

综述

重组腺病毒介导的前列腺癌基因治疗研究进展

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摘要 前列腺癌的基因治疗已逐渐成为研究热点。载体系统是基因治疗的基础。目前, 腺病毒载体在前列腺癌基因治疗中应用最为广泛。溶瘤腺病毒的研究进展为前列腺癌基因治疗开辟了新的途径。近年研究表明, 溶瘤腺病毒单独使用或与治疗基因联合应用, 能够有效发挥抗肿瘤效应。治疗基因是发挥功能的关键因素。自杀基因能将药物转化为毒性代谢产物, 细胞因子能增强抗肿瘤免疫效应, 血管生成抑制因子能抑制血管生成, 凋亡相关分子能诱导细胞凋亡, 这些基因在前列腺癌的基础和临床研究中均表现出一定的肿瘤生长抑制作用。本文对重组腺病毒介导的前列腺癌基因治疗基础及临床研究进展进行综述。

关键词 [前列腺癌](#) [基因治疗](#) [腺病毒科](#) [DNA](#) [重组](#)

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Progress of adenovirus-mediated gene therapy for prostate cancer

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Abstract

Gene therapy for prostate cancer has been becoming a hot research. Vector system is the foundation of gene therapy. Until now, adenovirus is the most popular vector in gene therapy for prostate cancer. The development of oncolysis adenovirus provides new ways for prostate cancer therapy. Recent researches showed that oncolysis adenovirus alone or combined with therapeutic genes can produce antineoplastic effect. Therapy genes play key roles in gene therapy. Suicide genes can convert the drug into toxic metabolic product, cytokines can enhance the antineoplastic and immunologic responses, angiogenesis inhibitors can inhibit the development of new vessels, and apoptosis related factors can induce the apoptosis of tumor cells. These genes have been confirmed for their antineoplastic effects in both basic and clinical researches in prostate cancer. This paper reviewed the advancement of adenovirus based gene therapy for prostate cancer in both basic and clinical researches.

Key words [prostatic neoplasms](#) [gene therapy](#) [Adenoviridae](#) [DNA](#) [recombinant](#)

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