

The majority of this data was retrieved from supplemental 1 provided by Memtsoudis et. al.,[1] with the addition of the sentiment scores from this study. As a reminder, a score of 1 is positive, -1 is negative, and 0 is neutral. n/a is provided for studies that were excluded from sentiment analysis due to either not having an abstract available on PubMed or for not being indexed in the PubMed database.

## Randomized Control Trials

A: Allocation concealment B: Blinding of outcome assessors C: Blinding of participants and personnel D: Incomplete outcome data E: Other sources of bias F: Selective outcome reporting G: Sequence Generation

Study	Ref	Year	Study Type	n	A	B	C	D	E	F	G	Sentiment
Aksoy	2	2014	THA	70	Unclear	Low	High	Low	Low	Low	Low	1
Amundson	3	2017	TKA GA NA	157	Low	Low	Low	Low	Low	Low	Low	-1
Andersen	4	2012	TKA NA	40	Low	Low	Low	Low	Low	Low	Low	0
Angers	5	2019	TKA GA	90	Low	Low	Low	Low	Low	Low	Low	-1
Ashraf	6	2013	TKA NA	40	Low	Low	Low	Low	Low	Low	Unclear	0
Bali	7	2016	TKA GA	68	Low	Low	High	Low	Low	Low	Low	0
Baranovi	8	2011	TKA NA	71	Unclear	Unclear	Unclear	High	Low	Low	Low	1
Barrington	9	2005	TKA NA	108	Low	High	High	Low	Low	Low	Low	0
Beausang	10	2016	TKA NA	96	Unclear	High	High	Low	Low	Low	Unclear	0
Biswas	11	2018	TKA NA	130	Low	Low	Low	Unclear	Low	Low	Low	0
Bogoch	12	2002	THA TKA GA	115	Low	Low	Low	Low	Low	Low	Unclear	-1
Bron	13	2018	THA NA	162	Low	Low	Low	Low	Low	Low	Unclear	0
Campbell	14	2008	TKA NA	56	Unclear	Low	Unclear	High	Low	Low	Low	1
Chan	15	2013	TKA GA NA	135	Low	Low	High	Unclear	Low	Low	Low	1
Chan	16	2014	TKA	135	Unclear	Low	Unclear	Low	Low	Low	Unclear	0
Chaumeron	17	2013	TKA NA	59	Low	Low	Low	Low	Low	Low	Low	1
Chelly	18	2001	TKA GA NA	92	High	Unclear	High	Low	Low	Low	Unclear	1
Chen	19	2017	THA TKA GA	90	Low	Low	Unclear	Low	Low	Low	Low	n/a
Fahs	20	2018	THA GA	99	Low	Low	Unclear	Low	Low	Low	Low	1
Fan	21	2016	TKA GA	157	Low	Low	Low	Low	Low	Low	Low	-1
Fan	22	2017	TKA GA	65	Unclear	Unclear	Unclear	Low	Low	Low	Unclear	n/a
Fenten	23	2018	TKA NA	80	Low	Low	Low	Low	Low	Low	Low	1

<b>Gasanova</b>	24	2019	THA GA	60	Unclear	Unclear	Unclear	Unclear	Unclear	Unclear	Unclear	Unclear	1
<b>Gmez</b>	25	2017	TKA NA	574	Unclear	Unclear	Unclear	Low	Low	Low	Unclear	Unclear	1
<b>Good</b>	26	2007	TKA	42	Low	Low	Low	Low	Low	Low	Unclear	Unclear	1
<b>Goytizolo</b>	27	2016	THA NA	90	Low	Low	Low	Low	Unclear	Low	Low	Unclear	0
<b>Goytizolo</b>	28	2020	TKA NA	111	Unclear	Unclear	Unclear	Unclear	Unclear	Unclear	Unclear	Unclear	0
<b>Grosso</b>	29	2018	TKA NA	102	Low	Low	Low	Unclear	Low	Low	Low	Unclear	0
<b>Hua</b>	30	2017	THA GA	60	Unclear	Unclear	Unclear	High	Low	Low	Low	n/a	
<b>Johnson</b>	31	2017	THA GA NA	159	Low	Low	High	Low	Low	Low	Low	Unclear	0
<b>Kadic</b>	32	2009	TKA NA	53	Low	Low	Unclear	Low	Low	Low	Low	Unclear	-1
<b>Kampitak</b>	33	2018	TKA NA	57	Low	Low	Low	Low	Low	Low	Low	Unclear	1
<b>Kardash</b>	34	2007	TKA NA	40	Unclear	Low	Low	Low	Low	Low	Unclear	Unclear	-1
<b>Kayupov</b>	35	2018	TKA GA NA	91	Low	High	High	High	Unclear	Low	Low	Unclear	0
<b>Kearns</b>	36	2016	THA NA	108	Low	Low	Low	Low	Low	Low	Low	Unclear	-1
<b>Kendrii</b>	37	2017	THA GA NA	30	Unclear	Unclear	Unclear	Low	Low	Low	Unclear	n/a	
<b>Kovalak</b>	38	2015	TKA NA	60	Low	Unclear	Unclear	Low	Low	Low	Low	Unclear	1
<b>Kratz</b>	39	2015	THA GA	52	Low	Low	High	High	Low	Low	Low	Unclear	1
<b>Kuchlik</b>	40	2017	THA NA	56	Low	Low	Low	Low	Low	Low	Low	Unclear	0
<b>Kulkarni</b>	41	2019	TKA NA	100	Low	Low	Low	Low	Low	Low	Low	Unclear	-1
<b>Lee</b>	42	2011	TKA NA	78	Low	Low	Low	Low	Low	Low	Low	Unclear	0
<b>Lee</b>	43	2012	TKA GA	40	Unclear	Unclear	Unclear	Low	Low	Low	Unclear	Unclear	-1
<b>Leung</b>	44	2018	TKA NA	70	Low	Low	Low	Low	Low	Low	Low	Unclear	1
<b>Li</b>	45	2017	TKA	53	Low	Low	Low	Low	Low	Low	Low	Unclear	1
<b>Long</b>	46	2006	TKA NA	70	Unclear	Unclear	Unclear	High	Low	Unclear	Unclear	n/a	
<b>Lu</b>	47	2017	TKA GA NA	57	Unclear	Low	High	Low	Low	Low	Low	n/a	
<b>Lueznier</b>	48	2020	TKA	139	Low	Low	Low	Low	Low	Low	Low	Unclear	-1
<b>Ivarez</b>	49	2017	TKA NA	39	High	High	High	Low	Low	Low	Low	Unclear	1
<b>Marino</b>	50	2009	THA NA	150	Low	High	Unclear	Low	Low	Low	Low	Unclear	1
<b>Mei</b>	51	2017	THA GA	132	Low	Low	Unclear	Low	Low	Unclear	Low	Unclear	1
<b>Moghtadaei</b>	52	2014	TKA NA	36	Low	Low	Low	Unclear	Low	Low	Low	Unclear	1
<b>Nader</b>	53	2012	TKA NA	62	Low	Unclear	Unclear	Low	Low	Low	Low	Unclear	1

<b>Ng</b>	54	2001	TKA GA	48	Low	Low	Low	Low	Low	Low	Low	Low	-1
<b>Ng</b>	55	2012	TKA GA	32	Low	Low	Low	Low	Low	Low	Low	Low	0
<b>Nishio</b>	56	2014	THA GA NA	19	Low	Unclear	Unclear	Low	Low	Low	Low	Low	1
<b>Niskanen</b>	57	2005	TKA NA	50	Unclear	High	High	Low	Low	Low	Low	Unclear	1
<b>Peng</b>	58	2014	TKA GA	280	Low	Unclear	High	Low	Low	Low	Low	Low	1
<b>Reinhardt</b>	59	2014	TKA NA	94	Low	Low	Low	Low	Low	Low	Low	Low	0
<b>Rizk</b>	60	2017	TKA GA	75	Low	Unclear	Unclear	Low	Low	Low	Low	Low	n/a
<b>Safa</b>	61	2014	TKA NA	68	Low	Low	Low	Low	Low	Low	Low	Low	0
<b>Sahin</b>	62	2014	TKA NA	104	Low	Low	Low	Low	Low	Low	Low	Low	1
<b>Saine</b>	63	2018	TKA NA	60	Low	Low	Low	Low	Low	Low	Low	Low	0
<b>Seet</b>	64	2006	TKA NA	37	Low	Unclear	Unclear	Low	Low	Low	Low	Unclear	0
<b>Siddiqui</b>	65	2007	THA GA	34	Low	High	High	Low	Low	Low	Low	Low	1
<b>Singelyn</b>	66	1998	TKA GA NA	30	Low	Unclear	Unclear	Low	Low	Low	Low	Low	1
<b>Sites</b>	67	2004	TKA NA	40	Low	Unclear	Unclear	Low	Low	Low	Low	Low	1
<b>Sogbein</b>	68	2017	TKA NA	70	Low	Low	Low	Low	Low	Low	Low	Low	1
<b>Spangehl</b>	69	2015	TKA GA	160	Low	High	High	Low	Low	Low	Low	Low	1
<b>Stathellis</b>	70	2017	TKA GA	50	Low	Unclear	Unclear	Low	Low	Low	Low	Low	1
<b>Stevens</b>	71	2000	THA GA	60	Unclear	Unclear	Low	Low	Low	Low	Low	Unclear	1
<b>Sundarathiti</b>	72	2009	TKA NA	61	Unclear	Unclear	Unclear	Low	Low	Low	Low	Unclear	1
<b>Thybo</b>	73	2016	THA NA	100	Low	Low	Low	Unclear	Low	Low	Low	Low	0
<b>Toftdahl</b>	74	2007	TKA NA	77	Low	Unclear	Unclear	Low	Low	Low	Low	Low	0
<b>Tong</b>	75	2019	TKA NA	40	Low	Low	Low	Low	Low	Low	Low	Low	0
<b>Twyman</b>	76	1990	THA GA	20	Unclear	Unclear	Unclear	Low	High	Low	Low	Unclear	1
<b>Wall</b>	77	2017	TKA GA NA	257	Low	Low	Unclear	Unclear	Low	Low	Unclear	Low	1
<b>Wang</b>	78	2019	TKA	90	Low	Low	Low	Low	Low	Low	Low	Low	0
<b>Widmer</b>	79	2012	TKA GA	55	Low	Low	Low	Low	Low	Low	Low	Low	1
<b>Wu</b>	80	2014	TKA NA	79	Low	High	High	Unclear	Low	Low	Low	Low	1
<b>Yamamoto</b>	81	2019	THA NA	53	Low	Low	Low	Low	Low	Low	Low	Low	0
<b>Zhou</b>	82	2018	TKA GA	40	Low	Low	Low	Low	Low	Low	Low	Low	0
<b>Zinkus</b>	83	2017	TKA NA	54	Low	Low	Low	Low	Low	Low	Low	Low	1

## Observational Studies

A: Failure to adequately control for confounding B: Failure to develop and apply appropriate eligibility criteria C: Flawed measurement of exposure or outcome D: Incomplete follow-up

Study	Year	Ref	Study Type	Study Technique	Patient	A	B	C	D	Sentiment
Akkaya	2014	84	Case-control	TKA NA	27	High	Low	Low	High	-1
Alsheik	2020	85	Retrospective cohort	TKA GA NA	80	Unclear	Low	Low	Low	1
Antoni	2014	86	Retrospective cohort	TKA GA	98	High	High	Low	Low	-1
Asakura	2011	87	Retrospective cohort	TKA GA	40	High	Low	Low	Low	1
Beaupre	2012	88	Prospective cohort	TKA GA NA	39	High	Low	Low	Low	0
Cien	2015	89	Retrospective cohort	TKA	122	Low	Low	Low	Low	0
Danninger	2014	90	Retrospective cohort	THA TKA GA NA	530089	Unclear	Low	Unclear	Low	-1
DeRuyter	2006	91	Prospective cohort	TKA GA NA	50	High	Low	Unclear	Low	1
Duncan	2013	92	Retrospective cohort	TKA GA NA	108	High	Unclear	Low	Low	1
Fetherston	2011	93	Prospective cohort	THA TKA	52	Unclear	Low	Low	Unclear	0
Fukuda	2020	94	Retrospective cohort	TKA GA	5094	Low	Low	Low	Low	-1
Green	2018	95	Retrospective cohort	THA GA	20	Unclear	Low	Low	Low	0
Gwam	2018	96	Retrospective cohort	TKA	110	Unclear	Low	Low	Low	-1
Henson	2019	97	Retrospective cohort	TKA	144	Unclear	Low	Low	Low	0
Horn	2015	98	Retrospective cohort	TKA	32	Unclear	Low	Low	High	1
Jacob	2011	99	Retrospective cohort	TKA GA NA	8590	Unclear	Low	Low	Low	-1
Jacob	2011a	100	Retrospective cohort	THA	9844	Unclear	Unclear	Low	Low	-1
Kim	2012	101	Retrospective cohort	TKA NA	80	High	Low	Low	Low	0
Kinjo	2012	102	Prospective cohort	TKA GA NA	81	Unclear	Low	Low	High	-1
Kirkness	2017	103	Retrospective cohort	TKA GA NA	268	Low	Low	Low	Low	n/a
Kukreja	2019	104	Retrospective cohort	THA NA	71	Low	Low	Low	Low	1

<b>Liu</b>	2015	105	Retrospective cohort	TKA NA	1768	Unclear	Low	Low	Low	0
<b>Lovald</b>	2015	106	Retrospective cohort	TKA GA NA	35642	High	Low	Unclear	Unclear	1
<b>Mclsaac</b>	2017	107	Retrospective cohort	TKA GA NA	178214	Low	Low	Low	Low	0
<b>Memtsoudis</b>	2016	107	Retrospective cohort	TKA GA NA	719426	Low	Low	Low	Low	-1
<b>Memtsoudis</b>	2016	108	Retrospective cohort	THA GA NA	342726	Low	Low	Low	Low	-1
<b>Peters</b>	2006	109	Retrospective cohort	THA TKA GA NA	100	High	High	Low	High	0
<b>Pope</b>	2015	110	Retrospective cohort	TKA GA NA	294	High	Low	Low	Low	0
<b>Raimer</b>	2007	111	Prospective cohort	TKA GA NA	42	Unclear	Low	Low	High	0
<b>Rajeev</b>	2016	112	Prospective cohort	TKA GA NA	114	High	High	Low	Low	1
<b>Rames</b>	2019	113	Retrospective cohort	TKA	693	Low	Low	Low	Low	0
<b>Roberts</b>	2019	114	Retrospective cohort	TKA	236	Low	Low	Low	Low	1
<b>Schmidt</b>	2009	115	Retrospective cohort	TKA GA NA	200	Unclear	Unclear	Low	Low	-1
<b>Schwab</b>	2019	116	Retrospective cohort	TKA	224	Unclear	Low	Low	Low	1
<b>Simonsen</b>	2011	117	Prospective cohort	TKA NA	67	Unclear	High	Low	Low	1
<b>Singelyn</b>	1999	118	Prospective cohort	THA GA NA	1274	High	Low	Low	Low	1
<b>Sporer</b>	2016	119	Retrospective cohort	TKA NA	597	Unclear	Low	Low	Low	0
<b>Sugar</b>	2011	120	Prospective cohort	TKA NA	28	Unclear	Low	Low	Low	1
<b>Suthersan</b>	2015	121	Prospective cohort	TKA GA NA	46	Unclear	Low	Low	Low	1
<b>Tetsunaga</b>	2016	122	Retrospective cohort	THA GA	62	High	High	Low	Low	0
<b>Willett</b>	2019	123	Retrospective cohort	TKA	151	High	Low	Low	Low	1

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