

EGFR-TKIs治疗期间NSCLC患者炎性指标动态变化与疗效相关性的系统评价^Δ

伍俐颖^{1,2*}, 杨婧怡^{1,2}, 曾雅婷^{1,2}, 雍灵¹, 邵炜凤^{1,2}, 刘维^{1,3#}(1. 北京大学第三医院药学部, 北京 100191; 2. 北京大学药学院药事管理与临床药理学系, 北京 100191; 3. 北京大学医学部药物评价中心, 北京 100191)

中图分类号 R979.1 文献标志码 A 文章编号 1001-0408(2026)11-1490-06
DOI 10.6039/j.issn.1001-0408.2026.11.19



摘要 目的 系统评价表皮生长因子受体-酪氨酸激酶抑制剂(EGFR-TKIs)治疗期间非小细胞肺癌(NSCLC)患者炎性指标动态变化与药物疗效的相关性,以期为临床预后评估及治疗策略调整提供循证支持。**方法** 检索PubMed、Embase、Cochrane Library、中国知网、万方数据及中国生物医学文献数据库,检索时限为建库至2025年7月20日。筛选文献、提取资料及评价文献质量后,对纳入研究的结果进行描述性分析。**结果** 共纳入8项研究,分析了EGFR-TKIs治疗前后6项炎性指标与药物疗效之间的相关性。偏倚风险评估结果显示6项为高质量研究,2项为中等质量研究。其中,7项研究结果表明,治疗前较低的中性粒细胞-淋巴细胞比值(NLR)、衍生中性粒细胞-淋巴细胞比值(dNLR)、血小板-淋巴细胞比值(PLR)和单核细胞-淋巴细胞比值(MLR),较高的淋巴细胞-单核细胞比值(LMR),以及治疗后NLR、MLR的降低与LMR的升高与更长的中位无进展生存期相关。5项研究结果表明,治疗前较低的NLR、dNLR、PLR和白细胞介素-6(IL-6),较高的LMR,以及治疗后NLR、dNLR的降低与LMR的升高均与中位总生存期延长相关。3项研究结果表明,治疗前较低的IL-6与更高的客观缓解率相关,而治疗后两者的相关性仍存争议;1项研究显示,治疗后NLR、MLR和PLR的早期下降可能与客观缓解获益存在相关性。**结论** NSCLC患者接受EGFR-TKIs治疗期间,低炎症水平与更好的疗效相关。

关键词 非小细胞肺癌;表皮生长因子受体-酪氨酸激酶抑制剂;炎性指标;动态变化;药物疗效

Systematic review of the relationship between dynamic changes in inflammatory markers and therapeutic efficacy in NSCLC patients during EGFR-TKIs therapy

WU Liying^{1,2}, YANG Jingyi^{1,2}, ZENG Yating^{1,2}, YONG Ling¹, SHAO Weifeng^{1,2}, LIU Wei^{1,3} (1. Dept. of Pharmacy, Peking University Third Hospital, Beijing 100191, China; 2. Dept. of Pharmaceutical Administration and Clinical Pharmacy, School of Pharmaceutical Sciences, Peking University, Beijing 100191, China; 3. Institute for Drug Evaluation, Peking University Health Science Center, Beijing 100191, China)

ABSTRACT OBJECTIVE To systematically evaluate the correlation between dynamic changes in inflammatory markers during treatment with epidermal growth factor receptor-tyrosine kinase inhibitors (EGFR-TKIs) in non-small cell lung cancer (NSCLC) patients and therapeutic efficacy, with the aim of providing evidence-based support for clinical prognosis assessment and treatment strategy adjustment. **METHODS** Databases including PubMed, Embase, Cochrane Library, CNKI, Wanfang Data, and CBM were searched from the inception to July 20, 2025. Following literature screening, data extraction and quality assessment, descriptive analysis was conducted on the outcomes of included studies. **RESULTS** A total of eight studies were included to analyze the correlation of 6 inflammatory markers before and after treatment with EGFR-TKIs with therapeutic efficacy. The risk of bias assessment identified six high-quality studies and two moderate-quality studies. Among these studies, seven studies demonstrated that lower levels of neutrophil-to-lymphocyte ratio (NLR), derived neutrophil-to-lymphocyte ratio (dNLR), platelet-to-lymphocyte ratio (PLR), and monocyte-to-lymphocyte ratio (MLR), higher lymphocyte-to-monocyte ratio (LMR) before treatment, as well as decreased NLR and MLR and increased LMR after treatment were associated with longer median progression-free survival. Five studies indicated that lower levels of NLR, dNLR, PLR, and interleukin-6 (IL-6), higher LMR before treatment as well as decreased NLR and dNLR and increased LMR were associated with longer median overall survival. Three studies indicated that lower levels of IL-6 were associated with a higher objective response rate, while the association of these markers after treatment

remained controversial; another study showed that an early decline in NLR, MLR, and PLR after treatment may be associated with objective response benefit. **CONCLUSIONS** Lower inflammatory levels during EGFR-TKIs therapy correlate with better therapeutic efficacy in NSCLC patients.

Δ 基金项目 国家自然科学基金项目(No.82504922)

* 第一作者 硕士研究生。研究方向:肿瘤临床药理学。E-mail: wuyile2024@163.com

通信作者 主任药师,副教授,硕士生导师,博士。研究方向:肿瘤临床药理学。E-mail:liuwei0023@bjmu.edu.cn