## American College of Radiology ACR Appropriateness Criteria®

## Imaging of Deep Inferior Epigastric Arteries for Surgical Planning (Breast Reconstruction Surgery)

Variant 1: Imaging of deep inferior epigastric arteries for surgical planning (breast reconstruction surgery). Initial imaging.

Procedure	Appropriateness	SOE	Adults RRL	Peds RRL	Rating	24.11	Final Tabulations										
	Category					Median	1	2	3	4	5	6	7	8	9		
CTA abdomen and pelvis with IV contrast	Usually appropriate	Strong	୫୫୫୫ 10-30 mSv		9	9	0	0	0	0	0	1	1	4	9		

References	Study Quality
28 (19037689)	4
25 (19941357)	3
2 (21918046)	4
9 (19926353)	3
12 (19742426)	2
14 (19581312)	4
8 (20048587)	1
15 (23031768)	4
34 (24572842)	M
18 (23836386)	M
16 (23175495)	4
17 (20124830)	4
11 (22889458)	2
29 (24927860)	3
30 (22704607)	3
22 (27556615)	3
26 (26050970)	1
32 (26375461)	4

			24 (26654396)				4													
			23 (29926133)				3													
			31 (30182489)				2													
			20 (30691846)																	
			19 (31136470)				3													
			27 (31492417)				4													
			33 (32221198)				3													
			21 (32590519)				1													
MRA abdomen and pelvis without and with IV contrast	Usua approp		Strong	O 0 mSv	,	O 0 mSv [ped]	7	7	0	1	0	1	1	3	4	3	2			
			References			Study	Quality													
			38 (20392982)				2													
		36 (19121986) 39 (19452440) 41 (19890807) 42 (24009659)					4													
			39 (19452440)				3													
			41 (19890807)				3													
			42 (24009659)				2										0 0			
			35 (24875438)				4		- - - - -											
			40 (26654701)				4													
			43 (29289500)			Inac	lequate													
			37 (30832989)				4													
		42 (24009659) 35 (24875438) 40 (26654701) 43 (29289500) 37 (30832989) 44 (33342741)					Good													
MRA abdomen and pelvis without IV contrast	May approp	be oriate	Limited	O 0 mSv	,	O 0 mSv [ped]	4	4	0	4	2	1	6	0	0	0	0			
			References		Study Quality															
	41 (19890807)			3																
CT abdomen and pelvis with IV contrast	Usuall approp	y not oriate	Expert Consensus	��� 1-10 mSv	0	���� 3- 10 mSv [ped]	3	3	2	4	3	3	3	0	0	0	0			
CT abdomen and pelvis without and with IV contrast	Usuall approp		Expert Consensus	<b>⊕⊕⊕⊕</b> 10- mSv	30	����� 10-30 mSv [ped]	3	3	2	5	4	2	1	0	1	0	0			

MRI abdomen and pelvis without and with IV contrast	Usually appropri			O 0 mSv	O 0 mSv [ped]	3	3	1	5	7	0	0	1	1	0	0
US color Doppler abdomen and pelvis	Usually appropri			O 0 mSv	O 0 mSv [ped]	3	3	1	4	4	4	0	0	0	0	0
		References			Study											
		17 (20124830)														
		45 (23571697)				2										
		46 (25824193)														
			47 (31375431)													
CT abdomen and pelvis without IV contrast	Usually appropri			��� 1-10 mSv	���� 3- 10 mSv [ped]	2	2	7	5	2	0	0	0	0	1	0
MRI abdomen and pelvis without IV contrast	Usually appropri			O 0 mSv	O 0 mSv [ped]	2	2	5	5	4	1	0	0	0	0	0
Arteriography abdomen and pelvis	Usually appropri		Expert Consensus		0 Varies	2	2	3	5	4	2	0	0	0	1	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.