

**Comments on Chinese Pharmacopoeia Draft Guideline: *Guideline for Packaging System of Preparations for Inhalation***

Submitted by the International Pharmaceutical Aerosol Consortium on Regulation and Science ([IPAC-RS](#)) and the Extractables and Leachables Safety Information Exchange Consortium ([ELSIE](#))

**General Comments**

1. Paragraph 1: Suggest that authors clarify that the guidance has aligned with any ISO standards, ICH and USP on any specific subjects, e.g., risk management. If so, add into the references list.
2. It will be helpful to explain the principle of mode of inhalation as the determining factor of sterility requirements. For example, both MDI and nasal spray are liquid formulations for inhalation but are not sterile for all other markets. In China, MDI is not required to be sterile while spray for inhalation is required to be sterile.

**Specific Comments:**

Page, Line or Section of the Document	Original Language	Proposed Changed Language; or Comment
<b>I. Production Requirements</b>	Enterprises should conduct risk assessment and prevention/control based on the idea of risk management, combined with the requirements of preparations for inhalation, and the characteristics and uses of packaging system and components.	<b>Drug Product manufacturers</b> should conduct risk assessment and prevention/control based on the <b>concept</b> of risk management, combined with the requirements of preparations for inhalation, and <b>with</b> the characteristics and uses of packaging system and components.
	Packaging system for preparations for inhalation refers to the packaging systems that accommodate, protect, and deliver preparations for inhalation	Packaging system for preparations for inhalation refers to the packaging systems that <b>contain</b> , protect, <b>measure</b> and deliver preparations for inhalation
	The packaging system for MDIs typically includes a metering valve, a pressure container, a dosing device (e.g., actuator),	The packaging system for MDIs typically includes a metering <b>valve (drug dosing device)</b> , a pressure container, a <b>drug delivery</b> device (e.g., actuator),
	It should be ensured that the components that require <b>precision machining</b> in the packaging	Please consider changing “precision machining” to “dimension accuracy.” (We realize this may simply be a

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	<p>system for preparations for inhalation are precise in terms of <b>shape</b> and size, and have and maintain appropriate structural strength (e.g., meeting the requirements of deformation pressure, etc.).</p>	<p>translation issue).</p> <p>Please consider using “dimension” instead of “shape” – again, this is perhaps a translation issue. In English the concept of “shape” is not measurable, so a shape cannot be precise, while a “dimension” can be. This comment is applicable also to the Quality section (see below comment)</p>
<p><b>II. Application requirements</b></p>	<p>Research and control should be conducted on the protection and functionality of packaging system and components in accordance with the requirements of the General Chapter for Preparations for Inhalation (General Chapter 0111). The packaging system or device with drug delivery function should meet quality requirements such as total number of actuations/puffs/sprays delivered and dose content uniformity during its <b>valid</b> and use period.</p>	<p>Please consider revising the translation to: “during its <b>validation</b> and use period.” at the end of this paragraph</p>
<p><b>III. Quality Control</b> <b>1. Physical Performance</b></p>	<p>Pressure test</p>	<p>These are tests usually performed by the supplier (e.g., pressure test on the canister). The ChP may want to consider adding a sentence relevant to the acceptability of tests performed by suppliers. Alternatively, this can remain general and left to interpretation.</p>
	<p>Shape</p>	<p>Better term is, “Dimension”</p>
<p><b>3. Application Performance</b></p>	<p>metered valve</p>	<p>meter<b>ing</b> valve</p>
	<p>For MDIs and inhalation sprays, it is necessary</p>	<p>Please consider moving this up, closer to the other</p>

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	to investigate the uniformity of shot weight of the metering valve and the total number of actuations of the valve	paragraph on “packaging systems for MDIs.”
<b>4. Microbial Control</b>	Referring to the Guideline for Microbiological Testing of Pharmaceutical Packaging Materials (Guideline 9627), the microbial limit, bioburden, or sterility of packaging system or components can be controlled, so as to ensure that the packaging system meets the requirements for preparations for inhalation.	It should be clarified that this control is not mandatory for non-sterile inhalation product and that the microbiological quality is ensured testing the finished drug product.