ONLINE SUPPLEMENTARY DATA

Supplementary Table S1. TCZ dose at 6 and 12 months after initiation of TCZ in patients with low vs high comorbidity burden.

Outcome	All Initiators [N = 770]	Low Burden (mCCI < 2) [n = 575]	High Burden (mCCI ≥ 2) [n = 195]
All IV TCZ initiators, n (%)*	706 (93.8)	528 (93.6)	178 (94.2)
All SC TCZ initiators, n (%)*	47 (6.2)	36 (6.4)	11 (5.8)
Dose available at initiation, n	437	342	95
Initiated IV TCZ with dose available, n	407	316	91
Initiated IV TCZ 4 mg/kg, n	230	172	58
Dose available at 6 months, n (%)†	168 (73.0)	124 (72.1)	44 (75.9)
Increase to 8 mg/kg by 6 months, n (%)†	107 (46.5)	81 (47.1)	26 (44.8)
Dose available at 12 months, n (%)†	146 (63.5)	107 (62.2)	39 (67.2)
Increase to 8 mg/kg by 12 months, n (%)†	117 (50.9)	89 (51.7)	28 (48.3)
Initiated IV TCZ 8 mg/kg, n	177	144	33
Initiated SC TCZ with dose available, n	30	26	4
Initiated SC TCZ q2w, n	13	10	3
Dose available at 6 months, n (%)‡	7 (53.8)	6 (60.0)	1 (33.3)
Increase to qw by 6 months, n (%)‡	1 (7.7)	0	1 (33.3)
Dose available at 12 months, n (%)‡	9 (69.2)	7 (70.0)	1 (33.3)
Increase to qw by 12 months, n (%)‡	0	0	0
Initiated SC TCZ qw, n	17	16	1
Receiving TCZ at 6 months, n (%)§	579 (75.2)	434 (75.5)	145 (74.4)
Receiving IV TCZ with dose available, n	488	364	124
Receiving IV TCZ 4 mg/kg, n (%)‖	114 (23.3)	86 (23.6)	28 (22.6)
Receiving IV TCZ 8 mg/kg, n (%)‖	374 (76.6)	278 (76.4)	96 (77.4)
Receiving SC TCZ with dose available, n	40	34	6
Receiving SC TCZ q2w, n (%)‖	20 (50.0)	16 (47.1)	4 (66.7)
Receiving SC TCZ qw, n (%)‖	20 (50.0)	18 (52.9)	2 (33.3)
Receiving TCZ at 12 months, n (%)§	475 (61.7)	353 (61.4)	122 (62.6)
Receiving IV TCZ with dose available, n	412	306	106
Receiving IV TCZ 4 mg/kg, n (%)‖	69 (16.8)	49 (16.0)	20 (18.9)
Receiving IV TCZ 8 mg/kg, n (%)‖	343 (83.2)	257 (84.0)	86 (81.1)
Receiving SC TCZ with dose available, n	32	25	7
Receiving SC TCZ q2w, n (%)‖	19 (59.4)	14 (56.0)	5 (71.4)
Receiving SC TCZ qw, n (%)‖	13 (40.6)	11 (44.0)	2 (28.6)

IV, intravenous; mCCI, modified Charlson Comorbidity Index; SC, subcutaneous; TCZ, tocilizumab; qw, every week; q2w, every 2 weeks.

* Of patients with available IV/SC information.

† Of patients who received IV TCZ 4 mg/kg at initiation.

‡ Of patients who received SC TCZ q2w at initiation.

§ Of all patients.

‖ Of patients with available dose information.

Supplementary Table S2. Distribution of comorbidities included in the mCCI* among patients with mCCI score available at TCZ initiation

Comorbidity	All TCZ Initiators With mCCI Score (N = 770)	Low Comorbidity Burden (mCCI < 2) [n = 575]	High Comorbidity Burden (mCCI ≥ 2) [n = 195]	Nonobese (BMI < 30) [n = 427]	Obese (BMI ≥ 30) [n = 343]
Connective tissue disease†	195 (100)	575 (100)	195 (100)	427 (100)	343 (100)
Diabetes mellitus	83 (10.8)	0	83 (42.6)	25 (5.6)	58 (16.3)
Solid tumor cancer (excluding NMSC)	41 (5.3)	0	41 (21.0)	23 (5.2)	18 (5.)
Liver disease	40 (5.2)	0	40 (20.5)	23 (5.1)	17 (4.8)
COPD	20 (2.6)	0	20 (10.3)	12 (2.7)	8 (2.2)
Myocardial infarction	14 (1.8)	0	14 (7.2)	7 (1.6)	7 (2.0)
Stroke	14 (1.8)	0	14 (7.2)	7 (1.6)	7 (2.0)
Congestive heart failure	9 (1.2)	0	9 (4.6)	4 (0.9)	5 (1.4)
TIA	6 (0.8)	0	6 (3.1)	2 (0.4)	4 (1.1)
Lymphoma	4 (0.5)	0	4 (2.1)	4 (0.9)	0
Peptic ulcer disease	4 (0.5)	0	4 (2.1)	2 (0.4)	2 (0.6)
Peripheral vascular disease	1 (0.1)	0	1 (0.5)	1 (0.2)	0
Leukemia	0	0	0	0	0

BMI, body mass index; COPD, chronic obstructive pulmonary disease; mCCI, modified Charlson Comorbidity Index; NMSC, nonmelanoma skin cancer; TCZ, tocilizumab; TIA, transient ischemic attack.
* The mCCI was calculated as the sum of prior (history of) physician-reported comorbid conditions included in the CCI that are captured in the Corrona registry, excluding the few conditions that are not captured (dementia, kidney disease, hemiplegia and AIDS).
† Connective tissue disease was coded as "1" for all patients because the population was limited to patients with RA.

Supplementary Table S3. Distribution of mCCI by level in patients with low vs high comorbidity burden.

mCCI Level	All Initiators [N = 770]
Low mCCI, n (%)*	
1	575 (74.7)
High mCCI, n (%)*	
2	153 (19.9)
3	34 (4.4)
4	3 (0.4)
5	5 (0.6)

mCCI, modified Charlson Comorbidity Index.
* Percentage of all initiators (n = 770).

Supplementary Table S4. Distribution of weight of nonobese vs obese patients.*

Weight	All Initiators	Nonobese (BMI < 30) [n = 449]				Obese (BMI ≥ 30) [n = 356]		
		All Nonobese (BMI < 30)	Underweight (BMI < 18.5)	Normal Weight (BMI > 18.5 and ≤ 24.9)	Overweight (BMI > 25 and ≤ 29.9)	All Obese (BMI ≥ 30)	Obese Class I (BMI > 30 and ≤ 34.9)	Obese Class II or III (BMI ≥ 35)
No. patients	805	449	31	185	233	356	180	176
< 100 kg, n (%)	651 (80.9)	447 (99.6)	31 (100.0)	185 (100.0)	231 (99.1)	204 (57.3)	144 (80.0)	60 (34.1)
≥ 100 kg, n (%)	154 (19.1)	2 (0.4)	0	0	2 (0.9)	152 (42.7)	36 (20.0)	116 (65.9)

BMI, body mass index.

* The recommended starting dose of subcutaneous TCZ for adult patients weighing < 100 kg is 162 mg every other week, followed by an increase to every week based on clinical response; for patients weighing ≥ 100 kg, the recommended starting dose is 162 mg every week. The recommended starting dose of intravenous TCZ for all adult patients is 4 mg/kg every 4 weeks followed by an increase to 8 mg/kg every 4 weeks based on clinical response.

Supplementary Table S5. TCZ dose at 6 and 12 months after initiation of TCZ in nonobese vs obese patients.

Outcome	All Initiators [N = 805]	Nonobese (BMI < 30) [n = 449]	Obese (BMI ≥ 30) [n = 356]
All IV TCZ initiators, n (%)*	739 (91.8)	416 (92.7)	323 (90.7)
All SC TCZ initiators, n (%)*	48 (6.0)	23 (5.1)	25 (7.0)
Dose available at initiation, n	458	247	211
Initiated IV TCZ with dose available, n	428	231	197
Initiated IV TCZ 4 mg/kg, n	243	127	116
Dose available at 6 months, n (%)†	176 (72.4)	85 (66.9)	91 (78.4)
Increase to 8 mg/kg by 6 months, n (%)†	110 (45.3)	58 (45.7)	52 (44.8)
Dose available at 12 months, n (%)†	151 (62.1)	74 (58.3)	77 (66.4)
Increase to 8 mg/kg by 12 months, n (%)†	121 (49.8)	61 (48.0)	60 (51.7)
Initiated IV TCZ 8 mg/kg, n	185	104	81
Initiated SC TCZ with dose available, n	30	16	14
Initiated SC TCZ q2w, n	13	8	5
Dose available at 6 months, n (%)‡	7 (53.8)	6 (75.0)	1 (20.0)
Increase to qw by 6 months, n (%)‡	1 (7.7)	0	1 (20.0)
Dose available at 12 months, n (%)‡	9 (69.2)	7 (87.5)	2 (40.0)
Increase to qw by 12 months, n (%)‡	0	0	0
Initiated SC TCZ qw, n	17	8	9
Receiving TCZ at 6 months, n (%)§	603 (74.9)	342 (76.2)	261 (73.3)
Receiving IV TCZ with dose available, n	509	288	221
Receiving IV TCZ 4 mg/kg, n (%)‖	120 (23.6)	61 (21.2)	59 (26.7)
Receiving IV TCZ 8 mg/kg, n (%)‖	389 (76.4)	227 (78.8)	162 (73.3)
Receiving SC TCZ with dose available, n	41	23	18
Receiving SC TCZ q2w, n (%)‖	20 (48.8)	13 (56.5)	7 (38.9)
Receiving SC TCZ qw, n (%)‖	21 (51.2)	10 (43.5)	11 (61.1)
Receiving on TCZ at 12 months, n (%)§	494 (61.4)	287 (63.9)	207 (58.1)
Receiving IV TCZ with dose available, n	429	245	184
Receiving IV TCZ 4 mg/kg, n (%)‖	71 (16.6)	39 (15.9)	32 (17.4)
Receiving IV TCZ 8 mg/kg, n (%)‖	358 (83.4)	206 (84.1)	152 (82.6)
Receiving SC TCZ with dose available, n	33	26	7
Receiving SC TCZ q2w, n (%)‖	19 (57.6)	15 (57.7)	4 (57.1)
Receiving SC TCZ qw, n (%)‖	14 (42.4)	11 (42.3)	3 (42.9)

BMI, body mass index; IV, intravenous; SC, subcutaneous; TCZ, tocilizumab; qw, every week; q2w, every 2 weeks.

* Of patients with available IV/SC information.

† Of patients who received IV TCZ 4 mg/kg at initiation.

‡ Of patients who received SC TCZ q2w at initiation.

§ Of all patients.

‖ Of patients with available dose information.