

Title:	EBUS-guided procedures for investigation of lung cancer, mediastinal/hilar masses and peripheral lung lesions
Agency:	Medical Services Advisory Committee (MSAC) MDP 106 Commonwealth Department of Health and Ageing GPO Box 9849 Canberra ACT 2601 <a href="http://www.msac.gov.au">http://www.msac.gov.au</a>
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### **Aim**

To evaluate the safety, effectiveness and cost-effectiveness of endobronchial ultrasound (EBUS)-guided transbronchial sampling procedures for non-small cell lung cancer (NSCLC) staging, diagnosis of mediastinal/hilar masses, depth diagnosis of endobronchial cancers and the diagnosis of peripheral lung lesions.

### **Results and conclusions**

#### *Safety*

EBUS-guided procedures for NSCLC staging, diagnosis of mediastinal/hilar masses, depth diagnosis of endobronchial cancers and diagnosis of peripheral lung lesions appear to be safe with a low risk of adverse events.

#### *Effectiveness*

The available evidence indicated that the diagnostic yield of EBUS-transbronchial needle aspiration (TBNA) was greater than TBNA alone in NSCLC staging and diagnosis of mediastinal/hilar masses. The diagnostic yield of EBUS-transbronchial biopsy (TBBX) was greater than TBBX alone and at least equivalent to other methods of guided TBBX for diagnosis of peripheral lung lesions. Lack of clinical data meant that a clinical effectiveness analysis was not conducted for depth diagnosis of endobronchial cancer.

#### *Cost-effectiveness*

The economic analyses demonstrated that the use of EBUS-guided procedures was cost saving for assessment of NSCLC and mediastinal/hilar masses, and for diagnosis of peripheral lung lesions when compared with current practices. Lack of clinical data meant that an economic analysis was not conducted for depth diagnosis of endobronchial cancers.

### **Recommendation**

MSAC recommended that public funding should be supported for EBUS-guided procedures for the staging of non-small cell lung cancer, and the investigation of mediastinal/hilar masses and peripheral lung lesions, but should not be supported for EBUS-guided procedures to evaluate endobronchial cancer. This recommendation was endorsed by the Minister for Health and Ageing on 20 May 2008.

### **Methods**

MSAC conducted a systematic review of the literature pertaining to EBUS-guided procedures for NSCLC staging, diagnosis of mediastinal/hilar masses, depth diagnosis of endobronchial cancers and the diagnosis of peripheral lung lesions.