

# CTIS-Profile 2+

Accurately determine the cognitive safety  
of compounds in Phase II and beyond



## CTIS-Profile 2+

**For pharmaceutical companies, *CTIS-Profile 2+* sensitively detects the cognitive properties of compounds in Phase II onwards and is supported by strong scientific evidence demonstrating the sensitivity and reliability of the tasks. Delivered on a cloud-based platform, the cognitive assessment provides high quality reliable data for faster, more efficient clinical trials.**

<p><b>Measures:</b></p> <ul style="list-style-type: none"> <li>• Processing speed</li> <li>• Psychomotor speed</li> <li>• Sustained attention</li> <li>• Visual episodic memory</li> <li>• Working memory</li> <li>• Executive Function</li> </ul> <p><b>Application:</b> Phase II-IV Clinical Trials</p>	<p><b>Age range:</b> 40+</p> <p><b>Length:</b> approximately 20 minutes</p> <p><b>Administration:</b> Standardized</p> <p><b>Scoring:</b> Automatic</p>
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### Simple, scalable touchscreen testing

Validated for use on iPad Air tablet devices, *CTIS-Profile 2+* makes conducting cognitive assessments easy. The intuitive control center and touchscreen tests enables the management of participants, data and trials in one simple to use application.

### Better data, greater value

Cantab is the world's leading cognitive testing system. With *CTIS-Profile 2+* the risks and hidden costs of conventional pencil and paper testing are removed, ensuring better data, faster; saving time and cost.

### Be confident in your drug's cognitive profile

Designed specifically for Phase II-IV trials, *CTIS-Profile 2+* targets the key cognitive domains commonly affected by pharmacological manipulation to assess the function of important neural systems.

### Quality science you can trust

Maximize the chances of detecting signals by using highly sensitive measures and avoid compromising data quality with error-prone pencil and paper tests.

*CTIS-Profile 2+* benefits from a robust scientific heritage and is extensively validated in published literature and over 25 years of leading cognitive research.

A computerized cognitive assessment with standardized administration, including voiceover instructions, *CTIS-Profile 2+* reduces the effects of inter-rater variance on the data. The tests are designed to allow repeated testing of subjects in trials, with multiple parallel forms to minimize practice effects associated with familiarity of stimuli. The test panel is graded in difficulty, making it suitable for both midlife to older adults.

### Professional services

Cantab Connect customers are supported by a team of expert neuropsychologists, project managers and data analysts; ensuring studies are designed, run and completed to the highest standard, on time and in budget.

### Reduce trial workload and costs

The automated *CTIS-Profile 2+* test panel can be administered by non-specialist staff and is rated instantly by the system minimizing the risk of inter-rater variance and data errors.

The cognitive assessment is language and culture independent, allowing fast data collection across multinational sites, with the reassurance that your data will be valid and consistent.

### Regulatory-approved product to support your label claims

*CTIS-Profile 2+* is designed for GCP-compliant studies. The Electronic Data Capture system complies with the European Clinical Trials Directive 2001/20/EC and meets FDA regulations for computerized systems used in clinical trials and 21 CFR Part 11.



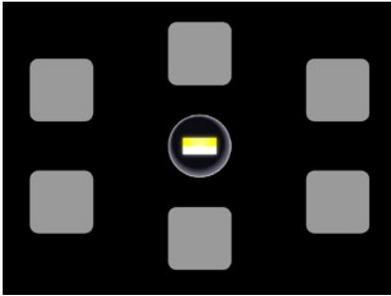
***CTIS-Profile 2+* is delivered on the iPad Air prepared for use in the clinical testing environment with antimicrobial and protective casings and docking bays to ensure no external cables.**

### Contact us

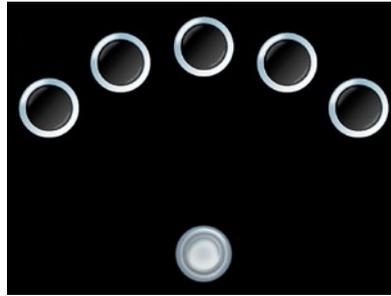
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Cambridge Cognition is the leading global provider of computerized cognitive assessments in academic research, clinical drug trials and healthcare provision.

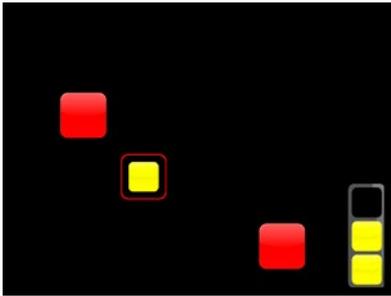
## CTIS-Profile 2+ test panel



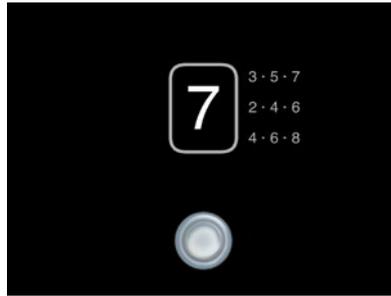
**Visual Episodic Memory** is assessed with a paired associates learning and memory test that is sensitive to hippocampal and temporal-frontal network functioning.



**Psychomotor Processing Speed** is measured using a reaction time test that is an assay for mental and movement reaction times.



The **working memory** and **executive function** task requires the retention and manipulation of visuospatial information. This self-ordered test has notable executive function demands and measures strategy use.



**Sustained attention** is assessed with the rapid visual information processing task, providing measures of response bias, target sensitivity and reaction time.

### Full support for successful trials:-

#### Expert scientific consultation

The Cambridge Cognition team of neuropsychologists can advise on study criteria, protocol design and statistical analysis.

#### Experienced project management

Dedicated Project Managers ensure global studies are delivered on time and on budget.

#### Comprehensive data management

Our data team perform ongoing data reviews and query resolution to guarantee the most accurate data possible.

#### Round the clock support

Technical and customer support is always on hand via our 24/7 helplines.

## Efficient drug development on the cloud

Running on Cantab Connect, CTIS Profile 2+ brings you all the benefits of cloud computing in a single system, ensuring the best value, performance and speed in clinical trials:

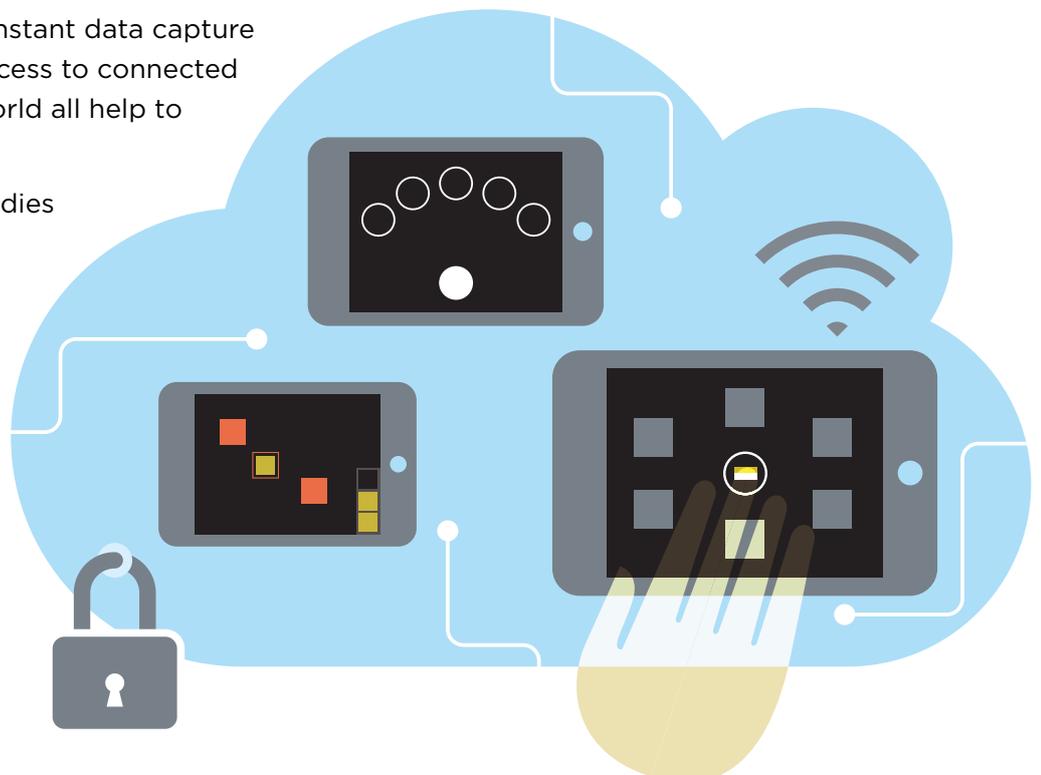
**Flexible** – easy to use, portable and accessible on multiple devices with tasks suitable for healthy participants and patients of different ages and levels of impairment.

**Efficient** – workloads are reduced and productivity increased with no training necessary, automated test delivery, electronic data capture and instant scoring.

**Fast** – rapid study initiation, instant data capture and scoring with real-time access to connected data from anywhere in the world all help to accelerate trials.

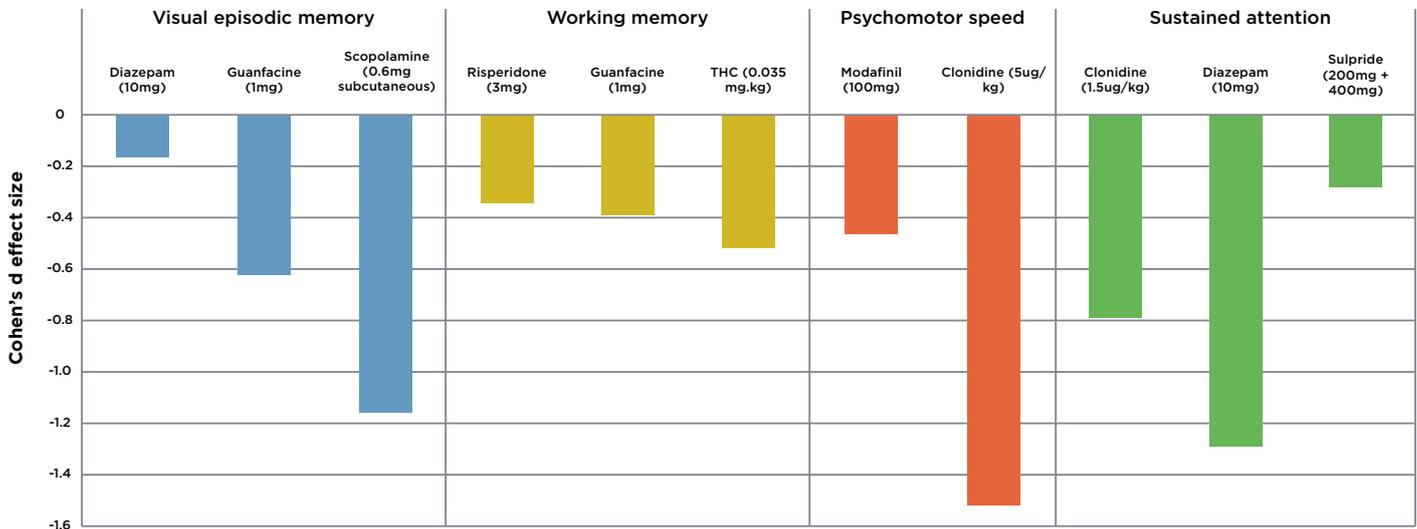
**Secure** – the continuity of studies is never in doubt with cloud-hosted data encryption and secure backups accessible from any system worldwide.

**Quality** – clean and reliable data is guaranteed with CANTAB science and data management built into every system.



## Sensitively measure the safety profile of your compound

The CTIS-Profile 2+ panel is sensitive to acute pharmacologically induced cognitive impairment in healthy subjects, as illustrated in Figure 1.



**Figure 1.**

### Effect size of cognitive impairment following acute administration of pharmacological agents in healthy volunteers.

Figure 1 plots the Cohen's d pooled effect size for pharmacological agents that induce cognitive impairment in four of the cognitive domains assessed in *CTIS-Profile 2+*: visual memory, working memory (a form of executive function), processing speed, and sustained attention, compared to an inactive placebo.

## Key references

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