



## CARDIOVASCULAR RISK INDUCED BY THE PRESENCE OF NON-ALCOHOLIC FATTY LIVER DISEASE

### Objectives:

The paper wishes to quantify the cardiovascular risk in a lot of Non-alcoholic fatty liver disease (NAFLD) Romanian patients.

### Material and methods:

This is a prospective observational investigation on patients with NAFLD trying to determine the cardiovascular risk using **Framingham cardiac risk score** and **SCORE cardiovascular risk**.

### Results:

We found an average Framingham risk of 12.21239%, statistically significant compared to the population of the same age and sex ( $p = 0.000515$ ). Correlating Framingham score with liver fibrosis indexes reveal close linear correlation: index ASPRI -  $r = 0.591$ , respectively Fib 4 index -  $r = 0.126$ . We also found weak positive linear correlation between average blood pressure and Framingham risk ( $r = 0.238$ ), meaning that patients with increased blood pressure have a high average 10 years risk to present a major cardiovascular pathology. As per HeartScore<sup>®</sup> risk ( $n=101$ ), we obtained an average of **3.03%**, statistically significant higher than the control group (1.88 %) -  $p=0.001739$ . A total of 20 patients showed an increased cardiovascular risk ( $\geq 5$ ) quantify into the SCORE system, mostly men ( $n = 13$ ).

Estimation of Framingham and SCORE cardiovascular risk proved an increased risk with age (Spearman coefficient  $r = 0.64$ , respectively  $r = 0.47$ ). The risk was lower in female sex and higher in those presenting obesity, hyper-tensive waist or metabolic syndrome.

**Conclusions:** Cardiovascular risk of subjects with fatty liver is extremely high and often neglected by GI or Internal Medicine clinicians who are concerned generally only about the digestive pathology.