

SBW offers high quality services in drug discovery and development for pharma, biotech industry and chemical industry.

SBW Corp. is a consolidated CRO company, providing extensive range of world class services for drug discovery and development from our offices in seven locations in Europe and India.

SBW is equipped with state-of-the-art instrumentation operating by experienced pharma professionals of multiple disciplines.

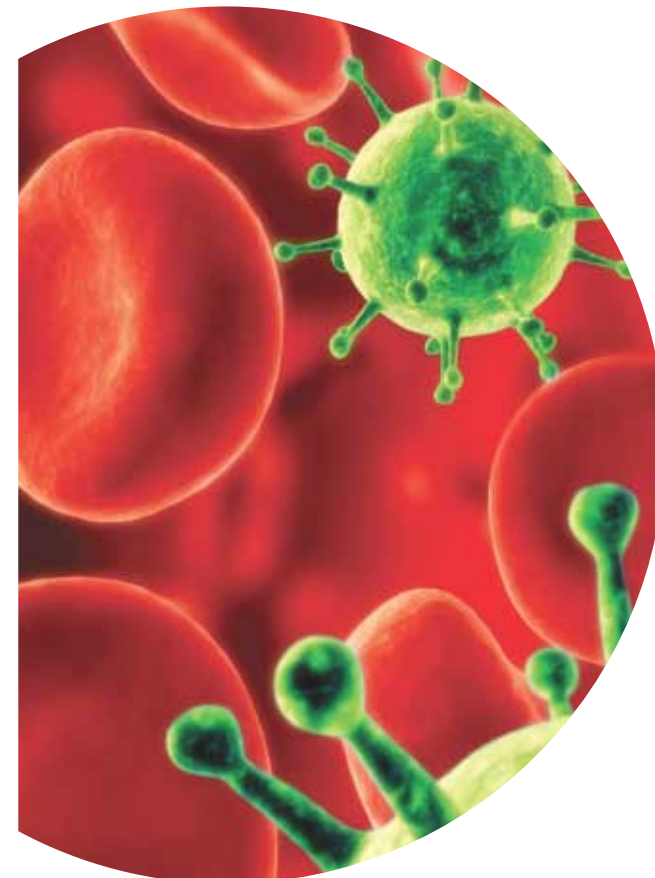
SBW promotes industry-academia partnerships and is involved in many academic research projects aiming to provide novel innovation services for our customers.

Full range of services for drug candidate validation

- SBW provides a range of *in silico*, *in vitro* and *in vivo* services for drug discovery, including early target identification, hit to lead, lead optimization and pre-clinical steps.
- SBW provides a range of services for clinical trials: biostatistics and data management, warehousing and analysis.
- In addition to providing services, SBW acts as your strategic partner in drug research providing you with comprehensive solutions to get the best out of your research efforts.

Scientific accuracy and reliability

- We are authors in over 60 peer-reviewed research papers on drug research and technologies since 2005.



SBW Corp.

Mikonkatu 8, FI-00100 Helsinki, Finland.


Phone: +358 10 439 9440, Fax: +358 9 678 783

Email: info@sbw.fi

www.sbw.fi

Infodix / Biodix / Toxis / novamass / Medachem / 4Pharma
Discovery Informatics / Discovery Biology / In vivo Services / ADME/DMPK / Medicinal Chemistry / Clinical Services

Discovering Success



Services and solutions for drug discovery and development

SBW Corp. provides services and comprehensive designed solutions for drug discovery and development. All our services are tailorable to customer needs. Our experience includes over 100 pharma / biotech customers in over 20 countries.



Chemoinformatics

- Biological activity and scaffold hopping (US pat pend)
- Quantitative physico-chemical and ADME property prediction
- Systemic, organ specific, and genetic toxicity and side effect prediction (US pat pend)

Structure based drug discovery

- Target and ligand based as well as reverse docking / vHTS
- Pharmacophore generation and QSPR

Bioinformatics

- Analysis of proteomics, gene expression and genotyping array data including biomarker discovery, pharmacogenomics and toxicogenomics
- Pathway, protein domain, and interaction network analysis

Workflow Development

- Development of workflows using proprietary and Open Source software (Infosense, Accelrys Pipeline Pilot, Knime)

Data mining and tailored software development

- Artificial intelligence and statistics method development and life-science data analysis
- Programming in R, MatLab, Java, .NET and other platforms and life science packages



- Comprehensive medicinal chemistry solutions for Lead Optimization
- Chemistry design and coordination
- Computational chemistry
- Custom chemical library synthesis
- Custom *in vitro* and *in vivo* efficacy assays
- ADME *in vitro* and *in vivo* analytics



- Biomarker discovery using 2-dgel, MALDI-TOF/TOF, other MS and phage display techniques
- Biomarker quantitation and validation
- Physicochemical characterization of proteins / peptides and post-translational modifications using MS, NMR and CD techniques
- Fragment based drug discovery analytics
- Custom peptide synthesis
- Recombinant DNA services
- Cloning and gene expression in bacterial and mammalian systems
- Gene silencing using siRNA techniques
- Development and screening of custom protein and cell based efficacy assays
- Hematology and clinical chemistry analytics



Metabolism studies

- Metabolite profiling and identification: biotransformations and structural analysis *in vitro* and *in vivo*
- Metabolic stability, profiling and kinetics *in vitro* and *in vivo*
- Identification of rate-limiting CYP enzymes *in vitro*
- Various liver and other organ preparations available in 8 species

Drug interaction studies

- CYP inhibition: cocktail study in microsomes or in hepatocytes
- CYP induction: nuclear receptor activation or cocktail studies in hepatocytes
- Identification of rate-limiting CYP enzymes

Bioanalytical services

- Bioanalytical method development and validation
- Quantitative bioanalysis from plasma, serum, urine, or tissue homogenates
- Metabolite profiling and identification

Pharmacokinetic calculations

- Pharmacokinetic parameters AUC, $t_{1/2}$, CL, V, T_{max} , C_{max}
- Bioavailability

Permeability studies

- Caco-2, MDCK, PAMPA
- Organ specific permeability (lung, skin)
- Transporter interaction assessment

Basic property characterization

- Solubility, lipophilicity, pKa
- Plasma stability
- Protein binding



Disease models

Around 30 *in vivo* disease models, including:

- Cardiovascular and metabolic diseases, diabetes, oncology, dermatology, gastrointestinal diseases and CNS models (e.g. Alzheimer's and Parkinson's, stroke, epilepsy)

In vivo PK

- Available species are rat, mouse, dog, rabbit, and guinea pig
- Formulation for dosing (vehicle finding, vehicle stability)

Safety pharmacology and toxicology

- Modified Irwin test in mice and rats
- Locomotor activity
- Anti- and proconvulsant activity
- Analgesic activity
- Motor coordination
- BP and HR with telemetry
- Pulmonary functions, whole body plethysmography
- Renal / urinary system
- Tail-transection bleeding time test
- Gastrointestinal safety
- Toxicity screening and Maximum Tolerated Dose
- GLP *in vivo* toxicology assays, including respiratory toxicity
- GLP *in vitro* toxicology assays



Key Products

- Biostatistics
- Data management
- Data warehousing
- Bioinformatics

Medical services

- Medical writing
- Medical coding
- Monitoring (through partners)
- Full clinical study (through partners)

Information technology expertise

- Common technical document
- Remote data entry
- Electronic data capture (through partners)
- Pharmacovigilance (through partners)