

Appendix S2: Information on the 215 studies included.

Study	Year	Country	Sample Number	Test	Joints	Reference Standard	Inflammatory Arthritis		QUADAS-2 Overall Judgement	
							Included IA Patents	Patients Number	Risk of Bias	Applicability
Teller et al.	2000	USA	137	ESR/Aspiration Culture	Knee/Hip	Intraoperative Culture	N/A ^b	N/A ^c	High	Low
Itasaka et al.	2001	Japan	48	CRP/ESR/WBC/Aspiration Culture	Hip	Compositive Standard	No	0	Unclear	Low
Somme et al.	2003	USA	107	Aspiration Culture	Hip	Intraoperative Culture	Yes	N/A	High	Low
Mason et al.	2003	USA	86	sWBC/PMN	Knee	Intraoperative Culture	Yes	4	High	High
Bernard et al.	2004	France	228	CRP/ESR/WBC/Aspiration Culture	Knee/Hip	Intraoperative Culture	N/A	N/A	Unclear	Unclear
Malhotra et al.	2004	Australia	41	Aspiration Culture	Hip	Intraoperative Culture	Yes	N/A	High	High
Williams et al.	2004	UK	273	Aspiration Culture	Hip	Intraoperative Culture	N/A	N/A	Low	Unclear
Trampuz et al.	2004	USA	133	sWBC/PMN	Knee	Compositive Standard	No	0	High	Unclear
Panousis et al.	2005	UK	92	CRP/ESR/Aspiration Culture	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
Ali et al.	2005	UK	73	Aspiration Culture	Hip	Intraoperative Culture	N/A	N/A	Unclear	Unclear
Di Cesare et al.	2005	Finland	58	CRP/ESR/IL-6/WBC	Knee/Hip	Intraoperative Culture	No	0	Unclear	Unclear
Van den bekerom et al.	2006	Belgium	68	Aspiration Culture	Knee	Compositive Standard	N/A	N/A	High	Unclear
Parvizi et al.	2006	USA	168	sWBC/PMN	Knee/Hip	Compositive Standard	No	0	High	Unclear
Baré et al.	2006	Canada	242	CRP/ESR	Knee	Compositive Standard	N/A	N/A	High	Unclear
Della Valle et al.	2007	USA	94	CRP/ESR/sWBC/PMN/Aspiration Culture	Knee	Compositive Standard	N/A	N/A	High	Unclear
Trampuz et al.	2007	USA	140	Aspiration Culture	Knee/Hip	Compositive Standard	N/A	N/A	High	Low
Nilsdotter-Augustinsson et al.	2007	Sweden	124	CRP/ESR/sWBC/TNF- α /sIL-1 β /sIL6	Hip	Compositive Standard	Yes	5	High	High
Bottner et al.	2007	Germany	78	CRP/ESR/IL-6/WBC/PCT	Knee/Hip	Intraoperative Culture	Yes	5	Unclear	Unclear

Greidanus et al.	2007	Canada	151	CRP/ESR	Knee	Intraoperative Culture	No	0	High	Low
Simonsen et al.	2007	Denmark	76	CRP/ESR/WBC	Hip	Compositive Standard	N/A	N/A	High	Unclear
Austin et al.	2008	USA	296	CRP/ESR/IL-6/sWBC/PMN/Aspiration Culture	Knee	Compositive Standard	No	0	High	High
Müller et al.	2008	Germany	50	CRP/WBC/Aspiration Culture	Hip	Compositive Standard	N/A	N/A	High	Unclear
Gallo et al.	2008	Czech	94	Aspiration Culture	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
Schinsky et al.	2008	USA	201	CRP/ESR/sWBC/PMN	Hip	Compositive Standard	No	0	High	Unclear
Ghanem et al.	2008	USA	128	sWBC	Knee	Compositive Standard	No	0	High	Low
Ghanem et al.	2008	USA	429	sWBC/PMN	Knee	Compositive Standard	No	0	High	Low
Fink et al.	2008	Germany	145	CRP	Knee	Intraoperative Culture	Yes	16	Unclear	Unclear
Tohtz et al.	2009	Germany	64	CRP/ESR/WBC/Aspiration Culture	Hip	Compositive Standard	N/A	N/A	High	Unclear
Chevillotte et al.	2009	USA	204	CRP/ESR/WBC	Hip	Intraoperative Culture	Yes	29	High	Unclear
Ghanem et al.	2009	USA	479	CRP/ESR	Hip	Compositive Standard	No	0	High	Unclear
Morgan et al.	2009	USA	903	CRP/ESR/WBC	Knee	Compositive Standard	N/A	N/A	High	Unclear
Meermans et al.	2010	UK	120	Aspiration Culture	Knee/Hip	Intraoperative Culture	N/A	N/A	Unclear	Unclear
Deirmengian et al.	2010	USA	51	CRP/ESR/sWBC/PMN/sIL-1 β	Knee/Hip	Intraoperative Culture	Yes	N/A	High	High
Buttaro et al.	2010	Italy	69	CRP/ESR/IL-6	Hip	Intraoperative Culture	No	0	High	Unclear
Piper et al.	2010	USA	518	CRP/ESR	Knee/Hip	Compositive Standard	No	0	High	Unclear
Worthington et al.	2010	UK	46	CRP/ESR/IL-6	Hip	Compositive Standard	N/A	N/A	High	Low
Parvizi et al.	2011	USA	59	CRP/sCRP	Knee	Compositive Standard	N/A	N/A	High	Unclear
Parvizi et al.	2011	USA	108	LE	Knee	Compositive Standard	Yes	1	High	Unclear
Jacovides et al.	2011	USA	74	sCRP/sIL-6	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
Johnson et al.	2011	USA	113	CRP/ESR	Knee	Compositive Standard	N/A	N/A	High	Unclear
Randau et al.	2011	Germany	103	CRP/WBC/IL-6/PCT	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
Cipriano et al.	2012	USA	871	CRP/ESR/sWBC/PMN	Knee/Hip	Compositive Standard	Yes	61	High	Low

Schwartz et al.	2012	Germany	172	CRP/ESR/sWBC/PMN	Knee	Compositive Standard	Yes	6	High	Low
Parvizi et al.	2012	USA	63	sCRP	Knee/Hip	Compositive Standard	Yes	11	High	Unclear
Mihalic et al.	2012	Slovenia	206	sWBC/PMN	Hip	Compositive Standard	N/A	N/A	High	Unclear
Wetters et al.	2012	USA	93	LE	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
Zmistowski et al.	2012	USA	150	sWBC/PMN	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
Fink et al.	2012	Germany	100	CRP	Hip	Compositive Standard	Yes	7	Unclear	High
Toossi et al.	2012	USA	1856	WBC	Knee/Hip	Compositive Standard	N/A	N/A	High	Low
Gollwitzer et al.	2013	Germany	35	IL-6/sTNF-a/sIL-6/sIL-1 β	Knee/Hip	Compositive Standard	Yes	N/A	High	High
Wyles et al.	2013	USA	39	CRP/ESR/sWBC/PMN	Hip	Intraoperative Culture	N/A	N/A	High	Unclear
Dinneen et al.	2013	UK	75	sWBC/PMN	Knee/Hip	Compositive Standard	No	0	High	Unclear
Vanderstappen et al.	2013	Belgium	44	sCRP	Knee	Compositive Standard	N/A	N/A	High	Unclear
Alijanipour et al.	2013	USA	1962	CRP/ESR	Knee/Hip	MSIS	No	0	High	Unclear
Miyamae et al.	2013	Japan	81	CRP	Knee/Hip	Compositive Standard	No	0	High	Low
El-Khier et al.	2013	Egypt	40	IL-6	Knee/Hip	Intraoperative Culture	N/A	N/A	High	Low
Glehr et al.	2013	Austria	124	CRP/WBC/IL-6/PCT	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
Bingham et al.	2014	USA	61	CRP/ESR/WBC/ α - Defensin/Aspiration Culture	Knee/Hip	MSIS	No	0	High	High
Cross et al.	2014	USA	110	Aspiration Culture	Hip	Intraoperative Culture	N/A	N/A	High	Unclear
Ryu et al.	2014	Korea	89	Aspiration Culture	Knee	Compositive Standard	N/A	N/A	High	Unclear
Ronde-Oustau et al.	2014	France	31	CRP/sCRP	Knee	MSIS	Yes	2	High	Unclear
Tetreault et al.	2014	USA	119	CRP/sCRP	Knee/Hip	MSIS	Yes	11	High	Unclear
Randau et al.	2014	Germany	120	CRP/WBC/IL-6/PCT/sIL-6	Knee/Hip	Compositive Standard	No	0	High	Unclear
Deirmengian et al.	2014	USA	149	sCRP/ α -Defensin	Knee/Hip	MSIS	Yes	N/A	High	High
Deirmengian et al.	2014	USA	95	sCRP/sIL-1 β /sIL-6/ α -Defensin	Knee/Hip	MSIS	Yes	11	High	Unclear
Tischler et al.	2014	USA	189	LE	Knee/Hip	MSIS	N/A	N/A	Unclear	Unclear

Chalmers et al.	2014	USA	253	sWBC/PMN	Hip	Compositive Standard	N/A	N/A	High	Unclear
Liu et al.	2014	USA	38	CRP/ESR	Knee	MSIS	Yes	8	High	Unclear
Milone et al.	2014	USA	98	CRP/ESR/WBC	Hip	Intraoperative Culture	No	0	High	High
Elgeidi et al.	2014	Egypt	44	CRP/ESR/IL-6/WBC	Knee/Hip	Compositive Standard	No	0	High	Unclear
Friedrich et al.	2014	Germany	120	CRP/WBC	Knee/Hip	Compositive Standard	No	0	High	Unclear
Cansü et al.	2014	Turkey	31	CRP/ESR	Hip	Intraoperative Culture	N/A	N/A	High	Unclear
Claassen et al.	2014	Germany	77	CRP/WBC	Knee	Compositive Standard	N/A	N/A	High	Unclear
Wu et al.	2014	China	156	CRP/ESR	Knee/Hip	Compositive Standard	N/A	N/A	High	Low
Shen et al.	2015	China	110	Aspiration Culture	Knee/Hip	Compositive Standard	No	0	High	Unclear
Omar et al.	2015	Germany	80	CRP/ESR/sWBC/PMN/sCRP	Hip	Compositive Standard	N/A	N/A	High	High
Buttaro et al.	2015	Argentina	76	sCRP	Hip	MSIS	No	0	High	Unclear
Shafafy	2015	UK	103	LE	Knee/Hip	IDSA	No	0	High	Unclear
Chalmers et al.	2015	USA	433	sWBC/PMN	Hip	Compositive Standard	N/A	N/A	High	Unclear
Yuan et al.	2015	China	71	CRP/WBC/PCT	Hip	Compositive Standard	No	0	High	Low
Hoell et al.	2016	Germany	115	CRP/sWBC	Knee/Hip	Intraoperative Culture	Yes	5	High	Low
Frangiamore et al.	2016	USA	78	CRP/ESR/ α -Defensin	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Kwon et al.	2016	USA	62	CRP/ESR/sWBC/PMN	Hip	MSIS	N/A	N/A	High	Unclear
Shah et al.	2016	USA	121	CRP/ESR/sWBC/PMN	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Frangiamore et al.	2016	USA	90	sTNF-a/sIL-6/sIL-1 β	Knee/Hip	MSIS	Yes	6	High	Unclear
Choi et al.	2016	USA	138	sWBC	Hip	MSIS	No	0	High	Unclear
Boettner et al.	2016	USA	77	sWBC	Knee/Hip	Intraoperative Culture	No	0	Unclear	Unclear
Kasperek et al.	2016	USA	40	α -Defensin	Knee/Hip	MSIS	N/A	N/A	High	Unclear
De Vecchi et al.	2016	Italy	129	sCRP/LE	Knee/Hip	Compositive Standard	N/A	N/A	High	Low
Claassen et al.	2016	Germany	32	CRP/WBC	Knee	Compositive Standard	N/A	N/A	High	Unclear

Berger et al.	2017	Belgium	121	CRP/ESR/sWBC/PMN/ α -Defensin/Aspiration Culture	Knee/Hip	MSIS	Yes	N/A	High	High
Rothenberg et al.	2017	USA	341	CRP/ESR/sWBC/PMN/Aspiration Culture	Knee/Hip	MSIS	N/A	N/A	High	High
Pohlig et al.	2017	Germany	20	CRP/ESR/Aspiration Culture	Hip	MSIS	N/A	N/A	High	Unclear
Fernández-Sampedro et al.	2017	Spain	495	CRP/Aspiration Culture	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
Shahi et al.	2017	USA	195	CRP/ESR/LE/D-Dimer	Knee/Hip	MSIS	Yes	N/A	High	Unclear
Shahi et al.	2017	USA	4662	CRP/ESR/PMN	Knee/Hip	MSIS	Yes	727	High	High
Zmistowski et al.	2017	USA	129	CRP/ESR/sWBC/PMN	Knee/Hip	Intraoperative Culture	N/A	N/A	High	Unclear
Li et al.	2017	China	93	LE	Knee/Hip	MSIS	Yes	6	High	Unclear
Bonanzinga et al.	2017	Germany	156	α -Defensin	Knee/Hip	ICM	Yes	N/A	High	Unclear
Gallo et al.	2017	Czech	391	sWBC/PMN	Knee/Hip	Compositive Standard	Yes	N/A	High	Unclear
Sousa et al.	2017	Portugal	55	sWBC/PMN/sCRP	Knee/Hip	Compositive Standard	Yes	N/A	High	Unclear
Higuera et al.	2017	USA	453	sWBC/PMN	Hip	MSIS	No	0	High	Low
Koh et al.	2017	Korea	60	LE	Knee	MSIS	No	0	High	Unclear
Balato et al.	2017	Italy	51	sWBC/PMN/ α -Defensin/	Knee	ICM	No	0	High	Unclear
Kawamura et al.	2017	Japan	51	sWBC/PMN/sCRP	Hip	MSIS	N/A	N/A	High	Low
Suda et al.	2017	Germany	30	α -Defensin	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Wang et al.	2017	China	63	LE	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Kheir et al.	2017	USA	77	LE	Knee/Hip	Intraoperative Culture	N/A	N/A	High	Low
Ruangsomboon et al.	2017	Thailand	46	LE	Knee	ICM	N/A	N/A	High	Unclear
Lausmann et al.	2017	Germany	59	LE	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
George et al.	2017	Cleveland	44	CRP/ESR	Knee/Hip	MSIS	Yes	44	High	Unclear
Lindsay et al.	2017	USA	21	CRP/ESR	Knee/Hip	MSIS	N/A	N/A	High	Unclear

Kuo et al.	2018	China	214	CRP/ESR/sWBC/PMN/Aspiration Culture	Knee/Hip	MSIS	N/A	N/A	Unclear	Unclear
Riccio et al.	2018	Italy	73	sWBC/ α -Defensin/LE/Aspiration Culture	Knee/Hip	MSIS	Yes	3	High	Unclear
De Vecchi et al.	2018	Italy	66	sWBC/sCRP/LE/ α -Defensin/Aspiration Culture	Knee/Hip	ICM	Yes	N/A	High	Unclear
Fink et al.	2018	Germany	116	CRP/Aspiration Culture	Knee	Intraoperative Culture	Yes	5	High	Unclear
Fang et al.	2018	China	71	Aspiration Culture	Knee/Hip	Compositive Standard	Yes	5	High	High
Larsen et al.	2018	Denmark	96	Aspiration Culture	Knee/Hip	MSIS	N/A	N/A	High	High
Morgenstern et al.	2018	Germany	142	Aspiration Culture	Knee/Hip	EBJIS	N/A	N/A	High	Unclear
Huang et al.	2018	China	67	Aspiration Culture	Knee/Hip	Compositive Standard	N/A	N/A	High	Unclear
Renz et al.	2018	Germany	212	CRP/LE/ α -Defensin	Knee/Hip	MSIS/IDSA/EBJIS	Yes	5	High	Unclear
Dwyer et al.	2018	USA	205	ESR/sWBC/PMN	Knee/Hip	MSIS	Yes	11	High	Unclear
Erdemli et al.	2018	Turkey	88	CRP/sCRP/IL-6/sIL-1 β /sTNF-a/	Knee/Hip	MSIS	Yes	8	High	Unclear
Gallo et al.	2018	Czech	197	IL-6/sCRP/sIL-6	Knee/Hip	MSIS	Yes	19	High	High
Shohat et al.	2018	USA	1220	CRP/ESR/sWBC/PMN/ α -Defensin	Knee/Hip	MSIS	Yes	110	High	High
Tahta et al.	2018	Turkey	38	CRP/ESR/sWBC/PMN/PCT/sCRP/ α -Defensin	Knee	MSIS	Yes	38	Unclear	High
Kheir et al.	2018	USA	1095	CRP/ESR/sWBC/PMN	Knee/Hip	ICM	N/A	N/A	High	High
Kelly et al.	2018	USA	39	α -Defensin	Knee/Hip	MSIS	Yes	2	High	Unclear
Plate et al.	2018	Switzerland	109	α -Defensin	Knee/Hip	MSIS	Yes	7	High	Unclear
Stone et al.	2018	USA	183	sCRP/ α -Defensin	Knee/Hip	MSIS	Yes	N/A	High	Unclear

Zahar et al.	2018	Germany	337	sWBC/PMN/LE	Knee/Hip	MSIS	Yes	N/A	High	Unclear
Balato et al.	2018	Italy	167	sWBC/PMN	Knee	ICM	No	0	High	Unclear
Sigmund et al.	2018	Germany	71	α -Defensin	Knee/Hip	MSIS/IDSA/EBJIS	N/A	N/A	High	Unclear
De Saint Vincent et al.	2018	France	41	α -Defensin	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Gehrke et al.	2018	Germany	195	α -Defensin	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Kanwar et al.	2018	USA	70	α -Defensin	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Li et al.	2018	China	204	LE	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Sebastian et al.	2018	India	40	CRP/ESR	Knee/Hip	MSIS	Yes	7	High	Unclear
Stylianakis et al.	2018	Greece	79	CRP/ESR/WBC	Knee/Hip	MSIS	Yes	2	High	Unclear
Sa-Ngasoongsong et al.	2018	Thailand	32	PCT	Knee/Hip	ICM	Yes	2	High	Unclear
Wouthuyzen-Bakker et al.	2018	Canada	52	CRP/ESR	Knee/Hip	Compositive Standard	Yes	4	High	Low
Tani et al.	2018	Greece	114	CRP/ESR	Knee/Hip	Compositive Standard	N/A	N/A	High	Low
Ettinger et al.	2019	Germany	72	α -Defensin/sIL-6/sCRP	Knee/Hip	Intraoperative Culture	N/A	N/A	High	Low
Benedetto et al.	2019	Italy	50	LE	Knee/Hip	MSIS	N/A	N/A	High	Low
Ding et al.	2019	Singapore	70	ESR/sWBC/PMN/ α -Defensin	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Huang et al.	2019	China	101	CRP/ESR/D-Dimer	Knee/Hip	MSIS	No	0	High	High
Kleiss et al.	2019	Germany	202	α -Defensin	Knee/Hip	MSIS	Yes	13	High	Unclear
Lazarides et al.	2019	UK	90	sWBC/PMN	Knee/Hip	MSIS	Yes	90	Unclear	Unclear
Li et al.	2019	China	439	CRP/ESR/WBC/D-Dimer/ Fibrinogen	Knee/Hip	MSIS	No	0	High	Unclear
Plate et al.	2019	Switzerland	171	sCRP	Knee/Hip	MSIS	Yes	5	Unclear	Unclear

Qin et al.	2019	China	122	CRP/ESR/D-Dimer	Knee/Hip	MSIS	No	0	Unclear	High
Salari et al.	2019	Italy	72	Calprotectin	Knee	ICM	No	0	Low	High
Schiffner et al.	2019	Germany	108	CRP/WBC	Hip	Compositive Standard	N/A	N/A	High	Unclear
Stone et al.	2019	USA	52	α -Defensin	Knee/Hip	MSIS	Yes	5	High	High
Xiong et al.	2019	China	80	CRP/ESR/D-Dimer	Knee/Hip	MSIS	No	0	Unclear	High
Xu et al.	2019	China	318	CRP/ESR/IL-6/D-Dimer/FDP	Knee/Hip	MSIS	No	0	High	Unclear
Zagra et al.	2019	Italy	119	LE	Hip	MSIS	Yes	N/A	High	Unclear
Fu et al.	2019	China	30	CRP/ESR	Knee/Hip	MSIS	No	0	High	Low
Xu et al.	2019	China	102	Fibrinogen	Hip	MSIS	N/A	N/A	Low	High
Trotter et al.	2020	UK	69	Calprotectin	Knee/Hip	ICM	N/A	N/A	High	Unclear
De Saint Vincent et al.	2020	France	106	α -Defensin	Knee/Hip	ICM	N/A	N/A	High	Unclear
Fink et al.	2020	Germany	390	CRP	Knee/Hip	ICM	No	0	High	Low
Dijkman et al.	2020	Netherlands	89	LE	Knee/Hip	MSIS	Yes	12	High	Low
Wang et al.	2020	China	63	Aspiration Culture	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Bin et al.	2020	China	90	CRP/ESR/Fibrinogen	Knee/Hip	MSIS	No	0	Low	Unclear
Wu et al.	2020	China	136	CRP/ESR/Fibrinogen/D-Dimer/FDP	Knee/Hip	MSIS	N/A	N/A	High	Unclear
Xu et al.	2020	China	360	CRP/ESR/Fibrinogen/PLT	Knee/Hip	MSIS	No	0	Low	High
Bingham et al.	2020	USA	164	CRP/ESR	Knee/Hip	MSIS	No	0	Unclear	High
Qin et al.	2020	China	122	CRP/ESR/D-Dimer	Knee/Hip	MSIS	No	0	Low	High
Qin et al.	2020	China	50	CRP/ESR/PMN	Knee/Hip	MSIS	No	0	Low	High
Klim et al.	2020	Austria	124	CRP/WBC/IL-6/PCT/Fibrinogen	Knee/Hip	MSIS	No	0	High	Unclear

Paziuk et al.	2020	USA	4939	CRP/ESR/PVR	Knee/Hip	MSIS	No	0	High	Low
Pannu et al.	2020	USA	111	D-Dimer	Knee/Hip	ICM	N/A	N/A	High	High
Ackmann et al.	2020	Germany	119	CRP/D-Dimer/IL-6	Knee/Hip	MSIS	No	0	High	Unclear
Fang et al.	2020	China	38	Aspiration Culture	Knee/Hip	MSIS	No	0	Low	High
Wang et al.	2020	China	157	CRP/ESR/D-Dimer/Fibrinogen/FDP	Knee/Hip	MSIS	No	0	Unclear	High
Zhang et al.	2020	China	63	Calprotectin	Knee/Hip	MSIS	No	0	Low	High
Levent et al.	2021	Germany	260	CRP/PMN/sWBC/LE/ α -Defensin	Knee/Hip	ICM	N/A	N/A	High	Unclear
Yu et al.	2021	China	139	CRP/IL-6	Knee/Hip	MSIS	N/A	N/A	High	Low
Yu et al.	2021	China	130	LE/ α -Defensin	Knee/Hip	EBJIS	N/A	N/A	High	Low
Deirmengian et al.	2021	USA	228	CRP/ESR/sWBC/PMN/ α -Defensin	Knee/Hip	MSIS	Yes	N/A	Low	High
Praz et al.	2021	France	152	CRP	Knee/Hip	MSIS	N/A	N/A	Low	Unclear
Grzelecki et al.	2021	Poland	133	CRP/ESR/D-Dimer	Knee/Hip	ICM	No	0	High	Unclear
Chisari et al.	2021	USA	259	CRP/ESR/ LE /Fibrinogen/ sCRP/sWBC/D-Dimer/ α -Defensin	Knee/Hip	ICM	N/A	N/A	High	High
Sahin et al.	2021	Turkey	62	CRP/ESR/PVR	Knee/Hip	ICM	No	0	High	Unclear
Grzelecki et al.	2021	Poland	195	Calprotectin	Knee/Hip	ICM	Yes	25	High	Unclear
Wang et al.	2021	China	93	CRP/ESR/sIL-1 β /PMN	Knee/Hip	MSIS	No	0	Unclear	High
Yin et al.	2021	China	35	CRP/ESR/IL-6/PCT/D-Dimer/ Aspiration Culture	Knee/Hip	MSIS	No	0	High	Unclear
Xu et al.	2021	China	65	CRP/ESR/IL-6/FDP/D-Dimer	Knee/Hip	ICM	Yes	N/A	High	High
Sigmund et al.	2021	Austria	176	CRP/WBC/PMN/NLR/PVR/ Fibrinogen	Knee/Hip	EBJIS	N/A	N/A	High	Low

Huang et al.	2021	China	149	CRP/ESR/PVR/Fibrinogen/D-Dimer	Knee/Hip	MSIS	Yes	64	High	Low
Qiao et al.	2021	China	210	CRP/ESR/PVR/Fibrinogen/ D-Dimer/FDP/PLT	Knee/Hip	MSIS	N/A	N/A	Low	Unclear
Wang et al.	2021	China	97	CRP/ESR/sCRP/PMN	Knee/Hip	MSIS	No	0	Unclear	High
Ivy et al.	2021	USA	99	α -Defensin	Knee/Hip	MSIS/IDSA	N/A	N/A	High	Unclear
Shohat et al.	2021	USA	122	LE/ α -Defensin	Knee/Hip	ICM	N/A	N/A	High	High
Abdo et al.	2021	Brazil	53	α -Defensin	Knee	MSIS	Yes	12	High	Low
Li et al.	2021	China	50	CRP/ESR/PCT/ α -Defensin/D-Dimer	Knee/Hip	MSIS	No	0	Low	High
Tirumala et al.	2021	USA	538	CRP/ESR/PMN/sWBC/PLT/PVR	Knee	ICM	N/A	N/A	High	Unclear
Warren et al.	2021	USA	123	Calprotectin	Knee	MSIS	N/A	N/A	Low	High
Ye et al.	2021	China	158	CRP/ESR/NLR	Knee/Hip	MSIS	No	0	Low	Unclear
Klemt et al.	2022	USA	464	CRP/ESR/PMN/sWBC/MLR/NLR/ PLR/PVR	Hip	MSIS	No	0	Low	High
Baker et al.	2022	USA	588	CRP/ESR/PMN/sCRP/sWBC/ α -Defensin	Knee/Hip	ICM	No	0	High	Low
Kuo et al.	2022	Taiwan, China	76	CRP/ESR/D-Dimer/sWBC/LE/ α -Defensin/PMN/Aspiration Culture	Knee/Hip	ICM	N/A	N/A	High	Low
Grassi et al.	2022	Italy	93	Calprotectin	Knee	ICM	N/A	N/A	Low	High
Shang et al.	2022	China	206	CRP/ESR/PLT/PCT/PVR	Knee/Hip	MSIS	No	0	High	Unclear
Liu et al.	2022	China	58	CRP/ESR/PCT/D-Dimer	Knee/Hip	MSIS	N/A	N/A	High	Low
Xu et al.	2022	China	543	CRP/ESR//Fibrinogen/IL-6/ PLT/MLR/NLR/PLR	Knee/Hip	ICM	N/A	N/A	High	High

Huang et al.	2022	China	99	CRP/ESR/PMN	Knee/Hip	MSIS	No	0	High	Low
Jiao et al.	2022	China	115	CRP/ESR/NLR	Knee/Hip	MSIS	No	0	Low	Unclear
Qin et al.	2022	China	70	CRP/ESR/IL-6/sIL-6/PMN/D-Dimer	Knee/Hip	MSIS	Yes	30	Unclear	High
Xu et al.	2022	China	63	CRP/ESR/Fibrinogen/NLR	Knee/Hip	ICM	N/A	N/A	High	High
Fernandez-Sampedro et al.	2022	Spain	180	CRP/ESR/D-Dimer	Knee/Hip	IDSA	No	0	Unclear	Low
Chen et al.	2022	China	186	CRP/ESR/D-Dimer/FDP/PVR/PLT	Knee/Hip	MSIS	N/A	N/A	High	Low
Chen et al.	2022	China	52	ESR/FDP/D-Dimer/Fibrinogen	Knee/Hip	MSIS	N/A	N/A	Unclear	High
Maimaiti et al.	2022	China	246	CRP/ESR/WBC/MLR/NLR/PLR/ PVR/D-Dimer/Fibrinogen/PLT	Knee/Hip	MSIS	No	0	Low	High

- a. PLT: platelet count; NLR: neutrophil to lymphocyte ratio; MLR: monocyte to lymphocyte ratio; PLR: platelet to lymphocyte ratio; PVR: platelet to mean platelet volume ratio; FDP: fibrin degradation product; sWBC: synovial WBC; sCRP: synovial CRP; sIL-6: synovial IL-6; sTNF- α : synovial TNF- α ; sIL-1 β : synovial IL-1 β ; PCT: serum procalcitonin; LE: leucocyte esterase; MSIS: the Musculoskeletal Infection Society criteria; IDSA: the Infectious Diseases Society of America criteria; EBJS: European Bone and Joint Infection Society criteria; ICM: the International Consensus Meeting (ICM); Compositive Standard: Study-defined comprehensive PJI diagnostic evaluation criteria; IA: inflammatory arthritis; QUADAS-2: The Quality Assessment of Diagnostic Accuracy Studies 2.
- b. The articles report no information of the IA patients included.
- c. The articles report no information of the specific number of the IA patients included.