Abstract
The aflatoxin B1 (AFB1) is a mycotoxin that has been identified as the most potent hepatocarcinogen. The metabolite resulting from detoxification process of AFB1 in liver, has the ability to react with the genomic DNA, generating AFB1-DNA adducts; during DNA replication process, this adduct induced the G:CT:A transversion. Polymorphism in genes encoding for enzymes involved in the activation and detoxification of AFB1 and DNA repair enzymes has been associated with the risk of hepatocellular carcinoma (HCC) development. Additionally, in populations of high exposure to aflatoxin and high prevalence of hepatitis B virus (HBV) infection, has been demonstrated a synergism between these two risk factors for the development of HCC.

Keywords
Aflatoxin B1, Hepatitis B virus, Hepatocellular carcinoma, AFB1 metabolite, AFB1- DNA adducts, DNA repair.