

**American College of Radiology  
ACR Appropriateness Criteria®**

**Radiologic Management of Pulmonary Nodules and Masses**

**Variant 1: Adult. Stable 1 to 3 cm solitary solid pulmonary nodule. Unchanged in diameter for 2 years. Person who smokes. Next step.**

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Follow-up imaging only	May be appropriate	Limited	N/A	N/A	6	6	0	1	0	0	5	4	1	1	0
		References		Study Quality											
		17 (37820837)		4											
		16 (36597231)		3											
		2 (36049538)		4											
Percutaneous lung biopsy	May be appropriate (Disagreement)	Expert Opinion	N/A	N/A	5	5	2	4	2	1	0	1	2	0	0
		References		Study Quality											
		24 (25163758)		4											
		23 (31084480)		4											
		22 (34229043)		3											
		13 (25430528)		3											
		12 (34654044)		4											
		20 (34986006)		2											
		4 (35080453)		4											
		19 (35227506)		3											
		21 (34121343)		4											
		10 (24954230)		2											
		11 (24581458)		3											

Stereotactic body radiotherapy	Usually not appropriate	Limited	N/A	N/A	3	3	4	3	3	1	1	0	0	1	0	
		References		Study Quality												
		25 (30226453)		4												
Surgical management	Usually not appropriate	Moderate	N/A	N/A	3	3	4	3	3	0	2	0	0	1	0	
		References		Study Quality												
		14 (30720402)		3												
		26 (30772108)		Good												
Percutaneous ablation lung	Usually not appropriate	Limited	N/A	N/A	3	3	4	3	3	1	1	0	1	0	0	
		References		Study Quality												
		18 (24952227)		2												
Endobronchial ultrasound and biopsy	Usually not appropriate	Strong	N/A	N/A	3	3	2	2	4	0	3	1	0	0	0	
		References		Study Quality												
		13 (25430528)		3												
		6 (30103727)		4												
		12 (34654044)		4												
		4 (35080453)		4												
		10 (24954230)		2												
		5 (27886860)		2												
		11 (24581458)		3												
		7 (36640994)		Good												
		9 (32967044)		Good												
		8 (34481209)		2												
Fiducial marker and surgical management	Usually not appropriate	Limited	N/A	N/A	2	2	4	4	2	1	0	1	1	0	0	
		References		Study Quality												
		14 (30720402)		3												
		15 (30819493)		2												









		57 (37924974)			4														
Follow-up imaging only	May be appropriate	Limited	N/A	N/A	5	5	1	3	2	2	3	1	1	0	0				
		References			Study Quality														
		50 (30868898)			4														
Percutaneous ablation lung	May be appropriate	Strong	N/A	N/A	5	5	0	0	0	2	5	4	0	1	0				
		References			Study Quality														
		64 (35704108)			4														
		65 (36892641)			4														
		66 (24239684)			4														
		18 (24952227)			2														
		62 (24042540)			4														
		33 (36276106)			3														
		32 (33245066)			2														
		36 (34612679)			4														
		34 (36039430)			2														
		63 (36647962)			4														
Endobronchial ultrasound and biopsy	May be appropriate	Moderate	N/A	N/A	5	5	0	0	0	0	8	2	1	1	0				
		References			Study Quality														
		28 (31387600)			4														
		60 (40300665)			2														
Fiducial marker and surgical management	Usually not appropriate	Limited	N/A	N/A	3	3	2	6	2	1	0	2	0	0	0				
		References			Study Quality														
		61 (23608462)			4														
Surgical management	Usually not appropriate	Limited	N/A	N/A	2	2	2	7	3	0	0	0	0	0	0				
		References			Study Quality														
		42 (30947705)			4														







## **Appendix Key**

A more complete discussion of the items presented below can be found by accessing the supporting documents at the designated hyperlinks.

**Appropriateness Category:** The panel's recommendation for a procedure based on the assessment of the risks and benefits of performing the procedure for the specified clinical scenario.

**SOE:** Strength of Evidence. The assessment of the amount and quality of evidence found in the peer reviewed medical literature for an appropriateness recommendation.

- **References:** The citation number and PMID for the reference(s) associated with the recommendation.
- **Study Quality:** The assessment of the quality of an individual reference based on the number of study quality elements described in the reference.

**RRL:** Relative Radiation Level. A population based assessment of the amount of radiation a typical patient may be exposed to during the specified procedure.

**Rating:** The final rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

**Median:** The median rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

**Final tabulations:** A histogram showing the number of panel members who rated the procedure as noted in the column heading (ie, 1, 2, 3, etc.).

Additional supporting documents about the AC methodology and processes can be found at [www.acr.org/ac](http://www.acr.org/ac).