

# Comparing Compliance by Race and Ethnicity for Schizophrenia Patients on Oral or Long-Acting Injectable Antipsychotics

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## Introduction

- The two most common forms of symptom management for schizophrenia are oral antipsychotics (OAs) and long-acting injectable antipsychotics (LAIAs).
- A major barrier to effective symptom management for many schizophrenia patients is adherence to their treatment plan.<sup>1</sup>
- Research has been done to show that LAIAs generally have stronger adherence and outcomes than OAs despite being less commonly prescribed,<sup>2,3</sup> but there is limited analysis incorporating patients' race and ethnicity.<sup>4</sup>

## Objective

- To analyze how adherence to OAs and LAIAs for schizophrenia patients differs when breaking down the patient population by their race/ethnicity.

## Methods

### Study Design

- This retrospective cohort study used closed claims from the Komodo Research Dataset, a Komodo Health data schema designed for RWE and HEOR studies, from January 1, 2019, through December 31, 2022.
- For LAIAs, the days of supply for each dose has been imputed as 30 days.
- Adherence was defined as the percent of days covered (PDC)  $\geq 0.8$ .
- Persistence was defined as having no gaps in prescriptions filled greater than 90 days.
- Adherence and persistence were calculated for OAs and LAIAs, broken down by patients' race/ethnicity. A race/ethnicity-agnostic "Average" inclusive of all patients was also calculated for the purpose of comparison.

### Inclusion/Exclusion Criteria (Figures 1 and 2)

- Antipsychotics users with a schizophrenia diagnosis (within) 30 days prior to the first antipsychotic dosage, which is considered the index event
- Minimum 3 schizophrenia diagnoses within the study time frame
- Only one category (OA vs. LAIA) of antipsychotic used after index date, and used at least 3 times
- Continuous enrollment required for each time frame analyzed (6 months, 1 year, 2 years, and 4 years)

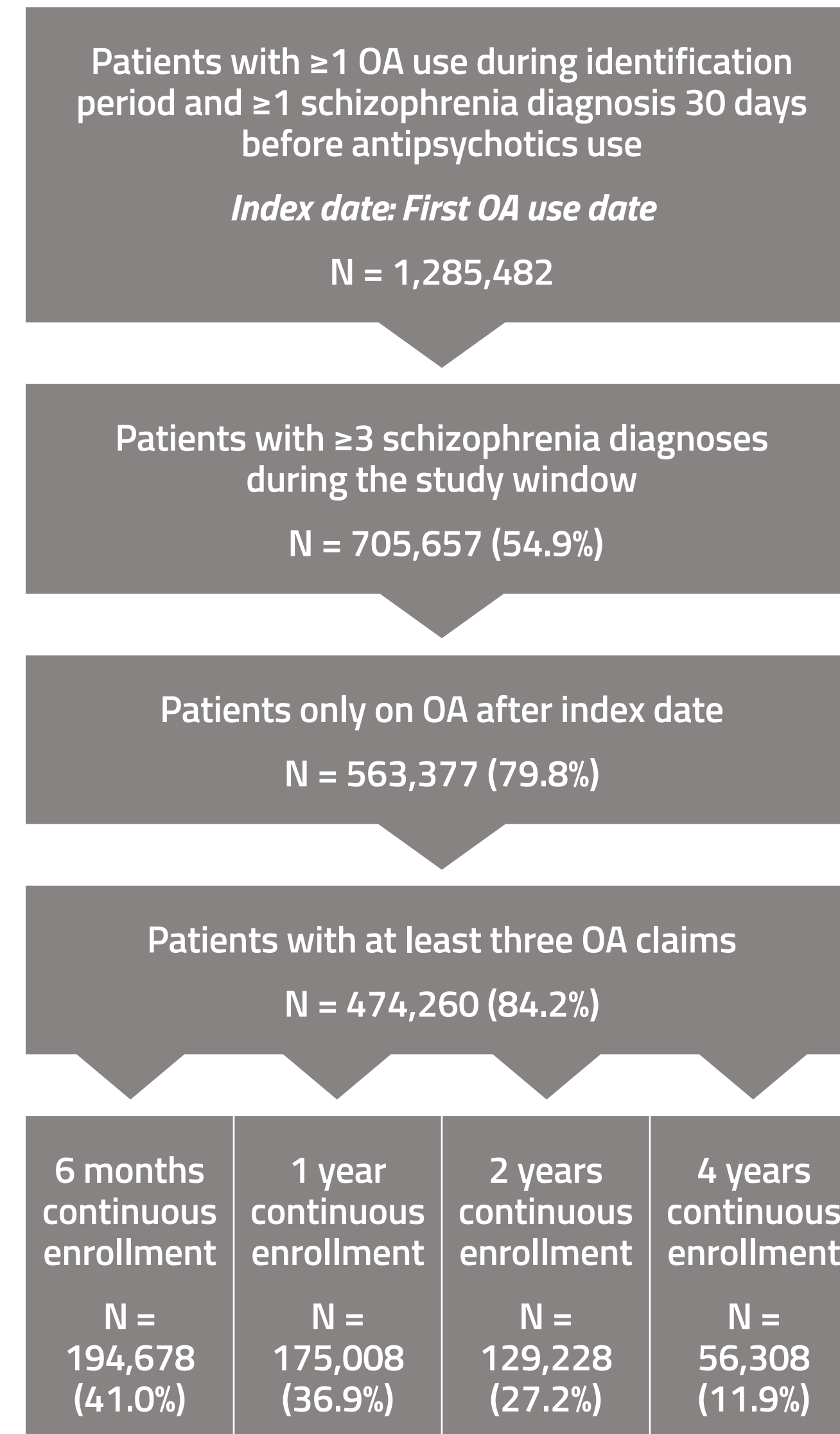
### Key Study Variables

- Patient Race and Ethnicity data
- Patient compliance metrics (Adherence, Persistence)

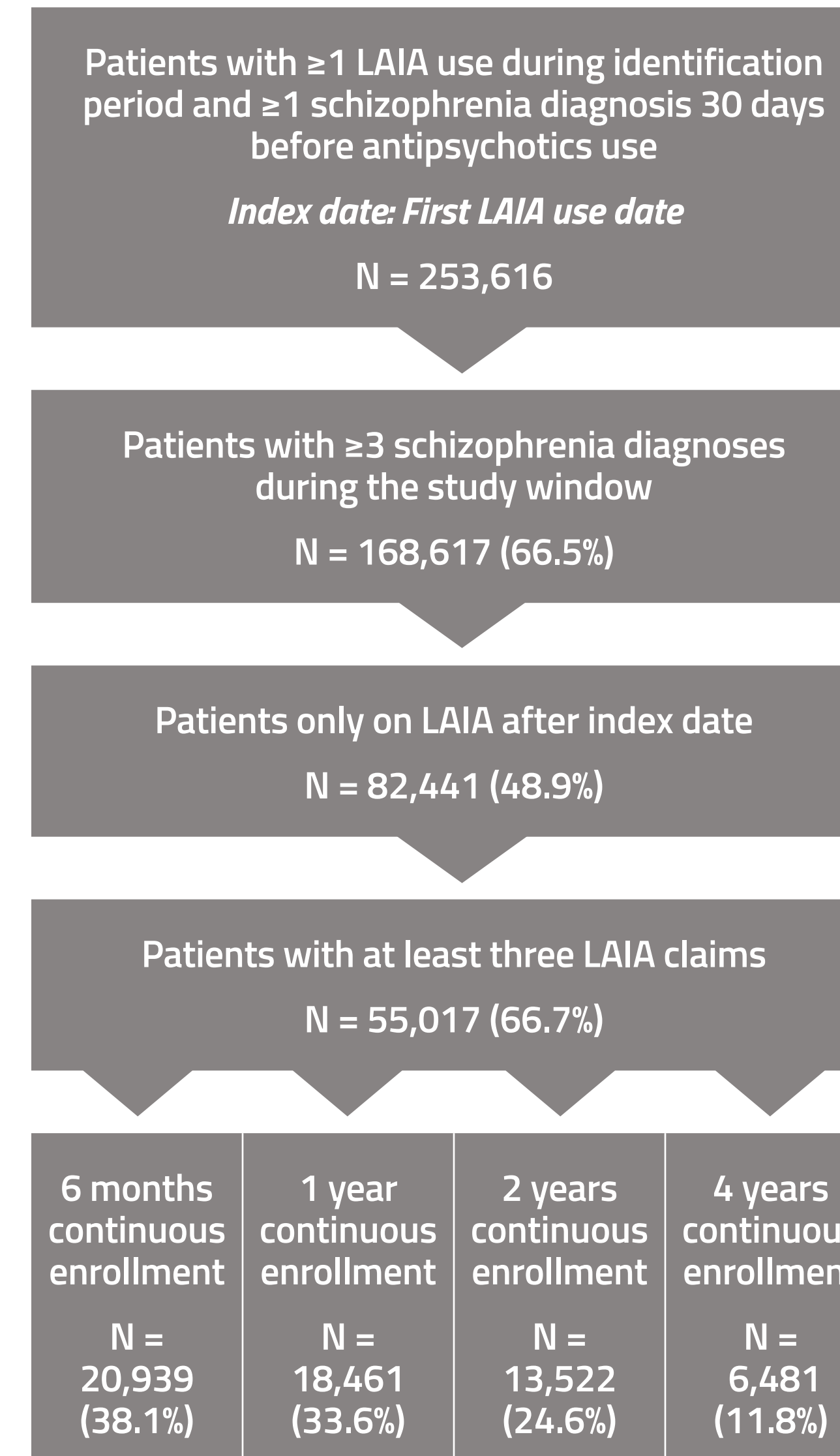
## Results

- 194,678 OA users and 20,939 LAIA users were identified who met the eligibility for inclusion.

**Figure 1. Sample Selection for OA**



**Figure 2. Sample Selection for LAIA**

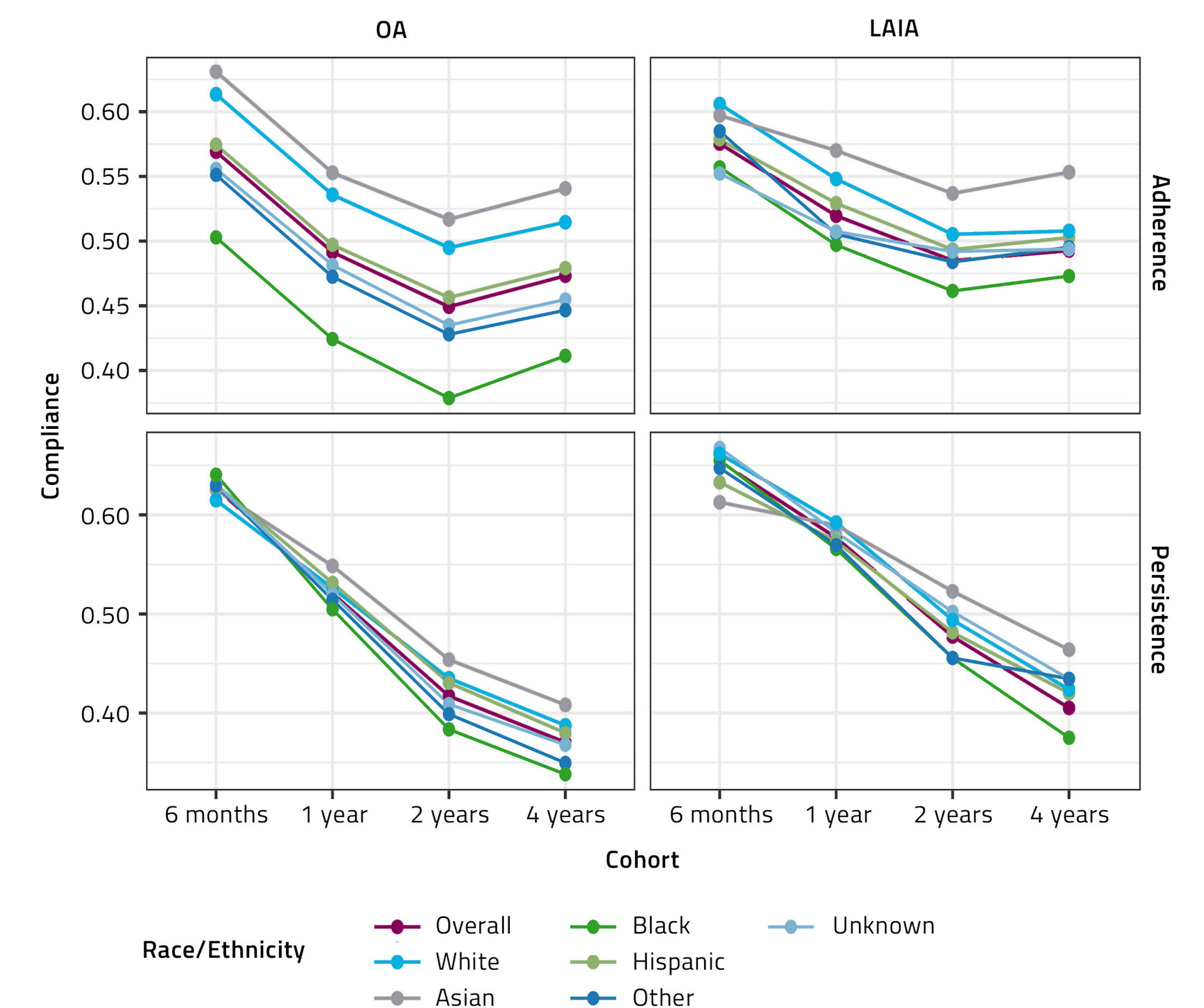


**Table 1. Cohort Size**

Race and Ethnicity	6 Months Cohort		1 Year Cohort		2 Years Cohort		4 Years Cohort	
	OA (N = 194,678)	LAIA (N = 20,939)	OA (N = 175,008)	LAIA (N = 18,461)	OA (N = 129,228)	LAIA (N = 13,522)	OA (N = 56,308)	LAIA (N = 6,481)
White	74,383 (38.2)	5,946 (28.4)	66,270 (37.9)	5,182 (28.1)	48,836 (37.8)	3,810 (28.2)	21,072 (37.4)	1,784 (27.5)
Asian or Pacific Islander	8,276 (4.3)	772 (3.7)	7,639 (4.4)	714 (3.9)	5,957 (4.6)	570 (4.2)	2,817 (5.0)	291 (4.5)
Black or African American	54,017 (27.7)	8,639 (41.3)	48,600 (27.8)	7,610 (41.2)	35,490 (27.5)	5,541 (41.0)	15,953 (28.3)	2,797 (43.2)
Hispanic or Latino	30,656 (15.7)	2,520 (12.0)	28,135 (16.1)	2,288 (12.4)	21,798 (16.9)	1,743 (12.9)	10,076 (17.9)	907 (14.0)
Other	6,823 (3.5)	706 (3.4)	6,303 (3.6)	641 (3.5)	4,765 (3.7)	496 (3.7)	2,022 (3.6)	214 (3.3)
Unknown	20,523 (10.5)	2,356 (11.3)	18,061 (10.3)	2,026 (11.0)	12,382 (9.6)	1,362 (10.1)	4,368 (7.8)	488 (7.5)

- Black patients are more likely to receive LAIAs compared to other race/ethnicity groups.
- Adherence and persistence were shown to be greater for LAIA users than OA users for the vast majority of analysis time frames as well as patient races or ethnicities.
- Notably above-average adherence was observed for OAs and LAIAs for all time frames analyzed for "Asian or Pacific Islander" and "White" patients. Above-average persistence was observed for OAs and LAIAs for all time frames except 6 months for "Asian or Pacific Islander" and "White" patients.

**Figure 3. Antipsychotics Compliance in Schizophrenia Patients Separated by Race/Ethnicity**



- Notably below-average adherence and persistence was observed for OAs and LAIAs for all time frames analyzed for "Black or African American" patients except for 6-month adherence.
- Adherence and persistence among "Hispanic or Latino" patients closely align with the population average, displaying some mixed patterns in certain time frames.

## Conclusion

- Compliance to LAIAs and OAs varies by patients' race and ethnicity, with "White," "Asian or Pacific Islander," and "Hispanic or Latino" patients having mostly above-average outcomes and "Black or African American" patients having mostly below-average outcomes.
- This suggests that there is a racial disparity in schizophrenia treatment that should be further studied in order to work toward improving health outcomes.

## References

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