

# Formulation and Evaluation of Salbutamol Sulphate Sublingual Films

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Received May 4, 2017; accepted July 2, 2017

## ABSTRACT

Salbutamol is a short-acting, selective beta-2-adrenergic receptor agonist used in treatment of asthma and COPD. In the present work, sublingual films of Salbutamol sulphate were developed with a view to enhance the patient compliance and provide quick onset of action. Salbutamol has a bioavailability of 53 - 60%. The goal of the study was to formulate sublingual films of Salbutamol sulphate to achieve a better dissolution rate and further improving the bioavailability of the drug. Sublingual films prepared by solvent casting method using film forming polymers

HPMC-E5, HPMC-E15 and Maltodextrin in different ratios. The prepared batches of films were evaluated for the drug content, weight variation, film thickness, disintegration time and *in vitro* dissolution studies. Among all, the formulation B1 containing HPMC-E15 with a drug: polymer ratio (1:6) was found to be the best formulation which showed 98.36% of the drug release within 15 minutes and disintegration time 18 sec. This study shows the viability of developing sublingual films of salbutamol.

**KEYWORDS:** Sublingual Films; Salbutamol Sulphate; HPMC; Maltodextrin.