

NUVISAN

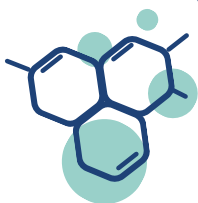


DRUG DISCOVERY

***In Vitro* Drug Metabolism and Pharmacokinetics (DMPK)**

www.nuvisan.com

IN VITRO DMPK EXPERTISE

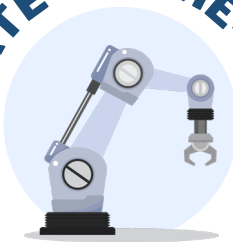


**Comprehensive
Screening:**

15000

compounds/year

STATE-OF-THE-ART



**Liquid Handling
& Robotics Platform**

High Throughput Assays



Efficiency:

>13 Triple-quadrupole and high-resolution mass spectrometers

Speed:

Prompt data delivery for your ultimate convenience

Versatility:

Tailored solutions to unique research questions

Reliability:

>90% customer satisfaction and repeat business

**Unified ADME
Solutions**



> 80 YEARS

experience in
in vitro DMPK



9 PhD Scientists



22 Lab Professionals

In Vitro DMPK for Drug Discovery

At NUVISAN, we are dedicated to provide you with exceptional DMPK (drug metabolism and pharmacokinetics) services. Our preclinical compound profiling capabilities cover the entire ADME (Absorption, Distribution, Metabolism, and Excretion) spectrum to guide your project towards viable clinical drug candidates. With decades of pharma expertise, our NUVISAN scientists assist you from assay design selection to interpretation of results and implementation of screening strategies to overcome ADME liabilities and DDI (Drug-drug interaction) risks.

- State-of-the-art technologies including numerous LC-MS/MS workstations and a large platform of liquid handling robots
- Research support with tailor-made solutions, medium-throughput manual assays, or fully automated high-throughput screening assays on robotic systems
- We provide data fast, reliable and in the highest quality, while maintaining the best possible flexibility
- Excellent customer service focused on sustainability, transparency and customer satisfaction
- Experienced partner for superior scientific feedback, guidance and consultancy on DMPK in drug discovery projects

Our dedicated team is ready to support you at every stage, ensuring the success of your drug discovery projects.

METABOLIC
STABILITY



DRUG-DRUG
INTERACTIONS



METABOLITE
IDENTIFICATION



PERMEABILITY
& TRANSPORTER



PROTEIN BINDING &
BLOOD PARTITIONING



MS IMAGING





De-risking your Drug Discovery Projects



Metabolic Stability

Essential for guiding drug candidate selection to achieve an adequate exposure, half-life, and *in vivo* bioavailability. At NUVISAN, we provide:

- High-throughput determination of metabolic stability and intrinsic clearance in microsomes and hepatocytes of several species
- Prediction of hepatic blood clearance and maximum achievable bioavailability applying the well-stirred liver model



Drug-drug Interactions

Cytochrome P450 (CYP) enzymes, pivotal in drug metabolism, are a key source of DDI. Enhance the safety and effectiveness of your drug candidates with our advanced services, including:

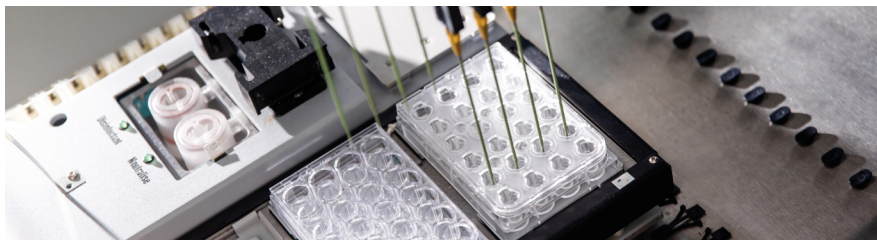
- Reversible and irreversible inhibition assays for seven CYP enzymes
- CYP induction studies emphasizing mRNA and activity measurements
- CYP/UGT phenotyping studies revealing the involvement of individual isoforms



Metabolite Identification

Early knowledge on metabolic structure liabilities is crucial in all drug discovery projects. NUVISAN aids in the progression to viable drug candidates through:

- Elucidating the structures of metabolites formed in microsomal and hepatocyte incubations
- Conducting cross-species investigations to facilitate a seamless transition into the drug development phase



DMPK – A Vital Player for Successful Drug Candidates



Permeability and Transporters

Understanding intestinal absorption and tissue distribution involves assessing permeation across membranes and interactions with transporters. Leverage our services, including:

- Caco2 cell assay for bidirectional membrane permeation testing
- Studies with MDCK cell lines showing P-gp or BCRP overexpression



Protein Binding and Blood Partitioning

The unbound drug concentration relevantly influences *in vitro* and *in vivo* efficacy. Benefit from our assays that determine:

- Unbound fraction in plasma, tissue-homogenate or *in vitro* assay medium
- Partitioning between whole blood and plasma for precise blood clearance prediction



MS Imaging

Elevate your understanding of tissue distribution with our MALDI-MS imaging technique by:

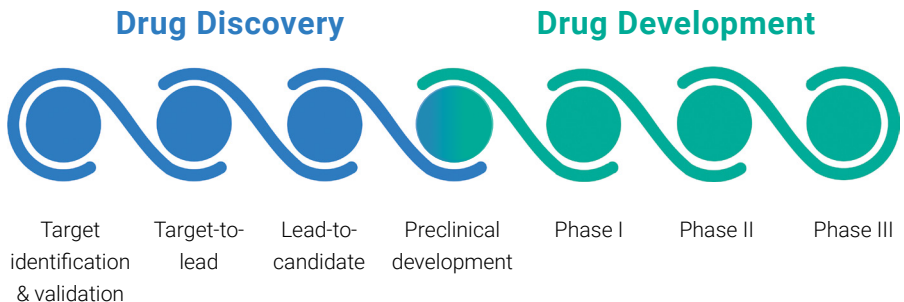
- Visualization of spatial distribution of drugs, metabolites, and other endogenous molecules within biological tissues
- Obtaining quantitative information on concentration in specific tissue regions

The Science CRO - From Target to Patient

The NUVISAN group is a contract research and development and manufacturing organization (CRO/CDMO) with six sites in Germany and France as well as local experts situated in Latin America.

We offer unique, high-quality, and tailored integrated solutions along the drug discovery and development value chain to our biotech startup, pharma, non-profit, and venture capital clients – from target identification to the patient.

Thanks to more than 40 years of experience and about 1,000 employees (incl. > 70 % industry experienced scientists and lab professionals), we know how to discover, develop, and bring the next generation medicines to market. At the same time, our scientists understand that every project is different. With a flexible and innovative approach and transparent communication, our teams are passionate about closely collaborating with you to adapt to your individual needs.



Contact us



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