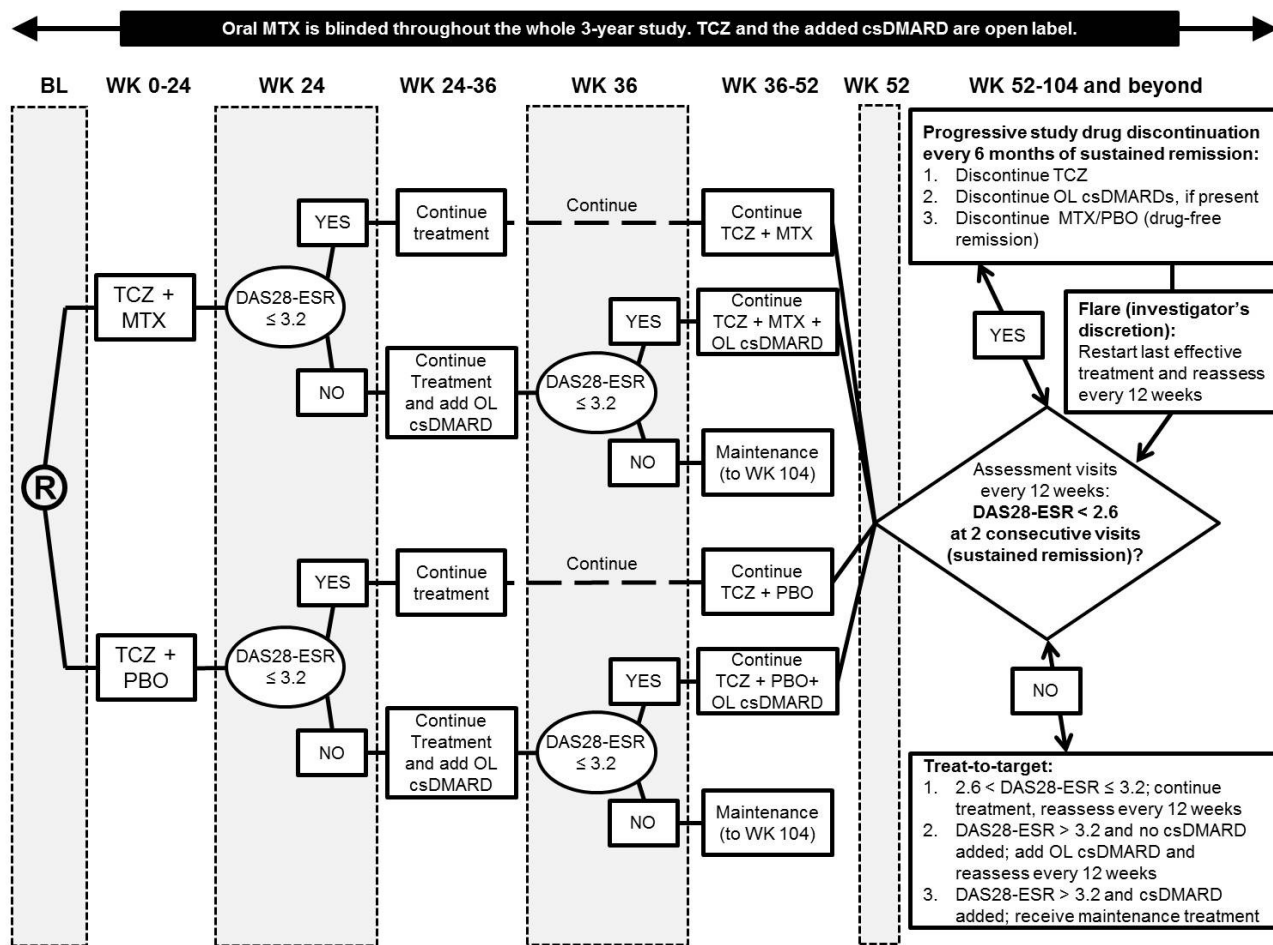


1 SUPPLEMENTAL MATERIALS

2 Supplemental Figure 1. ACT-RAY study design



3

4 BL, baseline; csDMARD, conventional synthetic disease-modifying antirheumatic drug; DAS28, Disease Activity Score in 28 joints; MTX, methotrexate; OL, open-

5 label; PBO, placebo; TCZ, tocilizumab.

- 1 **Supplemental Table 1.** Number of patients adding first or second open-label csDMARDs—
- 2 safety population

Added csDMARD, n	Add-On (N=277)			Switch (N=276)		
	Weeks 24-36	Weeks 36-52	Weeks 52-100	Weeks 24-36	Weeks 36-52	Weeks 52-100
Azathioprine	0	1	0	3	1	0
Chloroquine	7	1	1	9	1	2
Hydroxychloroquine	34	9	21	31	9	20
Leflunomide	6	4	7	15	2	7
Sulfasalazine	27	8	8	32	7	8

- 3 csDMARD, conventional synthetic disease-modifying antirheumatic drug.

1

2 **Supplemental Table 2.** Adverse events leading to patient deaths—safety population

	Age/Sex	Study Day of Death	SAE Leading to Death [onset day] (other SAE [onset day])
Add-On			
147738/0005	66/M	168	Sepsis [131] (Scrotal abscess [131]) (Acute renal failure [135]) (Skin necrosis [135]) (Congestive heart failure [138])
147645/0005	79/F	205	Sepsis [138]
147697/0009	62/M	783	Gastrointestinal carcinoma [641]
147714/0018	63/F	831	Haemorrhagic stroke [829]
Switch			
147642/0001	51/F	107	Meningitis [98]
147739/0004	32/F	104	Myocardial infarction [104]
147635/0005	63/M	458	Cardiac failure [445]
147617/0004	56/F	564	Malignant hyperthermia [559] (Cerebral haemorrhage [460]) (Gastrointestinal disorder [514])
147616/0009	64/F	550	Sudden death [550]
147622/0010	79/M	613	Death [613] (Gastric ulcer [521])

3 SAE, serious adverse event.