

## SERVICE DELIVERABLES FOR URINE ANALYSIS

### Research Use only

Name	Unit	Name	Unit
<b>Amino acids</b>		<b>Nuclotide metabolism</b>	
Alanine	mmol/l & ratio to creatinine	3-Aminoisobutyrate	mmol/l & ratio to creatinine
Glutamine	mmol/l & ratio to creatinine	Allantoin	mmol/l & ratio to creatinine
Glycine	mmol/l & ratio to creatinine	Hypoxanthine	mmol/l & ratio to creatinine
Isoleucine	mmol/l & ratio to creatinine	Pseudouridine	mmol/l & ratio to creatinine
Leucine	mmol/l & ratio to creatinine	Uracil	mmol/l & ratio to creatinine
Taurine	mmol/l & ratio to creatinine	Xanthosine	mmol/l & ratio to creatinine
Threonine	mmol/l & ratio to creatinine		
Tryptophan	mmol/l & ratio to creatinine	<b>Urine volume scaling factor</b>	
Tyrosine	mmol/l & ratio to creatinine	Creatinine	mmol/l
Valine	mmol/l & ratio to creatinine		
<b>Amino acid metabolism</b>			
2-Hydroxyisobutyrate	mmol/l & ratio to creatinine		
3-Hydroxyisobutyrate	mmol/l & ratio to creatinine		
3-Hydroxyisovalerate	mmol/l & ratio to creatinine		
4-Deoxythreonate	mmol/l & ratio to creatinine		
4-Deoxyerythronate	mmol/l & ratio to creatinine		
Ethanolamine	mmol/l & ratio to creatinine		
Glycolate	mmol/l & ratio to creatinine		
Hippurate	mmol/l & ratio to creatinine		
Pyroglutamate	mmol/l & ratio to creatinine		
Urea	mmol/l & ratio to creatinine		
<b>Dietary metabolites</b>			
2-Furoylglycine	mmol/l & ratio to creatinine		
Arabinose	mmol/l & ratio to creatinine		
Ethanol	mmol/l & ratio to creatinine		
Mannitol	mmol/l & ratio to creatinine		
Proline betaine	mmol/l & ratio to creatinine		
Propylene glycol	mmol/l & ratio to creatinine		
Quinate	mmol/l & ratio to creatinine		
Sucrose	mmol/l & ratio to creatinine		
Xylose	mmol/l & ratio to creatinine		
<b>Energy metabolism</b>			
Citrate	mmol/l & ratio to creatinine		
Glucose	mmol/l & ratio to creatinine		
Lactate	mmol/l & ratio to creatinine		
cis-Aconitase	mmol/l & ratio to creatinine		
trans-Aconitase	mmol/l & ratio to creatinine		
<b>Microbial metabolism</b>			
3-Hydroxyhippurate	mmol/l & ratio to creatinine		
4-Hydroxyhippurate	mmol/l & ratio to creatinine		
Acetate	mmol/l & ratio to creatinine		
Dimethylamine	mmol/l & ratio to creatinine		
Formate	mmol/l & ratio to creatinine		
HPPHA: 3-(3-Hydroxyphenyl)-3-hydroxypropanate	mmol/l & ratio to creatinine		
Indoxyl sulfate	mmol/l & ratio to creatinine		
Trimethylamine N-oxide (TMAO)	mmol/l & ratio to creatinine		
<b>Nicotinate and nicotinamide metabolism</b>			
1-Methylnicotinamide	mmol/l & ratio to creatinine		
Trigonelline	mmol/l & ratio to creatinine		

Nightingale may be unable to deliver part of the Service Deliverables for some of the Samples due to the fact that individual characteristics and environmental factors, such as lifestyle and diet have a strong impact on urine composition and some biomarkers may not be detectable for all the Samples.