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Metabolic hallmarks of liver regeneration

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Abstract

Despite the crucial role of cell metabolism in biological processes, particularly cell division, metabolic aspects of liver regeneration are not well defined. Better understanding of the metabolic activity governing division of liver cells will provide powerful insights into mechanisms of physiological and pathological liver regeneration. Recent studies have provided evidence that metabolic response to liver failure might be a proximal signal to initiate cell proliferation in liver regeneration. In this review, we highlight how lipids, carbohydrates, and proteins dynamically change and orchestrate liver regeneration. In addition, we discuss translational studies in which metabolic intervention has been used to treat chronic liver diseases (CLDs). © 2021 Elsevier Ltd

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