COMMENTARY

International perspectives on treating advanced renal cell carcinoma

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Molecular targeted therapies have revolutionized the treatment of metastatic renal cell carcinoma and significantly improved the overall survival. Currently seven molecular-target drugs; four tyrosine kinase inhibitors (sorafenib, sunitinib, pazopanib, and axitinib), two mTOR inhibitors (temsirolimus and everolims) and one anti-vascular endothelial growth factor monoclonal antibody (bevacizumab) have been available in the United States[1] while six drugs except for bevacizumab in Japan. In cytokine era, the recommended dose of IL-2 in Japan, 0.7 to 2.1 million units per day based on the Japanese phase 2 clinical trial, were markedly lower than the standard dose in the United States because of less tolerance of cytokine agents in race difference.[2] On the other hand, these six new drugs have the same recommended dose and indications as in the United States. This study by Ninomiya et al[3] showed the importance of relative dose intensity (RDI) on targeted anticancer agents, especially sunitinib, and furthermore aggressive management of adverse events helped to maintain RDI that contributed to prolong the overall survival. □

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References

1. Albiges L, Choueiri T, Escudier B et al. A systematic review of sequencing and combinations of systemic therapy in metastatic renal cancer. *Eur Urol* 2015;67(1):100-110.
2. Kobayashi M, Ikeda H, Nukui A et al. Clinical outcome and prognostic survival factors in patients with advanced renal cell carcinoma treated with very low-dose interleukin-2, interferon-alpha, and tegafur-uracil: a single-institution experience. *Int J Clin Oncol* 2008;13(3):257-262.
3. Ninomiya N, Tamada S, Kato M, Yamasaki T, Iguchi T, Nakatani T. Prolonging survival in metastatic renal cell carcinoma patients treated with targeted anticancer agents: a single-center experience of treatment strategy modifications. *Can J Urol* 2015; 22(3):7798-7804.