

Pathology News

September 2009 - Biomedical Science Congress Edition

TPMT and 6-TGN Tests whose time has come

The enzyme TPMT metabolises immunosuppressant thiopurine drugs, such as azathioprine, to inactive metabolites.

The TPMT test is the first successful routine application of pharmacogenomics, with detection of patients with inactive enzyme minimising serious side effects due to inappropriate treatment. In January 2009 the Drugs and Therapeutics Bulletin advised that patients should be pre-screened for TPMT before commencing therapy. This ended the strange situation where patients were screened in some medical specialties and not in others.



We have offered a service for TPMT since 2003 which is now used by over 200 Trusts. Our national referral service for TPMT includes:

- 1-2 day turn round target for our CE marked assay
- Phenotyping service supported by appropriate genomic analysis
- Ready access to clinical advice and scientific support
- Regular information to our users in the form of audit and development

The 6-TGN assay complements the TPMT assay by measuring the active thiopurine metabolites of patients on treatment. This is of particular importance in treating TPMT heterozygous patients, where reduced dose regimes are used. We are now running up to three assays a week for 6-TGN with a 3 day turnaround target.

Further details of these assays from: nicola@cityassays.org.uk



**Biomedical
Science Congress**

**Come and meet
us on Stand R14**

Vitamin D Unprecedented Growth Requires Continuous Investment

In 2008 we upgraded our service for Total Vitamin D along with D2 and D3. In the last 18 months there has been a dramatic increase in Vitamin D determination in the UK. We are maintaining a 2-3 day turnaround by increasing analytical capacity as well as introducing 7-day working. We are planning to introduce a second LC-MS/MS dedicated to Vitamin D analysis in coming months.

Enquiries on this service to:
loretta@cityassays.org.uk



Take the Pain Out of Your Stone Analysis

The chemical kit for determining the composition of urinary calculi was recently withdrawn from the market and this leaves some



laboratories looking for alternative means of analysing their stones. We offer a cost effective and highly professional service for stone analysis and undertake the work of some 50 Trusts across the UK.

Our service includes:

- 5 day turnaround
- State of the art Fourier Transform Infra-Red analysis
- Semi-quantitative reporting and wet chemistry confirmation
- An image of the stone as part of the report
- Annual audit data

We have recently invested in a second FT-IR machine to ensure we maintain our turnaround times in our dedicated stone laboratory. The cost of our service is £25 per stone.

To find out more please email: pervaz@cityassays.org.uk

Emergency Glycol Service

Coming up to winter each year sees an increase in patients presenting with glycol poisoning from ingestion of products such as screen wash and antifreeze. We have recently introduced an improved assay which is able to determine both ethylene glycol and diethylene glycol. This is a 24 hour, seven day a week service, with a turnaround of 2 hours on receipt.

For further details please contact: loretta@cityassays.org.uk

Electronic Reporting

All our referred in work is monitored for turnaround, with paper reports being fast-tracked back to you by first class post. We also offer a secure web-based look up of results to our users.

If you are interested in this please contact: alan@cityassays.org.uk

cityassays.org.uk

Our website gives basic details for many of the tests that we offer to other laboratories.

This includes:

- Downloadable PDF files of user information leaflets
- Relevant information and background details for the tests
- Up to date details on the turnaround time for the tests that we offer.



Specialist assays

Offered by SWBH NHS Trust Pathology Department

General Biochemistry	Turnaround	Cost
Vitamin A	3 working days	£12
Vitamin D (Total, D2 and D3)	2 working days	£19
Vitamin E	3 working days	£12
Carotenes	5 working days	£30
TPMT service (Enzyme activity and relevant DNA)	2 working days	£29
Thioguanine nucleotides	3 working days	£29
Faecal elastase-1 service	3 working days	£30
Gilbert's Syndrome (UGT1A1*28)	3 working days	£29
ACE	3 working days	£13
Bile acids	1 working day	£13
Fructosamine	1 working day	£13
Stone analysis	5 working days	£25
Toxicology	Turnaround	Cost
Ethylene and diethylene glycol	Available 24 hours	£100
Trace Elements	Turnaround	Cost
Copper, Zinc and Selenium	2 working days	£15 each analyte
Manganese	3 working days	£25

Contact point

Department	Email	Telephone
General	info@cityassays.org.uk	0121 507 4222
Biochemistry	biochem@cityassays.org.uk	0121 507 5162
Haematology	haem@cityassays.org.uk	0121 507 4241
Microbiology	micro@cityassays.org.uk	0121 507 4262
Trace elements	elements@cityassays.org.uk	0121 507 4137
Toxicology	toxicology@cityassays.org.uk	0121 507 4135