

Case Study: Preventing Professional & Duplicate Participants in Neuroscience Clinical Trials – Portfolio Support for a Neuroscience Focused Biotech Sponsor

Background:

A small biotechnology company focused on psychiatric and neurological disorders partnered with **Verified Clinical Trials (VCT)** to enhance **subject safety, data reliability, and study validity** across its entire portfolio.

Given the **subjective nature of psychiatric endpoints** and the **vulnerability of neurological populations**, this sponsor recognized that **professional and duplicate participants** represented one of the most serious, yet under-recognized, risks to trial success.

Over a four-year collaboration, VCT supported **nine studies** (four Phase 3 and five Phase 1b) covering major indications such as **schizophrenia and Alzheimer's disease** — all areas known for high placebo responses, variable endpoints, and risk of crossover participation.

Scope and Impact:

Across all studies, VCT verified 3,127 participants and prevented >550 protocol violations, representing a ~18% violation rate that would have otherwise gone undetected.

Top 4 violations prevented included:

- Dual enrollment attempts (same or different studies) 185
- Prior investigational product (IP) exposure 101
- Dual screening attempts (initial and subsequent alerts) 94
- Washout period violations 46

Participants frequently **crossed study boundaries**, enrolling in:

- Multiple studies within the same therapeutic area (e.g., different schizophrenia protocols), or
- Entirely **different therapeutic indications** (e.g., a schizophrenia and a metabolic study) in pursuit of compensation or treatment access.

Reducing Placebo Response and Study Noise:

Duplicate participants distort neuroscience trial outcomes in several profound ways:

1. Inflated Placebo Response:

Subjects who are on **active drug in one study and placebo in another** can produce a **false appearance of efficacy**, artificially inflating placebo response rates and blurring the true treatment effect. This "carry-over" bias can cause a promising investigational drug to appear ineffective.

2. Small N, Big Impact:

In many neuroscience trials, the **number of participants determining study success is relatively small**. Just a handful of duplicate subjects can **shift results enough to turn a positive study into a failed one**. Preventing even a few such participants through VCT can be the difference between **meeting endpoints and losing an entire program**.

3. Compromised Safety:

Subjects who receive multiple investigational products across studies or sponsors face compounded exposure risks. This can create spurious adverse events or false safety signals that delay programs or force repeat trials. In some cases, sponsors have been compelled to abandon promising compounds because uncontrolled crossover subjects distorted safety and efficacy data.

4. Cross-Sponsor Contamination:

Because **research participants rarely "stay in their lane"**, they often move freely among studies from different CROs and sponsors. Only VCT's **cross-sponsor and cross-therapeutic registry** can identify these hidden overlaps, ensuring **true independence of trial populations** and protecting all stakeholders in the ecosystem.

Through real-time verification at the **point of screening**, VCT prevents these high-impact errors before randomization — protecting both the **statistical integrity** and **clinical safety** of every study.

Participant Personas:

VCT's longitudinal registry not only detects violations but also helps sponsors understand **why** they occur. In neuroscience, two distinct participant personas dominate:

- Deceptive Participants (Psychiatric Studies):
 Some individuals deliberately misrepresent medical histories to qualify for multiple studies or maximize compensation. Without objective verification, their self-reported symptom data can artificially inflate placebo response and distort efficacy endpoints.
- Desperate Participants (Neurological Studies):
 In Alzheimer's and other neurodegenerative diseases, participants or caregivers may seek any opportunity for access to investigational therapies. Fearful of receiving placebo, they attempt dual enrollment across sponsors or indications unknowingly creating confounding exposure effects that can invalidate results and introduce safety risks.

Results and Outcomes:

By integrating VCT into its screening and enrollment workflow, the sponsor:

- Eliminated duplicate and crossover participants both within and across studies
- Reduced placebo response and data noise, preserving true efficacy signals
- **Prevented overlapping IP exposure** that could have led to false adverse events
- Maintained protocol compliance and regulatory integrity
- Avoided costly study repeats and protected long-term program viability

Conclusion:

Neuroscience clinical trials are among the most challenging in drug development — characterized by **subjective endpoints**, **small sample sizes**, **and vulnerable populations**.

By leveraging VCT's cross-sponsor, cross-CRO, and cross-therapeutic protections, this sponsor achieved measurable improvements in data quality, subject safety, and study success rates.

Without VCT, duplicate subjects remain invisible.

With VCT, sponsors gain a verified, global safeguard that transforms risk into reliability.