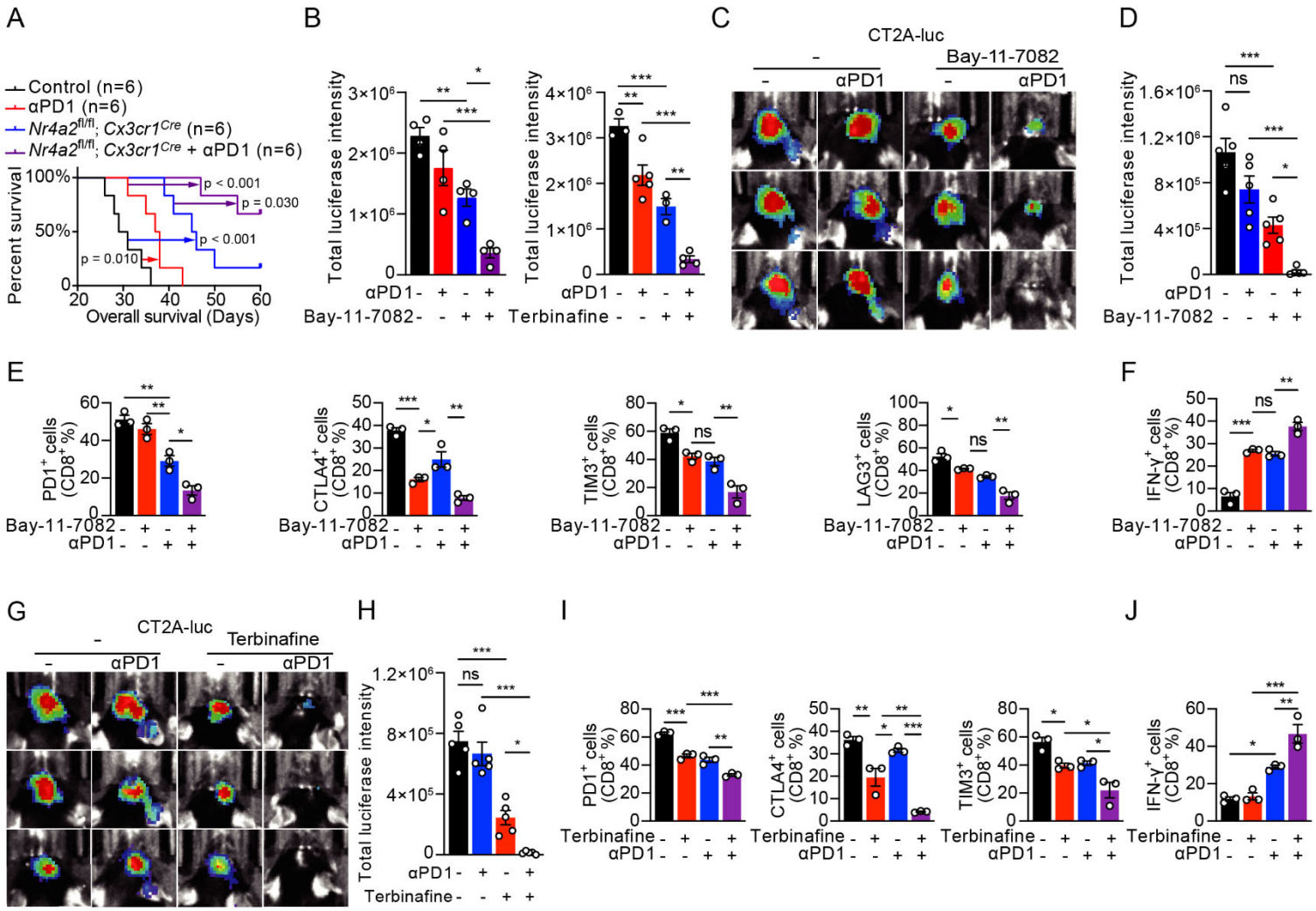
A
Control (n=6)
αPD1 (n=6)
Nr4a2fl/fl; Cx3cr1Cre (n=6)
Nr4a2fl/fl; Cx3cr1Cre + αPD1 (n=6)
Percent survival
Overall survival (Days)
p < 0.001
p = 0.030
p < 0.001
p = 0.010
B
Total luciferase intensity
αPD1
Bay-11-7082
Terbinafine
C
CT2A-luc
Bay-11-7082
αPD1
D
Total luciferase intensity
ns
E
PD1+ cells (CD8+ %)
CTLA4+ cells (CD8+ %)
TIM3+ cells (CD8+ %)
LAG3+ cells (CD8+ %)
F
IFN-γ+ cells (CD8+ %)
G
CT2A-luc
Terbinafine
αPD1
H
Total luciferase intensity
I
PD1+ cells (CD8+ %)
CTLA4+ cells (CD8+ %)
TIM3+ cells (CD8+ %)
J
IFN-γ+ cells (CD8+ %)

Supplementary Figure S6. Inhibition of NR4A2 or SQLE improves the therapeutic efficacy of immune checkpoint blockade, related to Figure 7

(A) Survival curves of *Nr4a2*$^{fl/fl}$ and *Nr4a2*$^{fl/fl}$*Cx3cr1*^{cre} glioma-bearing mice (2×10^4 cells) in the absence or presence of αPD1 treatment. αPD1 was given intraperitoneally at a dose of 500 μg per mouse every 2 days on day 3 after tumor cell implantation (n=6 per group).

(B) Quantification of tumor volume based on bioluminescence in each treatment group.

(C, D) Representative *in vivo* bioluminescence-based images of CT2A-luc-bearing C57BL/6J mice (2×10^4 cells) with αPD1 in the absence or presence of Bay-11-7082. Bay-11-7082 was given intraperitoneally at a dose of 25 mg/kg per mouse every 2 days on day 3 after tumor inoculation. αPD1 was given intraperitoneally at a dose of 500 μg per mouse every 2 days on day 3 after tumor cell implantation (C). Quantification of tumor volume based on bioluminescence(D) (n=4 to 6 per group).

(E, F) Flow cytometry analysis to examine immune checkpoint molecule expressions (E) and cytotoxic functions (F) of $CD8^+$ T cells in CT2A-luc-bearing C57BL/6J mice with combination treatment of Bay-11-7082 and αPD1.

(G, H) Representative *in vivo* bioluminescence-based images of CT2A-luc-bearing C57BL/6J mice (2×10^4 cells) with αPD1 in the absence or presence of terbinafine. Terbinafine was given by oral gavage at a dose of 560 mg/kg per mouse every 2 days on day 3 after tumor inoculation. αPD1 was given intraperitoneally at a dose of 500 μg per mouse every 2 days on day 3 after tumor cell implantation (G). Quantification of tumor volume based on bioluminescence(H). (n=4 to 6 per group).

(I, J) Flow cytometry analysis to examine immune checkpoint molecule expressions (I) and cytotoxic functions (J) of $CD8^+$ T cells in CT2A-luc-bearing C57BL/6J mice with combination treatment of terbinafine and αPD1.

Data are shown as mean ± SEM. In (B), (D), (E), (F), (H), (I) and (J), P value was calculated using one-way *ANOVA* analysis. In (A), survival difference was calculated by log-rank test. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.