



**Australian Government**

**Department of Defence**

**HEAD DEFENCE HEALTH SERVICES**

## **HEALTH BULLETIN NO 8/2006**

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4 OCTOBER 2006

## **USE OF MANNITOL (ARIDOL) BRONCHIAL PROVOCATION TESTING**

### **References:**

- A. J.D. Brennan et al, The safety and efficacy of inhaled dry powder mannitol as a bronchial provocation test for airway hyperresponsiveness: a phase 3 comparison study with hypertonic (4.5%) saline, *Respiratory Research*, 2005; 6(1), p 144. Published online 2005 December 9. doi: 10.1186/1465-9921-6-144. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1326200>
- B. Defence Instruction (General) PERS 16-15—*Australian Defence Force Medical Employment Classification System*
- C. Health Directive 236—*Medical Employment Classification procedures*

### **INTRODUCTION**

1. The inhaled Mannitol bronchial provocation test is a new test used to identify asthma. It has been developed to improve portability and standardisation of osmotic challenge testing. Osmotic challenge tests have an advantage over the traditional methods of measuring airway hyper-responsiveness using methacholine as they demonstrate higher specificity for asthma and have a better correlation with inhaled corticosteroids (ICS). See reference A.
2. Mannitol was approved for registration in Australia in March 2006.

### **AIM**

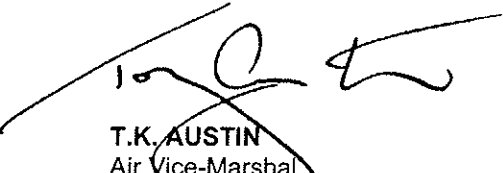
3. The aim of this Health Bulletin is to provide policy guidance on the use of Mannitol bronchial provocation testing for Australian Defence Force (ADF) personnel.

### **POLICY**

4. Mannitol is an approved alternative to hypertonic saline or methacholine in bronchial provocation testing. Bronchial provocation testing with inhaled Mannitol may be used to test for asthma and to monitor the progression of the disease.
5. Bronchial provocation testing should be used to confirm clinical suspicions and to help identify those at risk of acute deterioration under military conditions. There is no intention or requirement to use it for mass screening of ADF personnel.

### **MEDICAL EMPLOYMENT CLASSIFICATION**

6. ADF personnel with a confirmed diagnosis of asthma are to be managed in accordance with references B and C.



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