免疫原性细胞死亡相关分子的表达机制及对免疫的调节

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Title: Expression mechanism of immunogenic cell death related molecules and regulation of immunity

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摘要: 研究表明，用部分化学药物和放射线等手段治疗肿瘤，肿瘤发生免疫原性细胞死亡（ICD），随后细胞表面高表达损伤相关分子模式(DAMPs)，如钙网蛋白（CRT）、三磷酸腺苷（ATP）、热休克蛋白(HSP)、高迁移率族蛋白B1（HMGB1）信号分子，增强肿瘤细胞的免疫原性，招募树突状细胞(DC)到肿瘤床并提高其功能，激活特异性的细胞毒性T淋巴细胞(CTL)对肿瘤的攻击。ICD及其DAMPs为肿瘤治疗提供了新的治疗依据和手段，监测化疗前后肿瘤细胞免疫原性的变化,将化疗和免疫治疗有机结合，可提高肿瘤的治疗效果。本文对ICD相关分子的表达机制及对机体免疫的调节等进行综述。

Abstract: Studies have shown that tumors are treated with some chemicals and radiation，and immunogenic cell death（ICD) occurs in the tumor，followed by damage-associated molecular patterns（DAMPs) such as calreticulin（CRT)，adenosine triphosphate（ATP)，heat shock protein（HSP)，high mobility group protein B1（HMGB1) signaling molecules,whichreally enhance the immunogenicity of tumor cells，recruit dendritic cells(DC) to the tumor bed and enhance their functions that activate specific cytotoxic T lymphocytes（CTL) to attack tumors.ICD and its DAMPs provide new therapeutic basis and means for tumor treatment，monitoring the changes of tumor cell immunogenicity before and after chemotherapy，organically combining chemotherapy and immunotherapy，and improving the therapeutic effect of tumor.This article reviews the expression mechanism of ICD-related molecules and the regulation of immune system.

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