Supplementary Material

Supplementary Table 1. csDAMRD strategies by 3 months and RF/CCP seropositivity positive for pactiveRA and plowRA

	RF and/or CCP positive		
	Total N = 1,186	plowRA N= 719	pactive RA N= 467
No DMARD: n	26	16	10
MTX: n			
MTX mono	653	394	259
MTX combo	268	186	82
HCQ: n			
HCQ mono	140	79	61
HCQ combo	268	186	82
SSZ: n			
SSZ mono	79	36	43
SSZ combo	34	17	17

Seropositive status had 3.2% missing data n=55 missing variables of the total included patients in this study N=1,708 (plowRA =1,026 and pactiveRA = 682).

DMARD: disease-modifying anti-rheumatic drug; RA: rheumatoid arthritis; CCP: anti-cyclic citrullinated peptide antibody; RF: rheumatoid factor; HCQ: Hydroxychloroquine; MTX: methotrexate; SSZ: sulfasalazine; n: population size; Pactive RA defined as DAS28 > 3.2 at three times point (baseline, 3 and 12 months follow up); Plow RA defined as DAS28 > 3.2 at baseline and \leq 3.2 at 3 and 12 months follow up.

Independent predictors at baseline	Univariable analysis
	OR (95% CI)
Age (years)	0.98 (0.97,0.99)
Female gender	1.54 (1.24,1.90)
Ever smoked (referent never-smoked)	1.26 (1.01,1.57)
Black	1.55 (0.94,2.56)
Asian	1.27 (0.86,1.86)
Other	1.47 (0.80,2.69)
Ethnic minority as a group including Mixed	1.34 (0.99,1.82)
IMD (less social deprivation)	0.89 (0.86,0.93)
Symptoms duration	1.18 (1.08,1.29)
RDCI	1.14 (1.02,1.27)
Depression	2.36 (1.64,3.40)
Diabetes mellitus	1.04 (0.74,1.47)

Supplementary table 2. Univariable analysis: pactiveRA association with socioeconomic clinical and treatment variables compared to plowRA.

Hypertension	0.81 (0.62,1.05)
Lung disease	1.36 (1.00,1.83)
Gastrointestinal ulcer	1.94 (1.19,3.15)
Seropositivity	0.91 (0.76,1.10)
MSKHQ (higher scores indicate better	0.94 (0.92,0.95)
function)	
HAQ	2.51 (1.96,3.21)
Any MTX strategy*	0.68 (0.52,0.89)
Any SSZ strategy*	1.6 (1.19,2.18)
HCQ strategy*	0.74 (0.58,0.95)
Corticosteroids	1.14 (0.83,1.55)

*Any csDMARD strategy (monotherapy or combination therapy within 3 months of diagnosis).

OR: Odds ratio; CI: confidence interval; HCQ: Hydroxychloroquine; MTX: methotrexate; SSZ: sulfasalazine; IMD: Index of multiple deprivation; RDCI: rheumatic disease comorbidity index.

HAQ: Health Assessment Questionnaire; MSKHQ: This 15-item questionnaire evaluates how musculoskeletal symptoms affect day to day life across a range of domains including pain, fatigue, emotional well-being and work and social activities. Scores range from 0-56, with higher scores indicating better musculoskeletal function.