undefi	ned	
	creening	
Instruct	ions:	Exit (no save)
		EXIL (IIO Save)
	SCREENING	FORM
	PATIENT IDENT	IFICATION
S1	National identification number	[info]
	INCLUSION C	RITERIA
S2	Acutely admitted to the ICU?	○ Yes ○ No [info]
S3	Age ≥ 18 years?	○ Yes ○ No
S4	Respiratory support in a closed system with an FiO2 ≥ 0.50?	○ Yes ○ No [info]
S5	Oxygen supplementation through an open system with a oxygen flow of ≥ 10 L/min? (See definition in info-box)	O Yes O No [info]
S6	Oxygen supplementation in the ICU expected to last for at least 24 hours?	O Yes O No [info]
	(If in doubt of this forecast answer 'YES')	
S7	Intraarterial catheter in place?	○ Yes ○ No [info]
	EXCLUSION C	RITERIA
S8	More than 12 hours since admission to the ICU?	○ Yes ○ No [info]
S9	Chronic mechanical ventilation?	○ Yes ○ No [info]
S10	Use of home oxygen supplementation?	○ Yes ○ No [info]
S11	Previously treated with bleomycin?	○ Yes ○ No [info]
S12	Solid organ transplant planned or conducted during current hospitalisation?	○ Yes ○ No [info]
S13	Withdrawal from active therapy or brain death deemed imminent?	○ Yes ○ No
S14	Known pregnancy?	○ Yes ○ No [info]
S15	Poisoned with carbon monoxide, cyanide or paraquat?	○ Yes ○ No[info]
S16	Methaemoglobinaemia?	○ Yes ○ No [info]
S17	Sickle cell disease?	○ Yes ○ No [info]
S18	Condition expected to involve the use of hyperbaric oxygen treatment (HBO)?	○ Yes ○ No[info]
S19	Consent according to national regulations NOT obtainable?	○ Yes ○ No[info]

STRATIFICATION VARIABLES				
S20	Name of the patient	[info]		
S21	Chronic obstructive pulmonary disease (COPD)?	O Yes O No [info]		
S22	Active haematological malignancy?	○ Yes ○ No [info]		
S23	Site ID			
S24	Participant randomised to			
S25	Randomisation timestamp			
Return	to top	Exit (no save)		

Baseline (0/43)	
Title: Baseline	
Instructions:	
	BASELINE FORM
	General Patient Information
B1 Sex?	○ Male ○ Female [info]
B2 Hospital admission date?	[info]
B3 ICU admission date?	(dd-mm-yyyy) [info]
B4 ICU admission time?	(hh:mm, 24 hours format) [info]
B5 ICU admission was directly from the operating or recovery room after surgery?	○ Yes ○ No
B5a Type of surgery leading to ICU admission?	○ Elective ○ Acute [info]
B6 Patient height? Choose unit first	cm feet / inches (cm) (feet) (inches) [info]
	Respiratory Support
B7 Type of closed respiratory support system at randomisation?	☐ Invasive MV ☐ NIV or CPAP [info]
B7a TV _{insp} at randomisation?	(mL) [info]
B7b PEEP at randomisation?	(cmH ₂ O) [info]
B7c P _{peak} at randomisation?	(cmH ₂ O) [info]
B7d EPAP or CPAP pressure at randomisation?	(cmH ₂ O) [info]
	Arterial Blood Gas before randomisation
B8 PaO ₂ in the last ABG before randomisation?	○ kPa ○ mmHg
B9 SaO ₂ in the last ABG before randomisation?	(%) [info] Not Available
B10 p-lactate in the last ABG before randomisation?	(mmol/L) [info] Not Available
B11 FiO ₂ at the time of the last ABG?	[info]
	Acute Illness
B12 Pneumonia?	○ Yes ○ No [info]
B13 Multiple trauma?	○ Yes ○ No [info]
B14 Stroke (haemorrhagic or ischaemic)?	○ Yes ○ No [info]

B15 Traumatic brain injury?	○ Yes ○ No [info]	
B16 Myocardial infarction?	○ Yes ○ No [info]	
B17 Intestinal ischaemia?	○ Yes ○ No [info]	
B18 ARDS at randomisation?	Yes No [info]	
SOFA (Se	quential Organ Failu	re Assessment) Score
B19 Lowest Glasgow coma score in the 24 hours prior to randomisation? If sedated, estimate the last score before sedation. If unknown write 15		[info]
B20 Lowest MAP in 24 hours prior to randomisation?		(mmHg) [info]
B21 Use of dobutamine, milrinone and/or levosimendan within 24 hours before the randomisation?	Yes No [info]	
B22 Use of any continuous infusion of vasopressors in the 24 hours prior to randomisation?	Yes No [info]	
B22aHighest dose of dopamine in the 24 hours prior to randomisation? If dopamine has not been used write 0		(μg/kg/min) [info]
B22bHighest dose of norepinephrine (noradrenalin) in the 24 hours prior to randomisation? If norepinephrine has not been used write 0		(μg/kg/min) [info]
B22cHighest dose of epinephrine (adrenalin) in the 24 hours prior to randomisation? If epinephrine has not been used write 0		(μg/kg/min) [info]
B23 Highest concentration of bilirubin in 24 hours prior to randomisation?		(μmol/L) [info] Not Available
B24 Lowest concentration of platelets in 24 hours prior to randomisation?		(x10 ⁹ /L) [info] Not Available
B25 Urinary output in the 24 hours prior to randomisation? If urine volume is measured for a short		(mL) [info] Not Available
period MULTIPLY TO GET TOTAL OUTPUT IN 24 hours!		(umpl/I) s. c.s.
B26 Highest creatinine in the 24 hours prior to randomisation?		(µmol/L) [info] Not Available
	Chronic Co-morl	bidities
B27 History of ischaemic heart disease?	○ Yes ○ No [info]	
B28 Chronic heart failure?	○ Yes ○ No [info]	
B29 Active metastatic cancer?	○ Yes ○ No [info]	
B30 Chronic dialysis?	○ Yes ○ No [info]	
B30aHabitual creatinine level > 110 μmol/L?	○ Yes ○ No [info]	

Daily F...(0/42) **Title: Daily Form** Instructions: **DAILY FORM Time Span** Site ID Day start date: Day start time: Day end date: Day end time: Respiration D1 Respiratory support on this day? Yes No [info] D1a Use of mechanical ventilation in prone ○ Yes ○ No [info] **position** in the ICU on this day? ○ Yes ○ No [info] D1b Use of inhaled vasodilators during mechanical ventilation on this day? D1c Use of **ECMO** in the ICU on this day? ○ Yes ○ No [info] 06:00h to 18:00h D2 Highest PaO₂ from 06:00h to 18:00h? ○ kPa ○ mmHg Choose unit first Not Available [info] $D2a\ SaO_2$ in the ABG with the **highest** (%) [info] PaO₂ from 06:00h to 18:00h D2b FiO₂ at the time of the ABG with [info] the **highest** PaO₂ from 06:00h to 18:00h D3 Lowest PaO₂ from 06:00h to 18:00h? [info] ○ kPa ○ mmHg Choose unit first D3a SaO₂ in the ABG with the **lowest** (%) [info] PaO₂ from 06:00h to 18:00h $\mathrm{D3b}\ \mathrm{FiO_2}$ at the time of the ABG with [info] the lowest PaO $_2$ from 06:00h to 18:00h 18:00h to 06:00h D4 Highest PaO₂ from 18:00h to 06:00h? Not Available [info] D4a SaO₂ in the ABG with the **highest** (%) [info] PaO₂ from 18:00h to 06:00h D4b FiO₂ at the time of the ABG with [info] the **highest** PaO₂ from 18:00h to

06:00h		
D5 Lowest PaO ₂ from 18:00h to 06:00h?	○ kPa ○ mmHg	unit first [info]
D5a SaO ₂ in the ABG with the lowest PaO ₂ from 18:00h to 06:00h?		(%) [info]
D5b FiO ₂ at the time of the ABG with the lowest PaO ₂ from 18:00h to 06:00h?		[info]
	ABGs	
D6 Total number of ABGs on this day?		[info]
	Respiratory status 08:0	00
D7 Did the patient receive respiratory support at 08:00h on this day?	○ Yes ○ No [info]	
D7a Type of respiratory support at 08:00h?	☐ Invasive MV ☐ NIV or CPAF	[info]
D7a1TV _{insp} at 08:00h?		(mL) [info]
D7a2PEEP at 08:00h?		(cmH ₂ O) [info]
D7a3P _{peak} at 08:00h?		(cmH ₂ O) [info]
D7a4EPAP or CPAP pressure at 08:00h?		(cmH ₂ O) [info]
	Remaining organ system	ms
D8 Highest p-lactate on this day?		(mmol/L) [info] Not Available
D9 Circulatory support (infusion of vasopressor/inotropes) on this day?	Yes No [info]	
D10 Renal replacement therapy on this day?	Yes No [info]	
D11 New myocardial ischaemia on this day?	○ Yes ○ No [info]	
D11aWas this myocardial ischaemia related to the allocated oxygenation target?	Yes, related Possibly rela	ted No, not related
D12 Cerebral CT or MR scan on this day with signs of new ischaemic stroke?	○ Yes ○ No [info]	
D12aWas this ischaemic stroke related to the allocated oxygenation target?	Yes, related Possibly rela	ted No, not related
D13 New intestinal ischaemia on this day?	○ Yes ○ No [info]	
D13aWas this intestinal ischaemia related to the allocated oxygenation target?	Yes, related Possibly rela	ted No, not related
D14 Number of units of red blood cells transfused on this day?		(Units) [info]

Withdra (0/5)			
Title: Withdrawal			
Instructions:			
w	VITHDRAWAL FORM		
WITHDRAWAL FROM INTERVENTION AND/OR DATA REGISTRATION			
W1 Date of withdrawal?	(dd-mm-yyyy)		
W2 Time of withdrawal? (24 hours)	(hh:mm)		
W3 Reason for withdrawal?	SUSAR [info] Consent not given or withdrawn		
W3a Who is not giving or withdrawing consent?	Relative/next of kin/guardian not giving or withdrawing consent Patient not giving or withdrawing consent		
W3b Will further daily data be registered?	○ Yes ○ No		

tle: Discharge and readmis	sion					
						Exit (no save)
DISCHARGE AND READMISSION FORM						
Date of ICU readmission (dd-mm-yyyy)	Time of ICU readmission (hh:mm, 24 hours format)	Date of ICU discharge (dd-mm-yyyy)	Time of ICU discharge (hh:mm, 24 hours format)	Patient discharged to [info]	Has the patient been enrolled in other interventional trials during this ICU admission	Patient transferred to site Id
				General Ward ICU participating in HOT-ICU trial ICU not participating in HOT-ICU trial Home (including nursing homes and similar) Dead	○ Yes ○ No	
				General Ward ICU participating in HOT-ICU trial ICU not participating in HOT-ICU trial Home (including nursing homes and similar) Dead	○ Yes ○ No	
dd						

Follow-...(0/10) Title: Follow-up 90 days Instructions: 90 DAYS FOLLOW-UP F0 Date of follow-up Calculated as 90 days after randomisation F1 Discharged from hospital within 90 O Yes [info] days? O No F1a Date of discharge from hospital? (dd-mm-yyyy) F1b Readmitted to hospital within 90 Yes [info] days? O No F1b1Days in hospital during (days) [info] readmission(s)? F2 Renal replacement therapy **outside** the O Yes [info] ICU in the 90 days of follow-up? O No F2a Date of last renal replacement (dd-mm-yyyy) [info] therapy **outside** the ICU? F2a1 Renal replacement therapy ongoing at 90-day follow-up F3 Did the patient die within 90 days of Yes [info] follow-up? O No (dd-mm-yyyy) F3a Date of death?

Follow-...(0/10) Title: Follow-up 1 year Instructions: **1 YEAR FOLLOW-UP** F4 Date of follow-up **Mortality** F5 Was the patient dead at one-year Yes [info] follow-up? O No EuroQol F6 Lost to EuroQol follow-up? Yes [info] O No Date of EQ-5D-5L and EQ-vas interviews F8 EQ-5D-5L score **Mobility**? [info] I have no problems in walking about I have slight problems in walking about I have moderate problems in walking about I have severe problems in walking about I am unable to walk about The answer is not obtainable F9 EQ-5D-5L score **Self-care**? [info] I have no problems with washing or dressing myself I have slight problems with washing or dressing myself I have moderate problems with washing or dressing myself I have severe problems with washing or dressing myself I am unable to wash or dress myself The answer is not obtainable F10 EQ-5D-5L score **Usual activities**? [info] I have no problems doing my usual activities I have slight problems doing my usual activities I have moderate problems doing my usual activities I have severe problems doing my usual activities I am unable to do my usual activities The answer is not obtainable F11 EQ-5D-5L score Pain/discomfort? [info] I have no pain or discomfort I have slight pain or discomfort I have moderate pain or discomfort I have severe pain or discomfort I have extreme pain or discomfortf The answer is not obtainable F12 EQ-5D-5L score Anxiety/depression? [info] I am not anxious or depressed I am slighty anxious or depressed I am moderately anxious or depressed I am severely anxious or depressed I am extremely anxious or depressed The answer is not obtainable F13 EQ-VAS score (1-100)? [info]