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## EGFR抑制剂对肿瘤的抑制和放疗增敏作用研究进展

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### Research on the progress of EGFR inhibitors in tumor inhibition and radio-sensitization

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[摘要](#)[图/表](#)[参考文献\(0\)](#)[相关文章 \(15\)](#)**全文:** [PDF](#) (965 KB) [HTML](#) (1 KB)**输出:** [BibTeX](#) | [EndNote](#) (RIS)**摘要**

放射治疗是治疗肿瘤的重要手段, 提高放疗疗效仍是目前肿瘤放射治疗学领域亟待解决的难题。表皮生长因子受体 (epidermal growth factor receptor, EGFR) 是ErbB家族成员之一, 具有酪氨酸激酶活性, 是一种重要的跨膜受体。EGFR 可介导细胞迁移、黏附、增殖、分化、凋亡, 且与肿瘤的形成和恶化密切相关。EGFR 抑制剂具有放射增敏性, EGFR 抑制剂可通过影响细胞周期进展、DNA 损伤修复及抗血管形成等多种途径发挥放疗增敏作用。合理应用EGFR 抑制剂, 将有效地提高恶性肿瘤放射敏感性, 从而改善患者生活质量, 减少肿瘤局部复发, 延长患者的生存时间。

**关键词 :** 放射治疗, EGFR, 放疗敏感性, EGFR 抑制剂**Abstract :**

Radiotherapy is important in cancer treatment, but improving the therapeutic effect of irradiation and decreasing its toxicity to normal human tissues is still a global problem. Epidermal growth factor receptor (EGFR) is a member of ErbB family and is an important transmembrane receptor with signal-transduction tyrosine kinase activity. EGFR can direct cellular migration, adhesion, proliferation, differentiation, and apoptosis, and plays a fundamental role in the development and growth of many types of human tumor cells. A series of preclinical studies showed that EGFR inhibitors can enhance the antitumor activity of ionizing radiation. EGFR inhibitors regulate radio-sensitization through multiple mechanisms, including cell cycle alterations, DNA repair modulation, and anti-angiogenesis. Reasonable application of EGFR inhibitors will effectively increase the radio-therapeutic effect, extend the local control of tumor, and improve a patient's quality of life.

**Key words :** radiotherapy EGFR radio-sensitivity EGFR inhibitors**收稿日期:** 2015-04-27    **出版日期:** 2015-06-15**通讯作者:** 赵路军    **E-mail:** tjdoctorzhao@126.com**引用本文:**

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