Table S1: Reference recommendation derived from the CPG of WHO [1]

No.	Reference recommendation	Population	Intervention[a]	Comparator[b]
#1	Initial oxygen therapy	Patients with SARI and respiratory distress, hypoxaemia or shock	Target SpO_2 >94%	Another target SpO_2
#2	Maintenance oxygen therapy	Patients stabilized after initial oxygen therapy	Target SpO_2 >90%	Another target SpO_2
#3	Empiric antimicrobials	Patients with SARI and sepsis	Empiric antimicrobials within 1 hour of the initial assessment	No empiric antimicrobials
#4	Fluid management	Patients with SARI	Conservative strategy	Liberal strategy
#5	Neuromuscular blockade	Patients with moderate-severe ARDS (PaO_2/FiO_2 < 150)	No routine neuromuscular blockade use by continuous infusion	Routine use of neuromuscular blockade by continuous infusion
#6	Thromboprophylaxis	Patients with SARI	Pharmacological prophylaxis if without contraindications	No pharmacological prophylaxis
#7	Stress ulcer prevention	Patients with SARI	Administer histamine-2 receptor blockers or proton-pump inhibitors in patients with risk factors for GI bleeding	No administration of histamine-2 receptor blockers or proton-pump inhibitors
#8	Resuscitation for septic shock (1)	Patients with septic shock	Administration of crystalloid fluid	Administration of other fluid
#9	Resuscitation for septic shock (2)	Patients with septic shock	Use of hypotonic crystalloids, starches, or gelatins is not allowed	Use of hypotonic crystalloids, starches, or gelatins is allowed
#10	Vasopressor for septic shock (1)	Patients who septic shock persist during or after fluid resuscitation	Norepinephrine is considered first-line treatment	Another vasopressor is considered first-line treatment
#11	Vasopressor for septic shock (2)	Patients who received vasopressor for septic shock	Target MAP ≥65 mmHg	Another target MAP
#12	Inotrope for septic shock	Patients who poor perfusion and cardiac dysfunction persist despite achieving MAP target	An inotrope is considered	An inotrope is not considered
#13	Systemic corticosteroids	Patients with SARI	No routine systemic corticosteroids use outside clinical trials	Routine systemic corticosteroids use outside clinical trials

Abbreviations: SARI=severe acute respiratory infection; SpO_2=oxygen saturation; ARDS=acute respiratory distress syndrome; PaO2=partial pressure of arterial oxygen; FiO2=percentage of inspired oxygen; MAP=mean arterial pressure

[a]Intervention was the approach adopted in CPG of WHO.

[b]Comparator was the approach in contrast to the CPG of WHO.

Table S2: Direction codings by recommendation across comparator CPGs

		ANZ [7]	BEL [8]	CAN [9]	NHC [10]	NIH [11]	SSC [12]	ICM [13]	UTD [14]
#1	Initial O_2 Therapy	≈	≈	√	≈	≈	≈	≈	≈
#2	Maintenance O_2 Therapy	≈	≈	X	≈	X	X	X	X
#3	Empiric antibiotics	√	≈	√	X	≈	≠	O	O
#4	Fluid management	√	O	√	≈	≈	√	O	√
#5	Neuromuscular blockade	≈	O	√	O	X	√	≈	√
#6	Thromboprophylaxis	O	√	√	O	O	O	O	√
#7	Stress ulcer prophylaxis	O	O	√	O	O	O	O	≈
#8	Fluids for septic shock (1)	O	O	√	O	√	√	O	≈
#9	Fluids for septic shock (2)	O	O	√	O	√	√	O	≈
#10	Vasopressor for septic shock (1)	O	O	√	≈	√	√	O	O
#11	Vasopressor for septic shock (2)	O	O	X	≈	≈	X	O	O
#12	Inotropes for septic shock	O	O	√	≈	√	√	O	O
#13	**Systemic corticosteroids**	√	√	√	X	X	X	√	X[1]

Indicators: √: for; ≈: insufficient; X: against; ≠ different; O: out of scope

[1] UpToDate has changed their previous recommendation of against routine use of corticosteroids to recommend low-dose corticosteroid therapy for intensive-care patients who require oxygen supplementation and selected patients with refractory shock on 1st of July 2020.

Kow CS, *et al. Eur J Hosp Pharm* 2020; 28:42–46. doi: 10.1136/ejhpharm-2020-002388

Table S3: Clinical implications for inconsistencies among comparator CPGs with WHO CPG

Reference recommendation #1: Initial oxygen therapy
A clear target should be of consensus since hyperoxia or hypoxia may impact the clinical outcomes of critically ill COVID-19 patients.
Reference recommendation #2: Maintenance O2 Therapy
The main argument in CPGs inconsistent with WHO was that liberal oxygen therapy was associated with worse clinical outcomes and thus the recommendation of maximum target SpO_2.
Reference recommendation #3: Empiric antibiotics
Differential diagnosis of bacterial pneumonia was the rationale for empirical antibiotics, but the approach should be detailed for escalation or de-escalation/discontinuation of antibiotic therapy to avoid antibiotic resistance.
Reference recommendation #5: Neuromuscular blockade
Specifications of clinical situation(s) where neuromuscular blockade by continuous infusion must not be initiated should be clarified by consensus and may be more useful to clinicians. The definition of 'routine use' may be subject to many interpretations.
Reference recommendation #11: Vasopressor for septic shock (2)
SSC argued for a lower MAP target due to some evidence of harms associated with a higher MAP target. This ought to be solved by consensus among organizations since there may be different interpretations of the same sources of evidence.
Reference recommendation #13: Systemic corticosteroids
Specifications of clinical situation(s) where corticosteroid therapy must not be initiated should be clarified by consensus and may be more useful to clinicians. The definition of 'routine use' may be subject to many interpretations.