

January 21, 2010

**ANNOUNCING THE AVAILABILITY OF THE *GLOBAL STRATEGY FOR ASTHMA MANAGEMENT AND PREVENTION, UPDATED 2009.***

The latest (2009) update to the GINA Report, *Global Strategy for Asthma Management and Prevention* (covering asthma care in adults and children older than 5 years) is now available on the GINA Website at <http://www.ginasthma.org>. A Pocket Guide containing key information for physicians and nurses about patient management and education has also been updated and is available on the Website.

**Corrected versions of these two documents were posted on January 12, 2010. If you downloaded the documents before that date please download the files again to ensure that you have the new, corrected versions.**

An important modification in the 2009 update concerns the segment on asthma control (*pages 22-23*) and an update of the figure classifying asthma control (*Figure 2.4 on page 22 and 4.3-1 on page 58: Assessment of Asthma Control*). The modifications emphasize that the concept of asthma control includes not just control of the clinical manifestations of asthma, but also control of future risks to the patient such as exacerbations, accelerated decline in lung function, and side effects of treatment. For the new version of the figure, the GINA Science Committee aimed to create a clear, easy to implement set of criteria that would correlate well with existing tools to assess asthma control. However, this working scheme has not been formally validated, so it should be used in conjunction with the clinician's own assessment of the patient's clinical condition and the potential risks and benefits of changing treatment.

In addition, since the release (in May 2009) of the *Global Strategy for Asthma Management and Prevention in Children 5 Years and Younger*, the segments pertaining to the care of asthma in this age group have been removed from the GINA Report and readers are referred to the report for children 5 years and younger, and its accompanying Pocket Guide, both of which are available on the GINA Website.

An important goal of the GINA initiative is to produce recommendations for the management of asthma based on the best scientific information available. To that end, the GINA Science Committee was established in 2002 to review published research on asthma and prepare annual updates of the GINA documents. To produce this year's update, the Committee reviewed 392 publications primarily related to the clinical care of patients with asthma that were published from July 1, 2008 through June 30, 2009. A full list of publications reviewed by the Committee is available at <http://www.ginasthma.org/Guidelineitem.asp?11=2&12=1&intId=2003>.

There were several publications that led to modifications of the text. The following is a summary of some of the topics addressed by the modifications, as well as the relevant references and page numbers where they appear in the report:

- A statement that measuring the fraction of exhaled NO (FeNO) as an indicator of asthma control does not improve control or enable reduction in the dose of inhaled glucocorticosteroid<sup>1</sup>. (*page 19*)

- An indication that in older adults, inhaled glucocorticosteroids increase the relative risk of non-vertebral fractures, although the magnitude of this risk is considerably less than that contributed by other common risk factors for fracture in older adults<sup>2</sup>. (*page 30*)
- A statement that no association was found between Churg-Strauss syndrome and leukotriene modifiers after controlling for asthma drug use, although it is not possible to rule out modest associations given that Churg-Strauss syndrome is so rare and so highly correlated with asthma severity<sup>3</sup>. (*page 30*)
- An indication from a meta-analysis that long-acting beta<sub>2</sub>-agonists do not increase the risk of asthma-related hospitalizations<sup>4</sup>. (*page 31*)
- A recommendation that human monoclonal antibody against tumor necrosis factor (TNF)-alpha not be used for treatment of severe asthma, due to an unfavorable risk-benefit profile<sup>5</sup>. (*page 33*)
- A conclusion that a low-sodium diet as an adjunct therapy to normal treatment has no additional therapeutic benefit in adults with asthma, nor any effect on bronchial reactivity to methacholine<sup>6</sup>. (*page 35*)
- A report on a study of the safety of long-term use of inhaled glucocorticosteroids in children with asthma, which provided evidence that inhaled glucocorticosteroids may reduce bone mineral accretion in boys progressing through puberty, but this risk is likely to be outweighed by the reduced use of oral corticosteroids in these children<sup>7</sup>. (*page 38*)
- Additional evidence that patients with well-controlled asthma are less likely to experience exacerbations (asthma attacks) than those whose asthma is not well controlled<sup>8</sup>. (*page 55*)
- An indication that installation of non-polluting, more effective heating (heat pump, wood pellet burner, flued gas) in the homes of children with asthma does not significantly improve lung function, but *does* significantly reduce symptoms of asthma, days off school, healthcare utilization, and visits to a pharmacist<sup>9</sup>. (*page 56*)
- A refinement of the recommendations for use of beta blockers in the management of patients with acute coronary syndromes and for secondary prevention of coronary events: Data suggest that patients with asthma who receive newer, more cardio-selective beta blockers within 24 hours of hospital admission for an acute coronary event, have lower in-hospital mortality rates<sup>10,11</sup>. (*page 57*)

In addition, six references were added that provided confirmation of, or update previous recommendations. Specific changes, and where they occur, are further detailed in the segment titled “Methodology and Summary of Recommended Changes” that appears in the beginning of the GINA Report.

The members of the GINA Science Committee are identifying areas of asthma diagnosis and management that require more in-depth review based on current controversy or debate. The goal is to develop specific position papers that will appear as supplements to the GINA documents. This plan will be more fully discussed and explored during the Committee’s 2010 meetings.

Please visit the GINA Website ([www.ginasthma.org](http://www.ginasthma.org)) to access the *Global Strategy for Asthma Management and Prevention, Updated 2009* along with the updated Pocket Guide, and the documents on asthma in young children from May 2009.

## REFERENCES

1. Szeffler SJ, Mitchell H, Sorkness CA, Gergen PJ, O'Connor GT, Morgan WJ, Kattan M, Pongracic JA, Teach SJ, Bloomberg GR, Eggleston PA, Gruchalla RS, Kerckmar CM, Liu AH, Wildfire JJ, Curry MD, Busse WW. Management of asthma based on exhaled nitric oxide in addition to guideline-based treatment for inner-city adolescents and young adults: a randomised controlled trial. *Lancet* 2008;372:1065-72.
2. Weatherall M, James K, Clay J, Perrin K, Masoli M, Wijesinghe M, Beasley R. Dose-response relationship for risk of non-vertebral fracture with inhaled corticosteroids. *Clin Exp Allergy* 2008;38:1451-8.
3. Harrold LR, Patterson MK, Andrade SE, Dube T, Go AS, Buist AS, Chan KA, Weller PF, Wechsler ME, Yood RA, Davis KJ, Platt R, Walker AM. Asthma drug use and the development of Churg-Strauss syndrome (CSS). *Pharmacoepidemiol Drug Saf* 2007;16:620-6.
4. Jaeschke R, O'Byrne PM, Mejza F, Nair P, Lesniak W, Brozek J, Thabane L, Cheng J, Schunemann HJ, Sears MR, Guyatt G. The safety of long-acting beta-agonists among patients with asthma using inhaled corticosteroids: systematic review and metaanalysis. *Am J Respir Crit Care Med* 2008;178:1009-16.
5. Wenzel SE, Barnes PJ, Bleeker ER, Bousquet J, Busse W, Dahlen SE, Holgate ST, Meyers DA, Rabe KF, Antczak A, Baker J, Horvath I, Mark Z, Bernstein D, Kerwin E, Schlenker-Herceg R, Lo KH, Watt R, Barnathan ES, Chanaz P. A randomized, double-blind, placebo-controlled study of tumor necrosis factor-alpha blockade in severe persistent asthma. *Am J Respir Crit Care Med* 2009;179:549-58.
6. Pogson ZE, Antoniak MD, Pacey SJ, Lewis SA, Britton JR, Fogarty AW. Does a low sodium diet improve asthma control? A randomized controlled trial. *Am J Respir Crit Care Med* 2008;178:132-8.
7. Kelly HW, Van Natta ML, Covar RA, Tonascia J, Green RP, Strunk RC. Effect of long-term corticosteroid use on bone mineral density in children: a prospective longitudinal assessment in the childhood Asthma Management Program (CAMP) study. *Pediatrics* 2008;122:e53-61.
8. Bateman ED, Bousquet J, Busse WW, Clark TJ, Gul N, Gibbs M, Pedersen S. Stability of asthma control with regular treatment: an analysis of the Gaining Optimal Asthma control (GOAL) study. *Allergy* 2008;63:932-8.
9. Howden-Chapman P, Pierse N, Nicholls S, Gillespie-Bennett J, Viggers H, Cunningham M, Phipps R, Boulic M, Fjallstrom P, Free S, Chapman R, Lloyd B, Wickens K, Shields D, Baker M, Cunningham C, Woodward A, Bullen C, Crane J. Effects of improved home heating on asthma in community dwelling children: randomised controlled trial. *BMJ* 2008;337:a1411.
10. Babu KS, Gadzik F, Holgate ST. Absence of respiratory effects with ivabradine in patients with asthma. *Br J Clin Pharmacol* 2008;66:96-101.
11. Olenchock BA, Fonarow GG, Pan W, Hernandez A, Cannon CP. Current use of beta blockers in patients with reactive airway disease who are hospitalized with acute coronary syndromes. *Am J Cardiol* 2009;103:295-300.