



Lack of clinical significance of the ImmuKnow™-Cylex assay for the detection of cellular immune function in patients with renal cell carcinoma

K. Zheng^{1*}, J.P. Zhang^{2*}, J.M. Tan¹, W.Z. Wu¹, S.L. Yang¹ and D.D. Ke¹

¹Department of Urology, Fuzhou General Hospital, Fuzhou, China

²Department of Urology, Fuzong Medical College of Fujian Medical University, Fuzhou, China

*These authors contributed equally to this study.

Corresponding author: K. Zheng

E-mail: kaizhengcn@126.com

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ABSTRACT. This study aimed to explore the clinical value of the CD4⁺ T cell ATP levels in patients with renal cell carcinoma through the application of the ImmuKnow™-Cylex® assay. We recruited 104 patients with renal cancer who had undergone surgery at Fuzhou General Hospital from March 2009 to June 2012, and were subsequently treated by dendritic cell and cytokine-induced killer cell bio-therapy or interferon- α therapy. The changes in CD4⁺ T cell ATP levels were detected at the perioperative period and at 10 days, 1 month, 3 months, and 1 year after the surgery using the ImmuKnow assay. In addition, the differences in ATP levels in different therapy groups were compared and the prognosis conditions were analyzed. Our results demonstrated that no significant difference in the ATP levels occurred at different time points; furthermore, there were no obviously different ATP levels between the different therapy groups, and the ATP levels were found

to have no clinical significance for the assessment of renal cancer prognosis. Overall, this study suggested that CD4⁺ T cell ATP levels as detected by the ImmuKnow assay have no obvious clinical value in patients with renal cancer.

Key words: Renal carcinoma; ImmuKnow assay; ATP; Prognosis