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综述

ATM基因与乳腺癌

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摘 要 目前国内外针对共济失调毛细血管扩张症的致病基因ATM基因的研究不断增多，自从Swift等第一次报道了ATM杂合子患乳腺癌的风险增加后，作为乳腺癌危险因子ATM基因受到国内外学者的关注。ATM基因位于人类染色体的11q22－23，其蛋白主要参与DNA 的损伤识别和修复、细胞周期的调控。ATM基因作为抑癌基因在乳腺癌的发生发展中起重要的作用。可把研究ATM基因与ATM杂合子的乳腺癌患病风险的关系作为研究ATM与肿瘤发生发展关系的契入点，并最终为肿瘤的预防和治疗带来新的理论与方法。本文对ATM基因结构，功能，增加癌症易感性的机制及其与乳腺癌患病风险的关系作一概述。

关 键 词 ATM基因 乳腺癌

分类号

Ataxia- telangiectasia mutated gene and breast cancer

Abstract The studies of Ataxia-telangiectasia mutated gene (ATM) are increasing. Since Swift and his colleagues firstly reported that ATM heterozygotes in AT families had higher risk of suffering breast cancer, many researchers were paying close attention to ATM as a risk factor for breast cancer. Locating in the human chromosome 11q22-23, this gene is referred to the repairing of DNA damage and the regulation of cell cycle check-point. As the anti-oncogene， ATM plays an important role in the carcinogenesis of breast cancer. We can take the study of the relationship between ATM and the risks of developing breast cancer of ATM heterozygotes, as the entrance study of ATM and tumorigenesis, then find out new theories and method for precaution and therapy of tumors. This article reviews the structure and functions of the ATM, how it increases the cancer susceptivity and the relationship between ATM and the risks of developing breast cancer.

Key words ATM Breast cancer

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