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Comparative Study on Dissolution Profiles of Sibutramine Hydrochloride Monohydrate from Commercial Capsules

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***SUMMARY*. Sibutramine hydrochloride monohydrate (SHM) has been widely used for the management of overweight and obesity. However, more restrict data have been regarded about *in vitro* dissolution profile of SHM from pharmaceutical dosage forms. The goal of this paper was to perform a comparative analysis on dissolution profiles of SHM from four commercial capsules (formulations F1, F2, F3 and F4) available in the Brazilian pharmaceutical market. All studied preparations reached a plateau from 85 to 100% of dissolution within 20 min in purified water, HCl 0.1 mol L^{-1} (pH 1.2) and phosphate buffer solution (PBS pH 6.8) that can be reported as an immediate release behavior. Formulation F4 showed the lower dissolution efficiency (73.40%) in PBS medium. However, since similarity/difference data and analysis of variance were carried out, results demonstrated no statistical differences among the evaluated formulations in the three used media. Weibull equation was chosen as the most suitable kinetic model that better adjusted the experimental dissolution data.**

KEY WORDS: Capsules, Comparative analysis, Dissolution Profile, Sibutramine Hydrochloride Monohydrate.

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