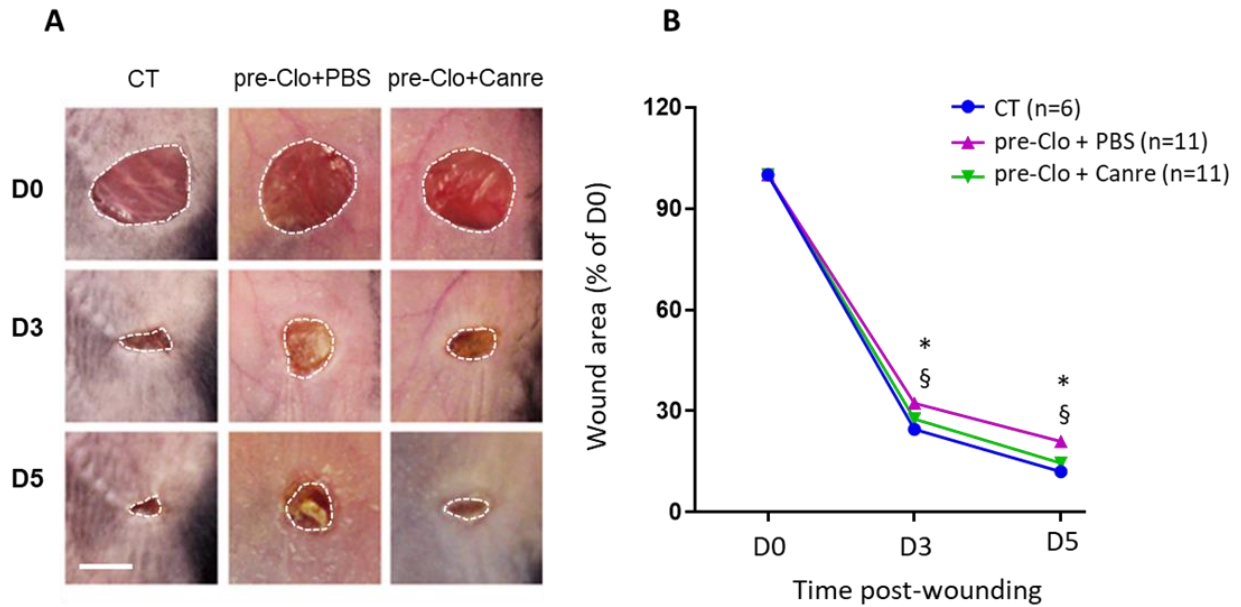**Figure S1. MR antagonist rescues clobetasol induced wound healing delayed in mouse skin**.

Photographs (**A**) and (**B**) quantification wound area from mice with and without pretreated 10 days with clobetasol and treated with Canrenoate (Canre) or PBS at different time point post wounding. Data represent mean ± SEM; n= number of mice per group. Statistics: (**B**) two-way ANOVA test followed by the Newman-Keuls Multiple Comparison test. *$p < 0.05$ for pre-Clo + PBS vs CT. §$p < 0.05$ for pre-Clo + PBS vs pre-Clo + Canre, ns = not significant. ANOVA, analysis of variance; CT, control; Canre, potassium canrenoate; PBS, phosphate buffered saline; SEM, standard error of the mean; pre, pretreated; Clo, clobetasol; D0, day 0; D3, day 3; D5, day 5. Scale bar = 100 µm.
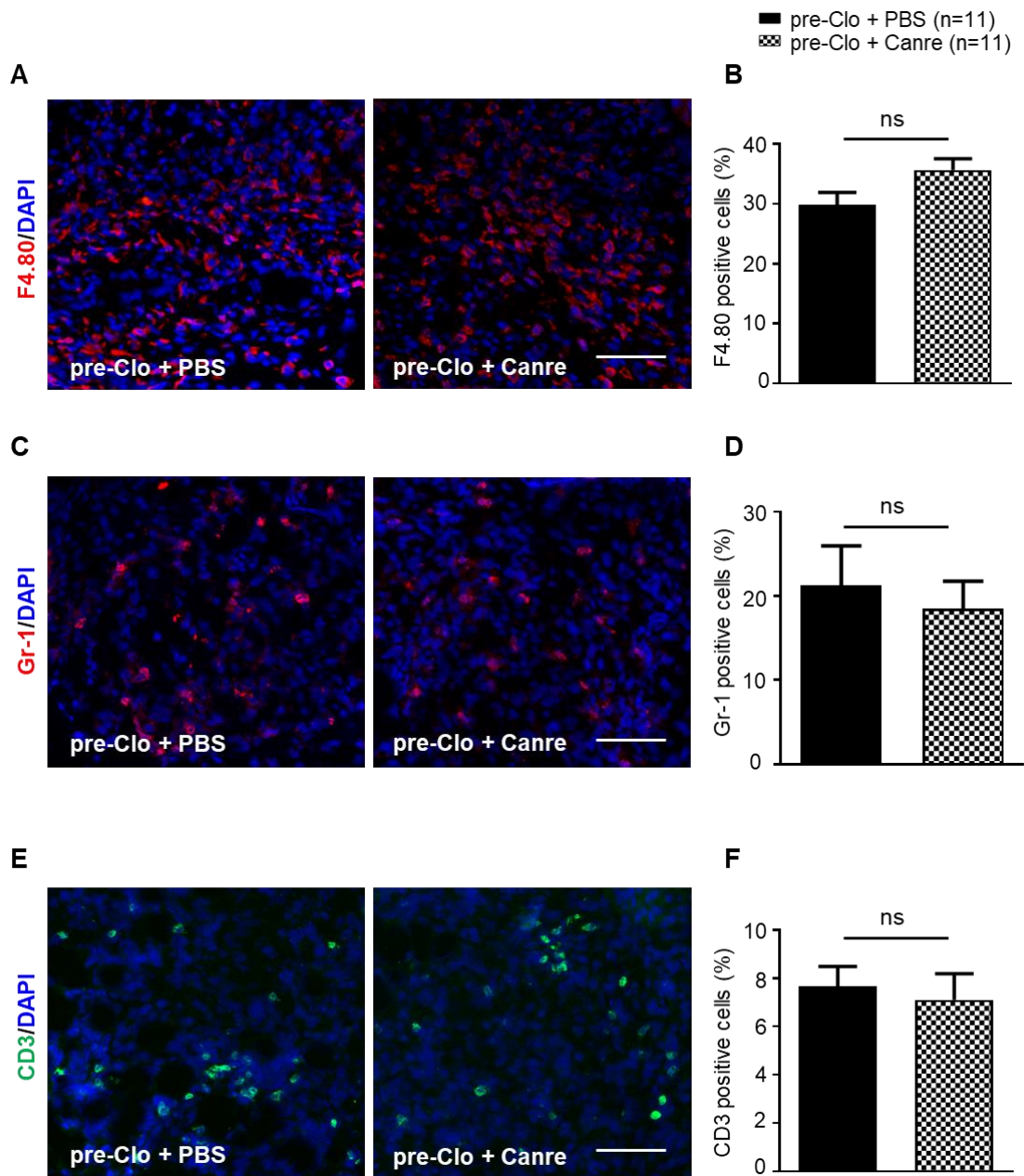
Figure S2. Canrenoate does not modify the recruitment of inflammatory cells in clobetasol pre-treated skin.

Photographs of wound sections at day 5 post-wounding labelled with (**A**) anti- F4.80; (**C**) anti-Gr-1 and (**E**) anti-CD3 antibodies, showing neutrophils, macrophages, lymphocyte T cells in granulation tissue of mice pre-treated clobetasol and (**B, D, F**) quantification of these cells in granulation tissue of wounds at day 5 after treatment with Canre or PBS. Data present mean ± SEM, n= number of mice per group, from 2 experimental series. Differences between the means

of two groups were assessed using a non-parametric Mann-Whitney test. *ns: not significant*.

PBS, phosphate buffered saline; Canre, potassium canrenoate; DAPI, 4,6-diamidino-2-phenylindole; SEM, standard error of the mean; pre, pretreated; Clo, clobetasol. Scale bar = 100 μm
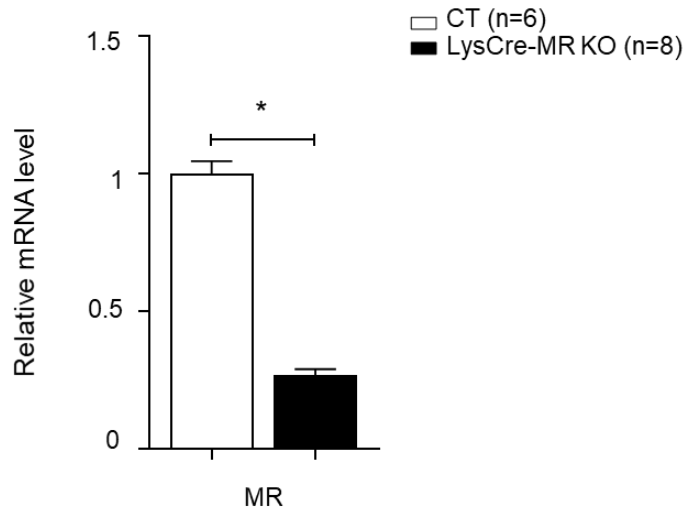

Figure S3. MR mRNA expressed low level in macrophages of LysCre-MR KO mice model. The expression level of MR mRNA is decreased in macrophages from the LysCre-MR KO mice model compared with CT mice. Data present mean ± SEM, n = number of mice per group. Differences between the means of two groups were assessed using a non-parametric Mann-Whitney test. *$p < 0.05$*, MR, mineralocorticoid receptor; CT, control; KO, knockout; SEM, standard error of the mean.
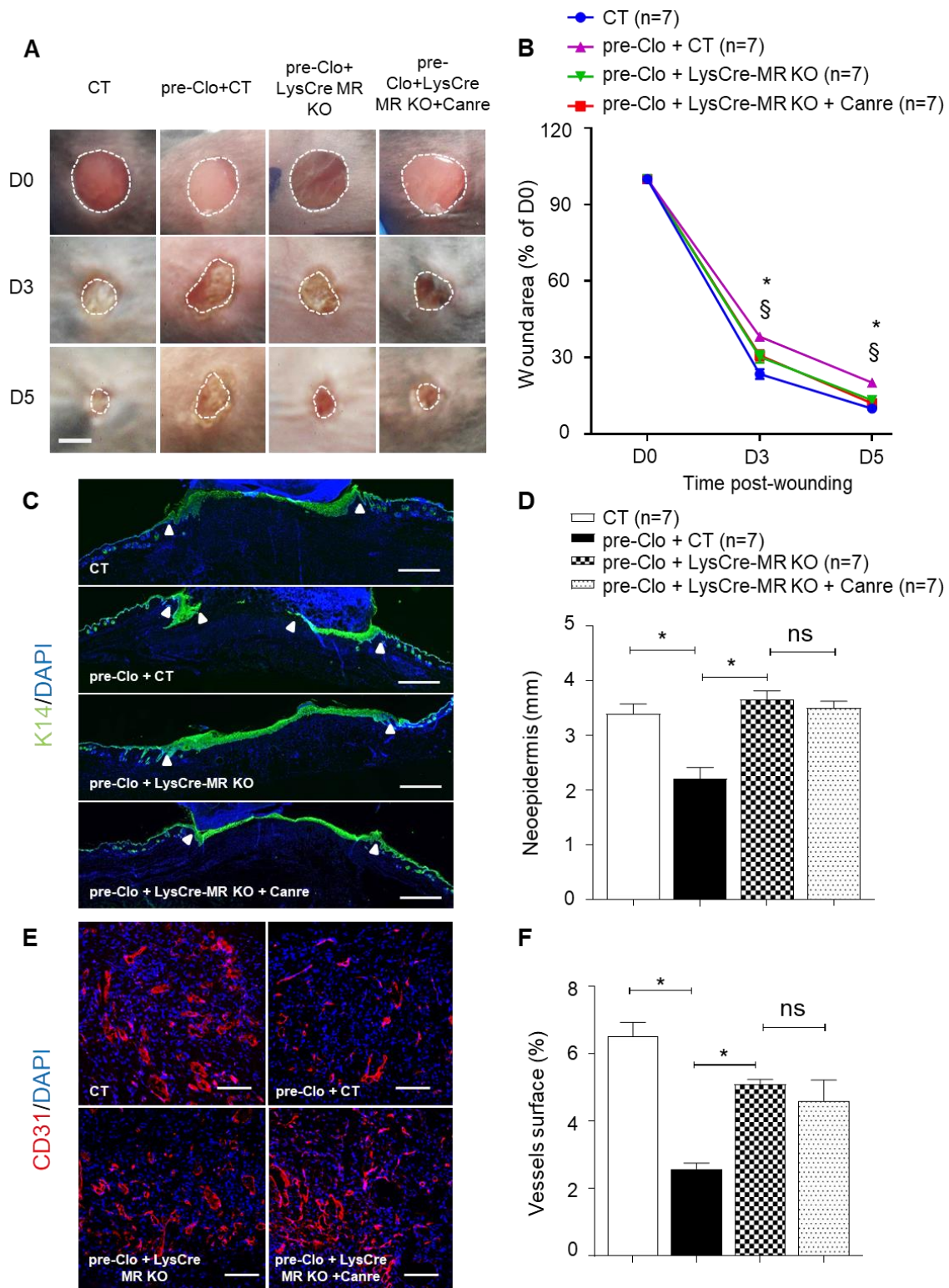
Figure S4. Canrenoate does not give additional effect on wound healing of myeloid mineralocorticoid receptor deficiency mice pretreated with clobetasol.

(**A**) Images and (**B**) quantification of the wound area from CT or LysCre-MR KO mice with or without clobetasol pretreatment before wounding and canrenoate treatment post-wounding, at

the different time points post-wounding. (**C**) Photographs of wound sections at day 5 post-wounding labeled with anti-K14 antibody (green) and DAPI (blue). (**D**) Quantification of the length of the neo-epidermis. (**E**) Photographs of wound sections stained for CD31 (red), showing neo-microvessels formed in wound beds. (**F**) Quantification of CD31$^+$ microvessels surface in the granulation tissue of wounds. Data represent mean ± SEM; n= number of mice per group. Statistics: (**B**): two-way ANOVA; (**D**), (**F**): one-way ANOVA test followed by the Newman-Keuls Multiple Comparison test. *$p < 0.05$ for CT + Clo vs CT. §$p < 0.05$ for CT + Clo vs LysCre-MR KO + Clo, *ns = not significant*. ANOVA, analysis of variance; K14, keratin-14; DAPI, 4,6-diamidino-2-phenylindole; MR, mineralocorticoid receptor; CT, control; Canre, potassium canrenoate; SEM, standard error of the mean; pre, pretreated; Clo, clobetasol; KO, knockout; D0, day 0; D3, day 3; D5, day 5. Scale bar = 100 um