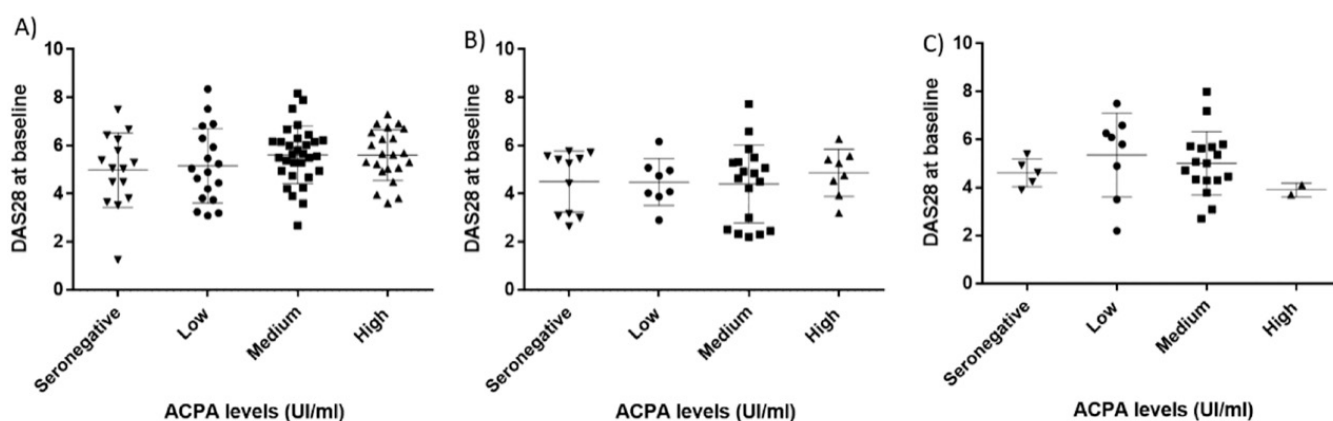


Supplementary Fig. 1. Median basal DAS28 by baseline rheumatoid factor (RF) quartiles in patients treated with A) Infliximab B) Adalimumab or C) Certolizumab.



Supplementary Fig. S2. Median basal DAS28 by baseline anti-citrullinated peptide antibodies (ACPA) quartiles in patients treated with A) Infliximab B) Adalimumab or C) Certolizumab.

Supplementary Table S1. Baseline rheumatoid factor (RF) and anti-citrullinated peptide antibodies (ACPA) status.

n (%)	Infliximab (n=88*)	Adalimumab (n=48)	Certolizumab (n=32)
RF+/ACPA+	69 (77)	26 (54)	24 (75)
RF+/ACPA-	4 (4)	2 (4)	1 (3)
RF-/ACPA+	4 (4)	9 (19)	3 (9)
RF-/ACPA-	11 (12)	11 (23)	4 (13)

*2 ACPA data missing in 2 patients positive for RF.

RF: Rheumatoid factor; ACPA: anti-citrullinated peptide antibodies.

Supplementary Table S2. Drug levels (µg/ml) at 6 months based on rheumatoid factor (RF) and anti-citrullinated peptide antibodies (ACPA) quartiles only in patients without previous biological therapy (144 patients).

Baseline RF levels	Seronegative (<20.0 IU/ml)	Low levels (20–57 IU/ml)	Medium levels (57–380 IU/ml)	High levels (>380 IU/ml)
Infliximab (n=80)				
Median (IQR)	1.8 (0.3–4.7)	0.1 (0–2.9)	0.5 (0–1.8)	0.01 (0–0.8)*
Adalimumab (n=38)				
Median (IQR)	5.3 (2.8–11.0)	4.9 (0.3–10.2)	3.2 (0.8–5.0)	0 (0–2.0)*
Certolizumab (n=26)				
Median (IQR)	34 (18–71)	39 (30–49)	36 (13–46)	34 (18–71)
Baseline ACPA levels	Seronegative (<25 IU/ml)	Low levels (25-167 IU/ml)	Medium levels (167–1582 IU/ml)	High levels (>1582 IU/ml)
Infliximab (n=80)				
Median (IQR)	1.4 (0.1–3.7)	0 (0–1.2)*	0.4 (0–2.7)	0.5 (0–1.4)
Adalimumab (n=38)				
Median (IQR)	5.6 (1.0–13.2)	3.7 (0–11.2)	3.6 (1.5–5.3)	4.0 (0.5–4.7)
Certolizumab (n=26)				
Median (IQR)	21 (18–24)	33 (20–50)	67 (18–47)	36 (32–40)

**p*<0.05, comparator group: RF or ACPA seronegative, non-parametric test, Mann-Whitney.

Supplementary Table S3. Percentage of anti-drug-antibodies (n,%) at 6 months based on rheumatoid factor (RF) and anti-citrullinated peptide antibodies (ACPA) quartiles.

ADAb positive	Infliximab (n=26/90)	Adalimumab (n=3/48)	Certolizumab (n=1/32)
RF status			
Seronegative (<20 IU/ml)	1 (4%)	0	0
Low levels (20-57 IU/mL)	5 (19%)	1 (33.3%)	0
Medium levels (57-380 IU/mL)	10 (39%)	1 (33.3%)	1 (100%)
High levels (>380 IU/mL)	10 (38%)	1 (33.3%)	0
ACPA status			
Seronegative (<25 IU/ml)	1 (4%)	0	0
Low levels (25-167 IU/mL)	9 (35%)	1 (33.3%)	1 (100%)
Medium levels (167-1582 IU/mL)	10 (38%)	1 (33.3%)	0
High levels (>1582 IU/mL)	6 (23%)	1 (33.3%)	0