



1 21 July 2016  
2 EMA/CHMP/474825/2016  
3 Committee for Medicinal Products for Human Use (CHMP)

4 **Paliperidone palmitate depot suspension for injection 25,**  
5 **50, 75, 100 and 150 mg product-specific bioequivalence**  
6 **guidance**  
7 **Draft**

|  |                 |
|--|-----------------|
| Draft agreed by Pharmacokinetics Working Party | June 2016       |
| Adopted by CHMP for release for consultation   | 21 July 2016    |
| Start of public consultation                   | 1 August 2016   |
| End of consultation (deadline for comments)    | 31 October 2016 |

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

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| <b>Keywords</b> | <b><i>Bioequivalence, generics, paliperidone</i></b> |
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13 Paliperidone palmitate depot suspension for injection 25, 50, 75, 100 and 150 mg  
 14 product-specific bioequivalence guidance

15 Disclaimer:

16 *This guidance should not be understood as being legally enforceable and is without prejudice to the need to ensure that the data submitted in support of a*  
 17 *marketing authorisation application complies with the appropriate scientific, regulatory and legal requirements.*

18 Requirements for bioequivalence demonstration (PKWP)\*

|                                      |   |
|--------------------------------------|---|
| <b>Bioequivalence study design**</b> | <b>Multiple dose:</b> any dose/strength (if the test product has the same concentration of active substance as the reference for all the strengths), patients<br><br><b>Background:</b> single-dose studies in healthy volunteers are not considered feasible.    |
|                                      | <b>cross-over or parallel</b>   |
| <b>Analyte</b>                       | <input type="checkbox"/> parent <input checked="" type="checkbox"/> metabolite <input type="checkbox"/> both<br><br><b>Background:</b> the prodrug, paliperidone palmitate, is not reliably measurable in plasma. Bioequivalence should be based on paliperidone. |
|                                      | <input checked="" type="checkbox"/> plasma/serum <input type="checkbox"/> blood <input type="checkbox"/> urine  |
|                                      | <b>Enantioselective analytical method:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no  |
| <b>Bioequivalence assessment</b>     | <b>Main pharmacokinetic variables:</b><br><br><b>Multiple dose:</b> $AUC_{0-\tau}$ , $C_{max,ss}$ and $C_{\tau,ss}$   |

|  |  |
|--|--|
|  | <b>90% confidence interval: 80.00– 125.00%</b> |
|--|--|

19 \* As intra-subject variability of the reference product has not been reviewed to elaborate this product-specific bioequivalence guideline, it is not possible to  
20 recommend at this stage the use of a replicate design to demonstrate high intra-subject variability and widen the acceptance range of  $C_{max}$ ,  $C_{T,ss}$ , and  
21 partialAUC.. If high intra-individual variability ( $CV_{intra} > 30\%$ ) is expected, the applicants might follow respective guideline recommendations.

22 \*\* For prolonged release formulations: If a single-dose study with the highest strength has shown that there is low risk of accumulation (i.e.  $AUC_{\tau} > 90\%$  of  
23  $AUC_{inf}$ ), the multiple-dose study may be waived. If low degree of accumulation is expected, the applicants might follow respective guideline  
24 recommendations.