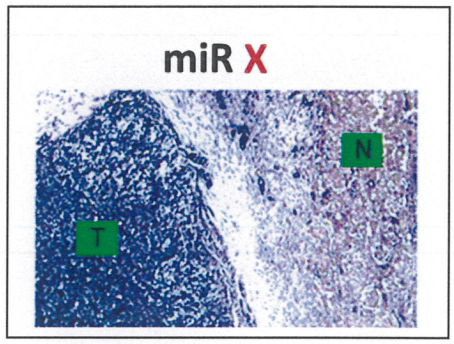
Specific microRNAs as HCC diagnosis and effective drug screening system

PI： Assistant Prof. DA-LIANG OU
Graduate Institute of Oncology, National Taiwan U.

Experience:
2011/02 so far, Graduate Institute of Oncology, National Taiwan University
2007/08 to 2011/01 National center of excellence for in clinical trials and research (National Taiwan University Hospital) / Postdoctoral Fellow



Market Needs: There are over 70 million people worldwide each year die from liver cancer, therefor the progression of any predictive biomarkers or treatments have a huge potential market value. The two microRNAs levels as a platform, the preliminary results of in vitro and animal experiments shown could predict drug efficacy in liver cancer cell lines. In the future can be used to predict the performance of a specific amount assess the patient serum by the two microRNAs as assess the therapeutic effecacy of cancer drugs.

Our Technology: The invention is use a stable Q-RT-PCR system, measuring the two microRNAs techniques can be used to evaluate the effective drug in liver cancer cell lines or patient's serum levels as a platform. The platform is mainly induced by the two microRNAs levels to evaluate single or a combination of drugs used in the treatment of hepatocellular carcinoma through the screening platform. The two microRNAs may be used as a diagnosis biomarkers and effective therapy of hepatocellular carcinoma.

Strength: In recent years, microRNAs discovered to be secreted by living cells, due to a small fragment of microRNA difficult to degrade and break more than DNA, mRNA and protein that have better stability and biological significance in serum. The use of Q-RT-PCR system can accurately quantify the amount of the relative performance of microRNAs. The advantages may be as diagnosis biomarkers and effective drug screening in hepatocellular carcinoma.

Intellectual Properties:
US provisional (number: 62 / 029,589).

Contact (do not need to fill out):
Center for Industry-Academia Cooperation, NTU
Tel: 02-3366-9951, E-mail: lutepan@ntu.edu.tw