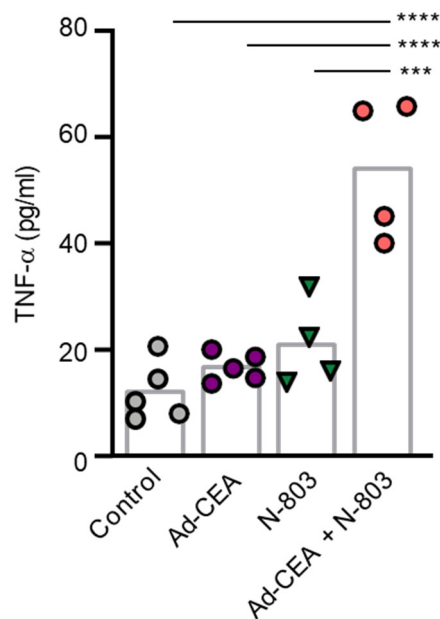


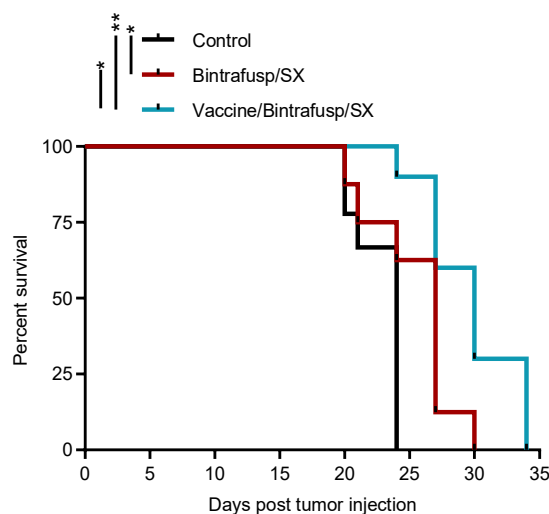
Supplementary Materials

# Vaccine Increases the Diversity and Activation of Intratumoral T Cells in the Context of Combination Immunotherapy

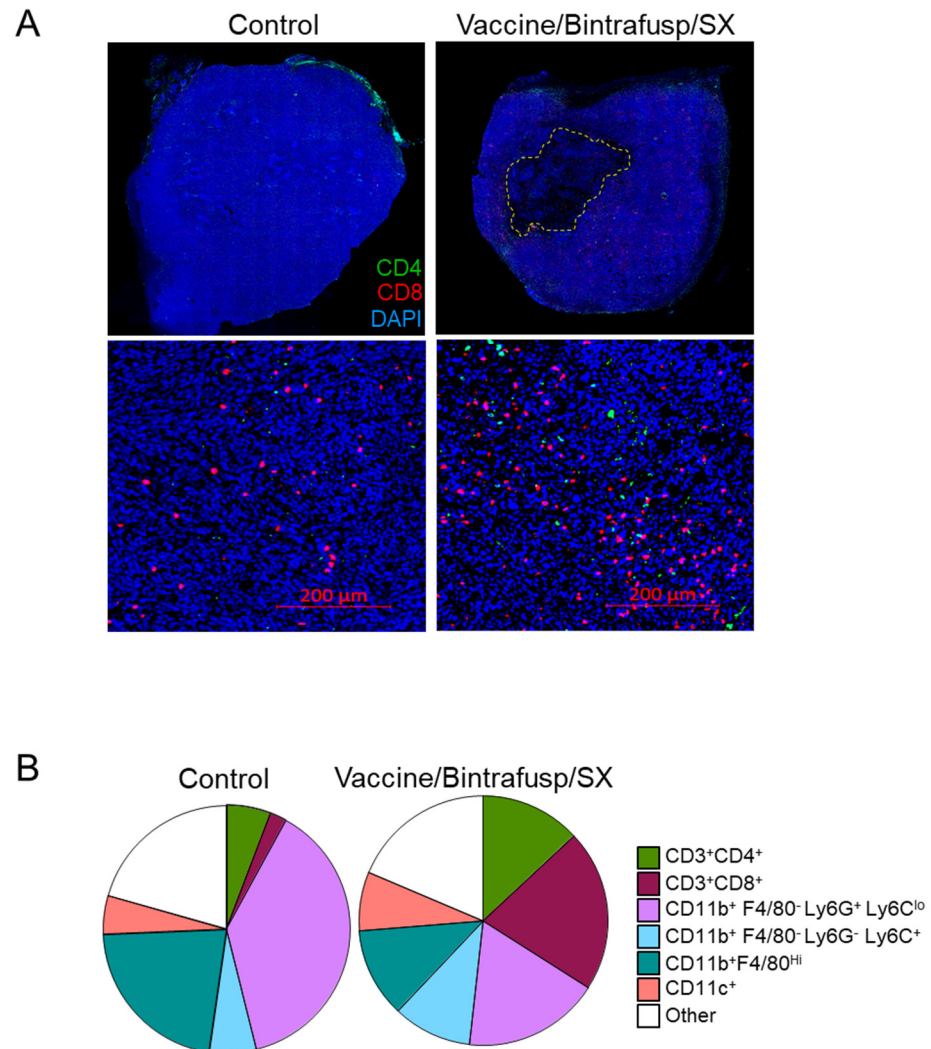
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**Figure S1.** Optimization of the combination Ad-CEA plus N-803. Female C57BL/6-CEA.Tg mice (10- to 16-week-old) were injected with MC38-CEA tumors. Mice were administered either Ad-CEA alone on days 7, 14, and 21 post-tumor implantation, N-803 alone on days 10 and 17, or the combination of the two agents. On day 25 post-tumor implantation, sera were collected ( $n = 4-5$ /group) and TNF $\alpha$  levels quantified. Individual points represent data from one mouse. \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ ; \*\*\*\*  $p \leq 0.0001$  for one-way ANOVA followed by Tukey's post hoc test.



**Figure S2.** CEA.Tg mice were injected s.c. with  $3 \times 10^5$  MC38-CEA in the flank. On day 7, mice were started on a control or SX-682 diet, and on days 14 and 21 mice received i.p. injections of 200  $\mu$ g bintrafusp alfa. Priming vaccine dose of s.c. Ad-CEA was administered on day 7 with boosting doses of Ad-CEA/N-803 on days 14 and 21. Survival curves show percent survival;  $n = 7$  mice/group. \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$  for Log-rank (Mantel-Cox) test.



**Figure S3.** (A) Representative images of tumors stained for CD4<sup>+</sup> (green) and CD8<sup>+</sup> (red) T cells and DAPI (blue) by immunofluorescence. Upper panels show images for the entire tumor, with area of central necrosis delineated by a dashed line; lower panels showed a magnified area. (B) Flow cytometry analysis of Control and Vaccine/Bintrafusp/SX-treated tumors comparing average frequencies of tumor infiltrating immune subsets per total CD45<sup>+</sup>;  $n = 5$  (Control),  $n = 6$  (Vaccine/Bintrafusp/SX).