

Ciclesonide

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Inhaled corticosteroids are the most effective prophylactic therapy currently available for the treatment of asthma, particularly in patients with mild-to-moderate asthma and persistent symptoms. Airway inflammation is thought to underlie the increased airway responsiveness seen in asthma and inhaled corticosteroids reduce airway responsiveness to a variety of direct and indirect stimuli in patients with mild asthma. Corticosteroids are thought to possess this beneficial therapeutic profile principally via their anti-inflammatory properties.

Ciclesonide is a novel corticosteroid which appears to possess many of the properties desired in an ideal corticosteroid. For example, it is a pure isomer parent compound, cleaved by esterases to form the active metabolite (desisobutyl-ciclesonide [des-CIC]), which contributes to its favourable profile with regard to reduced local side effects. Furthermore, this compound possesses extremely low oral bioavailability and is highly sensitive to meta-

bolism by liver oxidases. Its proven clinical efficacy, together with the high plasma protein binding and rapid elimination half-life exhibited by the active metabolite, des-CIC, contribute to its attractive therapeutic profile.

In vitro studies have confirmed that ciclesonide is the parent compound of an active metabolite known as des-CIC, and that the anti-inflammatory actions of this moiety are similar to those seen with other inhaled corticosteroids. Ciclesonide has also been shown to have beneficial effects in animal models of inflammatory airways disease, with an improved safety profile compared to other corticosteroids.

Ciclesonide is generally well tolerated in patients with asthma. Clinical studies have described a beneficial effect on lung function and improvement in asthma symptoms with dosages ranging from 160µg once a day in patients with mild-to-moderate asthma to 640µg twice daily in those with moderate-to-severe asthma.

In conclusion, ciclesonide, administered by a metered-dose inhaler, is currently in preregistration for the treatment of asthma in Australia, Canada, Switzerland and the UK. ▲