

SUPPLEMENTAL MATERIAL

Statistical analyses

In efficacy analyses, for a given logistic regression, a covariance matrix was applied, and if the model converged, the results were reported. The first covariance matrix tried was the autoregressive matrix, denoted as AR(1). If that model failed to converge, compound symmetry was fit. The methods of restricted and maximum pseudo likelihood were tried for each of those covariance matrices. If still no convergence, then an unstructured covariance was applied using maximum pseudolikelihood. If these all failed to converge, the method of quadrature was used. For a given linear regression, an AR(1) covariance matrix was first applied, and if convergence occurred, the results were reported. If not, these covariance matrices were applied: compound symmetry, unstructured, heterogeneous AR(1) and heterogeneous compound symmetry; each of these attempts used the method of restricted maximum likelihood. If none of those converged, the PROC MIXED method of MIVQUE0 was used.

Supplemental table 1 Demographics and clinical characteristics stratified by treatment group and sex; pooled data from OPAL Broaden and OPAL Beyond

| Variable | Tofacitinib 5mg and 10mg BID | | Tofacitinib 5mg BID | | Tofacitinib 10mg BID | | ADA 40mg Q2W [†] | | Placebo | |
|--|------------------------------|-------------------|---------------------|-------------------|----------------------|-------------------|---------------------------|------------------|-------------------|-------------------|
| | Male, | Female, | Male, | Female, | Male, | Female, | Male, | Female, | Male, | Female, |
| Sex, N (%) | 217 (45.8) | 257 (54.2) | 117 (49.2) | 121 (50.8) | 100 (42.4) | 136 (57.6) | 56 (52.8) | 50 (47.2) | 100 (42.4) | 136 (57.6) |
| Age (years), mean (SD) | 48.7 (12.2) | 50.0 (12.0) | 49.8 (12.5) | 49.2 (12.3) | 47.6 (11.7) | 50.8 (11.6)* | 46.7 (10.8) | 48.2 (11.9) | 47.2 (12.6) | 49.3 (12.4) |
| Race, White, n (%) | 202 (93.1) | 245 (95.3) | 109 (93.2) | 117 (96.7) | 93 (93.0) | 128 (94.1) | 54 (96.4) | 49 (98.0) | 95 (95.0) | 127 (93.4) |
| BMI (kg/m ²), mean (SD) | 29.5 (5.4) | 30.4 (7.0) | 29.1 (5.0) | 30.5 (7.4) | 30.0 (5.8) | 30.4 (6.6) | 29.3 (4.6) | 28.3 (6.0) | 29.4 (4.6) | 29.1 (6.3) |
| PsA duration | | | | | | | | | | |
| <2 years | 47 (21.7) | 49 (19.1) | 21 (17.9) | 20 (16.5) | 26 (26.0) | 29 (21.3) | 22 (39.3) | 12 (24.0) | 19 (19.0) | 25 (18.4) |
| ≥2 years | 170 (78.3) | 208 (80.9) | 96 (82.1) | 101 (83.5) | 74 (74.0) | 107 (78.7) | 34 (60.7) | 38 (76.0) | 81 (81.0) | 111 (81.6) |
| SJC (66), mean (SD) | 11.3 (9.2) | 13.3 (10.6)* | 11.5 (8.9) | 13.4 (11.4) | 11.0 (9.5) | 13.3 (9.9) | 8.8 (9.1) | 10.9 (6.1) | 11.7 (8.7) | 10.4 (9.0) |
| TJC (68), mean (SD) | 19.8 (14.0) | 23.6 (14.6)* | 19.6 (12.2) | 21.4 (13.3) | 20.0 (15.8) | 25.6 (15.5) | 17.2 (11.9) | 17.1 (10.5) | 19.6 (14.4) | 20.6 (14.8) |
| SPARCC, patients included [‡] | | | | | | | | | | |
| n (%) | 169 (77.9) | 197 (76.7) | 90 (76.9) | 87 (71.9) | 79 (79.0) | 110 (80.9) | 46 (82.1) | 36 (72.0) | 75 (75.0) | 104 (76.5) |
| Mean (SD) | 4.9 (3.7) | 6.5 (4.1)** | 4.6 (3.2) | 6.3 (4.1)* | 5.2 (4.3) | 6.7 (4.1)* | 4.5 (3.0) | 4.5 (2.7) | 4.3 (3.3) | 6.1 (3.7)* |
| LEI, patients included [§] | | | | | | | | | | |
| n (%) | 136 (62.7) | 185 (72.0)* | 73 (62.4) | 85 (70.2) | 63 (63.0) | 100 (73.5) | 45 (80.4) | 31 (62.0)* | 64 (64.0) | 94 (69.1) |
| Mean (SD) | 2.8 (1.6) | 3.1 (1.6) | 2.7 (1.5) | 2.8 (1.6) | 3.0 (1.8) | 3.4 (1.6) | 2.2 (1.1) | 2.4 (1.4) | 2.5 (1.6) | 2.9 (1.4) |
| DSS, patients included [¶] | | | | | | | | | | |
| n (%) | 130 (59.9) | 122 (47.5)* | 70 (59.8) | 57 (47.1) | 60 (60.0) | 65 (47.8) | 30 (53.6) | 28 (56.0) | 58 (58.0) | 63 (46.3) |
| Mean (SD) | 8.5 (7.8) | 9.0 (9.5) | 8.7 (8.2) | 8.1 (10.0) | 8.3 (7.3) | 9.7 (9.0) | 8.7 (8.3) | 7.3 (6.4) | 9.9 (8.0) | 6.8 (6.2)* |
| CRP (mg/L), mean (SD) | 13.3 (24.2) | 11.2 (18.2) | 12.9 (23.1) | 11.6 (17.7) | 13.7 (25.6) | 10.7 (18.7) | 18.9 (31.8) | 9.2 (11.2)* | 14.9 (26.4) | 8.7 (13.6)* |

| | | | | | | | | | | |
|---|------------------------|-------------------------|------------------------|-------------------------|-------------|--------------|-----------------------|-------------|-------------|------------------------|
| PASI, patients included ^{††} | | | | | | | | | | |
| n (%) | 156 (71.9) | 157 (61.1) | 82 (70.1) | 80 (66.1) | 74 (74.0) | 77 (56.6) | 38 (67.9) | 39 (78.0) | 79 (79.0) | 89 (65.4) |
| Mean (SD) | 11.5 (8.9) | 7.6 (6.0)*** | 10.7 (8.6) | 7.3 (6.5)* | 12.4 (9.2) | 7.9 (5.5)** | 11.1 (10.7) | 9.1 (6.2) | 11.4 (10.4) | 9.3 (9.4) |
| PGA-PsA, mean (SD) | 63.4 (21.2) [N=216] | 65.6 (22.4) | 61.3 (20.9) [N=116] | 66.3 (21.2) | 65.8 (21.5) | 65.0 (23.4) | 57.7 (24.1) | 62.1 (23.6) | 59.0 (24.5) | 62.3 (22.2) |
| PGA-PsO ^{‡‡} | | | | | | | | | | |
| 0 | 7 (3.2) | 14 (5.4) | 5 (4.3) | 6 (5.0) | 2 (2.0) | 8 (5.9) | 2 (3.6) | 1 (2.0) | 2 (2.0) | 5 (3.7) |
| 1 | 57 (26.3) | 75 (29.2) | 32 (27.4) | 35 (28.9) | 25 (25.0) | 40 (29.4) | 16 (28.6) | 19 (38.0) | 27 (27.0) | 42 (30.9) |
| 2 | 87 (40.1) | 108 (42.0) | 47 (40.2) | 55 (45.5) | 40 (40.0) | 53 (39.0) | 22 (39.3) | 21 (42.0) | 45 (45.0) | 61 (44.9) |
| 3 | 56 (25.8) | 52 (20.2) | 27 (23.1) | 21 (17.4) | 29 (29.0) | 31 (22.8) | 14 (25.0) | 8 (16.0) | 22 (22.0) | 20 (14.7) |
| 4 | 9 (4.1) | 6 (2.3) | 5 (4.3) | 3 (2.5) | 4 (4.0) | 3 (2.2) | 1 (1.8) | 1 (2.0) | 4 (4.0) | 7 (5.1) |
| HAQ-DI, mean (SD) | 1.1 (0.6) [N=216] | 1.4 (0.6)*** | 1.0 (0.6) [N=116] | 1.4 (0.7)*** | 1.2 (0.6) | 1.3 (0.6) | 1.0 (0.6) | 1.2 (0.6) | 1.1 (0.7) | 1.3 (0.7)* |
| SF-36 PCS, mean (SD) | 34.9 (8.8) [N=214] | 33.4 (8.1)* [N=256] | 35.7 (8.5) [N=114] | 33.1 (7.8)* [N=120] | 34.1 (9.1) | 33.6 (8.4) | 36.1 (9.5) | 35.8 (7.4) | 35.9 (9.0) | 34.9 (8.4) |
| SF-36 MCS, mean (SD) | 41.9 (12.0) [N=214] | 38.7 (11.7)* [N=256] | 41.8 (12.1) [N=114] | 38.7 (11.3)* [N=120] | 42.0 (12.0) | 38.7 (12.0)* | 43.8 (12.4) | 41.7 (10.2) | 42.5 (10.9) | 38.4 (12.1)* |
| FACIT-F, mean (SD) | 29.5 (10.6) [N=216] | 24.9 (10.8)*** | 29.8 (10.5) [N=116] | 24.2 (11.6)** | 29.1 (10.8) | 25.4 (10.0)* | 31.6 (11.7) | 28.2 (10.5) | 30.8 (10.3) | 25.9 (10.5)** |
| Patient Global | | | | | | | | | | |
| Assessment of arthritis and skin, mean (SD) | 53.3 (20.4) [N=215] | 54.3 (20.1) [N=251] | 51.1 (22.0) [N=115] | 52.6 (21.2) [N=120] | 55.9 (18.2) | 55.7 (19.0) | 51.6 (15.6) | 52.9 (19.6) | 55.3 (21.0) | 54.3 (20.9) [N=135] |
| Patient's assessment of arthritis pain (VAS in mm), mean (SD) | 55.5 (23.4) | 57.6 (22.3) | 53.8 (24.2) [N=116] | 58.2 (22.8) | 57.4 (22.3) | 57.1 (22.0) | 51.6 (22.3) [N=55] | 49.6 (21.1) | 51.8 (25.1) | 55.9 (23.9) |
| Presence of depression ^{§§} | | | | | | | | | | |
| yes, n (%) | 13 (6.0) | 39 (15.2)* | 6 (5.1) | 25 (20.7)** | 7 (7.0) | 14 (10.3) | 0 | 3 (6.0) | 8 (8.0) | 25 (18.4)* |

* $p < 0.05$, ** $p < 0.001$, *** $p < 0.0001$ for females versus males.

[†]Data from OPAL Broaden.

[‡]Patients with baseline SPARCC > 0 .

[§]Patients with baseline LEI > 0 .

[¶]Patients with baseline DSS > 0 .

^{††}PASI was assessed in patients with baseline BSA $\geq 3\%$ and PASI > 0 .

^{‡‡}PGA-PsO assessed in patients with baseline PGA-PsO > 0 .

^{§§}Ascertained from medical history.

ADA, adalimumab; BID, twice daily; BMI, body mass index; CRP, C-reactive protein; DSS, dactylitis severity score; FACIT-F, Functional Assessment of Chronic Illness Therapy-Fatigue; HAQ-DI, Health Assessment Questionnaire-Disability Index; LEI, Leeds Enthesitis Index; N, number of evaluable patients; n, number of patients with demographic/clinical characteristic at baseline; PASI, Psoriasis Area and Severity Index; PGA-PsA, Physician Global Assessment of Psoriatic Arthritis; PGA-PsO, Physician Global Assessment of Psoriasis; PsA, psoriatic arthritis; Q2W, every 2 weeks; SF-36 PCS, Short Form-36 Physical Component Summary; SF-36 MCS, Short Form-36 Mental Component Summary; SD, standard deviation; SJC, swollen joint count; SPARCC, Spondyloarthritis Research Consortium of Canada enthesitis index; TJC, tender joint count; Tofacitinib combined, tofacitinib 5mg and 10mg BID; VAS, Visual Analogue Scale.

Supplemental table 2 Change from baseline in joint counts, SPARCC[‡], DSS[§], PGA-PsO, PGA-PsA, CRP and PASI stratified by treatment group and sex; pooled data from OPAL Broaden and OPAL Beyond. (a) tofacitinib 5mg and 10mg BID, (b) tofacitinib 5mg BID, (c) tofacitinib 10mg BID, (d) ADA 40mg Q2W[¶], (e) placebo

| a | Tofacitinib 5mg and 10mg BID | | | | | | | | |
|---------------------|-------------------------------------|-----------------------|----------------------------|-------------------|-------------------|----------------------------|-------------------|-------------------|----------------------------|
| | Month 3 | | | Month 6 | | | Month 12 | | |
| | LSM change | LSM change | Difference (95% CI) | LSM change | LSM change | Difference (95% CI) | LSM change | LSM change | Difference (95% CI) |
| | Females | Males | | Females | Males | | Females | Males | |
| SJC (66) | -7.34 ^{†††} | -6.59 ^{†††} | -0.75 (-1.81, 0.31) | -7.85 | -7.69 | -0.16 (-1.24, 0.91) | -10.18 | -8.65 | -1.53 (-3.08, 0.02) |
| TJC (68) | -9.83 ^{†††} | -9.52 [†] | -0.31 (-2.08, 1.46) | -11.55 | -11.22 | -0.33 (-2.13, 1.47) | -14.45 | -13.21 | -1.24 (-3.74, 1.26) |
| SPARCC [‡] | -2.34 [†] | -2.34 ^{††} | 0 (-0.60, 0.60) | -2.69 | -2.76 | 0.07 (-0.54, 0.68) | -3.62 | -3.23 | -0.39 (-1.28, 0.49) |
| DSS [§] | -5.04 [†] | -4.87 [†] | -0.17 (-1.72, 1.38) | -5.57 | -6.21 | 0.64 (-0.93, 2.21) | -8.41 | -6.96 | -1.45 (-3.62, 0.72) |
| PGA-PsO | -1.05 ^{†††} | -0.80 ^{†††} | -0.25 (-0.40, -0.11)** | -1.07 | -0.92 | -0.15 (-0.30, 0)* | -1.32 | -1.13 | -0.19 (-0.41, 0.03) |
| PGA-PsA | -28.89 ^{†††} | -27.40 ^{†††} | -1.48 (-5.10, 2.13) | -32.29 | -33.09 | 0.80 (-2.86, 4.46) | -38.61 | -37.25 | -1.37 (-6.71, 3.97) |
| CRP (mg/L) | -7.12 ^{††} | -4.65 ^{†††} | -2.46 (-4.62, -0.30)* | -7.46 | -6.93 | -0.53 (-2.72, 1.66) | -6.48 | -7.11 | 0.63 (-2.65, 3.91) |
| PASI | -5.60 ^{†††} | -4.81 ^{†††} | -0.79 (-1.84, 0.25) | -5.61 | -6.06 | 0.45 (-0.61, 1.51) | -6.57 | -7.38 | 0.81 (-0.67, 2.29) |
| b | Tofacitinib 5mg BID | | | | | | | | |
| SJC (66) | -7.05 ^{†††} | -6.88 ^{†††} | -0.17 (-1.66, 1.32) | -8.23 | -7.91 | -0.33 (-1.83, 1.18) | -10.87 | -8.97 | -1.90 (-4.09, 0.28) |
| TJC (68) | -9.02 [†] | -9.72 [†] | 0.70 (-1.79, 3.18) | -11.29 | -11.73 | 0.44 (-2.07, 2.95) | -15.14 | -14.15 | -1.00 (-4.51, 2.51) |
| SPARCC [‡] | -2.11 | -2.19 [†] | 0.07 (-0.78, 0.93) | -2.54 | -2.60 | 0.06 (-0.80, 0.92) | -3.74 | -3.15 | -0.60 (-1.85, 0.66) |
| DSS [§] | -4.69 | -4.39 [†] | -0.29 (-2.49, 1.90) | -5.14 | -6.14 | 0.99 (-1.22, 3.21) | -8.86 | -6.98 | -1.88 (-5.04, 1.29) |
| PGA-PsO | -0.95 ^{†††} | -0.67 ^{††} | -0.28 (-0.48, -0.08)* | -0.93 | -0.78 | -0.15 (-0.36, 0.05) | -1.22 | -0.99 | -0.23 (-0.54, 0.08) |
| PGA-PsA | -27.14 ^{†††} | -24.60 [†] | -2.54 (-7.59, 2.50) | -32.39 | -30.11 | -2.28 (-7.37, 2.80) | -38.70 | -34.15 | -4.55 (-12.04, 2.95) |
| CRP (mg/L) | -6.70 [†] | -4.38 ^{†††} | -2.32 (-5.36, 0.71) | -6.12 | -6.53 | 0.41 (-2.65, 3.47) | -5.30 | -7.90 | 2.61 (-2.00, 7.21) |
| PASI | -5.33 ^{†††} | -3.55 [†] | -1.78 (-3.23, -0.34)* | -5.03 | -4.94 | -0.09 (-1.54, 1.35) | -6.49 | -6.52 | 0.03 (-1.99, 2.05) |
| c | Tofacitinib 10mg BID | | | | | | | | |
| SJC (66) | -7.59 ^{†††} | -6.24 ^{††} | -1.36 (-2.87, 0.16) | -7.50 | -7.42 | -0.08 (-1.63, 1.47) | -9.58 | -8.27 | -1.31 (-3.53, 0.91) |
| TJC (68) | -10.54 ^{†††} | -9.27 [†] | -1.27 (-3.79, 1.26) | -11.79 | -10.61 | -1.18 (-3.75, 1.40) | -13.83 | -12.08 | -1.75 (-5.33, 1.83) |
| SPARCC [‡] | -2.53 [†] | -2.53 [†] | 0 (-0.84, 0.85) | -2.81 | -2.95 | 0.14 (-0.72, 0.99) | -3.52 | -3.33 | -0.19 (-1.47, 1.08) |
| DSS [§] | -5.35 [†] | -5.45 [†] | 0.10 (-2.10, 2.31) | -5.95 | -6.30 | 0.35 (-1.89, 2.59) | -8.10 | -6.93 | -1.17 (-4.22, 1.87) |

| | | | | | | | | | |
|---------------------|---------------------------------|-----------------------|-----------------------|--------|--------|---------------------|--------|--------|---------------------|
| PGA-PsO | -1.15 ^{†††} | -0.96 ^{†††} | -0.19 (-0.40, 0.02) | -1.20 | -1.10 | -0.10 (-0.31, 0.11) | -1.41 | -1.30 | -0.11 (-0.42, 0.20) |
| PGA-PsA | -30.55 ^{†††} | -30.77 ^{†††} | 0.22 (-4.91, 5.35) | -32.25 | -36.71 | 4.46 (-0.77, 9.69) | -38.62 | -40.98 | 2.37 (-5.23, 9.97) |
| CRP (mg/L) | -7.48 ^{††} | -5.00 ^{†††} | -2.48 (-5.57, 0.61) | -8.70 | -7.45 | -1.25 (-4.40, 1.91) | -7.53 | -6.20 | -1.33 (-6.02, 3.35) |
| PASI | -5.88 ^{†††} | -6.24 ^{†††} | 0.36 (-1.13, 1.84) | -6.21 | -7.37 | 1.16 (-0.35, 2.67) | -6.63 | -8.39 | 1.75 (-0.40, 3.90) |
| d | ADA 40mg Q2W[¶] | | | | | | | | |
| SJC (66) | -6.67 [†] | -6.41 ^{††} | -0.26 (-2.49, 1.97) | -8.05 | -7.15 | -0.90 (-3.16, 1.35) | -8.11 | -7.21 | -0.90 (-3.22, 1.42) |
| TJC (68) | -6.83 | -8.19 | 1.36 (-2.34, 5.07) | -10.57 | -10.55 | -0.02 (-3.77, 3.73) | -11.16 | -12.01 | 0.85 (-2.99, 4.70) |
| SPARCC [‡] | -1.87 | -2.33 [†] | 0.46 (-0.79, 1.71) | -1.98 | -3.21 | 1.22 (-0.05, 2.49) | -2.77 | -3.53 | 0.76 (-0.56, 2.07) |
| DSS [§] | -5.33 | -4.31 | -1.02 (-4.21, 2.18) | -5.50 | -5.24 | -0.26 (-3.48, 2.97) | -6.29 | -5.62 | -0.67 (-3.99, 2.65) |
| PGA-PsO | -0.72 [†] | -0.99 ^{†††} | 0.27 (-0.03, 0.58) | -0.86 | -1.39 | 0.53 (0.22, 0.84)** | -0.97 | -1.30 | 0.33 (0.01, 0.65)* |
| PGA-PsA | -28.26 [†] | -26.53 [†] | -1.73 (-9.23, 5.76) | -31.21 | -36.18 | 4.97 (-2.62, 12.56) | -33.18 | -38.23 | 5.05 (-2.77, 12.87) |
| CRP (mg/L) | -8.02 [†] | -8.92 ^{†††} | 0.90 (-3.68, 5.47) | -5.86 | -9.55 | 3.69 (-0.91, 8.28) | -6.48 | -9.89 | 3.41 (-1.34, 8.17) |
| PASI | -5.89 ^{††} | -4.76 [†] | -1.13 (-3.20, 0.94) | -6.24 | -8.13 | 1.88 (-0.20, 3.97) | -6.92 | -8.25 | 1.33 (-0.80, 3.47) |
| e | Placebo | | | | | | | | |
| SJC (66) | -3.93 | -3.10 | -0.82 (-2.36, 0.71) | | | | | | |
| TJC (68) | -5.29 | -6.00 | 0.71 (-1.83, 3.26) | | | | | | |
| SPARCC [‡] | -1.32 | -0.99 | -0.33 (-1.21, 0.54) | | | | | | |
| DSS [§] | -2.79 | -1.73 | -1.05 (-3.33, 1.22) | | | | | | |
| PGA-PsO | -0.44 | -0.27 | -0.17 (-0.38, 0.04) | | | | | | |
| PGA-PsA | -17.40 | -15.80 | -1.60 (-6.77, 3.57) | | | | | | |
| CRP (mg/L) | -2.44 | 2.33 | -4.77 (-7.90, -1.65)* | | | | | | |
| PASI | -2.34 | -2.08 | -0.26 (-1.70, 1.18) | | | | | | |

*p<0.05, **p<0.001 for females versus males. †p<0.05, ††p<0.001, †††p<0.0001 for treatment group versus placebo.

‡For patients with baseline SPARCC >0.

§For patients with baseline DSS >0.

¶Data from OPAL Broaden.

CI, confidence interval; CRP, C-reactive protein; DSS, dactylitis severity score; LSM, least square means; PASI, Psoriasis Area and Severity Index; PGA- PsA, Physician Global Assessment of Psoriatic Arthritis; PGA-PsO, Physician Global Assessment of Psoriasis; SJC, swollen joint count; SPARCC, Spondyloarthritis Research Consortium of Canada enthesitis index; TJC, tender joint count.

Supplemental table 3 Summary of safety events (all causalities) for patients randomised to ADA

(up to months 3 and 12), stratified by sex; data from OPAL Broaden

| Up to month 3 | ADA 40mg SC Q2W | |
|-------------------------------|--------------------|---------------|
| | Male (N=56) | Female (N=50) |
| Patients with events, n (%) | | |
| TEAEs | 22 (39.3) | 27 (54.0) |
| SAEs | 1 (1.8) | 0 |
| Discontinuations due to AEs | 1 (1.8) | 1 (2.0) |
| Death | 0 | 0 |
| Serious infections | 0 | 0 |
| HZ (serious and non-serious) | 0 | 0 |
| OIs (excluding TB) | 0 | 0 |
| Tuberculosis | 0 | 0 |
| MACE | 0 | 0 |
| Malignancies (excluding NMSC) | 0 | 0 |
| NMSC | 0 | 0 |
| GI perforation | 0 | 0 |
| VTE | 0 | 0 |
| Up to month 12 | ADA 40mg SC Q2W | |
| | Male (N=56) | Female (N=50) |
| Patients with events, n (%) | | |
| TEAEs | 37 (66.1) | 38 (76.0) |
| SAEs | 5 (8.9) | 4 (8.0) |
| Discontinuations due to AEs | 1 (1.8) | 2 (4.0) |
| Death | 0 | 0 |
| Serious infections | 0 | 1 (2.0) |
| HZ (serious and non-serious) | 0 | 0 |
| OIs (excluding TB) | 0 | 0 |
| Tuberculosis | 0 | 0 |
| MACE | 0 | 1 (2.0) |
| Malignancies (excluding NMSC) | 0 | 0 |
| NMSC | 0 | 0 |
| GI perforation | 0 | 0 |
| VTE | 0 | 0 |

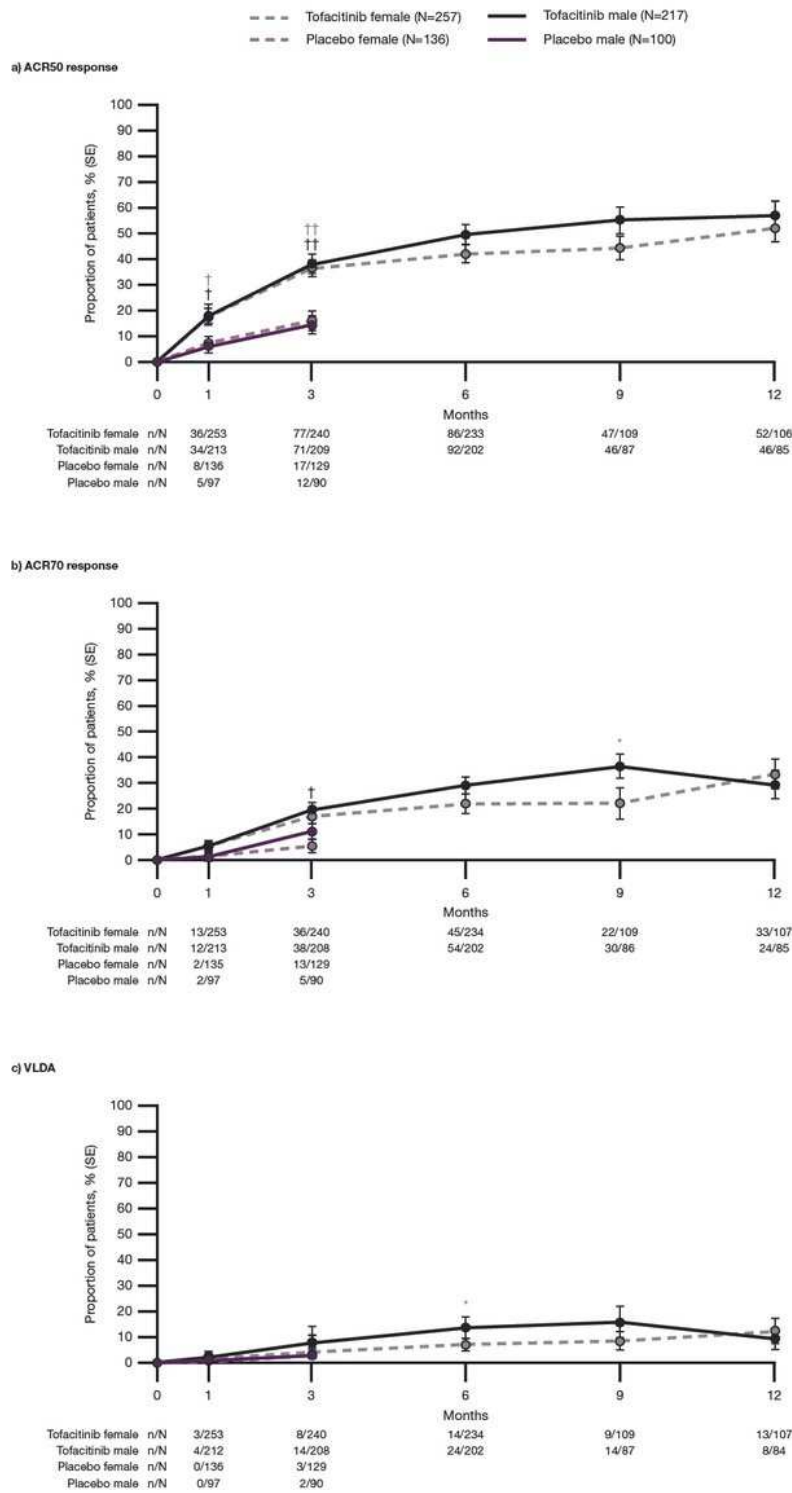
ADA, adalimumab; AE, adverse event; GI, gastrointestinal; HZ, herpes zoster; MACE, major adverse cardiovascular events; N, number of patients included in the analysis; n, number of patients with the event. Events are counted up to 28 days beyond the last dose or the end of month 3 or month 12;

NMSC, non-melanoma skin cancer; OI, opportunistic infection; Q2W, once every 2 weeks;

SAE, serious adverse event; SC, subcutaneous; TB, tuberculosis; TEAE, treatment-emergent adverse

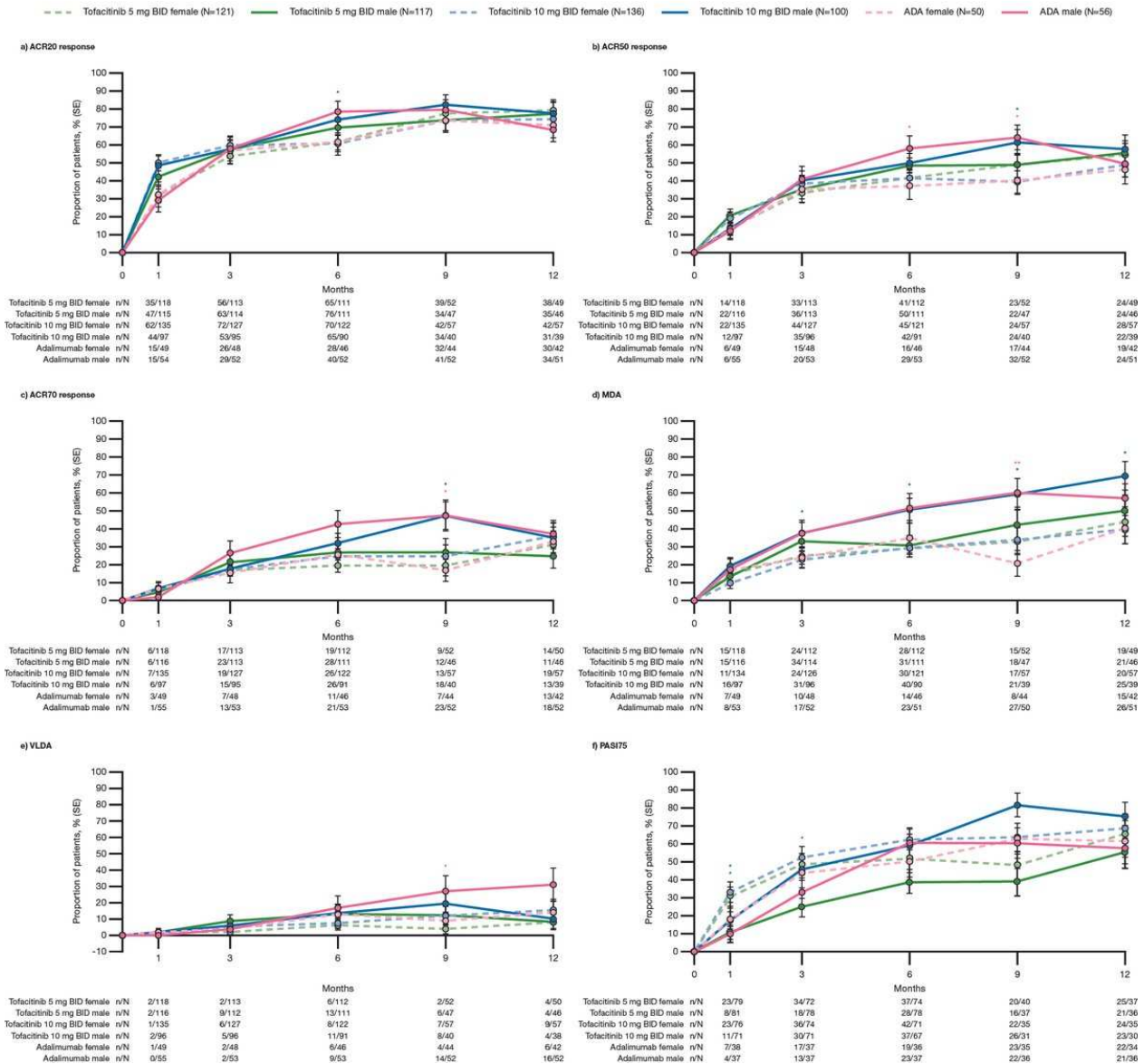
event; VTE, venous thromboembolic event.

Supplemental Figure 1



Supplemental figure 1 Proportion of patients achieving composite outcomes. (a) ACR50 response, (b) ACR70 response, (c) VLDA, by treatment group and sex; pooled data from OPAL Broaden and OPAL Beyond. * $p < 0.05$, ** $p < 0.001$ for females versus males. † $p < 0.05$, †† $p < 0.001$, ††† $p < 0.0001$ for tofacitinib versus placebo. ACR50/70, American College of Rheumatology $\geq 50/70\%$ response criteria; N, number of patients included in the analysis; n, number of patients achieving outcome; Tofacitinib, tofacitinib 5mg and 10mg BID; VLDA, very low disease activity.

Supplemental Figure 2



Supplemental figure 2 Proportions of patients achieving composite outcomes ACR20/50/70

responses, MDA/VLDA and PASI75 on tofacitinib 5mg BID, tofacitinib 10mg BID and ADA 40mg

Q2W[†], stratified by sex; pooled data from OPAL Broaden and OPAL Beyond. *p<0.05, **p<0.001,

***p<0.0001 for females versus males. [†]Data from OPAL Broaden. ADA, adalimumab; ACR20/50/70,

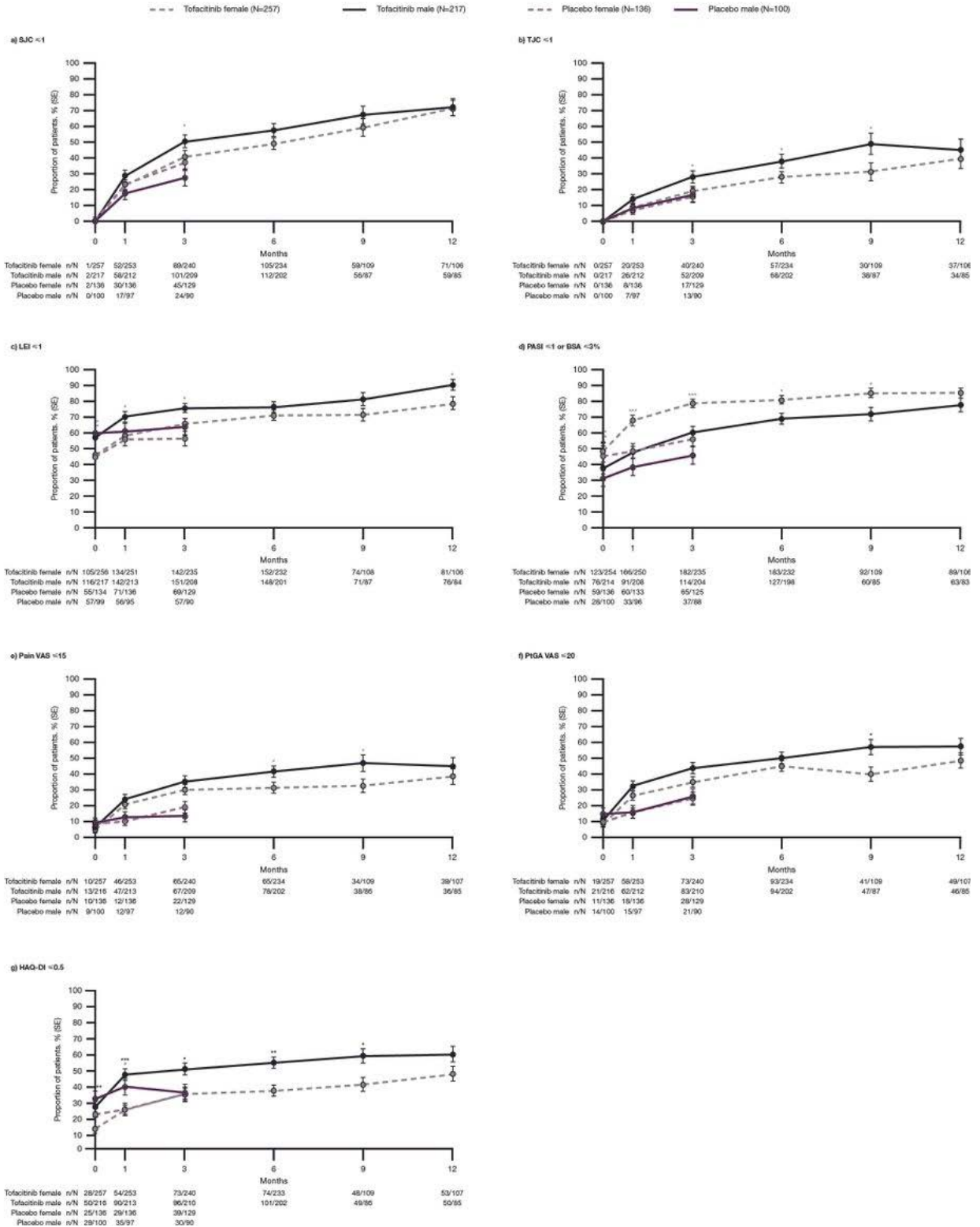
American College of Rheumatology ≥20/50/70% response; BID, twice daily; MDA, minimal disease

activity; N, number of patients included in the analysis; n, number of patients achieving outcome;

PASI75, 75% improvement in Psoriasis Area and Severity Index; Q2W, once every 2 weeks;

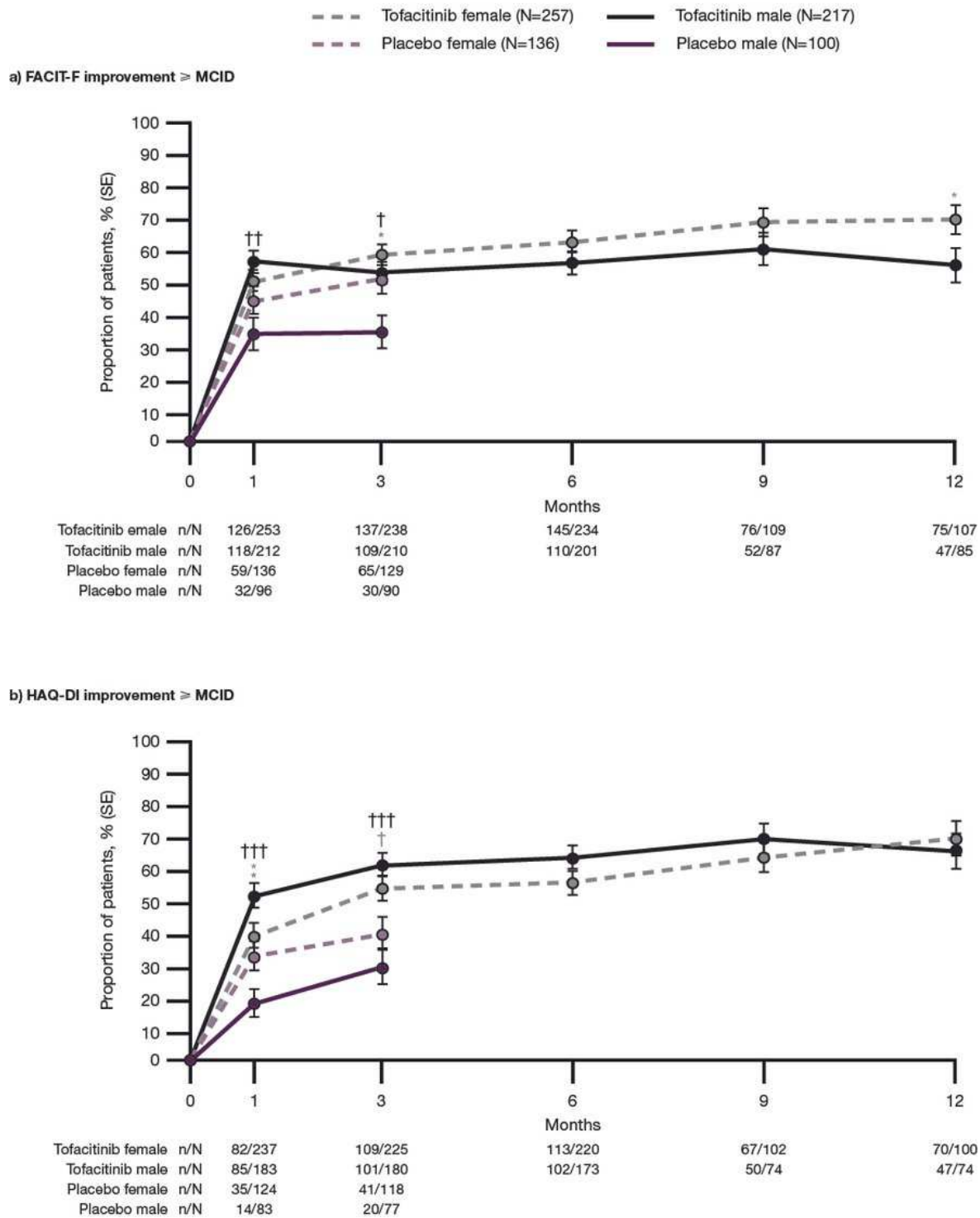
VLDA, very low disease activity.

Supplemental Figure 3



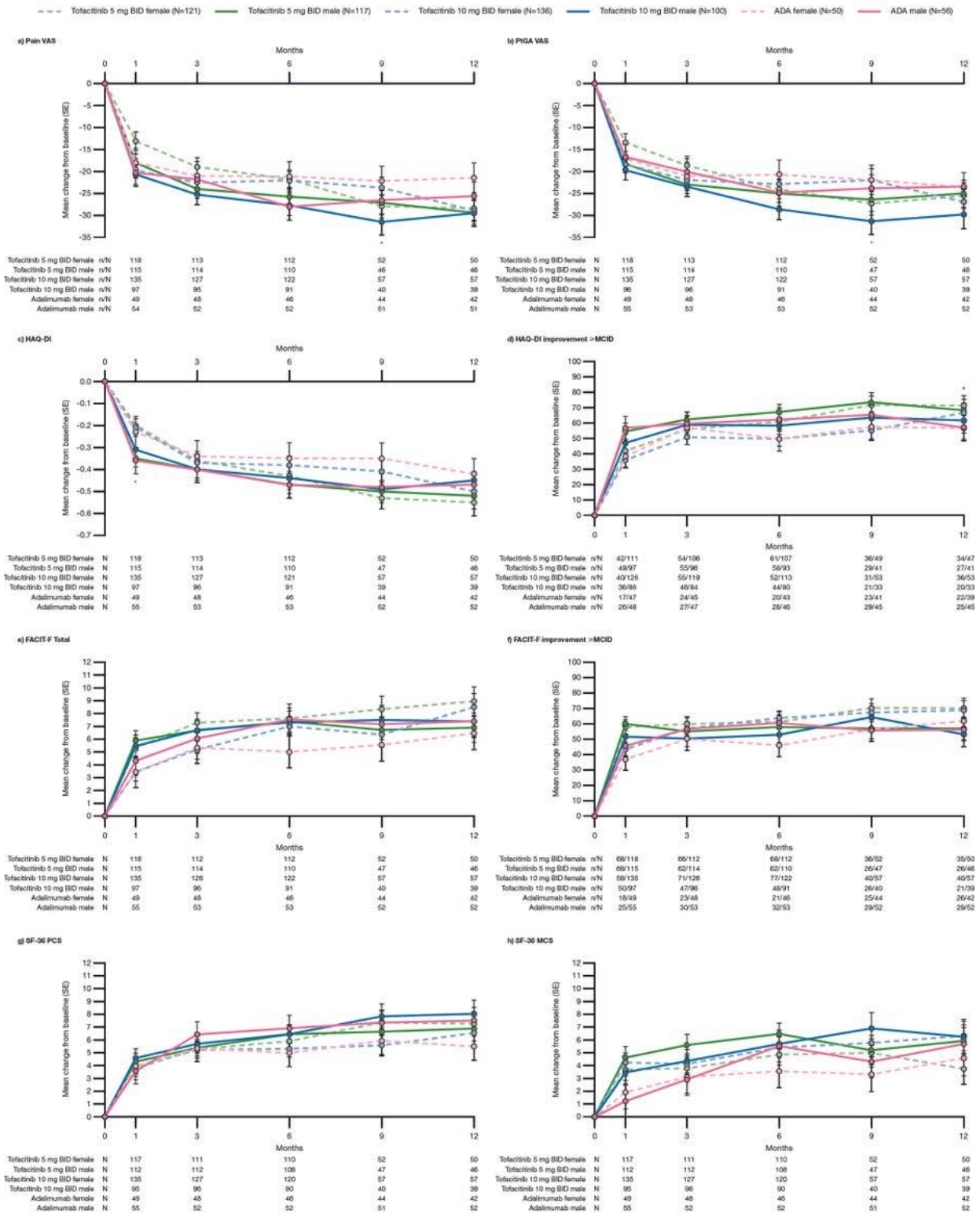
Supplemental figure 3 Proportions of patients on achieving MDA components, stratified by treatment group and sex; pooled data from OPAL Broaden and OPAL Beyond. * $p < 0.05$, ** $p < 0.001$, *** $p < 0.0001$ for females versus males. ADA, adalimumab; BSA, body surface area; HAQ-DI, Health Assessment Questionnaire-Disability Index; LEI, Leeds Enthesitis Index; MDA, minimal disease activity; N, number of patients included in the analysis; n, number of patients achieving outcome; PASI, Psoriasis Area and Severity Index; PtGA, Patient Global Assessment of arthritis and skin; SJC, swollen joint count; TJC, tender joint count; Tofacitinib combined, tofacitinib 5mg and 10mg BID; VAS, Visual Analogue Scale.

Supplemental Figure 4



Supplemental figure 4 Change from baseline in patient-reported outcomes. Rates of (a) FACIT-F and (b) HAQ-DI improvements \geq MCID, by treatment group and sex; pooled data from OPAL Broaden and OPAL Beyond. * $p < 0.05$, ** $p < 0.001$ for females versus males. † $p < 0.05$, †† $p < 0.001$, ††† $p < 0.0001$ for tofacitinib versus placebo. FACIT-F MCID, Functional Assessment of Chronic Illness Therapy-Fatigue minimal clinically important difference (≥ 4); HAQ-DI (MCID), Health Assessment Questionnaire-Disability Index minimal clinically important difference (≥ 0.35); N, number of patients included in the analysis; n, number of patients achieving outcome; Tofacitinib, tofacitinib 5mg and 10mg BID.

Supplemental Figure 5



Supplemental figure 5 Change from baseline in patient-reported outcomes and rates of achieving MCID for patients treated with tofacitinib 5mg BID, tofacitinib 10mg BID, and ADA 40mg Q2W[†], stratified by sex; pooled data from OPAL Broaden and OPAL Beyond. *p<0.05, **p<0.001, ***p<0.0001 for females versus males. [†]Data from OPAL Broaden. ADA, adalimumab; BID, twice daily; FACIT-F, Functional Assessment of Chronic Illness Therapy-Fatigue; FACIT-F MCID, Functional Assessment of Chronic Illness Therapy-Fatigue minimal clinically important difference (≥ 4); HAQ-DI, Health Assessment Questionnaire-Disability Index; HAQ-DI (MCID), Health Assessment Questionnaire-Disability Index minimal clinically important difference (≥ 0.35); MCID, minimal clinically important difference; N, number of patients included in the analysis; n, number of patients achieving outcome; PtGA, Patient Global Assessment of arthritis and skin; SF-36 MCS, Short Form-36 Mental Component Summary; SF-36 PCS, Short Form-36 Physical Component Summary; VAS, Visual Analogue Scale.