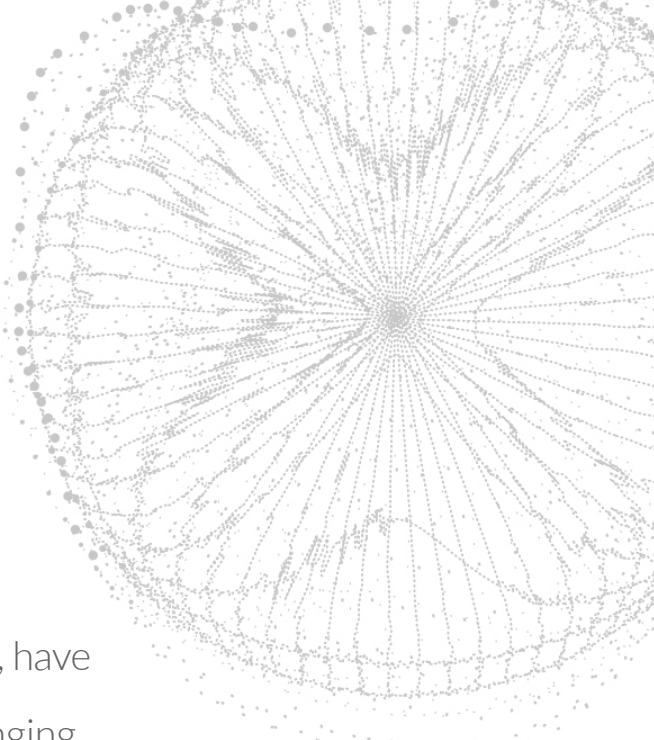


# Life Sciences Data Solutions:

What You Shoud Know



Life sciences industries, including pharmaceutical, biotechnology, and medical device manufacturers, have complex and unique problems. On one hand, bringing new products to market requires sharing ever more resources and data across an organization. On the other hand, intellectual property and patient information must be protected and secured. This results in data sets that are spread across numerous sources and geographies. The users that access and analyze this information need customized views into the data in order to understand it for their purpose.

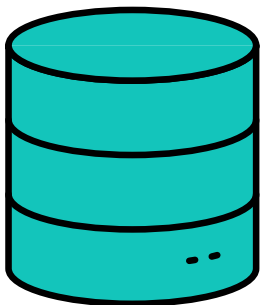
This guide will illustrate how the Lucidworks Fusion platform can enable you to create powerful search and data applications that solve the most common data challenges for life sciences.

Here are some of the common problems and their solutions:

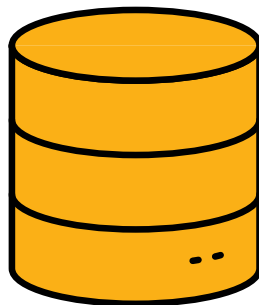
**Problem:**

Data is distributed among different organizations in different formats, and searching across each source separately wastes time and resources.

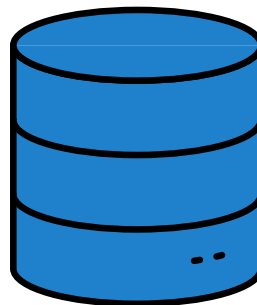
Research Data



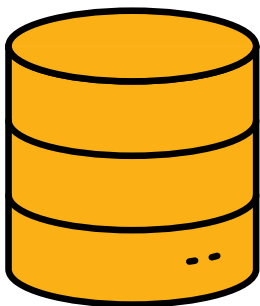
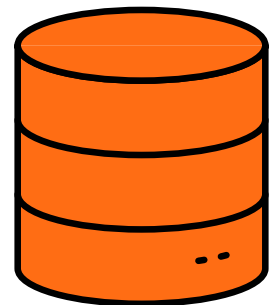
Phase 1 Data



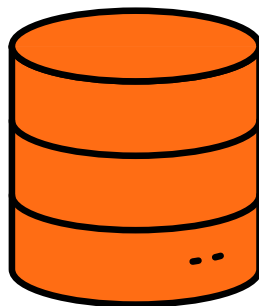
Clinical Trials Data



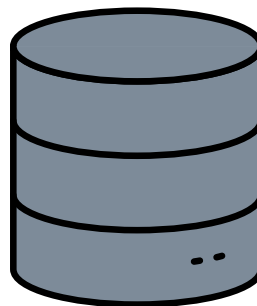
Biological Data



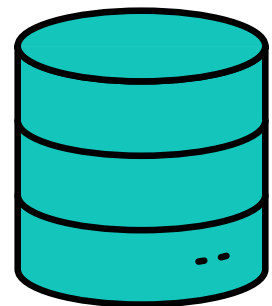
IP Data



Field Data



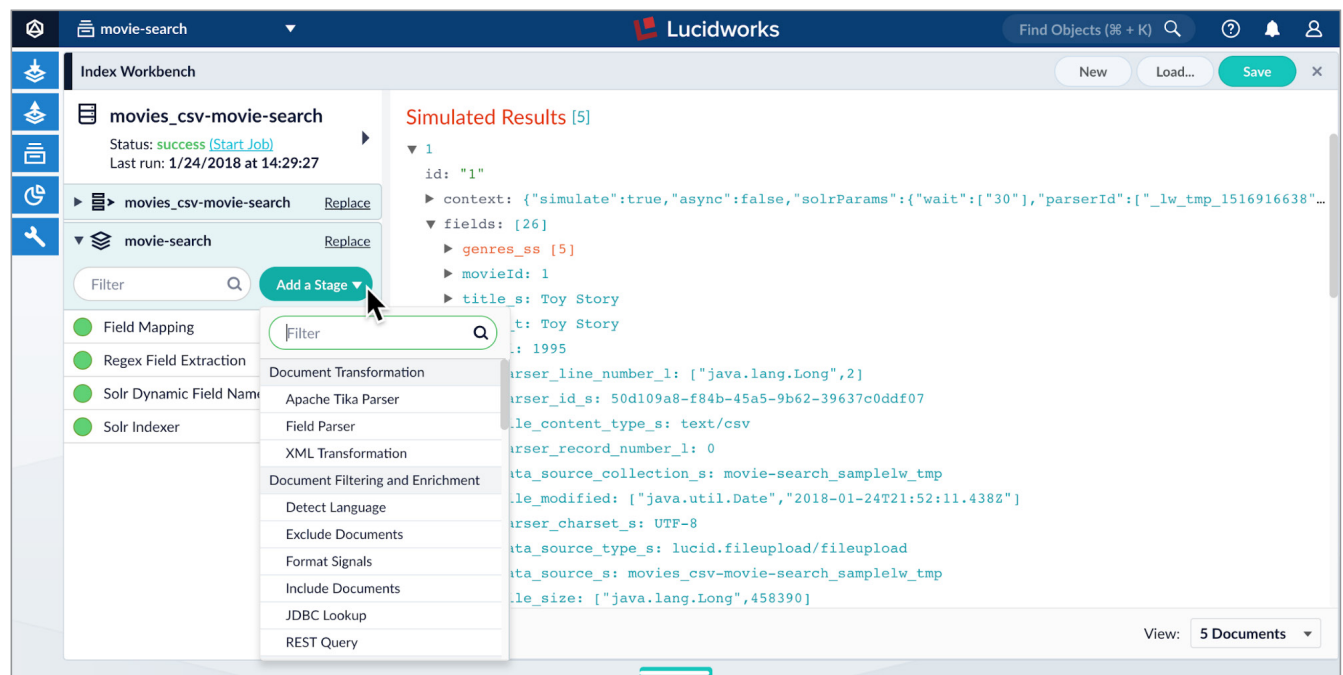
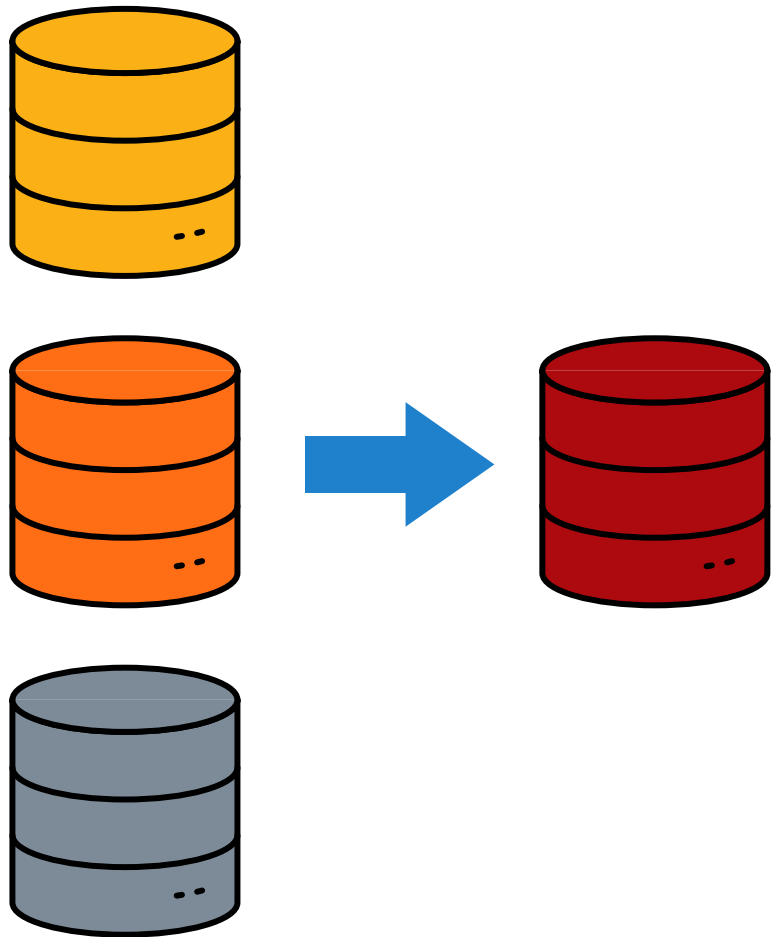
Treatment Data



Patient Data

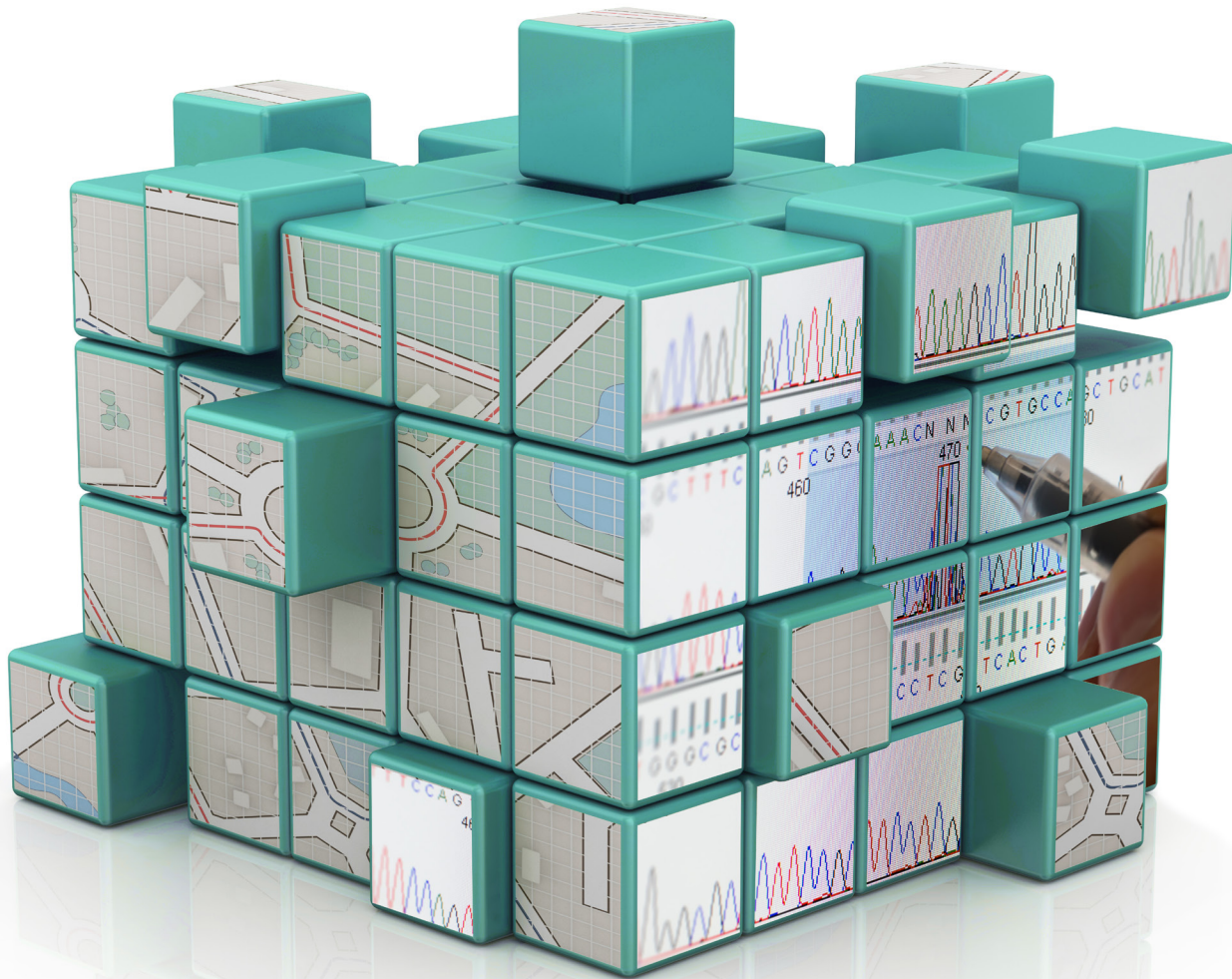
## Solution:

Fusion pipelines allow importing, transforming, and augmenting data from hundreds of different data source types into the index so that data applications can provide higher quality search results and more context around each data point.



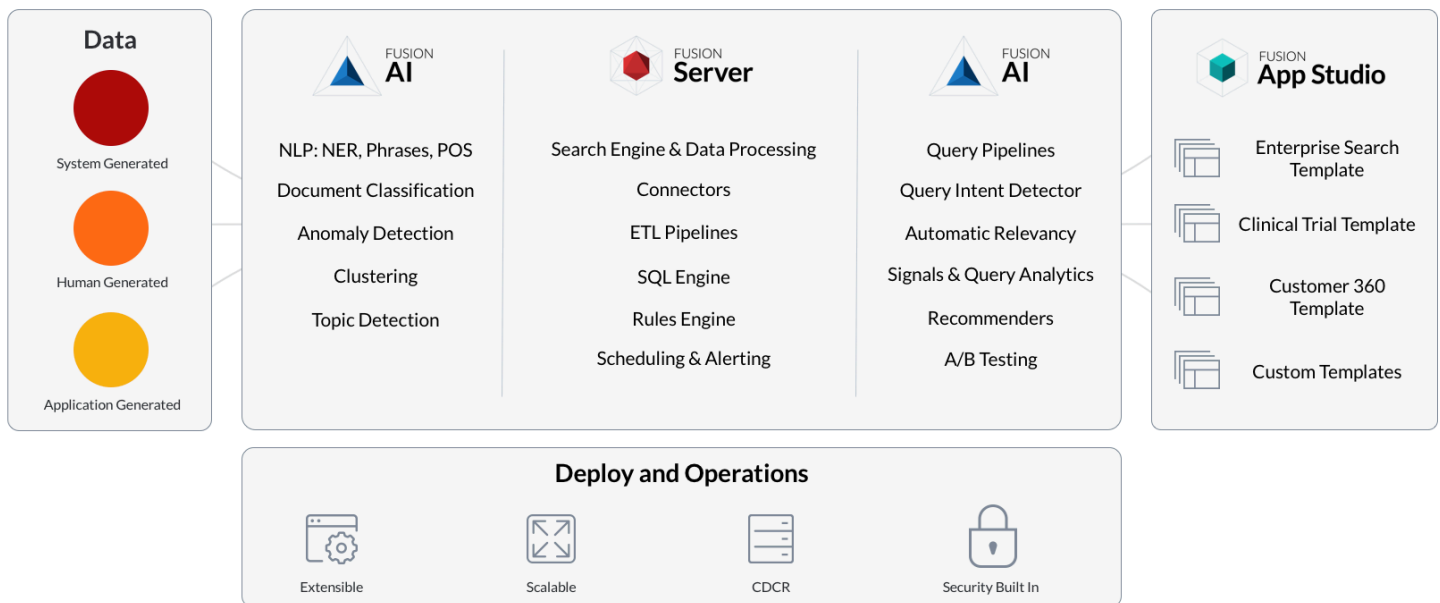
## Problem:

Different types of data need to be analyzed in combination.  
Data volumes are too large for traditional RDBMS joins and too complex for data warehouses or data lakes.



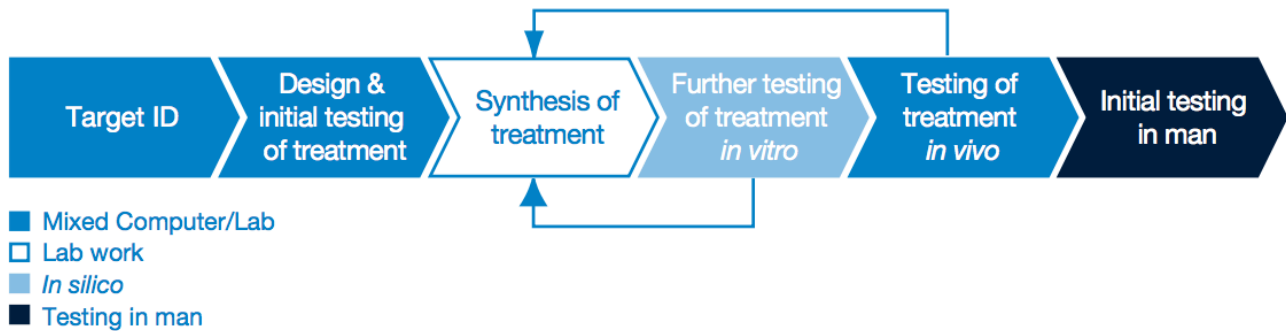
## Solution:

Fusion's distributed document-based database powered by Apache Solr can join as many as 11 collections with as many as 2 billion documents (depending on the complexity) on inexpensive commodity hardware. This includes using complex joins and pivots.



## Problem:

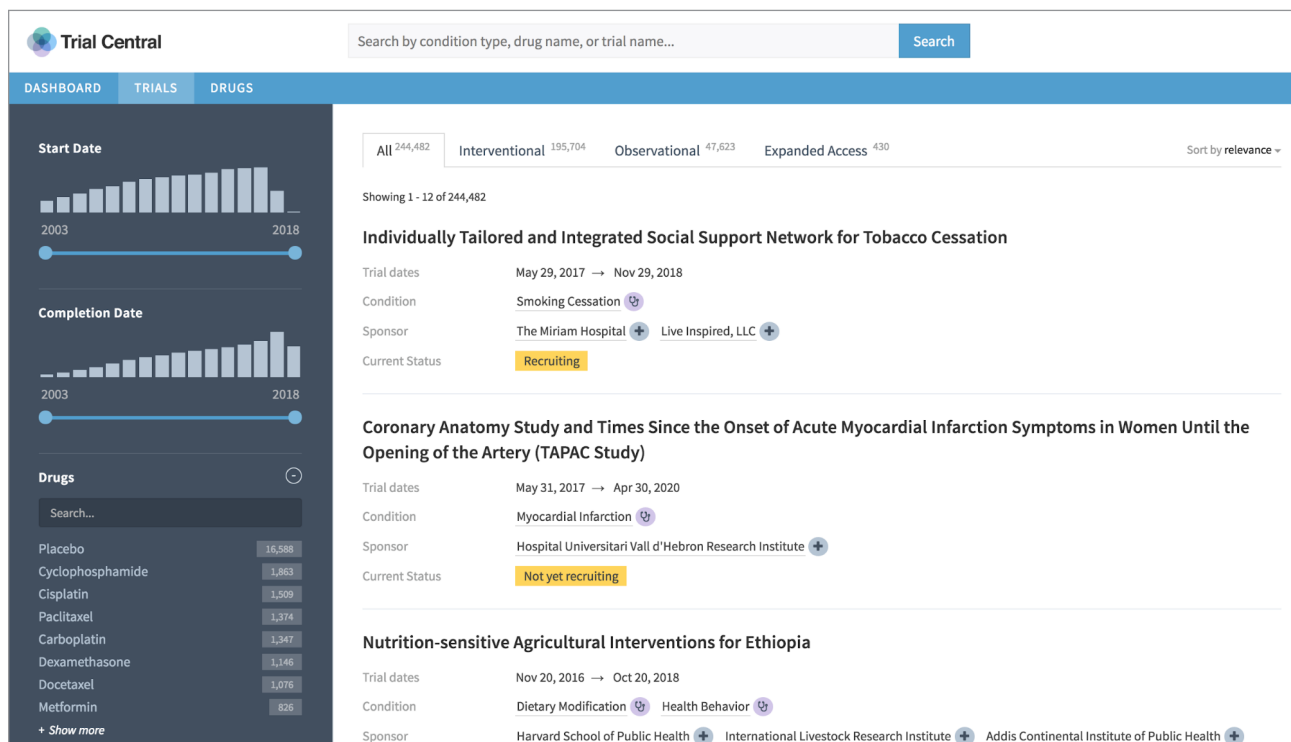
Multiple users across different disciplines (research, clinical trials, regulatory, marketing) need real-time access to data but with different visualizations and emphasis.



Source: PricewaterhouseCoopers

## Solution:

Fusion App Studio enables teams to create various types of visualizations to simplify data analytics for particular views or roles.





## Problem:

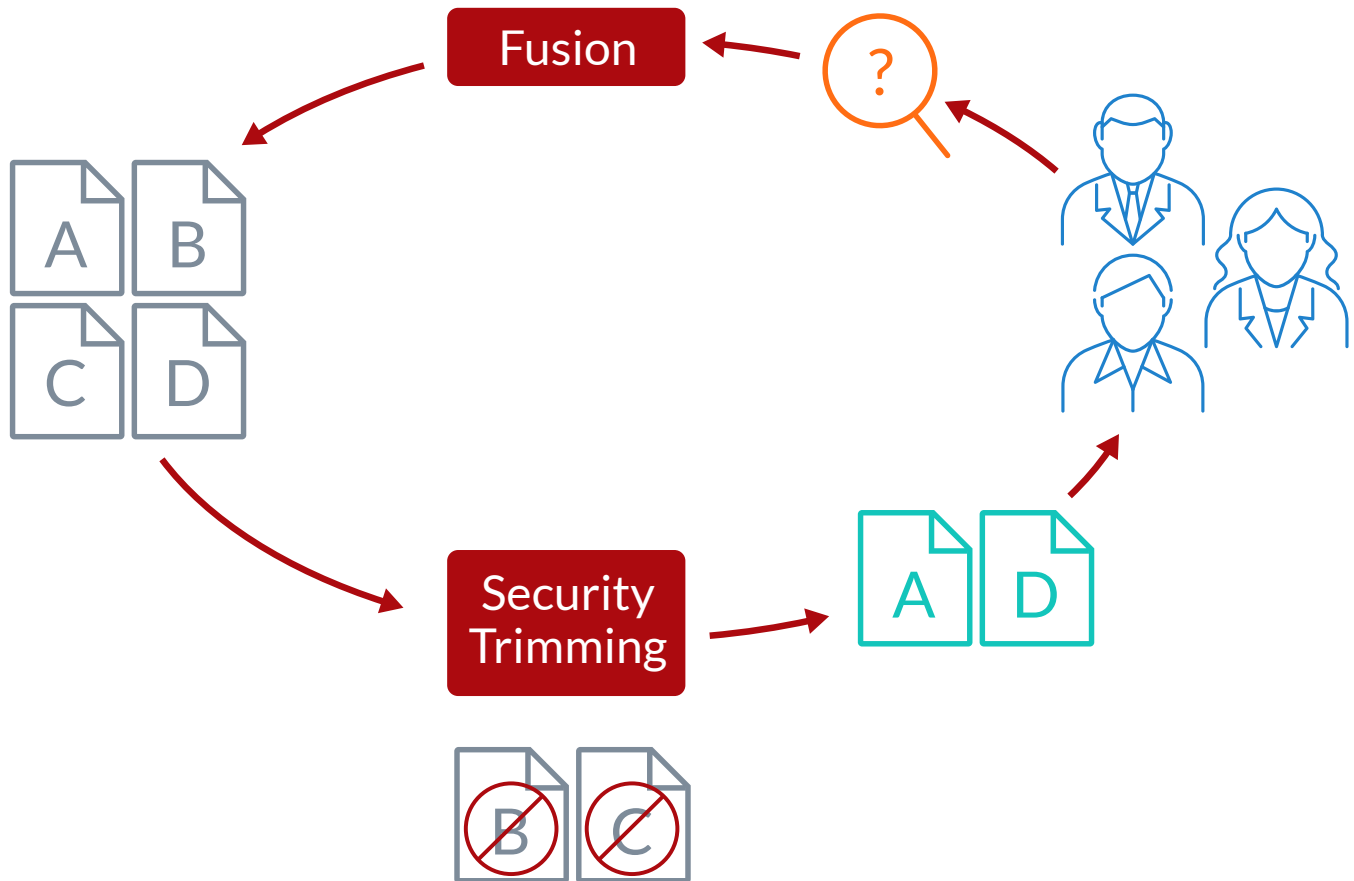
Patient and other types of data such as intellectual property need to be kept highly secure and controlled by role, region, and in some cases owner.





## Solution:

Fusion's security framework allows for both single sign-on and security trimming. This facilitates making sure data is only seen by those who have the authority to see it.



## Problem:

It isn't possible to dump all data into a lake. There are too many sources distributed in too many places.



## Solution:

Fusion App Studio's data brokers allow you to connect to data sources from around the globe without having to ingest them into a separate data lake. A hybrid approach allows you to utilize the search-driven analytics power of Fusion while using an "analyze in place" strategy for other distributed data sources.

Search

User

Trial 233/4867/190422

Current status: Ongoing

LS-233/4867 • L002678 • Chlororin

SEARCH / COMPOUND DETAILS

< BACK TO RESULTS

Synopsis

Further investigations into how LS-233/4867 fights the malarial parasite and show that it is appropriate in treating more resistant malaria strains.

LS-233/4867 Malaria Oral Tablet L002678 Chlororin Resistant Indication

Staff

The following people are all linked to this trial.

Name	Role	Contact
Rowena Chan	Associate Hematologist	<a href="mailto:rchan@tiscience.com">rchan@tiscience.com</a>
Stuart Witney	Hematologist	<a href="mailto:switney@abbvie.com">switney@abbvie.com</a>
Wayne Khoe	Support	<a href="mailto:wkhoe@tiscience.com">wkhoe@tiscience.com</a>

Drug Supply

GEOGRAPHIC SCOPE: France

SITE ENROLLMENT : FRANCE

8

Target

3

Actual


5

Enrolled

SUBJECT ENROLLMENT : FRANCE

Location	Target	Actual
Paris	90	66
Lyon	75	75
Nantes	75	30
Aix	34	10

View larger map



Documents (5,808)

All Clinical 3,546 Regulatory 1,182 Quality 1,080

Name	Date	Format	
<a href="#">Study TN-400254</a>	10.07.2011	pdf	<a href="#">view</a>
<a href="#">Study TN-034974</a>	19.02.2013	MS Word	<a href="#">view</a>
<a href="#">Study TN-346587</a>	28.04.2005	MS Word	<a href="#">view</a>

## Next Steps

This list just scratches the surface of simple solutions Lucidworks Fusion can provide to the complex problems in the life sciences industries. Fusion's out-of-the-box capabilities, security features, and pipelines will unify diverse data and provide each user with a data experience customized to their needs.

### Get Started or Learn More

For more information or to start using Fusion, contact us today at [lucidworks.com/contact](https://lucidworks.com/contact) or give us a call at **415-329-6515**.