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Abstract

Radiotherapy plays a limited role in the treatment of hepatocellular carcinoma (HCC) due to the development of resistance. Therefore, further investigation of underlying mechanisms involved in HCC radioresistance is warranted. Increasing evidence shows that long non-coding RNAs (linc-RNAs) are involved in the pathology of various tumors, including HCC. Previously, we have shown that long noncoding RNA regulator of reprogramming (linc-ROR) promotes HCC metastasis via induction of epithelial-mesenchymal transition (EMT). However, the roles of linc-ROR in HCC radioresistance and its possible mechanisms are unclear. Here, we established two radioresistant HCC cell lines (HepG2-R and SMMC-7721-R) and found that linc-ROR was significantly upregulated in radioresistant HCC cells. Knockdown of