American College of Radiology
ACR Appropriateness Criteria®

Chronic Wrist Pain

Variant 1: Chronic wrist pain. With or without prior injury. Best initial study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Radiography wrist	Usually appropriate	Expert Consensus	☢ <0.1 mSv		9	9	0	0	0	0	0	0	0	0	0
CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
MR arthrography wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
MRI wrist without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
MRI wrist without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	0	0	0	0	0	0	0	0	0

US wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	14	0	0	0	0	0	0	0	0

Variant 2: Chronic wrist pain. Routine radiographs normal or nonspecific. Persistent symptoms. Next study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI wrist without IV contrast	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	0	0	0
References	Study Quality														
3 (16424247)	3														
12 (16932876)	4														
26 (17179363)	3														
MR arthrography wrist	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	4	4	0	0	0	0	0	0	0	0	0
References	Study Quality														
3 (16424247)	3														
12 (16932876)	4														
26 (17179363)	3														
CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0

MRI wrist without and with IV contrast	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0

References	Study Quality
3 (16424247)	3
12 (16932876)	4
26 (17179363)	3

Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	0	0	0	0	0	0	0	0	0
US wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	12	0	0	2	0	0	0	0	0

Variant 3: Chronic wrist pain. Routine radiographs normal or nonspecific. Suspect inflammatory arthritis. Next study.

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

References	Study Quality
27 (20810395)	3
28 (21318271)	3
29 (16941192)	3
31 (18718987)	2
32 (21068093)	3
33 (18388160)	1
34 (16219706)	3
30 (18307764)	1

MRI wrist without IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	0	0	0	0	0

References	Study Quality
27 (20810395)	3
28 (21318271)	3
29 (16941192)	3
31 (18718987)	2
32 (21068093)	3
33 (18388160)	1
34 (16219706)	3
30 (18307764)	1

US wrist	May be appropriate	Strong	O 0 mSv	O 0 mSv [ped]	5	5	0	0	0	1	9	2	0	0	1

References	Study Quality
27 (20810395)	3
28 (21318271)	3
31 (18718987)	2
32 (21068093)	3
33 (18388160)	1
34 (16219706)	3
35 (23111854)	4
20 (22476781)	2

CT wrist without IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		3	3	0	0	0	0	0	0	0	0	0
CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
MR arthrography wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0

Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	0	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	13	0	0	1	0	0	0	0	0

Variant 4: Chronic wrist pain. Radiographs normal or show nonspecific arthritis. Exclude infection. Next study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
Image-guided aspiration wrist	Usually appropriate	Expert Consensus	Varies		9	9	0	0	0	0	0	0	0	0	0
MRI wrist without and with IV contrast	May be appropriate (Disagreement)	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	6	0	1	0	3	1	1	0	1
US wrist	May be appropriate (Disagreement)	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	5	0	2	0	4	1	1	0	0
CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	12	0	1	0	1	0	0	0	0
CT wrist without IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
MR arthrography wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
MRI wrist without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0

Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	0	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	14	0	0	0	0	0	0	0	0

Variant 5: Ulnar-sided chronic wrist pain. Radiographs normal or nonspecific. Next study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI wrist without IV contrast	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	0	0	0

References	Study Quality
12 (16932876)	4
36 (9168716)	3
37 (18762112)	2

MR arthrography wrist	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	0	0	0	0	0

References	Study Quality
7 (21467087)	M
26 (17179363)	3
8 (23812413)	3
38 (17449771)	1
39 (19098183)	2

CT arthrography wrist	May be appropriate	Strong	☢ <0.1 mSv		5	5	1	0	0	1	7	1	3	1	0

References	Study Quality
40 (18665366)	2
8 (23812413)	3
38 (17449771)	1

MRI wrist without and with IV contrast	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	3	3	5	0	4	2	1	2	0	0	0

References	Study Quality
12 (16932876)	4
36 (9168716)	3
37 (18762112)	2

X-ray arthrography wrist	Usually not appropriate	Limited	☢ <0.1 mSv		3	3	0	0	0	0	0	0	0	0	0

References	Study Quality
7 (21467087)	M

CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	0	0	0	0	0	0	0	0	0
US wrist	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0

References	Study Quality
41 (21078815)	4
42 (18204008)	3

Variant 6: Radial-sided chronic wrist pain. Radiographs normal or nonspecific. Next study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI wrist without IV contrast	Usually appropriate	Moderate	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	0	0	0

References	Study Quality
8 (23812413)	3
10 (15122464)	4
38 (17449771)	1
39 (19098183)	2

CT arthrography wrist	May be appropriate	Limited	☢ <0.1 mSv		6	6	0	0	0	0	0	0	0	0	0

References	Study Quality
16 (16304116)	2
8 (23812413)	3

MR arthrography wrist	May be appropriate	Strong	O 0 mSv	O 0 mSv [ped]	6	6	0	0	0	0	0	0	0	0	0

References	Study Quality
3 (16424247)	3
43 (9194225)	3
8 (23812413)	3
38 (17449771)	1
44 (10194719)	2

US wrist	May be appropriate	Limited	O 0 mSv	O 0 mSv [ped]	5	5	0	0	1	0	11	1	0	0	0

References	Study Quality
18 (21613443)	3
19 (20033358)	3
41 (21078815)	4
42 (18204008)	3

MRI wrist without and with IV contrast	Usually not appropriate	Strong	O 0 mSv	O 0 mSv [ped]	3	3	5	2	2	0	5	0	0	0	0

References	Study Quality
8 (23812413)	3
10 (15122464)	4
38 (17449771)	1

		39 (19098183)			2											
X-ray arthrography wrist	Usually not appropriate	Limited	☢ <0.1 mSv		3	3	0	0	0	0	0	0	0	0	0
		References			Study Quality											
		45 (2661651)			3											
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	0	0	0	0	0	0	0	0	0

Variant 7: Chronic wrist pain. Radiographs normal or nonspecific. Suspect Kienböck's disease. Next study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI wrist without IV contrast	Usually appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	0	0	0
CT wrist without IV contrast	May be appropriate	Expert Consensus	☢ <0.1 mSv		5	5	0	0	0	0	0	0	0	0	0
MRI wrist without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	3	3	0	0	0	0	0	0	0	0	0
Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		2	2	0	0	0	0	0	0	0	0	0
CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0

US wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
MR arthrography wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	14	0	0	0	0	0	0	0	0

Variant 8: Chronic wrist pain. Kienböck's disease on radiographs. Next study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
CT wrist without IV contrast	May be appropriate	Expert Consensus	☢ <0.1 mSv		5	5	0	0	0	0	0	0	0	0	0
MRI wrist without IV contrast	May be appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	4	4	0	0	0	0	0	0	0	0	0
MRI wrist without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	3	3	0	0	0	0	0	0	0	0	0
CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
MR arthrography wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0

Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	0	0	0	0	0	0	0	0	0
US wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	14	0	0	0	0	0	0	0	0

Variant 9: Chronic wrist pain. Palpable mass or suspected occult ganglion cyst. Radiographs normal or nonspecific. Next study.

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

References	Study Quality
46 (17177022)	4
47 (16498112)	3
48 ()	4

MRI wrist without IV contrast	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	8	8	0	0	0	0	0	0	0	0	0

References	Study Quality
46 (17177022)	4
47 (16498112)	3
48 ()	4

US wrist	Usually appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	8	8	0	0	0	0	0	0	0	0	0
CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0

CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
MR arthrography wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	0	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	13	0	1	0	0	0	0	0	0

Variant 10: Chronic wrist pain. Suspect occult fracture or stress fracture. Radiographs nondiagnostic. Next study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
MRI wrist without IV contrast	Usually appropriate	Limited	O 0 mSv	O 0 mSv [ped]	9	9	0	0	0	0	0	0	0	0	0
CT wrist without IV contrast	Usually appropriate	Expert Consensus	☢ <0.1 mSv		7	7	0	0	0	0	0	0	0	0	0
Radiography wrist additional views	May be appropriate	Expert Consensus	☢ <0.1 mSv		6	6	0	0	0	0	4	5	2	0	2
Bone scan with SPECT or SPECT/CT wrist	May be appropriate	Limited	☢☢☢ 1-10 mSv	☢☢☢☢ 3-10 mSv [ped]	5	5	0	0	1	1	8	0	2	0	1

References	Study Quality
12 (16932876)	4
50 (19847413)	4

References	Study Quality
51 (21408000)	4
52 (24404637)	4

		53 (19756904)				M										
		54 (15911954)				4										
		55 (23377415)				4										
		56 (23531735)				2										
CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
MR arthrography wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
MRI wrist without and with IV contrast	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
		References				Study Quality										
		12 (16932876)				4										
		50 (19847413)				4										
US wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	13	0	0	0	1	0	0	0	0

Variant 11: Chronic wrist pain. Radiographs show old scaphoid fracture. Evaluate for nonunion, malunion, osteonecrosis, or post-traumatic osteoarthritis. Next study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
CT wrist without IV contrast	Usually appropriate	Expert Consensus	☢ <0.1 mSv		8	8	1	0	0	0	1	0	3	3	6

MRI wrist without IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	1	3	4	4	2

References	Study Quality
60 (17312277)	2
57 (20858790)	2
58 (10628470)	2
59 (15855097)	2

MRI wrist without and with IV contrast	May be appropriate	Strong	O 0 mSv	O 0 mSv [ped]	6	6	0	0	0	0	5	3	1	1	3

References	Study Quality
60 (17312277)	2
57 (20858790)	2
58 (10628470)	2
59 (15855097)	2

CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	10	1	1	0	1	0	1	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	0	0	0	0	0	0	0	0	0
MR arthrography wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	0	0	0	0	0	0	0	0	0
US wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	0	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	13	0	1	0	0	0	0	0	0

Variant 12: Chronic wrist pain. Radiographs normal or nonspecific. Suspect carpal tunnel syndrome. Next study.

Procedure	Appropriateness Category	SOE	Adults RRL	Peds RRL	Rating	Median	Final Tabulations								
							1	2	3	4	5	6	7	8	9
US wrist	May be appropriate	Strong	O 0 mSv	O 0 mSv [ped]	6	6	0	0	0	1	5	3	0	1	3

References	Study Quality
62 (19280794)	3
63 (19037017)	3
64 (17989976)	3
65 (21076589)	3
21 (22244369)	M
24 (22542258)	M
66 (16632712)	4
22 (20963527)	M
23 (25187592)	2
61 (24154903)	3

MRI wrist without IV contrast	May be appropriate	Strong	O 0 mSv	O 0 mSv [ped]	5	5	0	1	0	0	6	3	0	1	2

References	Study Quality
68 (17920190)	3
69 (18312102)	2
67 (9772842)	4
70 (24248989)	2

CT arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	14	0	0	0	0	0	0	0	0
CT wrist with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	14	0	0	0	0	0	0	0	0
CT wrist without IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	12	1	0	0	1	0	0	0	0

CT wrist without and with IV contrast	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	14	0	0	0	0	0	0	0	0
X-ray arthrography wrist	Usually not appropriate	Expert Consensus	☢ <0.1 mSv		1	1	14	0	0	0	0	0	0	0	0
MR arthrography wrist	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	14	0	0	0	0	0	0	0	0
MRI wrist without and with IV contrast	Usually not appropriate	Strong	O 0 mSv	O 0 mSv [ped]	1	1	10	0	1	0	2	0	0	0	0

References	Study Quality
68 (17920190)	3
69 (18312102)	2
67 (9772842)	4
70 (24248989)	2

Bone scan wrist	Usually not appropriate	Expert Consensus	☢☢☢ 1-10 mSv		1	1	14	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.**