

Supplementary Table 1. Quality assessment of the included studies.

Author	Year	QoPS score	Study participation	Study attrition	Prognostic factor measurement	Outcome measurement	Confounding measurement and account	Analysis
Scire, C. A	2009	5	u	y	y	y	y	y
Saleem, B	2010	4	y	y	y	y	n	n
Peluso, G	2011	4	y	y	y	y	n	u
Saleem, B	2012	6	y	y	y	y	y	y
Foltz, V	2012	6	y	y	y	y	y	y
Iwamoto, T	2014	4	y	y	y	y	n	n
Yan Geng	2014	4	y	u	y	y	n	y
Ramirez Garcia, J	2014	6	y	y	y	y	y	y
Van Der Ven, M	2014	4	y	y	y	y	n	n
Brown, A. K	2008	6	y	y	y	y	y	y
Raffeiner, B	2011	4	y	y	y	y	n	n
Yoshimi, R	2013	4	y	y	y	y	n	n
Ogishima, H	2014	3	u	y	y	y	n	n

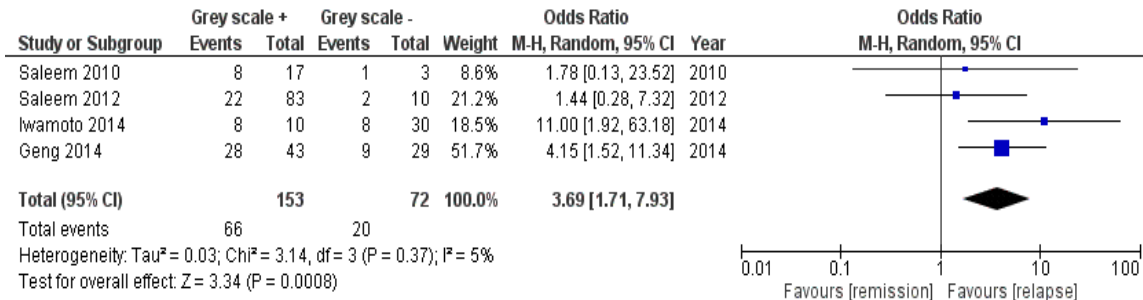
y, yes, the study described and handled the problem; n, no, the study did not describe or handle the problem; u, unclear, unclear descriptions of the problem in the study.

Supplementary Table 2. Baseline characteristics of the included patients.

Author	Year	Patients number	Remission number	Age	Female (%)	Disease duration (years)	Duration of remission (months)	TJC	SJC	DAS 28	HAQ	PD	GS	PD+ (%)	GS+ (%)	Erosion (%)	RF+ (%)	Anti-CCP+ (%)	Shared epitope (%)
Scire, C. A	2009	106	43	59.5	70.8%	3.8 months	≥3	NA	NA	NA	NA	NA	NA	41%	NA	NA	39%	29%	38%
Saleem, B	2010	27	20	50	51.9%	19 months	8	0	0	1.8	0	0	5	NA	NA	NA	55%	45%	NA
Peluso, G	2011	94	94	51.4	80.9%	61.7 months	≥6	0.8	0.4	1.1	0.3	1.7	3.4	NA	NA	NA	63.8%	58.5%	NA
Saleem, B	2012	93	93	56.6	67.7%	7.0	22	0	1	2.29	0.337	NA	NA	62.4%	89.2%	69.9%	41.9%	59.4%	60.4%
Foltz, V	2012	47	47	51.9	76.6%	31.4 months	≥2	0.5	2.4	1.09	NA	0.6	NA	14.9%	87.2%	80.9%	NA	51.1%	NA
Iwamoto, T	2014	42	40	59.6	79%	8.2	22.8	NA	NA	1.9	0.2	0	6	NA	NA	NA	83%	74%	NA
Yan Geng	2014	72	72	44.9	80.6%	5.3	NA	0.3	0.3	1.9	NA	2.9	3.4	55.6%	61.1%	51.4%	72.2%	71.4%	NA
Ramirez Garcia, J	2014	28	28	51.9	82.1%	108.2 months	NA	NA	NA	NA	NA	NA	NA	60.7%	NA	NA	NA	NA	NA
Van Der Ven, M	2014	67	67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.8%	NA	NA	NA	NA	NA
Brown, A. K	2008	102	90	57	67%	7	22	0	1	2.53	0.31	NA	NA	63%	89%	68%	64%	NA	61%
Raffaener, B	2011	109	109	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Yoshimi, R	2013	31	22	55.2	87.1%	5	16	0.29	0.48	2.06	NA	2.58	9.26	63.6%	NA	NA	85.2%	NA	NA
Ogishima, H	2014	77	30	50.6	83.1%	7.2	NA	2.2	4.2	NA	NA	NA	NA	NA	NA	NA	77.9%	84.5%	NA

Values are presented as mean or median; NA, not available

Supplementary Figure 1. Summary of the association between ultrasonic Grey scale score and risk of flare.



Supplementary Figure 2. Cumulative meta-analysis of the association between ultrasonic Power doppler score and risk of flare.

