American College of Radiology ACR Appropriateness Criteria®

Pretreatment Evaluation and Follow-up of Invasive Cancer of the Cervix

Variant 1: Initial local staging of pretreatment cervical cancer; assessment of local tumor extension (T staging) for any clinically visible lesion.

	Appropriateness	207	4.1.1. DDY	D 1 DD1	D	3.5.31			F	inal '	Tabu	latio	ns		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
MRI pelvis without and with IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	1	0	1	4	6
		References		Study	Quality										
		19 (8331236)			2										
		20 (7784021)			2										
		11 (14529663)			4										
		18 (1362678)			1										
		25 (18936313)			2										
		27 (21479769)			3										
		26 (28726120)			Good										
		24 (27012496)			3										
		22 (30799568)			3										
		28 (30503642)			3										
		21 (30903231)			4										
		12 (32415584)			3										
		29 (25794993)			3										
FDG-PET/MRI skull base to mid-thigh	Usually appropriate	Strong	≎≎≎ 1-10 mSv		7	7	1	0	0	0	4	0	5	1	1
		References		Study	Quality		•								
		16 (19604567)			2										

		17 (20580064)			3										
		14 (28840302)			3										
		15 (33482909)			3										
MRI pelvis without IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	6	6	0	0	0	1	3	5	1	1	1
		References		Study	Quality		•								
		27 (21479769)			3										
		22 (30799568)			3										
		28 (30503642)			3										
		21 (30903231)			4										
		29 (25794993)			3										
FDG-PET/CT skull base to mid- thigh	May be appropriate	Limited	❤❤❤❤ 10-30 mSv	���� 3- 10 mSv [ped]	6	6	1	0	0	0	5	0	4	1	1
		References		Study	Quality										
		9 (32551909)			4										
		12 (32415584)			3										
US pelvis transvaginal	May be appropriate	Strong	O 0 mSv	O 0 mSv [ped]	5	5	0	0	0	2	9	0	0	0	0
		References		Study	Quality										
		32 (23022593)			2										
		31 (30028181)			3										
		30 (32096793)		(ood										
CT pelvis with IV contrast	May be appropriate	Limited	��� 1-10 mSv	���� 3- 10 mSv [ped]	4	4	1	3	2	0	5	0	1	0	0
		References		Study	Quality										
		10 (17179104)			2										
		11 (14529663)			4										
		9 (32551909)			4										
		12 (32415584)			3										

CT pelvis without and with IV contrast	Usuall approp	Expert Consensus	⊕⊕⊕⊕ 10-3 mSv	30	���� 3- 10 mSv [ped]	2	2	6	4	0	1	0	0	1	0	0
CT pelvis without IV contrast	Usuall approp	Limited	≎≎≎ 1-10 mSv)	���� 3- 10 mSv [ped]	1	1	7	2	2	0	0	0	1	0	0
		References			Study	Quality										
		13 (12117194)				4										
US pelvis transabdominal	Usuall approp	Expert Consensus	O 0 mSv		O 0 mSv [ped]	1	1	7	3	1	0	0	0	0	1	0

Variant 2: Initial systemic staging of pretreatment cervical cancer; assessment of lymph node and distant metastases (N/M staging).

ъ .	Appropriateness	COF	4 1 14 DD	, D 1 DF	T D 4	34.1		Final Tabulations 2 3 4 5 6 7 0 0 1 0 0 1 0 0 0 1 0 4							
Procedure	Category	SOE	Adults RR	L Peds RF	L Rating	Median	1	2	3	4	5	6	7	8	9
FDG-PET/CT skull base to mid-thigh	Usually appropriate	Strong	���� 10-3 mSv	30 🕏��� 10 mS [ped]		9	0	0	0	1	0	0	1	4	6
		References		S	udy Quality										
		36 (20298252)			M										
		33 (29185901)			2										
		38 (27178725)			3										
		34 (30739082)			3										
		35 (27357415)			4										
		12 (32415584)			3										
		37 (-3195133)			4	_									
CT abdomen and pelvis with IV contrast	Usually appropriate	Moderate	��� 1-10 mSv	0		8	1	0	0	0	1	0	4	4	2
		References		S	udy Quality										
		36 (20298252)			M										
		33 (29185901)			2										
		34 (30739082)			3										

		35 (27357415)			4										
		12 (32415584)			3					1	1				
MRI pelvis without and with IV contrast	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	8	8	0	0	0	0	0	0	5	5	1
		References		Study	Quality										
		36 (20298252)			M										
		12 (32415584)			3										
FDG-PET/MRI skull base to mid- thigh	Usually appropriate	Limited	≎≎≎ 1-10 mSv		8	8	0	0	0	0	1	0	4	5	1
		References		Study	Quality										
		16 (19604567)			2										
		17 (20580064)			3										
		14 (28840302)			3										
CT chest with IV contrast	Usually appropriate	Moderate	999 1-10 mSv	���� 3- 10 mSv [ped]	7	7	0	0	0	0	0	0	10	1	0
		References		Study	Quality										
		33 (29185901)			2										
MRI abdomen without and with IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	6	6	0	0	0	0	2	6	3	0	0
		References		Study	Quality										
		36 (20298252)			M										
		12 (32415584)			3										
CT chest without IV contrast	May be appropriate	Moderate	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	5	5	1	0	0	1	8	0	1	0	0
		References		Study	Quality										
		33 (29185901)			2										
MRI abdomen without IV contrast	May be appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	5	5	0	0	0	1	8	1	0	1	0
MRI pelvis without IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	5	5	0	0	0	1	5	2	2	1	0

				1												
		References			Study	Quality										
		40 (18201753)				3										
		39 (32636272)				4										
CT chest without and with IV contrast	Usuall approp	Expert Consensus	��� 1-1 mSv		��� 3- 0 mSv [ped]	3	3	4	2	3	0	3	0	0	0	0
CT abdomen and pelvis without IV contrast	Usuall approp	Limited	��� 1-1 mSv		��� 3- 0 mSv [ped]	2	2	5	3	2	1	0	0	0	0	0
		References			Study	Quality										
		13 (12117194)			_	4										
US abdomen	Usuall approp	Expert Consensus	O 0 mS\	, C	0 mSv [ped]	2	2	5	4	1	1	1	0	0	0	0
Radiography chest	Usuall approp	Limited	≎ <0.1 m§		<0.03 mSv [ped]	2	2	6	2	1	0	2	0	1	0	0
		References			Study	Quality										
		42 (16556457)				4										
		41 (7557610)				2										
CT abdomen and pelvis without and with IV contrast	Usuall approp	Expert Consensus	���� 10- mSv		10-30 mSv [ped]	1	1	7	1	3	0	0	0	0	0	0
US pelvis transabdominal	Usuall approp	Expert Consensus	O 0 mS\	, 0	0 mSv [ped]	1	1	7	3	1	0	0	1	0	0	0
US pelvis transvaginal	Usuall approp	Expert Consensus	O 0 mS\	, 0	0 mSv [ped]	1	1	7	3	1	0	0	0	0	0	1

Variant 3: Initial treatment response assessment of cervical cancer after chemoradiation.

n 1	Appropriateness	COF	A L L DDI	D I DDI	D. (*	3.6 11			F	inal [Гаbu	latio	ns		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
MRI pelvis without and with IV	Usually	Strong	O 0 mSv	O 0 mSv	8	8	0	0	1	0	0	0	1	8	2

n .	Appropriateness	902		D 1 222		3.6.34			Fina	ıl Tal	oulati	ons		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1 2	3	4	5	6	7	8	9
contrast	appropriate			[ped]										
		References		Study	Quality		_							
		54 (26849153)			4									
		65 (26919800)			4									
		56 (26671305)			3									
		60 (26622060)			3									
		61 (28301309)			3									
		52 (29159572)			2									
		14 (28840302)			3									
		58 (30712019)			3									
		66 (31079257)			3									
		59 (30149749)			Good									
		64 (32621877)			3									
		57 (32701045)			3									
		63 (32424659)			3									
		62 (33788707)		(Good									
		55 (16425027)			4									_
FDG-PET/CT skull base to mid-thigh	Usually appropriate	Strong	���� 10-30 mSv	���� 3- 10 mSv [ped]	8	8	0	0 () 1	1	3	6	1
		References		Study	Quality									
		46 (29470614)			3									
		43 (24407578)			4									
		47 (27276204)			3									
		50 (30207790)		C	Good									
		45 (30069578)			3									
		44 (29559287)			3									
		52 (29159572)			2									
		48 (31414206)	_		3									

		51 (31328452)		(Good										
MRI pelvis without IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	2	3	5	1	0
		References		Study	Quality										
		58 (30712019)			3										
		66 (31079257)			3										
		59 (30149749)		(Good										
		64 (32621877)			3										
		57 (32701045)			3										
		63 (32424659)			3										
		62 (33788707)			Good					ı					
FDG-PET/MRI skull base to mid- thigh	Usually appropriate	Limited	��� 1-10 mSv		7	7	0	0	0	0	2	1	3	5	0
		References		Study	Quality		•								
		53 (32798280)			3										
CT abdomen and pelvis with IV contrast	May be appropriate	Limited	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	6	6	0	0	0	2	2	2	5	0	0
		References		Study	Quality										
		37 (-3195133)			4										
CT chest with IV contrast	May be appropriate (Disagreement)	Expert Opinion	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	5	5	0	0	3	2	2	1	3	0	0
		References		Study	Quality										
		37 (-3195133)			4										
MRI abdomen without and with IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	5	5	0	0	1	1	4	3	1	1	0
		References		Study	Quality		•								
		37 (-3195133)			4										
MRI abdomen without IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	4	4	0	0	2	4	3	1	1	0	0
		References		Study	Quality										

		37 (-3195133)			4										
CT abdomen and pelvis without IV contrast	Usually appropi	Limited	≎≎≎ 1-10 mSv	9		3	2	1	3	2	2	0	1	0	0
		References		S	tudy Quality										
		37 (-3195133)			4										
CT abdomen and pelvis without and with IV contrast	Usually appropi	Limited	���� 10-3 mSv	30 \$€\$€ 10-30 mSv [ped]	3	3	3	3	3	1	1	0	1	0	0
		References		S	tudy Quality										
		37 (-3195133)			4									_	
CT chest without IV contrast	Usually appropr	Limited	≎≎≎ 1-10 mSv)		3	3	1	4	0	3	0	1	0	0
		References		S	tudy Quality										
		37 (-3195133)			4										
CT chest without and with IV contrast	Usually appropr	Limited	≎≎≎ 1-10 mSv)		3	4	2	3	1	2	0	0	0	0
		References		S	tudy Quality										
		37 (-3195133)			4										
US pelvis transvaginal	Usually appropi	Expert Consensus	O 0 mSv	O 0 mS [ped]	v 3	3	3	3	2	0	3	0	0	0	1
US abdomen	Usually appropi	Expert Consensus	O 0 mSv	O 0 mS [ped]	v 2	2	6	5	1	0	0	0	0	0	0
Radiography chest	Usually appropr	Limited	≎ <0.1 mS		3 2	2	6	3	3	0	0	0	0	0	0
		References		S	tudy Quality										
		37 (-3195133)			4										
US pelvis transabdominal	Usually appropi	Expert Consensus	O 0 mSv	O 0 mS [ped]	v 1	1	7	4	0	0	0	0	1	0	0

Variant 4: Surveillance of treated cervical cancer in asymptomatic patients.

	Appropriateness	207							I	inal	Tabu	latio	ns		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
FDG-PET/CT skull base to mid-thigh	Usually appropriate	Strong	���� 10-30 mSv	≎≎≎≎ 3- 10 mSv [ped]	8	8	0	0	1	1	0	0	3	6	1
		References		Study	Quality										
		54 (26849153)			4										
		5 (28372871)			4										
		46 (29470614)			3										
		70 (24798933)		C	Good										
		43 (24407578)			4										
		71 (24177043)			Good										
		73 (32034109)			3										
		72 (33620285)			3										
		37 (-3195133)			4										
CT abdomen and pelvis with IV contrast	Usually appropriate	Limited	��� 1-10 mSv	���� 3- 10 mSv [ped]	7	7	0	0	1	0	1	0	8	1	0
		References		Study	Quality										
		37 (-3195133)			4						_				
CT chest with IV contrast	Usually appropriate	Limited	��� 1-10 mSv	���� 3- 10 mSv [ped]	7	7	0	0	1	0	2	0	7	1	0
		References		Study	Quality										
,		37 (-3195133)			4								_		
MRI pelvis without and with IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	1	1	0	6	3	0
		References		Study	Quality										
		54 (26849153)			4		0 0 1 1 0 0 3								

	Г		91 (27942662)				ood										
	-		81 (27842663)			<u> </u>											
	-		79 (28935271)				3										
	-		44 (29559287)				3										
	_		78 (30980126)				4										
	_		66 (31079257)				3										
	_		59 (30149749)			G	ood										
			77 (33039422)				3										
			80 (32312283)				3										
			37 (-3195133)				4			1		1					
FDG-PET/MRI skull base to mid- thigh	Usuall appropri	ly iate	Strong	��� 1-10 mSv)		7	7	0	0	0	0	2	0	5	4	0
			References			Study	Quality										
			76 (24804676)				2										
		75 (26551527)					3										
							3										
		73 (32034109) 53 (32798280)					3										
CT abdomen and pelvis without IV contrast	May b appropri (Disagree)	iate	Expert Opinion	��� 1-1(mSv)	���� 3- 10 mSv [ped]	5	5	2	1	2	2	2	1	1	0	0
			References			Study	Quality		•								
			37 (-3195133)				4										
CT chest without IV contrast	May b		Limited	��� 1-10 mSv)	���� 3- 10 mSv [ped]	5	5	0	0	1	4	3	1	2	0	0
			References			Study	Quality										
			37 (-3195133)				4										
MRI abdomen without IV contrast	May b appropri (Disagreei	riate	Expert Opinion	O 0 mSv		O 0 mSv [ped]	5	5	0	1	2	3	2	1	2	0	0
		References				Study	Quality										_
		37 (-3195133)					4										

MRI abdomen without and with IV contrast	May appropr (Disagree	riate	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	0	0	2	1	1	2	3	2	0
			References		Study	y Quality			•							
			37 (-3195133)													
MRI pelvis without IV contrast	May appropri		Limited	O 0 mSv	O 0 mSv [ped]	5	5	0	1	0	1	5	2	2	0	0
			References		Study	y Quality										
			79 (28935271)			3										
			78 (30980126)			4										
			77 (33039422)			3										
			80 (32312283)			3										
	Ī		37 (-3195133)			4										
CT abdomen and pelvis without and with IV contrast	Usually		Limited	���� 10-30 mSv		2	2	5	2	4	0	0	0	0	0	0
			References		Stud	y Quality		•								
	Ī		37 (-3195133)			4										
CT chest without and with IV contrast	Usually		Limited	��� 1-10 mSv	���� 3- 10 mSv [ped]	2	2	3	4	4	0	0	0	0	0	0
			References		Stud	y Quality		•								
			37 (-3195133)			4										
US abdomen	Usually appropri		Limited	O 0 mSv	O 0 mSv [ped]	2	2	6	4	1	1	0	0	0	0	0
			References		Study	y Quality										
			5 (28372871)			4										
			37 (-3195133)			4										
US pelvis transabdominal	Usually appropr		Limited	O 0 mSv	O 0 mSv [ped]	2	2	6	3	2	0	0	0	1	0	0
			References		Study Quality											
			5 (28372871)		4											

			37 (-3195133)				4										
Radiography chest	Usuall approp	y not oriate	Limited	≎ <0.1 mS	Sv		2	2	5	3	3	0	1	0	0	0	0
			References			Study	Quality										
			5 (28372871)				4										
			37 (-3195133)				4										
US pelvis transvaginal	Usuall approp		Limited	O 0 mSv	,	O 0 mSv [ped]	1	1	6	4	1	0	0	0	0	0	0
			References			Study	Quality										
			5 (28372871)			4											
			37 (-3195133)	4													

Variant 5: Evaluation of known or suspected cervical cancer local recurrence or distant metastatic disease. Follow-up imaging.

D 1	Appropri	iateness	COF	4 1 1/ DD		D 1 DD1	ь.	3.6.11			F	'inal '	Tabu	lation	ıs		
Procedure	Categ	gory	SOE	Adults RR	(L	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
FDG-PET/CT skull base to mid-thigh	Usua approp		Moderate	❤❤❤ 10-30 mSv		���� 3- 10 mSv [ped]	8	8	0	0	0	0	0	0	2	5	4
			References			Study	Quality										
			54 (26849153)				4										
			82 (24299154)		C	Good											
			47 (27276204)														
			37 (-3195133)		4							_					
CT abdomen and pelvis with IV contrast	Usua approp		Moderate	��� 1-1 mSv	0	���� 3- 10 mSv [ped]	7	7	0	0	0	0	0	0	8	3	0
			References			Study Quality											
			82 (24299154)			Good											
			37 (-3195133)			4											

CT chest with IV contrast	Usually appropriate	Moderate	��� 1-10 mSv	���� 3- 10 mSv [ped]	7	7	0	0	0	0	0	0	8	3	0
		References		Study											
		82 (24299154)													
		37 (-3195133)													
MRI abdomen without and with IV contrast	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	2	2	5	2	0
		References		Study	y Quality										
		37 (-3195133)		4											
MRI pelvis without and with IV contrast	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	0	0	9	2	0
		References		Study	y Quality		•			•	•		•	•	
		37 (-3195133)													
FDG-PET/MRI skull base to mid-thigh	Usually appropriate	Limited	��� 1-10 mSv		7	7	0	0	0	0	2	1	3	4	1
		References		Study	y Quality						•	•	•	•	
		76 (24804676)		2											
		75 (26551527)		3											
CT chest without IV contrast	May be appropriate	Moderate	��� 1-10 mSv	���� 3- 10 mSv [ped]	6	6	0	0	0	3	2	3	3	0	0
		References		Study	y Quality										
		82 (24299154)		(Good										
		37 (-3195133)			4										
MRI pelvis without IV contrast	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	6	6	0	0	1	0	4	2	4	0	0
		References		Study	y Quality		•								
		37 (-3195133)			4										
CT abdomen and pelvis without IV contrast	May be appropriate (Disagreement)	Expert Opinion	��� 1-10 mSv	���� 3- 10 mSv [ped]	5	5	1	1	2	1	3	2	1	0	0

			D . C		G. 1	0 .14										
			References 82 (24299154)			y Quality Good										
						4										
CT abdomen and pelvis without and with IV contrast	May approp (Disagre	riate	37 (-3195133) Expert Opinion	���� 10-3 mSv	0 10-30 mSv [ped]	5	5	3	1	4	0	1	1	1	0	0
			References			y Quality			I							
			82 (24299154)		•	Good										
			37 (-3195133)			4										
MRI abdomen without IV contrast	May approp		Limited	O 0 mSv	O 0 mSv [ped]	5	5	0	0	1	0	7	1	2	0	0
			References		Study	y Quality		•			•		•			
			37 (-3195133)			4										
CT chest without and with IV contrast	Usually approp		Moderate	��� 1-10 mSv	���� 3- 10 mSv [ped]	3	3	3	2	4	0	1	0	1	0	0
			References		Study	y Quality										
			82 (24299154)		(Good										
			37 (-3195133)			4										
US pelvis transvaginal	Usually approp		Limited	O 0 mSv	O 0 mSv [ped]	2	2	4	5	2	0	0	0	0	0	0
			References		Study	y Quality										
			5 (28372871)			4										
			37 (-3195133)			4										
Radiography chest	Usually approp		Limited	 	v <0.03 mSv [ped]	2	2	4	4	2	0	1	0	0	0	0
			References		Study	y Quality										
			5 (28372871)			4										
			37 (-3195133)			4										
US abdomen	Usually approp		Limited	O 0 mSv	O 0 mSv [ped]	1	1	7	2	2	0	0	0	0	0	0

			References			Study Quality											
			5 (28372871)			4											
			37 (-3195133)		4												
US pelvis transabdominal	Usuall approp	y not oriate			′	O 0 mSv [ped]	1	1	7	2	2	0	0	0	0	0	0
			References														
			5 (28372871)			4											
			37 (-3195133)				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.