

A retrospective multicentre study on the original and generic salmeterol/fluticasone combination (SFC) in the management of asthma

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ABSTRACT

Introduction: According to the Global Initiative of Asthma (GINA) 2020, the salmeterol/fluticasone combination (SFC) is the preferred controller in the management of asthma. The higher cost of the original SFC triggers the generic substitution which is less expensive and claims to have the same efficacy as the original SFC. However, there is a lack of local studies exploring the efficacy of generic SFC. **Methods:** A retrospective study was conducted in the chest clinic of Penang Hospital and Balik Pulau Hospital from January 2020 to May 2021. Patients who were prescribed original SFC in January 2020 or even earlier and then switched to generic SFC in September 2020 for 9 months were recruited. Pulmonary function (spirometry), asthma control symptoms (ACT score), and hospitalisations were measured as treatment outcomes. Data was analysed by using SPSS version 22. **Results:** A total of 33 patients were investigated. The majority were female (63.6%), Malay (48.5%) and aged more than 71 years old (45.5%). Original SFC and generic SFC had comparable FEV1 ($p=0.518$), FVC ($p=0.838$), and FEV1/FVC ($p=0.298$) values. The ACT score increased considerably after switching from the original SFC to the generic SFC ($p=0.038$). There is no significant difference in the number of hospitalisations between the original and generic formulations of SFC. **Conclusion:** The improvement in spirometric function was comparable between the original and generic SFC in asthma patients but the generic SFC exhibited better asthma control symptoms. Thus, the generic SFC can be recommended as a cost-effective and safe alternative to the original SFC.