File name: Additional file 4

File format: .pdf

Title: Univariate analysis of risk factors associated with at least one hypotensive episode.

Description of data: Univariate analysis of risk factors associated with at least one

hypotensive

episode.

Age (year) * $0.99$ Male gender $0.70$ SAPSII * $0.99$ Reasons for PiCCO® monitoring $1$ • Septic shock $1$ • Cardiogenic shock $1.08$ • Other $1.39$ Time between ICU admission and IHD session (day) * $0.97$ SOFA score at the day of IHD session * $1.35$ Mechanical ventilation at IHD session onset $0.77$ Inotrope at IHD session onset $0.19$ Vasopressor dose at IHD session onset ( $\mu g.kg^{-1}.min^{-1}$ ) * $18.49$ Heart rate at IHD session onset ( $mm Hg$ ) * $0.90$ CVP at IHD session onset ( $mm Hg$ ) * $0.96$ CI at IHD session onset ( $L.min^{-1}.m^{-2}$ ) * $0.91$	[0.94-1.03] $[0.17-2.31]$ $[0.95-1.02]$ $[0.95-1.02]$ $[0.32-5.32]$ $[0.92-1.00]$ $[1.12-1.70]$ $[0.27-2.15]$ $[0.02-1.22]$ $[0.60-4.83]$	0.62 0.58 0.46 0.89 0.05 <0.01 0.62 0.09
SAPSII *0.99Reasons for PiCCO® monitoring1• Septic shock1• Cardiogenic shock1.08• Other1.39Time between ICU admission and IHD session (day) *0.97SOFA score at the day of IHD session *1.35Mechanical ventilation at IHD session onset0.77Inotrope at IHD session onset0.19Vasopressor at IHD session onset (µg.kg <sup>-1</sup> .min <sup>-1</sup> ) *18.49Heart rate at IHD session onset (µm Hg) *0.90CVP at IHD session onset (nm Hg) *0.96CI at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) *0.91	[0.95-1.02] [0.95-1.02] [0.32-5.32] [0.92-1.00] [1.12-1.70] [0.27-2.15] [0.02-1.22]	0.46 0.89 0.05 <0.01 0.62 0.09
Reasons for PiCCO® monitoring1• Septic shock1• Cardiogenic shock1.08• Other1.39Time between ICU admission and IHD session (day) *0.97SOFA score at the day of IHD session *1.35Mechanical ventilation at IHD session onset0.77Inotrope at IHD session onset0.19Vasopressor at IHD session onset (µg.kg <sup>-1</sup> .min <sup>-1</sup> ) *18.49Heart rate at IHD session onset (µm.Hg) *0.90CVP at IHD session onset (mm Hg) *0.96CI at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) *0.91	[0-inf] [0.32-5.32] [0.92-1.00] [1.12-1.70] [0.27-2.15] [0.02-1.22]	0.89 0.05 <0.01 0.62 0.09
• Septic shock1• Cardiogenic shock1.08• Other1.39Time between ICU admission and IHD session (day) *0.97SOFA score at the day of IHD session *1.35Mechanical ventilation at IHD session onset0.77Inotrope at IHD session onset0.19Vasopressor at IHD session onset (µg.kg <sup>-1</sup> .min <sup>-1</sup> ) *18.49Heart rate at IHD session onset (µm Hg) *0.90CVP at IHD session onset (µm Hg) *0.96CI at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) *0.91	[0.32-5.32] [0.92-1.00] [1.12-1.70] [0.27-2.15] [0.02-1.22]	0.05 <0.01 0.62 0.09
<ul> <li>Cardiogenic shock</li> <li>Other</li> <li>Other</li> <li>1.39</li> <li>Time between ICU admission and IHD session (day) *</li> <li>O.97</li> <li>SOFA score at the day of IHD session *</li> <li>Mechanical ventilation at IHD session onset</li> <li>Mechanical ventilation at IHD session onset</li> <li>Inotrope at IHD session onset</li> <li>Vasopressor at IHD session onset (µg.kg<sup>-1</sup>.min<sup>-1</sup>) *</li> <li>Heart rate at IHD session onset (min<sup>-1</sup>) *</li> <li>Heart rate at IHD session onset (min Hg) *</li> <li>O.90</li> <li>CVP at IHD session onset (L.min<sup>-1</sup>.m<sup>-2</sup>) *</li> <li>O.91</li> </ul>	[0.32-5.32] [0.92-1.00] [1.12-1.70] [0.27-2.15] [0.02-1.22]	<0.01 0.62 0.09
<ul> <li>Other</li> <li>Other</li> <li>1.39</li> <li>Time between ICU admission and IHD session (day) *</li> <li>SOFA score at the day of IHD session *</li> <li>I.35</li> <li>Mechanical ventilation at IHD session onset</li> <li>0.77</li> <li>Inotrope at IHD session onset</li> <li>Vasopressor at IHD session onset</li> <li>Vasopressor dose at IHD session onset (µg.kg<sup>-1</sup>.min<sup>-1</sup>) *</li> <li>Heart rate at IHD session onset (min<sup>-1</sup>) *</li> <li>MAP at IHD session onset (mm Hg) *</li> <li>O.90</li> <li>CVP at IHD session onset (L.min<sup>-1</sup>.m<sup>-2</sup>) *</li> <li>O.91</li> </ul>	[0.32-5.32] [0.92-1.00] [1.12-1.70] [0.27-2.15] [0.02-1.22]	<0.01 0.62 0.09
Time between ICU admission and IHD session (day)*0.97SOFA score at the day of IHD session *1.35Mechanical ventilation at IHD session onset0.77Inotrope at IHD session onset0.19Vasopressor at IHD session onset1.65Vasopressor dose at IHD session onset (µg.kg <sup>-1</sup> .min <sup>-1</sup> )*18.49Heart rate at IHD session onset (min <sup>-1</sup> )*1.00MAP at IHD session onset (mm Hg)*0.90CVP at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> )*0.91	[0.92-1.00] [1.12-1.70] [0.27-2.15] [0.02-1.22]	<0.01 0.62 0.09
SOFA score at the day of IHD session *1.35Mechanical ventilation at IHD session onset0.77Inotrope at IHD session onset0.19Vasopressor at IHD session onset1.65Vasopressor dose at IHD session onset (µg.kg <sup>-1</sup> .min <sup>-1</sup> ) *18.49Heart rate at IHD session onset (min <sup>-1</sup> ) *1.00MAP at IHD session onset (mm Hg) *0.90CVP at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) *0.91	[1.12-1.70] [0.27-2.15] [0.02-1.22]	<0.01 0.62 0.09
Mechanical ventilation at IHD session onset0.77Inotrope at IHD session onset0.19Vasopressor at IHD session onset1.65Vasopressor dose at IHD session onset (μg.kg <sup>-1</sup> .min <sup>-1</sup> ) *18.49Heart rate at IHD session onset (min <sup>-1</sup> ) *1.00MAP at IHD session onset (mm Hg) *0.90CVP at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) *0.91	[0.27-2.15] [0.02-1.22]	0.62 0.09
Inotrope at IHD session onset0.19Vasopressor at IHD session onset1.65Vasopressor dose at IHD session onset (µg.kg <sup>-1</sup> .min <sup>-1</sup> ) *18.49Heart rate at IHD session onset (min <sup>-1</sup> ) *1.00MAP at IHD session onset (mm Hg) *0.90CVP at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) *0.91	[0.02-1.22]	0.09
Vasopressor at IHD session onset1.65Vasopressor dose at IHD session onset (µg.kg <sup>-1</sup> .min <sup>-1</sup> ) *18.49Heart rate at IHD session onset (min <sup>-1</sup> ) *1.00MAP at IHD session onset (mm Hg) *0.90CVP at IHD session onset (mm Hg) *0.96CI at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) *0.91		
Vasopressor dose at IHD session onset (µg.kg-1.min-1) *18.49Heart rate at IHD session onset (min-1) *1.00MAP at IHD session onset (mm Hg) *0.90CVP at IHD session onset (mm Hg) *0.96CI at IHD session onset (L.min-1.m-2) *0.91	[0.60-4.83]	0.00
Heart rate at IHD session onset (min <sup>-1</sup> ) *1.00MAP at IHD session onset (mm Hg) *0.90CVP at IHD session onset (mm Hg) *0.96CI at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) *0.91		0.33
MAP at IHD session onset (mm Hg) *0.90CVP at IHD session onset (mm Hg) *0.96CI at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) *0.91	[0.56-4035]	0.13
CVP at IHD session onset (mm Hg) * $0.96$ CI at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) * $0.91$	[0.96-1.03]	0.82
CI at IHD session onset (L.min <sup>-1</sup> .m <sup>-2</sup> ) * $0.91$	[0.84-0.96]	< 0.001
	[0.87-1.05]	0.37
<i>.</i>	[0.43-1.68]	0.76
ISVR at IHD session onset (dyne.s.cm <sup>-5</sup> ) $\dagger$ 0.78	[0.47-1.27]	0.31
EVLWI at IHD session onset (ml.kg <sup>-1</sup> PBW) * 0.88	[0.71-1.05]	0.16
PVPI at IHD session onset * 1.11	[0.37-3.46]	0.85
Preload dependence at IHD session onset 3.25	[0.34-80]	0.32
Arterial lactates (mmol.L <sup>-1</sup> ) * $1.19$	[0.64-2.29]	0.57
Elevated lactates above upper laboratory limit (2.2 2.41		0.23

mmol.L<sup>-1</sup>)

Duration of IHD sessions (min) †	1.49	[0.91-2.70]	0.12
Total fluid removal during IHD session (mL) <b>†</b>	0.83	[0.50-1.37]	0.45
Fluid removal per hour during IHD session (mL.H <sup>-1</sup> ) $\dagger$	0.78	[0.46-1.29]	0.32
Dialyzer blood flow rate at IHD session onset (L.min <sup>-1</sup> ) <b>†</b>	1.31	[0.83-2.19]	0.25
Dialysate flow at IHD session onset (mL.min <sup>-1</sup> ) †	1.41	[0.87-2.35]	0.16
Dialysate temperature at IHD session onset (°C) <b>†</b>	0.95	[0.58-1.53]	0.83
Dialysate sodium concentration at IHD session onset	1.58	[0.96-2.88]	0.07
$(mmol.L^{-1})$ †			

\* per one unit increase, † per one standard deviation increase\*.

 $CI = cardiac index; CI_{95\%} = 95\%$  confidence interval; CVP = central venous pressure; MAP= mean arterial pressure; EVLWI = extravascular lung water; IHD = intermittenthemodialysis; inf = infinity; ISVR = indexed systemic vascular resistance; PBW = predicted body weight; PVPI = pulmonary vascular permeability index; SAPSII = simplified acute physiology score II; SOFA = Sequential Organ Failure Assessment score.