

Table 1**Risk factors for hepatocellular carcinoma (HCC) and cholangiocarcinoma (CC)**

Hepatocellular carcinoma	Cholangiocarcinoma
Age > 60 ³	Age > 60 ⁶
Male sex ³	Male sex ⁶
Chronic viral hepatitis (B and C). Worldwide approximately 54% of cases of HCC are attributable to hepatitis B and 31% to hepatitis C. ³	Primary sclerosing cholangitis (PSC) – (5-35% lifetime risk of CC) ⁸
Co-infection with HIV further increases the risk of HCC ⁷	
Cirrhosis (chronic viral hepatitis, haemochromatosis, ⁹ alpha-1-antitrypsin deficiency ¹⁰ and non-alcoholic fatty liver disease). ³ One third of cirrhotic patients will develop an HCC during their lifetime ¹¹	Chronic inflammation secondary to hepatolithiasis, choledocholithiasis and cholangitis ¹²
Excessive alcohol consumption ^{3,13}	Bile duct adenoma and biliary papillomatosis ¹²
Smoking ^{13,14}	Rare congenital cystic diseases such as choledochal cysts and Caroli's disease ¹²
Haemochromatosis – 45% of patients develop an HCC, the majority are already cirrhotic ⁹	Parasitic infections (liver fluke e.g. <i>Clonorchis sinensis</i> and <i>Opisthorchis viverrini</i>) and chronic typhoid carriage, common in SE Asia ¹²
Aflatoxin B ¹⁵	Cirrhosis ¹²
Diabetes, obesity and fatty liver ^{13,16}	Chronic hepatitis (B and C) ¹²
Anabolic steroids ¹⁷	Inflammatory bowel disease without PSC ¹²
Primary biliary cirrhosis (PBC) - risk is greater in men than women ¹⁸	Toxins such as thorotrast, digoxins, nitrosamines and vinyl chloride ¹⁹
BRCA1/BRCA2/EGF gene ^{20,21}	Obesity, diabetes, fatty liver disease, alcohol and smoking ¹²