

Approval of test to diagnose adrenal cancer

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A new analytical test has been launched in the UK that provides sensitive, specific and efficient predictive analysis of a rare form of cancer from a simple urine sample. The ACC steroid analysis service will be marketed by Birmingham-based AltaBioscience, which has an exclusive licence on this patented technology from the University of Birmingham.

The steroid profiling test is expected to improve diagnosis for adrenocortical carcinoma (ACC), a highly aggressive type of cancer of the [adrenal glands](#), which manufacture and control the level of [steroid hormones](#) in the body.

Early diagnosis is critical for people with ACC: there are few treatment options and the 5-year survival drops from 65% of those diagnosed in the early stages of disease to less than 10% of those diagnosed at the later stages.

The test is a significant development on the current diagnostic procedures, which rely on CT/MRI imaging or tissue biopsy - both of which are time-consuming and costly, and rely on indicators that can be ambiguous. The new test accurately quantifies up to 32 steroid hormones and metabolites in urine, delivering a 'hormone fingerprint' which is then compared to a comprehensive database containing profiles from patients with benign and malignant adrenal disease.

This comparison with the reference database provides a detailed picture of urinary steroid metabolites profiles as biomarkers of Adrenal Cortical

Carcinoma (ACC) resulting in a report detailing probability of malignancy. This test is a non-invasive analysis supporting clinicians in ACC diagnosis and quickly signposts the need for treatment. The database was developed by Professors Wiebke Arlt and Paul Stewart from the University's Centre for Endocrinology, Diabetes and Metabolism, who identified a set of urinary markers which can differentiate adrenocortical carcinomas (ACC) from adrenocortical adenomas (ACA).

Professor Wiebke Arlt, from the University of Birmingham, said: "Urine steroid analysis delivers a detailed steroid fingerprint of adrenal tumours and can help determine whether the tumour is harmless or a cancer. This test has several advantages over existing methods, as it is easy, non-invasive and radiation-free. I am delighted that this test, developed in the University's Institute of Metabolism and Systems Research, is now available in the clinical setting for the earlier and more effective diagnosis of Adrenal Cancer."

Marion Peak, Director of Operations at Alta Bioscience commented: "Until now this test has only been available to researchers and clinical research organisations. However our urinary steroid analysis service, which includes the more specific ACC steroid testing, is now accredited to ISO 17025:2005, and we are delighted to be able to offer it more widely to clinicians who are at the frontline of patient care."

Provided by University of Birmingham

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