Asthma Impairment and Risk Questionnaire (AIRQ®) Information for Health Care Providers

AIRQ® Indications

The AIRQ® is a patient assessment tool intended to help identify patients 12 years of age and older whose health may be at risk because of uncontrolled asthma. This assessment is based on a series of patient-facing questions about asthma medications, respiratory symptoms, and utilization of health care resources. Depending on the patient's responses to these questions, the patient will receive a score reflecting their level of asthma control. After completion of the AIRQ®, the patient and health care provider should discuss the responses to each of the individual questions, the total AIRQ® score, and the patient's level of asthma control and form a treatment plan.

The AIRQ® is not intended to:

- Diagnose asthma
- Replace the advice or treatment of a health care provider
- Direct specific actions to treat, mitigate, or improve asthma
- Collect or store any laboratory values or lung function test values

Health Care Provider Instructions for Use

- 1. Provide your patient with the AIRQ® during or immediately prior to their appointment.
- 2. Examine the responses to each of the individual questions, the total AIRQ® score, and the patient's level of asthma control.
- 3. Discuss responses to each of the individual questions, the total AIRQ® score, and the patient's level of asthma control with your patient.
- 4. Determine a treatment plan with your patient based on the information you've learned during your discussion and clinical assessment of the patient, and through responses to the AIRQ® questions.

Information on the Validation and Interpretation of AIRQ®

- 1. AIRQ® is a 10-item, equally weighted, yes/no composite asthma control questionnaire that includes 7 impairment and 3 risk items.
- 2. The AIRQ[®] was validated against a standard of ACT[™] score (impairment) + prior-year, chart-documented exacerbations (risk) in 442 patients 12 years of age and older who were previously diagnosed with asthma.
- 3. Multivariable logistic regression analyses were used to determine questions with the greatest validity in discriminating between patients of varying levels of control.
- 4. A total of 10 questions were identified for inclusion in the AIRQ[®].
- 5. The AIRQ[®] performed well with respect to the ACT™ + exacerbations standard in identifying well-controlled vs not well-/very poorly controlled and well-/not well-controlled vs very poorly controlled asthma, with area under the ROC (receiver operating characteristic) curves of 0.94 and 0.93, respectively.
- 6. The combination of selected AIRQ[®] items and cut points of control demonstrated a sensitivity of 0.90 to identify patients whose asthma was well-controlled (cut point of ≥2), and a specificity of 0.96 to determine patients whose asthma was very poorly controlled (cut point of ≥5).
- 7. For further information on the development and cross-sectional validation of the AIRQ[®], please refer to Murphy KR, et al. *J Allergy Clin Immunol Pract*. 2020;8(7):2263-2274.e5; and Murphy KR, et al. *J Allergy Clin Immunol Pract*. 2021;9(1):603.



AIRQ® (Asthma Impairment and Risk Questionnaire)



For use by health care providers with their patients 12 years and older who have been diagnosed with asthma. AIRQ® is intended to be part of an asthma clinic visit.

Please answer all of the questions below.

In the past 2 weeks, has coughing, wheezing, shortness of breath, or chest tightness:

- 1. Bothered you during the day on more than 4 days?
- 2. Woke you up from sleep more than 1 time?
- **3.** Limited the activities you want to do **every day**?
- **4.** Caused you to use your rescue inhaler or nebulizer **every day**?





Yes No





Primatene® MIST (Amphastar Pharmaceuticals) or Epinephrine



ProAir RespiClick® (Teva Respiratory, LLC) or Albuterol sulfate



Proventil® HFA (Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc.) or



Ventolin® HFA (GlaxoSmithKline) or Albuterol sulfate



Xopenex HFA® (Sunovion Pharmaceuticals Inc.) or Levalbuterol tartrate



Albuterol sulfate or Xopenex® (Sunovion Pharmaceuticals Inc.) or Levalbuterol HCl

Please see all prescribing information for all products.

In the past 2 weeks:

5. Did you have to limit your social activities (such as visiting with friends/relatives or playing with pets/children) because of your asthma?

Yes No

- **6.** Did coughing, wheezing, shortness of breath, or chest tightness limit your ability to exercise?
- No

7. Did you feel that it was difficult to control your asthma?

Yes No

In the past 12 months, has coughing, wheezing, shortness of breath, or chest tightness:

8. Caused you to take steroid pills or shots, such as prednisone or Medrol®*?

Yes No

9. Caused you to go to the emergency room or have unplanned visits to a health care provider?

Yes No

10. Caused you to stay in the hospital overnight?

Yes No

Total YES Answers

What Does My AIRQ® Score Mean?

The AIRQ® is meant to help your health care providers talk with you about your asthma control. The AIRQ® does not diagnose asthma. Whatever your AIRQ® score (total **YES** answers), it is important for your health care team to discuss the number and answers to each of the questions with you. All patients with asthma, even those who may be well-controlled, can have an asthma attack. As asthma control worsens, the chance of an asthma attack increases.¹ Only your medical provider can decide how best to assess and treat your asthma.



SCAN here to visit airqscore.com



^{*}Medrol* (Pfizer, Inc.) or methylprednisolone

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