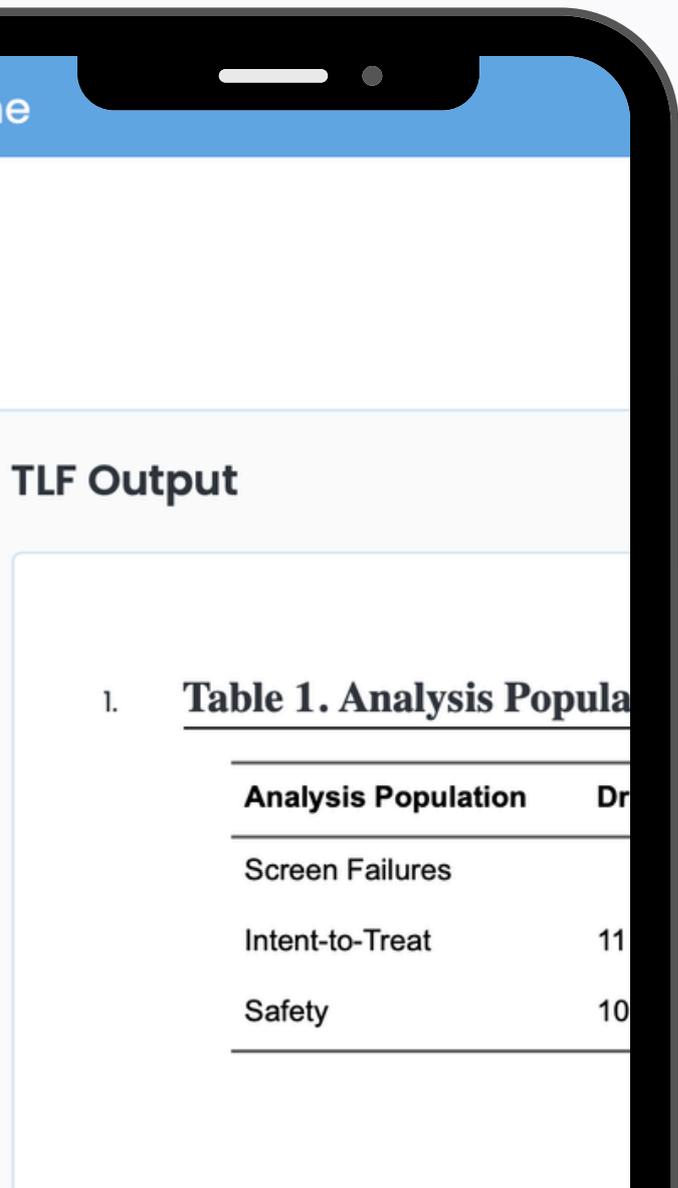


SMARTER, FASTER, EFFORTLESS



99%+ precision in automated data validation and compliance checks.

- 99%+ precision in automated data validation and compliance checks.
- 100% CDISC compliance for automated dataset outputs.
- Real-time compliance monitoring reduces regulatory review cycles by weeks.



82 % reduction in manual SAS programming effort

- 70% faster generation of TLFs (Tables, Listings, Figures).
- Up to 100x faster CRF annotation compared to manual processes.
- <1 seconds to search and analyze 1M+ clinical documents with LLM analytics.



Customer Satisfaction

98.43%



Customer Retention Rate

95.00%



OUR AI CAPABILITIES

AI solutions for clinical analytics, compliance, data management, and regulatory submissions.

01

LLM Augmented Clinical Analytics System

02

Data Compliance Agent

03

Relational Information Extraction

04

Data Reverse Engineering

05

CRF Annotation Agent

06

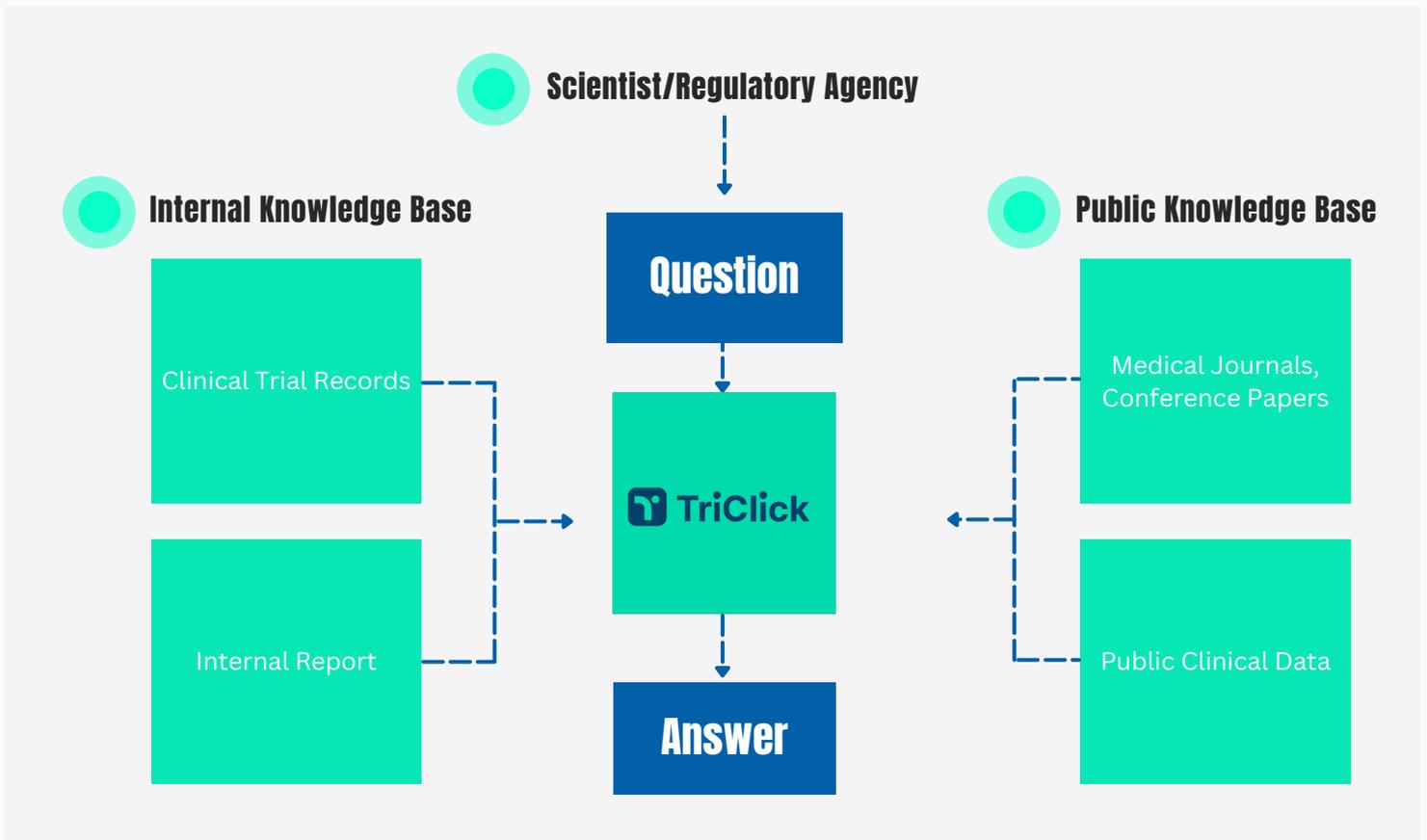
Data Management Platform

07

Evidence Summary Tool

LARGE LANGUAGE MODEL (LLM)- AUGMENTED CLINICAL ANALYTICS SYSTEM

We extracting clinical information from various sources to support regulatory filings and scientific decisions.



Technology Advantage

100k+

Internal knowledge base

Internalstore and process 100K+ clinical documents knowledge base: store and process 100K+ clinical documents.

100k+

Public knowledge base

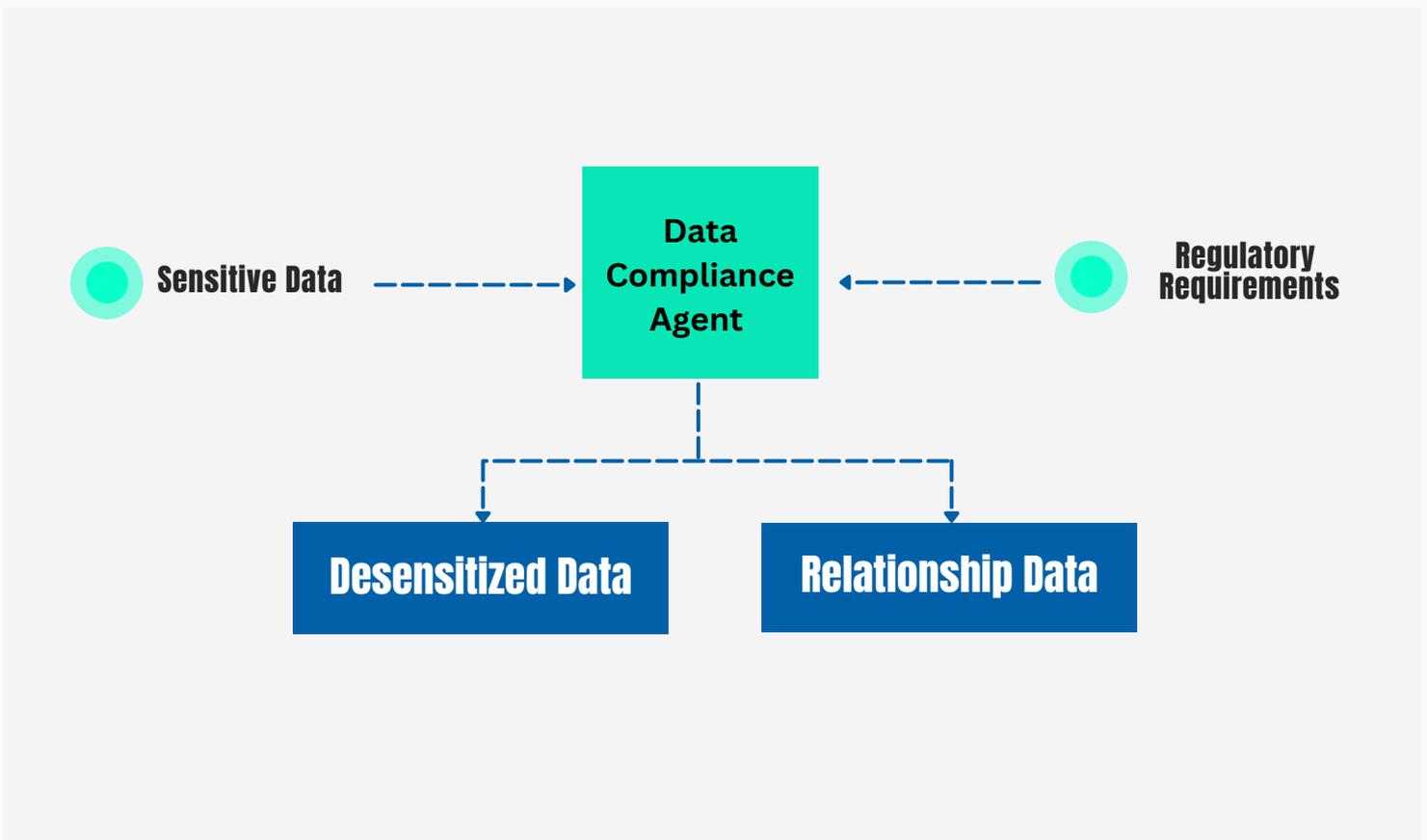
access to 100K+ medical journals, public clinical data, etc.

Search and analyze over 1M clinical documents within 5 seconds.

No prior knowledge necessary use the clinical analytics system.

DATA COMPLIANCE AGENT

Automatic desensitization of medical information to ensure compliance with regulations using advanced Natural Language Processing techniques.



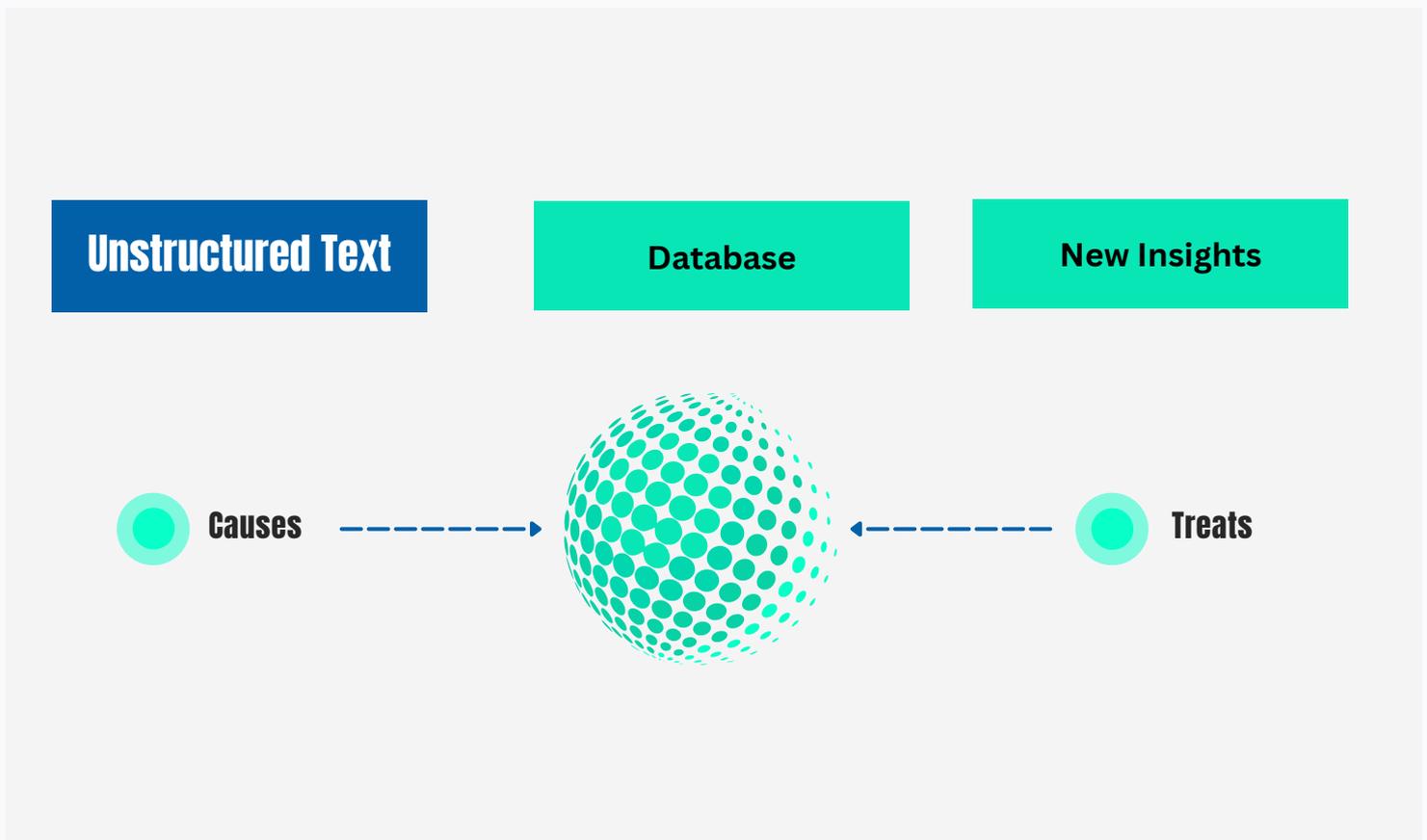
Technology Advantage

Regulatory agencies impose strict limitations on handling of medical data, especially linked with Personal Identifiable Information.

Our Data Compliance Agent automatically scans documents, detecting sensitive data, obscuring it, and returning anonymized data that follows the regulations supplied (e.g. HIPAA). It also securely stores relationships, allowing de-anonymization if needed.

RELATIONAL INFORMATION EXTRACTION

Transforming texts into machine-readable databases at a massive scale.



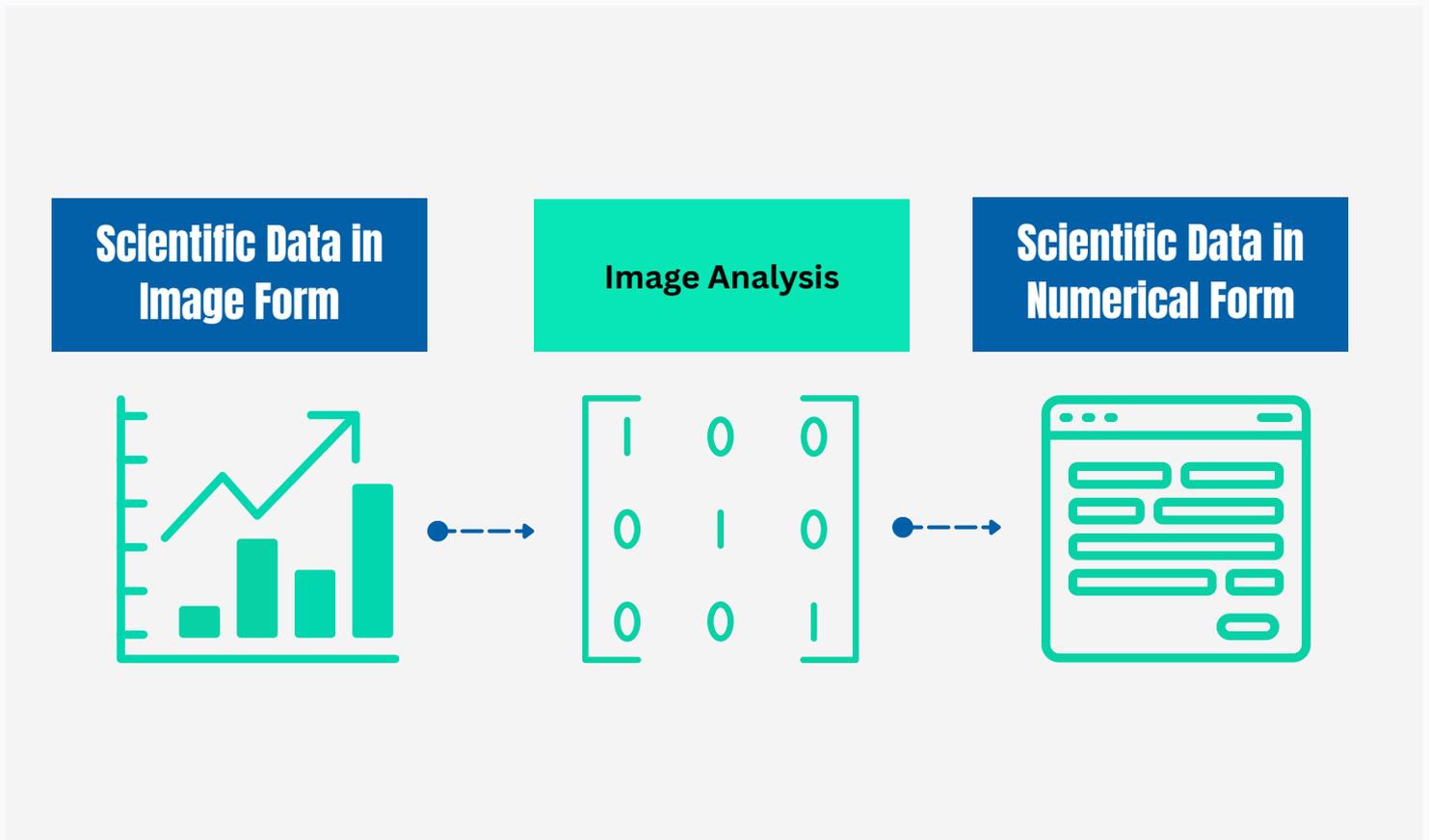
Technology Advantage

There are massive amounts of information available to inform clinical trials or identify new targets, and it is difficult to query it at scale.

Using our Natural Language Processing solutions, we can transform large amounts of text data into searchable databases, and extract information relevant to your needs.

DATA REVERSE ENGINEERING

Extracting quantitative data from plots for accurate comparisons



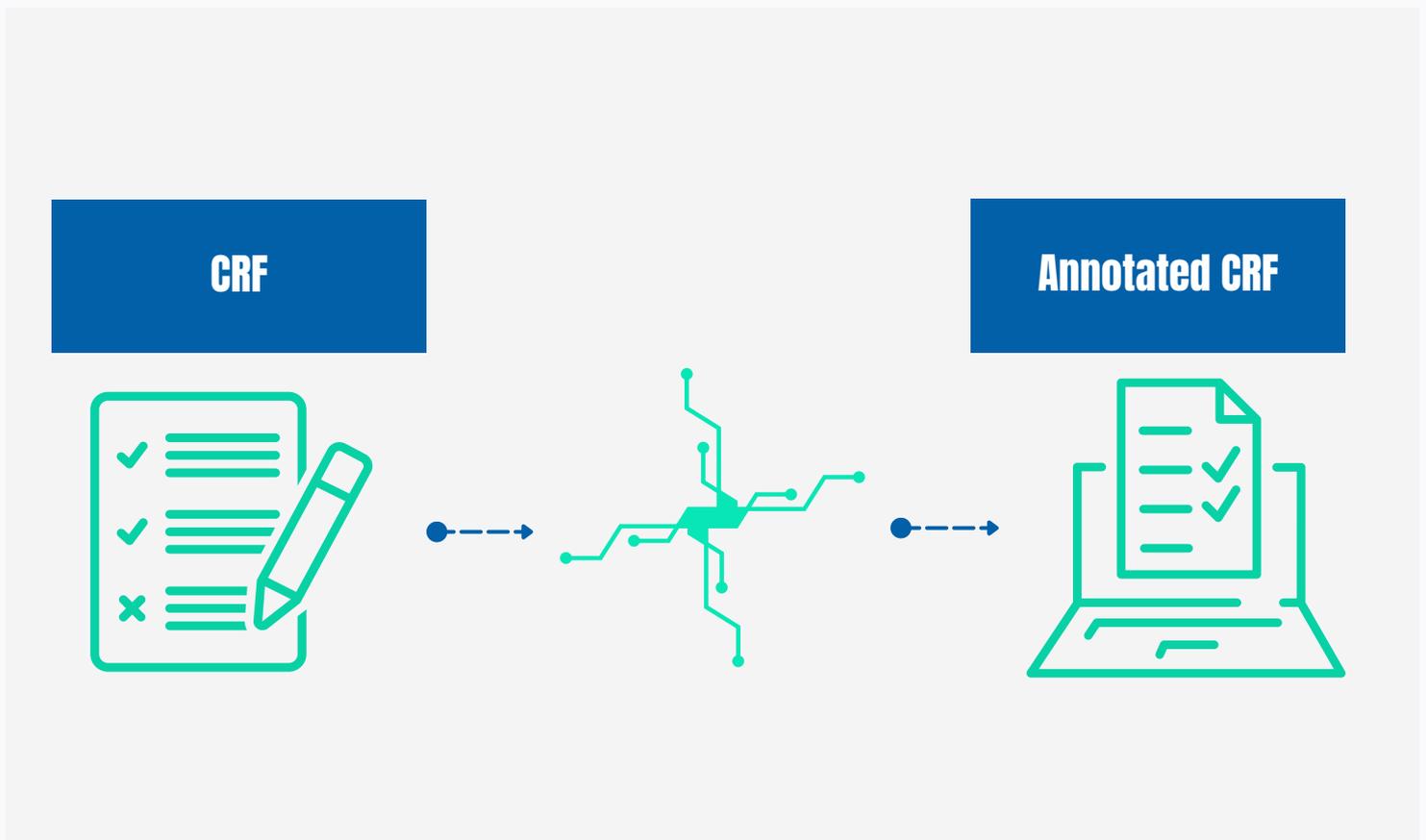
Technology Advantage

The numerical data used in plots are not always made available. Rather than manually approximating the data, our service uses automated image analysis to extract numerical data at scale.

We already support a variety of plots including Kaplan-Meier plots and can develop custom solutions tailored to your needs.

CASE REPORT FORM (CRF) ANNOTATION AGENT

Automating the preparation of documents for FDA submissions.



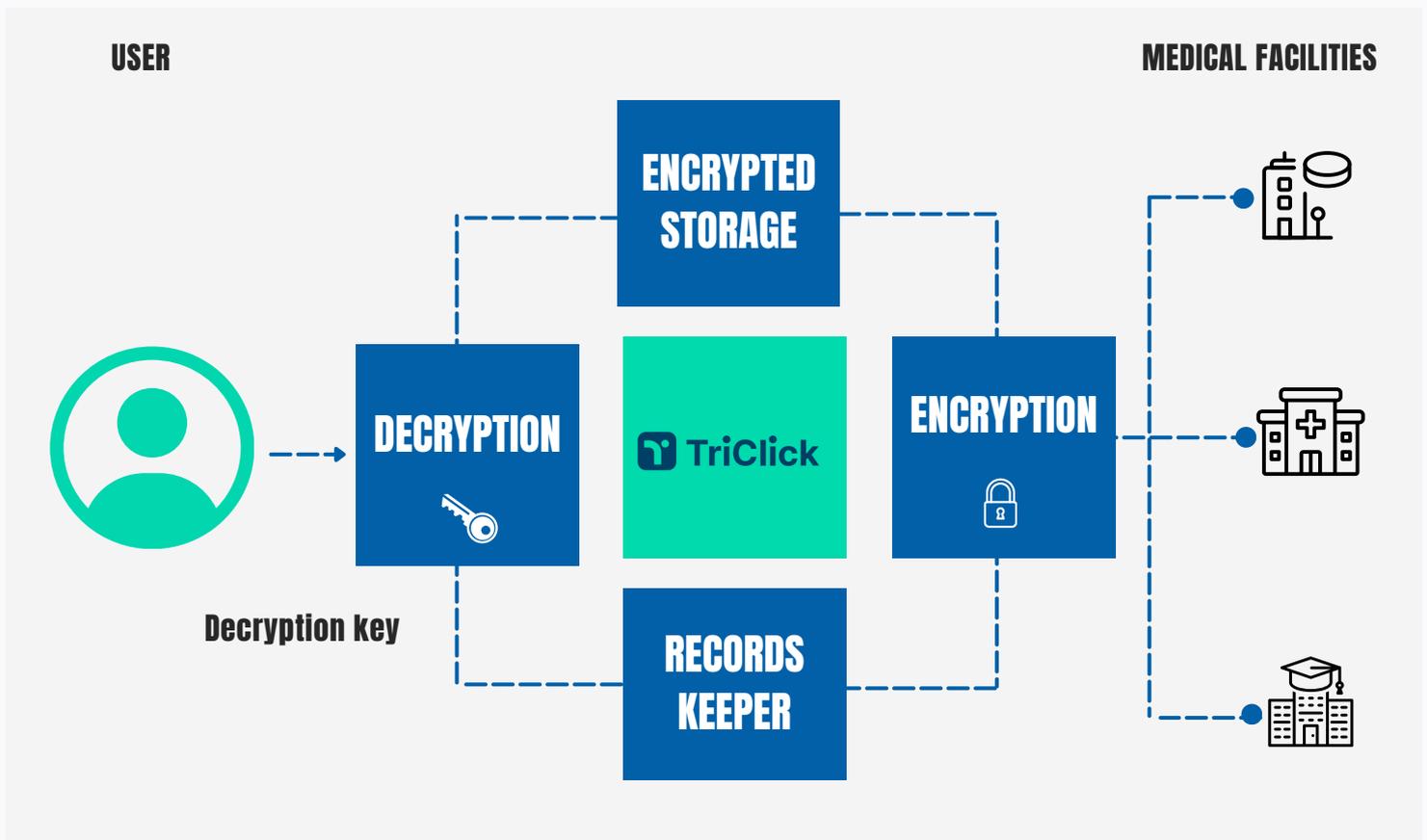
Technology Advantage

During a trial, Case Reporting Forms (CRF) need to be annotated in compliance to CDISC standards before submitting to the FDA.

CRF Annotation Agent works closely with human experts to automate the tedium of producing consistent and compliant annotated CRFs, significantly increasing efficiency.

DATA MANAGEMENT PLATFORM

Your data, securely accessible wherever you need it.



Technology Advantage

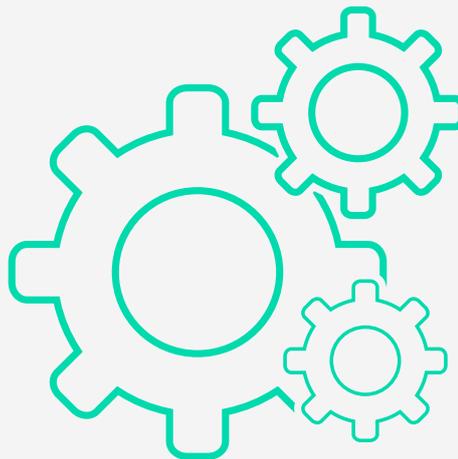
Extracting insights from data is made more difficult when data is sensitive and scattered across multiple systems and organizations.

Our data management platform provides easy, secure storage and retrieval of all kinds of data, including sensitive medical data.

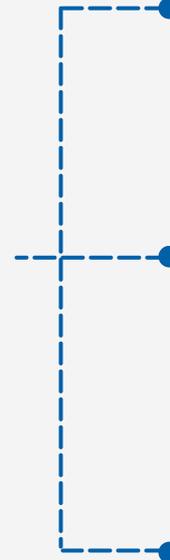
EVIDENCE SUMMARY TOOL

Summarize your Multimodal data evidence with AI

 Upload scientific data in different forms that need analysis



 Quickly and accurately convert images into raw data and perform in-depth analysis.



Technology Advantage

This AI tool can quickly and accurately convert images into raw data and perform in-depth analysis. By leveraging our core image-to-data technology, we empower research projects with fast data transformation, efficient and precise data processing, and analysis.

User Case: During conferences, Pharma Representative can take picture of competitor's charts and upload them to our summarize tool. This tool will convert the raw data from the charts and generate a summary simultaneously.

TRUSTED BY GLOBAL LEADERS

Hill Research partners with more than ten of the world's leading pharmaceutical companies — including **two of the top three and five of the top ten global pharma leaders**. This breadth of collaboration underscores our reputation as a trusted innovator in clinical research.



With each partnership, we focus on outcomes that matter: shorter trial cycles, stronger compliance frameworks, and smoother regulatory success.

By empowering global leaders with our AI-driven solutions, Hill Research is redefining what's possible in the future of clinical trials.

The background of the slide features a dark, blurred image of a computer monitor. On the screen, there are several icons: a speech bubble with three lines, a speech bubble with 'AI' inside, and a large, glowing 'AI' logo in a rounded square. The overall aesthetic is tech-oriented and modern.

THANK YOU

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