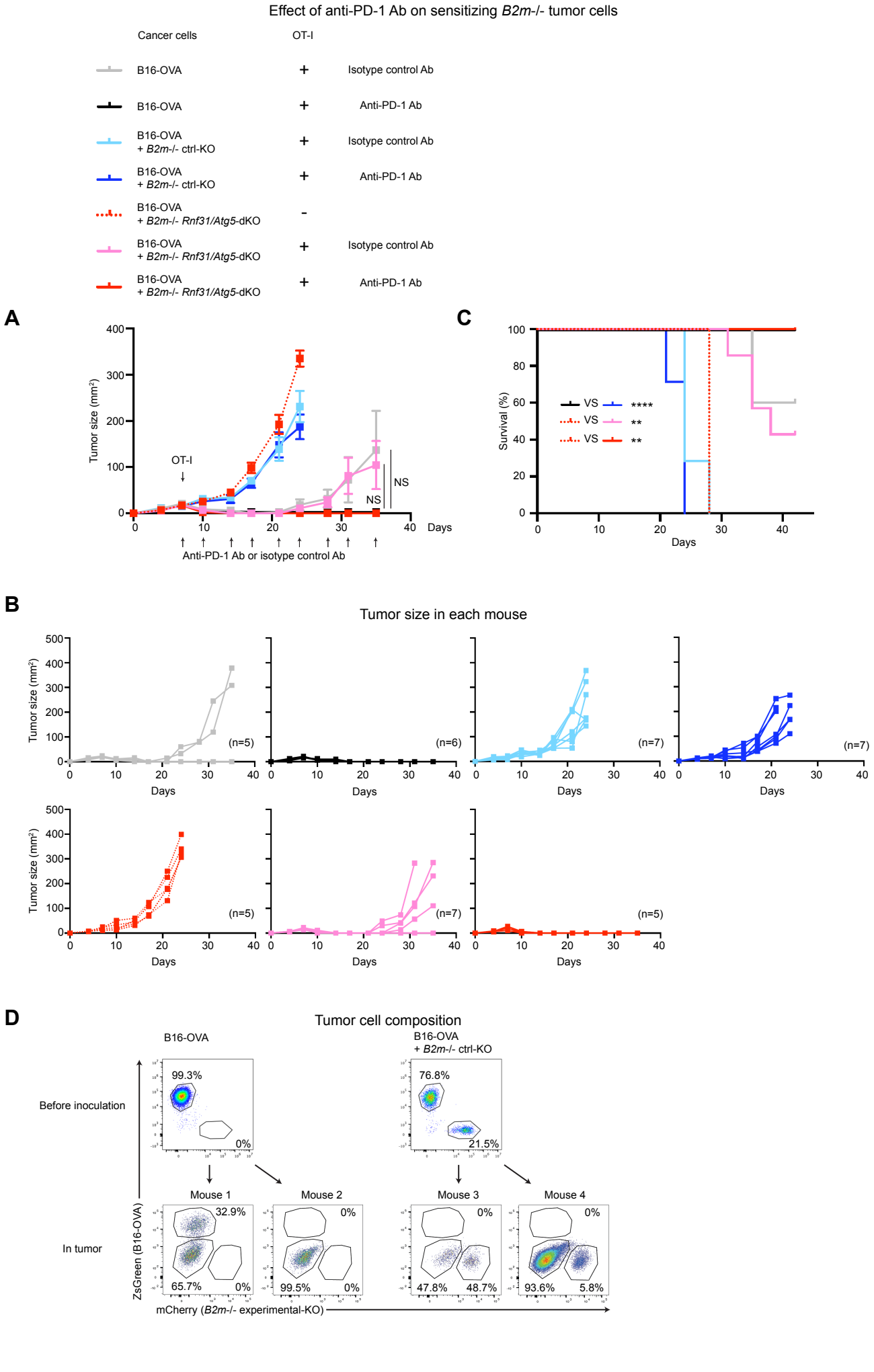
Figure S7


Effect of anti-PD-1 Ab on sensitizing B2m-/- tumor cells
Cancer cells
OT-I
B16-OVA + Isotype control Ab
B16-OVA + Anti-PD-1 Ab
B16-OVA + B2m-/- ctrl-KO + Isotype control Ab
B16-OVA + B2m-/- ctrl-KO + Anti-PD-1 Ab
B16-OVA + B2m-/- Rnf31/Atg5-dKO -
B16-OVA + B2m-/- Rnf31/Atg5-dKO + Isotype control Ab
B16-OVA + B2m-/- Rnf31/Atg5-dKO + Anti-PD-1 Ab
A
Tumor size (mm²)
OT-I
NS
NS
Days
Anti-PD-1 Ab or isotype control Ab
C
Survival (%)
VS ****
VS **
VS **
Days
B
Tumor size in each mouse
Tumor size (mm²)
(n=5)
(n=6)
(n=7)
(n=7)
(n=5)
(n=7)
(n=5)
Days
D
Tumor cell composition
B16-OVA
B16-OVA + B2m-/- ctrl-KO
Before inoculation
99.3%
0%
76.8%
21.5%
Mouse 1
Mouse 2
Mouse 3
Mouse 4
In tumor
32.9%
65.7%
0%
0%
99.5%
0%
0%
47.8%
48.7%
0%
93.6%
5.8%
ZsGreen (B16-OVA)
mCherry (B2m-/- experimental-KO)

Supplementary Fig. S7. Effect of PD-1 inhibition on treatment of tumors containing a *B2m*-/- population.

(**A-C**) Mice were injected subcutaneously ($4x10^5$ cells) with B16-Ova tumor cells or a 4:1 mixture of B16-Ova and *B2m*-/- cells. The indicated edits were performed in *B2m*-/- cells (ctrl-KO or *Rnf31/Atg5*-dKO). Following tumor engraftment (day 7), activated OT-I T cells ($3x10^6$) were injected intravenously. PD-1 antibody or isotype control antibody treatment was initiated on day 7 and continued twice weekly. Tumor growth (**A-B**) and survival (**C**) were recorded (n=5-7 mice/group).

(**D**) Tumor cell composition in mice whose tumors grew out after treatment with OT-I T cells and isotype control antibody. Representative flow cytometry plots of *B2m*-/- exp-KO (mCherry), B16-Ova (ZsGreen), and tumor cells negative for both marker proteins before inoculation (top row) and in tumors (bottom row).

Data are depicted as the mean ± SEM. Statistical significance was assessed by a two-way ANOVA with Dunnett's post hoc test (**A**) and Kaplan-Meier log-rank (Mantel-Cox) test (**C**). ****$p < 0.0001$; **$p < 0.01$; NS, not significant.