



1 13 October 2016  
2 EMA/CHMP/179692/2016  
3 Committee for Medicinal Products for Human Use (CHMP)

4 **Concept paper on the need for revision of the guideline**  
5 **on clinical investigation of medicinal products in the**  
6 **treatment of epileptic disorders**  
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Agreed by CNS Working Party	June 2016
Adopted by CHMP for release for consultation	13 October 2016
Start of public consultation	25 October 2016
End of consultation (deadline for comments)	31 January 2017

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9 The proposed guideline will replace the Guideline on clinical investigation of medicinal products in the  
10 treatment of epileptic disorders (CHMP/EWP/566/98 Rev.2/Corr).  
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12 Comments should be provided using this [template](#). The completed comments form should be sent to [cnswpsecretariat@ema.europa.eu](mailto:cnswpsecretariat@ema.europa.eu).

Keywords	Seizures, epilepsy, anti-epileptic agents.
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## 13 **1. Introduction**

14 Epilepsy is a neurological disorder characterised by recurrent spontaneous/unprovoked seizures as the  
15 most dominant feature. The prevalence is estimated at 5-8 per 1000 subjects. Once diagnosed  
16 epilepsy is a life-long condition which has a major physical, psychological and social impact on  
17 patients. The clinical expression of epilepsy has a high variability depending on seizure types, epileptic  
18 syndromes, age, prognosis and response to treatment.

19 The current Guideline (CHMP/EWP/566/98 Rev.2/Corr) came into effect in August 2010. Recently a  
20 number of scientific advice procedures and several Paediatric Investigation Plans including  
21 modifications have been conducted for development programs on medicinal products for treatment of  
22 epilepsy indicating that there is a need for revision to further clarify the guidance provided.

## 23 **2. Problem statement**

24 Anti-epileptic agents may have different spectra of efficacy i.e. some anti-epileptics have a broad  
25 spectrum of efficacy whereas for others efficacy is limited to a specific seizure type. Data regarding  
26 efficacy and safety in various seizure types are therefore needed. Further, in epilepsy syndromes, it is  
27 important to know in which seizure types a product is effective and in which seizure types it is not  
28 effective or even harmful.

29 Hence, ideally, the clinical development plan of medicinal products intended for epilepsy treatment  
30 includes add-on studies, monotherapy studies, studies in children, and studies in epileptic syndromes  
31 and seizure types.

32 Most new anti-epileptic agents are initially developed and approved for the treatment of partial-onset  
33 seizures with or without generalised seizures as add-on to existing anti-epileptic treatment, in the  
34 adult population. Subsequent evaluation in e.g. other seizure types, epileptic syndromes, in children  
35 and the elderly or as monotherapy is often delayed. Preferably, the evaluation of the efficacy spectrum  
36 should continue and be started as early as the development of the medicinal product allows.

37 The need for evaluating the full efficacy spectrum of newly developed anti-epileptic agents should be  
38 highlighted and the way to foster further development needs to be re-visited. Also the guideline may  
39 be adapted according to the revised and ongoing terminology and classification of seizures and seizure  
40 syndromes (Engel 2006; Berg et al., 2010; Scheffer et al., 2016).

## 41 **3. Discussion (on the problem statement)**

42 The following critical aspects should be discussed in the update of the guideline:

### 43 *Add-on studies*

- 44 • Revision of the study design in the add-on setting e.g. validity and acceptability of a time to event  
45 approach as alternative endpoint and consequences for duration of the studies.
- 46 • Need and design of active comparative studies in the add-on setting.

### 47 *Monotherapy studies*

- 48 • Clarification of the type and breadth of evidence needed to support a monotherapy claim, i.e. study  
49 design (i.e. switching from one monotherapy to another), patient population, etc.

50

51 *Special populations*

- 52 • To which extent the results of adult studies can be extrapolated to children, i.e. for which  
53 conditions separate studies in children are required, under which conditions extrapolation from the  
54 results of adult studies may be possible and which data needs to be generated to support the  
55 extrapolation.
- 56 • Need for sufficient data in the elderly with newly diagnosed epilepsy as the benefit/risk profile may  
57 be different considering that the effect size may be smaller and subjects may be more sensitive to  
58 CNS adverse events.

59 *Specific seizure types/epileptic syndromes*

- 60 • Inclusion of status epilepticus section.
- 61 • Inclusion of neonatal seizures section.
- 62 • Need for separate studies and study design in epileptic syndromes and seizure types.

63 *Miscellaneous*

- 64 • Whether the revised classification of seizures and seizure syndromes is sufficiently established to  
65 include in the guideline.

66 **4. Recommendation**

67 The CNS Working Party recommends drafting a revision of the guideline on the clinical investigation of  
68 medicinal products for the treatment of epileptic disorder (CHMP/EWP/566/98 Rev.2/Corr) in line with  
69 the critical aspects discussed above.

70 **5. Proposed timetable**

71 It is planned to release for consultation the concept paper in Q4 2016 and a draft revised guideline  
72 document in 2017.

73 **6. Resource requirements for preparation**

74 The preparation of this guideline revision will involve the CNS Working Party and Paediatric Committee  
75 (PDCO). It is also planned to discuss the draft revision with the Scientific Advice Working Party and  
76 other relevant Working Parties and Committees.

77 **7. Impact assessment (anticipated)**

78 It is aimed that the guideline revision will be helpful to achieve consensus in the evaluation of  
79 antiepileptic agents by regulatory authorities in the European Union. Furthermore, it is expected, that  
80 the guideline revision will provide further guidance with respect to methodology, assessment tools and  
81 clinically relevant outcomes in epilepsy and thus would improve the quality and comparability of  
82 development programs for this therapeutic area by pharmaceutical companies.

83 **8. Interested parties**

84 Interested parties include learned societies and academia [e.g. International League Against Epilepsy  
85 (ILAE), European Neurological Society (ENS), pharmaceutical industry (e.g. EFPIA and others), the  
86 International Neonatal Consortium (ICH) and other regulatory agencies.

87 **9. References to literature, guidelines, etc.**

88 Note for guidance on clinical investigation of medicinal products in treatment of epileptic  
89 disorder [http://www.ema.europa.eu/ema/pages/includes/document/open\\_document.jsp?webContentId](http://www.ema.europa.eu/ema/pages/includes/document/open_document.jsp?webContentId=WC500070043)  
90 [=WC500070043](http://www.ema.europa.eu/ema/pages/includes/document/open_document.jsp?webContentId=WC500070043)

91 Procedure for European Union guidelines and related documents within the pharmaceutical legislative  
92 framework (EMEA/P/24143/2004): <http://www.emea.europa.eu/pdfs/human/regaffair/2414304en.pdf>

93 Berg, A.T. et al. Revised terminology and concepts for organization of seizures and epilepsies: report of  
94 the ILAE Commission on Classification and Terminology, 2005-2009. *Epilepsia* 51(4):676-685

95 Engel J, Report of the ILAE Classification Core Group *Epilepsia*, 47(9):1558–1568, 2006

96 French J. ILAE Classification Redux: Ready for Prime Time? *Epilepsy Curr.* 2014 Mar; 14(2):84-5).

97 Scheffer IE et al., Classification of the epilepsies: New concepts for discussion and debate—Special  
98 report of the ILAE Classification Task Force of the Commission for Classification and Terminology,  
99 *Epilepsia Open*, 1(1):37–44, 2016