



European Medicines Agency  
<Unit>

2009-05-28

## SUBMISSION OF COMMENTS ON

### QRD Recommendations on the expression of strength in the name of centrally authorised human medicinal products (EMEA/208304/2009)

#### COMMENTS FROM:

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**Name of Organisation or individual**

**INTERNATIONAL MEDICATION SAFETY NETWORK**

**Care of Institute for Safe Medication Practices**

**If necessary, please respond to: Michael R. Cohen, RPh, MS, ScD**

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The International Medication Safety Network (IMSN) is an international network involving the main programmes for safe medication practices, the aims of which are to prevent medication errors and contribute to safer healthcare.

Established by the "Salamanca Declaration to promote safe medication practices globally" in November 2006, this specific network aims at promoting and reinforcing cooperation between independent, multidisciplinary programmes for safe medication practices.

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*Please note that these comments and the identity of the sender will be published unless a specific justified objection is received.*

*Comments should be sent to the EMEA electronically and in word-format (not pdf).*

**1. GENERAL COMMENTS**

<b>Stakeholder No.</b> <i>&lt;to be completed by EMEA&gt;</i>	<b>General Comment (if any)</b>	<b>Outcome (if applicable)</b> <i>&lt;to be completed by EMEA&gt;</i>
	<p><b>COMMENTS:</b></p> <p>The International Medication Safety Network (IMSN) believes that developing these recommendations for expressing the strength in the name of centrally authorised medicines in Europe constitutes an initiative that is essential for ensuring the safe use of medicines and for preventing medication errors, based on the following:</p> <p><b>- Naming is labelling.</b> According to the current European regulation, the name that must be used on the label (both for outer packaging and inner packaging) of a medicinal product is that which is called the “full name”, which consists of the “<i>(invented) name + strength + pharmaceutical form</i>”, as stated in the Guideline on Summary of Product Characteristics (SPC) (1).</p> <p>This name, together with other relevant information, should be brought together using a sufficiently large font on the labelling (where possible) and should appear in the same field of view (2).</p> <p>Therefore, these recommendations on the expression of strength of centrally authorised human medicinal products shall permit establishing the essential quantitative information which will be presented in a prominent manner on the labels of medicines in order to ensure a safer use.</p>	

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	<p><b>- Current European legal requirements regarding the expression of strength are flexible and do not take into consideration concerning the use of medicines by healthcare professionals and by patients in the real world.</b></p> <p>The way in which the strength of a medicinal product is to be indicated, in particular in the case of medicines for parenteral use, is not clearly defined in the legal requirements regarding labelling on packaging. In this sense, even the last Guideline on the readability of the labelling and package leaflets for medicinal products for human use, revised by the European Commission in 2009 (2), seems to support the importance of strength indications for the safe use of these kinds of medications. However, the Guideline limits itself to restating the indications in Directive 2001/83/EC:</p> <p><i>“Nevertheless, of the information items listed in Article 54 of Directive 2001/83/EC, certain items are deemed critical for the safe use of the medicine. These items are: name of the medicine; strength and, where relevant, total content; route of administration. Where possible these should be brought together using a sufficiently large type size on the labelling. Having these items together in the same field of view should be considered in order to aid users.”</i></p> <p>and additionally indicates the following:</p> <p><i>“In some cases the packaging may need to contain information on both the quantity per unit volume (mL) and on the total quantity per total volume. The total quantity per total volume can be particularly important for safety reasons for injectable products and other medicines available in solution or suspension.”</i></p> <p>In addition, the Guideline on Summary of Product Characteristics (1), when indicating the way to express quantitative composition in medicinal products, establishes differences between what it called “partial use” and “total use”. However, these concepts are not sensible in practice and the different ways of expressing strength on labels prepared according to the guideline, depending upon whether the medicine is considered to be for “partial or total” use, are not known to the professionals who handle the medicines.</p> <p>In summary, the possibility of using different ways of expressing strength, particularly for injectable drugs, leads to a lack of uniformity in the way quantitative composition is indicated on the label, which increases the opportunities for medication errors to occur.</p>	

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	<p><b>- Using the concentration as the expression of strength in the name instead of the total content per total volume along with the per mL designation creates a situation prone to medication errors.</b></p> <p>Findings from medication error reporting programs evidence that the expression of the strength for liquid products, particularly parenteral, in the name as concentration (x mg/mL) rather than total content/total volume (z mg/y mL) has lead to medication errors in all the processes of the medication use system: prescription, preparation, dispensing, and administering (3-8). However, in the Nordic countries the per mL designation is widely practiced. Therefore we believe that both the total content/total volume AND the per mL designation should be included together, within the same border or background so that they are both readily visible.</p> <p>Putting with prominence the concentration in the expression of strength of parenteral liquid medicines puts patients at risk for medication errors, mostly overdoses, since this format may be mistakenly interpreted as the total amount per container when the medication is prepared or administered.</p> <p>Additionally, when there are several presentations registered for the same product, the use of concentration in the name increases the chances for errors in identifying the different presentations. In these cases the total content per total volume (z mg/y mL) as well as the per mL amount, must be used in the name of the product, so that the individual product may be correctly selected.</p>	

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	<p><b>PROPOSED CHANGES:</b></p> <p>The IMSN is in agreement with the following paragraph of the minutes of the workshop held the 31 October 2008 by the EMEA (7):  <i>“The main purpose of the strength in the name of a medicinal product is to provide the most relevant quantitative information for the user regarding the content of the product, taking every step of the complex medication management process into account (e.g. prescribing, documenting, dispensing, administration and monitoring). The ‘strength’, together with other content information in the labelling, should ensure the unambiguous identification of the product (content) concerned, a clear distinction between different presentations of the same product, and the appropriate and safe use of the medicine by healthcare professionals, caregivers and patients, therefore, minimising potential confusion and medication errors.”</i></p> <p>Reducing the risk of medication errors requires a clear and unambiguous design of essential information on the labelling and packaging (8-9). This approach to safety is based on human factors principles, such as simplification, prioritisation, standardization, differentiation, and conspicuity, which have been considered when establishing recommendations and guidelines for the expression of strength by regulatory agencies or organisms in Canada, Australia-NZ, France, UK and USA (10-14).</p> <p>The IMSN also considers it important that the EMEA bear in mind the recommendations most recently published in other countries, since medications and their safe uses are both part of a global issue.</p> <p>The IMSN believes it particularly important that the following</p>	

Stakeholder No. <to be completed by EMEA>	General Comment (if any)	Outcome (if applicable) <to be completed by EMEA>
	specific comments be considered by the EMEA:	

## 2. SPECIFIC COMMENTS ON TEXT

Because of the absence of line numbers in the text in consultation, this part is left empty.

Line No of the first line(s) affected. <e.g. Line 20-23>	Stakeholder No. <to be completed by EMEA>	Comment and Rationale; proposed changes <if changes to the wording are suggested, they should be highlighted using “track changes”>	Outcome <to be completed by EMEA>
		<p><b>Comments:</b></p> <p><b><u>Parenteral preparations: Single dose liquid preparations and concentrates</u></b></p> <p>There should not exist any possibility of using different ways of expressing strength. A single form of expression should be adopted.</p> <p><b>Proposed change (if any):</b></p> <p><b>- The expression of strength in the name of single dose preparations (both in case of total use and partial use) should be the total content or the total content per total volume (‘z mg/y ml’) as well as the per mL designation within the same border or background.</b></p> <p>Particular effort should be made to distinguish between the essential information to be included in the same field of vision such that the total amount of active</p>	

Line No of the first line(s) affected. <e.g. Line 20-23>	Stakeholder No. <to be completed by EMEA>	<b>Comment and Rationale; proposed changes</b> <if changes to the wording are suggested, they should be highlighted using “track changes”>	<b>Outcome</b> <to be completed by EMEA>
		substance, and complementary information such as concentration, or percentage.	
		<p><b>Comments:</b></p> <p><b>Parenteral preparations: Single dose liquid preparations and concentrates</b></p> <p>Establishing differences in the expression of strength between “total use” and “partial use” of single dose parenteral medicines is an aspect that has no application to the real world. Also, healthcare professionals who use these medications are not familiar with these differences.</p> <p><b>Proposed change (if any):</b>  <b>The distinction between “total use” and “partial use” of parenteral products should be eliminated.</b></p>	
		<p><b>Comments:</b></p> <p><b><u>Parenteral preparations: Powders for liquid preparations</u></b></p> <p>Although the SPC describes only one volume to use in reconstitution, this guidance for reconstitution will not always be followed, and the inclusion of the total content in the container will be necessary for correct preparation.</p> <p><b>Proposed change (if any):</b>  <b>The strength of powders for liquid preparation should always be expressed in the name as “z mg”, both for single-dose and multi-dose.</b></p>	

*Please feel free to add more rows if needed.*



## References:

- 1- European Commission “Guideline on Summary of Product Characteristics” October 2005 ; 26 pages.
- 2- European Commission “Guideline on the readability of the label and package leaflet of medicinal products for human use” 12 January 2009 ; 27 pages.
- 3- Instituto para el Uso Seguro de los Medicamentos “Errores por denominación inapropiada del medicamento en etiquetado y formatos electrónicos” ISMP-España Boletín 2007 ; (25) : 3.
- 4- Instituto para el Uso Seguro de los Medicamentos.” Errores por etiquetado inapropiado de medicamentos”. ISMP-España Boletín 2009 ; (28) : 1-2.
- 5- Prescrire Rédaction “Keppra° injectable : surdoses” Rev Prescrire 2008 ; 28 (293) : 182.
- 6- Prescrire Editorial Staff “Kaletra° oral solution : modification of confusing label” Prescrire Int 2008; 17 (96): 140.
- 7- Cohen MR. Ed. Medication Errors. Washington DC. 2007 Am Pharm Assoc. Chapter 7, pages 127-131.
- 8- US Food and Drug Administration. Medication errors associated with CEREBYX. FDA Advise-ERR. ISMP Medication Safety Alert! April 10, 2008.  
<http://www.ismp.org/Newsletters/acutecare/articles/20080410.asp>
- 9- EMEA “Report on the Workshop “Expression of strength in the name of medicines” - London, 31 October 2008” 04 April 2009 ; 2 pages.
- 10- Expert Group on Safe Medication Practices (P-SP-PH/SAFE) of the Council of Europe “Creation of a medication Safety culture in Europe: Building up Safe Medication Practices. Chapter III Improving the safety of naming, labelling and packaging of medicines marketed in Europe” March 2007 : 67-99.
- 11- National Patient Safety Agency “Design for safety. Labelling and Packaging Guidelines for Injectable Medicines” NPSA, London 2007.
- 12- Medicines and Healthcare Products Regulatory Agency (MHRA) “Best practice guidance on labelling and packaging of medicines. MHRA guidance note No 25” June 2003.
- 13- Agence française de sécurité sanitaire des produits de santé (AFSSAPS) “Harmonisation des étiquetages des solutions injectables” 2007.
- 14- Institute for Safe Medication Practices. Inattentional blindness. What captures your attention? February 26, 2009.  
<http://www.ismp.org/Newsletters/acutecare/articles/20090226.asp>
- 15- Canadian Society of Hospital Pharmacists “Guidelines for drug packaging and labelling for manufacturers” Ottawa, 2001.
- 16- Canadian Standards Association “Labelling of drug ampoules, vials, and prefilled syringes” Toronto, 1999.