

非臨床薬物動態試験パッケージに関するアンケート調査

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(受付: 平成 21 年 4 月 28 日, 受理: 平成 21 年 10 月 29 日)

Questionnaire Survey on Non-Clinical ADME Studies Package

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Summary

The ICH guideline (M3) adopted (as a step 5 document) in Japan in November 1998 recommends that a phase I clinical (P1) study should start after completing evaluation of exposure data in animals. Further, information on inter-species comparison of metabolism should be made available by the time the P1 studies have been completed. However, there are not well-defined criteria or guidelines regarding when sponsors need to obtain ADME study data during R&D, or what kind of data are required. Therefore, pharmaceutical companies need to establish their own policies regarding the types of ADME studies that should be done in connection with P1 study. The contents of the ADME studies package thus depend on the policy of individual companies and also differ among regions.

Therefore, questionnaire surveys concerning ADME studies for IND or NDA were sent to the 66 member companies of JPMA from January to February 2008. The surveys included both the timing of studies and the objectives in terms of efficacy, toxicity and clinical planning. The survey also contained questions concerning the conduct of P1 study. Answers were obtained from 54 companies, and their responses were analyzed. The results showed that pharmaceutical companies tend to conduct more *in vitro* studies than *in vivo* studies using radioactive compounds before P1 studies, especially in the case of companies with US/EU capital involvement. The drug development environment seems to be dramatically changing, including the data package requirements for approval to start clinical trials. This report will discuss what types of ADME studies are needed to support efficacy and toxicity studies and clinical planning, and will also propose a stage-appropriate approach for ADME studies.

Key words

ADME studies, Questionnaire surveys, *In vitro* studies, Minimum ADME package, Stage-appropriate approach, ICH guideline (M3), Global clinical trial