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Abstracts

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- [2] Schubert W, Dress A, Ruonala M, Krusche A, Hillert R, Gieseler A, Walden P. Imaging cyclor microscopy. Proc Natl Acad Sci USA 2014; 111(2): E215. doi: 10.1073/pnas.1319017111.
- [3] Schubert W, Bonnekoh B, Pommer AJ, Philipsen L, Boeckelmann R, Maliykh J, Gollnick H, Friedenberger M, Bode M, Dress AW. Analyzing proteome topology and function by automated multidimensional fluorescence microscopy. Nat Biotechnol 2006; 24(10): 1270-1278. doi: 10.1038/nbt1250.
- [4] Friedenberger, M, Bode, M, Krusche A, Schubert W. Fluorescence detection of protein clusters in individual cells and tissue sections by using topome imaging system: sample preparation and measuring procedures. Nat Protoc 2007; 2(9): 2285-2294. doi: 10.1038/nprot.2007.320.

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Track: Medical Biotechnology

BIOMARKER POTENTIAL OF SEVERAL MIRNAS FOR THE EARLY DIAGNOSIS OF HEPATOCELLULAR CARCINOMA RELATED WITH HBV AND HCV INFECTIONS

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Hepatocellular carcinoma (HCC) is the fifth most common cancer worldwide and the third most common cause of cancer-related mortality. It is rarely detected at its early stage, resulting in a short survival of few months. About 90% of HCC cases arise from cirrhosis, which can be attributed to a wide range of factors including chronic viral hepatitis B or C (HBV or HCV) infections, highly alcohol consuming, nonalcoholic steatohepatitis (NASH), autoimmune hepatitis, primary biliary cirrhosis (PBC), and carcinogens exposure.

The possible reason of poor prognosis of HCC is the lack of an effective early diagnosis. Development of an effective and reliable tool for early diagnosis, would play an important role in improving the prognosis of HCC patients. Its detection at late stages raises the mortality rate and limits the therapeutic options.

MicroRNAs (miRNAs) are a class of short non-coding RNA molecules. Facilitated by high-throughput genomics and bioinformatics in conjunction with traditional molecular biology techniques and animal models, miRNA research is now positioned to make the transition from laboratories to clinics to deliver profound benefits to public health. Alterations of miRNAs are associated with a number of disease pathologies. With over 5000 miRNAs discovered in humans to date, many of them have already been implicated in common human disorders such as cancer, viral diseases, immune-related diseases, Neurodegenerative diseases. miRNAs have important potential to becoming the next generation of diagnostics and therapeutics.

The results of our recent studies about HBV and HCV related HCC, significantly imply that miR-125b-5p and miR223-3p could be used as novel non-invasive biomarkers of HBV related HCC in very early, even at chronic hepatitis B stage of liver disease. On the other hand, miR-30c-5p, miR-223-3p, miR-302c-3p and miR-17-5p could be used as novel noninvasive biomarkers of HCV related HCC in very early, even at cirrhosis stage of liver disease (BAP-SBE TM (BGG) 2011-5 YL, BAP-SBE FM (ZO) 2011-5 YL).

Biomarker potential of these miRNAs for the early diagnosis of hepatocellular carcinoma related with HBV and HCV infections will be focused in this presentation.
