Supplementary Figure 1. Innate lymphoid 1 and 2 cells in the gut of AS patients. A-D: Representative images of confocal analysis of T-bet and IFN-γ co-localization in gut tissues of AS patients. A: single staining for T-bet. B: single staining for IFN-γ. C: nuclei counterstained with toto-3 (blue). D: merged double staining of T-bet and IFN-γ (Arrow indicates positive cells). E: quantification of ILC1 in the gut of AS patients and controls. F-I: Representative images of confocal analysis of IL-4, CRTH2 and GATA3 co-localization in gut tissues of AS patients. F: single staining for IL-4. G: single staining for GATA-3. H: single staining for CRHT2. Nuclei were counterstained with toto-3 (blue). I: merged triple staining of IL-4, GATA-3 and CRHT2. J: quantification of ILC2 in the gut of AS patients and controls. K-L: ILC1 characterized by flow cytometry: cells were gated on Lyn⁺CD56⁺ IFN-γ⁺ Tbet regions. K: representative dot plot showing ILC1 in the gut of a patient with AS and L: percentage of ILC1 in the LPMC obtained from gut of 5 AS patients and 5 healthy controls. M-N: ILC2 were characterized by flow cytometry. Cells were gated on Lyn⁺CRTH2⁺ GATA3⁺ regions. M: representative dot plot showing ILC2 in the gut of a patient with AS and N: percentage of ILC2 in the LPMC obtained from gut of 5 AS patients and 5 healthy controls. A-D, F-I: original magnification x 400. E, J, L, N: data are expressed as individual data points (Mean).
Supplemental Figure 2. A-D: Representative images of confocal analysis of Nkp44, Tbet and IL-22 co-localization in gut tissues of AS patients. E: quantification of ILC3 in the gut of AS patients and controls. F: correlation between the number of ILC3 and disease activity as assessed by Bath Ankylosing Spondylitis Activity Index (BASDAI). G-H: isotype controls for confocal staining. A-D: original magnification x 630. G-I: original magnification x400. Data are expressed as individual data points (Mean). *p<0.05
Supplemental Figure 3. Innate lymphoid cells type 3 in the gut of normal controls. A-I: representative dot plots showing the gating strategy for ILC3 in the gut of controls.
Supplemental Figure 4. Innate lymphoid cells type 3 in the synovial fluid (SF) of AS patients. A: percentage of CD3^+ILC3 in the synovial fluids of Ankylosing Spondylitis (AS) and osteoarthritis (OA) patients. B: cytokine production by SF CD3^+ILC3 in AS patients. C: α4β7 expression on CD3^+ILC3 isolated from the SF of AS and OA patients. Data are expressed as individual data points (Mean)
Supplemental Figure 5. Effect of TNF-inhibitors (TNFi) on circulating and gut ILC-3. A-B and D-E: representative dot plots showing the percentage of circulating (A-B) and intestinal (D-E) ILC3 before TNF-i in 5 AS patients. C, F: percentage of circulating (C) and intestinal (F) ILC3 before and after TNF-i. G numbers of gut MADCAM1+ HEV in AS patients before and after TNFi. Data are shown as individual data points (Mean). p<0.05