

## Appendix 1

### *Search strategy of meta-analysis*

#### **PubMed: N=91 records**

#1: ("Bronchoscopy"[Mesh]) OR (Bronchoscopies[Title/Abstract] OR Bronchoscopic Surgical Procedures[Title/Abstract] OR Bronchoscopic Surgical Procedure[Title/Abstract] OR Surgical Procedure, Bronchoscopic[Title/Abstract] OR Surgical Procedures, Bronchoscopic[Title/Abstract] OR Bronchoscopic Surgery[Title/Abstract] OR Bronchoscopic Surgeries[Title/Abstract] OR Surgeries, Bronchoscopic[Title/Abstract] OR Surgery, Bronchoscopic[Title/Abstract] OR endobronchial ultrasound-guided biopsy[Title/Abstract] OR rEBUS[Title/Abstract] OR Bronchoscopic transbronchial biopsy[Title/Abstract] OR TBB[Title/Abstract])

#2: Guide sheath[Title/Abstract] OR GS[Title/Abstract] OR non-guide sheath[Title/Abstract] OR nGS[Title/Abstract]

#3: peripheral pulmonary lesions[Title/Abstract] OR PPLs[Title/Abstract]

#4: #1 AND #2 AND #3

#### **Embase: N=159 records**

#1: 'bronchoscopy'/exp

#2: 'bronchoscopies':ab,ti OR 'bronchoscopic surgical procedures':ab,ti OR 'bronchoscopic surgical procedure':ab,ti OR 'surgical procedure, bronchoscopic':ab,ti OR 'surgical procedures, bronchoscopic':ab,ti OR 'bronchoscopic surgery':ab,ti OR 'bronchoscopic surgeries':ab,ti OR 'surgeries, bronchoscopic':ab,ti OR 'surgery, bronchoscopic':ab,ti OR 'endobronchial ultrasound-guided biopsy':ab,ti OR 'rebus':ab,ti OR 'bronchoscopic transbronchial biopsy':ab,ti OR 'tbb':ab,ti

#3: #1 or #2

#4: 'guide sheath':ab,ti OR 'gs':ab,ti OR 'non-guide sheath':ab,ti OR 'ngs':ab,ti

#5: #3 and #4

#6: 'peripheral pulmonary lesions':ab,ti OR 'ppls':ab,ti

#7: #5 and #6

#### **Cochrane: N=37 records**

#1: (Bronchoscopies):ti,ab,kw OR (Bronchoscopic Surgical Procedures):ti,ab,kw OR (Bronchoscopic Surgical Procedure):ti,ab,kw OR (Surgical Procedure, Bronchoscopic):ti,ab,kw OR (Surgical Procedures, Bronchoscopic):ti,ab,kw OR (Bronchoscopic Surgery):ti,ab,kw OR (Bronchoscopic Surgeries):ti,ab,kw OR (Surgeries, Bronchoscopic):ti,ab,kw OR (Surgery, Bronchoscopic):ti,ab,kw OR (endobronchial ultrasound-guided biopsy):ti,ab,kw OR (rEBUS):ti,ab,kw OR (Bronchoscopic transbronchial biopsy):ti,ab,kw OR (TBB):ti,ab,kw

#2: (Guide sheath):ti,ab,kw OR (GS):ti,ab,kw OR (non-guide sheath):ti,ab,kw OR (nGS):ti,ab,kw

#3: (peripheral pulmonary lesions):ti,ab,kw OR (PPLs):ti,ab,kw

#4: #1 AND #2 AND #3

#### **Web of science: N=289 records**

#1: (((((((((((((TS=(Bronchoscopy)) OR TS=(Bronchoscopies)) OR TS=(Bronchoscopic Surgical Procedures)) OR TS=(Bronchoscopic Surgical Procedure)) OR TS=(Surgical Procedure, Bronchoscopic)) OR TS=(Surgical Procedures, Bronchoscopic)) OR TS=(Bronchoscopic Surgery)) OR TS=(Bronchoscopic Surgeries)) OR TS=(Surgeries, Bronchoscopic)) OR TS=(Surgery, Bronchoscopic)) OR TS=(endobronchial ultrasound-guided biopsy)) OR TS=(rEBUS)) OR TS=(Bronchoscopic transbronchial biopsy)) OR TS=(TBB)

#2: (((TS=(Guide sheath)) OR TS=(GS)) OR TS=(non-guide sheath)) OR TS=(nGS)

#3: (TS=(peripheral pulmonary lesions)) OR TS=(PPLs)

#4: #1 AND #2 AND #3