Concept paper on revision of the guideline on the pharmaceutical quality of inhalation and nasal products

Draft

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<th>Event</th>
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<td>Agreed by Quality Working Party</td>
<td>February 2017</td>
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<tr>
<td>Adopted by CHMP for release for consultation</td>
<td>23 February 2017</td>
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<tr>
<td>Start of public consultation</td>
<td>22 March 2017</td>
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<td>End of consultation (deadline for comments)</td>
<td>30 June 2017</td>
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The proposed guideline will replace "Guideline on the Pharmaceutical Quality of Inhalation and Nasal Products" (EMEA/CHMP/QWP/49313/2005 Corr).

Comments should be provided using this [template](#). The completed comments form should be sent to [QWP@ema.europa.eu](mailto:QWP@ema.europa.eu)

Keywords

- inhalation, nasal, pharmaceutical quality, lung, pressurised metered dose inhalers, dry powder inhalers, products for nebulisation, non-pressurised metered dose inhalers, nasal sprays, nasal powders, nasal liquids
Introduction

This concept paper concerns the guidance document on quality aspects of human medicinal products intended for delivery of drug substance into the lungs or to the nasal mucosa with the purpose of evoking local or systemic effect. These include pressurised metered dose inhalers, dry powder inhalers, products for nebulisation and non-pressurised metered dose inhalers as well as pressurised metered dose nasal sprays, nasal powders and nasal liquids.

For an Orally Inhaled Product (OIP) there are two guidelines where quality aspects are covered; “Guideline on Pharmaceutical Quality of Inhalation and Nasal Products” EMEA/CHMP/QWP/49313/2005 Corr and CPMP/EWP/4151/00 Rev. 1, a guideline focussing on the establishment of therapeutic equivalence of two orally inhaled products (See Reference 1). These guidelines are written to complement each other and should always be read in conjunction. Currently the guideline on therapeutic equivalence is under revision and a separate Concept Paper relating to that guideline will be published in parallel. The experience gained over the years’ points at a need to clarify certain aspects related to the establishment of therapeutic equivalence based on pharmaceutical data. Therefore, the changes to the guideline on therapeutic equivalence will have impact on the quality guideline. To have both these guidelines open for revision in parallel gives the opportunity to align the requirements.

1. Problem statement

The current guideline on quality of inhalation and nasal products came into effect in 2006 and since then a lot of experience has been gained mainly with regard to establishment of therapeutic equivalence but also new combinations and new chemical entities. During review of applications and scientific advices several issues are frequently being discussed and some Question & Answers have been adopted which may be incorporated in the updated guideline.

The main focus of the revision will be on the inhalation part.

2. Discussion (on the problem statement)

Since the guideline was adopted, regulatory guidance has evolved which may have an impact in the field of this guideline and more experience has been gained from the assessment of applications.

In particular the following items have been identified which would benefit from being addressed in a revision of the guideline:

- Inclusion of issues identified in the Concept Paper on revision of the guideline on therapeutic equivalence of orally inhaled products which also have an impact on the quality guideline, such as requirements for dose proportionality, flow-rate dependency, stage grouping and requirements on data for an inhalation spray together with a spacer/holding chamber.
- The possibility to use new abbreviated methods for determination of aerodynamic particle size distribution.
- The possibility to conduct intra- and inter-device variability for delivered dose uniformity in one test in the finished product specification.
- Complementary guidance how to justify that the manufacturing process may be considered as a standard process in accordance with the process validation guideline.
• Evaluating essential requirements for CE marked and non-CE marked devices.
• Updating of relevant parts to reflect the concepts of ICH Q8/Q9/Q10.
• The possibility to include a chapter on lifecycle management.
• Inclusion of requirements in published Q&A, such as robustness test after dropping of an inhalation device and an acceptable range of fine particle dose (FPD) in the finished drug product specification.

3. Recommendation

The QWP recommends revising the current guideline on the pharmaceutical quality of inhalation and nasal products taking into account the issues identified above.

The revised guideline will not introduce new requirements on medicinal products already authorised, but it will clarify the regulatory expectations for new applications for medicinal products.

4. Proposed timetable

Released for consultation on 01/04/2017, deadline for comments 30/06/2017.

QWP will take into account all comments received during the public consultation of the concept paper, and publish the draft guidance for a 3 month consultation period.

5. Resource requirements for preparation

The revision will be carried out by the Quality Working Party (QWP), in cooperation with EU/EEA competent authorities. The QWP should appoint rapporteur and drafting group from the members of QWP.

6. Impact assessment (anticipated)

The revised guideline is intended to give guidance on the quality aspects of inhalation and nasal product and will clarify the requirements for regulators and industry. In addition, it will be useful to reach a common approach for the assessment of these products and scientific advices given by European regulatory authorities.

7. Interested parties

The pharmaceutical industry, European Competent Authorities, EDQM, European scientific and learned societies and organisations. Consultation with other working parties or committees (e.g. PKWP and RDG) will be initiated as appropriate.

8. References to literature, guidelines, etc.

1. Guideline on the Requirements for Clinical Documentation for Orally Inhaled Products (OIP) Including the Requirements for Demonstrating of Therapeutic Equivalence Between Two Inhaled Products for Use in the Treatment of Asthma and Chronic Obstructive Pulmonary Disease (COPD) in Adults and for the Treatment of Asthma in Children and Adolescents (CPMP/EWP/4151/00 Rev. 1).

3. QWP Question & Answers on inhalation products.

4. Preparations for Inhalation (Ph Eur monograph).

5. ICH guideline Q8 (R2) on pharmaceutical development

6. ICH guideline Q9 on quality risk management

7. ICH guideline Q10 on pharmaceutical quality system