A new predictive test for the risk of relapse in kidney cancer, validated by Gustave Roussy

On 5th June, Dr Bernard Escudier will present his research at the American Society of Clinical Oncology (Asco) Congress in Chicago. He is a Medical Oncologist at Gustave Roussy with a special interest in kidney cancer. He has validated the first genetic signature of the risk of relapse of this cancer. This new prognostic tool will thus be the subject of an oral presentation at the world’s leading oncology congress.

“This combination of 16 genes (11 involved in inflammation, vascular growth, etc. and 5 reference genes) can predict which patients have a significant risk of relapse within five years. Similar tools have already been shown to be useful, in particular in breast cancer, but until now no molecular signature is available to predict such relapses in kidney cancer,” explained Dr Escudier.

This molecular signature, christened 16gene Recurrence Score®, was developed and validated post-surgery (nephrectomy) in two cohorts of patients with non-metastatic kidney cancer. The research was a collaboration between Dr Escudier’s team at Gustave Roussy and other French centers and that of Dr Rini at the Cleveland Clinic (Ohio, United States). It was previously reported as a presentation to the Asco Congress in 2015 and in The Lancet Oncology. This latest study, in a third high-risk patient cohort, confirms its role as a new prognostic tool.

“The 16gene Recurrence Score helps to identify those patients who might gain require adjuvant treatment. This score is much more reliable than the prognostic systems usually used heretofore. However, our study also showed that this test does not enable us to predict which of these patients will respond well to adjuvant therapy with sunitinib” declared Dr Escudier.

With 11,000 new cases each year in France, kidney cancer is between the 6th and 7th commonest cancer, contributing 3% of the total number. Clear cell kidney cancer (renal cell carcinoma) is by far the commonest type of kidney cancer (more than 80% of cases). When it is found at an early stage, the prognosis is good, but when metastases are present, its 5-year survival level is about 10%.

This confirmation of the test’s usefulness opens the door to its early marketing and routine clinical use in better identifying those patients at risk of relapse of kidney cancer and offering them improved treatment.
phase III trial of adjuvant sunitinib in patients with high-risk renal cell carcinoma (rcc): validation of the 16-gene recurrence score in stage III patients.