

## **TWO NOVEL BIOMARKERS FOR EARLY DIAGNOSIS OF RENAL CELL CARCINOMA**

Urinary aquaporin-1 (AQP-1) and adipose differentiation-related protein (ADFP) as biomarkers of kidney cancer. This is a new process, applicable to humans, for 1) early and noninvasive detection of renal cancer, 2) population screening for renal cancer, 3) post-treatment surveillance for recurrence of renal cancer, 4) progression, regression or time-course of disease in untreated, partially treated, and definitively treated patients with renal cancer. The process is noninvasive, using readily available biological fluids such as urine and possibly blood. The proteins AQP-2 and ADFP are over-expressed in renal cancer tissue. These proteins may be shed into urine. The invention, per se, is a method (Western blot analysis or ELISA) for the sensitive detection and quantification of AQP-2 and ADFP in human urine, a readily available biological fluid, and the application of this assay for the detection and diagnosis of renal cancer, population screening for kidney cancer, surveillance for recurrence following or during treatment, and determining success of treatment and assessment of prognosis.

### **POTENTIAL AREAS OF APPLICATIONS:**

- Oncology
- Markers

**PATENT STATUS:** Pending

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