

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

## Male Breast Cancer Screening

**Variant 1: Adult male. Breast cancer screening. Higher-than-average risk.**

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Mammography screening	Usually appropriate	Limited	☼☼ 0.1-1mSv		7	7	0	0	0	0	3	5	7	1	2
		References		Study Quality											
		3 (32058842)		4											
		20 (-3197516)		4											
		12 (31526252)		3											
		19 (32828665)		4											
		15 (-3197512)		4											
Digital breast tomosynthesis screening	Usually appropriate	Limited	☼☼ 0.1-1mSv		7	7	0	0	0	0	2	5	8	1	2
		References		Study Quality											
		19 (32828665)		4											
		12 (31526252)		3											
		20 (-3197516)		4											
		15 (-3197512)		4											
		3 (32058842)		4											
MRI breast without IV contrast	Usually not appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	1	1	15	2	1	0	0	0	0	0	0
		References		Study Quality											
		3 (32058842)		4											

MRI breast without and with IV contrast	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	1	1	10	4	1	1	2	0	0	0	0
		References	Study Quality												
		3 (32058842)	4												
US breast	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	1	1	12	2	2	1	1	0	0	0	0
		References	Study Quality												
		12 (31526252)	3												
Sestamibi MBI	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	16	0	2	0	0	0	0	0	0
Mammography with IV contrast	Usually not appropriate	Expert Consensus	☢☢ 0.1-1mSv		1	1	11	2	2	1	1	1	0	0	0
MRI breast without and with IV contrast abbreviated	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	1	1	11	3	1	1	2	0	0	0	0
		References	Study Quality												
		3 (32058842)	4												
MRI breast without IV contrast abbreviated	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	1	1	15	2	1	0	0	0	0	0	0
		References	Study Quality												
		3 (32058842)	4												

**Variant 2: Adult male. Breast cancer screening. Average risk.**

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Mammography screening	Usually not appropriate	Limited	☢☢ 0.1-1mSv		1	1	16	1	1	0	0	0	0	0	0
		References		Study Quality											
		21 (-3197518)		4											

MRI breast without IV contrast	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	1	1	17	1	0	0	0	0	0	0	0
		References	Study Quality												
		21 (-3197518)	4												
MRI breast without and with IV contrast	Usually not appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	1	1	17	1	0	0	0	0	0	0	0
US breast	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	1	1	17	1	0	0	0	0	0	0	0
		References	Study Quality												
		21 (-3197518)	4												
Digital breast tomosynthesis screening	Usually not appropriate	Limited	☢☢ 0.1-1mSv		1	1	16	1	1	0	0	0	0	0	0
		References	Study Quality												
		21 (-3197518)	4												
Sestamibi MBI	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	17	1	0	0	0	0	0	0	0
Mammography with IV contrast	Usually not appropriate	Limited	☢☢ 0.1-1mSv		1	1	17	1	0	0	0	0	0	0	0
		References	Study Quality												
		21 (-3197518)	4												
MRI breast without and with IV contrast abbreviated	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	1	1	17	1	0	0	0	0	0	0	0
		References	Study Quality												
		21 (-3197518)	4												
MRI breast without IV contrast abbreviated	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	1	1	17	1	0	0	0	0	0	0	0
		References	Study Quality												
		21 (-3197518)	4												

**Variant 3: Adult male, younger than 25 years of age. Breast cancer screening. Any risk.**

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Mammography screening	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	18	0	0	0	0	0	0	0	0
MRI breast without IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	18	0	0	0	0	0	0	0	0
MRI breast without and with IV contrast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	17	0	1	0	0	0	0	0	0
US breast	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	17	0	0	0	1	0	0	0	0
Digital breast tomosynthesis screening	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	18	0	0	0	0	0	0	0	0
Sestamibi MBI	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv		1	1	18	0	0	0	0	0	0	0	0
Mammography with IV contrast	Usually not appropriate	Expert Consensus	☼☼ 0.1-1mSv		1	1	18	0	0	0	0	0	0	0	0
MRI breast without and with IV contrast abbreviated	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	17	0	1	0	0	0	0	0	0
MRI breast without IV contrast abbreviated	Usually not appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	1	1	18	0	0	0	0	0	0	0	0

## 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).