

Preparation and characterizations of sustained-released drug tablets

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ABSTRACT

In Pharmaceutics, there are two common systems in making the oral Sustained-release tablets, i.e. Matrix system and Reservoir system. The polymers are used as materials in the two systems mostly, such as citosan, xanthan gum and hydroxypropylmethylcellulose (HPMC) etc. In reservoir system, using a fluid-bed spray granulator machine to sprinkle polymers on surface of tablet and forming a membrane. The membrane make drug's effect release slowly. In matrix system, using traditional method to form the tablets with the mixture by mixing the medicine with hydrogel or hydrophobic polymers. That is a cheaper and easier method than others. Many traditional drugs are made by dump system. In order to consider both safety and effect, development of oral slow-release tablets is a good decoration. There are many advantages in slow-release tablets, such as it can maintain the concentration of drugs in the circulation of blood, decrease side effect, decrease the frequency of using drugs and the squander of drugs, and further, it is a more acceptable mode for patients.

Keywords : Sustained-release tablets; Matrix system; Citosan; HPMC

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