



Effective Health Care Bronchial Intraepithelial Neoplasia/ Early Central Airways Lung Cancer Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Bronchial intraepithelial neoplasia/early central airways lung cancer was found to be addressed by an in-process American College of Chest Physicians (ACCP) update to the guideline titled *Bronchial intraepithelial neoplasia/early central airways cancer: ACCP evidence-based clinical practice guidelines*. Given that the in-process guideline update covers this nomination, no further activity will be undertaken on this topic.

Topic Description

Nominator: Health care professional association

Nomination Summary: The nominator is interested in bronchoscopic detection of high grade dysplasia, carcinoma in situ, or microinvasive lung cancer in several patient populations, and the comparative effectiveness of local therapies for endobronchial carcinoma in situ.

Key Question #1: What is the comparative effectiveness of standard white light bronchoscopy, autofluorescence bronchoscopy and radiological follow-up in detection of invasive cancer in patients with high grade sputum atypia and no radiological evidence of lung cancer?

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Population(s): Patients with high grade sputum atypia and no radiological evidence of lung cancer

Intervention(s): Standard white light bronchoscopy or autofluorescence bronchoscopy

Comparator(s): Radiological follow-up

Outcome(s): Sensitivity, specificity, timing of detection, impact of testing options on management decisions, impact on morbidity and mortality, harms of testing and treatment

Key Question #2: Among patients with endobronchial high grade dysplasia undergoing periodic bronchoscopic observation, what is the risk of progression to more advanced neoplasia?

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Population(s): Patients with endobronchial high grade dysplasia

Intervention(s): Bronchoscopic follow-up

Comparator(s): None

Outcome(s): Timing of progression to more advanced neoplasia

Key Question #3: What is the comparative effectiveness of various local therapies and observation with delayed treatment at disease progression for patients with endobronchial carcinoma in situ?

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Population(s): Patients with endobronchial carcinoma in situ

Intervention(s): Photodynamic therapy, electrocautery, cryotherapy, brachytherapy, Nd-YAG laser therapy

Comparator(s): Observation with delayed treatment at disease progression

Outcome(s): Response rate, morbidity, mortality, harms of treatment

Key Question #4: What is the comparative effectiveness of standard white light bronchoscopy, autofluorescence bronchoscopy or radiological imaging in follow-up to detect recurrent or secondary lesions for patients who had carcinoma in situ and underwent endobronchial therapy?

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Population(s): Patients with carcinoma in situ who have undergone endobronchial therapy with curative intent

Intervention(s): Standard white light bronchoscopy or autofluorescence bronchoscopy

Comparator(s): Radiological imaging

Outcome(s): Sensitivity, specificity, timing of detection of recurrent or secondary lesions, impact on further management decisions, impact on morbidity and mortality, harms of testing and treatment

Key Question #5: What is the comparative effectiveness of standard white light bronchoscopy, autofluorescence bronchoscopy and imaging with chest CT and FDG positron emission tomography in evaluation and surgical planning for patients undergoing resection for early lung cancer?

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Population(s): Patients with early lung cancer undergoing resection

Intervention(s): Standard white light bronchoscopy or autofluorescence bronchoscopy

Comparator(s): Imaging with chest CT and FDG positron emission tomography

Outcome(s): Delineation of tumor margins and assessment of synchronous lesions, impact on surgical decisions, completeness of resection, impact on morbidity and mortality, harms of testing and treatment

Key Question #6: What is the effectiveness of standard white light bronchoscopy, autofluorescence bronchoscopy, or radiological imaging in follow-up to detect recurrent or secondary lesions in patients with a prior history of resected early stage lung cancer?

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Population(s): Patients with prior history of resected early stage lung cancer

Intervention(s): Standard white light bronchoscopy or autofluorescence bronchoscopy

Comparator(s): Radiological imaging

Outcome(s): Sensitivity, specificity, timing of detection or recurrent or secondary lesions, impact on further management decisions, impact on morbidity and mortality, harms of testing and treatment

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- Communication with ACCP revealed that an update to the 2007 ACCP clinical practice guideline titled *Bronchial intraepithelial neoplasia/early central airways lung cancer: ACCP evidence-based clinical practice guidelines* is underway; therefore, a new review would be redundant.
 - Kennedy TC, McWilliams A, Edell E, et al. Bronchial intraepithelial neoplasia/early central airways lung cancer: ACCP evidence-based clinical practice guidelines (2nd edition). *Chest* 2007; 132(3 Suppl): 221S-233S. PMID: 17873170.