## Supplementary information

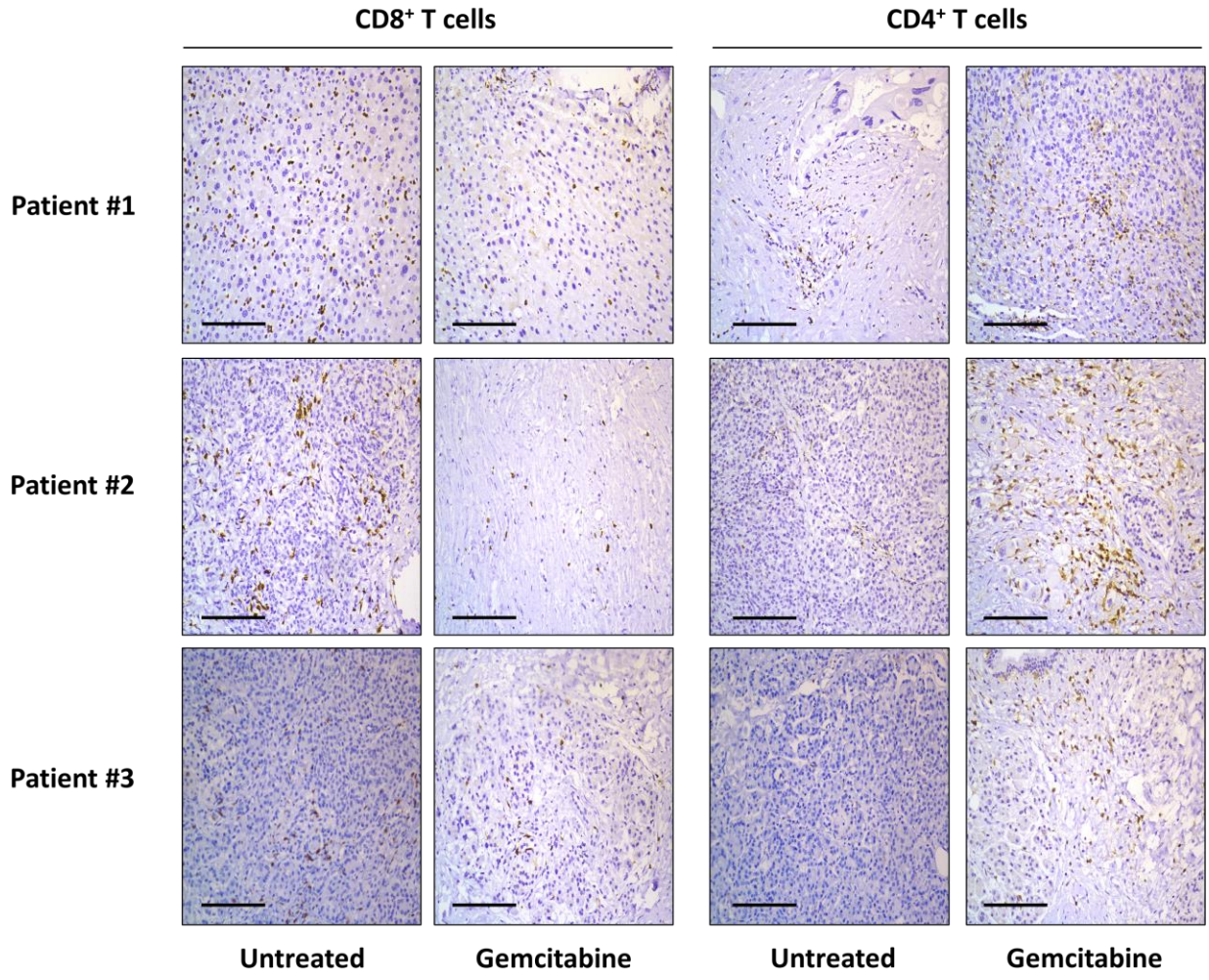


**Fig. S1. Immunostaining of CD4$^+$ and CD8$^+$ cells in human pancreatic tumor tissues.** Tumor tissues were processed for immunostaining of CD4 and CD8 staining. Representative images are shown of three tumors from untreated PDAC patients or treated with gemcitabine, as shown in Fig. 3I. Scale bars: 50 μm. Quantitative analyses are shown in Fig. 3H.

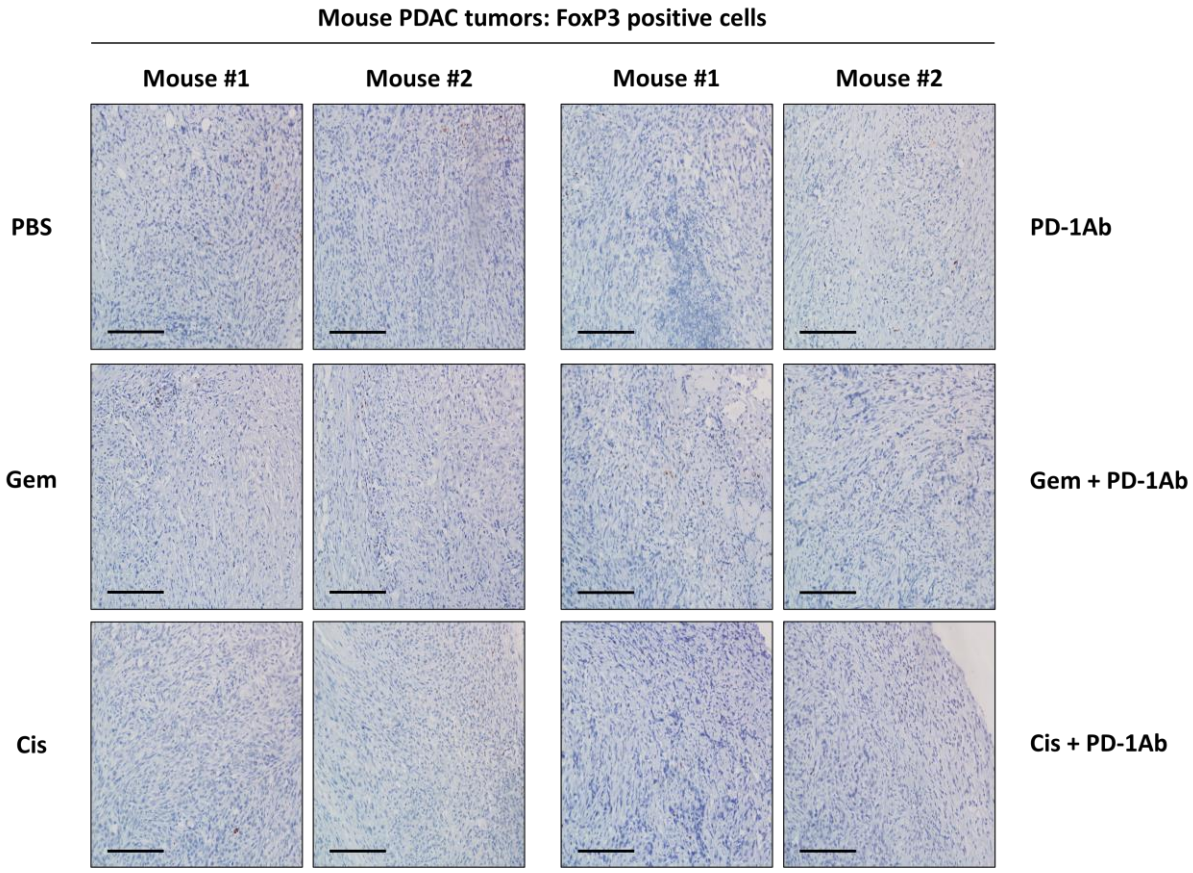


**Fig. S2. Immunostaining of FoxP3$^+$ T cells in mouse pancreatic tumor tissues.** PDAC tumor-bearing C57BL/6 mice were treated as described in Fig. 1E. Tumor tissues were processed for immunostaining of FoxP3 staining. Representative images are shown. Scale bars: 50 μm. Quantitative analyses are shown in Fig. 4G.

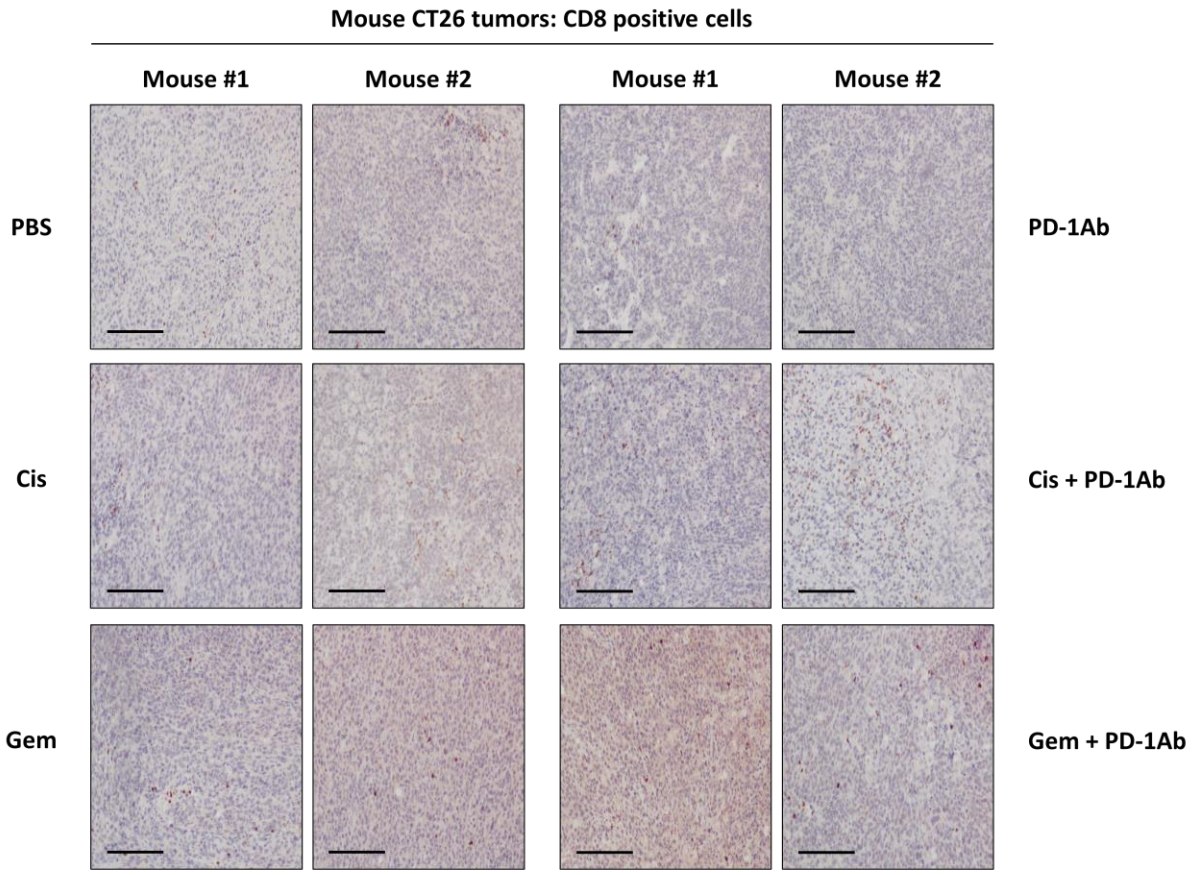


**Fig. S3. Immunostaining of CD8$^+$ T cells in mouse colon CT26 tumor tissues.** CT26 tumor-bearing BALB/c mice were treated as described in Fig. 2. Tumors were harvested at end-points and were processed for immunostaining of CD8$^+$ T cells. Representative images are shown. Scale bars: 50 μm. Quantitative analyses are shown in Fig. 4H.

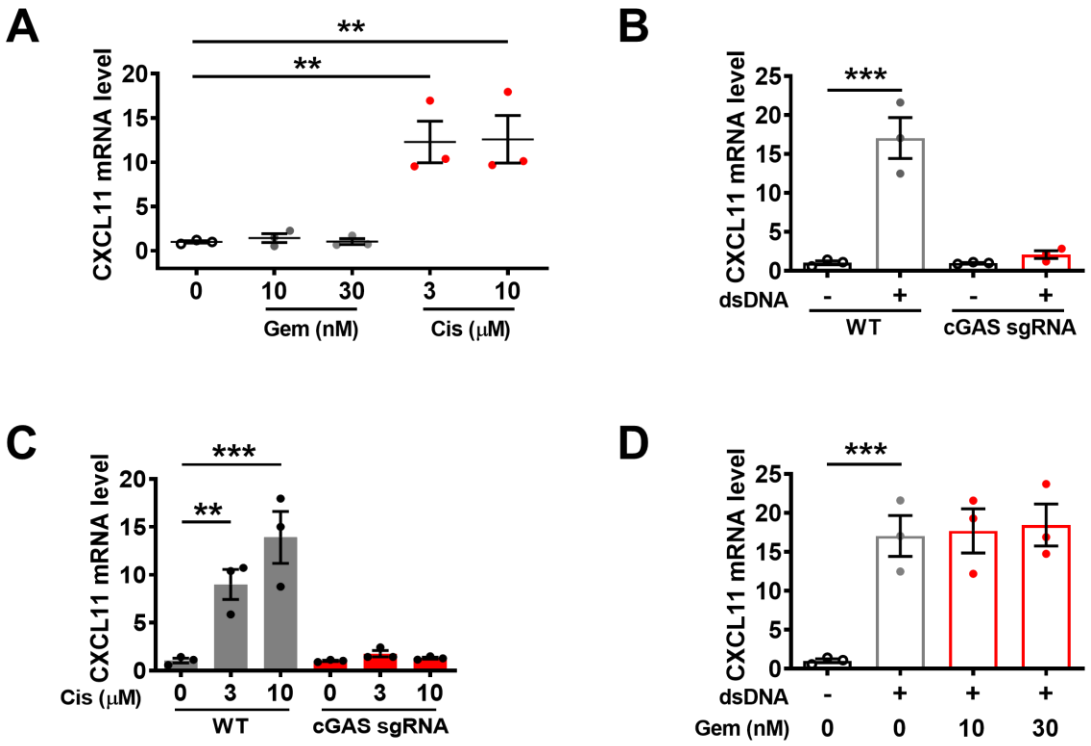


**Fig. S4. Cisplatin induces the expression of CXCL11 in a cGAS-dependent manner.** (**A**) Mouse pancreatic cancer cells were incubated with gemcitabine (Gem) or cisplatin (Cis) for 48 h (as shown in Fig. 7A-C). The expression of CXCL11 was measured by qRT-PCR. (**B**) Mouse pancreatic wild-type (WT) or the sgRNA-mediated cGAS-disrupted cells (cGAS-sgRNA) were transfected with dsDNA fragments for 48 h (as shown in Fig. 7E-G). The expression of CXCL11 was measured by qRT-PCR. (**C**) Mouse pancreatic wild-type (WT) or cGAS-disrupted cells were incubated with cisplatin for 48 h (as shown in Fig. 7H-J). The expression of CXCL11 was measured by qRT-PCR. (**D**) Wild-type mouse pancreatic cancer cells were incubated with gemcitabine. Eight hours post-treatment, cells were transfected with dsDNA fragments for 40 h (as shown in Fig. 7K-M). The expression of CXCL11 was measured by qRT-PCR. Statistical analysis: data are means ± SEM of three separate experiments; one-way ANOVA followed by Tukey *post hoc* test for A-D. **, $P < 0.01$; ***, $P < 0.001$.

**Table S1. Oligonucleotide sequences of primers used in qRT-PCR analyses and transfection.**

**Quantitative RT-PCR**

| Genes | Forward primer | Reverse primer |
|---|---|---|
| Mouse cxcl9 | CTTTTCCTTTTGGGCATCATCT | GCAGGAGCATCGTGCATTC |
| Mouse cxcl10 | GAATCCGGAATCTAAGACCATCAA | GTGCGTGGCTTCACTCCAGT |
| Mouse cxcl11 | TGCTCAAGGCTTCCTTATGTT | CTTTGTCGCAGCCGTTACTC |
| Mouse ifnb1 | GGAGCAGCTGAATGGAAAGA | CATCTCTTGGATGGCAAAGG |
| Mouse ifng | GAACTGGCAAAAGGATGGTG | GCTGATGGCCTGATTGTCTT |
| Mouse prf1b | TCTTCGGGAACCAAGCTACA | CTTCGGGTTCTGTTCTTCCA |
| Mouse gzmb | GTGTGCTATGTGGCTGGTTG | CACACTCCCGATCCTTCTGT |
| Mouse tbx21 | AGCAAGGACGGCGAATGTT | GGGTGGACATATAAGCGGTTC |
| Mouse ifngr1 | CTGGCAGGATGATTCTGCTGG | GCATACGACAGGGTTCAAGTTAT |
| Mouse gata3 | CTCGGCCATTCGTACATGGAA | GGATACCTCTGCACCGTAGC |
| Mouse il4 | GGTCTCAACCCCCAGCTAGT | GCCGATGATCTCTCTCAAGTGAT |
| Mouse foxp3 | CCCATCCCCAGGAGTCTTG | ACCATGACTAGGGGCACTGTA |
| Mouse rorγt | GACCCACACCTCACAAATTGA | AGTAGGCCACATTACACTGCT |
| Mouse il9 | ATCACGTGTCCGTCCTTTTC | GCTTTTCTGCCTTTGCATCT |
| Mouse il22 | CAGACAGGTTCCAGCCCTAC | CGCCTTGATCTCTCCACTCT |
| Mouse il17a | TTTAACTCCCTTGGCGCAAAA | CTTTCCCTCCGCATTGACAC |
| Mouse il23a | CATGCTAGCCTGGAACGCACAT | ACTGGCTGTTGTCCTTGAGTCC |
| Mouse rpl19 (reference) | GAAGGTCAAAGGGAATGTGTTCA | CCTTGTCTGCCTTCAGCTTGT |
| Human CXCL10 | GTGGCATTCAAGGAGTACCTC | TGATGGCCTTCGATTCTGGATT |
| Human CXCL11 | GGCAGATATTGAGAAAGCCTCC | GCCTTGCTTGCTTCGATTTG |
| Human EF1 (reference) | GCTTCACTGCTCAGGTGAT | GCCGTGTGGCAATCCAAT |

**Transfection**

| | Forward primer | Reverse primer |
|---|---|---|
| dsDNA (60-bp fragment, HSV-1 sequence) | CCATCAGAAAGAGGTTTAATATTTT TGTGAGACCATCGAAGAGAGAAAG AGATAAAACTT | AAGTTTTATCTCTTTCTCTCTTCGAT GGTCTCACAAAAATATTAAACCTCT TTCTGATGG |