The Disease Burden Of Mild Asthma in China

Bo Ding1, Mark Small2, Wenzhu Wang3, Peter Schweikert3

1 AstraZeneca, Gothenburg, Sweden. 2 Adelphi Real World, Macclesfield, UK. 3 AstraZeneca, Shanghai, China

Introduction

• While the majority of hospital treated asthmatics in China have moderate asthma, mild asthma is estimated to account for up to 75% of asthmatics.1

• Mild asthma is defined as being well controlled with Global Initiative for Asthma (GINA) Step 1 (as-needed reliever medication) or Step 2 treatment, limited to low-dose inhaled corticosteroids (ICS), leukotriene receptor antagonists (LTRAs), or low dose theophylline.2

Methods

• The Adelphi Disease Specific Programmes (DSPs) are cross-sectional surveys conducted to provide impartial observations of real-world clinical practice from a physician and matched patient viewpoint.3

• The DSP was conducted as a market research survey adhering to the International code (ICC/ESOMAR) and was approved by the Ethics Committee of Bo Ding, Wenzhu Wang and Peter Schweikert are employees of AstraZeneca. Mark Small is an employee of Adelphi Real World. Adam Roughley, an employee of Adelphi Real World provided analytical support.

• The DSP Survey populations – physician and patient surveys

• Physicians were eligible if they qualified as Chief Doctor, Vice Chief Doctor or Doctor in Charge, were responsible for the treatment of asthma and saw a minimum of 15 asthma patients in a typical month.

• Patients were aged 12 years or over with a physician-confirmed asthma diagnosis.

• Each physician was asked to complete a patient form for their next 4 consecutive asthma patients, recording patient demographics, symptomatology, treatment and clinical asthma control characteristics.

• Physicians were also asked to complete an additional form for the next consulting mild asthma patient. Each patient was invited to complete a questionnaire which included the Asthma Control Test (ACT), Morisky Medication Adherence Scale, and Work Productivity and Activity Impairment (WPAI) questionnaire.

Results

• In total, 229 patients were identified as mild asthmatics, and prescribed as-needed reliever medication only (25.3%), limited to low-dose inhaled corticosteroids (ICS), leukotriene receptor antagonists (LTRAs), or low dose theophylline only (20.5%) (Table 1). Concomitant prescribing of anti-lucaemic and mucolytic agents accounted for up to 7% of patients respectively.

• According to the Morisky Medication Adherence Scale, the majority of GINA Step 1 mild asthma patients have low or medium adherence to treatment.

Table 1. Prescribed current treatment and adherence

<table>
<thead>
<tr>
<th>% of patients</th>
<th>GINA Step 1</th>
<th>GINA Step 2</th>
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</thead>
<tbody>
<tr>
<td>As-needed reliever medication only</td>
<td>56 (24.2)</td>
<td>56 (24.2)</td>
</tr>
<tr>
<td>ICS only</td>
<td>37 (16.2)</td>
<td>37 (16.2)</td>
</tr>
<tr>
<td>LTRA only</td>
<td>47 (20.5)</td>
<td>47 (20.5)</td>
</tr>
<tr>
<td>Theophylline-only</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Adherence treatment maintained well</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Poorly</td>
<td>88 (46.9)</td>
<td>88 (46.9)</td>
</tr>
<tr>
<td>Medium</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>High</td>
<td>20 (9.8)</td>
<td>20 (9.8)</td>
</tr>
</tbody>
</table>

• Despite the majority of patients (73.5%) being categorised as partly controlled according to GINA guideline criteria, 75% were self-reported by physicians as well or completely controlled.

• Time of day of symptoms (Figure 2).

Figure 2. Time of day when symptoms are most bothersome

• A 17% of all patients experienced an exacerbation in the last 12 months requiring emergency department treatment and/or hospitalisation.

Conclusion

• In China, despite the majority of mild asthma patients being classified as well or completely controlled by physicians, mild asthmatics are not well controlled according to GINA guidelines. Patients with mild asthma experienced a relatively high negative impact on their work, while 17% had experienced a severe exacerbation in the last 12 months.

• Despite an increase in ICS prescribing since 2010, around 80-90% of mild patients are treated on non-stereoidal and short-acting only medications.

• In addition, the relatively high use of anti-tussive and mucolytic medications suggests supplementary usage as acute therapy for prevalent symptoms of cough and sputum instead of regular use of maintenance medications.

References


3. Presented at the European Respiratory Society Congress 2016, London, United Kingdom, September 3-7

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Disclosures

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