



Supplementary figure S1: Frequencies of sialic acid and bisecting GlcNAc residues in the Fc part of ACPA-IgG1 at the diagnosis of RA. Patients diagnosed as having RA (A), but not those with UA (B), present a decrease of ACPA-IgG1 Fc sialylation content compared to arthralgia patients at baseline (arthralgia at baseline: median 12.6% [IQR 10.6-

15.7]; UA at diagnosis: 11.2% [IQR 9.7-13.9]; RA at diagnosis: 10.7% [IQR 8.0-12.8]). (C) However, no significant difference of ACPA-IgG1 sialic acid level was observed between RA patients and UA patients at diagnosis. (D, E, F) No difference was found in the level of bisecting GlcNAc of ACPA-IgG1 from RA and UA at diagnosis as compared to that of arthralgia patients at baseline (arthralgia at baseline: median 13.4% [IQR 11.5-16.9]; UA at diagnosis: 14.9% [IQR 12.5-17.1]; RA at diagnosis: 12.9% [IQR 9.4-16.0%]). Statistical differences were evaluated using the non-parametric Mann-Whitney test. * represents p-value <0.05.