

Clinical Biochemistry News – City Hospital

No. External - 04 City Laboratory

13th March 2006

New Whole Blood TPMT Assay Commences 3rd April

We are now pleased to give further details of our new assay for TPMT which uses whole blood rather than a red blood cell lysate. The assay gives a number of advantages including better reproducibility.

We have compared our conventional assay with the whole blood assay in 400 patient samples and results are presented in the Figure in the new user information leaflet that can be downloaded from our website and which is circulated with this newsletter. We have undertaken genotyping analysis in the sample comparison to optimize reference intervals.

Whole blood levels of TPMT show higher activity than those found in our old assay. Please change the reference intervals in your computer as follows:

	TPMT Activity (nmol/gHb/hr)
Deficient	<5
Low activity	6-34
Normal activity	35-79
High activity	>80

The change to the new assay takes place **on Monday 3rd April**. **New reference ranges will be clearly presented on all reports.**

TPMT Genotyping

We have established a DNA Laboratory as part of our TPMT service. This enables us to:

- Define our phenotyping reference ranges.
- Investigate patients who have had a blood transfusion and may give a misleading phenotyping result.
- Confirm the genotype of patients who present with a non detectable TPMT activity.

Our information leaflet makes it clear that we may include DNA analysis on selected samples. We have taken advice on this and for this pharmacogenomic test there are not thought to be ethical issues. We do not charge for any extra genotyping that we perform on TPMT activity requests but do note that this is only available to complement the phenotyping service.

Telephoning Deficient TPMT Results

All deficient TPMT results are first checked and then phoned to the referring laboratory. Thanks to everyone who replied confirming the contact details for referring laboratories.

CPA Accreditation Information

To make it easier for you to comply with CPA standard E6.1e on sending work to referral laboratories we are pleased to provide the following information.

- CPA Status: We are a fully accredited laboratory. Our next inspection is July 2006.
- CE Marked: Our TPMT assay carries a CE mark. Among other things this means that we operate stringent operator and user feedback logs as part of a quality system.

Analyte	Turn Round (working days)	In EQA Scheme and OK QC performance	Price 06/07 (£)
Vitamin A	3	✓ ✓	10-00
Vitamin D	3	✓ ✓	17-50
Vitamin E	3	✓ ✓	10-00
Carotenes	5	✓ ✓	23-00
TPMT	2	✓ ✓	27-00
Faecal elastase-1	3	✓ ✓	27-00
ACE	3	✓	10-00

Prices – We have made minimal price increases to our assays for the coming year.

Key Contact Points

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