

## Montelukast

### A Viewpoint by Romain A. Pauwels

Department of Respiratory Diseases,  
University Hospital, Ghent, Belgium

Asthma is most probably a syndrome and not a single disease; the symptoms and physiological abnormalities associated with it are caused by chronic airway inflammation and airway remodelling, the mechanisms of which vary from patient to patient. Since no cure is available, current treatment strategies for asthma aim to control the disorder; i.e. provide symptom relief and prevent exacerbations allowing normal lung function, and thus a normal activity level, without causing adverse events. For most patients with asthma, this objective can be achieved with regular treatment with low to moderate doses of inhaled glucocorticosteroids, eventually combined with a long-acting bronchodilator if necessary.

The arrival of new treatment options, such as the leukotriene antagonist montelukast, should be welcomed because they may increase the proportion of patients able to lead a life free from symptoms and exacerbations. The repeated demonstration that

montelukast, a cysLT<sub>1</sub>-receptor antagonist, significantly improves symptoms and lung function parameters in patients with asthma is an important observation that few scientists involved in asthma would have predicted 15 years ago. However, before the role montelukast and other anti-leukotrienes will be recognised in guidelines for the management of asthma, further studies investigating their efficacy relative to low dose inhaled glucocorticosteroids and their potential as add on-therapy compared with long-acting bronchodilators are required.

The outcomes in these comparative studies should reflect the primary objective of asthma therapy, namely control of the disease. It is extremely important that future studies evaluate not only the effects of treatments on symptom scores, use of rescue medication and one or more lung function parameters but also incorporate overall outcome measures reflecting control of asthma as outlined above. Such comparisons will allow meaningful evaluation of the efficacy and effectiveness of different treatment options. ▲