

36 (25320247)	3
35 (14529661)	3
34 (30303910)	3
33 (20505067)	4
32 (19244063)	3
31 (12634641)	4
30 (32736853)	4
29 (34474226)	4
28 (27776067)	4
27 (10586480)	3
26 (10201081)	3
23 (18504770)	3
22 (31687921)	4
39 (11169340)	4
45 (32809166)	2
38 (24937676)	3
40 (36520422)	3

US pelvis transabdominal	Usually appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	7	7	0	0	0	0	0	4	5	4	1
MRI pelvis without and with IV contrast	May be appropriate	Limited	0 0 mSv	0 0 mSv [ped]	6	6	0	0	1	3	3	6	0	1	0

References	Study Quality
15 (31482379)	3
16 (35040672)	4

MRI pelvis without IV contrast	May be appropriate	Limited	0 0 mSv	0 0 mSv [ped]	5	5	1	0	3	2	4	3	0	1	0
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References	Study Quality
18 (33725187)	3
17 (7824738)	2

CT pelvis with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	3	5	2	1	2	1	0	0	0
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	6	5	3	0	0	0	0	0	0
CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	4	5	3	0	2	0	0	0	0
FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	13	0	1	0	0	0	0	0	0

Variant 2: Adult female. Adnexal mass, likely benign, no acute symptoms. Premenopausal. Follow-up imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
US pelvis transvaginal	Usually appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	9	9	0	0	0	0	0	0	3	2	9
US pelvis transabdominal and US pelvis transvaginal	Usually appropriate	Strong	○ 0 mSv	○ 0 mSv [ped]	9	9	0	0	0	0	0	1	1	1	11

References	Study Quality
55 (29702449)	Good
54 (35315722)	3
53 (29112653)	3
52 (21351179)	3
51 (27282774)	3
50 (30737137)	2
49 (23583217)	4
48 (30419104)	3
47 (21762355)	3
46 (20096820)	4
45 (32809166)	2

			41 (31549945)		4												
			24 (11176291)		4												
			22 (31687921)		4												
			34 (30303910)		3												
			33 (20505067)		4												
US duplex Doppler pelvis	Usually appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	8	8	0	0	0	0	1	1	4	3	5		
US pelvis transabdominal	Usually appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	7	7	0	0	0	0	0	4	6	3	1		
MRI pelvis without IV contrast	May be appropriate	Limited	0 0 mSv	0 0 mSv [ped]	4	4	0	0	1	8	4	1	0	0	0		
			References		Study Quality												
			17 (7824738)		2												
			18 (33725187)		3												
MRI pelvis without and with IV contrast	May be appropriate	Limited	0 0 mSv	0 0 mSv [ped]	4	4	1	0	0	8	5	1	1	0	0		
			References		Study Quality												
			15 (31482379)		3												
			16 (35040672)		4												
CT pelvis with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	3	8	2	0	0	0	1	0	0		
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	6	7	1	0	0	0	0	0	0		
CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	5	6	3	0	0	0	0	0	0		
FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	11	2	1	0	0	0	0	0	0		

Variant 3: Adult female. Adnexal mass, likely benign, no acute symptoms. Postmenopausal. Follow-up Imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
US pelvis transvaginal	Usually appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	9	9	0	0	0	0	0	0	3	2	9
US pelvis transabdominal and US pelvis transvaginal	Usually appropriate	Strong	0 0 mSv	0 0 mSv [ped]	9	9	0	0	0	0	0	0	1	2	11

References	Study Quality
34 (30303910)	3
41 (31549945)	4
59 (20503240)	3
58 (12962948)	4
57 (31396641)	3
56 (23001924)	3
55 (29702449)	Good
48 (30419104)	3
47 (21762355)	3
46 (20096820)	4

US duplex Doppler pelvis	Usually appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	8	8	0	0	0	0	2	0	5	1	6
US pelvis transabdominal	Usually appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	7	7	0	0	0	1	0	2	7	3	1
MRI pelvis without and with IV contrast	May be appropriate	Limited	0 0 mSv	0 0 mSv [ped]	6	6	0	0	0	1	4	8	0	1	0

References	Study Quality
16 (35040672)	4
15 (31482379)	3

MRI pelvis without IV contrast	May be appropriate	Limited	0 0 mSv	0 0 mSv [ped]	5	5	0	0	1	6	4	3	0	0	0
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References	Study Quality
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			17 (7824738)		2											
			18 (33725187)		3											
CT pelvis with IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗ 1-10 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	2	2	3	7	1	1	0	2	0	0	0	
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗ 1-10 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	2	2	6	7	1	0	0	0	0	0	0	
CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗⊗ 10-30 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	2	2	6	5	2	0	1	0	0	0	0	
FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	⊗⊗⊗⊗ 10-30 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	1	1	10	2	2	0	0	0	0	0	0	

Variant 4: Adult female. Adnexal mass, indeterminate on initial pelvic US, no acute symptoms. Premenopausal or postmenopausal. Next imaging study for characterization.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI pelvis without and with IV contrast	Usually appropriate	Strong	○ 0 mSv	○ 0 mSv [ped]	9	9	0	0	0	0	0	1	1	1	11

References	Study Quality
16 (35040672)	4
43 (28727500)	3
85 (27583370)	3
84 (29467113)	3
83 (32715577)	2
82 (33484725)	4
81 (19214523)	3
80 (18972356)	3
79 (21193596)	2
78 (18581400)	3
77 (22105841)	3

76 (22814827)	3
75 (27367786)	3
74 (20419493)	3
73 (22095438)	2
72 (31977064)	3
71 (33929901)	4
70 (23468574)	2
69 (24183731)	4
68 (27770228)	4

MRI pelvis without IV contrast	May be appropriate	Strong	0 0 mSv	0 0 mSv [ped]	6	6	0	0	0	1	4	10	1	0	0
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References	Study Quality
86 (30177450)	4
72 (31977064)	3
70 (23468574)	2
18 (33725187)	3
17 (7824738)	2
16 (35040672)	4

CT pelvis with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	4	4	3	0	2	1	0	0	0
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	7	3	3	0	1	0	0	0	0
CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	4	5	1	0	3	1	0	0	0
FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	9	1	4	0	0	0	0	0	0

References	Study Quality
67 (20093590)	4
66 (18423470)	3

70 (23468574)	2
18 (33725187)	3
17 (7824738)	2
16 (35040672)	4

US pelvis transabdominal	May be appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	6	6	1	0	0	0	2	5	5	1	0
CT pelvis with IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗ 1-10 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	2	2	6	3	2	2	1	0	0	0	0
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗ 1-10 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	2	2	7	5	2	0	0	0	0	0	0
CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗⊗ 10-30 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	2	2	6	3	2	1	2	0	0	0	0
FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	⊗⊗⊗⊗ 10-30 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	1	1	12	2	0	0	0	0	0	0	0

Variant 6: Adult female. Adnexal mass, indeterminate on initial pelvic US, no acute symptoms. Postmenopausal. Follow-up imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
US duplex Doppler pelvis	Usually appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	9	9	0	0	0	0	2	1	1	3	7
US pelvis transvaginal	Usually appropriate	Expert Consensus	○ 0 mSv	○ 0 mSv [ped]	9	9	0	0	0	0	2	1	4	7	
US pelvis transabdominal and US pelvis transvaginal	Usually appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	9	9	0	0	0	0	1	1	3	9	

References	Study Quality
16 (35040672)	4
44 (31770022)	3

60 (29480762)	3
72 (31977064)	3
91 (28118296)	4
90 (27876070)	3
89 (33992598)	3
88 (25068555)	3

MRI pelvis without and with IV contrast	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	8	8	0	0	0	0	1	0	6	3	4
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References	Study Quality
16 (35040672)	4
87 (25273949)	3

US pelvis transabdominal	Usually appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	7	7	0	0	0	1	1	5	5	0	2
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MRI pelvis without IV contrast	May be appropriate	Strong	0 0 mSv	0 0 mSv [ped]	6	6	0	0	0	0	3	11	2	0	0
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References	Study Quality
86 (30177450)	4
72 (31977064)	3
70 (23468574)	2
18 (33725187)	3
17 (7824738)	2
16 (35040672)	4

CT pelvis with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	4	4	3	1	1	0	1	0	0
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CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	7	4	3	0	0	0	0	0	0
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CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	5	3	2	0	3	0	1	0	0
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FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	10	2	1	0	0	1	0	0	0
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Variant 7: Adult female. Adnexal mass, suspicious for malignancy on pelvic US, no acute symptoms. Premenopausal or postmenopausal. Next imaging study for characterization.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI pelvis without and with IV contrast	Usually appropriate	Strong	○ 0 mSv	○ 0 mSv [ped]	9	9	0	0	0	0	0	1	2	0	13

References	Study Quality
16 (35040672)	4
22 (31687921)	4
23 (18504770)	3
94 (35230183)	3
79 (21193596)	2
78 (18581400)	3
77 (22105841)	3
76 (22814827)	3
75 (27367786)	3
74 (20419493)	3
73 (22095438)	2
72 (31977064)	3
70 (23468574)	2
68 (27770228)	4
61 (21156740)	3
60 (29480762)	3
54 (35315722)	3
44 (31770022)	3
36 (25320247)	3

			33 (20505067)			4												
MRI pelvis without IV contrast	May be appropriate	Strong	0 0 mSv	0 0 mSv [ped]	6	6	0	0	1	2	2	6	4	1	0			
			References		Study Quality													
			86 (30177450)		4													
			72 (31977064)		3													
			70 (23468574)		2													
			18 (33725187)		3													
			17 (7824738)		2													
			16 (35040672)		4													
CT pelvis without and with IV contrast	May be appropriate (Disagreement)	Expert Opinion	⊗⊗⊗⊗ 10-30 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	5	5	5	1	7	0	0	1	0	0	2			
CT pelvis with IV contrast	Usually not appropriate	Limited	⊗⊗⊗ 1-10 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	3	3	4	4	6	0	0	0	1	1	0			
			References		Study Quality													
			92 (29724422)		4													
FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Limited	⊗⊗⊗⊗ 10-30 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	3	3	7	0	5	0	3	1	0	0	0			
			References		Study Quality													
			93 (23988417)		2													
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗ 1-10 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	1	1	10	2	2	0	1	0	1	0	0			

Variant 8: Female. Clinically suspected adnexal mass, no acute symptoms. Pregnant. Initial imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations											
							1	2	3	4	5	6	7	8	9			
US pelvis transvaginal	Usually appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	9	9	0	0	0	0	0	1	2	4	7			

US pelvis transabdominal and US pelvis transvaginal	Usually appropriate	Strong	0 0 mSv	0 0 mSv [ped]	9	9	0	0	0	0	0	0	2	2	10
		References	Study Quality												
		28 (27776067)	4												
		113 (34902893)	4												
		112 (33671023)	3												
		111 (11127014)	4												
		110 (27484484)	4												
		109 (24496773)	4												
		108 (26482730)	3												
		107 (10411786)	4												
		106 (15863550)	3												
		105 (16310839)	4												
		104 (21194826)	4												
		103 (33515746)	Good												
		102 (10214838)	3												
		101 (32347749)	4												
		100 (9315194)	4												
US duplex Doppler pelvis	Usually appropriate	Strong	0 0 mSv	0 0 mSv [ped]	8	8	0	0	0	0	1	0	6	3	4
		References	Study Quality												
		25 (7839975)	3												
		24 (11176291)	4												
		23 (18504770)	3												
		22 (31687921)	4												
		21 (9646799)	2												
		20 (10739694)	3												
		19 (9618853)	3												
US pelvis transabdominal	Usually appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	7	7	0	0	0	0	1	2	5	5	1

MRI pelvis without IV contrast	May be appropriate	Limited	0 0 mSv	0 0 mSv [ped]	5	5	0	0	1	6	5	3	1	0	0
		References	Study Quality												
		17 (7824738)	2												
		16 (35040672)	4												
		15 (31482379)	3												
		18 (33725187)	3												
		95 (-3188538)	4												
MRI pelvis without and with IV contrast	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	3	3	5	1	5	1	1	0	1	0	0
		References	Study Quality												
		99 (28668416)	2												
		98 (-3195845)	4												
		97 (27599330)	3												
		96 (22003244)	3												
		95 (-3188538)	4												
CT pelvis with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	11	3	0	0	0	0	0	0	0
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	11	3	0	0	0	0	0	0	0
CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	12	2	0	0	0	0	0	0	0
FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	14	0	0	0	0	0	0	0	0

Variant 9: Female . Adnexal mass, indeterminate on initial pelvic US, no acute symptoms. Pregnant. Next imaging study for characterization.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations									
							1	2	3	4	5	6	7	8	9	
MRI pelvis without IV contrast	Usually appropriate	Strong	0 0 mSv	0 0 mSv [ped]	9	9	0	0	0	0	0	0	4	2	8	
		References	Study Quality													
		16 (35040672)	4													
		18 (33725187)	3													
		114 (27130065)	3													
		110 (27484484)	4													
		108 (26482730)	3													
		95 (-3188538)	4													
		86 (30177450)	4													
		72 (31977064)	3													
		70 (23468574)	2													
		61 (21156740)	3													
		60 (29480762)	3													
MRI pelvis without and with IV contrast	Usually not appropriate	Limited	0 0 mSv	0 0 mSv [ped]	3	3	1	0	8	5	1	0	1	0	0	
		References	Study Quality													
		99 (28668416)	2													
		98 (-3195845)	4													
		97 (27599330)	3													
		96 (22003244)	3													
		95 (-3188538)	4													
CT pelvis with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	10	3	0	0	0	1	0	0	0	
CT pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	10	3	0	1	0	0	0	0	0	
CT pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	11	2	0	0	0	1	0	0	0	

FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Expert Consensus	☢☢☢☢ 10-30 mSv	☢☢☢☢ 3-10 mSv [ped]	1	1	13	0	1	0	0	0	0	0	0
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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.