ONTOSIGHT®

AI-POWERED INTELLIGENCE
FOR DRUG DEVELOPMENT
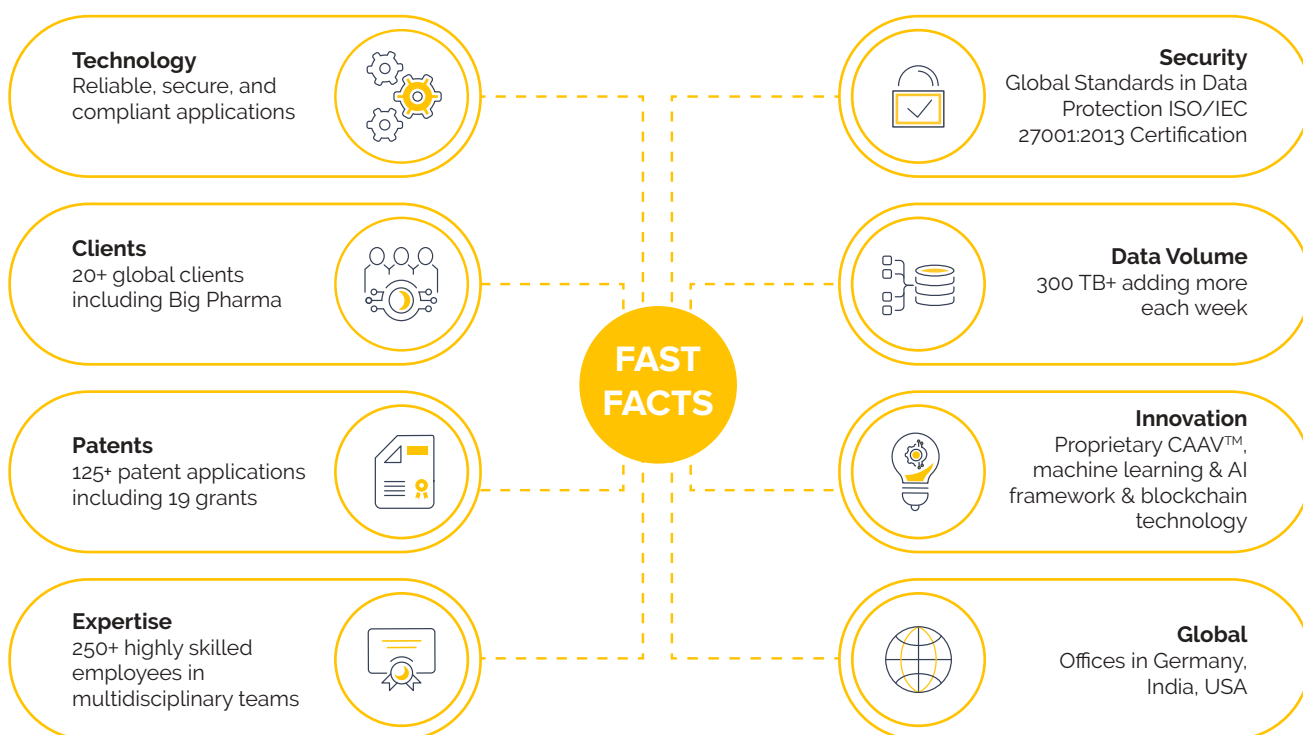
innoplexus®

Innoplexus
A Global AI-Champion

At Innoplexus, we empower enterprises with advanced analytics, faster and more secure solutions. We focus on life sciences to constantly evaluate and improve the efficiency of pharmaceutical and biotechnology companies, reduce R&D costs, and mitigate risks.

With 125+ patent applications and 19 patent grants, Innoplexus uses artificial intelligence to analyze vast amounts of data and surface non-obvious insights.

The Innoplexus Market place is built on blockchain technology to break data silos in life sciences and help researchers submit their work securely while surfacing insights from unpublished work. Innoplexus Market place is the optimal technology for secure online transactions, and has been adopted by the banking sector in India to transform the financial industry.

Founded in 2015, INNOPLEXUS AG is headquartered in Frankfurt, Germany, with offices in Pune, India, and Iselin & San Francisco in USA.

Technology
Reliable, secure, and compliant applications

Clients
20+ global clients including Big Pharma

Patents
125+ patent applications including 19 grants

Expertise
250+ highly skilled employees in multidisciplinary teams

FAST FACTS

Security
Global Standards in Data Protection ISO/IEC 27001:2013 Certification

Data Volume
300 TB+ adding more each week

Innovation
Proprietary CAAV™, machine learning & AI framework & blockchain technology

Global
Offices in Germany, India, USA

Ontosight®
Accelerating Drug Development with AI-Powered Intelligence

Ontosight® is a holistic platform for research and discovery in pharma and life sciences. At its core, Ontosight® is built with artificial intelligence acquiring and analysing the world's knowledge, augmenting a universal ontology and rendering it for researchers to gain insights.

Over the years the Ontosight® platform has acquired and analysed 95% of the world-wide-web data from multiple sources such as publications, clinical trials, congresses, patents, grants, drug profiles, gene profiles and many more. The content and trillions of derived data points are disambiguated, normalized, structured, augmented, and taxonomized into a knowledge base. The knowledgebase is continuously updated with fresh content and can be searched or browsed through an intuitive web-based user interface.

Ontosight® enables pharmaceutical, biotechnology, and life sciences professionals to accelerate research and development, with real-time insights at their fingertips. Ontosight® modules and dashboards significantly accelerate processes throughout the drug development cycle.

Largest Life Science Data Ocean

Public Data:

We scan the world wide web for life sciences data allowing our clients to access structured and unstructured, publicly available data from various sources to enable data enrichment and real-time continuous analytics using our life scienc-

Enterprise Data:

We help you integrate enterprise data, maintaining high security standards, into a custom life-sciences data ocean. The data is stored through IPSec. tunnel and even the backup is encrypted. The entire source code is maintained on private Git.
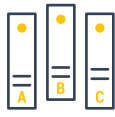
Third-party Data:

Innoplexus can enter into third-party agreements with data providers to centralize data assets already available. Organizations can then use their enterprise level data to generate useful insights and increase the efficiency of major business decisions.

Our Data Ocean
A one-stop solution for all relevant life science information

23 M+
Researchers & Physicians

1.3 M+
Thesis & Dissertations

42 M+
Publications

639 K+
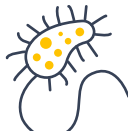Clinical Trials

500 K+
Proteins

9 M+
Genes

35 K+
Treatment Guidelines

28.6 M+
Patents

5 M+
Grants

300 K+
Diseases

3.7 M+
News & Press Releases

12 K+
Hospitals & Institutes

16.4 M+
Social Media

6.5 K+
Pathways

440 K+
Deals

17 K+
Regulatory Updates

13.9 M+
Blog & Forum Posting

200 K+
Species

3.3 M+
Congress Articles

One platform, multiple solutions

Experience the power of AI and our proprietary life sciences ontology combined in Ontosight® – your one-stop solution to relevant insights for more informed and faster decision-making.

Ontosight® accelerates research, discovery, and development by providing various modules and dashboards that support context-based searches, deep-dive functionalities, and intuitive visualization of our life sciences data ocean.
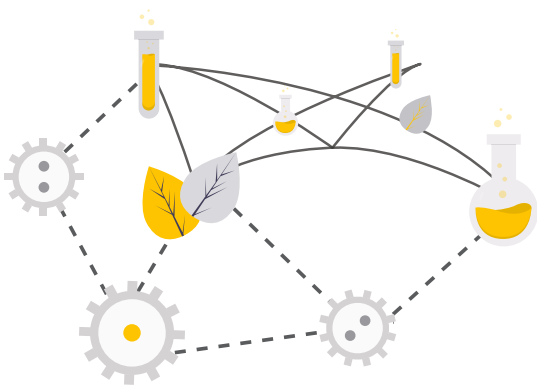
Ontosight® Discover - Automate your data intelligence work

A fully automated discovery engine using artificial intelligence to direct your focus on the data that matters most to you. Access comprehensive scientific literature database, curated using life sciences language process-ing and life sciences ontology of over 31 M+ biomedical terms.
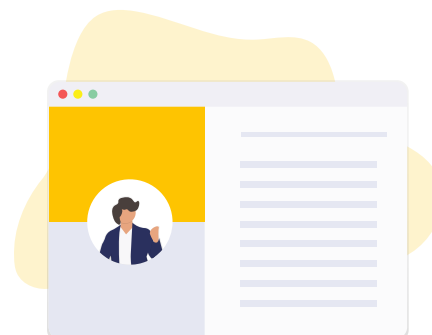
Ontosight® Explore - Visualize known & unknown connections

An AI-based engine for exploration and identification of obvious and non-obvious connections between diseases, pathways, proteins/targets, and drugs. Visualize com-prehensive networks to better understand disease pathways and uncover novel mecha-nism of action, or explore avenues for drug label expansion or combination therapies.

Ontosight® Influence - Track researchers and KOLs globally

An intuitive AI engine for discovery of use-case specific researchers, investigators, and key opinion leaders. Identify networks of top, second-tier, or emerging KOLs and dive deep into their profiles. Prioritize KOLs to meet precise needs across any disease area, rare diseases, or geography, and get real-time updates.
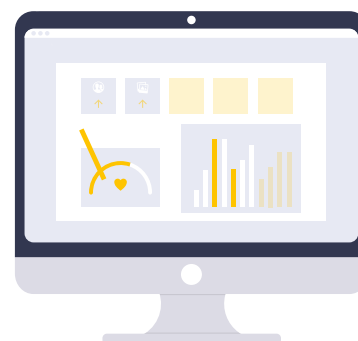
Ontosight® DaaS - APIs for life science data

Empower data analytics teams in life sciences with what's most important to them – structured life sciences data! Experience the power and flexibility of data in the palm of your hand with comprehensive Application Programming Interface (APIs) equipped with Innoplexus's proprietary machine learning algorithms and life sciences ontology.

Ontosight® Dashboards - Focus on decision making

Empower teams involved at various stages of drug development with AI-enabled custom insights and updates to make strategic decisions. Get real-time updates on patents, competitive intelligence, treatment guidelines, regulatory requirements, and medical affairs with our unique, intuitive dashboards.

Comprehensive AI-powered Ontology for Life Sciences

AI specialized to the deepest level in the specific language of life science will be more effective than a generic system that can address everything from science to architecture but is not optimized for anything. The language of life sciences is anything but natural. Moreover, there's a considerable influx of new data from various sources such as publications, patents, theses & dissertations every day. For this reason it is paramount to analyze data faster and to generate real time insights.

A life sciences ontology with the capacity of natural language processing & retrieval of context-dependent information helps narrow down the search for specific terms, identify query-related articles, and assists researchers, scholars, and scientists to generate associations between diseases, genes, drug targets, molecules, MOAs, etc. Importantly, it cuts down the need for manual intervention, and automates the identification and tagging of the most relevant content. It maps discoverable concepts from all major sources, connect observations, and learns unseen concepts – thereby, furnishing faster and more accurate insights.

Our Life Sciences Ontology is self-learning; it detects terms and concepts to make for a better output of searches. Moreover, with the integration of enterprise and third-party data, the ontology is automatically applied, offering insights applicable to your use case.

> ## Connected, automated, self learning ontology for life sciences

Our proprietary CAAV™ framework
enables you to generate insights in real time

Innoplexus' platform architecture utilizes a proprietary CAAV™ framework to deploy machine learning to crawl, aggregate, analyze, and visualize life science big data to enrich and expedite decision-making in the pharmaceutical and life science industries.

CRAWL

Our proprietary machine learning-enabled universal crawler crawls & extracts relevant data, and integrates new data into our biomedical ontology and data ocean in real time.

AGGREGATE

Encrypted integration with enterprise data and structuring of aggregated data is achieved using AI technologies that help in extracting useful information.

ANALYZE

We use powerful data analytics to remove text ambiguity and interpret relationships between concepts. Our ontology maps these concepts and enable concept-based searches.

VISUALIZE

With interactive visualization across web and mobile, we facilitate the discovery of hidden trends to help generate insights that drive important business decisions.

Our cutting-edge technological innovations led us to 125+ patent applications including 19 granted

Machine Learning & AI
Understanding domain-specific contextual information and building reasoning systems to serve the intent of user queries.

Ontology
Mapping all discoverable concepts from all major data sources and self-learning unseen concepts validated by random checks.

Network Analysis
Modelling and persisting the entire data set as a network in a graph database. Multigraph with networks from different asset classes as layers.

Entity Normalization
Resolving entities from disparate sources covering name variations. Increasing the precision to discover entities with sparse metadata.

Computer Vision
Leverages image processing to extract relevant info from PDF and images. Enhanced OCR to handle special characters with high precision.

Blockchain
Smart contract system for searching unpublished data and making transactions. Integration of confidential data in a secure way.

Contact us to get more information and build your AI-powered solution!

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