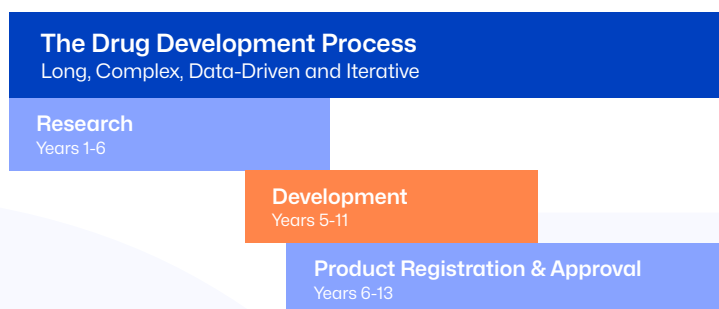


# Closing the Information Gap in Clinical Trials. Are You Ready?

The Secret Edge That Clinical Researchers Need

It's no secret that the pharmaceutical industry is facing a crisis. Their life-changing work is plagued by high costs, long timelines, and low success rates for bringing drugs to market. Many of these problems are caused by a lack of access to data across clinical trials, R&D practices, and regulatory/compliance activities.

The drug development process is long and arduous. It can take pharmaceutical companies years to successfully bring a treatment to the patients who are waiting for it, with many innovations, steps, protocols, and decisions along the way.



At each stage researchers must compile information: about their research, their tests, and their findings, which requires a lot of manual work. For the minority of molecules that are deemed ready for clinical trials, these studies are conducted by various departments within pharmaceutical companies or are outsourced to third-party organizations, leaving valuable data scattered across various internal and external data stores.

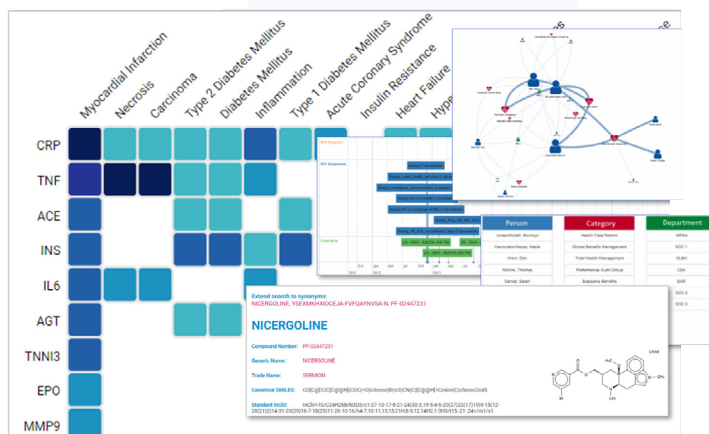
In that environment it's hard to find the right information when you need it fast, and the losses in productivity (and therefore time to market) are staggering: according to International Data Corporation (IDC), knowledge workers spend 25-35% of their work lives futilely looking for information<sup>1</sup>. For Data Professionals (many of whom are employed in the Life Sciences) it's even worse: IDC estimates that they're losing 50% of their week in the search for, and duplication of, data that already exists<sup>2</sup>.

What's worse, because Life Sciences is an industry that has historically low turnover rates and significant amounts of experienced, older employees, pharmaceutical companies are some of the largest victims of the "great retirement." In addition to the loss of institutional knowledge, this phenomenon also invites added difficulty as organizations struggle – on tight timelines – to transfer the personal knowledge of retiring researchers to new employees who may not have been involved in previous clinical development processes and trials. When this knowledge transfer is left to a manual system, no matter how hard they try, young researchers are often left to the difficult, time-consuming duty of personally combing through dissociated stores of trial data when they need to access information about past development.

**It's no surprise that this approach leaves new researchers with an incomplete picture at best, and a hopeless morass of seemingly disconnected data points at worst.**

<sup>1</sup> The High Cost of Not Finding Information | IDC

<sup>2</sup> The State of Data Discovery 2018 | IDC



## Connecting disconnected data makes the picture clear

Having this data not only makes new clinical trials much faster, easier to design and create, and more efficient in their execution, but it offers much more than that: vastly increased protection against the potential liability of NOT having centralized, accessible, and usable data on drug development. Since 2000, there have been hundreds of compliance-related penalties imposed on pharmaceutical companies. Depending upon the nature and severity of the violation, penalties have ranged from hundreds of thousands to billions of dollars<sup>3</sup>, each of which slows down the release of life-changing drugs and damages the public's confidence in the drug developer.

## How Real Companies Solved The Problem

In 2015, [one global life sciences company with over \\$4.9B annual revenue](#) faced many of these problems<sup>4</sup>.

Their challenge: A growing need to leverage decades of valuable information, including significant knowledge about the design and administration of thousands upon thousands of clinical trials, buried in the heap of internal and external data sources. Their SAS clinical data system alone contained millions of datasets each containing up to a millions rows, **which all added up to over 40 billion locations to digitally traverse in their search for valuable information.**

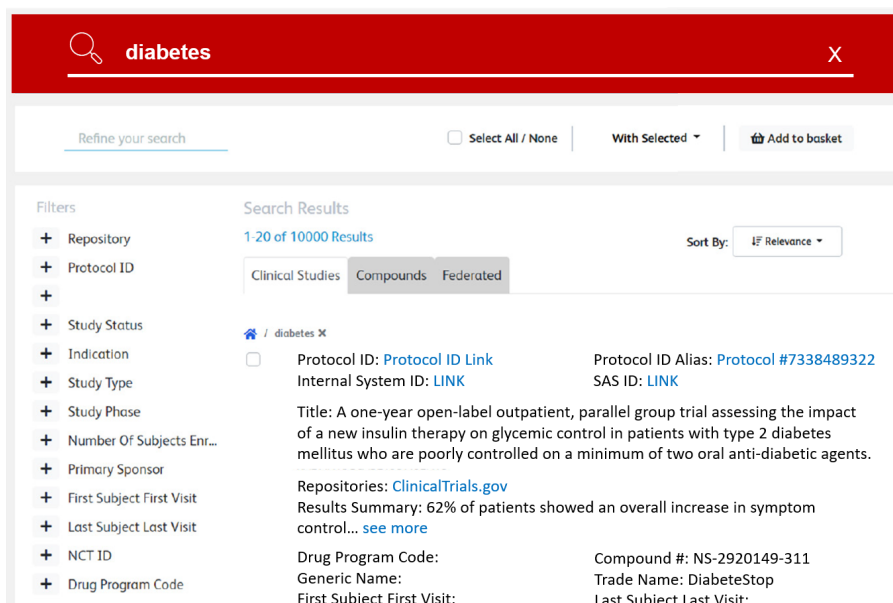
*"If you have historic information aggregated over time, you're quickly losing the idea of what's in there at all, and...you get quickly lost. This was the case in the past for us specifically in the clinical development teams where we had more than ten million files, one million folders, lots of study information, and if you would be interested in an older study especially or getting information about something that has been done in the past... then it's difficult."*

- Senior Project Manager, Worldwide Pharmaceutical Company

<sup>3</sup> Pharmaceuticals Summary | Violation Tracker

<sup>4</sup> Pharmaceutical Case Study - Sinequa: Gaining Efficiency Through Informed Clinical Trials

The company realized that it had to make data more readily accessible if it hoped to achieve the insights and innovation that would enable success in the future. Quick access to the right information - and ALL of the right information - would make employees more efficient and innovative in the design, setup, and administration of their trials.



## Clinical Study Search in Sinequa

After carefully researching the Enterprise Search market, they chose Sinequa for its market-leading data connectors (including statistical analysis systems). Using machine learning, Sinequa's Intelligent Search was connected to their existing SAS data stores and legacy systems to read, index, and unify their siloed data into a single, accessible interface... and clinical research staff began to close the data gap and discover insights almost immediately. Because it is uniquely suited for Life Sciences and Big Data use cases, users were able to quickly answer important questions from natural language queries, – like who was involved in a project or trial, what information they had about health outcome analyses for a particular disease, or who are the internal experts on a specific gene or biomarker, etc. – to connect the right people with the knowledge they needed to do their jobs, and focus on what mattered most—what was happening in their labs and clinical trials. By making it easy for clinicians to access the massive body of research buried in their servers, they were able to spend less time searching for data and more time analyzing it.

**Almost 7 years later, this company estimates that Sinequa has conservatively saved them almost \$4M /year** in regained time for 1,500 clinicians – or \$28M since implementation. They've also saved **an additional \$2.4M per year** (or nearly \$17M since implementation) for their 6,000 non-clinician employees who have begun using Sinequa's machine learning to accelerate innovation in R&D, create a compliance database for regulatory inquiries, and deliver drugs more quickly to market. Their most recent financial estimates see **potential to realize further savings of \$143M** by using Sinequa to accelerate their drug delivery timeline<sup>5</sup>.

<sup>5</sup> Pharmaceutical Case Study - Sinequa: Gaining Efficiency Through Informed Clinical Trials

50% of the world's leading pharmaceutical companies choose Sinequa's AI-driven search for their most critical applications. With its ability to search structured or unstructured data and use machine learning to read context instead of just words, Sinequa can proactively offer knowledge workers powerful insights and connections that the raw data would have otherwise hidden.

### Seing is believing

Request a demo by email at [info@sinequa.com](mailto:info@sinequa.com).

Sinequa also has a robust partner network, including:

SciBite's TERMite semantic enrichment product gives Sinequa a comprehensive, structured set of medical, scientific, and research vocabularies so that life sciences companies can pre-train their system and hit the ground running with scientific search.



## Companies that use Sinequa



... and many more.

Sinequa helps life science organizations put their wealth of data to work by unlocking the potential of their buried information. With its availability either on-premise or as a SaaS offering, and its library of over **200 native data connectors**, Sinequa's machine learning allows life sciences to solve complicated problems like:

- Facilitating clinical trial design and patient recruitment for centralized or decentralized studies
- Quicker, safer exploration of novel therapeutics (like mRNA vaccines, cell & gene therapies at scale, etc.)
- Building regulatory compliance databases to avoid costly delays
- Ensuring that research and innovations are discoverable to increase speed to market
- Faster sourcing for supply chain and manufacturing concerns
- ...and much more

Ready to see how Sinequa can make your clinical trials more successful?

Visit <https://bit.ly/Life-Sciences-Guide> to start your Life Science organization's journey towards Being Information Driven.

## About Sinequa

Sinequa serves both large and complex organizations with the most complete enterprise search, ever. Customers employ our intelligent search platform to connect all content (both text and data), derive meaning, learn from user interactions, and present information in context. This solves content chaos and informs employees through a single, secure interface. They get the knowledge, expertise, and insights needed to make informed decisions and do more, faster. These organizations accelerate innovation, reduce rework, foster collaboration, ensure compliance, and increase productivity. Become Information- Driven™ with Sinequa. For more information visit [www.sinequa.com](http://www.sinequa.com).