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Review Article

DESIGN AND EVALUATION OF FAST DISSOLVING TABLET CONTAINING TADALAFIL SOLID DISPERSION

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Abstract

Fast dissolving tablet containing tadalafil solid dispersion was developed to improve the dissolution of drug. In the present work, fast dissolving tablets of tadalafil were prepared by direct compression. Fast dissolving tablet increase the patient compliance. Solid dispersion prepared by spray drying method. Three super-disintegrants, viz., crospovidone, croscarmellose sodium and sodium starch glycolate in different ratios with microcrystalline cellulose PH-102 along with directly compressible mannitol to enhance mouth feel. All formulations were evaluated for physical characteristics of compressed tablets such as weight variation, hardness, friability, content uniformity, in vitro disintegration time, wetting time and in vitro dissolution study. Among all, the formulation T2 containing 4% w/w concentration of crospovidone was considered to be the best formulation with Drug content 99.25%, disintegration time of 22 sec, wetting time of 35 sec and in vitro drug release of 99.73% in 30 min and 83.36 in 15min. For Full Article Click Here

Keywords: Tadalafil, Fast dissolving tablets, Crospovidone, croscarmellose sodium, sodium starch glycollate