Estimation of Epidemiology of Tardive Dyskinesia Incidence and Prevalence in the United States

To estimate the current and expected epidemiology of TD in the US, stratified by level of severity

Inputs for the model were sourced from public literature as well as a primary research study.

This translates to 9% of the general AP user population.

For each year since 1997, the model uses the most recent 10-year AP prevalence data.

TD develops after exposure to dopamine-receptor antagonists, such as typical and atypical APs.

The prevalence of TD was estimated to be 573,000 patients in 2016.

The incidence of TD showed a steady decrease with the transition from typical to atypical APs.

Table 1: Inputs for Disease Burden Model for TD

<table>
<thead>
<tr>
<th>Source</th>
<th>Incidence of TD Progression</th>
<th>Prevalence of TD by Severity</th>
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<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Description</td>
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RESULTS

Incidences of TD Progression:

- Incident of TD progression was estimated from 2016 to 2025 (Figure 1).
- The model estimated the incidence of progression from mild to moderate TD to be 3,100 cases per year in 2016, forecasted to increase to 3,000 cases per year in 2025.
- The model estimated the incidence of progression from moderate to severe TD to be 3,000 cases per year in 2016, forecasted to increase to 3,000 cases per year in 2025.

Prevalences of TD:

- The prevalence of TD was estimated to be 579,000 patients in 2016 (Figure 2).
- This is 8% of the general AP user population.
- Patients with severe TD were estimated to be 82% of the prevalence pool in 2016 and 2025.

Outcomes by Disease Severity:

- 7% of patients with severe TD were still without drug treatment.
- Average time to commence of drug treatment for patients with severe TD was 22 months.

Figure 1: Model of Epidemiology Stratified by Severity

Figure 2: Use of Typical and Atypical APs Modeled From 1997 to 2025

Table 2: Outcomes for Non-Drug-Treated TD Patients

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<thead>
<tr>
<th>Severity Type</th>
<th>Outcome Description</th>
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CONCLUSIONS

This study was one of the first attempts to use a comprehensive model-based assessment of TD epidemiology in the US.

- The incidence of TD was estimated to be 579,000 patients in 2016.
- This is 8% of the general AP user population.
- Patients with severe TD were estimated to be 82% of the prevalence pool in 2016 and 2025.

Acknowledgments

The authors thank Teva Pharmaceutical Industries, Petach Tikva, Israel (Teva), and Chameleon Communications International for funding for the Teva Pharmaceutical Industries for editorial assistance in the preparation of this manuscript.

References

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