A survey of physicians’ perceptions of adherence to oral cholinesterase inhibitor treatment in patients with Alzheimer’s disease

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Disclaimer

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• This study was sponsored by Novartis
Predicted prevalence of dementia by 2050

Many patients stop taking their cholinesterase inhibitor treatment within 6 months

California Medicaid Programme (n = 17,742)

Median time to Rx discontinuation:
- 135 days for oral rivastigmine
- 120 days for donepezil (p = NS)

In practice, many patients do not reach high doses

- Among 5,462 Alzheimer’s disease (AD) patients, 65% received ‘low’ doses of cholinesterase inhibitors for up to 9 months.

![Bar graph showing the distribution of patients on different dosage levels of Rivastigmine, Donepezil, and Galantamine.]

- Rivastigmine: ‘Low’ ≤ 6 mg or 5 mg, ‘High’ > 6 mg or 10 mg
- Donepezil: ‘Low’ ≤ 5 mg, ‘High’ > 5 mg or > 16 mg
- Galantamine: ‘Low’ ≤ 16 mg, ‘High’ > 16 mg

Study objectives

• Increase understanding of physician perceptions of patient adherence in the treatment of mild-to-moderate AD with oral cholinesterase inhibitors

• Collect information about physicians’ treatment decisions in case of non-adherence

• Collect information about physicians’, patients’ and/or caregivers’ preferences related to the mode of cholinesterase inhibitor administration
Study design

- General practitioners (GPs) and specialists participated in a descriptive correlational survey of physician perceptions
- Questionnaires completed at Day 0 and Day 90
  - **Day 0**: Management and treatment of AD patients, factors influencing compliance, perceptions of treatment adherence
  - **Interim period**: Self-observation exercise including up to ten AD patients in their practice
    - All patients were being treated with an oral ChEI
    - Data collected on actual patient adherence, action in case of non-adherence, treatment preferences
  - **Day 90**: Perceptions of treatment adherence, and an evaluation of the self-observation exercise
## Participants

*A total of 408 physicians participated in the survey*

<table>
<thead>
<tr>
<th></th>
<th>GPs (n = 318)</th>
<th>Specialists (n = 90)</th>
<th>All (n = 408)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean age (± SD)</strong></td>
<td>52.1 ± 8.5</td>
<td>44.8 ± 8.9</td>
<td>50.4 ± 9.1</td>
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<tr>
<td><strong>Language (%)</strong></td>
<td></td>
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<td>34.6</td>
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<td>2.2</td>
<td>2.5</td>
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<tr>
<td><strong>Region (%)</strong></td>
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<td>57.2</td>
<td>42.2</td>
<td>53.9</td>
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<tr>
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<td>11.1</td>
<td>9.6</td>
</tr>
<tr>
<td><strong>Mean years of experience (± SD)</strong></td>
<td>26.4 ± 8.7</td>
<td>16.9 ± 8.8</td>
<td>24.2 ± 9.6</td>
</tr>
</tbody>
</table>
Important aspects of patient management

*Most important was ‘to inform the patient/caregiver’*
Patients’ adherence to oral cholinesterase inhibitors

Fewer than originally thought may stay on treatment for a full year

• At Day 0, physicians thought that the majority of AD patients stayed on treatment for more than a year
  • 87.4% for GPs; 92.2% for specialists

• At Day 90, following the self-observation exercise, perceptions of patients staying on treatment for a full year were lower
  • 79.5% for GPs; 82.3% for specialists

• The self-observation exercise helped to improve physician awareness of non-adherence
Achieving optimal therapeutic doses
Physicians slightly overestimated patients on optimal dose

- Patients treated with the optimal therapeutic dose (%):
  - General practitioners: Day 0 = 67%, Self-observation = 65%, Day 90 = 69.8%
  - Specialists: Day 0 = 71.9%, Self-observation = 67.7%, Day 90 = 73.8%
Physician intervention upon non-compliance

*The most common intervention was to switch to a transdermal patch*

- In cases of observed non-compliance to an oral cholinesterase inhibitor:
  - 33% of GPs and 26% of specialists would change the treatment to a transdermal cholinesterase inhibitor
  - 25% of GPs and 21% of specialists would try to motivate the patient/caregiver by providing more information about AD and expectations of treatment
Preferences for transdermal therapy

*Overall, more than 50% of GPs prefer transdermal therapy for AD*
Limitations of this study

• Recruitment target of 420 physicians not reached
  ► 408 physicians did participate and this population should be sufficient for this descriptive study

• Some data gathered at Days 0 and 90 were not structured to allow comparison with the self-observation period

• Future surveys should increase the sample size, particularly specialists (who comprised < 25% in this study)

• Patients and caregivers could also be surveyed in future studies of this type
Conclusions

- Physicians’ priorities when managing AD patients are that:
  - The patient and caregiver are fully informed
  - They have access to a specialist (in the case of GPs)
  - The patient receives pharmacological treatment

- Physicians have fairly accurate perceptions of the doses of oral cholinesterase inhibitors that their patients receive.

- Physicians may less accurately perceive how long their patients stay on treatment.

- Transdermal therapy offers a novel treatment approach for AD that may be preferred by many physicians.
  - Physicians have a role in educating about transdermal therapies, which are increasingly common in many disease areas.
Thanks!

- To all of the specialists and GPs who participated in this study for their valuable contributions – we wouldn’t be here now without your help!
- To Novartis for sponsoring this study
- To all of you for your kind attention