

Supporting Information for

A Simple and General Strategy for Postsurgical Personalized Cancer

Vaccine Therapy Based on an Injectable Dynamic Covalent Hydrogel

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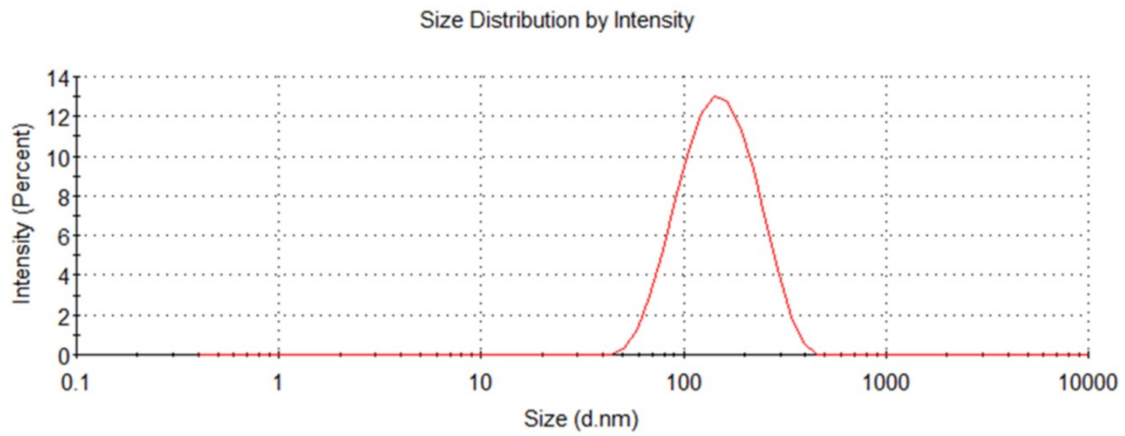


Fig.S1. DLS results of CpG/PEI. PDI = 0.175, zeta potential = +34.2 mV.

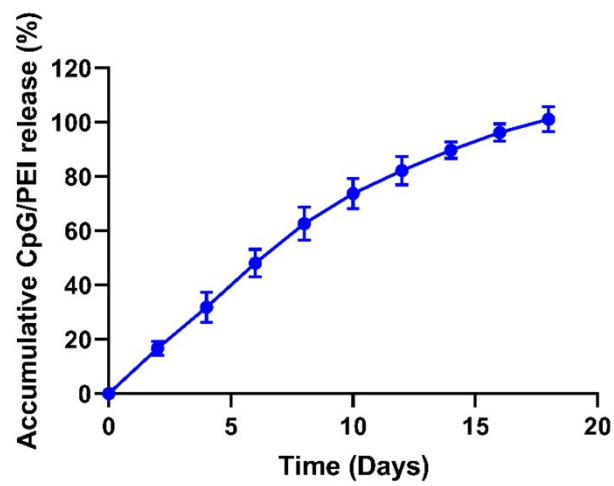


Fig.S2. Accumulative release of CpG/PEI from DCHVax in PBS, pH 7.4 (n = 3).

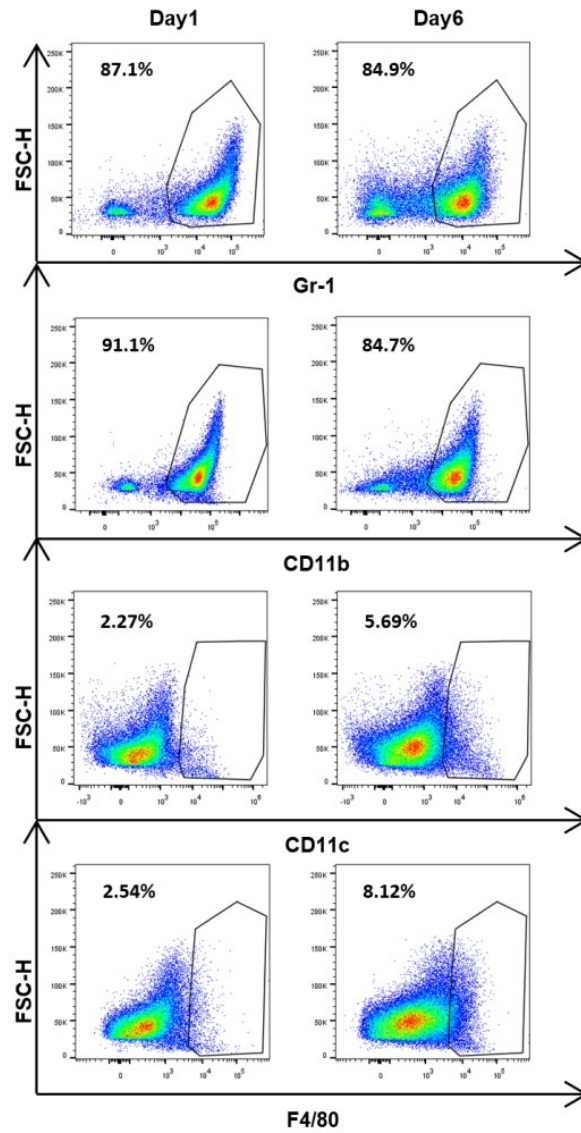


Fig.S3. Gating strategy and representative images of the flow cytometry analysis of immune cells infiltration in the subcutaneously injected DCHVax.

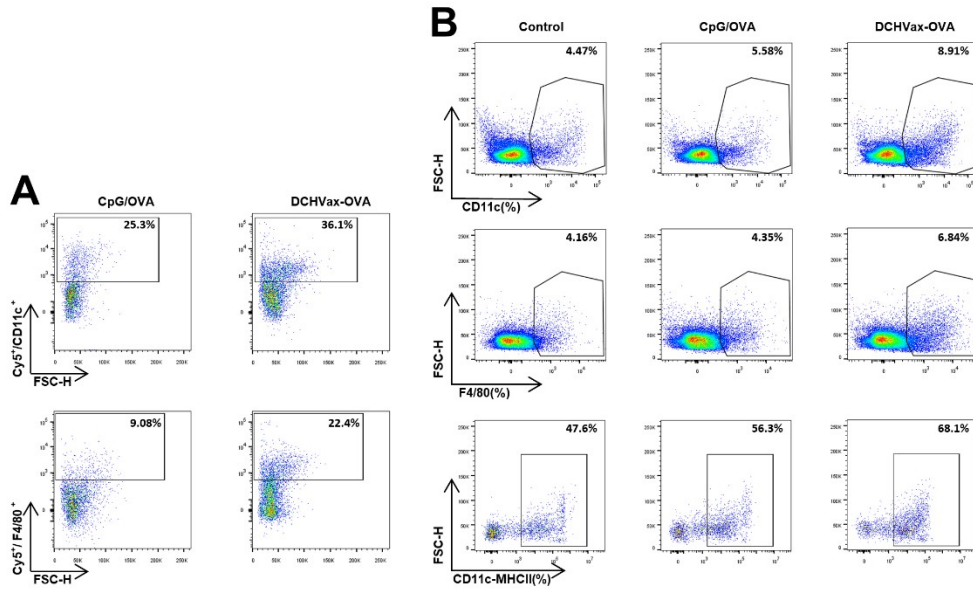


Fig.S4. A. Gating strategy and representative images of flow cytometry analysis on the Cy5⁺/CD11c⁺, Cy5⁺/F4/80⁺ in the lymph nodes. B. Gating strategy and representative images of flow cytometry analysis on the CD11c⁺, F4/80⁺, and CD11c-MHCII⁺ cells in the lymph nodes.

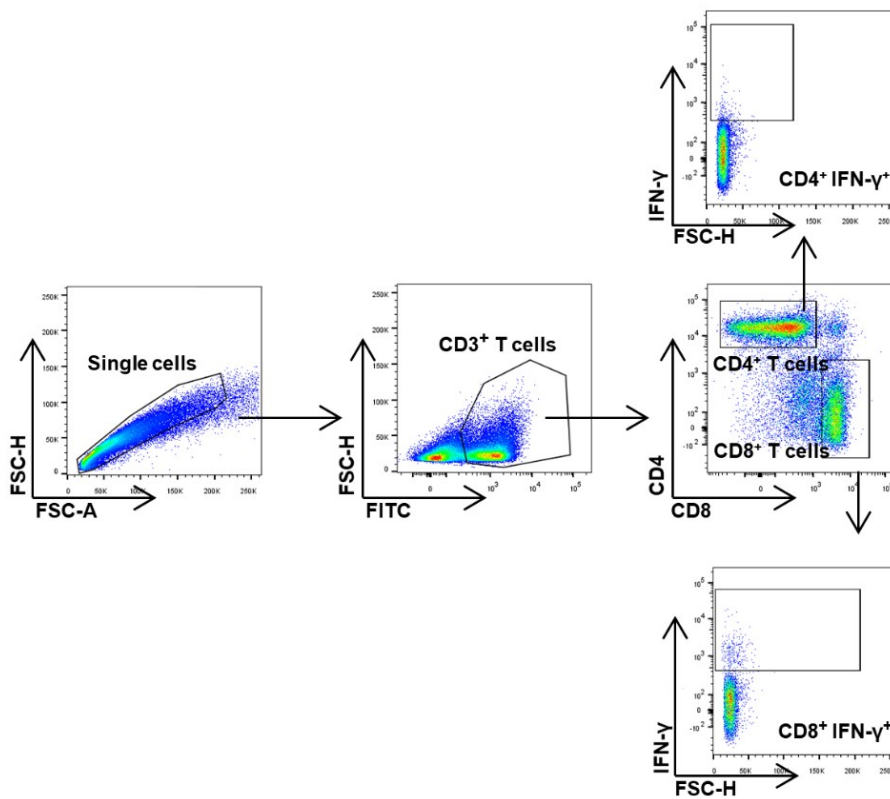


Fig.S5. Gating strategies for flow analysis of the blood samples in the B16-OVA tumor-bearing mice after various treatments.

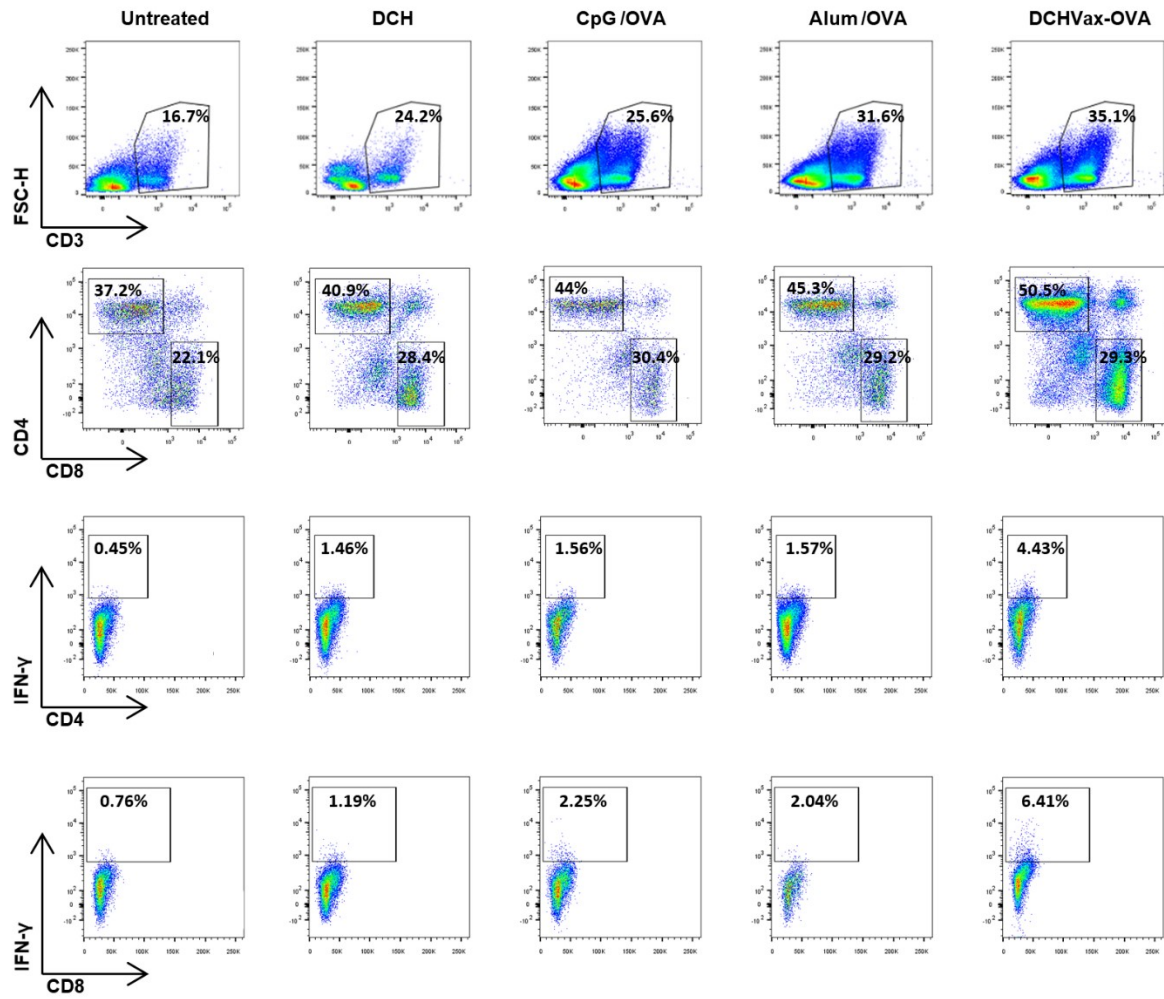


Fig.S6. Representative flow cytometry results of the CD4⁺ T cells, CD8⁺ T cells, IFN- γ ⁺ CD4⁺ T cells and IFN- γ ⁺ CD8⁺ T cells in the blood of B16-OVA tumor-bearing mice after various treatments.

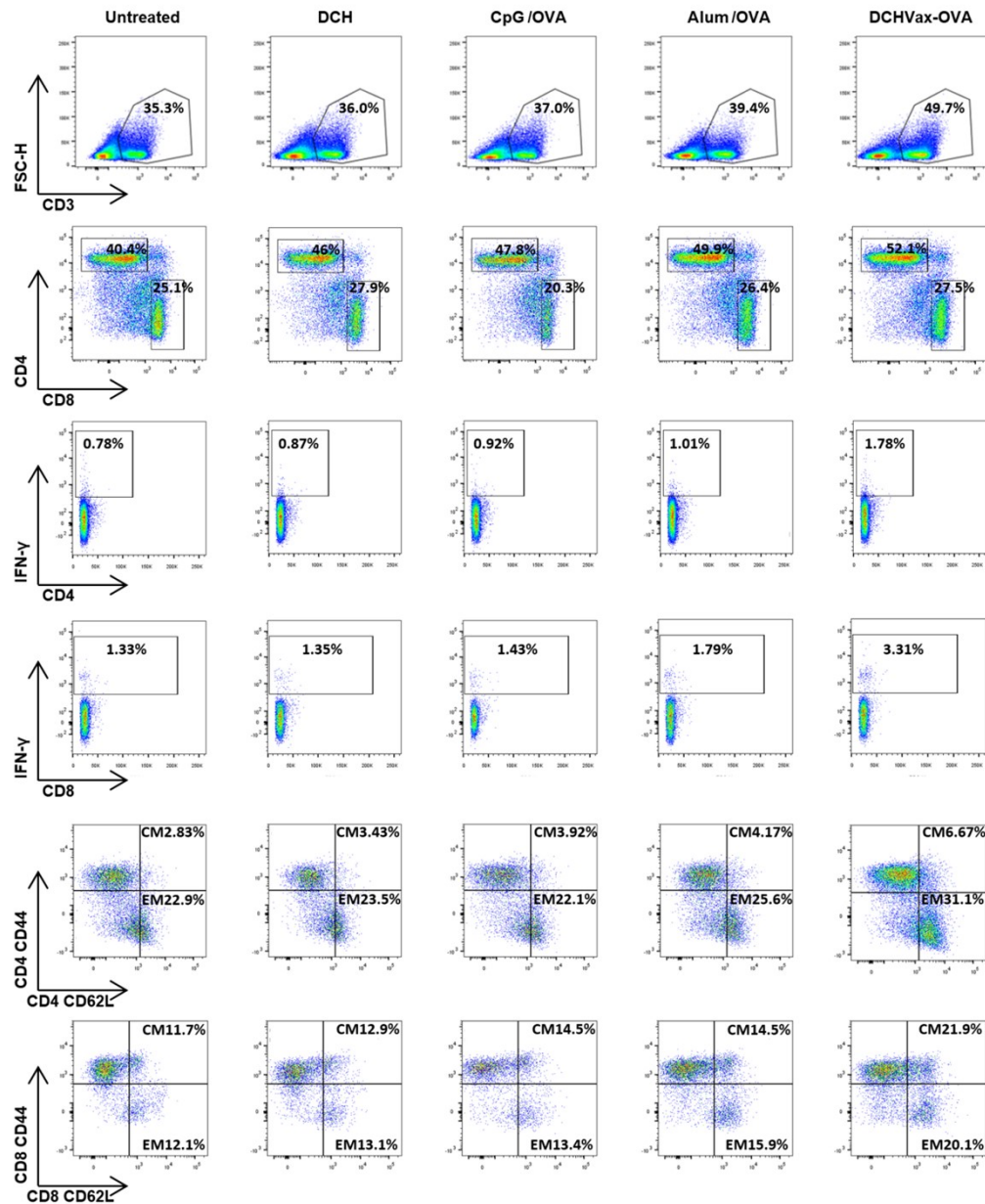


Fig.S7. Representative flow cytometry results of the CD4⁺ T cells, CD8⁺ T cells, IFN- γ ⁺ CD4⁺ T cells, IFN- γ ⁺ CD8⁺ T cells and memory T cells in the spleen of B16-OVA tumor-bearing mice after various treatments.

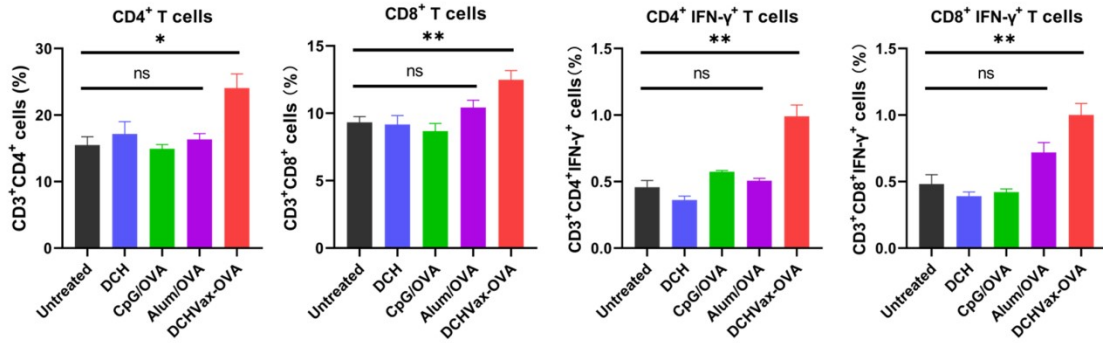


Fig.S8. Quantitative results of the CD4⁺ T cells, CD8⁺ T cells, IFN-γ⁺ CD4⁺ T cells, IFN-γ⁺ CD8⁺ T cells in the spleen of B16-OVA tumor-bearing mice after various treatments (*n* = 4).

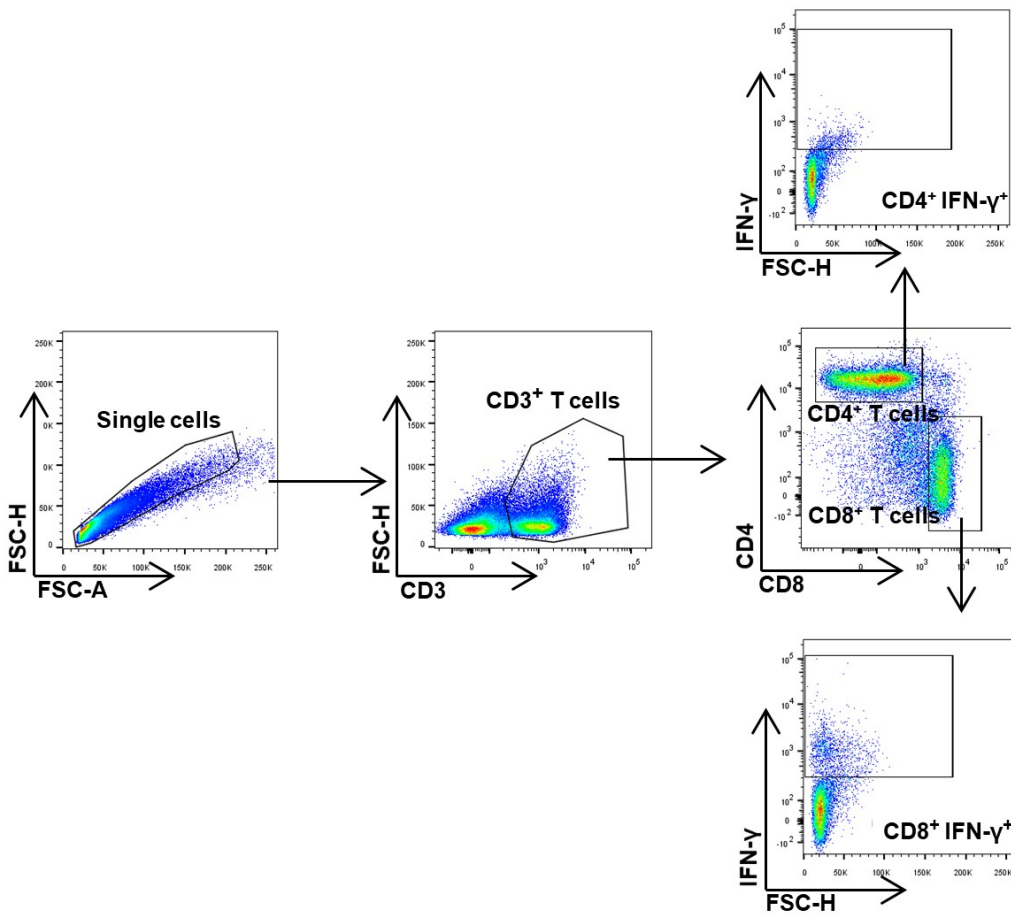


Fig.S9. Gating strategies for flow analysis of the blood samples in the MC38 tumor-bearing mice after various treatments.

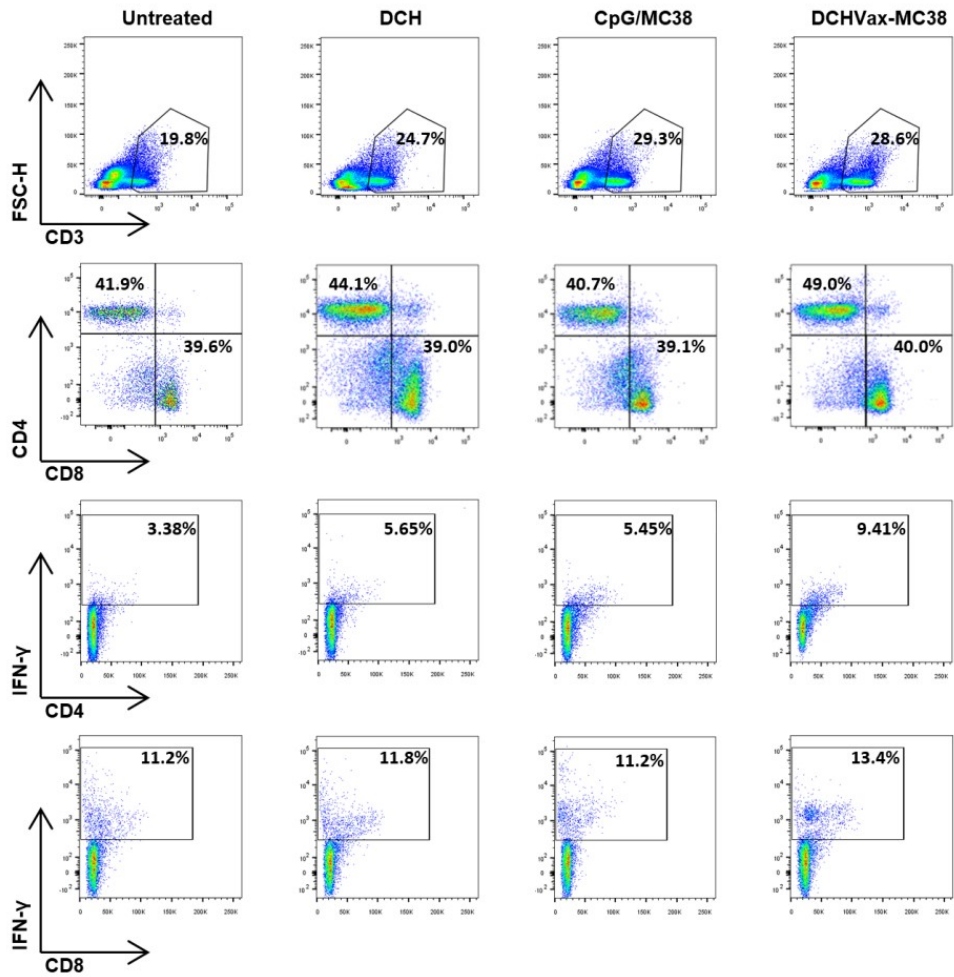


Fig.S10. Representative flow cytometry results of the CD4⁺ T cells, CD8⁺ T cells, IFN-γ⁺ CD4⁺ T cells and IFN-γ⁺ CD8⁺ T cells in the blood of MC38 tumor-bearing mice after various treatments.

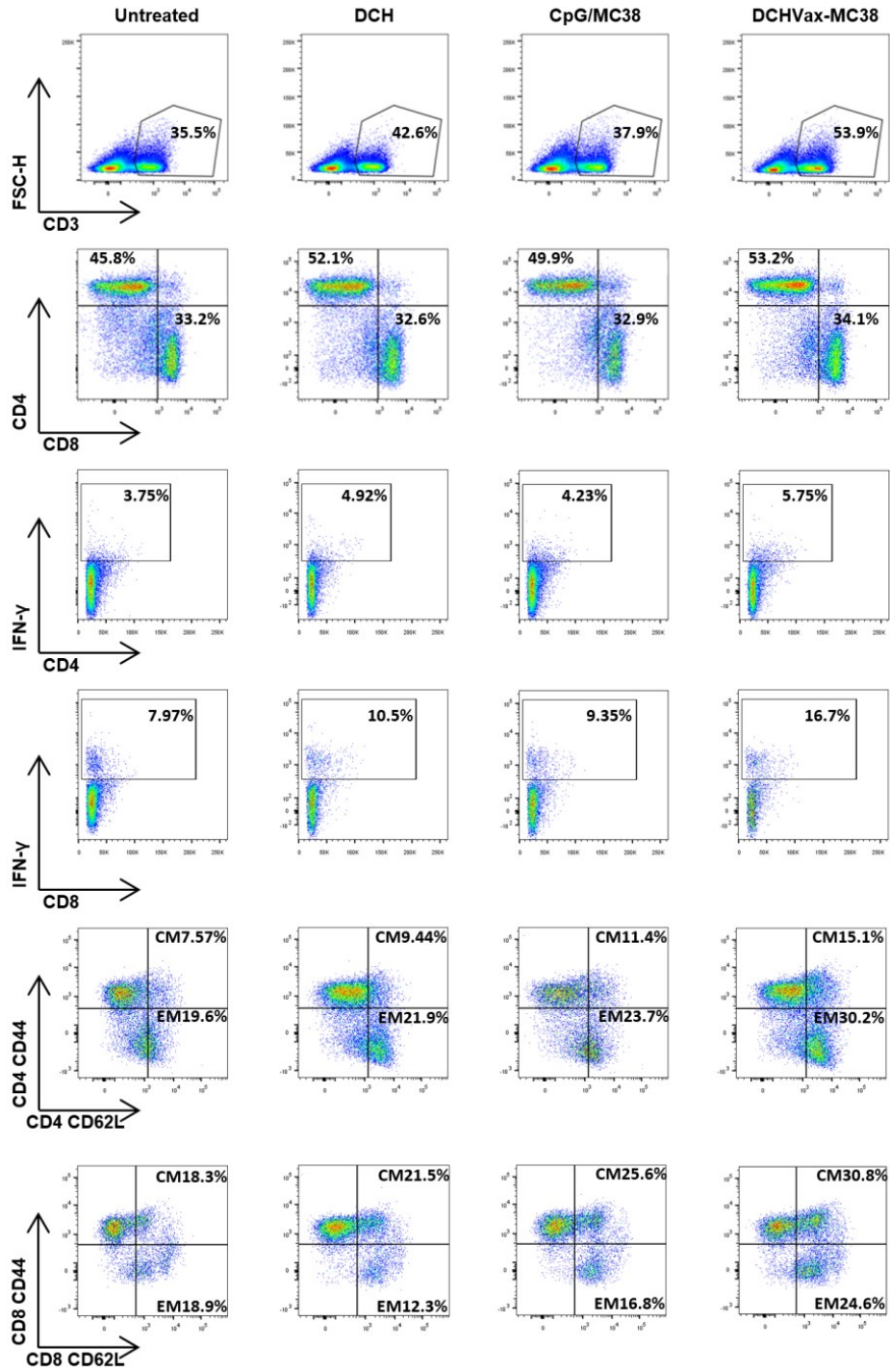


Fig.S11. Representative flow cytometry results of the CD4⁺ T cell, CD8⁺ T cell, IFN- γ ⁺ CD4⁺ T cell, IFN- γ ⁺ CD8⁺ T cell and memory T cell in spleen of MC38 tumor-bearing mice after various treatments.

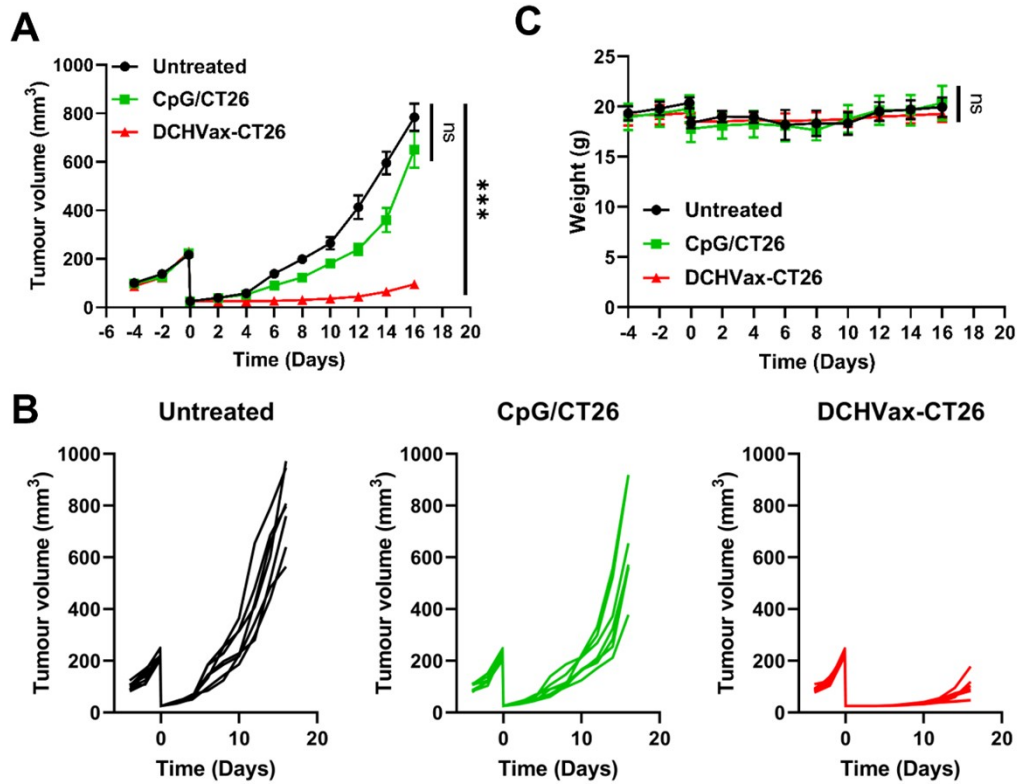


Fig.S12. DCHVax for CT26 tumor post-operative therapy ($n = 7$). (A) The overall growth curve of CT26 tumors in different groups. (B) Individual tumor growth curves of CT26 tumors in different groups. (C) Body weight of CT26 tumor-bearing mice of different treatment groups. (ns, not significant; *** $p < 0.001$).

Table S1. Antibodies used in this study.

Antibodies	Company	Catalog	Application
FITC anti-mouse CD3 Antibody	BioLegend	100203	flow
PE/Cy7 anti-mouse CD4 Antibody	BioLegend	100422	flow
Alexa Fluor700 anti-mouse CD8a Antibody	BioLegend	2075802	flow
IFN-gama-mouse BV650 Antibody	BioLegend	505832	flow
PE anti-mouse CD44 Antibody	BioLegend	103007	flow
Apc/Cy7 anti-mouse CD62L Antibody	BioLegend	104418	flow
APC Anti- mouse CD11b Antibody	BioLegend	101212	Flow
PE anti-mouse CD11c Antibody	BioLegend	102026	flow
PE/Cy anti-mouse F4/80 Antibody	BioLegend	123114	flow
PE Anti- mouse Gr-1 Antibody	BioLegend	108408	Flow
APC-Cy7 Anti- mouse MHCII Antibody	BioLegend	116630	Flow
PE Anti- mouse CD19 Antibody	BioLegend	115507	Flow