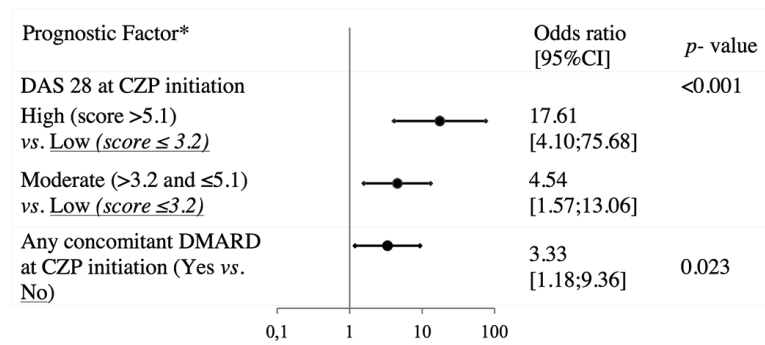**Supplementary Figure S1.** Patient disposition.
Completers: patients treated with CZP at each time point; EULAR: European League Against Rheumatism; FAS: Full Analysis Set.
[a] 61/733 patients not documented; [b] 122/733 patients not documented; [c] 174/733 patients not documented; [d] 261/733 patients not documented; [e] 264/733 patients not documented; [f] 303/733 patients not documented. CZP: certolizumab pegol; CZP Completers: patients treated with CZP at each time point. The following time windows were applied for study visits: 3-month visit: from 1 to 4.5 months; 6-month visit: from 4.5 to 9 months; 12-month visit: from 9 to 15 months; 18-month visit: from 15 to 21 months; 24-month visit: from 21 to 30 months; 36-month visit: from 30 to 42 months.

**Supplementary Figure S2.** Prognostic factors of EULAR response at 12 months (12-MCS).



| Prognostic Factor* | | Odds ratio [95%CI] | p- value |
|---|---|---|---|
| DAS 28 at CZP initiation | | | <0.001 |
| High (score >5.1) vs. Low (score ≤ 3.2) | | 17.61 [4.10;75.68] | |
| Moderate (>3.2 and ≤5.1) vs. Low (score ≤3.2) | | 4.54 [1.57;13.06] | |
| Any concomitant DMARD at CZP initiation (Yes vs. No) | | 3.33 [1.18;9.36] | 0.023 |

Model based on 290 observations.
12-MCS: 12-month completer set; CI: confidence interval; CZP: certolizumab pegol; DAS28: 28-joint disease activity score; DMARD: disease-modifying anti-rheumatic drug; EULAR: European League Against Rheumatism.

**Supplementary Table S1.** EULAR response definitions using the DAS28.

| | | Improvement in DAS28 from baseline | | |
|---|---|---|---|---|
| | | >1.2 | >0.6 and ≤1.2 | ≤0.6 |
| DAS28 at 12 months | Low (≤3.2) | Good | Moderate | None |
| | Moderate (>3.2 and ≤5.1) | Moderate | Moderate | None |
| | High (>5.1) | Moderate | None | None |

DAS28: 28-joint disease activity score; EULAR: European League Against Rheumatism.

**Supplementary Table S2.** Health resource utilisation per year.

| | | Analysis population n=733 | | |
|---|---|---|---|---|
| | | Year 1 n=545 | Year 2 n=457 | Year 3 n=219 |
| HCP consultations related to RA | n (%) | 243 (44.6) | 184 (40.3) | 82 (37.4) |
| Number of HCP consultations | Mean (SD) | 2.3 (1.8) | 2.4 (2.2) | 2.3 (2.0) |
| Rheumatologist consultations related to RA | n (%) | 165 (30.3) | 133 (29.1) | 70 (32.0) |
| Number of rheumatologist consultations | Mean (SD) | 2.0 (1.5) | 2.1 (2.1) | 2.2 (2.0) |
| GP consultations related to RA | n (%) | 80 (14.7) | 54 (11.8) | 14 (6.4) |
| Number of GP consultations | Mean (SD) | 2.0 (1.7) | 2.0 (1.7) | 1.8 (1.1) |
| Medical procedures | n (%) | 258 (47.3) | 210 (46.0) | 72 (32.9) |
| Number of medical procedures | Mean (SD) | 1.9 (1.4) | 2.1 (1.6) | 2.4 (2.5) |
| MRI | n (%) | 44 (8.1) | 39 (8.5) | 18 (8.2) |
| Number of MRI scans | Mean (SD) | 1.1 (0.3) | 1.1 (0.5) | 1.2 (0.6) |
| CT scan | n (%) | 54 (9.9) | 38 (8.3) | 17 (7.8) |
| Number of CT scans | Mean (SD) | 1.2 (0.5) | 1.3 (0.5) | 1.2 (0.4) |
| Scintigraphy | n (%) | 11 (2.0) | 5 (1.1) | 3 (1.4) |
| Number of scintigraphies | Mean (SD) | 1.0 (0.0) | 1.0 (0.0) | 1.7 (1.2) |
| Ultrasound scan | n (%) | 67 (12.3) | 65 (14.2) | 17 (7.8) |
| Number of ultrasound scans | Mean (SD) | 1.2 (0.5) | 1.2 (0.6) | 1.3 (0.5) |
| Other medical procedures | n (%) | 195 (35.8) | 158 (34.6) | 53 (24.2) |
| Number of other medical procedures | Mean (SD) | 1.6 (1.1) | 1.7 (1.2) | 2.0 (2.2) |
| Hospitalisation (length of stay >1 day) | n (%) | 71 (13.0) | 46 (10.1) | 25 (11.4) |
| Number of hospitalisations (length of stay >1 day) | Mean (SD) | 1.2 (0.4) | 1.1 (0.5) | 1.4 (0.8) |
| Emergency room visits | n (%) | 41 (7.5) | 11 (2.4) | 6 (2.7) |
| Number of emergency room visits | Mean (SD) | 1.1 (0.3) | 1.1 (0.3) | 1.5 (1.2) |

CT scan: computerised tomography scan; HCP: health care practitioner; GP: general practitioner; MRI: magnetic resonance imaging; RA: rheumatoid arthritis; SD: standard deviation.