

# **Intra-individual alterations of serum markers routinely used in forensic pathology depending on increasing post-mortem interval**

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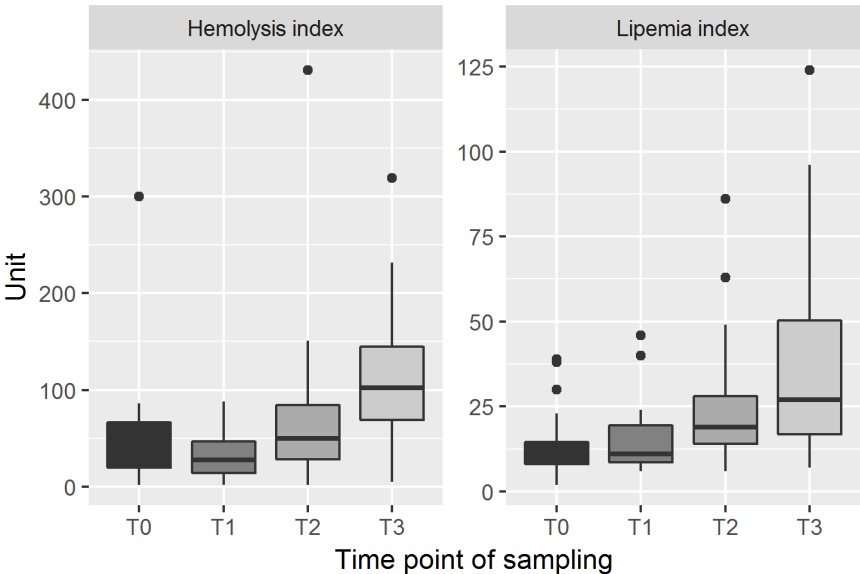
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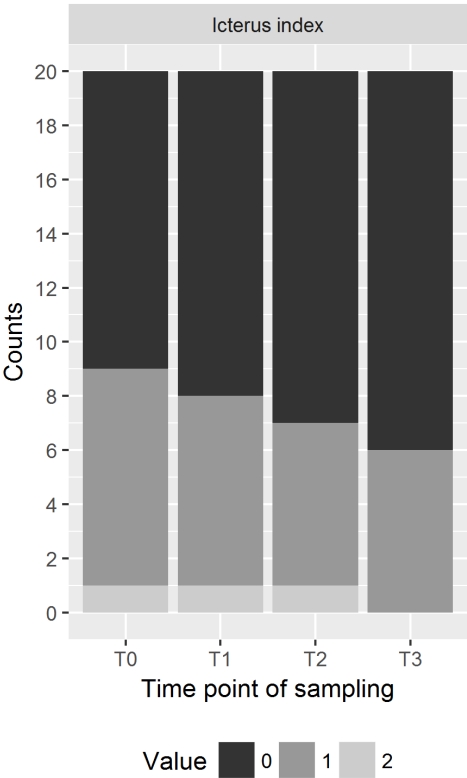
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**Electronic supplementary material**



**Supplemental figure 1:** Changes of hemolysis index (left) and lipemia index (right) according to the different sampling time points reflecting increasing post-mortem interval.



**Supplemental figure 2:** Minute changes of icterus index according to the different time points of sampling reflecting increasing post-mortem interval.

Marker	Upper clinical reference	Post-mortem cut-off values	
		Value	Citation
Creatinine (in $\mu\text{mol/l}$ )	104	353.6	Kernbach-Wighton [26]
Urea (in $\text{mmol/l}$ )	8.3	33.4	Kernbach-Wighton [26]
3HB (in $\mu\text{mol/l}$ )	74	500	Iten & Meier [27]
Tryptase (in $\mu\text{g/l}$ )	11.4	44.3	Edston et al. [28]
Myoglobin (in $\mu\text{g/l}$ )	72	<i>not reported</i>	<i>not available</i>
Troponin T (in $\text{pg/ml}$ )	14	250	Gonzalez-Herrera et al. [29]
CK (in $\mu\text{kat/l}$ )	2.9	<i>not reported</i>	<i>not available</i>
CK-MB (in $\mu\text{kat/l}$ )	0.4	<i>not reported</i>	<i>not available</i>

**Supplemental table 1:** Comparison between upper clinical reference values presented by the manufacturer (Roche Diagnostics, Mannheim, Germany) and post-mortem threshold values, linked to one main reference.

Quality control	Creatinine	Urea	3HB	Tryptase	Myoglobin	Troponin T	CK	CK-MB
<b>Freeze-thaw stability</b>								
Upper range	+28.8%	+25.8%	+17.6%	+21.1%	+6.4%	+13.9%	+51.8%	+16.9%
Lower range	-8.8%	-13.3%	-17.9%	-45.2%	-51.0%	-54.9%	-8.0%	-9.7%
<b>Triplicate</b>								
Upper range	+1.3%	+0.3%	+4.4%	+5.5%	+5.3%	+1.1%	+2.4%	+2.6%
Lower range	-2.5%	0.0%	-3.2%	-7.3%	-2.3%	-6.5%	-3.4%	-2.6%
<b>Arterial-venous deviation</b>								
Maximum relative	9.1%	2.8%	11.3%	1.7%	27.3%	18.3%	14.3%	1.9%

**Supplemental table 2:** Numerical details of quality control checks.