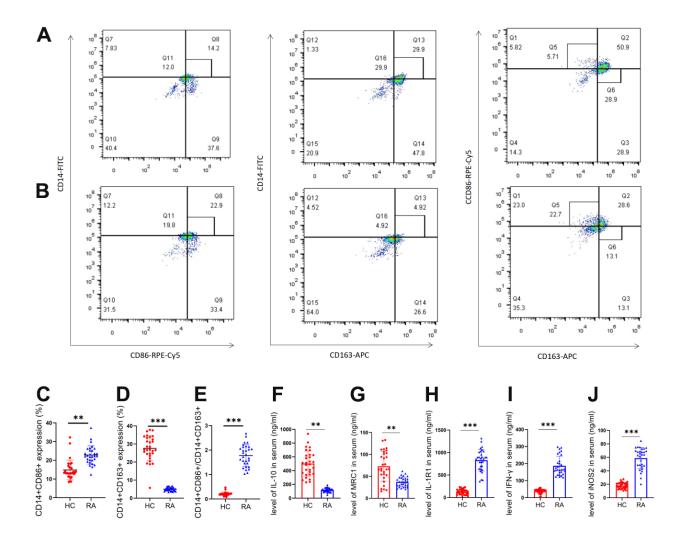
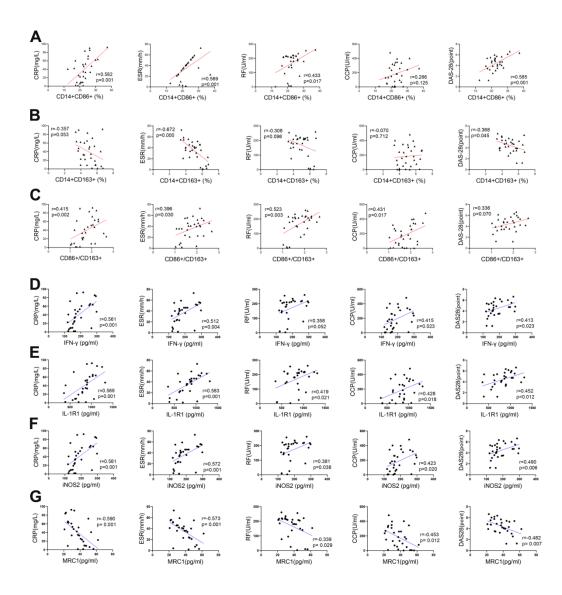
## SUPPLEMENTARY MATERIALS

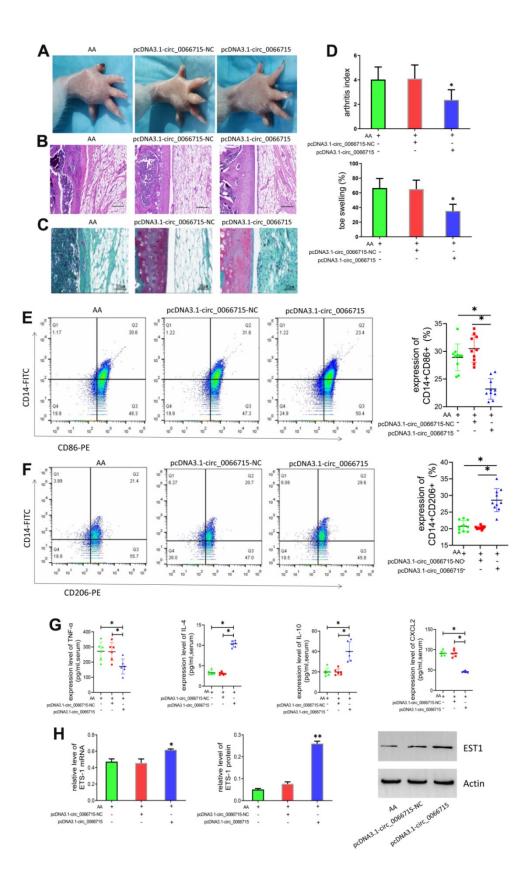
## **Supplementary Figures**



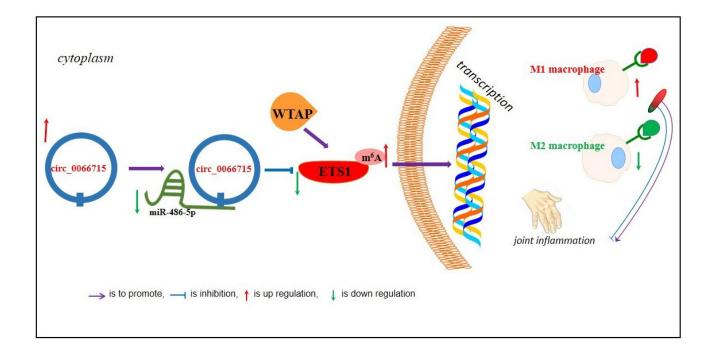
Supplementary Figure 1. Comparison of M1 and M2 macrophage markers between the two groups. (A) Flow cytometry of macrophages in the HC group. (B) Flow cytometry map of macrophages in RA group. (C–F) Comparison of HC and RA macrophage markers. (G–J) Comparison of cytokine secretion by HC and RA macrophages. \*\*\**P*<0.001, \*\**P*<0.01.



**Supplementary Figure 2. Correlation analysis between M1 and M2 macrophages and clinical indicators of RA.** (A) The correlation between CD14+CD86+ and clinical indicators of RA. (B) The correlation between CD14+CD163+ and clinical indicators of RA. (C) The correlation between CD86+/CD163+ and clinical indicators of RA. (D) The correlation between IFN-γ and clinical indicators of RA. (E) Correlation of IL-1R1 with clinical indicators of RA. (F) Correlation of iNOS2 with clinical indicators of RA. (G) Correlation of MRC1 with clinical indicators of RA.



**Supplementary Figure 3.** circ\_0066715 delays macrophage polarization *in vivo*. (A) Comparison of joint morphology; (B) Comparison of joint HE staining (×200); (C) Comparison of joint safranine fast green (×200); (D) Comparison of arthritis index and toe swelling; (E) M1 macrophage marker comparison; (F) M2 macrophage marker comparison; (G) Comparison of cytokine secretion by macrophages; (H) ETS1 changes after circ\_0066715 overexpression. \*\* P < 0.01, \* P < 0.05.



Supplementary Figure 4. Mechanistic process of ceRNA regulatory axis and m6A methylation modification involved in RA macrophage polarization.