

## Comments on the Drafts of Japanese Pharmacopoeia

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**Note:** Leave the box surrounded by a double line blank

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	22-26	Uniformity of delivered dose of nasal preparations	Introduction
Corresponding part and/or Amendment	An example of a combined intra- and inter-container sampling scheme is to take 10 containers and collect the first dose from 3 containers, the middle does from 4 containers and the last dose from 3 containers and then determine the delivered dose.		
Reason and/or Comment	The example described doesn't provide entire contents intra-container sampling.		
Attachment ( Yes • <input type="checkbox"/> No )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	37-43	Uniformity of delivered dose of nasal preparations	1. Intra-container testing. 1.1 Metered-dose nasal sprays. 1.1.1 Apparatus
Corresponding part and/or Amendment	Description of test apparatus		
Reason and/or Comment	Description of apparatus is vague potentially resulting in significant variation in test results between different labs.  Furthermore, given the variability associated with nasal sprays, this represents a good opportunity to encourage mechanical or automated actuation.		
Attachment ( Yes • <input type="checkbox"/> No )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	38-43	Uniformity of delivered dose of nasal preparations	1. Intra-container testing. 1.1 Metered-dose nasal sprays. 1.1.1 Apparatus
Corresponding part and/or Amendment	<i>“At the very minimum, the following aspects should be taken into consideration when selecting an apparatus: actuation direction (vertical or tilted), connection between container and apparatus, sampling efficacy, need for an airflow system, venting of collection apparatus and mode of actuation.”</i>		
Reason and/or Comment	Please define what the authors mean by “mode of actuation”.		
Attachment ( Yes • <input type="checkbox"/> Non )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	45-48 92-95	Uniformity of delivered dose of nasal preparations	1.1.2. Procedure 1.2.2. Procedure
Corresponding part and/or Amendment	"Unless otherwise prescribed or justified and authorized, perform 10 determinations of the delivered dose by collecting the first 3 doses, the middle 4 doses and the last 3 doses from a single container using the procedure described below"		
Reason and/or Comment	This sentence has been repeated on lines 45-48 for the metered dose liquid nasal sprays and lines 92-95 for the metered dose nasal powders. Yet, it was also introduced as a general example in lines 22-26. We suggest removing 'an example' in line 22 and introducing this as a standard procedure unless otherwise prescribed. This way, the authors can refer to the standard procedure unless prescribed otherwise without repeating the exact same sentence three times on a single page.		
Attachment ( Yes · <input type="checkbox"/> Non )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	49-50	Uniformity of delivered dose of nasal preparations	1.Intra-container testing 1.1 Metered-dose nasal sprays 1.1.2. Procedure
Corresponding part and/or Amendment	"Unless otherwise prescribed in the instructions to the <u>patient discharge</u> the first delivery to waste."		
Reason and/or Comment	Add a comma between 'patient' and 'discharge'		
Attachment ( Yes · <input type="checkbox"/> Non )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	56-57	Uniformity of delivered dose of nasal preparations	1.Intra-container testing 1.1 Metered-dose nasal sprays 1.1.2. Procedure
Corresponding part and/or Amendment	"Repeat the procedure for an additional 2 doses using the same container."		
Reason and/or Comment	Does this mean sample collection in triplicates? If so, move the sentence to the rest of the above paragraph without starting a new paragraph, as it's continuous with the previous sentence.		
Attachment ( Yes · <input type="checkbox"/> Non )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	77-81	Uniformity of delivered dose of nasal preparations	1.Intra-container testing 1.1 Metered-dose nasal sprays 1.1.2. Evaluation
Corresponding part and/or Amendment	“ <i>Since tolerance of the uniformity of delivered dose required for a <u>nasal preparation</u> is different depending on the kind of active ingredients, its content, delivered dose and dosage form, the appropriate tolerance range should be set for each product.</i> ”		
Reason and/or Comment	<ol style="list-style-type: none"> <li>Does “nasal preparation” mean “nasal device preparation”? Please revise or clarify.</li> <li>What's the difference between “the kind of active ingredients” and “its content”? The authors perhaps mean the active and other components of the formulation. Please revise for better clarity.</li> <li>“Dosage form” in this paragraph is too broad since we are in the metered dose nasal sprays section. The reviewer suggests revising to “liquid dosage form, solution, and 'suspension.”</li> </ol>		
Attachment ( Yes • <input type="checkbox"/> Non )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	84-90	Uniformity of delivered dose of nasal preparations	1.Intra-container testing 1.2 Metered-dose nasal powders 1.2.1 Apparatus
Corresponding part and/or Amendment	Description of test apparatus		
Reason and/or Comment	<p>Description of apparatus is vague potentially resulting in significant variation in test results between different labs.</p> <p>Furthermore, given the variability associated with nasal sprays, this represents a good opportunity to encourage mechanical or automated actuation.</p>		
Attachment ( Yes • <input type="checkbox"/> No )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	85-90	Uniformity of delivered dose of nasal preparations	1.Intra-container testing 1.2 Metered-dose nasal powders 1.2.1 Apparatus
Corresponding part and/or Amendment	“ <i>At the very minimum, the following aspects should be taken into consideration when selecting an apparatus: actuation direction (vertical or tilted), connection between container and apparatus, sampling efficacy, need for an airflow system, venting of collection apparatus and mode of actuation.</i> ”		
Reason and/or Comment	Please define what the authors mean by “mode of actuation”.		
Attachment ( Yes • <input type="checkbox"/> Non )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf	120-130	Uniformity of delivered dose of nasal preparations	2.Inter-cointainer testing
Corresponding part and/or Amendment	Inter-container testing		
Reason and/or Comment	The example given assumes that a batch of containers behave the same through life. More comprehensive testing of the 10 containers should be recommended.		
Attachment ( Yes • <input type="checkbox"/> No )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf		Uniformity of delivered dose of nasal preparations	
Corresponding part and/or Amendment	Consider adding a suggestion that testing be done using automation.		
Reason and/or Comment	These products are notoriously variable if actuated manually. Automation would improve reproducibility.		
Attachment ( Yes • <input type="checkbox"/> Non )			

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File name	Line number	Monograph/Test name	Section
001-2403eng.pdf		Uniformity of delivered dose of nasal preparations	
Corresponding part and/or Amendment	Consider recommending a final 'filter' / stage to capture all the finer particles, i.e. <10µm		
Reason and/or Comment	To limit unintended delivery to the lung.		
Attachment ( Yes • <input type="checkbox"/> Non )			