

PREDICTIVE BIOMARKERS
DECISION-MAKING ASSAYS
CNS EXPERTISE

SynapCell is a preclinical stage biotechnology company focused on Central Nervous System disorders. Since 2005, our CRO activity supports international pharmaceutical companies in revealing the therapeutic potential of their compounds in development. Cue®, our predictive decision-making solution comes with a large set of assays specifically designed for Drug Discovery applications. Quantitative, Cue® uses the power and sensitivity of Electro-Encephalography (EEG) to identify functional biomarkers of neurological diseases in vivo, with remarkable human translatability. Our returning customers in USA, Japan, Korea or Europe helped the company establish a solid reputation on the market and is the basis for long-lasting successful business partnerships.



Your Drug Efficacy.
Now Revealed.



SYNERGY Building
ZAC Isiparc
38330 Saint-Ismier
France

hello@synapcell.com
www.synapcell.com

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Unbiased outcomes. Delivered.

Make the Decisions that matter. Now.

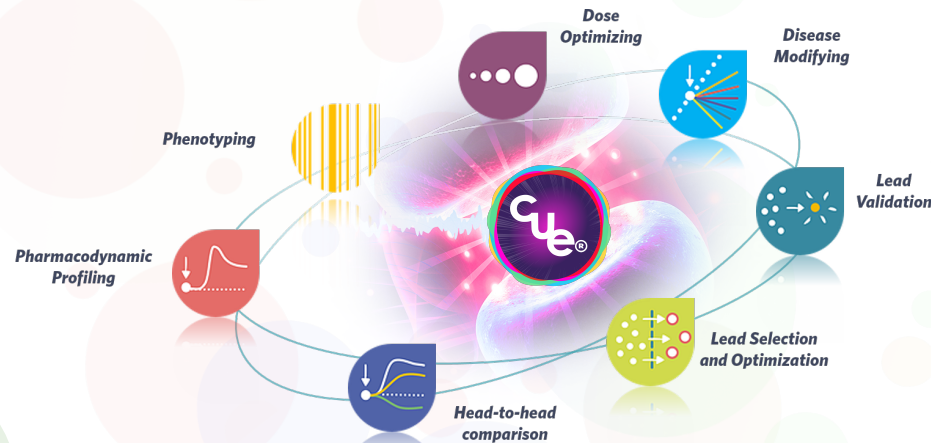
- Today's preclinical brain drug discovery lacks **predictive biomarkers** of in-human efficacy, leading to dramatic attrition rates at Clinical Phases II & III.
- Inspired by the clinical practice, we apply **quantitative EEG** methods (qEEG) on translational models to address this unmet need for predictivity.
- Neural network oscillations are indeed known to be altered in various brain disorders. Disease-specific **oscillatory signatures** can be used as surrogate biomarkers for drug discovery.
- Named **Cue®**, our powerful qEEG-based technology platform was designed to help our clients **make better-informed decisions** as it delivers reliable insights on **drug efficacy** right from brain oscillations.

Powerful Pharmacodynamic assays.

- Cue® combines high-end brain recording capabilities, proprietary signal processing, clinically-relevant animal models mimicking human diseases, and a team with strong skillsets in Neuroscience and Pharmacology.
- To your specific question, Cue® delivers precise **functional profiling** of your compounds with high reproducibility levels, objective endpoints and robust datasets.

Compound testing capabilities that include :

- Surface to deep brain recording
- **In vivo exclusive** assays
- Freely-moving **translational models**
- Crossover **clinical protocols**
- **Ability to compare** to reference drugs



Neuroscience expertise.

⚡ EPILEPSY

- Partial and generalized epilepsies
- Stable and spontaneous discharges
- Biomarkers: SWD and HPD
- Models: MTLE mouse and GAERS rat
- Non-convulsive models
- Anti-epileptic effect- Derisking
- Disease-modifying – Epileptogenesis - Screening

🧑 MOVEMENT

- Parkinson's, Dyskinesia and Essential Tremor
- Motor-related abnormal oscillations
- Biomarkers: BetaPARK and GammaPARK
- Models: 6-OHDA rat and Harmaline mouse
- Antidyskinetic effect – anti-parkinsonian effect
- Acute or chronic protocols

⚙️ COGNITIVE

- Schizophrenia, Alzheimer's disease, Autism
- Pharmaco-induced oscillations
- Auditory-evoked potentials
- Biomarkers: ASSR and AERPs
- Defects in information processing
- Pro-cognitive effect

🔍 EXPLORATORY

- Want to check your compound effect on brain oscillations?
- Wishing to phenotype your own model?
- Having massive EEG data to analyze?

You can then benefit from our **Exploratory program** to answer these questions. We also offer you to move forward by taking advantage of our **Derisking program** to unveil potential side effects (pro-epileptic, pro-kinetic, toxicity...) of your compound.

Partnering with SynapCell



TEAM

We're experts in Neuroscience, Pharmacology, and Brain Surgery.



REPUTATION

Over 13 years supporting preclinical drug development for international companies of all sizes.



QUALITY

Quality management system, with SOPs. Animal welfare and EU guidelines compliance.



INNOVATION

Strong Research & Innovation. Solid Pipeline. No outsourcing.

> **Personalized Study design**

> **3 to 6 weeks to result**

> **Comprehensive Report**