Supplementary File

Tables: Absolute radiographic scores (Larsen for FIN-RACO and Sharp-van der Heijde for NEO-RACO) were compared (predicted *vs*. observed) instead of the percent change from predicted, performed either on all patients or with a subdivision based on rheumatoid factor (RF). Predicted slopes of RF-positive or negative were also compared with one another.

Supplementary Table IV A. Predicted *versus* observed scores from the FIN-RACO trial.

Radiographic Outcomes	Single (n=72)			Combo (n=72)		
	Predicted	**Observed**	*p*-value[1]	**Predicted**	**Observed**	*p*-value[1]
2 years*	10.0 (6.25, 35.5)	14.5 (5.0, 23.0)	*p*=0.210	9.0 (7.0, 22.5)	5.0 (1.0, 16.5)	***p*<0.001**
5 years*‡	22.0 (13.25, 70.5)	25.0 (11.5, 34.5)	***p*=0.040**	21.0 (13.75, 48.0)	12.0 (3.25, 27.3)	***p*<0.001**

Combo: combination arm, intention-to-treat, **Single**: monotherapy arm, intention-to-treat; 1. Mann-Whitney U-test. All outcomes were reported as the median, followed by the interquartile range in parentheses: the predicted or observed Larsen radiographic score at BL, 2, and 5 years, respectively. ‡ Treatments in all groups became unrestricted after 2 years.

Supplementary Table IV A2. Predicted and observed scores from the FIN-RACO trial, divided by rheumatoid factor.

Outcomes	Rheumatoid factor (+) (n=102)			Rheumatoid factor (-) (n=42)		*p*-value
Baseline Erosions†	55 (53.9%)			18 (42.9%)		*p*=0.227[1]
Radiograph Baseline*	3.0 (1.0, 7.0)			1.0 (1.0, 7.0)		*p*=0.291[2]
Radiograph 2 years*	12.0 (3.8, 19.3)			4.0 (1.0, 17.5)		***p*=0.022[2]**
Predicted 2 years*	9.0 (7.0, 27.3)			9.0 (6.0, 24.5)		*p*=0.464[2]
Radiograph 5 years*‡	21.0 (9.0, 32.3)			11.0 (1.0, 22.8)		***p*=0.002[2]**
Predicted 5 years*‡	28.0 (16.0, 57.0)			21.0 (13.0, 48.3)		*p*=0.519[2]
	Predicted	**Observed**	*p*-value[2]	**Predicted**	**Observed**	*p*-value[2]
2 years*	9.0 (7.0, 27.3)	12.0 (3.75, 19.3)	***p*=0.021**	9.0 (6.0, 24.5)	4.0 (1.0, 17.5)	***p*<0.001**
5 years*‡	21.0 (16.0, 57.3)	21.0 (9.0, 32.3)	***p*=0.004**	21.0 (13.0, 48.3)	11.0 (1.0, 22.8)	***p*<0.001**

Combo: combination arm, intention-to-treat, **Single**: monotherapy arm, intention-to-treat; [1]Chi-Square; [2]Mann-Whitney U-test. All the following outcomes were reported as the median, followed by the interquartile range in parentheses: *the observed or predicted Larsen radiographic score at baseline (BL), 2, and 5 years, respectively. †BL erosions were reported as proportions (count, %). ‡Treatments in all groups became unrestricted after 2 years.

Supplementary Table IV B. Predicted versus observed scores from the NEO-RACO trial.

Radiographic Outcomes	Combo + aTNF (n=44)			Combo + PBO (n=46)		
	Predicted	**Observed**	*p*-value[1]	**Predicted**	**Observed**	*p*-value[1]
2 years*	13.5 (7.3, 26.5)	1.0 (1.0, 4.0)	***p*<0.001**	9.5 (7.0, 25.8)	2.5 (1.0, 5.3)	***p*<0.001**
5 years*‡	31.5 (16.3, 62.5)	2.0 (1.0, 5.8)	***p*<0.001**	21.5 (16.0, 61.8)	3.0 (1.0, 9.0)	***p*<0.001**

Combo + aTNF: combination + anti-TNF arm, intention-to-treat, **Combo + PBO**: combination + placebo arm, intention-to-treat. [1]Mann-Whitney U-test. All outcomes were reported as the median, followed by the interquartile range in parentheses: the predicted or observed Sharp-van der Heijde radiographic score at BL, 2, and 5 years, respectively. ‡Treatments in all groups became unrestricted after 2 years.

Supplementary Table IV B2. Predicted and observed scores from the NEO-RACO trial, divided by rheumatoid factor.

Outcomes	Rheumatoid factor (+) (n=67)	Rheumatoid factor (-) (n=23)	*p*-value
Baseline Erosions†	29 (43.3%)	8 (34.8%)	*p*=0.475[1]
Radiograph Baseline*	1.0 (1.0, 4.0)	1.0 (1.0, 2.0)	*p*=0.258[2]
Radiograph 2 years*	2.0 (1.0, 5.0)	1.0 (1.0, 3.0)	***p*=0.052**[2]
Predicted 2 years*	13.0 (7.0, 28.0)	10.0 (7.0, 25.0)	*p*=0.571[2]
Radiograph 5 years*‡	3.0 (1.0, 9.0)	1.0 (1.0, 4.0)	***p*=0.046**[2]
Predicted 5 years*‡	31.0 (16.0, 64.0)	22.0 (16.0, 61.0)	*p*=0.575[2]

	Predicted	**Observed**	*p*-value[2]	**Predicted**	**Observed**	*p*-value[2]
2 years*	13.0 (7.0, 28.0)	2.0 (1.0, 5.0)	***p*<0.001**	10.0 (7.0, 25.0)	1.0 (1.0, 3.0)	***p*<0.001**
5 years*‡	31.0 (16.0, 64.0)	3.0 (1.0, 9.0)	***p*<0.001**	22.0 (16.0, 61.0)	1.0 (1.0, 4.0)	***p*<0.001**

Combo + aTNF: combination + anti-TNF arm, intention-to-treat, **Combo + PBO**: combination + placebo arm, intention-to-treat; [1]Chi-Square; [2]Mann-Whitney U-test. All the following outcomes were reported as the median, followed by the interquartile range in parentheses: *the observed or predicted Sharp-van der Heijde radiographic score at baseline (BL), 2, and 5 years, respectively. †BL erosions were reported as proportions (count, %). ‡Treatments in all groups became unrestricted after 2 years.
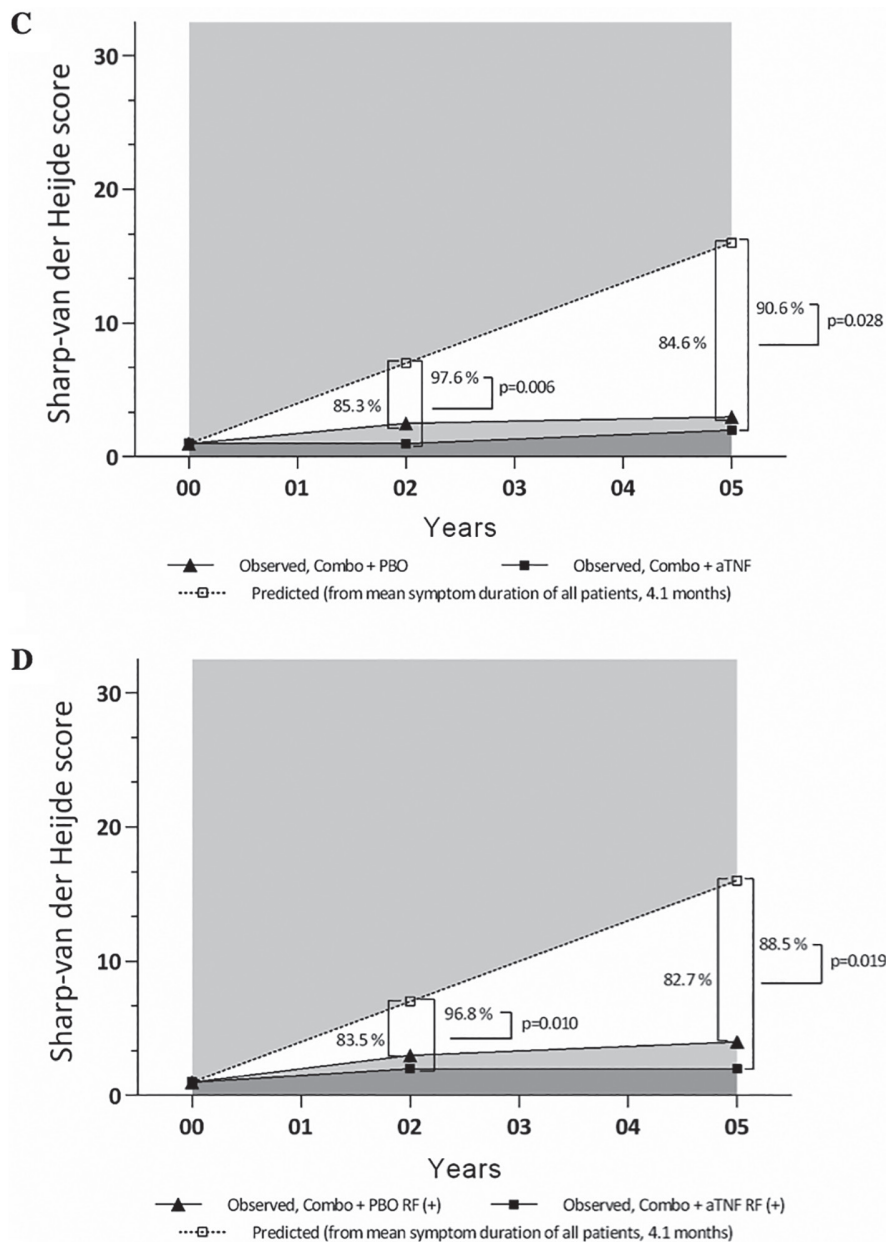
Supplementary Fig. 2. Results from the NEO-RACO trial.
C. All patients. **D**. Patients rheumatoid factor (RF) positive.
As a final sensitivity analysis, all patients (**C**) or RF-positive patients (**D**) had predicted progression simulated based on the mean symptom duration of all patients (4.1 months).