

转移性肾癌靶向治疗和免疫治疗的现状与进展

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Title: Current status and progress of targeted treatment and immunotherapy for metastatic renal cell carcinoma

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摘要: 近年来,转移性肾癌的治疗方式从细胞因子药物的治疗,到现在的针对血管生成、哺乳动物的雷帕霉素途径、免疫应答的药物的应用发生了巨大的变化。尽管耐药仍然是一个巨大的挑战,但通过对这些药物的应用及药物联合应用,转移性肾癌的治疗疗效得到大大的提高。目前新的治疗方法正在迅速发展,治疗前景一片大好。

Abstract: In recent years, the treatment of metastatic renal cell carcinoma has changed dramatically from the treatment of cytokine drugs to the current use of drugs for angiogenesis, mammalian rapamycin pathways, and immune responses. Although resistance is still a huge challenge, the therapeutic effects of metastatic renal cell carcinoma have been greatly improved through the application of these drugs and the combination of drugs. At present, new treatment methods are developing rapidly, and the treatment prospects are expected to further develop.

参考文献/REFERENCES

- [1] Vitale MG, Carteni G. Recent developments in second and third line therapy of metastatic renal cell carcinoma [J]. Expert Rev Anticancer Ther, 2016, 16(5): 469-471.
- [2] Ross K, Jones RJ. Immune checkpoint inhibitors in renal cell carcinoma [J]. Clin Sci (Lond), 2017, 131(21): 2627-2642.
- [3] Rabinovitch RA, Zelefsky MJ, Gaynor JJ, et al. Patterns of failure following surgical resection of renal cell carcinoma: Implications for adjuvant local and systemic therapy [J]. J Clin Oncol, 1994, 12(1): 206-212.
- [4] Barata PC, Ornstein MC, Garcia JA. The evolving treatment landscape of advanced renal cell carcinoma in patients progressing after VEGF inhibition [J]. J Kidney Cancer VHL, 2017, 4(2): 10-18.
- [5] Rodriguez-Vida A, Hutson TE, Bellmunt J, et al. New treatment options for metastatic renal cell carcinoma [J]. ESMO Open, 2017, 2(2): e000185.
- [6] Zarrabi K, Fang C, Wu S. New treatment options for metastatic renal cell carcinoma with prior anti-angiogenesis therapy [J]. J Hematol Oncol, 2017, 10(1): 38.
- [7] Atkins MB, Larkin J. Immunotherapy combined or sequenced with targeted therapy in the treatment of solid tumors: Current perspectives [J]. J Natl Cancer Inst, 2016, 108(6): djv414.
- [8] Motzer RJ, McCann L, Deen K. Pazopanib versus sunitinib in renal cancer [J]. N Engl J Med, 2013, 369(20): 1970.
- [9] Frampton JE. Pazopanib: A review in advanced renal cell carcinoma [J]. Target Oncol, 2017, 12(4): 543-554.
- [10] Yang JC, Haworth L, Sherry RM, et al. A randomized trial of bevacizumab, an antivascular endothelial growth factor antibody, for metastatic renal cancer [J]. N Engl J Med, 2003, 349(5): 427-434.
- [11] Escudier B, Pluzanska A, Koralewski P, et al. Bevacizumab plus interferon alfa-2a for treatment of metastatic renal cell carcinoma: A randomised, double-blind phase III trial [J]. Lancet, 2007, 370(9605): 2103-2111.
- [12] Rini BI, Garcia JA, Cooney MM, et al. A phase I study of sunitinib plus bevacizumab in advanced solid

- tumors [J]. Clin Cancer Res, 2009, 15(19): 6277-6283.
- [13] Feldman DR, Baum MS, Ginsberg MS, et al. Phase I trial of bevacizumab plus escalated doses of sunitinib in patients with metastatic renal cell carcinoma [J]. J Clin Oncol, 2009, 27(9): 1432-1439.
- [14] Cavaliere C, D'Aniello C, Pepa C, et al. Current and emerging treatments for metastatic renal cell carcinoma [J]. Curr Cancer Drug Targets, 2017(17): 1.
- [15] Choueiri TK, Halabi S, Sanford BL, et al. Cabozantinib versus sunitinib as initial targeted therapy for patients with metastatic renal cell carcinoma of poor or intermediate risk: The alliance A031203 CABOSUN trial [J]. J Clin Oncol, 2017, 35(6): 591-597.
- [16] Escudier B, Eisen T, Stadler WM, et al. Sorafenib for treatment of renal cell carcinoma: Final efficacy and safety results of the phase III treatment approaches in renal cancer global evaluation trial [J]. J Clin Oncol, 2009, 27(20): 3312-3318.
- [17] Hutson TE, Escudier B, Esteban E, et al. Randomized phase III trial of temsirolimus versus sorafenib as second-line therapy after sunitinib in patients with metastatic renal cell carcinoma [J]. J Clin Oncol, 2014, 32(8): 760-767.
- [18] Rini BI, Escudier B, Tomczak P, et al. Comparative effectiveness of axitinib versus sorafenib in advanced renal cell carcinoma(AXIS): A randomised phase 3 trial [J]. Lancet, 2011, 378(9807): 1931-1939.
- [19] Motzer RJ, Nosov D, Eisen T, et al. Tivozanib versus sorafenib as initial targeted therapy for patients with metastatic renal cell carcinoma: Results from a phase III trial [J]. J Clin Oncol, 2013, 31(30): 3791-3799.
- [20] Gill DM, Agarwal N, Vaishampayan U. Evolving treatment paradigm in metastatic renal cell carcinoma [J]. Am Soc Clin Oncol Educ Book, 2017(37): 319-329.
- [21] Berlato C, Khan MN, Schioppa T, et al. A CCR4 antagonist reverses the tumor promoting microenvironment of renal cancer [J]. J Clin Invest, 2017, 127(3): 801-813.
- [22] Cecchi F, Rabe DC, Bottaro DP. Targeting the HGF/Met signalling pathway in cancer [J]. Eur J Cancer, 2010, 46(7): 1260-1270.
- [23] Krock BL, Skuli N, Simon MC. Hypoxia-induced angiogenesis: Good and evil [J]. Genes Cancer, 2011, 2(12): 1117-1133.
- [24] Hudes G, Carducci M, Tomczak P, et al. Temsirolimus, interferon alfa, or both for advanced renal-cell carcinoma [J]. N Engl J Med, 2007, 356(22): 2271-2281.
- [25] Motzer RJ, Escudier B, Oudard S, et al. Efficacy of everolimus in advanced renal cell carcinoma: A double-blind, randomised, placebo-controlled phase III trial [J]. Lancet, 2008, 372(9637): 449-456.
- [26] Knox JJ, Barrios CH, Kim TM, et al. Final overall survival analysis for the phase II RECORD-3 study of first-line everolimus followed by sunitinib versus first-line sunitinib followed by everolimus in metastatic RCC [J]. Ann Oncol, 2017, 28(6): 1339-1345.
- [27] Motzer RJ, Alyasova A, Ye D, et al. Phase II trial of second-line everolimus in patients with metastatic renal cell carcinoma(RECORD-4) [J]. Ann Oncol, 2016, 27(3): 441-448.
- [28] Guo J, Huang Y, Zhang X, et al. Safety and efficacy of everolimus in Chinese patients with metastatic renal cell carcinoma resistant to vascular endothelial growth factor receptor-tyrosine kinase inhibitor therapy: An open-label phase Ib study [J]. BMC cancer, 2013, 13(1): 136.
- [29] McDermott DF, Sosman JA, Sznol M, et al. Atezolizumab, an anti-programmed death-ligand 1 antibody, in metastatic renal cell carcinoma: Long-term safety, clinical activity, and immune correlates from a phase Ia study [J]. J Clin Oncol, 2016, 34(8): 833-842.
- [30] Choueiri TK, Hodi FS, Thompson JA, et al. Pembrolizumab(pembro) plus low-dose ipilimumab(ipi) for patients(pts) with advanced renal cell carcinoma(RCC): Phase I KEYNOTE-029 study [J]. Proc Am Soc Clin Oncol, 2017(35): 510.
- [31] Hammers HJ, Plimack ER, Infante JR, et al. Phase I study of nivolumab in combination with ipilimumab in metastatic renal cell carcinoma(mRCC) [J]. J Clin Oncol, 2014(32): 5.
- [32] Motzer RJ, Tannir NM, McDermott DF, et al. Nivolumab plus ipilimumab versus sunitinib in advanced renal-cell carcinoma [J]. New England Journal of Medicine, 2018, 378(14): 1277-1290.
- [33] Santoni M, Massari F, Amantini C, et al. Emerging role of tumor-associated macrophages as therapeutic targets in patients with metastatic renal cell carcinoma [J]. Cancer Immunol Immunother, 2013, 62(12): 1757-1768.
- [34] Zhang QW, Liu L, Gong CY, et al. Prognostic significance of tumor-associated macrophages in solid tumor: A meta-analysis of the literature [J]. PLoS One, 2012, 7(12): e50946.
- [35] Rini BI, Stenzl A, Zdrojowy R, et al. IMA901, a multipeptide cancer vaccine, plus sunitinib versus sunitinib alone, as first-line therapy for advanced or metastatic renal cell carcinoma(IMPRINT): A multicentre, open-label, randomised, controlled, phase III trial [J]. Lancet Oncol, 2016, 17(11): 1599-1611.

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