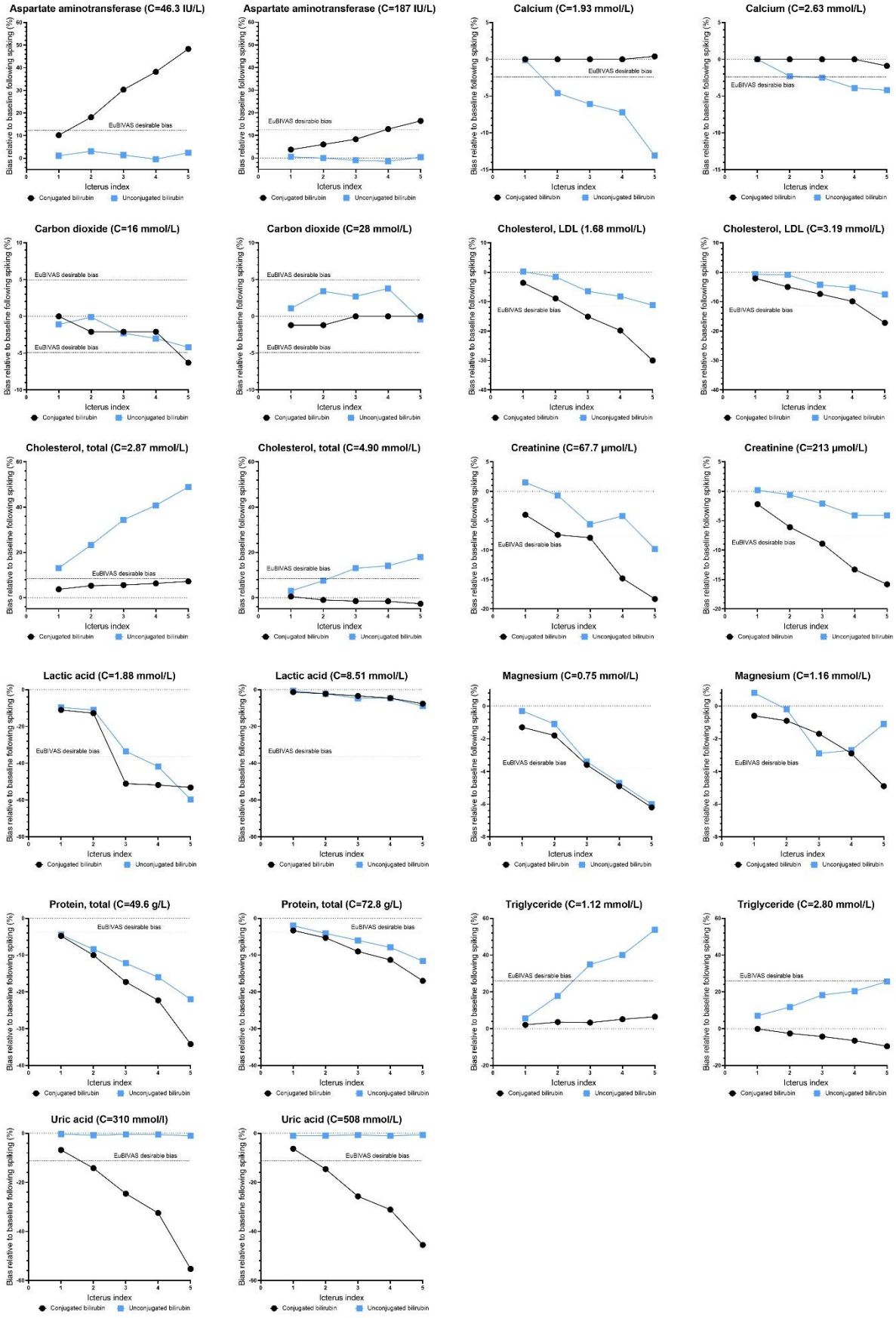
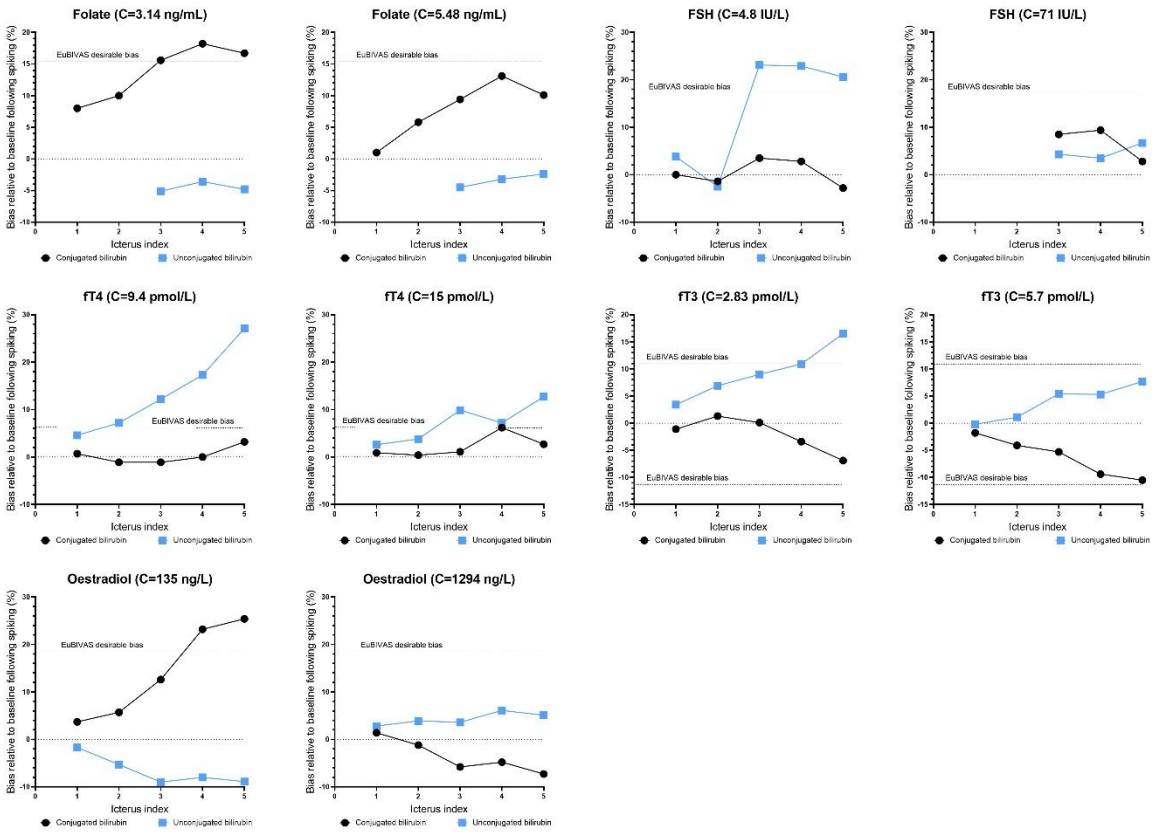

Aspartate aminotransferase (C=46.3 IU/L)
Aspartate aminotransferase (C=187 IU/L)
Calcium (C=1.93 mmol/L)
Calcium (C=2.63 mmol/L)
Carbon dioxide (C=16 mmol/L)
Carbon dioxide (C=28 mmol/L)
Cholesterol, LDL (1.68 mmol/L)
Cholesterol, LDL (C=3.19 mmol/L)
Cholesterol, total (C=2.87 mmol/L)
Cholesterol, total (C=4.90 mmol/L)
Creatinine (C=67.7 µmol/L)
Creatinine (C=213 µmol/L)
Lactic acid (C=1.88 mmol/L)
Lactic acid (C=8.51 mmol/L)
Magnesium (C=0.75 mmol/L)
Magnesium (C=1.16 mmol/L)
Protein, total (C=49.6 g/L)
Protein, total (C=72.8 g/L)
Triglyceride (C=1.12 mmol/L)
Triglyceride (C=2.80 mmol/L)
Uric acid (C=310 mmol/l)
Uric acid (C=508 mmol/L)
Bias relative to baseline following spiking (%)
Icterus index
EuBIVAS desirable bias
Conjugated bilirubin
Unconjugated bilirubin

Supplemental Figure 1. Graphical representation of icterus-induced biases for biochemical parameters. This figures shows the parameters for which a bias higher than EuBIVAS threshold has been observed for at least one bilirubin form and one concentration of the analyte. C – concentration.



Supplemental Figure 2. Graphical representation of icterus-induced biases for immunoanalysis parameters. This figures shows the parameters for which a bias higher than EuBIVAS threshold has been observed for at least one bilirubin form and one concentration of the analyte. C – concentration.

Supplementary Table 1. Rationale for the choice of the concentrations evaluated for bilirubin-induced interference.

	Concentrations	Rationale
CHEMISTRY MODULE		
Alanine aminotransferase, P5P	49.3 IU/L	Upper limit of reference interval
Albumin, bromocresol purple	25.7 g/L	Low value (denutrition)
Apolipoprotein AI	1.20 g/L	Low limit of reference interval
Apolipoprotein B	0.74 g/L	Low limit of reference interval
Aspartate aminotransferase, P5P	46.3 / 187 IU/L	Upper limit of reference interval and high value (5 times normal value)
Calcium	1.93/2.63 mmol/L	Low and upper limits of reference interval
Carbon dioxide	16 and 28 mmol/L	Low and upper limits of reference interval
Ceruloplasmin	0.20 g/L	Low limit of reference interval
Cholesterol, HDL	0.76 mmol/L	Low value frequently observed in metabolic syndrome
Cholesterol, LDL	1.68/3.19 mmol/L	Threshold values for the management of dyslipidemias
Cholesterol, total	2.87/4.90 mmol/L	In relation to LDL cholesterol values
Creatinine	67.7/213 mmol/L	Low limit of adult reference interval
Gamma-glutamyl transferase	46 IU/L	Upper limit of reference interval
Glucose, hexokinase	4.59 mmol/L	Upper limit of reference interval
Haptoglobin	0.30 g/l	Normal value
Immunoglobulin A	0.72 g/L	Low limit of reference interval
Immunoglobulin G	6.70 g/L	Low limit of reference interval
Lactic acid	1.88/8.51 mmol/L	Upper limit of reference interval and high value (4 times normal value)
Lipase	48.7 IU/L	Upper limit of reference interval
Lipoprotein (a)	157 mg/L	Low normal value

Magnesium	0.75/1.16 mmol/L	Low and upper limits of reference interval
Phosphorus	1.08 mmol/L	Low limit of reference interval
Prealbumin	0.19 g/L	Low limit of reference interval
Protein, total	49.6/72.8 g/L	Low and normal value
Transferrin	1.86 g/L	Low limit of reference interval
Triglyceride	1.12/2.80 mmol/L	Normal value, high value frequently observed (metabolic syndrome) : in anycase, impact on the estimation of LDL cholesterol by the Friedewald equation
Urea	6.3 mmol/L	Upper limit of reference interval
Uric acid	310/508 mmol/L	Target value for the treatment of severe gout attack and upper limit reference interval
IMMUNOANALYSIS MODULE		
AFP	10.9 µg/L	Upper limit of reference interval
CA 125	37.2 kIU/L	Upper limit of reference interval
CA 15-3	37.3 kIU/L	Upper limit of reference interval
CEA	4.4 µg/L	Upper limit of reference interval
Cortisol	5.69 µg/dL	Threshold for the diagnosis of adrenocortical insufficiency
C-peptide	0.41 ng/mL	Threshold for insulinoma diagnosis
Folate	3.14/5.48 ng/mL	Threshold for proven deficiency and lack of deficiency
FSH	4.8/71 IU/L	Low normal value (children men young women at the first phase of cycle) and high value (menopause)
fT3	2.83/5.70 pmol/L	Low and upper limits of reference interval
fT4	9.4/15.0 pmol/L	Low and upper limits of reference interval
Insulin	3.0 mIU/L	Threshold for insulinoma diagnosis

LH	2.9IU/L	Low normal value
Oestradiol	135/1294 ng/L	Low normal value and value in assisted reproduction
Progesteron	1.16/9.74 µg/L	Threshold values in assisted reproduction
Prolactin	246 mIU/L	Normal value
TSH	2.08 mIU/L	Low normal value
Vit B12	244/1376 ng/L	Low normal value and supplementation

AFP - alpha fetoprotein. CA carbohydrate antigen. CEA - carcinoembryonic antigen. FSH - follicle stimulating hormone. fT4 - free thyroxin. fT3 - free triiodothyronine. HDL - high density lipoprotein. LDL - low density lipoprotein. LH - luteinizing hormone. NP - not performed. P5P - pyridoxal-5-phosphate. Ph - heparinized plasma. Pf - sodium fluoride plasma. S - serum. TSH - thyroid stimulating hormone.