

ONCOLOGY AND BIOMARKERS SUMMIT

November 27-28, 2017 | Atlanta, USA



George G Chen

The Chinese University of Hong Kong, China

ZBP-89 and hypoxia-inducible factor 1a in hepatocellular carcinoma


The level of hypoxia-inducible factor 1a (HIF-1a) plays an important role not only in the development of hepatocellular carcinoma (HCC), but also in its metastasis, recurrence and resistance to anti-tumor chemotherapy. ZBP-89 is a transcription factor that binds to gene promoter GC-rich sequence to activate or suppress the transcription of genes that are associated with cell growth and cell death. However, the relationship between HIF-1a and ZBP-89 is unknown in HCC. In this study, we examined the levels of HIF-1a and ZBP-89 in HCC cells and HCC tissue samples. We found that the expression of HIF-1a was significantly in all HCC tumor samples, compared with non-tumor liver tissues. The levels of ZBP-89 was slightly increased in the well-differential HCC tumor samples but obviously decreased in moderately or poorly differential tumor samples, compared with non-tumor liver tissue samples. Overall, the expression of ZBP-89 was inversely correlated with the stage of the

tumor differentiation and the level of HIF-1a in HCC samples, indicating that the higher HIF-1a, the lower ZBP-89. In conclusion, there is a negative relationship between the level of HIF-1a and the expression of ZBP-89 in HCC. The data suggest that the low level of ZBP-89 may contribute to the upregulation of HIF-1a. Considering the fact that ZBP-89 can induce apoptosis in HCC cells, whether upregulation of ZBP-89 will negatively impact the expression of HIF-1a remains an interesting question.

Speaker Biography

George G Chen is a Professor in the Department of Surgery, Director of Surgical Research Laboratories and Faculty of Medicine of Chinese University of Hong Kong, China. He has extensive experience in cancer research, particularly in the area of liver and lung cancers. He has authored or co-authored more than 200 papers and has written a number of books or book chapters.

e: gchen@cuhk.edu.hk

 Notes: