PRAC List of questions
To be addressed by the marketing authorisation holders for pseudoephedrine-containing medicinal products

Referral under Article 31 of Directive 2001/83/EC resulting from pharmacovigilance data

Procedure number: EMEA/H/A-31/1526
Aerinaze EMEA/H/A-31/1526/C/000772/0047

INN/active substance: pseudoephedrine
1. Questions

The marketing authorisation holders (MAHs) are requested to address the following questions:

**Question 1**

Please provide the information concerning your pseudoephedrine-containing medicinal products requested in the annexed table (please provide in Excel format). Requested information in the last 3 columns of the table should be focused only on risks related to posterior reversible encephalopathy (PRES)/ reversible cerebral vasoconstriction syndrome (RCVS) and risks belonging to MedDRA HLGT Central nervous system vascular disorders and HLGT Encephalopathies.

**Question 2**

Please provide a literature review focused on publications regarding serious ischaemic neurological disorders (with focus on PRES/RCVS) after administration of pseudoephedrine as a single substance or in combination with other active substances. Please discuss this data together with any other non-clinical, clinical, or epidemiological data available related to this topic.

**Question 3**

Please discuss the overall benefit-risk balance of your pseudoephedrine-containing medicinal products taking into consideration the overall safety profile of pseudoephedrine (including risk of PRES/RCVS, already listed ischaemic risks, risk of abuse and all other known risks).

**Question 4**

Please provide proposals and justifications for current and further risk minimisation measures which could prevent or mitigate the risks of cerebrovascular events (including PRES/RCVS) and other known ischaemic events. Each measure should be critically evaluated taking into consideration the ischaemic risks in patients without any risk factors.

2. Additional Data Review

As part of this review, the PRAC considers it necessary to perform an EudraVigilance analysis of all cases of PRES/RCVS and all cases under MedDRA HLGT Central nervous system vascular disorders and HLGT Encephalopathies with pseudoephedrine-containing medicinal products. The data to perform this analysis will be provided by EMA and will be evaluated by PRAC together with the responses to the list of questions provided by the MAHs.
Annex

Question 1

<table>
<thead>
<tr>
<th>Product name</th>
<th>Active substance(s)</th>
<th>Indication¹ related to symptoms of cold and flu (YES/NO)</th>
<th>Indication¹ related to allergic rhinitis (YES/NO)</th>
<th>Pseudoephedrine content in mg in a single dose</th>
<th>Pseudoephedrine content (mg) in recommended dose per day</th>
<th>Details of any specific measures taken to minimize the risk²</th>
<th>Description of the risk in section 4.3 of SmPC</th>
<th>Description of the risk in section 4.4 of SmPC</th>
<th>Description of the risk in section 4.8 of SmPC</th>
</tr>
</thead>
</table>

Requested information in the last 3 columns of the table should be focused only on risks related to PRES/RCVS and risks belonging to MedDRA HLGT Central nervous system vascular disorders and HLGT Encephalopathies.

¹ MAH should clearly indicate for which country a specifically dedicated presentation has been granted for a particular indication.

² Measures not included in the product information (PI), such as legal status, limitations or specifications related to dispensing process - age limit control or maximum number of packages on a single prescription, pack size.