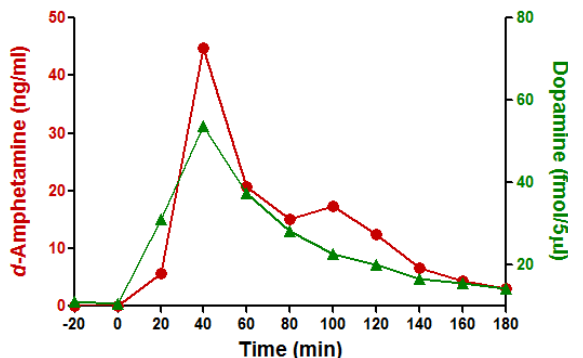


RenaSci: Drug and Neurotransmitter Measurements in the Same Microdialysate Sample

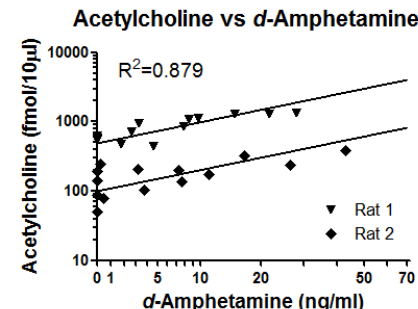
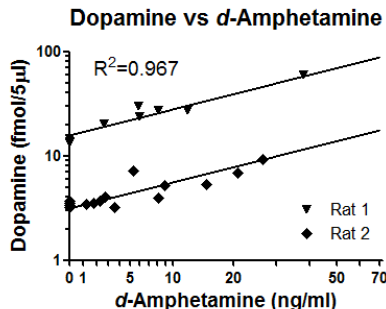


Measurement of Drug Concentrations and Neurotransmitter Levels in Rat Brain Following Administration of *d*-Amphetamine

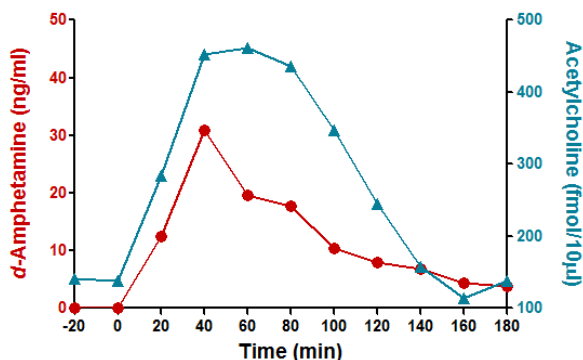
d-Amphetamine and Dopamine Concentrations in Dialysates from Nucleus Accumbens



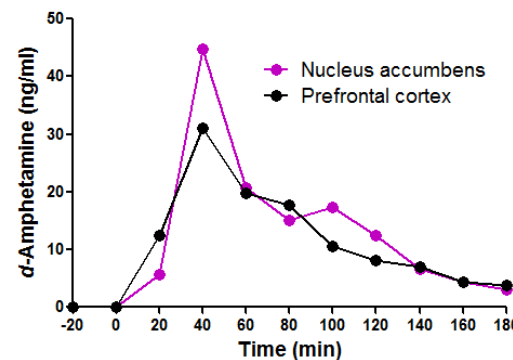
Correlation Between *d*-Amphetamine and Neurotransmitter Concentrations



d-Amphetamine and Acetylcholine Concentrations in Dialysates from Prefrontal Cortex



d-Amphetamine Concentrations in Dialysates from Each Brain Region



In collaboration with pharm-analyt, we are now offering measurement of drug concentrations and neurotransmitter analysis in a single sample of microdialysate

Dual-probe microdialysis in male Sprague Dawley rats to investigate the effect of *d*-amphetamine on:

- Dopamine - Nucleus accumbens
- Acetylcholine - Prefrontal cortex

High sensitivity analysis of dopamine and acetylcholine

- HPLC and UHPLC (ALEXYS™)

***d*-Amphetamine analysis performed by pharm-analyt**

- HPLC-MS/MS (Shimadzu HPLC with AB Sciex API 5000 MS/MS)
- Using just 2 µl of microdialysate (LLOQ 0.1 ng/ml)

About pharm-analyt

- Over 30 years of bioanalytical experience
- State-of-the-art instrumentation: QTRAP 6500 and API 5000
- Able to measure drug concentrations in minimal sample volumes with very high sensitivity

Intracerebral microdialysis was used to investigate the effects of 0.5 mg/kg *d*-amphetamine (sc) on dopamine and acetylcholine levels in the nucleus accumbens and prefrontal cortex, respectively (n=8). Vertical arrows indicate the time of drug administration. *d*-Amphetamine concentrations were measured by pharm-analyt (n=1-3 for the nucleus accumbens and n=5-7 for the prefrontal cortex, according to sample availability). Correlation data are presented for individual rats (representative data), all other data presented as group means.

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