synthesis of leukotrienes and (2) leukotriene antagonists that inhibit leukotriene function by blocking leukotriene-receptor sites. Previous studies suggested that the main role of cysLTs was smooth muscle constriction of airways and microvasculature. This study, as well as other growing evidence, points to a unique and broader role for cysLTs in the initiation and amplification of the Th2 response in the lung. Future studies should assess the mechanism of this role, specifically the impact of cysLTs on dendritic-cell and T-cell function. Therefore, the therapeutic benefit of leukotriene antagonists may be additionally derived from this broader physiologic role of cysLTs in pulmonary Th2 responses.

Hemant P. Sharma, MD
Elizabeth C. Matsui, MD, MHS
Baltimore, MD

Racial Disparities in Childhood Asthma in the United States: Evidence From the National Health Interview Survey, 1997 to 2003
McDaniel M, Paxson C, Waldfogel J. Pediatrics. 2006;117(5). Available at: www.pediatrics.org/cgi/content/full/117/5/e868

PURPOSE OF THE STUDY. To evaluate the differences in asthma prevalence and emergency department (ED) visits between non-Hispanic black and white children, as well as the factors that might explain those differences.

STUDY POPULATION. Cross-sectional study of 14,487 non-Hispanic black children and 49,042 non-Hispanic white children interviewed from 1997 to 2003 as part of a large, nationally representative sample.

METHODS. Information was collected as part of the National Health Interview Survey, a cross-sectional, in-person, household interview administered annually by the Centers for Disease Control and Prevention. Data were obtained on lifetime asthma, current asthma, ED visits in the previous year, age, gender, birth weight, family income, rural versus urban environment, type of health insurance, accessibility of routine medical care, and maternal history of asthma, smoking, depression, and BMI.

RESULTS. Being black was associated with a 20% greater likelihood of having current asthma as well as a greater likelihood of having gone to the ED for asthma treatment in the past year. Furthermore, this increased asthma risk was greatest in younger children and remained even after child and family characteristics were controlled for.

CONCLUSIONS. Black children were more likely to have asthma and to have experienced ED visits in the past year than were otherwise comparable white children; these racial disparities could not be completely explained by differences in child or family characteristics.

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Diagnosis and Management

Asthma Control Test: Reliability, Validity, and Responsiveness in Patients Not Previously Followed by Asthma Specialists

PURPOSE OF THE STUDY. To evaluate the validity and reliability of the asthma-control test (ACT) and assess its responsiveness to changes in asthma control over time in a sample of patients who were new to the care of an asthma specialist.

STUDY POPULATION. Participants were asthmatic subjects (N = 313) aged ≥12 years who had not consulted an asthma specialist within 5 years and had a previous diagnosis of asthma.

METHODS. This prospective trial was conducted in 6 asthma specialty practices. Participants were evaluated at 2 physician office visits (a baseline visit and a follow-up visit separated by 4–12 weeks) in which they completed the ACT, the Asthma Control Questionnaire (ACQ), and prebronchodilator measurements of forced expiratory volume in 1 second (FEV₁). The ACT is a 5-item patient-administered survey for assessing asthma control. Each of the 5 questions is given a score from 1 to 5. Responses from the ACT are summed to yield a score that ranges from 5 (poor control) to 25 (complete control). Asthma specialists, who were blinded to the

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Reviewer Comments. It has long been recognized that asthma, while affecting individuals of all ages, races, ethnicities, and incomes, disproportionately afflicts black and poor children. Past studies have identified multiple contributors to asthma prevalence and severity, including environmental factors, birth weight, socioeconomic and demographic differences, access to medical care and health insurance, and parental history. Because many of these factors are closely associated with race, especially in inner-city environments, it has been difficult to determine if race is independently associated with asthma. This study used a nationally representative sample of children to determine which, if any, of these social and environmental influences could explain the discrepancy in asthma prevalence between black and white children. The results indicate that the difference in asthma prevalence between black and white children remains significant, even when possible confounding variables are taken into account. This study will provide a baseline for tracking asthma trends in the future and should stimulate research aimed at determining the reasons for this increased asthma susceptibility.

Christine Virnig, MD
James E. Gern, MD
Madison, WI
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Christine Virnig and James E. Gern
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