

Appendix 1

Overview of the publication bias test results of every meta-analysis performed

MedCalc's meta-analysis reports include two tests to detect possible publication bias: Egger's test and Begg's rank test. Egger's test is a test for the Y intercept =0 from a linear regression of normalized effect estimate (estimate divided by its standard error) against precision (reciprocal of the standard error of the estimate). Begg's test assesses if there is a significant correlation between the ranks of the standardized effect sizes and the ranks of their variances. For both tests, when the (two-sided) P value is low, this is an indication of publication bias (MedCalc Software version 22.021).

Meta-analysis [§]	Egger's test		Begg's test	
	Intercept (95% CI)	P value	Kendall's Tau	P value
cCLP in RA versus HC (<i>Figure 2A</i>)	-1,18 (-6.72 to 4.37)	0.6622	0.2857	0.0700
cCLP in RA versus HC excluding Bühlmann (<i>Figure 2B</i>)	-3.31 (-9.46 to 2.85)	0.2686	0.2667	0.1497
cCLP in RA versus HC in studies adhering pre-analytical conditions (<i>Figure 3A</i>)	-4.09 (-12.76 to 4.59)	0.3189	0.1212	0.5833
cCLP in RA versus HC in studies adhering pre-analytical conditions excluding Bühlmann (<i>Figure 3B</i>)	-9.12 (-18.61 to 0.38)	0.0571	-0.1429	0.6207
cCLP in RA versus HC in studies non-compliant to pre-analytical conditions excluding Bühlmann (<i>Figure 4</i>)	4.43 (-2.35 to 11.08)	0.1630	0.3571	0.2160

[§], for details on meta-analysis, cfr. main text and figures. cCLP, circulating calprotectin; RA, rheumatoid arthritis; HC, healthy control; CI, confidence interval.

Table S1 Overview of the studies included in the meta-analysis, including study characteristics and extracted data

Study	Design	Assay	Sample type	Pre-centrifugation time	Conservation temperature	Number of		Calprotectin mean [SD] in ng/mL	
						RA	Controls	RA	Controls
Radwan, 2021	CS	Biovendor GmbH, Kassel	S	NS	NS	47	33	2,780 [890]	840 [500]
El-Kady, 2021	CS	Shanghai Korain Biotech ELISA	S	Immediately	-80 °C	25	30	457 [667]	95 [143]
Torgutalp, 2021	CS	Human Calprotectin ELISA Kit, Elabscience Biotechnology Co.	S	≤2 h	-80 °C	80	30	96,3 [46]	840 [50]
Jarlborg, 2020	CS + L	QUANTA Lite ELISA, Werfen	S	NS	NS	969	72	2,867 [1,930]	1,333 [908]
Wang, 2019	CS	Legend Max, Human MRP8/14, Biolegend	S	NS	NS	162	57	3,500 [3,200]	2,500 [800]
Van Hoovels, 2019	CS	MRP8/14 ELISA, Bühlmann; Liason Assay, Diasorin; QUANTA Lite ELISA, Werfen; EliA Calprotectin 2, Thermo Fisher	S/E	30 min after clotting	-20 °C	111	20	7,270 [5,840]	1,710 [690]
						111	20	3,690 [3,780]	1,000 [350]
						111	20	3,750 [5,390]	930 [270]
						111	20	4,580 [5,710]	900 [340]
Hurnakova, 2018	CS	MRP8/14 ELISA, Bühlmann	S	NS	-80 °C	160	32	3,300 [4,000]	1,900 [1,200]
Kopeć-Mędrek, 2018	L	PhiCal Calprotectin ELISA, Immundiagnostik, Bensheim	S	NS	-20 °C	35	10	2,422 [2,015]	405 [212]
Nielsen, 2018	L	MRP8/14 ELISA, Bühlmann	E/H	Immediately	-140 °C	40	96	10,110 [8,427]	563 [331]
Jonsson, 2017	L	CALPROLAB Elisa, CALPRO AS, Norway	E	≤30 min	-70 °C	215	100	1,282 [1,245]	587 [283]
Nordal, 2017	L	CALPROLAB Elisa, CALPRO AS, Norway	E	≤1 h	-20 °C	141	141	1,265 [937]	589 [289]
Mansour, 2017	CS	In house-ELISA	S	NS	NS	44	20	1,902 [804]	631 [203]
Inciarte-Mundo, 2016	CS	CALPROLAB Elisa, CALPRO AS, Norway	S	NS	-80 °C	87	40	3,247 [4,998]	2,280 [3,537]
Acar, 2016	L	Immundiagnostik-Bensheim ELISA kit	S	Centrifugated 10 min 3,000 rpm	-80 °C	28	28	359 [137]	274 [89]
Inciarte-Mundo, 2015	CS	CALPROLAB Elisa, CALPRO AS, Norway	S	NS	NS	33	40	3,200 [2,000]	1,500 [800]
Cerezo, 2011	L	MRP8/14 ELISA, Bühlmann	S	Immediately	-80 °C	43	32	5,990 [880]	1,920 [1,160]
De Seny, 2008	CS	Hycult Biotechnology	S	30 min after clotting	-80 °C	34	36	1,380 [2,509]	95 [336]
De Rycke, 2005	CS	In house ELISA	S	NS	NS	40	20	4,225 [8,597]	363 [439]

CS, cross-sectional; L, longitudinal; E, EDTA; H, heparin; NS, not specified; S, serum; RA, rheumatoid arthritis; SD, standard deviation.