

## Article 8

### Mir 129 5-P as a noninvasive prognostic biomarker of liver fibrosis in HCV Egyptian population

#### Abstract:

**Background:** Hepatic fibrosis is the inevitable pathological process of chronic hepatitis C (CHC), accurate assessment of liver fibrosis has an important role in determining prognosis and to follow-up disease progression. Current aim was to evaluate MiR 129 5-p as a noninvasive serum marker for assessment of liver fibrosis in chronic hepatitis C Egyptian populations. **Subject and Methods:** Eighty HCV patients complicated by liver fibrosis and 80 subjects were enrolled as controls. MiRNA expression level was tested using miScript SYBR Green PCR Kit (Qiagen, USA). **Results :** Results showed significant differences between the HCV patients and controls as regard the mean $\pm$  SD of expression level of MiR-129-5p with down- regulation in HCV patients (0.10 $\pm$ 0.02) (P<0.0001) . The results also showed that MiR 129-5p relative expression level was significantly down-regulated in sever fibrosis (F3-F4) compared with mild fibrosis (F1-F2). ROC curve analysis showed the prognostic value of MiR 129-5p to differentiate between severe fibrosis (F3 and F4) from mild (F1, F2) (sensitivity=70% and specificity =90%).

**Conclusion:** miR-129- 5p might be a potential prognostic biomarker for liver fibrosis.