

AB042. P013. LncRNA-PTCHD3P1 enhances chemosensitivity of gemcitabine in pancreatic cancer and inhibits cancer cell proliferation and metastasis via inhibiting Warburg effect

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Abstract: Warburg effect is associated with cancer chemosensitivity, and gemcitabine can increase the level of Warburg effect in pancreatic cancer. However, whether lncRNAs has impact on Warburg effect and further affect the chemosensitivity of gemcitabine, the proliferation and metastasis of pancreatic cancer are still unknown. In our previous researches, we have demonstrated that the expression of lncRNA-PTCHD3P1 is decreased in pancreatic cancer, and this reduction significantly inhibits Warburg effect, enhances chemosensitivity of gemcitabine, and inhibits pancreatic cancer cell proliferation and metastasis. In addition, lncRNA-PTCHD3P1 also suppresses the expression of phosphofructokinase-1 (PFK-1), the key factor of glycolysis pathway. Therefore, we assume that lncRNA-PTCHD3P1 inhibits PFK-1 expression, and PFK-1 down-regulation inhibits the Warburg effect of pancreatic cancer, finally enhances chemosensitivity of gemcitabine and inhibits cancer cell proliferation and metastasis. In conclusion: lncRNA-PTCHD3P1 pathway regulating pancreatic cancer metabolism and provide metabolic prospective for treatment of pancreatic cancer.

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