

# 化疗联合安罗替尼治疗晚期三阴性乳腺癌的疗效和安全性

《现代肿瘤医学》[ISSN:1672-4992/CN:61-1415/R] 期数: 2019年22期 页码: 3986-3988 栏目: 论著(胸部肿瘤) 出版日期: 2019-10-08

**Title:** Effectiveness and safety of chemotherapy combined with anlotinib for the treatment of advanced triple-negative breast cancer

**作者:** 张寅斌<sup>1</sup>; 陈琳<sup>2</sup>; 陈银溪<sup>1</sup>; 马宇光<sup>1</sup>; 刘棣<sup>1</sup>; 梁亮<sup>1</sup>; 王梦<sup>1</sup>; 靳耀锋<sup>1</sup>; 刘希璐<sup>1</sup>; 张淑群<sup>1</sup>  
1.西安交通大学第二附属医院肿瘤科, 陕西 西安 710004; 2.陕西省人民医院病理科, 陕西 西安 710068

**Author(s):** Zhang Yinbin<sup>1</sup>; Chen Lin<sup>2</sup>; Chen Yinxi<sup>1</sup>; Ma Yuguang<sup>1</sup>; Liu Di<sup>1</sup>; Liang Liang<sup>1</sup>; Wang Meng<sup>1</sup>; Jin Yaofeng<sup>1</sup>; Liu Xilu<sup>1</sup>; Zhang Shuqun<sup>1</sup>

1.Oncology Department, the Second Affiliated Hospital of Xi'an Jiaotong University, Shaanxi Xi'an 710004, China; 2.Department of Pathology, Shaanxi Provincial People's Hospital, Shaanxi Xi'an 710068, China.

**关键词:** 三阴性乳腺癌; 安罗替尼; 化疗

**Keywords:** triple-negative breast cancer; anlotinib; chemotherapy

**分类号:** R737.9

**DOI:** 10.3969/j.issn.1672-4992.2019.22.011

**文献标识码:** A

**摘要:** 目的: 探讨化疗联合安罗替尼治疗晚期三阴性乳腺癌的疗效和安全性。方法: 选取2018年6月至2018年12月我院肿瘤科收治的30例晚期乳腺癌患者为研究对象, 根据入组标准和排除标准进行随机分组, 对照组给予化疗联合安慰剂治疗6周期, 实验组给予化疗联合安罗替尼胶囊(12 mg, qd)治疗6周期, 比较两组的临床疗效和安全性。结果: 实验组和对照组患者的ORR分别为66.7%和46.7% (P=0.043), 并且中位PFS分别为7.5月和3月 (P=0.073)。常见不良反应为乏力、中性粒细胞减少症、高血压症、手足综合征、高甘油三酯血症。其中实验组III-IV级不良反应主要为中性粒细胞减少症(26.7%)和高血压症(13.3%), 调整剂量后患者耐受性好。结论: 化疗联合安罗替尼治疗晚期三阴性乳腺癌可明显提高患者的客观缓解率, 且安全性较好, 值得临床推荐。

**Abstract:** Objective: To investigate the effectiveness and safety of chemotherapy combined with anlotinib for advanced triple-negative breast cancer. Methods: A total of 30 patients were enrolled in this study. Patients were randomly allocated at 1 : 1 ratio for the chemotherapy combined with anlotinib (12 mg/d) group (experimental group) and chemotherapy combined with placebo group (control group) for 6 cycles treatments between June 2018 and December 2018 in our hospital. The primary end-point was objective response rate (ORR), and the secondary end-point was progression-free survival (PFS) and adverse event rate. Results: ORR in the experimental group and control group was 66.7% and 46.7% with statistically significant (P=0.043), and median PFS was 7.5 months and 3 months (P=0.073). The common treatment-related side effects in experimental group were weakness, granulocytopenia, hypertension, hand foot syndrome and hypertriglyceridemia. Grade III-IV adverse reactions were mainly included in granulocytopenia (26.7%) and hypertension (13.3%), which were well tolerated after dosage adjustment. Conclusion: The chemotherapy combined with anlotinib in the treatment of advanced triple-negative breast cancer can significantly improve the ORR, and is well tolerated and can be used as a treatment option for advanced triple-negative breast cancer.

## 参考文献/REFERENCES

- [1] Robson M, Im SA, Senkus E, et al. Olaparib for metastatic breast cancer in patients with a germline BRCA mutation [J]. New England Journal of Medicine, 2017, 377(6): 523-533.
- [2] Gray R, Bhattacharya S, Bowden C, et al. Independent review of E2100: A phase III trial of bevacizumab plus paclitaxel versus paclitaxel in women with metastatic breast cancer [J]. J Clin Oncol, 2009, 27(30): 4966.
- [3] Miles D, Chan A, Romieu G, et al. Randomized, double-blind, placebo-controlled, phase III study of bevacizumab with docetaxel or docetaxel with placebo as first-line therapy for patients with locally recurrent or metastatic breast cancer (mBC): AVADO [J]. J Clin Oncol, 2008, 26(15\_suppl): LBA1011-LBA1011.

- [4]Robert NJ, Diéras V, Glaspy J, et al.RIBBON-1: Randomized, double-blind, placebo-controlled, phase III trial of chemotherapy with or without bevacizumab for first-line treatment of human epidermal growth factor receptor 2-negative, locally recurrent or metastatic breast cancer [J] .J Clin Oncol, 2011, 29(10): 1252-1260.
- [5]Lin B, Song X, Yang D, et al.Anlotinib inhibits angiogenesis via suppressing the activation of VEGFR2, PDGFRB and FGFR1 [J] .Gene, 2018 (654) : 77-86.
- [6]Chen XZ.Anlotinib for refractory advanced non-small cell lung cancer in China [J] .JAMA Oncology, 2019, 5(1): 116-117.
- [7]Sun Y, Niu W, Du F, et al.Safety, pharmacokinetics, and antitumor properties of anlotinib, an oral multi-target tyrosine kinase inhibitor, in patients with advanced refractory solid tumors [J] .Journal of Hematology & Oncology, 2016, 9(1): 105.
- [8]Sun Y, Chi Y, Tang P, et al.Phase II study of anlotinib for treatment of advanced medullary thyroid carcinoma [J] .J Clin Oncol,2016, 34(15 Suppl):6015.
- [9]Wang W, Wu J, Zhang P, et al.Prognostic and predictive value of Ki-67 in triple-negative breast cancer [J] .Oncotarget, 2016, 7(21): 31079.
- [10]Rakha EA, El-Sayed ME, Green AR, et al.Prognostic markers in triple-negative breast cancer [J] .Cancer, 2007, 109(1): 25-32.
- [11]Foulkes WD, Smith IE, Reis-Filho JS.Triple-negative breast cancer [J] .New England Journal of Medicine, 2010, 363(20): 1938-1948.
- [12]Denkert C, Liedtke C, Tutt A, et al.Molecular alterations in triple-negative breast cancer-the road to new treatment strategies [J] .The Lancet, 2017, 389(10087): 2430-2442.
- [13]Tomao F, Papa A, Zaccarelli E, et al.Triple-negative breast cancer: New perspectives for targeted therapies [J] .OncoTargets and Therapy, 2015(8): 177.
- [14]Shen G, Zheng F, Ren D, et al.Anlotinib: A novel multi-targeting tyrosine kinase inhibitor in clinical development [J] .Journal of Hematology & Oncology, 2018, 11(1): 120.

---

**备注/Memo:** 陕西省重点研发计划 (编号: S2018-YF-YBSF-0316)

---

更新日期/Last Update: 1900-01-01