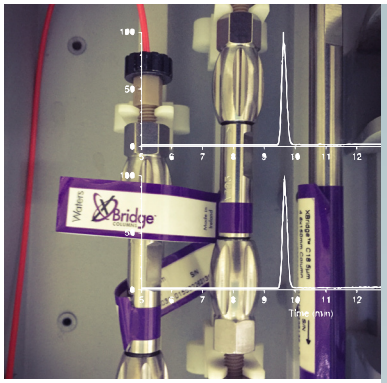
.02.
ADME/PK
for research



in vitro ADME

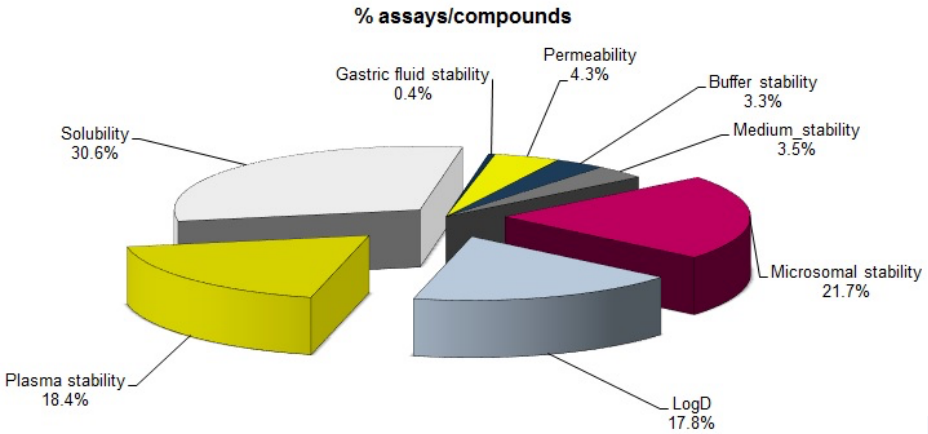
We perform ADME studies for our drug discovery and chemical biology projects. ADME services are also accessible on a fee-for-service basis or as part as a collaborative program. Our ADME/PK and bioanalysis experts offer a custom-based service and experience.

We perform state-of-the-art assays that are validated through SOPs. They can be customed for special needs.

Phys-chem properties
Metabolic stability
Distribution
Safety

Bioanalysis is performed using LC-MS/MS: UPLC Acquity I Class (Waters) coupled to a triple quadrupole Xevo TQD (Waters) equipped with ESI source.

Standard report templates are available and can be adapted to customers needs or existing templates.



Xevo TQD (Waters)

2016

Assays

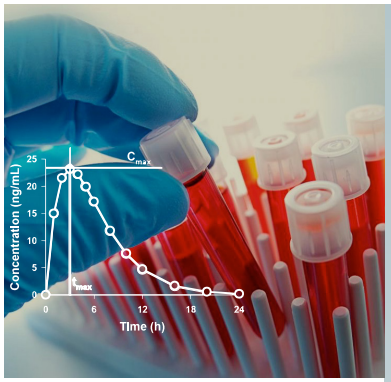
Phys-chem properties:
- Kinetic solubility
- Thermodynamic solubility
- Lipophilicity (LogD)
- Chemical stability

Metabolic stability:
- Microsomes (various species, both intestinal and liver)
- Plasma (various species), esterases function exploration
- Blood (various species)
- Simulated intestinal/gastric fluids
- CYP450 inhibition : MS-based

Distribution:
- Caco-2 permeation studies
- Plasma Protein-Binding

Safety:
- GSH-adduct detection

Drugs & Molecules for Living Systems



In vivo ADME

We perform state-of-the-art *in vivo* pharmacokinetic studies that are validated through SOPs that can be customized for special needs. We can design with you studies that will provide key data for your program.

We design different study types:

- Short lead time for study initiation
- Timed dosing by various routes (PO, IP, SC)
- Single agents, cassette dosing, repeated doses
- Multiple sample time points over extended periods
- Rodents – blood, urine, bile, feces, brain, liver, muscle...
- Bioanalytical support.

For examples of use of ADME/PK in our programs please refer to:

Deprez-Poulain, R., et al Nature Comm.,2015, 6.

Charton, J., et al. Eur. J. Med. Chem.,2015, 90, 2, 547–567.

Beghyn, T., et al J. Med. Chem.,2012, 55(3): 1274-1286.

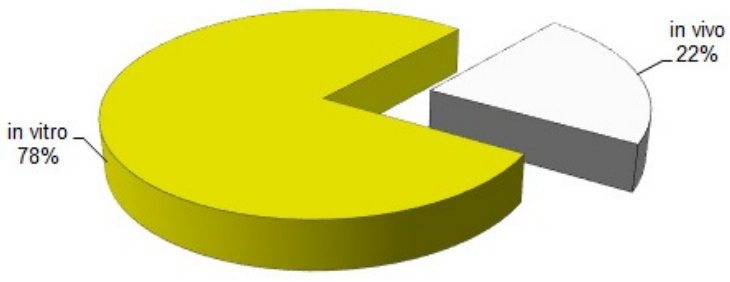
Deprez-Poulain, R., et al J. Med. Chem.,2012, 55(24): 10909-10917.

Flipo, M., et al J.Med. Chem, 2012, 55(14): 6391–6402.

Flipo, M., et al J.Med. Chem,2012, 55(1): 68-83.

Willand, N., et al Nature Med.,2009, 15: 537-544.

ADME/PK studies



2016

PK parameters

- Peak concentration (Cmax)
- Time of peak concentration (Tmax)
- Area under concentration time curve (AUC 0-∞ and AUC last)
- Volume of distribution (Vd)
- Clearance (Cl)
- Terminal elimination half-life ($t_{1/2}$)
- Bioavailability
- Concentration in organs

Contacts / Price Inquiries

We perform assays for research teams in academia and biotech sector

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