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Intratumoral heterogeneity of hepatocellular carcinoma: From single-cell to population-based studies

Zhang Q *et al.* Intratumoral heterogeneity of HCC

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Qi Zhang, Yu Lou, Xue-Li Bai, Ting-Bo Liang

Abstract

Hepatocellular carcinoma (HCC) is characterized by high heterogeneity in both intratumoral and interpatient manners. While interpatient heterogeneity is related to personalized therapy, intratumoral heterogeneity (ITH) largely influences the efficacy of therapies in individuals. ITH contributes to tumor growth, metastasis, recurrence, and drug resistance and consequently limits the prognosis of patients with HCC. There is an urgent need to understand the

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