Singulair
Merck Sharp & Dohme

A new study published in Annals of Allergy, Asthma and Immunology showed that adding once-daily Singulair (montelukast sodium) to fluticasone, a widely used inhaled corticosteroid (ICS) in Australia, provided superior protection against exercise-induced asthma compared with adding salmeterol, a long-acting beta-agonist (LABA), in children 6–14 years of age (P = .009). In addition, these children recovered faster after exercise and responded better to salbutamol, a ‘quick-relief’ inhaled asthma medication (short-acting beta agonist). 1

Professor Peter van Asperen, Head of Department of Respiratory Medicine at The Children’s Hospital at Westmead said, ‘it is estimated that exercise or activity can trigger asthma in up to 80–90% of children with asthma.’ 2 These children may avoid exercising and may not get the 60 minutes of exercise per day recommended in the Australian Government physical activity guidelines. 3

In this new study, Singulair was shown to be superior to salmeterol on all study efficacy endpoints (P < .05). 1 Singulair was significantly better than salmeterol on the primary endpoint of protecting against a decrease in lung function after exercise, demonstrated by easier breathing during and/or after exercise (P = .009). 1 This was measured using a breathing test of Forced Expiratory Volume in 1 second (FEV₁). ‘Results of this study show that Singulair is an excellent add-on alternative to help control asthma triggered by exercise in children,’ Professor van Asperen said.

This double-blind, active-controlled, multicenter, randomised clinical trial was sponsored by Merck Sharp & Dohme (MSD) Inc. Participants included boys and girls between 6 and 14 years of age with at least a 1-year clinical history of asthma. To be eligible, all participants had to show a decrease in lung function after a standardised exercise challenge (running on a treadmill for at least six minutes) while taking fluticasone 100 μg twice daily (ICS). Participants remained on the (open-label) fluticasone, and continued through two 4-week treatment periods (separated by a 2-week washout period): fluticasone 100 μg twice daily + montelukast 5 mg once daily versus fluticasone 100 μg twice daily + salmeterol 50 μg twice daily. At the end of each 4-week treatment period, participants performed another exercise challenge to measure which treatment, when added to fluticasone, provided better protection against asthma triggered by exercise, as well as the relief provided by a short-acting beta agonist after the exercise challenge.

References
1. Fogel RB, et al. The Effect of Montelukast or Salmeterol Added to Inhaled Fluticasone on Exercise-Induced Bronchoconstriction in Children 6 to 14 Years of Age. Annals of Allergy, Asthma & Immunology, Jun 2010;110:451-117.