

Still Working: Professional Subjects before and after the Pandemic



ABSTRACT

Professional subjects are a significant challenge in CNS clinical trials with their complex I/E criteria and subjective endpoints. We were interested to see if the nature or frequency of subjects excluded from CNS trials due to their being duplicate subjects, professional subjects or otherwise inappropriate (i.e. a subject with prior participation in multiple schizophrenia studies trying to enter an MDD study) varied in the two years preceding the pandemic and the two years during the pandemic.

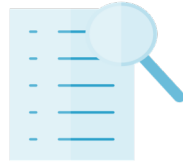
Methods: All subjects entered into the CTSdatabase subject registry between March 2018 and March 2020 were considered in the "pre-pandemic" group. Subjects entered April 2020 to March 2022 were considered in the "pandemic" group. For each of these timeframes, the number of exclusionary matches that occurred and the number of subjects that were entered was collected. The Exclusionary Match Rate (matches / subjects) was then calculated for each timeframe for comparison. We also looked at this breakdown by indication (Migraine, Major Depressive Disorder, Alzheimer's Disease, and Schizophrenia).

Results: There was no significant difference overall in the groups entered into all CNS studies. (3.34% vs 3.18%, p=0.5458). However, when we looked by indication in the 4 most common CNS indications (Schizophrenia, MDD, Alzheimer's Disease and Migraine), we found a trend for more (by percentage) of MDD subjects excluded prior to the pandemic and a highly significant finding of more subjects in schizophrenia studies being excluded after the pandemic (4.0% vs 7.2%, p<.0001).

Conclusion: Duplicate and Professional subjects were and are a problem in CNS studies with a frequency of at least 3% of screened subjects. This is consistent before and after the pandemic.

The problem of professional subjects among those presenting for studies of schizophrenia has likely only worsened with the pandemic. Mitigating strategies remain crucial in any studies with subjective endpoints and schizophrenia studies in particular.

BACKGROUND



- Duplicate and professional subjects are a significant problem in clinical trials, particularly in studies with subjective endpoints, such as in CNS or pain.¹
 - Duplicate subjects can occur, however, in any study where their activity is not monitored across sponsors, even in Alzheimer's, oncology or vaccine studies.
 - Data integrity is compromised when professional subjects purposely deceive with regard to inclusionary symptoms, excluded conditions, adherence to investigational product or previous study participation.²
- CTSdatabase is a subject registry which uses partial identifiers to track duplicate and professional subjects across sites and sponsors.³

METHODS

All subjects entered into the CTSdatabase subject registry between March 2018 and March 2020 were considered in the "pre-pandemic" group. Subjects entered April 2020 to March 2022 were considered in the "pandemic" group. For each of these timeframes, the number of exclusionary matches that occurred and the number of subjects that were entered was collected. The Exclusionary Match Rate (matches / subjects) was then calculated for each timeframe for comparison. We also looked at this breakdown by indication (Migraine, Major Depressive Disorder, Alzheimer's Disease, and Schizophrenia).

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RESULTS

- There was no significant difference overall in the groups entered into all CNS studies. (3.34% vs 3.18%, p=0.5458).
- In the 4 most common CNS indications (Schizophrenia, MDD, Alzheimer's Disease and Migraine), there was a trend toward a higher percentage of MDD subjects excluded prior to the pandemic.
- There was a highly significant finding of more subjects in schizophrenia studies being excluded after the pandemic (4.0% vs 7.2%, p<.0001).

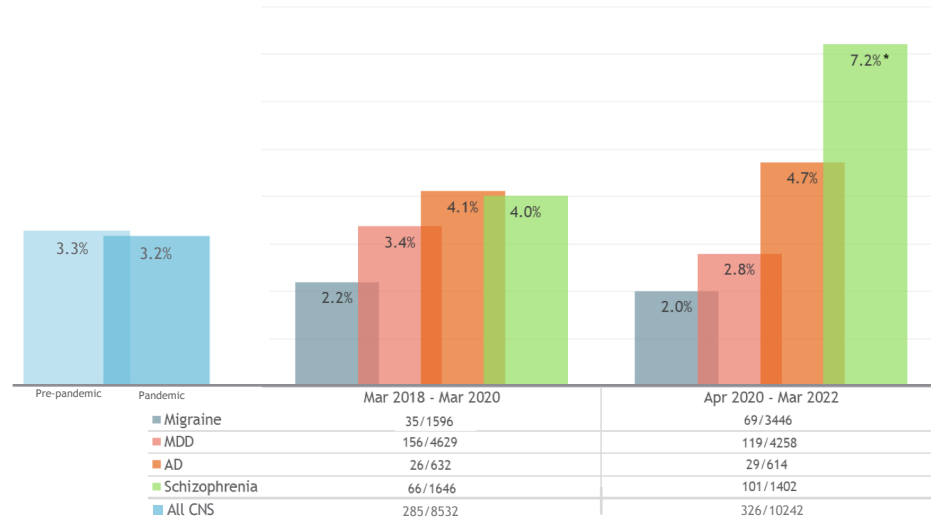


Fig.1: Despite little difference in CNS studies overall, there was a significantly higher percentage of subjects in studies of schizophrenia excluded during the pandemic (7.2%) compared with prior to the pandemic (4.0%).

DISCUSSION & CONCLUSION

- Duplicate and Professional subjects were and are a problem in CNS studies with a frequency of at least 3% of screened subjects. This is consistent before and after the pandemic.
- The problem of professional subjects among those presenting for studies of schizophrenia has likely only worsened with the pandemic.
- It is not clear why the problem was worse during the pandemic in schizophrenia studies.
- Professional subject mitigation strategies⁴, such as use of a subject registry, remain crucial in the design of studies with subjective endpoints (and in studies of schizophrenia in particular).

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