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miRNA-based Biomarker for Metastatic Renal Cell Carcinoma

DESCRIPTION

Renal cell carcinoma (RCC) is the cause of death of over 13,000 patients in the US alone, with nearly triple that number being diagnosed, every year. The ability to predict the clinical outcomes for patients with RCC is currently hampered by the fact that there are no reliable assays available. The featured technology enhances the clinician's ability to reliably predict the level of risk for metastasis that a given patient with RCC may have. The technology is based on assessing the micro-RNA (miRNA) signature of biopsied tissue from a patient's kidney. Determining the expression levels of a set of four specific miRNA's allows for a risk score to be calculated. This score can accurately classify a patient as being at either a high- or low-risk for metastasis, allowing clinicians to tailor therapies and increase a patient's chance for survival.

KEY ASPECTS

- Genetic-based method for determining metastasis risk in renal cell carcinoma patients.
- Biomarkers include the following miRNAs: miR-199b-5p, miR-130b, miR-10b and miR-139-5p.
- Eliminates subjectivity of clinical/pathological diagnoses and complements current methodology
- Submitted manuscript available upon request

INTELLECTUAL PROPERTY

Title	Patent Number	Country	Date Filed
4-miRNA Signature for Predicting Clear Cell Renal Cell Carcinoma Metastasis and Prognosis	Provisional Patent	US	10/28/10

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