Legends for Supplementary Figures

Supplementary Figure 1. Schedule of PCLS preparation and erlotinib treatment. Workflow of PCLS preparation and erlotinib treatment for (A) cirrhotic and (B) normal livers. (C) Summary table of PCLS preparation and erlotinib treatment.

Supplementary Figure 2. Viability evaluation in PCLS

(A) Representative images of PCLS from CDAHFD-induced cirrhosis rats on MTS assays, the cells alive were stained with purple color. (B) Representative images of PCLS from DEN-induced cirrhosis rats on MTS viability assays. MTS assays in PCLS from (C) CDAHFD and (D) DEN-induced rat cirrhosis after erlotinib treatment. These experiments were repeated three times (n = 3). All values were expressed as the mean ± S.E.M with two-tailed Student's *t* tests.

Supplementary Figure 3. Improvement of PCLS processing.

(A) Comparison of standard and modified protocols to proceed PCLS from TAA-induced rat cirrhosis.

Supplementary Figure 4. Confirmation of established murine cirrhosis.

Confirmation of established (A) CDAHFD, (B) TAA, (C) DEN and (D) CCl_4-induced murine cirrhosis.

Supplementary Figure 5. H&E staining.

Representative images for H&E staining in PCLS from (A) CDAHFD-induced mouse cirrhosis, (B) TAA-induced rat cirrhosis, (C) DEN-induced *rat* cirrhosis, and (D) CCl_4-induced *mouse* cirrhosis. (E) Representative images for H&E staining of PCLS from male healthy C57Bl/6 mice livers. (F) Representative images for H&E staining of human cirrhotic PCLS. Representative images for H&E staining of the samples from (G) *in vivo* DEN-induced rat cirrhotic models and (H) *in vivo* CCl_4-induced mouse cirrhotic models.

Supplementary Figure 6. Confirmation of established human cirrhosis.

Confirmation of human established cirrhosis with (A) H&E and (B) Sirius red staining. (C) H&E and (D) Sirius red staining of PCLS from human established cirrhosis.

Supplementary Tables

Supplementary Table 1. Modified *Ishak* Scoring[31]

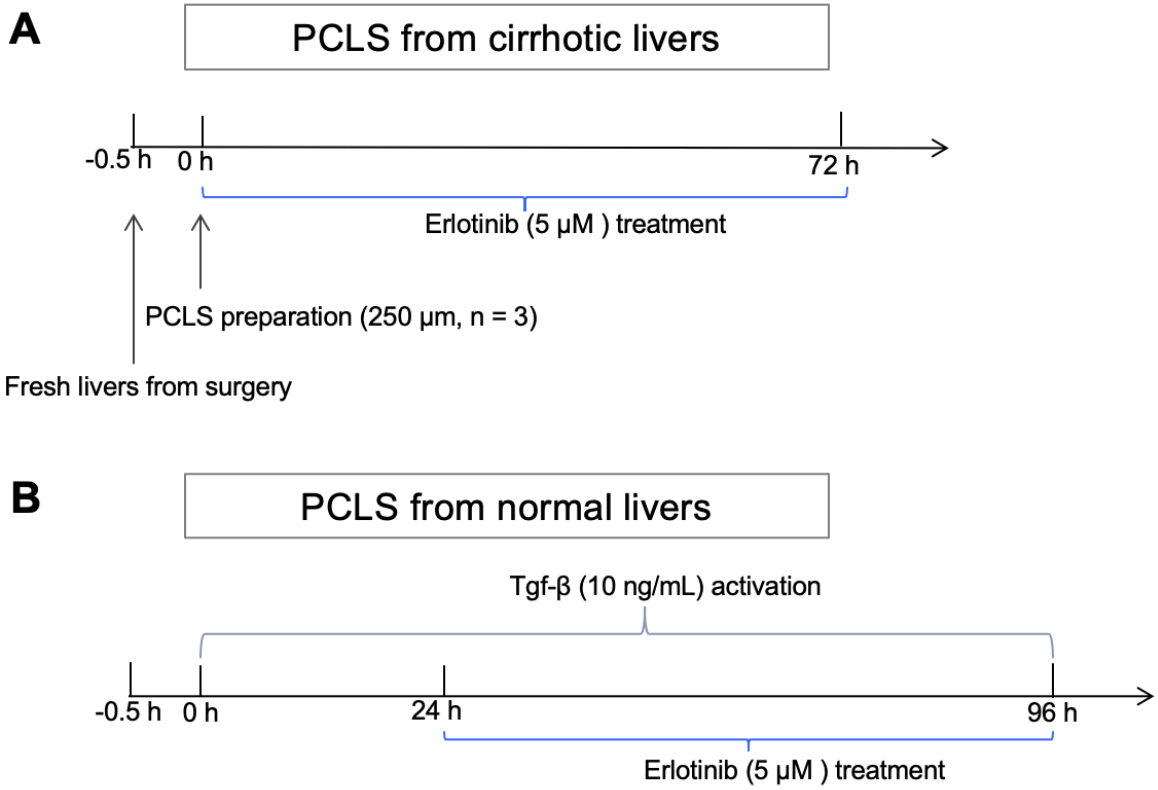
Score	Description
0	No fibrosis
1	Fibrous expansion of some or most portal areas, with or without short fibrous septa
2	Fibrous expansion of most portal areas, with occasional portal to portal bridging, or with marked portal to portal bridging as well as portal areas to central bridging
3	Marked bridging with occasional nodules
4	Probable to definite cirrhosis

Supplementary Table 2. Oligonucleotides

Gene Symbol	Species Specificity	Company	Assay ID
18S	Human	Thermo fisher	Hs03003631_g1
IL6	Human	Thermo fisher	Hs00174131_m1
ACTA2	Human	Thermo fisher	Hs00426835_g1
TIMP1	Human	Thermo fisher	Hs01092512_g1
COL1A1	Human	Thermo fisher	Hs0016004_m1
TNFA	Human	Thermo fisher	Hs00174128_m1
TGFB1	Human	Thermo fisher	Hs00998133_m1
Il6	Rat	Thermo fisher	Rn01410330_m1
Acta2	Rat	Thermo fisher	Rn01759928_g1
Timp1	Rat	Thermo fisher	Rn01430873_g1
Col1a1	Rat	Thermo fisher	Rn01463848_m1
Tgfb1	Rat	Thermo fisher	Rn00572010_m1
Il6	Mouse	Thermo fisher	Mm00446190_m1
Acta2	Mouse	Thermo fisher	Mm00725412_s1
Timp1	Mouse	Thermo fisher	Mm01341361_m1
Col1a1	Mouse	Thermo fisher	Mm00801666_g1

Tgfb1	Mouse	Thermo fisher	Mm01178820_m1
Mmp2	Mouse	Thermo fisher	Mm00439498_m1
Mmp3	Mouse	Thermo fisher	Mm00440295_m1
Mmp8	Mouse	Thermo fisher	Mm00439509_m1
Mmp9	Mouse	Thermo fisher	Mm00442991_m1
Mmp13	Mouse	Thermo fisher	Mm00439491_m1
Timp2	Mouse	Thermo fisher	Mm00441825_m1

Supplementary Figure 1



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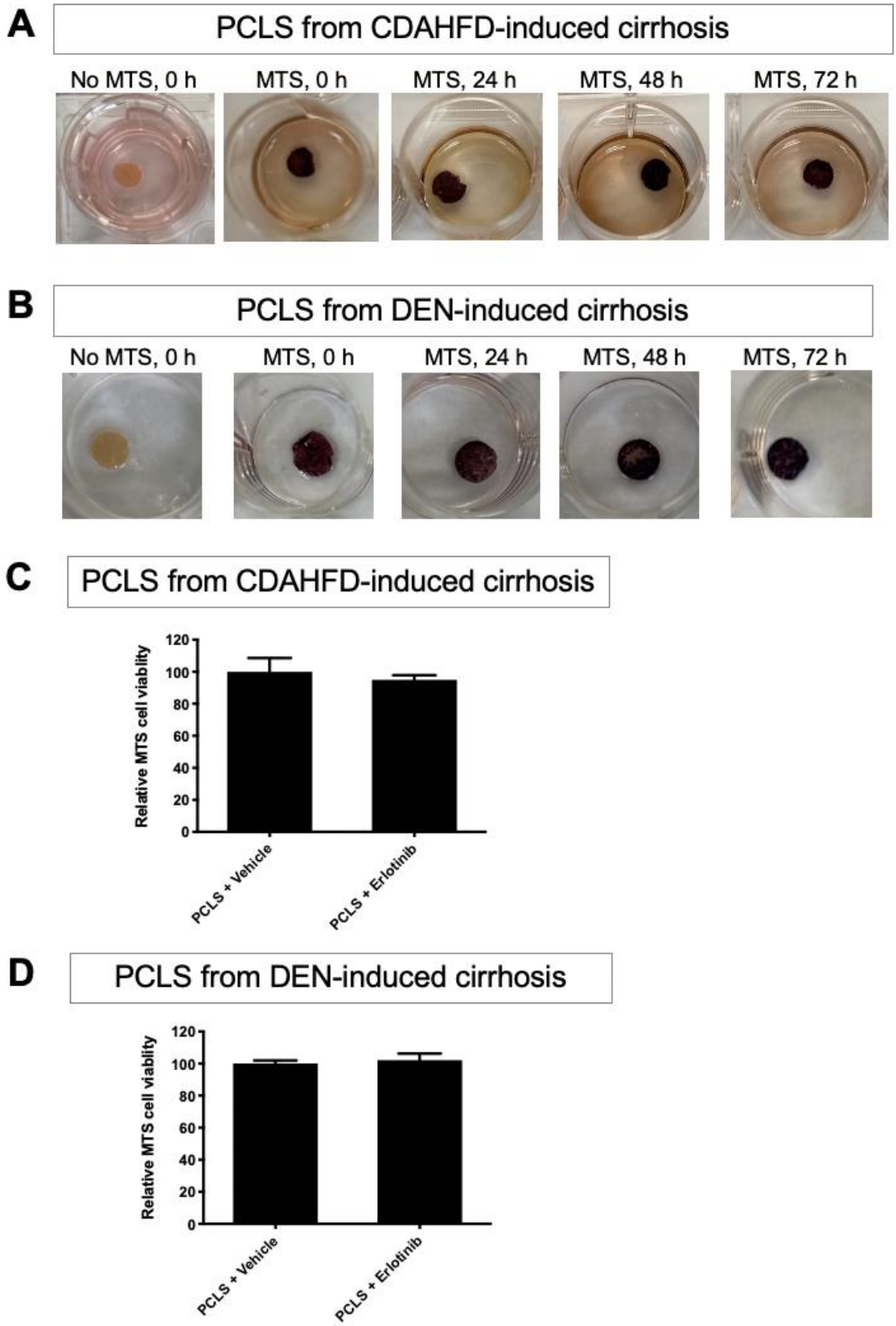
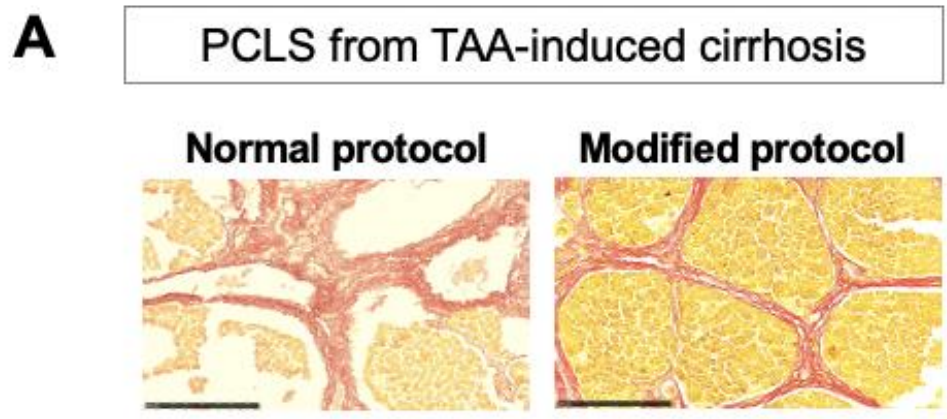
Model types	Model induction	Erlotinib treatment
ex vivo PCLS from 4 murine cirrhotic models	CDAHFD for 16 weeks	72 hours
	200 mg/kg TAA for 12 weeks	
	50 mg/kg DEN for 18 weeks	
	40% CCl_4 for 18 weeks	
ex vivo PCLS from murine normal livers	Tgf-β for 96 hours	72 hours
in vitro human HSC (LX2, TWNT4)		
in vivo murine cirrhotic models	50 mg/kg DEN for 18 weeks	10 weeks
	40% CCl_4 for 18 weeks	6 weeks
ex vivo PCLS from human cirrhotic liver		72 hours

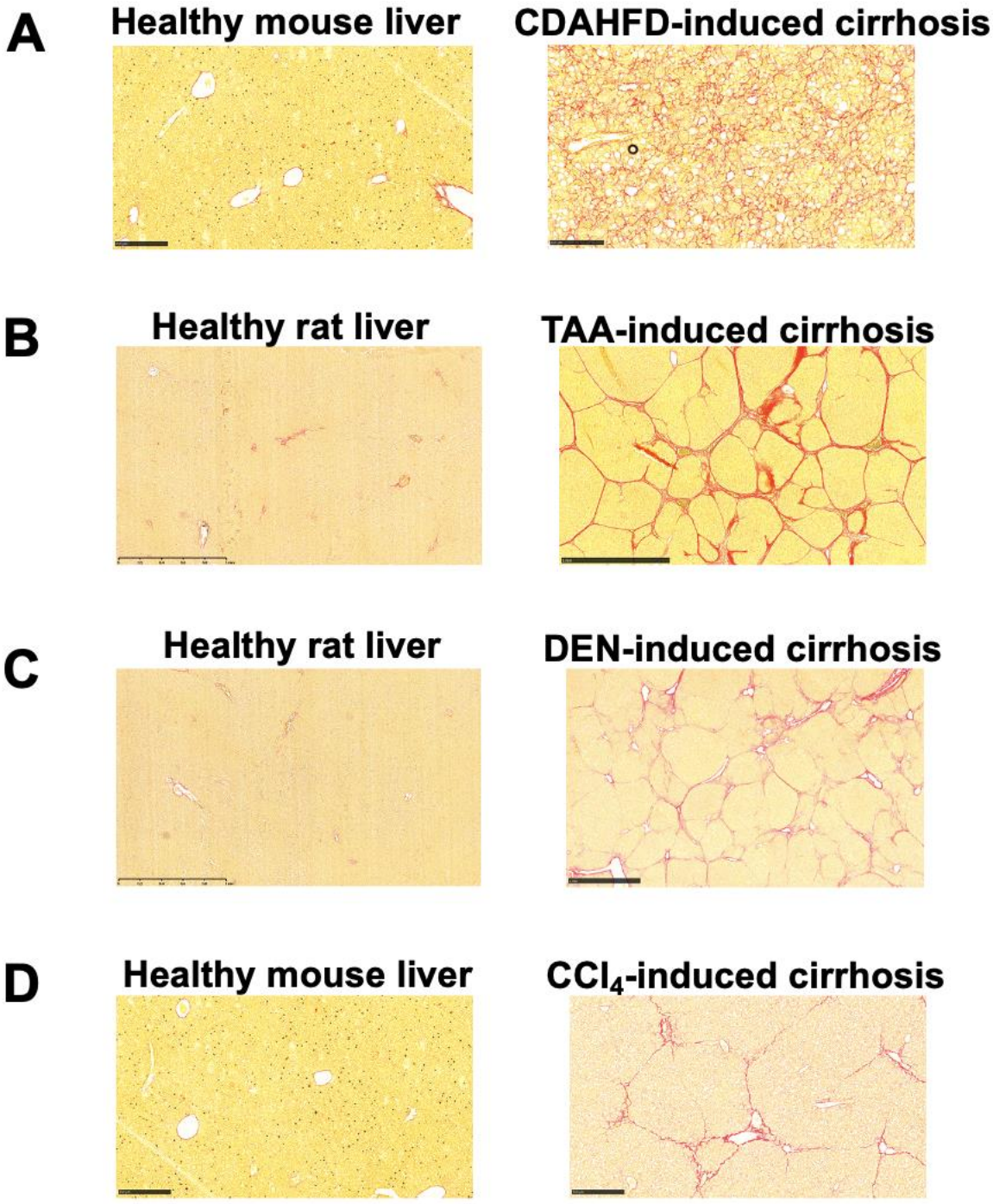
Supplementary Figure 2



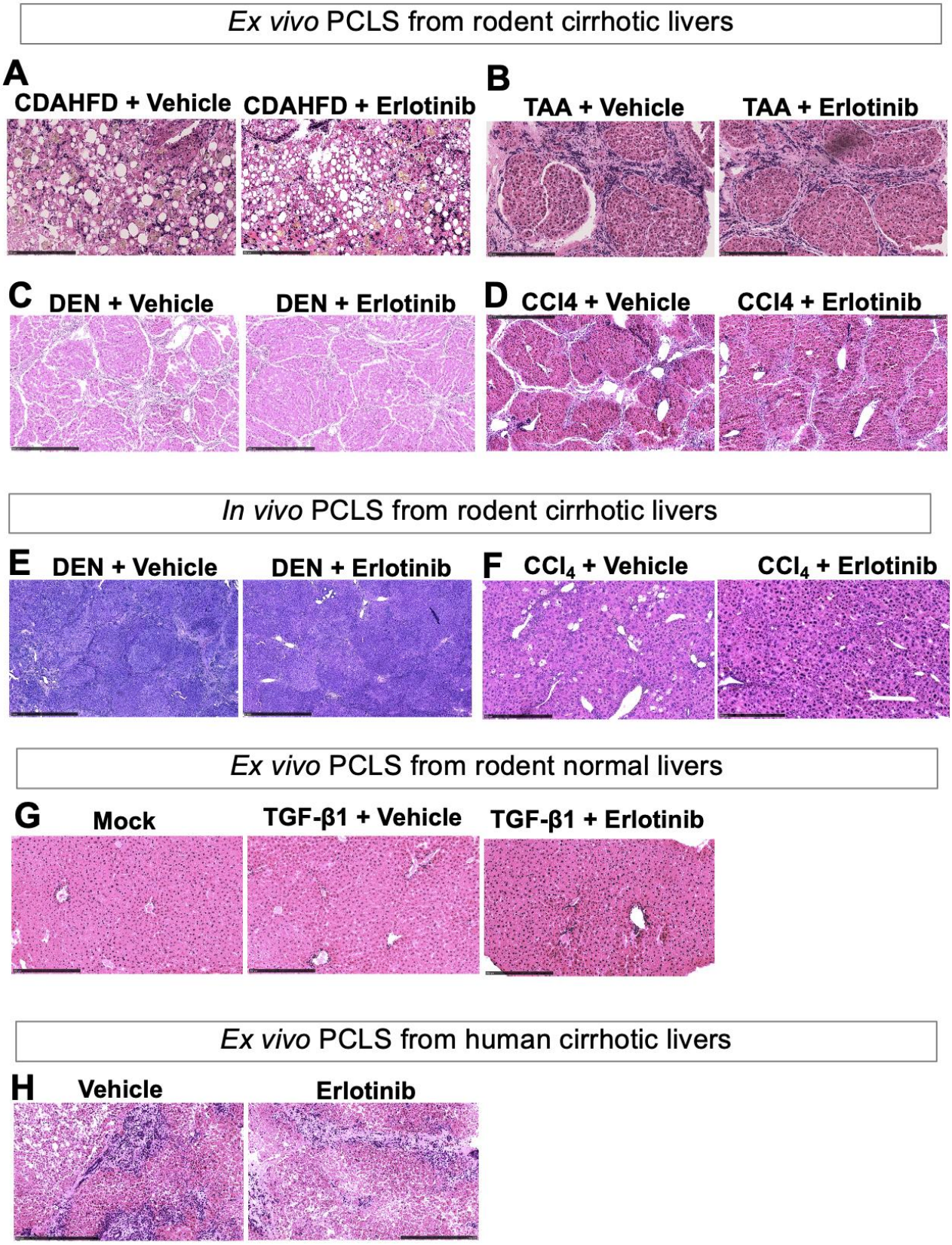
Supplementary Figure 3



Supplementary Figure 4



Supplementary Figure 5



Supplementary Figure 6