

FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Limited	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	6	2	6	0	0	0	0	0	0
		References		Study Quality											
		10 (31768594)		4											
US abdomen transabdominal	Usually not appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	2	2	7	5	2	0	0	0	0	0	0
		References		Study Quality											
		10 (31768594)		4											

Variant 2: Adult. Clinically suspected pancreatic ductal adenocarcinoma. Abdominal symptomatology. Initial imaging.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
CT abdomen with IV contrast multiphase	Usually appropriate	Limited	☼☼☼☼ 10-30 mSv		9	9	0	0	0	0	0	0	1	3	10
		References		Study Quality											
		9 (29277858)		4											
		42 (34851713)		4											
MRI abdomen without and with IV contrast with MRCP	Usually appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	8	8	0	0	0	0	1	4	1	4	4
		References		Study Quality											
		9 (29277858)		4											
		50 (29352379)		3											
		51 (29397657)		3											
		30 (31764824)		3											
		10 (31768594)		4											
		14 (35856454)		4											
CT abdomen and pelvis with IV contrast	Usually appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	7	7	0	0	0	1	1	2	7	1	2

References	Study Quality
41 (27519836)	3
22 (32950386)	4
21 (31832740)	3

MRI abdomen without and with IV contrast	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	7	7	0	0	0	1	1	2	5	1	4
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References	Study Quality
10 (31768594)	4
14 (35856454)	4

MRI abdomen without IV contrast	May be appropriate	Moderate	0 0 mSv	0 0 mSv [ped]	5	5	0	0	0	4	11	0	0	0	0
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References	Study Quality
36 (33819806)	Good
35 (27663591)	4
33 (34223962)	3
34 (28084815)	4
30 (31764824)	3
14 (35856454)	4

MRI abdomen without IV contrast with MRCP	May be appropriate	Moderate	0 0 mSv	0 0 mSv [ped]	5	5	0	0	0	1	10	4	0	0	0
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References	Study Quality
36 (33819806)	Good
35 (27663591)	4
33 (34223962)	3
34 (28084815)	4
30 (31764824)	3
10 (31768594)	4

MRI abdomen without and with hepatobiliary contrast	May be appropriate	Limited	0 0 mSv	0 0 mSv [ped]	5	5	0	1	2	2	9	1	0	0	0
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References	Study Quality
48 (31464937)	3

			49 (34314825)		4													
			47 (35316674)		3													
CT abdomen and pelvis without IV contrast	Usually not appropriate	Limited	⊕⊕⊕ 1-10 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	3	3	4	1	5	2	2	0	0	0	0			
			References		Study Quality													
			22 (32950386)		4													
			23 (34161128)		3													
			21 (31832740)		3													
CT abdomen and pelvis without and with IV contrast	Usually not appropriate	Limited	⊕⊕⊕⊕ 10-30 mSv	⊕⊕⊕⊕⊕ 10-30 mSv [ped]	3	3	0	2	6	2	3	2	0	0	0			
			References		Study Quality													
			25 (29128993)		4													
			24 (32703312)		4													
FDG-PET/CT skull base to mid-thigh	Usually not appropriate	Limited	⊕⊕⊕⊕ 10-30 mSv	⊕⊕⊕⊕ 3-10 mSv [ped]	3	3	1	1	6	3	2	1	0	0	0			
			References		Study Quality													
			9 (29277858)		4													
			46 (28180987)		3													
			45 (33063453)		3													
			44 (35717098)		4													
			43 (29143875)		4													
US abdomen transabdominal	Usually not appropriate	Limited	○ 0 mSv	○ 0 mSv [ped]	2	2	6	5	3	0	0	0	0	0	0			
			References		Study Quality													
			52 (32527594)		3													
			10 (31768594)		4													

Variant 3: Adult. Pancreatic ductal adenocarcinoma. Locoregional disease staging or pretreatment planning or posttreatment evaluation related to neoadjuvant therapy or surgical planning.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
CT abdomen with IV contrast multiphase	Usually appropriate	Strong	⊕⊕⊕⊕ 10-30 mSv		9	9	0	0	0	0	0	0	1	0	14

References	Study Quality
54 (24152957)	2
68 (27780664)	3
9 (29277858)	4
58 (30116961)	3
59 (31953587)	3
26 (33759561)	2
42 (34851713)	4
55 (27798447)	3
61 (28770287)	4
62 (30333055)	3
57 (31495760)	3
67 (34223961)	Good
60 (35213359)	4
27 (29796845)	2
65 (30931954)	3
64 (28339284)	3
56 (29063133)	2
63 (31012758)	3
66 (31799875)	3
21 (31832740)	3

MRI abdomen without and with IV contrast	Usually appropriate	Strong	○ 0 mSv	○ 0 mSv [ped]	7	7	0	0	1	0	0	0	9	4	1
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References	Study Quality
83 (29664340)	3
51 (29397657)	3

81 (31993737)	3
82 (29516979)	3
80 (30667305)	3
9 (29277858)	4
36 (33819806)	Good
35 (27663591)	4
33 (34223962)	3
34 (28084815)	4
30 (31764824)	3
10 (31768594)	4

MRI abdomen without and with IV contrast with MRCP	Usually appropriate	Strong	0 0 mSv	0 0 mSv [ped]	7	7	0	0	1	0	1	0	8	4	1
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References	Study Quality
24 (32703312)	4
85 (34756699)	3
87 (34903501)	Good
32 (36273992)	4
84 (34654379)	3
86 (35486167)	Good

CT abdomen and pelvis with IV contrast	May be appropriate	Limited	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	6	6	0	0	1	0	5	4	3	2	0
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References	Study Quality
41 (27519836)	3

FDG-PET/CT skull base to mid-thigh	May be appropriate	Limited	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	5	5	0	0	2	4	9	0	0	0	0
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References	Study Quality
76 (24721105)	3
75 (23922481)	M
42 (34851713)	4
79 (29402376)	3

45 (33063453)	3
74 (35410786)	3
77 (29017830)	3
44 (35717098)	4
46 (28180987)	3
43 (29143875)	4
78 (31092213)	4
9 (29277858)	4

MRI abdomen without and with hepatobiliary contrast	May be appropriate	Limited	0 0 mSv	0 0 mSv [ped]	5	5	0	0	1	0	10	3	1	0	0
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References	Study Quality
9 (29277858)	4
50 (29352379)	3
51 (29397657)	3
42 (34851713)	4

CT abdomen and pelvis without and with IV contrast	May be appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼☼ 10-30 mSv [ped]	4	4	0	2	5	2	5	0	1	0	0
MRI abdomen without IV contrast	Usually not appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	3	3	1	2	10	2	0	0	0	0	0
MRI abdomen without IV contrast with MRCP	Usually not appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	3	3	1	1	12	1	0	0	0	0	0
CT abdomen and pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	4	7	3	0	1	0	0	0	0
US abdomen transabdominal	Usually not appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	1	1	12	2	1	0	0	0	0	0	0

Variant 4: Adult. Pancreatic ductal adenocarcinoma. Distant metastatic evaluation. Initial staging or postprocedure surveillance for metastatic disease.

MRI abdomen without and with hepatobiliary contrast	Usually appropriate	Limited	0 0 mSv	0 0 mSv [ped]	7	7	0	0	0	0	1	1	8	4	1
		References	Study Quality												
		9 (29277858)	4												
		42 (34851713)	4												
FDG-PET/CT skull base to mid-thigh	May be appropriate	Limited	⊗⊗⊗⊗ 10-30 mSv	⊗⊗⊗⊗ 3-10 mSv [ped]	5	5	0	0	0	2	11	1	1	0	0
		References	Study Quality												
		95 (29782393)	4												
		44 (35717098)	4												
		43 (29143875)	4												
		96 (31806148)	4												
CT abdomen with IV contrast multiphase	May be appropriate (Disagreement)	Expert Opinion	⊗⊗⊗⊗ 10-30 mSv		5	5	0	0	2	0	1	0	7	3	2
		References	Study Quality												
		54 (24152957)	2												
		9 (29277858)	4												
		92 (30241869)	3												
		94 (36057929)	3												
		56 (29063133)	2												
MRI abdomen without IV contrast	May be appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	4	4	2	2	2	7	2	0	0	0	0
CT abdomen without and with IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗⊗ 10-30 mSv	⊗⊗⊗⊗⊗ 10-30 mSv [ped]	3	3	0	7	7	0	0	0	1	0	0
CT abdomen and pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	⊗⊗⊗⊗ 10-30 mSv	⊗⊗⊗⊗⊗ 10-30 mSv [ped]	3	3	0	3	7	4	1	0	0	0	0

CT chest abdomen pelvis without and with IV contrast	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼☼ 10-30 mSv [ped]	3	3	4	2	7	2	0	0	0	0	0
CT abdomen without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	6	6	3	0	0	0	0	0	0
CT chest abdomen pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼☼ 10-30 mSv	☼☼☼☼ 3-10 mSv [ped]	2	2	6	5	2	2	0	0	0	0	0
CT abdomen and pelvis without IV contrast	Usually not appropriate	Expert Consensus	☼☼☼ 1-10 mSv	☼☼☼☼ 3-10 mSv [ped]	1	1	8	3	3	1	0	0	0	0	0
US abdomen transabdominal	Usually not appropriate	Expert Consensus	0 0 mSv	0 0 mSv [ped]	1	1	12	3	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.