Poster Abstracts

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Down-regulation of PKCN1 inhibits AXL expression in human Triple-negative breast cancer cells

Chih-Yang Huang^{1,2,3}, Chia-Herng⁴, Yu-Yu Lin⁵, Jiuan-Jen Shin⁶, Jer-Yuh Liu^{5,6}, Ho Lin⁷, Chia-Jen Lee⁶

¹China Medical University, Graduate Institute of Chinese Medical Science, School of Chinese Medicine, Taiwan

²Graduate Institute of Basic Medical Science, China Medical University, Taichung, Taiwan

³Department of Health and Nutrition Biotechnology, Asia University, Taichung, Taiwan

⁴Department of Surgery, Tungs' Taichung MetroHarbor Hospital, Taichung, Taiwan

⁵Graduate Institute of Cancer Biology, China Medical University, Taichung, Taiwan

⁶Center for Molecular Medicine, China Medical University Hospital, Taichung, Taiwan

⁷Department of Life Science, National Chung Hsing University, Taichung, Taiwan

Background: AXL is over-expressed in a wide variety of human cancers and has a role in cancer progression and metastases, and can be regulated by PKCN1 in leukemia cells. However, it remains unknown that reduction of PKCN1 can inhibit AXL expression in human breast cancer cells. In this study,

Methods/Aim: we determined whether reduction of PKCN1 can inhibit AXL expression in human triple-negative breast cancer TNBC cells.

Results: The results showed that when a MZF-1-derived peptide which can down-regulate PKCN1 expression was transfected to the cells, AXL expression was inhibited and cell morphology and cell migration were changed, and reversed by the constitutive form of PKCN1. Moreover, this phenomenon was also confirmed by treatment with TAT-fused peptide.

Conclusions: Thus we suggest that the AXL signaling involved in PKCN1-caused EMT and cell migration in TNBC cells can be blocked by the MZF-1-derived peptide.