

Risk Evaluation of antiPsychotic Agents used In eldeRly in-patients (REPAIR)



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Background

- Antipsychotics (AP) include atypical and conventional agents
 - Indicated uses: schizophrenia, bipolar disorder, and major depressive disorder (as adjunct)
 - Off-label uses of antipsychotics (OLAP):** behavioural and neuropsychiatric symptoms in dementia, delirium, anxiety, obsessive compulsive disorder, and substance abuse
- Evidence for efficacy in dementia is controversial as multiple meta-analyses show **inconsistent findings**
- FDA 2008 black-box warning: both conventional and atypical AP are associated with an **increased risk of mortality** in elderly patients treated for dementia-related psychosis
- ~25% of elderly residents in nursing homes receive AP with most common diagnosis for dementia (70%)
- Prevalence of OLAP in a hospital setting has not been described

Objective

- To examine the prevalence of OLAP use in elderly in-patients
- To investigate if a plan is in place upon discharge for a hospital-initiated OLAP

Methods

- Design:** Single-centre, retrospective chart review
- Inclusion criteria:** Age ≥ 65 years old; admitted to two medical wards at Burnaby Hospital from September 2014 until sample size reached
- Exclusion criteria:** Same patient re-admissions
- Sample size:** Convenience sample of 250 patients
- Primary Outcomes:**
 - Percentage of hospital-initiated OLAP
 - Plan for hospital-initiated OLAP at discharge
- Secondary Outcomes:**
 - Dementia patients receiving hospital-initiated OLAP
 - Diagnosis for hospital-initiated OLAP
 - Agent for hospital-initiated OLAP
- Analysis:** Descriptive statistics

Definitions

- Off-label use of antipsychotic (OLAP):** indication not reported in Health Canada antipsychotic drug product monographs
- ‡Plan at discharge:** mention of a plan for OLAP in the discharge summary (e.g. follow up with mental health clinic, watch for QT prolongation, taper by family doctor)
- †No plan at discharge:** no mention of a plan for OLAP in the discharge summary

Figure 1. Patient Flowchart

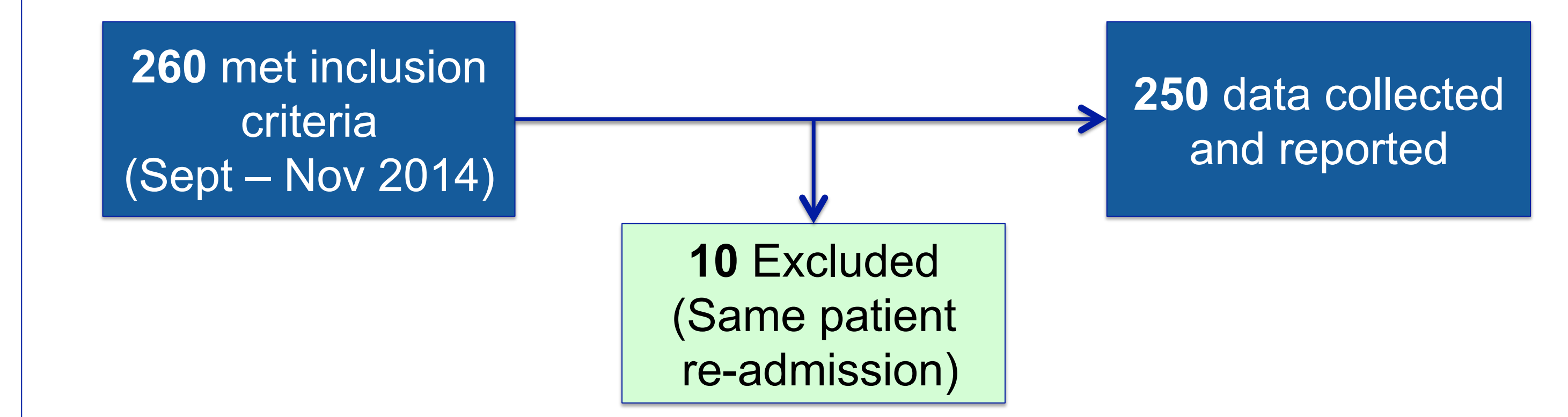


Table 1. Baseline Characteristics

	Total Patients (N=250)
Mean age—yr (min-max)	82.8 (65-98)
Female—no. (%)	164 (66)
Psychiatric illness—no. (%)	58 (23)
For which antipsychotic use is indicated—no. (%)	13 (5)
For which antipsychotic use is not indicated—no. (%)	45 (18)
Dementia—no. (%)	82 (33)
History of cerebral vascular accident—no. (%)	71 (28)
Diabetes mellitus—no. (%)	71 (28)
History of cardiovascular event—no. (%)	48 (18)
Prior to admission OLAP—no. (%)	17 (7)

Results

Table 2. Primary Outcome

	Total Patients (N=250)
Hospital-initiated OLAP—no. (%)	45 (18)

Figure 2. Primary Outcome: Hospital-initiated OLAP Upon Discharge

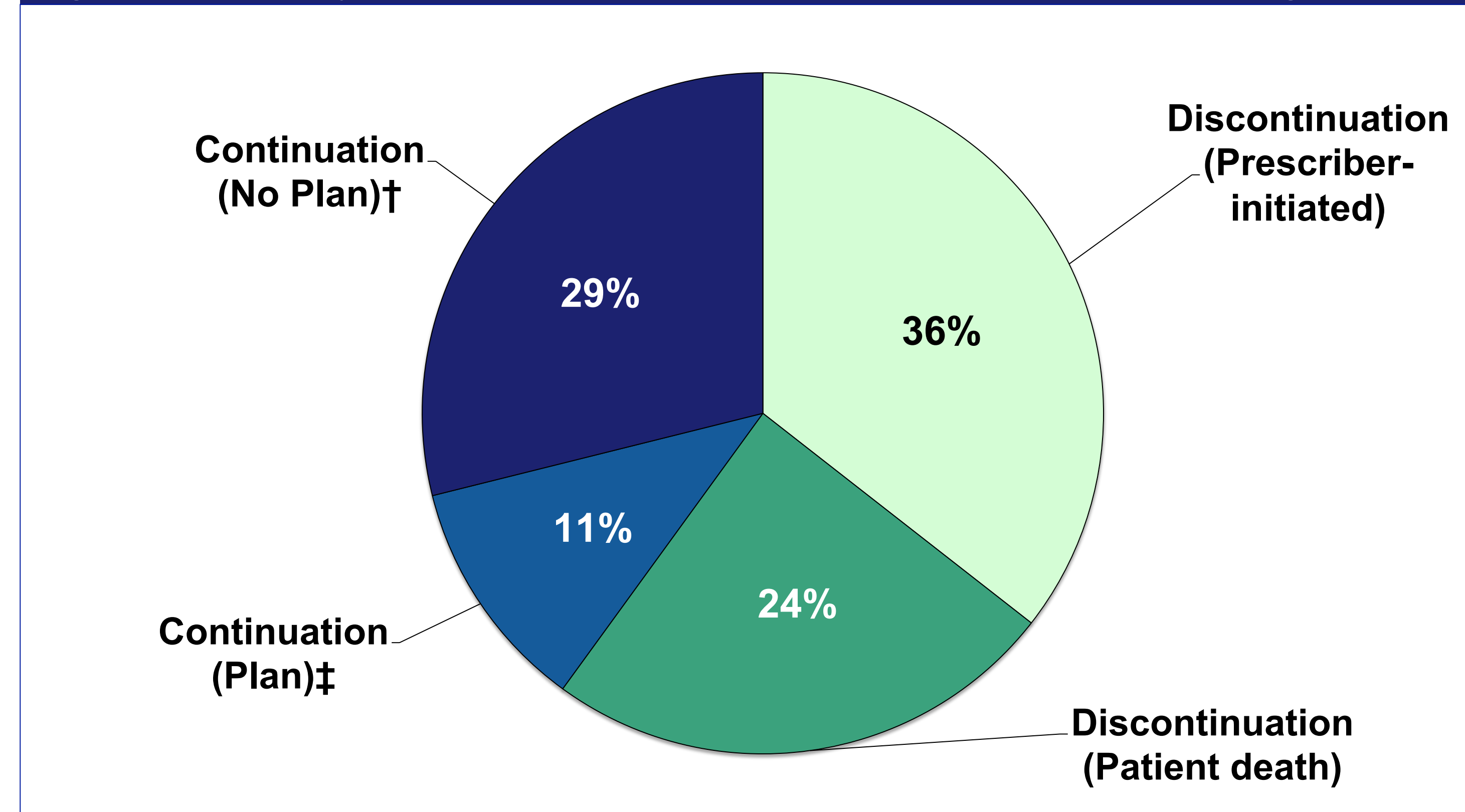
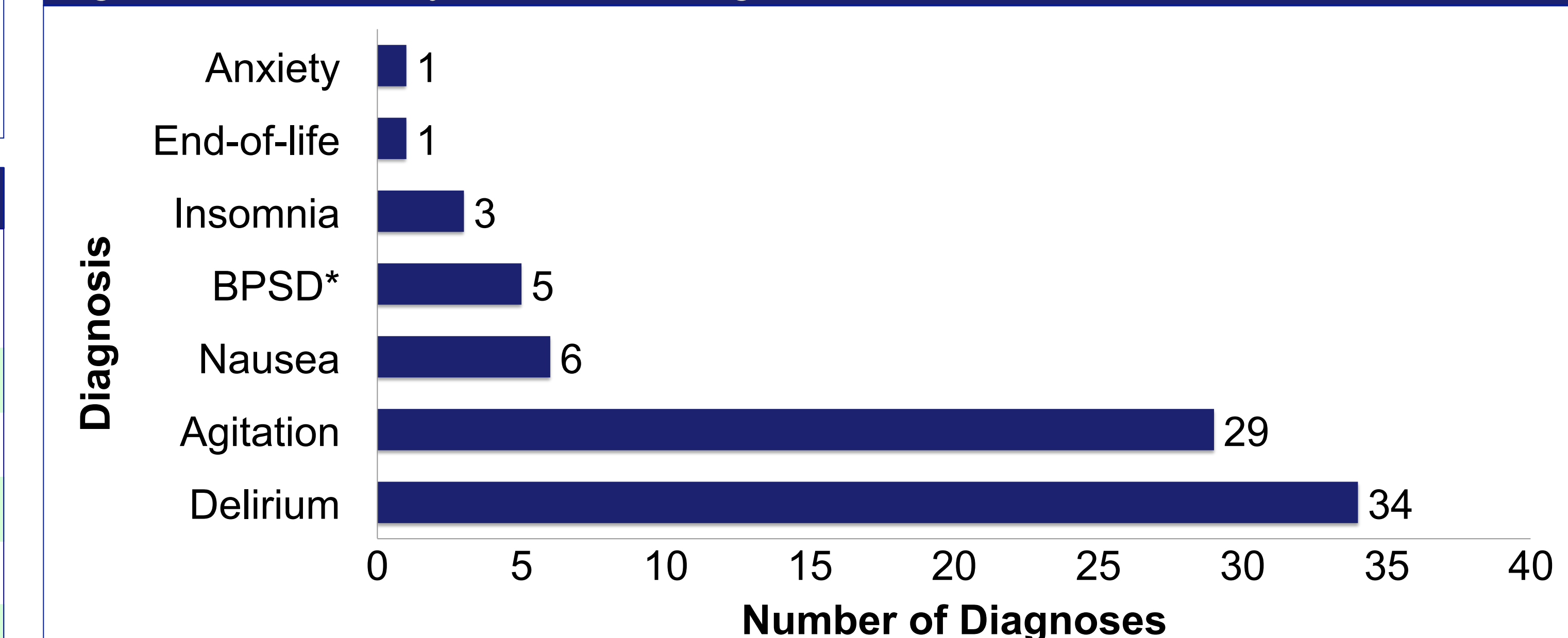


Table 3. Secondary Outcome

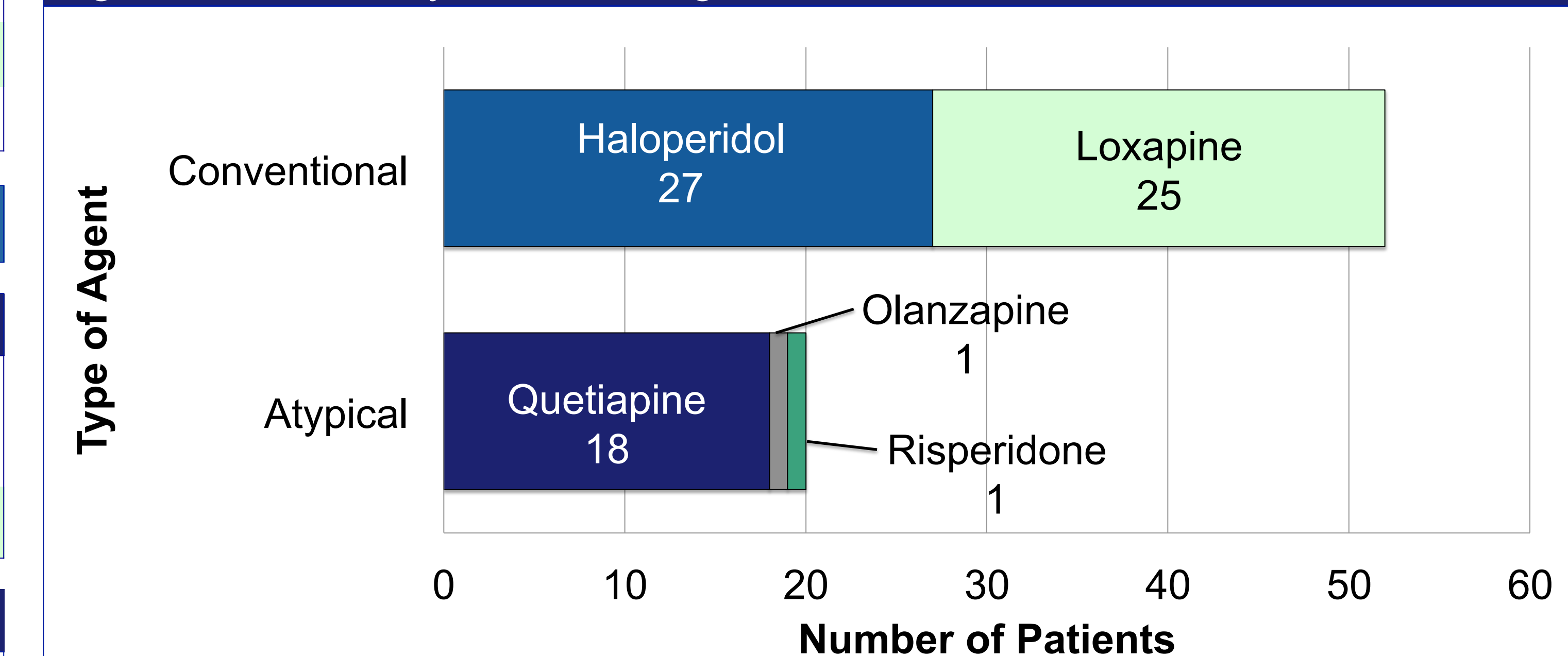
	Total Patients (N=250)
Dementia patients receiving hospital-initiated OLAP—no. (%)	26 (10)

Figure 3. Secondary Outcome: Diagnosis for OLAP



*Behavioural and neuropsychiatric symptoms in dementia
**Numbers may not add to total number of patients because > 1 diagnosis may be reported per patient

Figure 4. Secondary Outcome: Agent for OLAP



*Numbers may not add to total number of patients because > 1 medication may be reported per patient

Limitations

- Single-centre, retrospective design with sample size of convenience
- Unable to verify accuracy of collected data documented in charts (e.g. baseline characteristics, diagnoses)
- AP data were recorded from electronic medication records and may not represent actual administration of drug

Conclusions

- Nearly 1 in 5 patients were initiated on an OLAP in hospital, with the most common diagnosis of delirium
- Potential opportunity for further intervention of hospital-initiated OLAP, as 29% of these patients were discharged with no plan