

# Leukotriene receptor antagonists: Montelukast and zafirlukast

Resources available:



Bulletin



Data pack



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Patient letter

Weblink: <http://www.prescqipp.info/montelukast/viewcategory/179>

Across the PrescQIPP membership (20.2 million patients, November 2013), annual spend for the leukotriene receptor antagonists montelukast and zafirlukast is almost £3 million (ePACT November 2013). The majority of this spend (£2.8 million) is for montelukast of which over £700,000 is spent on the branded product Singulair®. QIPP projects in this area are aimed at ensuring prescribing is generic and also reviewing treatment to assess for continued need.

## Recommendations

- Ensure all prescriptions for montelukast are prescribed generically so that maximum savings are realised.
- Ensure prescribing of leukotriene receptor antagonists is in line with the British Thoracic Society/Scottish Intercollegiate Guidelines Network (BTS/SIGN) Guideline on the Management of Asthma which suggests a limited role in therapy.
- Leukotriene receptor antagonist prescriptions should be started as acute prescriptions and only put on short term repeat if effective and a need to continue therapy is established. Review patients on long term montelukast for suitability to step down treatment in line with the BTS/SIGN asthma management guidelines.
- When initiating treatment, if a leukotriene receptor antagonist is appropriate, montelukast should be the treatment of choice as it is less costly than zafirlukast and is available in a wider range of products to treat both adults and children.

## Clinical evidence and national guidance

- Montelukast is a leukotriene receptor antagonist which can be added to treatment used in steps 3 and 4 of the BTS/SIGN management of chronic asthma guidelines for adults and children over 5 years of age<sup>1,2</sup> and in steps 2 or 3 in children under 5 years of age.
- Evidence suggests the addition of leukotriene receptor antagonists to inhaled corticosteroids (ICS) is not associated with a statistically significant reduction in the need for rescue oral corticosteroids or hospital admission compared to the same or an increased dose of ICS in children and adolescents with mild to moderate asthma.<sup>3</sup>
- A NICE Medicines Evidence Commentary suggested that until studies are published that show leukotriene receptor antagonists improve patient-oriented outcomes such as exacerbations requiring oral corticosteroids, prescribers should continue to follow the NICE-accredited BTS/SIGN guideline on the management of asthma which recommends a limited role for leukotriene receptor antagonists in children and adolescents aged 5 years and above.<sup>4</sup>
- Montelukast should always be prescribed generically and initially on an acute prescription. Effectiveness should be reviewed and treatment discontinued if ineffective.

## Costs and savings

**Table 1: 28 day costs of leukotriene receptor antagonists<sup>5,6</sup>**

Product and dose	Treatment age range	28 day cost
Montelukast (generic) 4mg chewable tablets (one daily)	Children aged 2 to 5 years	£2.21
Montelukast (generic) 5mg chewable tablets (one daily)	Children aged 6 to 14 years	£2.37
Montelukast (generic) 10mg tablets (one daily)	Adults and children over 15 years	£2.52
Montelukast (generic) 4mg paediatric granules (one sachet daily)	Children ages 6 months to 5 years	£4.02
Zafirlukast (Accolate®) 20mg tablets (one twice daily)	Adults only	£17.75
Montelukast (Singulair®) 4mg chewable tablets (one daily)	Children aged 2 to 5 years	£25.69
Montelukast (Singulair®) 5mg chewable tablets (one daily)	Children aged 6 to 14 years	£25.69
Montelukast (Singulair®) 4mg paediatric granules (one sachet daily)	Children ages 6 months to 5 years	£25.69
Montelukast (Singulair®) 10mg tablets (one daily)	Adults and children over 15 years	£26.97

Switching all montelukast prescribing to generic will save **£565,000** across the PrescQIPP membership.

If montelukast is discontinued as part of a step down on the asthma treatment pathway, a 50% reduction in prescribing would save **£1.2 million** across the PrescQIPP membership.

## References

1. BTS/SIGN. British Guideline on the Management of Asthma. Guideline101. Last revised January 2012 <http://www.sign.ac.uk/guidelines/fulltext/101/contents.html>
2. Martin, J Editor. British National Formulary No 66. September 2013.
3. Chauhan BF, Ben Salah R, Ducharme FM. Addition of anti-leukotriene agents to inhaled corticosteroids in children with persistent asthma. Cochrane Database of Systematic Reviews 2013, Issue 10. Art. No.: CD009585. DOI: 10.1002/14651858.CD009585.pub2.  
<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009585.pub2/abstract>
4. National Institute of Health and Care Excellence Medicines Prescribing Centre. Medicines Evidence Commentary: Asthma in children and adolescents: leukotriene receptor antagonists. November 2013. <http://arms.evidence.nhs.uk/resources/hub/1030388/attachment>
5. Haymarket Publishing. MIMS online. December 2013.
6. Prescription Pricing Division. NHS Electronic Drug Tariff. December 2013.