Topics: cfNA (Circulating free nucleic acid)

A Breakthrough PCR-free Technology for the Diagnosis of Liver Injury

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Abstract: The dynamic chemical labelling (DCL) is a single-base specific method for the detection and quantification of microRNAs (miRNAs) without requiring extraction and pre-amplification from biological fluids. In this study, DCL method was combined with the highly sensitive Luminex® MAGPIX® CE-IVD system for profiling the serum levels of liver biomarker miRNA-122 in 27 samples from patients with Livery Injury. The assay was successfully used for an accurate direct quantification of miRNA-122 in patient serum. It was valuable in distinguishing DILI patients and healthy volunteers, as well as monitoring DILI patients over time. With these features, this assay will be used for the direct detection and quantification of patient miRNA-122, and it will be applied to any other circulating RNA biomarkers, hence being ideal for liquid biopsy applications.