EE249

Healthcare Resource Utilization With Adjunctive Cariprazine and Other Atypical Antipsychotics in Patients With Major Depressive Disorder

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OBJECTIVE

To evaluate the healthcare resource utilization (HRU) of patients with major depressive disorder (MDD) treated adjunctively with cariprazine versus other atypical antipsychotics

CONCLUSIONS

Compared with the cariprazine cohort, MDD-related inpatient stays were significantly higher among the other atypical antipsychotic cohorts

MDD-related emergency department visits were significantly higher in the generic atypical antipsychotic cohorts compared with the cariprazine cohort

Overall, this study indicated that the cariprazine cohort generally had lower HRU compared with other atypical antipsychotic cohorts among patients with MDD

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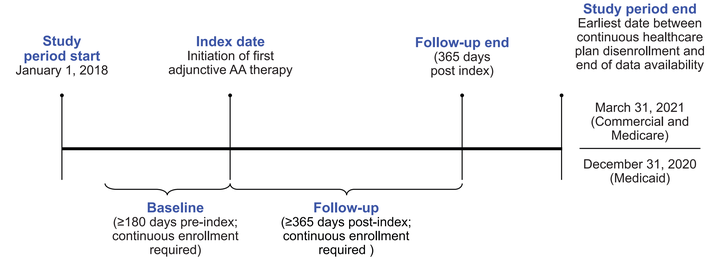
INTRODUCTION

- Many patients with major depressive disorder (MDD) have inadequate response to antidepressant monotherapy and may benefit from treatment with adjunctive atypical antipsychotics (AAs)[1]
- Cariprazine is a dopamine D_3-preferring D_3/D_2 and serotonin 5-HT_{1A} receptor partial agonist that is FDA-approved to treat schizophrenia and manic, mixed, or depressive episodes associated with bipolar I disorder and was recently approved for the adjunctive treatment of MDD
- Little is known about the healthcare resource utilization (HRU) for cariprazine versus other AAs for the adjunctive treatment of MDD

METHODS

- Merative™ MarketScan® databases were searched for claims made from January 2018 to December 2020 (Medicaid) or March 2021 (Commercial and Medicare) (**Figure 1**)
- The study population included adults (≥18 years) with ≥1 inpatient claim for MDD or ≥2 outpatient claims ≥30 days apart for MDD and ≥1 claim for an AA adjunctive to antidepressant therapy (ADT); initiation of the first adjunctive AA therapy determined each patient's AA cohort and index date
  - Adjunctive therapy was defined as ≥14 day overlap between AA and ADT
- Patients were excluded if they had a schizophrenia or bipolar I diagnosis within the study period, Part C or HMO enrollment at the index AA fill, or any claims for the index AA within the baseline period
- MDD-related HRU outcomes of interest included the average number of inpatient stays, emergency department (ED) visits, and office visits per patient during 1-year follow-up as well as average length of inpatient stays; MDD-related HRU was based on claims that included a diagnosis of MDD in any position
- Negative binomial models compared MDD-related HRU between cohorts; adjusted pairwise comparisons were presented as estimated mean ratios (EMRs) of comparator AA to cariprazine with 95% confidence intervals (CIs)
  - Covariates included sex, age, baseline Charlson Comorbidity Index, concomitant MDD medication use, baseline MDD severity, and index provider type

Figure 1. Study Design and Patient Population



AA, atypical antipsychotic.

RESULTS

- A total of 40,195 patients were included in the analysis, with AA cohorts as follows: cariprazine (n=1,038), brexpiprazole (n=3,221), generic aripiprazole (n=20,601), and generic quetiapine (n=15,335); baseline demographics and clinical characteristics for each cohort are presented in **Table 1**
- There were significantly more MDD-related inpatient stays among all other AA cohorts compared with the cariprazine cohort (**Figure 2A**)
  - Additionally, the average length of inpatient stay was lower in the cariprazine cohort (5.3 days) versus other AA cohorts (6.1 to 8.0 days)
- MDD-related ED visits were significantly higher in the generic aripiprazole and generic quetiapine cohorts versus the cariprazine cohort (**Figure 2B**), and there were significantly more MDD-related office visits in the brexpiprazole and generic aripiprazole cohorts compared with the cariprazine cohort (**Figure 2C**)

KEY LIMITATIONS

- Claims data may contain omissions and inaccuracies, but this is expected to equally affect all cohorts and should have no impact on overarching conclusions
- A claim for a medication may not indicate its use
- While the average number of fills was similar across cohorts, individual differences in adherence may exist
- Results may not be generalizable to beneficiaries with other insurance types and/or uninsured

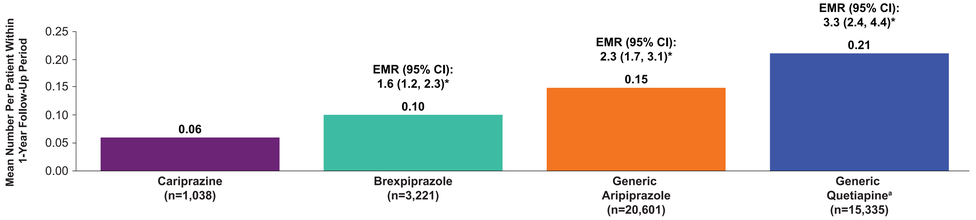
Table 1. Baseline Demographics and Clinical Characteristics

Characteristic	Cariprazine (n=1,038)	Brexpiprazole (n=3,221)	Generic Aripiprazole (n=20,601)	Generic Quetiapine[a] (n=15,335)
Age, years, mean (SD)	42.7 (13.0)	45.0 (13.5)	41.5 (14.9)	43.6 (16.0)
Female, n (%)	780 (75.1)	2,423 (75.2)	14,533 (70.6)	9,990 (65.2)
CCI, mean (SD)	0.54 (1.1)	0.71 (1.4)	0.62 (1.4)	0.84 (1.6)
MDD Severity, n (%)				
Mild	70 (6.7)	222 (6.9)	1,504 (7.3)	1,011 (6.6)
Moderate	311 (30.0)	1,140 (35.4)	6,370 (30.9)	4,184 (27.3)
Severe	206 (19.9)	693 (21.5)	3,727 (18.1)	2,962 (19.3)
Remission	45 (4.3)	138 (4.3)	1,016 (4.9)	637 (4.2)
Unspecified	406 (39.1)	1,028 (31.9)	7,984 (38.8)	6,541 (42.7)
Comorbidities of Interest, n (%)				
Anxiety	614 (59.2)	2,060 (64.0)	12,200 (59.2)	9,399 (61.3)
Diabetes	122 (11.8)	454 (14.1)	2,386 (11.6)	1,906 (12.4)
Hyperlipidemia	206 (19.9)	831 (25.8)	4,260 (20.7)	3,369 (22.0)
Payer Type, n (%)				
Commercial	772 (74.4)	2,339 (72.6)	16,238 (78.8)	10,517 (68.6)
Medicaid	250 (24.1)	812 (25.2)	3,898 (18.9)	4,082 (26.6)
Medicare	16 (1.5)	70 (2.2)	465 (2.3)	736 (4.8)

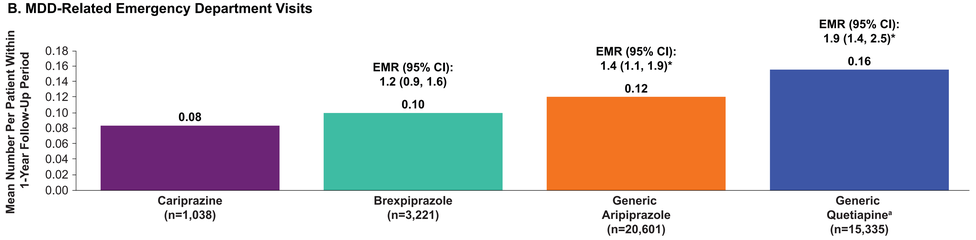
[a]Includes quetiapine immediate- and extended-release.
AA, atypical antipsychotics; CCI, Charlson Comorbidity Index; MDD, major depressive disorder; SD, standard deviation.

Figure 2. MDD-Related HRU Outcomes

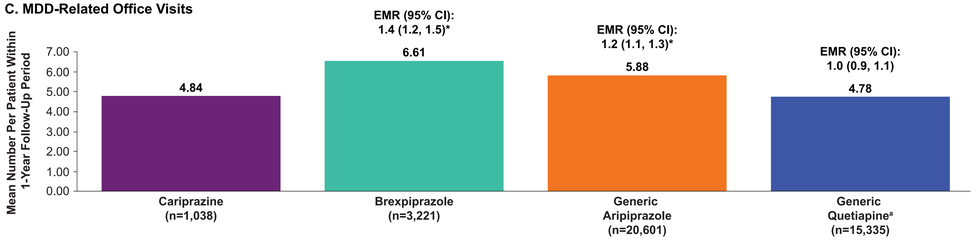
A. MDD-Related Inpatient Stays



B. MDD-Related Emergency Department Visits



C. MDD-Related Office Visits



*95% CI for the EMR of comparator AA to cariprazine does not include 1 and therefore is statistically significant.
[a]Includes quetiapine immediate- and extended-release.
AA, atypical antipsychotics; CI, confidence interval; EMR, estimated mean ratio; MDD, major depressive disorder.