

Centre for Human Metabolomics (CHM)

<b>Test:</b>	<b>Quantitative TMA (trimethylamine) URINE and Genotyping</b>															
<b>PLIEM Mnemonic:</b>	<b>PTMA</b>															
<b>NHRPL Tariff code:</b>	4268 x 2 (Urine analysis) 4268 x 2 (DNA analysis)															
<b>Tariff (including VAT):</b>	R 9,372.62															
<b>Description:</b>	Assay, quantification and interpretation															
<b>Turnaround time:</b>	3 months (work days, excluding public holidays and weekends) for TMA urine analysis and genotyping of the FMO3 gene from receipt of sample(s) at our laboratory.															
<b>Transit stability / Sample viability:</b>	<b>Urine samples: Keep frozen, send on dry ice.</b> Viability: samples must reach our laboratory within 72 hours after loading assay was performed.															
	<b>EDTA blood sample: Room temperature.</b> Viability: samples must reach our laboratory within 72 hours after loading assay was performed.															
<b>Comments:</b>	1. NO preservatives should be added. 2. No random sample without TMA loading will be tested. 3. <b>TMA loading samples required – protocol and other information available from our laboratory (ansie.mienie@nwu.ac.za).</b>															
<b>Samples required:</b>	<b>10 ml urine of each collection [see TMA loading protocol] AND 2-5 ml EDTA blood for genotyping (FMO3 gene analysis)</b>															
<b>Information Required with sample(s):</b>	Absent clinical details may affect the interpretation of results and recommendations for further/additional testing (to assist with a differential diagnosis) cannot be made. 1. Clinical history of the patient. The referring clinician could complete and submit the clinical history on our website at <a href="https://pliem.co.za/test-request-form">https://pliem.co.za/test-request-form</a> OR download the clinical history form from our website (same link) and email the completed form back to our laboratory at <a href="mailto:ansie.mienie@nwu.ac.za">ansie.mienie@nwu.ac.za</a> / <a href="mailto:pliem@nwu.ac.za">pliem@nwu.ac.za</a> . 2. Other significant medical reports for the patient (e.g. MRI brain, EEG, X-Ray reports, sonar reports, biopsy reports, genetic testing reports, etc). The referring clinician must please email these additional reports to <a href="mailto:ansie.mienie@nwu.ac.za">ansie.mienie@nwu.ac.za</a> . 3. Cumulative, routine pathology results of the patient (including archive results available) - this must be provided to our laboratory by the referring pathology laboratory. It could be e-mailed to <a href="mailto:pliem@nwu.ac.za">pliem@nwu.ac.za</a> OR send together with the sample(s) of the patient.															
<b>Method:</b>	G C M S and FMO3 gene sequencing															
<b>Reference ranges &amp; units:</b>	<p><b>Urine analysis (Following a normal diet.)</b></p> <table border="1"> <thead> <tr> <th>Group</th> <th>FMO3 metabolic capacity:</th> <th>TMA concentration</th> </tr> </thead> <tbody> <tr> <td>Severe cases</td> <td>&lt; 43%</td> <td></td> </tr> <tr> <td>Moderate cases</td> <td>44-70%</td> <td></td> </tr> <tr> <td>Mild cases</td> <td>71-92 %</td> <td></td> </tr> <tr> <td>Unaffected individuals</td> <td>&gt; 92%</td> <td>18-20mmol/mol creat</td> </tr> </tbody> </table> <p>[Reference: Michell and Smith et al., 2001; Mackay et al., 2011; Shimizu et al., 2013]</p> <p><b>DNA analysis: Mutation investigation via sequencing of the FMO3 gene</b></p>	Group	FMO3 metabolic capacity:	TMA concentration	Severe cases	< 43%		Moderate cases	44-70%		Mild cases	71-92 %		Unaffected individuals	> 92%	18-20mmol/mol creat
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Severe cases	< 43%															
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<b>Contact for results &amp; other enquiries:</b>	Sample reception and resulting															
<b>Telephone number:</b>	018 299 2312 / 018 285 2652 (leave message)															
<b>Fax number:</b>	018 299 2316															
<b>E-mail address:</b>	<a href="mailto:pliem@nwu.ac.za">pliem@nwu.ac.za</a>															
<b>Delivery address for samples:</b>	Center for Human Metabolomics (CHM), Sample reception (PLIEM/NBS/CRS) Building F3, Room Number G19, 11 Hoffmann street North West University, Potchefstroom, 2531															