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# Supplementary Materials for

## Therapy with CTLA4-Ig and an antiviral monoclonal antibody controls chikungunya virus arthritis

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**The PDF file includes:**



**Other Supplementary Material for this manuscript includes the following:**
(available at www.sciencetranslationalmedicine.org/cgi/content/full/9/375/eaah3438/DC1)

**SUPPLEMENTARY FIGURES**

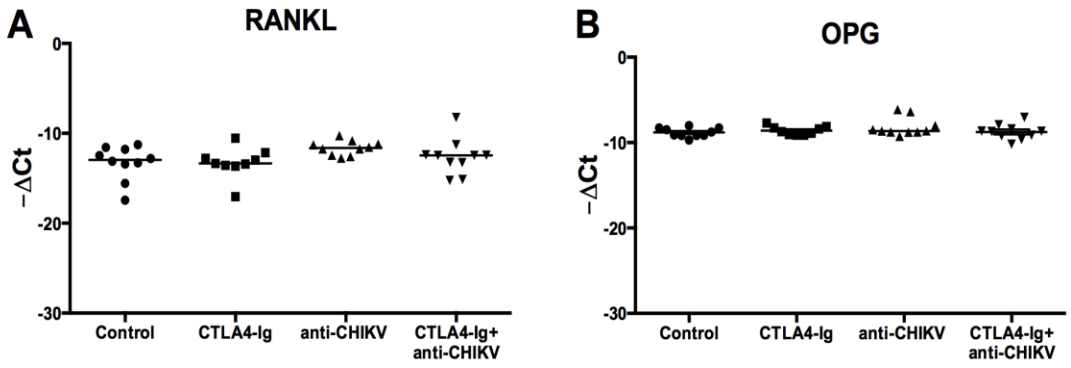


**Fig. S1. RANKL and OPG expression in CHIKV-infected joints.** Mice were inoculated with $10^3$ FFU of CHIKV via a subcutaneous route. At day 3 after infection, a single IP injection of 600 μg of isotype control antibody, 300 μg of CTLA4-Ig, 300 μg of anti-CHIKV mAb, or a combination of 300 μg CTLA4-Ig and 300 μg anti-CHIKV mAb was administered. On day 7 after infection, RNA was isolated from the left foot. RANKL (**A**) and OPG (**B**) expression were measured by qRT-PCR and normalized to GAPDH. Data were pooled from two independent experiments ($n$ = 10 animals per group) and analyzed by ANOVA with a multiple comparisons test. $P > 0.1$ for all groups.

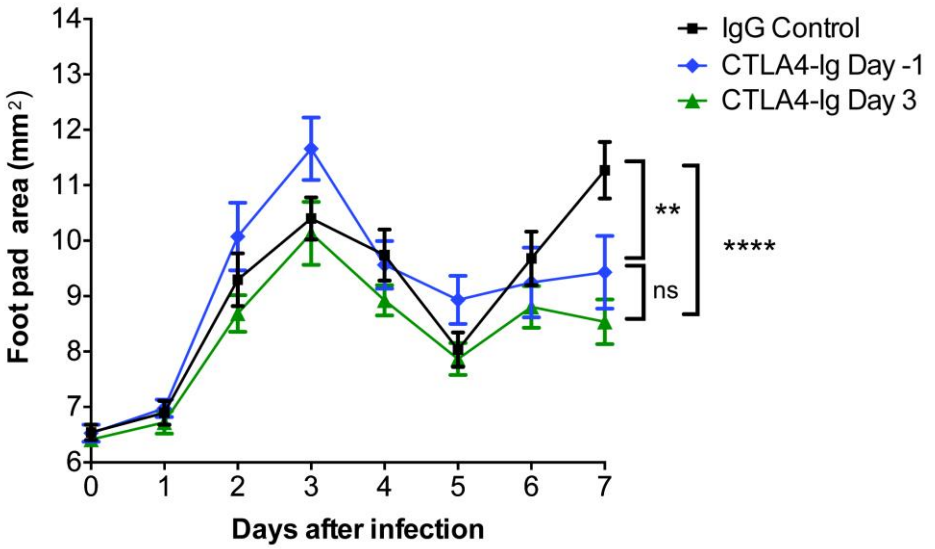


**Fig. S2. Foot swelling with CTLA4-Ig therapy administered before or during CHIKV infection.** Five week-old mice were inoculated with $10^3$ FFU of CHIKV via a subcutaneous route. (**A**) Foot swelling (area in $mm^2$) from day 0 through day 7 in mice receiving a single IP injection of 300 μg of isotype control antibody or 300 μg of CTLA4-Ig at day -1 or day 3. Data are pooled from two independent experiments ($n$ = 9 or 10 animals per group). Data represent the mean +/- SEM. **, $P < 0.005$; **** $P < 0.0001$ (2-way ANOVA with multiple comparisons test).

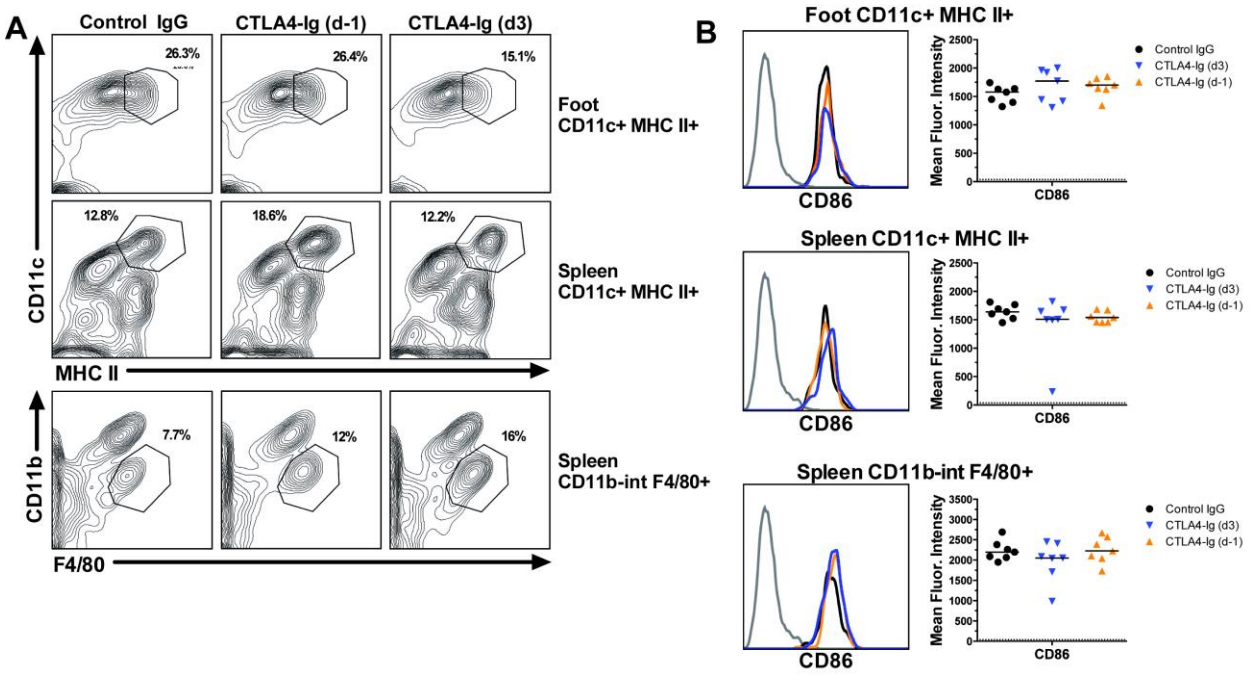


**Fig. S3. Flow cytometry analysis of APC activation in the spleen and ankles of mice on day 7 after infection with CHIKV.** Mice were inoculated with $10^3$ FFU of CHIKV via a subcutaneous route. Mice received at day 3 a single IP injection of 300 μg of isotype control antibody 300 μg of CTLA4-Ig on either day -1 or day 3 after infection. (**A**) Representative contour plots showing the percentages of $CD11c^+MHCII^+$ dendritic cells and $CD11b^{intermediate}F4/80^+$ macrophages in the left foot and spleen of infected animals from each treatment group. (**B**) Representative histograms (left panel) and geometric mean fluorescence intensity of CD86 expression on $CD11c^+MHCII^+$ dendritic cells and $CD11b^{intermediate}F4/80^+$ macrophages in the left foot and spleen of infected animals from each treatment group. Results are pooled from two independent experiments with 3 to 4 mice per group per experiment. No statistically significant differences were observed in the treatment groups (Kruskal-Wallis with Dunn's post-hoc analysis).