

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

**Appendix Table 1.** Baseline patients' characteristics determined in the observation preparatory phase and randomised phase

Characteristic	Intervention arm		Control arm	
	Baseline phase	Randomised phase	Baseline phase	Randomised phase
	(x ICUs, x patients)	(x ICUs, x patients)	(x ICUs, x patients)	(x ICUs, x patients)
<b>Patient level characteristics</b>				
Age – yr – mean $\pm$ sd	xx.x $\pm$ xx.x	xx.x $\pm$ xx.x	xx.x $\pm$ xx.x	xx.x $\pm$ xx.x
Female sex – no. (%)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Type of admission				
Medical – no. (%)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Elective surgery – no. (%)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Emergency surgery – no. (%)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Reason for ICU admission				
Post-operative care	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Sepsis	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Respiratory failure (except sepsis)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Shock (except sepsis)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Neurological	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Cardiovascular	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Gastrointestinal	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Haematological	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Other	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
Comorbidities				
Cancer treatment, metastatic or haematological	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)

Cirrhosis	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
AIDS	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)	xxx (xx.x)
SAPS 3 score at admission – mean ±sd	xx.x ±xx.x	xx.x ±xx.x	xx.x ±xx.x	xx.x ±xx.x
SOFA score at admission – mean ±sd	xx.x ±xx.x	xx.x ±xx.x	xx.x ±xx.x	xx.x ±xx.x

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**Appendix Table 2.** Outcomes reflecting clinical events, processes of care and culture in the baseline preparatory and randomised phase and between group differences in pre-post differences

Variables	Intervention arm			Control arm			Between group difference in pre-post differences (95% CI)	P value
	Baseline phase (x ICUs, x patients)	Randomised phase (x ICUs, x patients)	P value	Baseline phase (x ICUs, x patients)	Randomised phase (x ICUs, x patients)	P value		
<b>Primary outcome</b>								
In-hospital mortality– no./total no. (%)*	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
<b>Secondary clinical outcomes</b>								
ICU mortality – no./total no. (%)	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Catheter-related bloodstream infection – no./1000 patients-day	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Ventilator-Associated Pneumonia – no./1000 patients-day	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Urinary tract infection – no./1000 patients-day	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Ventilator-free days in a 28-day period – mean ±sd	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx
ICU length of stay – mean ±sd	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx
Hospital length of stay – mean ±sd	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx
<b>Processes of care</b>								
Head of bed elevated ≥ 30°	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Adequate prophylaxis for venous thromboembolism	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Adequate sedation (RASS -3 a 0)	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Central venous catheter use rate	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Urinary catheter use rate	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Analgesic use rate	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Antibiotic use rate	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx
Tidal volume > 8 mL/kg of predicted body weight	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	xx/xx (xx.x)	xx/xx (xx.x)	x.xx	x.xx	x.xx

Tidal volume, mean ±sd	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx
<b>Safety culture</b>								
Safety Attitudes Questionnaire – score by domains								
Team work climate	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx
Safety climate	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx
Job satisfaction	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx
Stress recognition	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx
Perception of management	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx
Work conditions	xx.x±xx.x	xx.x±xx.x	x.xx	xx.x±xx.x	xx.x±xx.x	x.xx	x.xx	x.xx