## **Supplementary Material**

**Table 1S.** ICD 9 and 10 codes for the outcomes

Outcomes	ICD-9 codes	ICD-10 codes	
ASCVD	410*and 428*	I21.* and I22.*and I 50.*	
VTE	415* and 451*-453*	I26 and I80.1-I80.2, I81, I82.2-I82.9	

## **Supplementary Results**

All VTE events were identified via questionnaires. Of the 539 VTE events, 44 (82.4%) were validated by using ICD 9/10 codes from hospital/death records. In only 95 (17.6%) patients, a protocolized interview was needed to validate the event.

Remission: 3.5%, low disease activity: 49.3%, moderate disease activity: 45.1%, high disease activity: 2.1%

The association of disease activity with VTE and ASCVD

	Remission	Low disease	Moderate disease	High disease
		activity	activity	activity
VTE	Reference	1.08 (0.68-1.77)	1.00 (0.51-1.61)	0.85 (0.39-1.67)
ASCVD	Reference	1.10 (0.74-1.63)	1.04 (0.68-1.59)	0.92 (0.55-1.56)

Table 2S. Baseline characteristics of RA patients with VTE and without any CVD

Variables	Without any CVD, N=25,070	With VTE, N=506	P value
Age, years	57.9 (13.1)	67.0 (11.8)	<0.001
Female, %	81.7	79.1	0.125
Caucasian, %	93.6	93.1	0.672
RA duration, years	13.5 (12.0)	20.0 (13.1)	<0.001
BMI, kg/m <sup>2</sup>	28.3 (6.4)	30.4 (7.8)	<0.001
Obesity, %	29.3	41.9	<0.001
Exercise, %	13.7	5.7	<0.001
RDCI (0-9)	1.6 (1.5)	2.7 (1.80)	<0.001
Ever-smoked, %	42.3	43.5	0.599
Diabetes, %	8.7	17.8	<0.001
Hypertension, %	43.5	59.9	<0.001
Pulmonary disease, %	6.2	19.4	<0.001
Prior fracture 1, %	2.3	6.9	<0.001
Prior cancerl, %	20.3	27.5	<0.001
HAQ disability (0-3)	1.1 (0.7)	1.4 (0.7)	<0.001
PAS (0-10)	3.9 (2.2)	4.6 (2.2)	<0.001
Medications			
Glucocorticoid current, %	40.1	50.4	<0.001
Glucocorticoid ever, %	70.7	85.4	<0.001
Methotrexate, %	56.3	48.2	0.001
Hydroxychloroquine, %	25.4	18.2	0.001
TNFi, %	33.2	36.0	<0.001

Other b/tsDMARDs, %	10.0	20.8	<0.001
NSAID, %	65.4	37.6	<0.001
Aspirin, %	21.0	24.3	<0.001
Statin, %	11.1	27.9	<0.001
Estrogen, %	20.9	10.3	<0.001

<sup>\*</sup>The values are mean (SD) unless indicated otherwise. ¶Pulmonary disease excluding pulmonary emboli.

[Prior fracture and cancer diagnosis > 1 year before cohort entry and not on active treatment.

RA= Rheumatoid arthritis; VTE= Venous thromboembolism; ASCVD= Atherosclerotic cardiovascular disease; CVD= Cardiovascular disease; BMI= Body mass index; RDCI= Rheumatic diseases comorbidity index; HAQ= Health assessment questionnaire; PAS= Patient activity scale; TNFi= Tumor necrosis factor-a inhibitors; b/tsDMARDs= Biological or targeted synthetic disease modifying antirheumatic drugs; NSAID= Nonsteroidal anti-inflammatory drugs.

Table 3S. The association of disease activity with VTE and ASCVD\*

	Remission	Low disease	Moderate disease	High disease
		activity	activity	activity
VTE	Reference	1.08 (0.68-1.77)	1.00 (0.51-1.61)	0.85 (0.39-1.67)
ASCVD	Reference	1.10 (0.74-1.63)	1.04 (0.68-1.59)	0.92 (0.55-1.56)

\*Remission: 3.5%, low disease activity: 49.3%, moderate disease activity: 45.1%, high disease activity: 2.1%. As the % of patients in remission or high disease activity were low, in the main analysis remission and low disease activity vs. moderate and severe disease activity were categorized in the same group.