

## CLINICAL DECISIONS

INTERACTIVE AT WWW.NEJM.ORG

## Mild Persistent Asthma — Polling Results

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In mid-May, we introduced Clinical Decisions — a new interactive feature designed to help us understand how our readers would manage a given clinical case. Our opening case<sup>1</sup> involved how to tailor the care of a 30-year-old woman with mild persistent asthma who, although only intermittently symptomatic while receiving treatment with inhaled beclomethasone at a dose of 160  $\mu$ g twice a day, desired to cut back her treatment.

Among the three options offered to you, the most popular — receiving 2281 votes (37.5% of the 6085 votes cast) — was to switch the patient's treatment to a corticosteroid and a long-acting  $\beta_2$ -agonist, in a single inhaler to be used each morning, plus as-needed rescue albuterol. A close second, with 2273 votes (37.4% of the total votes cast), was to switch the patient's treatment such that beclomethasone and albuterol inhalers are used only when the patient has symptoms of asthma. The remaining option, to switch the treatment to an oral leukotriene-receptor antagonist plus as-needed rescue albuterol, received 1531 votes (25.2% of the total votes cast). The 6085 participants were from 113 countries and indicated that they were physicians (80%), other health professionals (12%), or students (8%). Detailed results are displayed according to country at [www.nejm.org](http://www.nejm.org). The percentage of participants choosing a given option varied substantially when the responses were stratified according to the participants' locations, inferred from their Internet providers (Fig. 1).

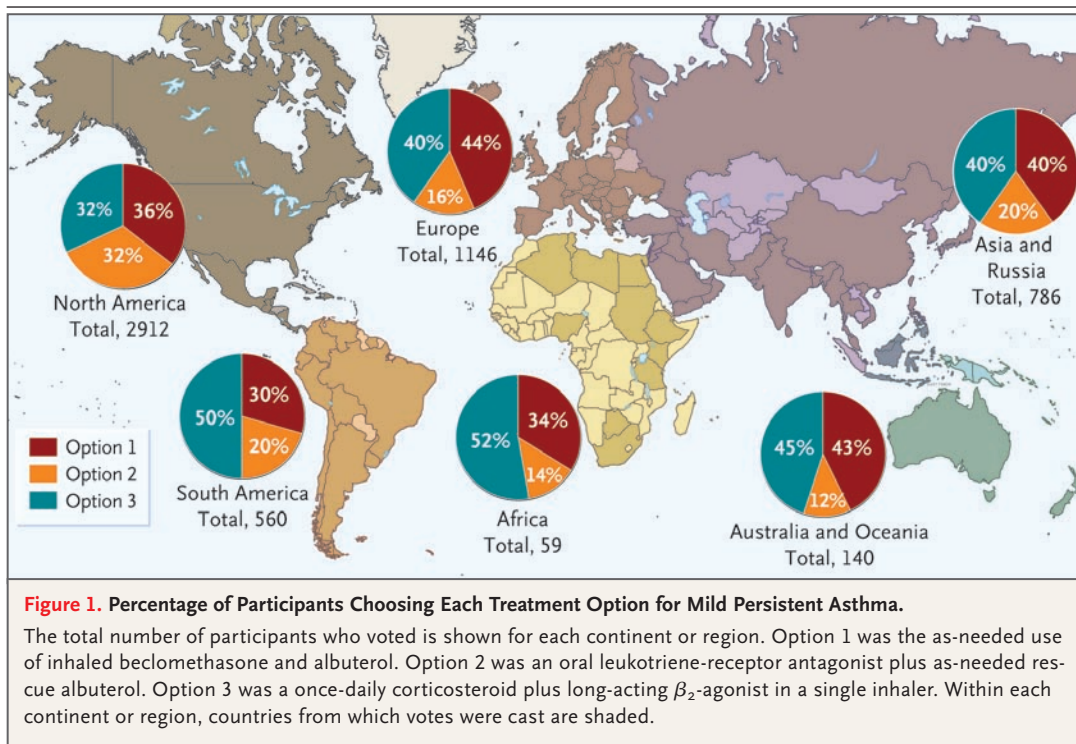
We received more than 340 comments from you, about 90% of which were posted at [www.nejm.org](http://www.nejm.org) (after being reviewed for appropriateness). Many suggested alternative management options, but there was no overwhelmingly favored choice. The comments showed how we as physicians use data to modify our thinking about treatment.

The majority of responders who chose to treat the patient with the as-needed use of inhaled beclomethasone and albuterol considered the pa-

tient's asthma to be well controlled, thus warranting step-down therapy. Many of you supported this treatment option because you felt that it would effectively control mild persistent asthma at a lower cumulative dose of inhaled corticosteroids, as shown by Papi et al.<sup>2</sup> in the same issue of the *Journal*. Other justifications for this treatment choice were that it is associated with a high likelihood of compliance, is cost-effective, allows the patient a better sense of control over her disease, and addresses her concerns regarding side effects.

Those of you who opted to switch treatment to an oral leukotriene-receptor antagonist plus as-needed rescue albuterol felt that the frequency of the patient's symptoms necessitated daily anti-inflammatory therapy and believed that the best such therapy that also minimized the side effects of corticosteroids was a leukotriene modifier. Although the study by the American Lung Association Asthma Clinical Research Centers<sup>3</sup> in that issue of the *Journal* showed that patients whose treatment was switched to montelukast had an increased rate of treatment failure as compared with those switched to twice-daily fluticasone or nightly fluticasone plus salmeterol, many of you noted that the patient we described is willing to tolerate increased symptoms to avoid long-term side effects. In addition, many of you commented that leukotriene modifiers may be particularly effective, given the patient's atopy and exercise-induced symptoms.

Responders who preferred to switch the patient's treatment to a once-daily corticosteroid plus a long-acting  $\beta_2$ -agonist in a single inhaler believed that, given her frequent use of albuterol, particularly before exercise, she still required a daily long-term control medication. Many thought that the addition of a long-acting  $\beta_2$ -agonist would allow for a reduction in corticosteroid dose while providing better anti-inflammatory therapy than a leukotriene-receptor antagonist, citing the study by the American Lung Association Asthma Clin-



ical Research Centers. Several of you believed that this treatment option would decrease the need for rescue albuterol, would improve control of the patient's exercise-induced asthma, and would be associated with good compliance because of the once-daily dosing through a single inhaler.

It appears that although we as physicians use new data, we do not slavishly follow them. Rather, we integrate our experience with new knowledge to arrive at an evidence-directed approach. Most of you noted the importance of interacting with the patient about her desires with respect to treatment outcomes, as well as the importance of close clinical follow-up and the monitoring of spirometric data and exhaled levels of nitric oxide. Comments will remain posted at [www.nejm.org](http://www.nejm.org), along with data on the voting results.

We judge this experiment a success and will use this interactive format in the future as new information accrues about the treatment of common conditions. We thank you for your input and look forward to hearing from you again soon about another challenging case.



*An interactive graphic that includes country-specific data is available at [www.nejm.org](http://www.nejm.org).*

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1. Treatment of mild persistent asthma. *N Engl J Med* 2007; 356:2096-100.
2. Papi A, Canonica GW, Maestrelli P, et al. Rescue use of beclomethasone and albuterol in a single inhaler for mild asthma. *N Engl J Med* 2007;356:2040-52.
3. The American Lung Association Asthma Clinical Research Centers. Randomized comparison of strategies for reducing treatment in mild persistent asthma. *N Engl J Med* 2007;356: 2027-39.

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