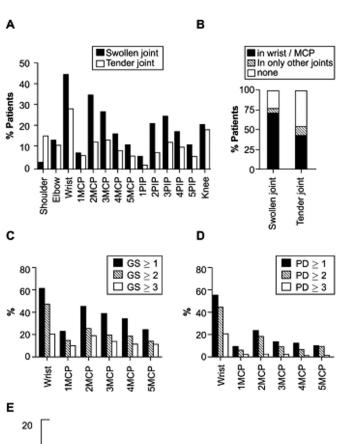
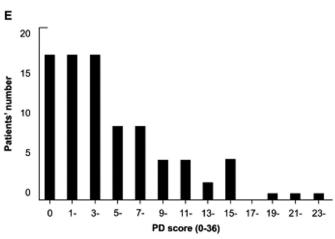
Supplementary Table I. Joint findings detected by clinical and ultrasound examination.

	Clinical examination		Ultrasound examination					
	Swollen joint	Tender joint	GS ≥1	GS ≥2	GS ≥3	PD ≥1	PD ≥2	PD ≥3
Shoulder	3.3	15.8	_			_	_	_
Elbow	13.6	11.4	_	_	_	_	_	_
Wrist	44.0	28.3	64.7	49.5	21.2	60.1	48.1	22.6
1MCP	7.6	6.5	23.4	15.2	10.3	8.7	6.0	1.6
2MCP	34.2	12.5	47.3	26.1	19.6	25.0	19.0	1.6
3MCP	26.6	13.6	40.8	20.1	14.1	13.3	9.5	1.9
4MCP	16.3	8.7	35.3	19.0	11.4	11.7	6.3	0.3
5MCP	11.4	6.0	25.0	14.1	10.9	9.8	9.2	1.6
1PIP	6.0	1.6	_	_	_	_	_	_
2PIP	21.2	7.6	_	_	_	_	_	_
3PIP	24.5	12.5	_	_	_	_	_	_
4PIP	17.4	10.3	_	_	_	_	_	_
5PIP	11.4	6.0	_	_	_	_	_	_
Knee	20.7	18.5	_	_	_	_	_	_

GS, grey scale; PD, power Doppler



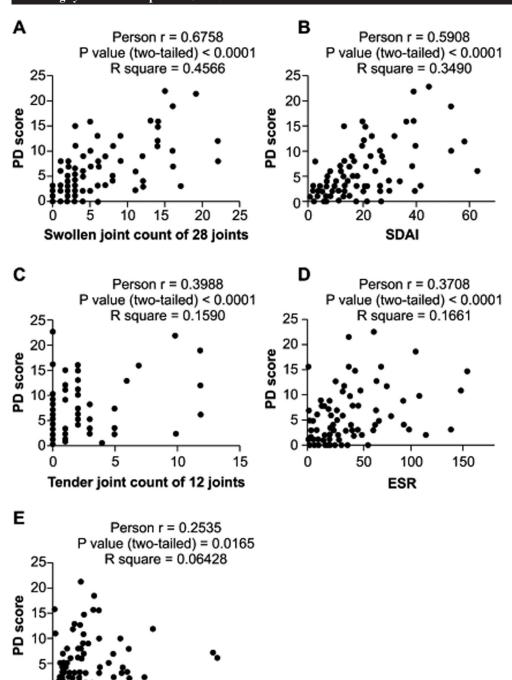


Supplementary Fig. 1.

Summary of clinical and US assessments of joints.

- A: Comparison of patients (percentage) with swelling and tenderness, for each of 28 joints examined in this study.
- **B**: Comparison of the patients (percentage) with swollen or tender wrist and MCP joints, relative to those with no swollen or tender joints and swelling or tenderness only in joints other than the wrist and MCP. MCP: metacarpophalangeal; PIP: proximal interphalangeal.
- C: GS positive joint frequency. Synovial effusion and/or hypertrophy was identified and graded on a semi-quantitative grey scale (GS) from 0 to 3. Described in detail in the patients and methods section.
- **D**: PD positive joint frequency. Synovial blood flow was evaluated by PD signals in each synovial site and graded on a semi-quantitative scale from 0 to 3. Described in detail in the patients and methods section.
- **E**: PD score distribution histogram. PD score mostly showed between 0 to 4 that might be low disease activity.

MMP-3



Supplementary Fig. 2.
Correlation coefficient analysis.
A: SJC vs. PD score (r=0.6758, p<0.0001, R square = 0.4566);
B: SDAI vs. PD score (r=0.5908, p<0.0001, R square = 0.3490);
C: TJC12 vs. PD score (r=0.3988, p<0.0001, R square = 0.1590);
D: ESR vs. PD score (r=0.3708, p<0.0001, R square = 0.1661);
E: MMP-3 vs. PD score (r=0.2535, p=0.0165, R square = 0.06428).