



Expression and clinical value of the soluble major histocompatibility complex class I-related chain A molecule in the serum of patients with renal tumors

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ABSTRACT. We investigated the expression and clinical value of the soluble major histocompatibility complex class I-related chain A (sMICA) molecule in the serum of patients with renal tumors. Sixty patients diagnosed with renal tumors were enrolled in the experimental group, whereas 20 healthy volunteers served as the control group. The sMICA levels were measured via enzyme-linked immunosorbent assay, and the results were analyzed in combination with data from pathology examination. The experimental group had a statistically significant higher sMICA level ($P < 0.05$) than the control group. The sMICA level was higher in patients with malignant tumors than in those with benign tumors. We also observed a positive relationship among different tumor-node-metastasis (TNM) pathological stages with more advanced

diseases exhibiting higher sMICA levels. As a tumor-associated antigen, MICA has a close relationship with renal tumorigenesis and immune escape. Our results indicated that sMICA levels were related to tumor pathology, TNM stage, and metastasis. Therefore, sMICA might be a potential marker for tumor characteristics, prognosis, and recurrence prediction.

Key words: Renal tumor; MICA; NK cell