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## The Role of CK19-Positive Cells of the Portal Zones in Thioacetamide-Induced Cirrhosis of Rat Liver

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In hepatic diseases, a complex regeneration mechanism is initiated, which is manifested in cell proliferation, differentiation, migration, stromal restructuring and angiogenesis. To date, the cellular and molecular/genetic mecha-

nisms of regeneration disorders and the reserve capacities of liver recovery are not fully understood. The purpose of the study is to examine the role of CK19-positive cells of the portal zones in thioacetamide-induced cirrhosis of rat liver. We found that the fibrogenesis of liver is accompanied by migration of CK19-positive cells of the portal zones along the connective tissue septa and their differentiation into the cells of two lines: the cholangiocytes forming the interlobular bile ducts and ductules, and the hepatocytes, which form the rudiments of new hepatic microlobules. Morphological and functional heterogeneity of these population of proliferating CK19-positive cells was identified.

**Keywords:** rats, thioacetamide, liver cirrhosis, immunohistochemistry, cytokeratin CK19, regeneration