

工业药剂学

## 格列吡嗪缓释片的制备及体外释放度的考察

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摘要

目的 制备格列吡嗪缓释片, 并考察其体外释放度。方法 以HPMC为凝胶骨架材料制备缓释片, 采用正交设计对方进行优化, 以 $f_2$ 因子法考察受试处方与参比处方释放曲线的相似度, 并考察压片压力、释放介质pH值、浆转速等因素对释放的影响。结果 采用HPMC K4M和HPMC K100LV为基本骨架材料制得缓释片, 药物释放符合Higuchi模型。介质pH值、压片压力、浆转速对药物释放影响较小。结论 作者研制的格列吡嗪缓释片处方合理, 体外释放符合缓释制剂要求。

关键词 [药剂学](#) [缓释片](#) [羟丙甲纤维素](#) [格列吡嗪](#) [释放度](#)

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## Study on preparation and release of glipizide sustained- release tablets in vitro

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Abstract

Objective To prepare glipizide sustained release tablets, and evaluate its release in vitro. Methods The tablets were prepared with HPMC as matrix material and optimized by orthogonal test. The similarity factors ( $f_2$ ) were used to calculated similarity of release profiles of test and reference tablets. The effect of hardness of tablets, pH of release medium and the speed of paddle on the release profile was investigated. Results The sustained-release tablets were prepared with HPMC K4M and HPMC K100LV as basic matrix material. The release pattern of glipizide was properly described by Higuchi equation. The release rate was slightly affected by pH value, the hardness of the tablets and the speed of paddle. Conclusions The selected formulation of glipizide sustained-release tablets is reasonable and the drug release in vitro confirms the requirements of the sustained-release formulation.

Key words [pharmaceutics](#) [sustained-release tablets](#) [HPMC](#) [gipizide](#) [release rate](#)

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