NUVISAN
The Science CRO

DRUG DISCOVERY

Digital life sciences

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Our digital science for drug discovery

At Nuvisan, we believe that data is at the very core of the drug discovery process. Our team of digital experts works closely with our clients to implement the most suitable strategy for a new target identification, hit finding, or lead optimisation program

With decades of pharma expertise, we use computer-aided drug design approaches to deliver new and effective blockbuster drugs by leveraging the latest digital technologies together with our in-house Life Science Database to accelerate and guide scientific decisions. We offer:

A highly multidisciplinary team collaborating across all functions, using state-of-the art digital technologies, and committed to the FAIR data principles.

Experienced partner for the omics data analysis and interpretation, as well as bioinformatics expertise for in silico target and indication space evaluation.

Our Life Science Database contains 3 million well-characterised compounds associated with 1 billion in vitro and in vivo data points.

We apply molecular modelling to support projects from early druggability analysis and hit finding, to hit-to-lead and lead optimisation campaigns.

Fine analysis of chemical matters, including QSAR and ML/AI model development for different ADME endpoints is supported by our cheminformatics team.

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Digital life science expertise

OUR EXPERTISE

Bioinformatics
- In silico target prediction
- Omics data analysis and interpretation

10x Genomics certified service provider
- Single cell gene expression and single-cell immune profiling

Molecular modelling
- Support from early druggability to lead-optimisation campaigns

State-of-the-art technology
- Data science technology under FAIR data principles

Compound library
- 3 million compound library with 1 billion in vitro/in vivo data points
- High-throughput screening, virtual screening and data mining

Quantitative structure-activity relationship (QSAR) and machine learning (ML)
- Model devlopment for activity, DMPK and Psychem property prediciton

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From target identification to novel chemical matter

BIOINFORMATICS

We facilitate integrated design, implementation, and data analysis for target validation or biomarker discovery by employing state-of-the-art data science methods including data mining, multivariate statistics, data visualisation, and machine learning. Application fields include:

- Transcriptomics, genomics and epigenomics
- High-content cellular assays
- In silico target and indication space evaluation

CHEMINFORMATICS AND MACHINE LEARNING

Our data platform enables efficient screening, prediction of efficacy and safety, and design/optimisation of new chemical series. Get ahead of the competition with cutting-edge approaches for:

- Mining Life Science Database
- QSAR modelling
- ML physchem and DMPK endpoint prediction
- AI-powered de novo generative molecular design

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Data-driven molecule generation

LIFE SCIENCE DATABASE (LSDB)

Our proprietary LSDB is built on decades of pharma research and contains 3 million unique molecules associated with ~1 billion experimental data points covering biological activity, physchem, DMPK endpoints and more. We rely on LSDB for:

- Analysing data for hits identified through high-throughput screens
- Data mining and virtual screening approaches

MOLECULAR MODELLING

We accelerate projects from hit finding to lead optimisation by predicting the behavior of potential drug candidates and optimising their properties before synthesis and testing with cutting-edge computer-aided drug design techniques:

- Binding pocket identification and druggability assessment
- Ligand- and structure-based virtual screening
- Docking and molecular dynamics simulations
- Multi-parameter optimisation in design-make-test-analyse (DMTA) cycles

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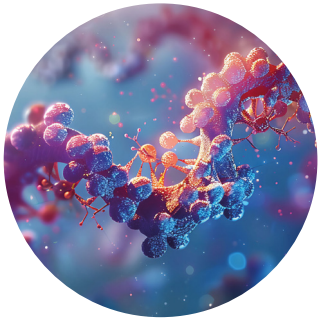

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YOUR PARTNER OF CHOICE IN BRINGING THERAPEUTICS TO LIFE

Nuvisan is a full-service contract research organisation (CRO) and development and manufacturing organisation (CDMO) with state-of-the-art laboratories in Germany and France.

Our pharmaceutical, biotechnology, venture capital and non-profit clients partner with us because our high-quality end-to-end solutions and scientific expertise enable us to streamline and accelerate drug discovery and development – from ensuring target understanding to helping bring therapeutics to life.

Founded over 40 years ago by a team of pharma industry innovators, Nuvisan has established a reputation for expertise and professionalism.

Our team leaders have extensive experience in the biopharma industry, and our unique centres of excellence – for drug discovery in Berlin, formulation and GMP manufacturing in Sophia Antipolis, and our bioanalysis hub in Neu-Ulm – enable our experienced scientists to help guide and advance projects.

We know how to discover, develop and bring the next generation of medicines to market. At the same time, we are committed to flexibility, transparency and collaboration in our approach, working closely with you to adapt to your individual needs, minimise risks and help deliver your project.

Contact us

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