

Table 3A. Asthma Diagnosis

Referral Guideline	Rationale	Evidence Type
Patients with respiratory symptoms suggestive of asthma but with normal PFT (FEV1 > 70 % predicted) and no significant reversibility (< 12 % and 200mL increase in FEV1).	Allergist/immunologists perform methacholine challenges, which have a high sensitivity for current asthma. ^{1, 2}	Diagnostic
Exercise-induced symptoms that are atypical or do not respond well to pre-treatment with albuterol, nedocromil, or cromolyn.	Further objective evaluation and confirmation with pulmonary function testing (including exercise challenge) in conjunction with appropriate allergist/immunologist evaluation will define diagnosis or differential diagnosis. ³	Diagnostic
Subjects wishing to scuba dive with a history of asthma	There is a theoretical risk of increased barotrauma as well as exercise-induced bronchospasm in patients with asthma who scuba dive. Bronchoprovocation with exercise has been recommended to exclude asthma in scuba divers. ⁴	Diagnostic Indirect outcome (scuba diving avoidance)

References:

1. Hopp R, Bewtra AK, Nair NM, Townley RG. Specificity and sensitivity of methacholine inhalation challenge in normal and asthmatic children. *J Allergy Clin Immunol.* 1984; 74:154-158. Evidence grade: III
2. Cockcroft DW, Berscheid BA, Murdock KY, Gore BP. Sensitivity and specificity of histamine PC₂₀ measurements in a random selection of young college students. *J Allergy Clin Immunol.* 1992; 89:23-30. Evidence grade: III
3. Holzer K, Anderson SD, Douglass J. Exercise in elite summer athletes: challenges for diagnosis. *J Allergy Clin Immunol* 2002; 110:374-80. Evidence grade: III
4. Anderson SD, Brannan J, Trevillion L, Young I. Lung function and bronchial provocation tests for intending divers with a history of asthma. *SPUMS Journal.* 1995; 25:233-248. Evidence grade: IV