

# Establishment of Colon-specific Release Medium of Calcium Pectinate

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**ABSTRACT** **AIM** The purpose is to determine the colon release medium of polysaccharide preparation. **METHODS** Prepare 5-Fu calcium pectinate (Ca-P) capsules; determine the activities of domestic compound pectinase and imported pectinase Pectinex Ultra SP-L at different temperatures and pH values; observe the release of 5-Fu Ca-P capsules in the colon medium composed of rats cecal content and pectinase in different concentrations. **RESULTS** The activity of the domestic compound pectinase decreased with the increase of pH value, which is devitalized when pH is above 6.0; while the imported pectinase Pectinex Ultra SP-L is the most active at pH 5.0, and also it is devitalized when pH is above 7.0; at 37 °C, the activities of Pectinex Ultra SP-L 3 ml/L (pH 6.0) and compound pectinase 6 g/L (pH 5.0) are somewhat similar; dissolution experiment showed that pectinase really could degrade Ca-P, and the release accelerated with the amount of pectinase increased. What's more, the release of Pectinex Ultra SP-L 3 ml/L (pH 6.0) and compound pectinase 6 g/L (pH 5.0) are similar; the rats cecal content can effectively degrade Ca-P. **CONCLUSION** It is primarily that determined the solution containing Pectinex Ultra SP-L 3 ml/L (pH 6.0) or compound pectinase 6 g/L (pH 5.0) is be colon release medium of calcium pectine. **KEY WORDS** Calcium pectinate; Pectinase; Colon-specific drug delivery system; Colon release medium

## 我国医药研究战略从仿制向创新转移

“十五”期间,我国将以具有自主知识产权的创新药物产品开发为重点,建立我国创新药物研究与产业化开发体系,提高创新药物研究的整体水平和综合实力,实现医药研究由仿制为主向创新为主的战略性转移。

医药健康产业与人民休戚相关,随着社会发展,人们对于新型药物的需求与日俱增,同时加入世贸组织也使我国的医药健康产业面临着极大的挑战和机遇。而我国医药研究的现状离人们的高要求还有些距离,以我国的传统产业中药产业为例,由于技术瓶颈的制约,我国中药产品在国际植物药市场中所占份额较低,2000年我国进口“洋中药”价值已超出同期我国中成药的出口额。这就迫切需要我国抓住机遇,加快研制自主知识产权产品,以创新药物开发为突破口,促进医药产业及其相关产业和学科的快速发展。

我国最近发布的《社会发展科技工作要点》提出,“十五”期间,我国将以创新药物为重点,推动健康产业的发展,满足社会医疗和市场需求,巩固和扩大市场份额,力争使我国创新药物研究在国际新药研究领域中的一席之地。研制一批提高生活质量和防治重大疾病的创新药物,研究优选非专利重大品种的产业化开发关键技术;研究制剂新技术、制剂新辅料及缓释、控释制剂和粘膜给药制剂等药物新制剂及新剂型;优化及完善创新药物研究与产业化开发研究规范化建设和重点实验室建设等。

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