A REAL-WORLD STUDY ON TIME-TO-INITIATION AND DOSE OPTIMIZATION OF MAJOR DEPRESSIVE DISORDER TREATMENT IN THE UNITED STATES

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Background

In the year 2014, 14.1 million people were diagnosed with MDD. The prevalence of MDD is an indicator used to denote the true burden of disease. A study looking at the incidence of worldwide MDD has shown an increase of 5.2% annually for the years 2000-2014.

Methods

Data source:

• The Tennant Health Analytical Market Commercial and Medicare supplement databases (2011-2015) was used.

Inclusion criteria:

• At least 18 years old (üssed as incident MDD diagnosis).
• MDD diagnosis made in the last 12 months prior to the index date.
• Patients receiving SSRI/SNRI therapy within 1 month or after the index date.
• 24-month continuous enrollment before the index date and 12 months after continuous enrollment after the index date.

Exclusion criteria:

• Evidence of one or more conditions: dementia, schizophrenia, delusional disorder, non-epileptic seizures, paranoia, delusional disorder, mania, bipolar disorder, sedative-hypnotics, schizoaffective disorder, urinary incontinence, myasthenia gravis, cerebrovascular disease, and systemic lupus erythematosus (SLE).
• Pregnant or lactating.
• Patients under the age of 18.
• Patients who were enrolled in another study or clinical trials.

Results

Table 1. Baseline Patient Characteristics

| Characteristic | All Patients (N=44,213) | Early vs. Late Initiators | Early vs. Late Minimal Therapeutic Dose (MTD) Achievers | P value
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<tr>
<td>Age, years (SD)</td>
<td>40.70 (17.40)</td>
<td>40.11 (16.40)</td>
<td>40.51 (17.36)</td>
<td>&lt;0.001</td>
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<td>Race (N, %)</td>
<td>18,979 (42.24)</td>
<td>18,918 (52.29)</td>
<td>19,031 (59.82)</td>
<td>&lt;0.001</td>
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<td>Region (N, %)</td>
<td>16,882 (38.17)</td>
<td>16,836 (46.12)</td>
<td>17,052 (56.38)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Gender</td>
<td>5,552 (12.55)</td>
<td>5,517 (14.71)</td>
<td>5,648 (17.85)</td>
<td>&lt;0.001</td>
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<tr>
<td>Clinical Anxiety</td>
<td>18,557 (41.87)</td>
<td>18,418 (50.48)</td>
<td>18,609 (59.91)</td>
<td>&lt;0.001</td>
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<td>MDD co-morbidity</td>
<td>14,487 (32.78)</td>
<td>14,424 (39.42)</td>
<td>14,664 (44.36)</td>
<td>&lt;0.001</td>
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<td>Comorbid anxiety, N (%):</td>
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<td>Depression</td>
<td>50,785 (92.00)</td>
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Discussion

• A higher proportion of early initiators and late MTD achievers received combination therapy for greater than 30 days versus late SSRI/SNRI initiators and late MTD achievers. It is unclear if early initiators and early MTD achievers may have had a higher severity of MDD on baseline and further investigation is needed.

Conclusions

• It is unknown whether MDD patients did not receive SSRI/SNRI treatment within 2 weeks of diagnosis.

• About 45% of MDD patients did not receive MTD within 4 weeks.

• Early treatment initiation and late MTD treatment were associated with improved medication adherence and persistence.

• Further research is needed to assess the impact of early treatment initiation and MTD achievement on patient clinical and economic outcomes.

• Prescribing clinicians may optimize care by considering the time to treatment initiation and dose titration for each of their patients.

Table 2. Treatment Patterns and Medication Adherence

| Variable Description | All Patients (N=44,213) | Early vs. Late Initiators | Early vs. Late Minimal Therapeutic Dose (MTD) Achievers | P value
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<td>Number of users with SSRI/SNRI as Initial Treatment (N=9,189)</td>
<td>81,099 (99.09%)</td>
<td>81,099 (99.09%)</td>
<td>81,099 (99.09%)</td>
<td>&lt;0.001</td>
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Figure 1. Flowchart Describing Study Inclusion/Exclusion Criteria and Construction of the Study Cohorts

Figure 2. Time to SSRI/SNRI Initiators

Figure 3. Time to Achieving Minimum Therapeutic Dose (MTD)

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