

The interaction between ESRP1 and ZEB1 affects prognosis of intrahepatic cholangiocarcinoma.

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Introduction

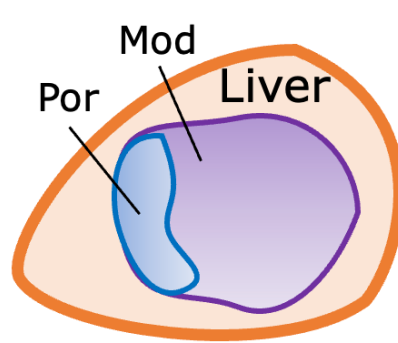
The interaction between Epithelial Splicing Regulatory Protein 1 (ESRP1) and Zink-finger, E-box binding homebox 1 (ZEB1) regulates tumor phenotype and affects prognosis via epithelial-mesenchymal transition in some cancers. This study investigate the interaction in intrahepatic cholangiocarcinoma (iCCA) immunohistochemically.

Conclusion

Intrahepatic cholangiocarcinoma cells exhibited oppositely ESRP1 and ZEB1 expression. The lower ESRP1 and higher ZEB1 cells promoted tumor progression and metastasis.

Materials and methods

Expression of ESRP1 and ZEB1 in 57 iCCA cases (2010-2022) was analyzed. These cases were investigated separately into the **central area** scores and the **invasive area** scores, and the combined **total scores** of the central area scores and the invasive area scores because ICC was a very heterogenous tumor derived from some differentiations.

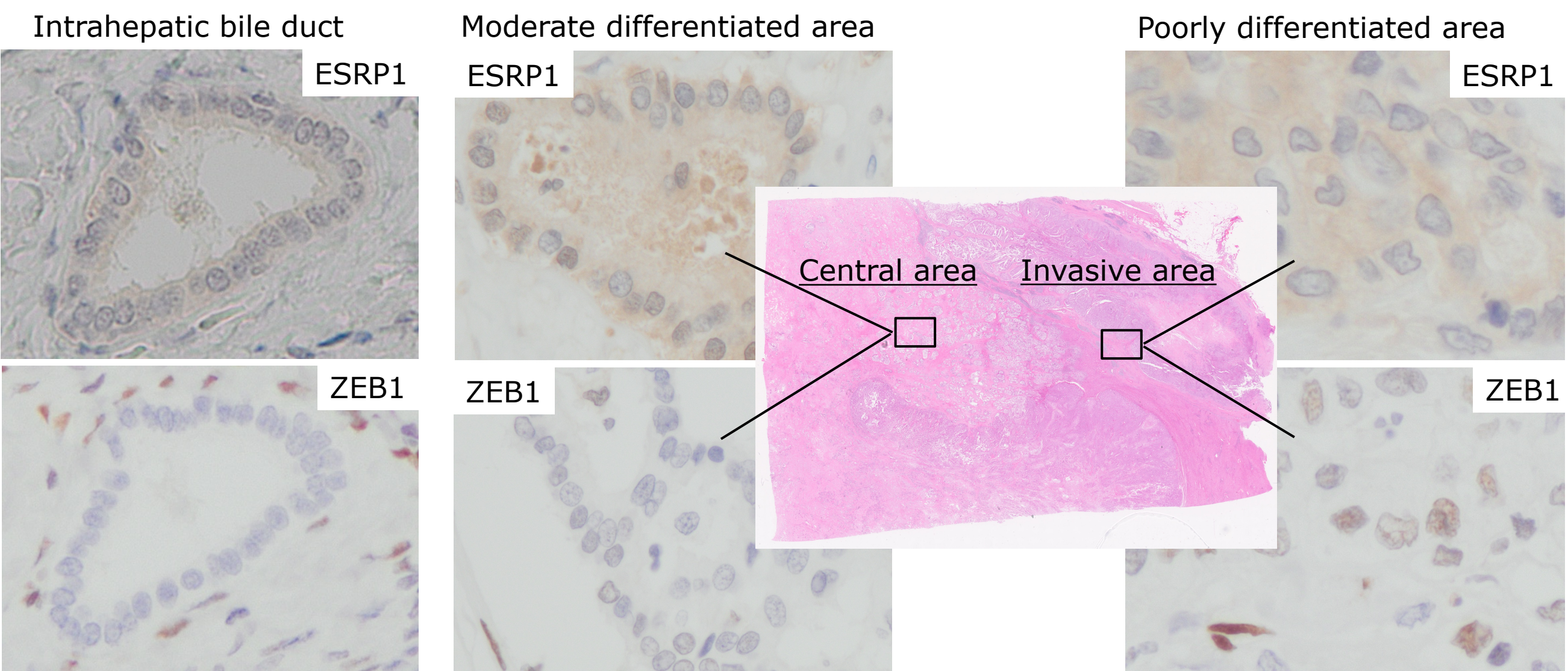


Staining concentration	0 : for no staining
	1 : for weak
	2 : for moderate
	3 : for strong immunoreactivity
Staining area	0 : for no positive cells
	1 : for <30% of cells being positive
	2 : for 30% to 60% of cells being positive
	3 : for >60% of cells being positive

This two scores were multiplied to obtain a composite expression score in 3 fields (Score : 0-27).

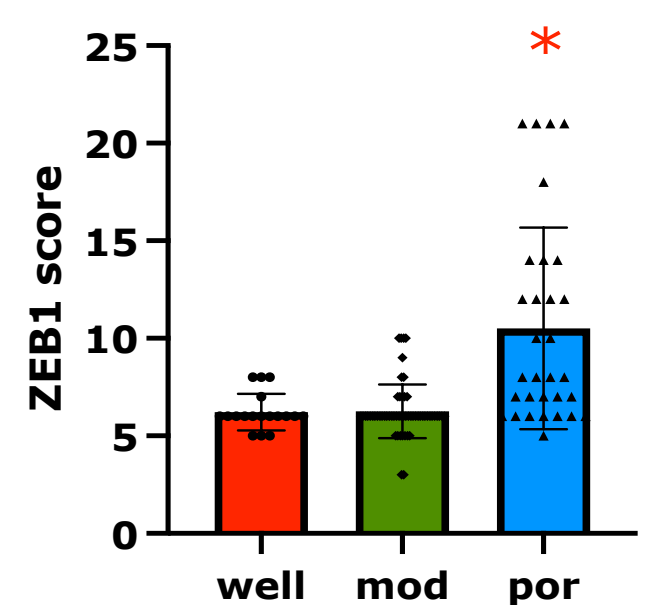
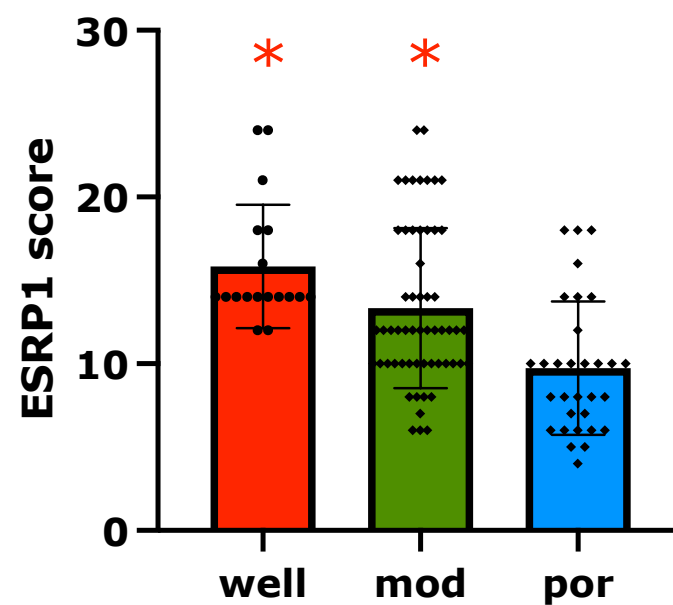
Results

① Feature of intrahepatic bile duct and iCCA immunostaining

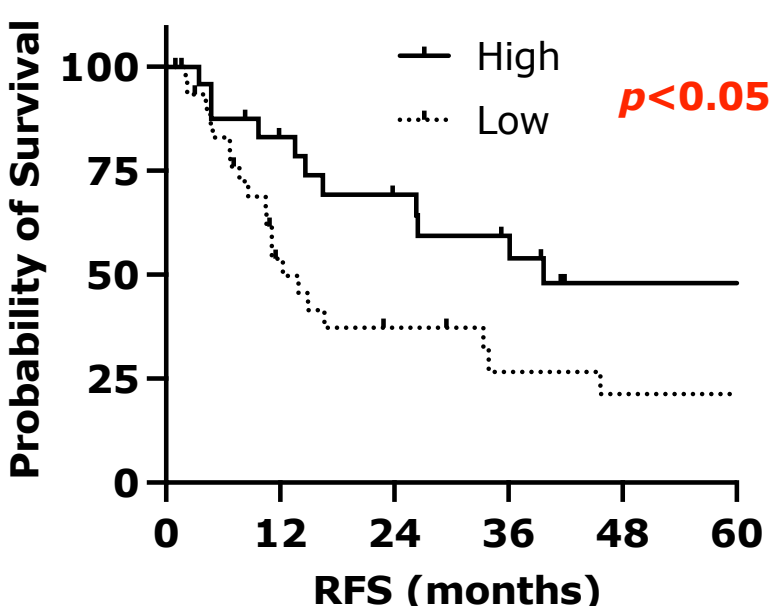


② Immunohistochemical analysis (n=57, *: p<0.05)

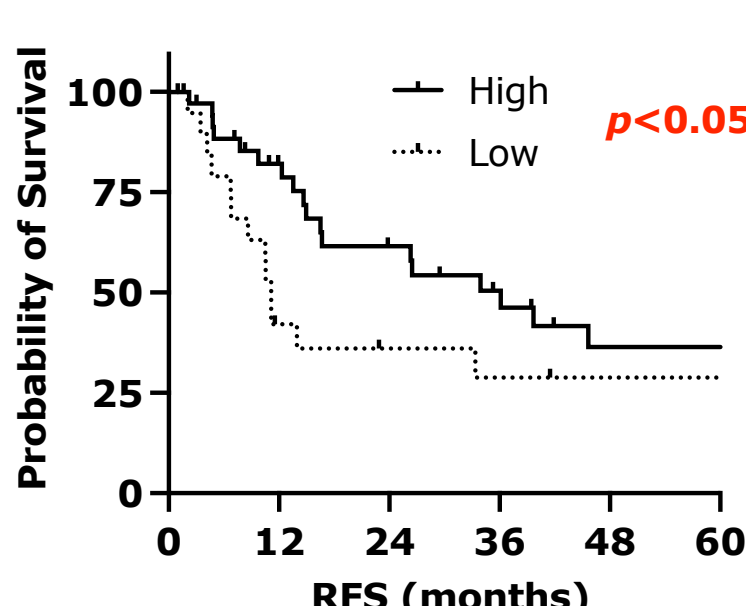
Differentiation	n'=114
Well	18
Mod	57
Por	31
CoCC	6
Muc	2



Central area score ratio (ESRP1/ZEB1)



Invasive area score ratio (ESRP1/ZEB1)



Total score ratio (ESRP1/ZEB1)

