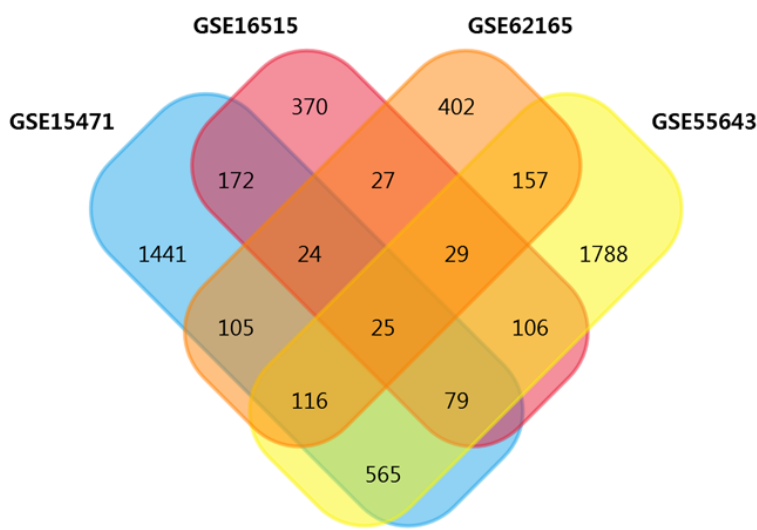


# Supplementary Materials: The YAP1-NMU Axis Is Associated with Pancreatic Cancer Progression and Poor Outcome: Identification of a Novel Diagnostic Biomarker and Therapeutic Target

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## List of common genes

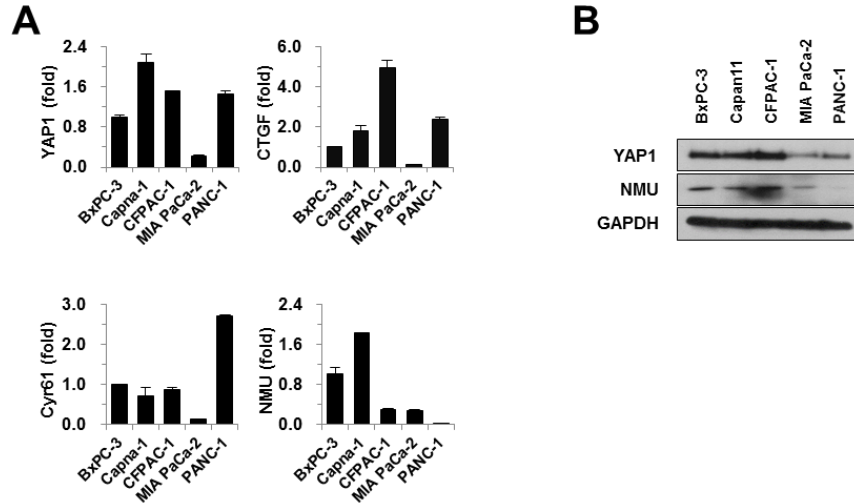


Genes listed in; GSE15471 n=2527  
 GSE16515 n=832  
 GSE55643 n=2865  
 GSE62165 n=885

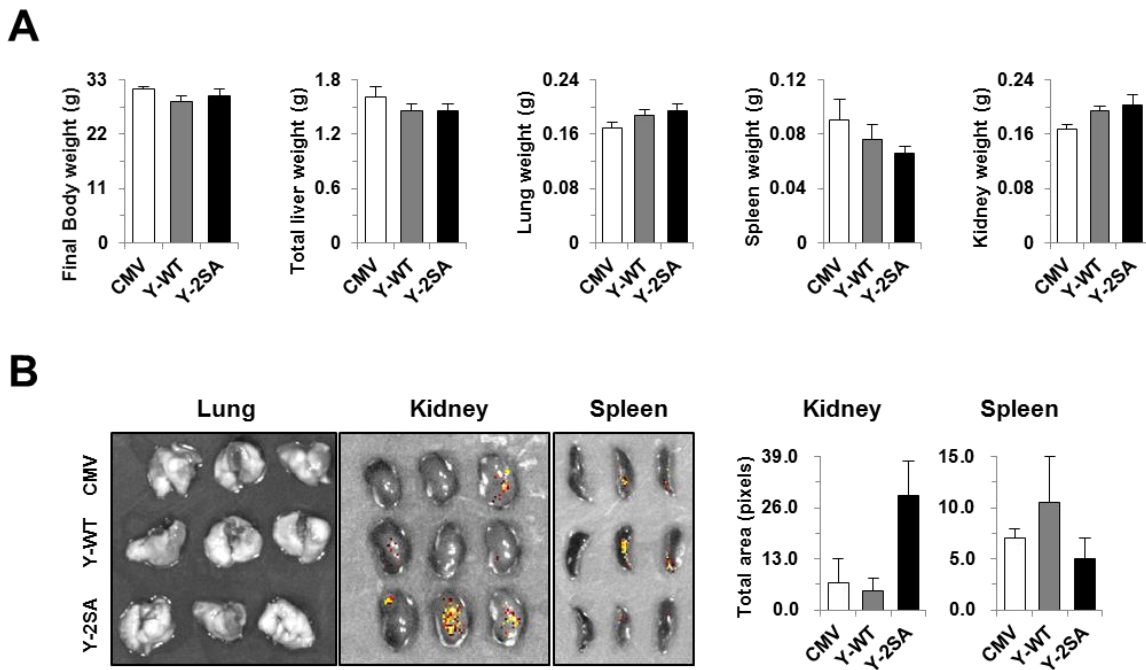
Venn diagram for genes identified Database

- CCND1
- INADL
- HN1L
- CDK6
- PITX1
- SSH3
- TRIO
- AHNAK2
- AP1S3
- BRAP
- DARS
- EZR
- FAM83A
- FUT3
- HRH1
- LIPH
- NMU
- NT5E
- PCDH7
- PPME1
- PTK2
- RHOD
- TPM1
- TRIM29
- ZNF185

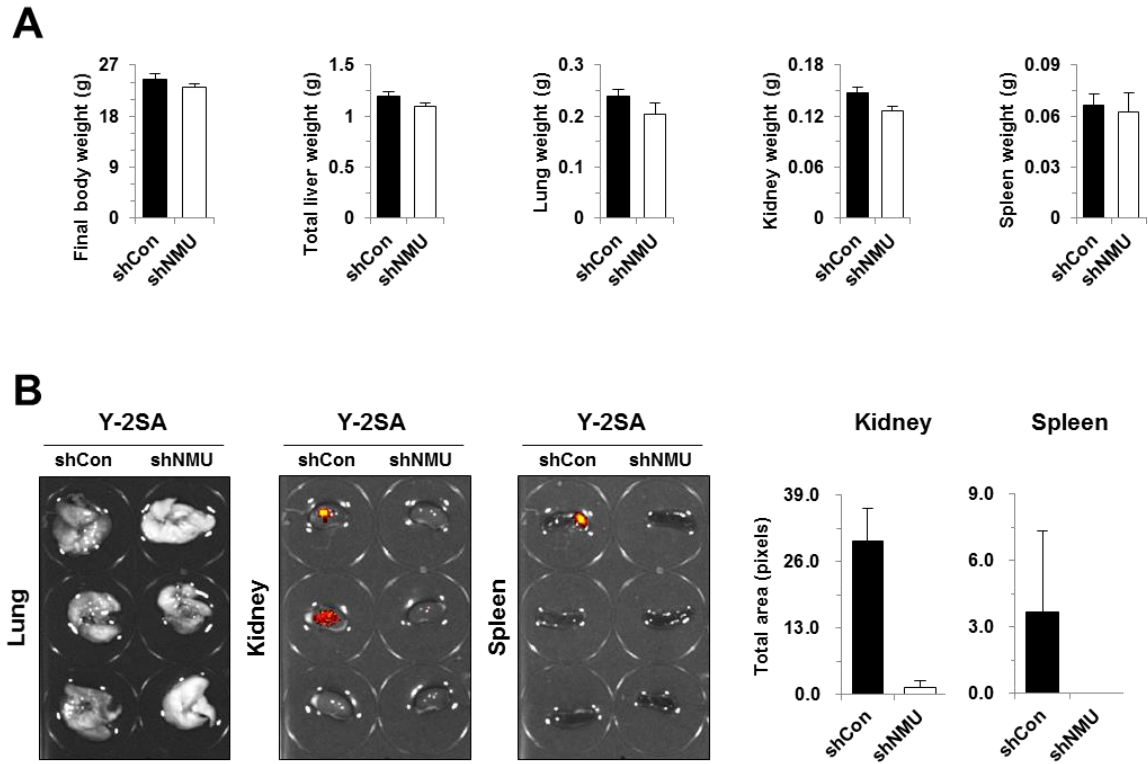
Figure S1. Venn diagram of differentially expressed genes of the GSE15471, GSE16515, GSE55643, and GSE62165 datasets for the comparisons in Figure 1A. The comparison identified 25 differentially expressed genes.



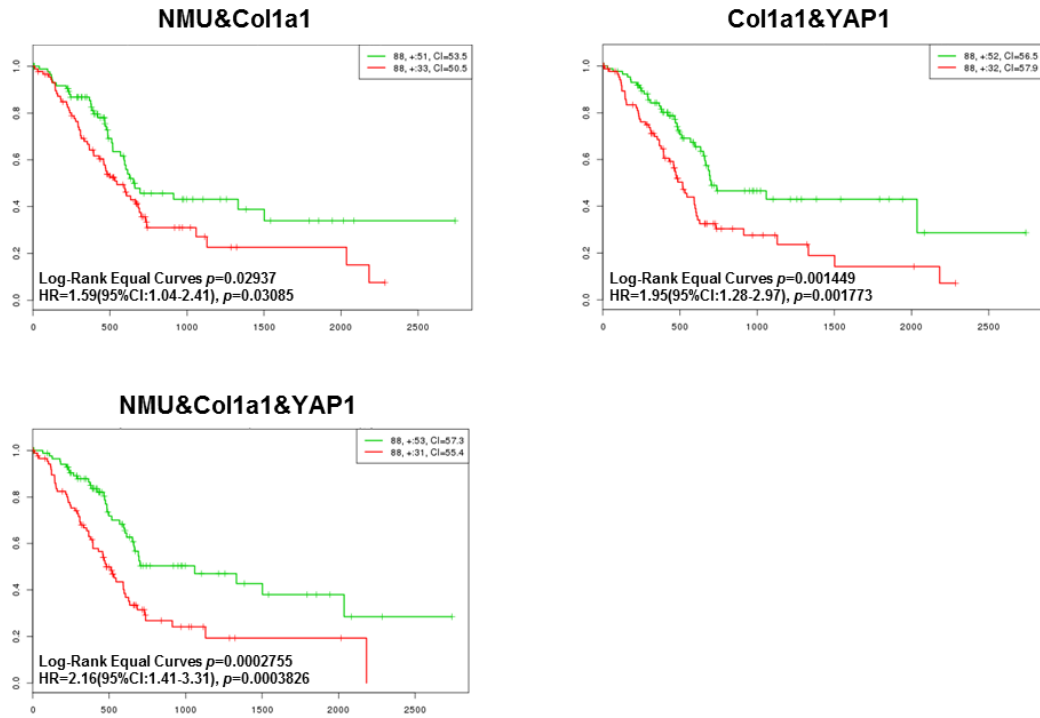
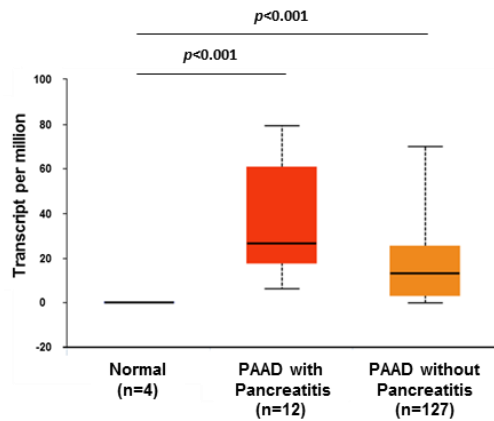
**Figure S2.** Expression levels of YAP1, its target genes, and NMU in human PDAC cells. (A), Real-time qPCR analysis of the gene expression of YAP1, CTGF, Cyr61, and NMU in BxPC-3, Capan-1, CFPAC-1, MIA PaCa-2, and PANC-1 cells. (B), Western blot analysis of YAP1 and NMU protein expression in PDAC cell lines.



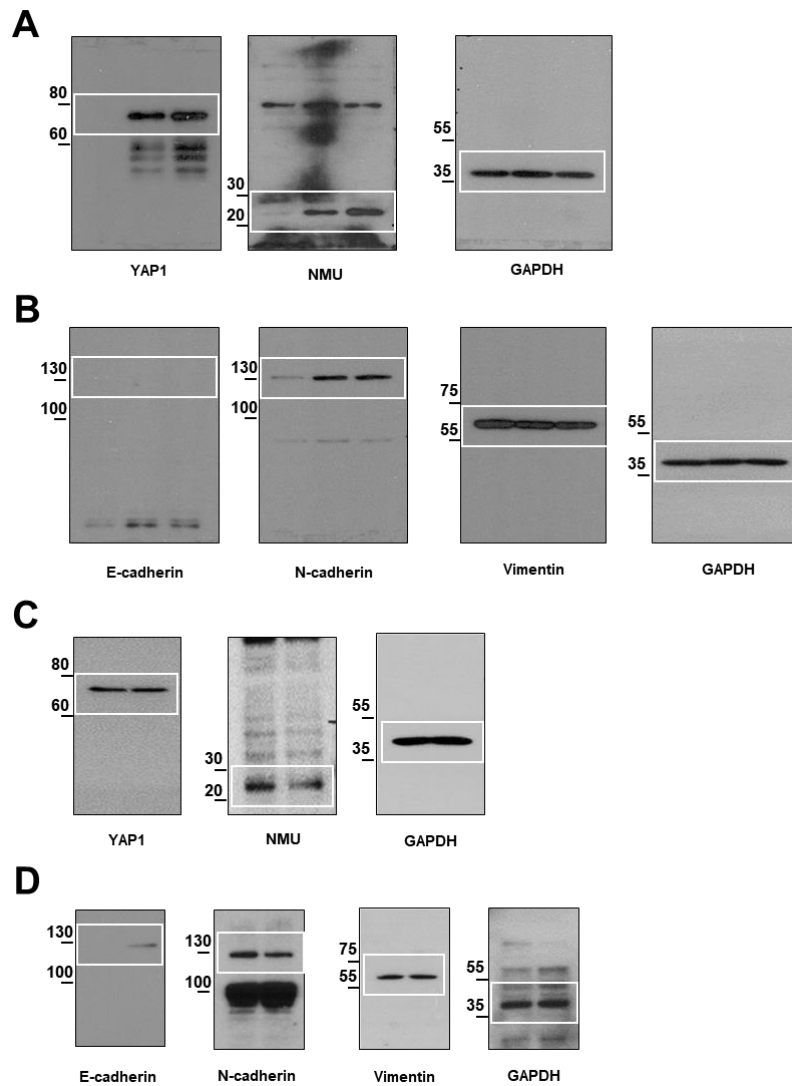
**Figure S3.** (A), Final body, liver, kidney, and spleen weight of CMV, Y-WT, and Y-2SA orthotopic tumor-bearing mice. (B), Bioluminescence images of the lung, kidney, and spleen and quantifications.



**Figure S4.** (A), Final body, liver, kidney, and spleen weight of Y-2SA-shCON and Y-2SA-shNMU orthotopic tumor-bearing mice. (B), Bioluminescence images of the lung, kidney, and spleen and quantifications.

**A****TCGA PAAD****B****Expression of NMU in PAAD based on Pancreatitis status in TCGA**

**Figure S5.** (A), Kaplan-Meier survival analysis of pancreatic adenocarcinoma patients from TCGA according to YAP1, NMU, and Col1a1 expression.  $p$ -values derived from the log-rank test are indicated in each comparison. (B), Kaplan-Meier survival analysis of patients with or without pancreatitis according to NMU expression. Values are expressed as the mean  $\pm$  SEM.



**Figure S6.** Original western blots. Western blots from Figure 3A (A), from Figure 3F (B), from Figure 4A (C), and from Figure 4H (D).

**Table S1.** Primer information.

Gene	Forward (5'–3')	Reverse (5'–3')
YAP1	ATGAGATGGATACAGGTGATA	TAAGGATGTCAGAACTCAAAG
NMU	TACTGTTCGTCTTTTCTGTC	CTTCTGTGTCTTCGAATAATG
CTGF	GACATACCGAGCTAAATTCT	TCCGTACATCTTCCTGTAGTA
Cyr61	CCTGTGAATATAACTCCAGAA	TTGATACTATCCTCGTCACAG
E-cadherin	CGAGAGCTACACGTTCCACGG	GTGTCGAGGGAAAAATAGGCTG
N-cadherin	GACGGTTCGCCATCCAGAC	TGGATTGGTTTGACCACGG
Vimentin	CAACCTGGCCGAGGACAT	ACGCATTGTCAACATCCTGTCT
GAPDH	CCACTCCTCCACCTTTGAC	ACCCTGTTGCTGTAGCCA

