



Min Li

The University of Texas Health Science Center at Houston, USA

Targeting ZIP4 to treat pancreatic cancer

Pancreatic cancer is the fourth leading cause of cancer related deaths in North America. The overall 5-year survival rate is less than 5%. The poor survival statistics are due to the fact that there are no reliable tests for early diagnosis and no effective therapies once metastasis has occurred. Surgical resection is the only curative treatment for pancreatic cancer; however, patients with pancreatic cancer usually present with locally advanced, unresectable or metastatic disease, even for patients with resectable disease, most of them will relapse. Standard chemo- and radiation therapy does not offer significant improvement of survival. Therefore, it is important to identify novel molecular markers and therapeutic targets in pancreatic cancer that could lead to more effective treatment or enhancement of standard chemo- and radiation therapy for this malignant disease. And combinational therapy including molecular targeted therapy, surgical resection and chemotherapy may further improve the efficacy of individual therapies. Our study suggest that a zinc transporter, ZIP4, stimulates pancreatic cancer cell growth, tumor progression, and survival, and silencing of ZIP4 significantly decreased the growth of pancreatic cancer, and increased the survival rate of nude mice with orthotopic xenografts. Those results indicated that targeting ZIP4 is a novel therapeutic strategy to treat pancreatic cancer.

Biography

Min Li got his PhD from Emory University in 2002. He then moved on to Baylor College of Medicine and started his career in cancer research as an Assistant Professor. Dr. Li joined the University of Texas Health Science Center at Houston, Medical School in 2010 as an Associate Professor and Director of Cancer Research Program. His research interests include pancreatic cancer and brain tumor. Dr. Li's group is the first one to identify ZIP4 as a novel molecular target in pancreatic cancer. He has published more than 100 papers on peer reviewed journals, and holds multiple grants from NIH and private foundations. Dr. Li serves as a permanent member of NIH study section, and is an editorial board member of many journals.

Min.Li@uth.tmc.edu