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The multifactorial aetiology of ICU-acquired hypernatremia

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The multifactorial aetiology of ICU-acquired hypernatremia

Marjolein van IJzendoorn

M.C.O. (Marjolein) van IJzendoorn
The multifactorial aetiology of ICU-acquired hypernatremia
PhD thesis University of Groningen, with a summary in Dutch

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Abbreviations and acronyms

ADH	Antidiuretic hormone
AKI	Acute kidney injury
APACHE	Acute physiology and chronic health evaluation
AVP	Arginine vasopressin
BIA	Bioelectrical impedance analysis
BMI	Body mass index
CCL2	Chemokine ligand 2
cDNA	Complementary DNA
CI	Confidence interval
CVP	Central venous pressure
ECF	Extracellular fluid
EFWC	Electrolyte free water clearance
eGFR	Estimated glomerular filtration rate
FE _{na}	Fractional sodium excretion
Fe _{urea}	Fractional urea excretion
FWC	Free water clearance
HCT	Hydrochlorothiazide
IAH	ICU-acquired hyponatremia
IAH 143	ICU-acquired hyponatremia, defined as a serum sodium concentration of $\geq 143\text{mmol/l}$
IAH 145	ICU-acquired hyponatremia, defined as a serum sodium concentration of $\geq 145\text{mmol/l}$
ICF	Intracellular fluid
ICU	Intensive care unit
IQR	Interquartile range
K	Potassium
LOS	Length of stay
MCL	Medical Centre Leeuwarden
MPS	Mononuclear phagocyte system
MV	Mechanical ventilation
N	Nitrogen
Na	Sodium
OR	Odds ratio
PDMS	Patient data management system
PDPN	Podoplanin
PhA	Phase angle

POCT	Point-of-care-testing
qRT-PCR	Quantitative real time polymerase chain reaction
R	Resistance
r	Spearman's rank correlation coefficient
RAAS	Renine-angiotensine-aldosteron-systeem
RRT	Renal replacement therapy
RTPO	Regionale toetsingscommissie patiëntgebonden onderzoek
SCC	Sodium chloride cotransporter
sCreat	Serum creatinine concentration
sNa	Serum sodium concentration
SOFA	Sequential organ failure assessment
SPSS	Statistical package for the social sciences
TIH	Thiazide induced hyponatremia
uCreat	Urine creatinine concentration
uK	Urine potassium concentration
uNa	Urine sodium concentration
VEGFC	Vascular endothelial growth factor C
Xc	Reactance