

前沿论坛

当前新药非临床安全性评价的趋势

Charles C. ZHANG¹, 戴仁科²

(1. Purdue Pharma LP, Cranbury, New Jersey 08512, USA; 2. 中山珐玛斯医药科技有限公司, 广东中山 528437)

收稿日期 2011-12-28 修回日期 网络版发布日期 2012-2-24 接受日期

摘要 非临床药物安全性评价为新药的研发发挥了重要作用。人用药品注册技术要求国际协调会 (ICH) 新药研发指南M3 (R2) 是非临床药物安全性评价的方向性指导文献。正确的评价策略和相关毒理学研究应该一起综合考虑, 以促进新药候选物高效、及时地向前发展, 从而支持临床试验计划和市场登记进展。然而, 随着发展成本增加和行业的竞争, 毒性预测、动物模型和法规遵从性也是新药深入研发过程中非常重要的因素。此外, ICH其他指导文献, 例如ICH S6和ICH S9, 也是给新药深入研发带来冲击力很大的指导文献。因此, 深入理解所有这些文献的本质意义对从事新药安全评价人员来说是很重要的, 增强综合使用各方面总体知识的能力将促进新药深入研发更快、更好地实施。

关键词 [非临床药物安全性](#) [ICH指南](#) [毒理学](#) [新药研发](#) [小分子药物](#) [生物药物](#)

分类号 [R965.3](#)

Current trends of nonclinical safety evaluation for new drugs

Charles C. ZHANG¹, DAI Ren-ke²

(1. *Purdue Pharma LP, Cranbury, New Jersey 08512, USA*; 2. *Zhongshan Pharmass Corporation, Zhongshan 528437, China*)

Abstract

Nonclinical safety evaluation plays a critical role in the process of new drug development. International Conference on Harmonization (ICH) guideline M3(R2) provides a key direction for the nonclinical safety evaluation process. Proper strategies and toxicological studies should be considered together to move the drug candidates forward efficiently and quickly to support clinical plans and market registration. Updates on ICH guidelines, such as ICH S6 and ICH S9, have great impact on the direction of development. With the increasing cost of development and competition in the industry, elements like predictivity, animal models, and regulatory compliance are also very important in the process. Therefore, an insight into all these factors is essential to toxicologists in the safety evaluation process. The ability to use the overall knowledge will result in a quicker and better new drug development program.

Key words [nonclinical safety](#) [ICH guideline](#) [toxicology](#) [new drug development](#) [small molecules](#) [biologics](#)

DOI: 10.3867/j.issn.1000-3002.2012.01.001

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(379KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中包含“非临床药物安全性”的相关文章](#)
- ▶ [本文作者相关文章](#)
 - [Charles C ZHANG](#)
 - [戴仁科](#)

通讯作者 cjzhang2000@yahoo.com