Thesis Title Influence of Methacrylate Ester Copolymers on the Release of Salbutamol Sulphate Pellets

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Date of Graduation

16 May B.E. 2540 (1997)

ABSTRACT

The sustained release salbutamol sulphate pellets were prepared using methacrylate ester copolymers as drug release regulators and fluidization techniques. The pellets were composed of salbutamol sulphate and microcrystalline cellulose (Avicel® PH101) as model drug and agglomeration enhancer in ratio 1:20, respectively, and water was used as a binder. The 18/20 mesh pellets were coated with methacrylate ester copolymers, Eudragit® RS 100 and Eudragit® RL 100 at different ratios in the fluid bed bottom spray coater. The methacrylate ester copolymers dissolved in a mixture of acetone and isopropanol, and triethyl citrate and castor oil were employed as plasticizers. It was found that the higher the Eudragit RS 100 concentration, the lower the drug release would be. The dissolution of the pellets coated with 2.5% Eudragit RS 100 appeared to conform to USP XXII requirements for sustained release dosage forms.