

## **INSIGHTS IN IMMUNOLOGY**

# IL6 reprograms β2SP+/- deficient stem cells into 'seed' metastatic cancer stem in pre-neoplastic livers

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#### Abstract

 $\beta$ 2SP+/- is one critical element for TGFbeta signaling and the deficiency of this gene has caused primary tumor development in some livers but these tumors are neither invasive nor metastatic. IL6 was found as a primary driver for liver tumors (HCC) through human genetic sequence analysis by our co-authors and others but the specific driver function are not clear. Our group discovered that presence of IL6 transforms  $\beta$ 2SP+/normal liver CD133 positive stem cells into seed metastatic liver cancer stem cells, the underlying mechanism and the treatment strategy will be discussed in this talk.

#### **Biography**

Shulin Li has completed his PhD at Washington State University, USA. He is the director/Distinguished endowed chair/professor of Pediatric Basic Research at MD Anderson Cancer Center, USA. He has over 120 publications that have been cited over multiple thousands of times, and his publication H-index is 34 and has been serving as an editorial board member of reputed Journal. He also led four book editing and acts as an editor-in-chief for BPO, one pioneer open access journal.

#### **Publications**

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- 4. ibra D, Xia X, Mitra A, Cutrera JJ, Lozano G, Li S. Mutant p53 in Concert with an Interleukin-27 receptor alpha deficiency causes spontaneous liver inflammation, fibrosis, and steatosis in mice. Hepatology 63(3):1000-12, 3/2016. PMCID: PMC4764463.



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