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Toxicology: Metabolic Networks in Gastric Cancer's Tumor Microenvironment

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Abstract

The heterogeneity of mutant clones is affected by the actions of other cells in the tumor and by metabolites and cytokines in the microenvironment. Metabolism can also influence immune cell phenotype and function. Metabolic reprogramming of cancer cells is the result of a convergence of both internal and external signals. The basal metabolic state is maintained by internal signaling, while external signaling fine-tunes the metabolic process based on metabolite availability and cellular needs. This paper reviews the metabolic characteristics of gastric cancer, focusing on the intrinsic and extrinsic mechanisms that drive cancer metabolism in the tumor microenvironment, and interactions between tumor cell metabolic changes and microenvironment metabolic changes. This information will be helpful for the individualized metabolic treatment of gastric cancers. Gastric cancer, also known as stomach cancer, remains a significant global health challenge, contributing to high morbidity and mortality rates worldwide. The tumor microenvironment (TME) plays a crucial role in tumor growth and progression, exerting complex influences on various

emerged as a vital area of research, presenting both barriers and promising avenues for understanding and targeting this devastating disease.

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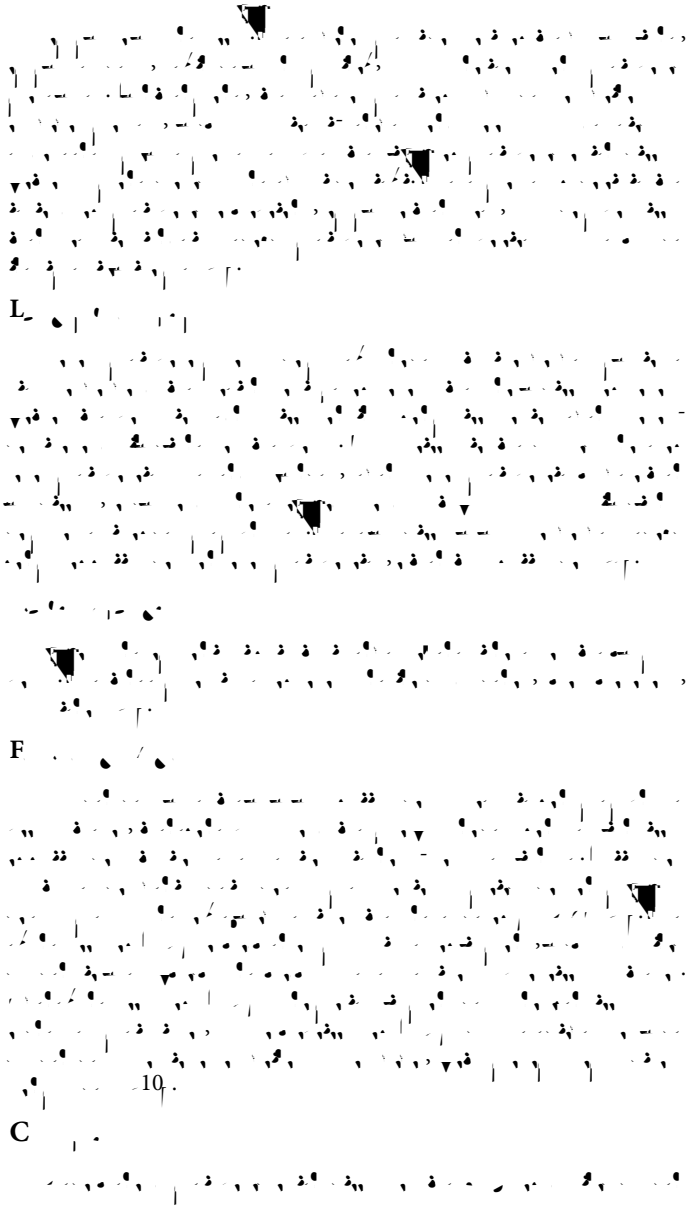

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