

Sepsis Cohort Clinical Record Form

Name (initial)			ID		
Gender	<input type="checkbox"/> M <input type="checkbox"/> F		Age	years	
Department		Ward		Admission Date	

1. Initial symptoms & positive P/Ex

<input type="checkbox"/> Fever (onset: day)
Symptoms
<input type="checkbox"/> CNS -
<input type="checkbox"/> Urinary tract system -
<input type="checkbox"/> Head and Neck -
<input type="checkbox"/> Obstetric system -
<input type="checkbox"/> Respiratory system -
<input type="checkbox"/> Soft and muscular system -
<input type="checkbox"/> Hepatobiliary system -
<input type="checkbox"/> Vascular system -
<input type="checkbox"/> GI system -
<input type="checkbox"/> Primary bacteremia -
<input type="checkbox"/> Others -

2. Time to initiation of treatment

<input type="checkbox"/>	Transfer from other hospital	<input type="checkbox"/> acute care hospital name: admission date: from _____ to _____ initial date of antibiotics: <input type="checkbox"/> long-term care hospital name: admission date: from _____ to _____ initial date of antibiotics:
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3. Infection

Site of infection

<input type="checkbox"/> CNS (definitive, suspicious)	<input type="checkbox"/> Urinary tract system (definitive, suspicious)
<input type="checkbox"/> Head and Neck (definitive, suspicious)	<input type="checkbox"/> Obstetric system (definitive, suspicious)
<input type="checkbox"/> Respiratory system (definitive, suspicious)	<input type="checkbox"/> Soft and muscular system (definitive, suspicious)
<input type="checkbox"/> Hepatobiliary system (definitive, suspicious)	<input type="checkbox"/> Vascular system (definitive, suspicious)
<input type="checkbox"/> GI system (definitive, suspicious)	<input type="checkbox"/> Primary bacteremia (definitive, suspicious)
<input type="checkbox"/> Others (definitive, suspicious)	
Diagnosis (ex. r/o Pneumonia):	

Acquisition

<input type="checkbox"/> community	<input type="checkbox"/> healthcare associated infection	<input type="checkbox"/> hospital acquired infection
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Sepsis category

Status	Organ dysfunction
<input type="checkbox"/> bacteremia	<input type="checkbox"/> hypotension
<input type="checkbox"/> septic shock	<input type="checkbox"/> kidney
<input type="checkbox"/> severe sepsis	<input type="checkbox"/> arterial hypoxemia
<input type="checkbox"/> severe sepsis and septic shock	<input type="checkbox"/> Coagulation abnormality (INR>1.5)
	<input type="checkbox"/> Thrombocytopenia (<100,000)
	<input type="checkbox"/> Hyperbilirubinemia (>2)
	<input type="checkbox"/> Elevated lactate (above normal)

Pitt bacteremia score (no bacteremia) - results of first blood culture

Fever	<input type="checkbox"/> ≤35°C or ≥40°C	<input type="checkbox"/> 35.1-36°C or 39-39.9°C	<input type="checkbox"/> 36.1-38.9°C
Hypotension	<input type="checkbox"/> Y	<input type="checkbox"/> N	
Mechanical ventilation	<input type="checkbox"/> Y	<input type="checkbox"/> N	
Cardiac arrest	<input type="checkbox"/> Y	<input type="checkbox"/> N	
Mental status	<input type="checkbox"/> Alert	<input type="checkbox"/> Disoriented	<input type="checkbox"/> Stuporous
			<input type="checkbox"/> Comatose

4. Patient – comorbidity

Charlson comorbidity score

MI history	<input type="checkbox"/> Y <input type="checkbox"/> N	Connective tissue disease	<input type="checkbox"/> Y <input type="checkbox"/> N
CHF	<input type="checkbox"/> Y <input type="checkbox"/> N	Peptic ulcer disease	<input type="checkbox"/> Y <input type="checkbox"/> N
Peripheral vascular disease	<input type="checkbox"/> Y <input type="checkbox"/> N	Chronic renal disease	<input type="checkbox"/> Y <input type="checkbox"/> N
Cerebrovascular disease	<input type="checkbox"/> Y <input type="checkbox"/> N	Hemiplegia	<input type="checkbox"/> Y <input type="checkbox"/> N
Dementia	<input type="checkbox"/> Y <input type="checkbox"/> N	Leukemia	<input type="checkbox"/> Y <input type="checkbox"/> N
Chronic pulmonary disease	<input type="checkbox"/> Y <input type="checkbox"/> N	Lymphoma	<input type="checkbox"/> Y <input type="checkbox"/> N
Chronic liver disease	<input type="checkbox"/> Y <input type="checkbox"/> N (LC <input type="checkbox"/>)	AIDS	<input type="checkbox"/> Y <input type="checkbox"/> N
Diabetes	<input type="checkbox"/> Y <input type="checkbox"/> N (end-organ damage <input type="checkbox"/>)	Tumor	<input type="checkbox"/> Y <input type="checkbox"/> N (metastasis <input type="checkbox"/>)

* alcoholics smoker

Indwelling devices

devices	Already	Newly	devices	Already	Newly
<input type="checkbox"/> Indwelling urinary catheter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> dialysis catheter	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Gastrostomy tube	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> tracheostomy tube	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> PICC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> central IV catheter	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> suprapubic urinary catheter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> NG tube	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> ventilator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> intubation tube	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> others					

5. Patient – severity

APACH II/III score, SAPS II, SOFA, MODs, RAPS, MEWS score

Vital sign					
HR		BP(SBP/DBP)		RR	
Temp		GCS		Pressure adjusted heart rate	
ABGA					
pH		pCO ₂		PO ₂	
FiO ₂		CPAP or mechanical ventilation			Y <input type="checkbox"/> N <input type="checkbox"/>
CHEM-7					
Na		K		CO ₂	
BUN		Cr		ARF	Y <input type="checkbox"/> N <input type="checkbox"/>
Bilirubin		PT (sec, %)			
CBC					
WBC	X10 ⁹ /L	Hct	%	Plt	10 ³ /mm ³
MISC					
Urine output	mL/hr (or)		mL/24hrs (or)		mL/8hrs
Vasopressors	<input type="checkbox"/> Y <input type="checkbox"/> N	Age		Bilirubin	
Chronic disease	<input type="checkbox"/> metastatic cancer		<input type="checkbox"/> Hematologic malignancy	<input type="checkbox"/> AIDS	
Type of adm	<input type="checkbox"/> scheduled surgical		<input type="checkbox"/> medical	<input type="checkbox"/> emergency surgical	
Severe organ system insufficiency or immunocompromised <input type="checkbox"/> Y <input type="checkbox"/> N					
*Liver: LC, Heart: NYHA class IV, Respiratory: COPD, Renal: dialysis					

Glasgow Coma Scale

Eye Opening Response	Eyes open spontaneously	4 points
	Eyes open to verbal command, speech, or shout	3 points
	Eyes open to pain (not applied to face)	2 points
	No eye opening	1 point
Verbal response	Oriented	5 points
	Confused conversation, but able to answer questions	4 points
	Inappropriate responses, words discernible	3 points
	Incomprehensible sounds or speech	2 points
	No verbal response	1 point
Motor response	Obeys commands for movement	6 points
	Purposeful movement to painful stimulus	5 points
	Withdraws from pain	4 points
	Abnormal flexion, decorticate posture	3 points
	Extensor response, decerebrate posture	2 points
	No motor response	1 point

6. Lab.

<input type="checkbox"/> CBC	Hb		WBC		Platelet	
<input type="checkbox"/> renal function	BUN		Cr		GFR	
<input type="checkbox"/> electrolyte	Na		K		HCO3	
	Ca		Mg		P	
<input type="checkbox"/> LFT	AST		ALT		ALP	
	GGT		Bilirubin		LDH	
<input type="checkbox"/> Coagulation	PT		aPTT			
<input type="checkbox"/> Nutrition	Protein		Albumin		T. cholest	
	Triglyceride		LDL		HDL	
	Ferritin		Thiamine			
<input type="checkbox"/> Inflammation	CRP		Procalcitonin			
<input type="checkbox"/> Cardiac marker	BNP		CK-MB		Troponin	
<input type="checkbox"/> Circulation	Lactate					
<input type="checkbox"/> Hormone	TSH		Free T4		HbA1c	
	ACTH		Cortisol			

ABGA (pH-CO2-O2-BE-SaO2)

Pathogen (only initial culture study)

Site	Done or not	Pathogen	Resistant
Blood	<input type="checkbox"/> Done <input type="checkbox"/> Not done		
Sputum	<input type="checkbox"/> Done <input type="checkbox"/> Not done		
Bile	<input type="checkbox"/> Done <input type="checkbox"/> Not done		
Liver	<input type="checkbox"/> Done <input type="checkbox"/> Not done		
Urine	<input type="checkbox"/> Done <input type="checkbox"/> Not done		
Stool	<input type="checkbox"/> Done <input type="checkbox"/> Not done		
Pus	<input type="checkbox"/> Done <input type="checkbox"/> Not done		
Tissue	<input type="checkbox"/> Done <input type="checkbox"/> Not done		
Others	Site:		

7. Antibiotics

1st Empirical antibiotic therapy (monotherapy , combination therapy) - duration: (h/d)

Beta-lactam

	Name		Name
Natural penicillin		Non-cephamycin 2 nd cephα	
Amonipenicillin		Anti-pseudomonal 3 rd cephα	
Antistaphylococcal penicillin		Other 3 rd cephalosporin	
b-lactamase inhibitor		4 th cephalosporin	
Piperacillin-tazobactam		Monobactam	
1 st cephalosporin		Ertapenem	
Cephamycin 2 nd cephα		Non-ertapenem carbapenem	

Others

	Name		Name
2 nd quinolone		Lincosamide	
3 rd quinolone		Glycopeptide	
4 th quinolone		Oxazolidinone	
Aminoglycoside		Folate antagonist	
Macrolide		Polymycin	
Tetracycline			

2nd Empirical antibiotic therapy (monotherapy , combination therapy) - duration: (h/d)

Beta-lactam

	Name		Name
Natural penicillin		Non-cephamycin 2 nd cephα	
Amonipenicillin		Anti-pseudomonal 3 rd cephα	
Antistaphylococcal penicillin		Other 3 rd cephalosporin	
b-lactamase inhibitor		4 th cephalosporin	
Piperacillin-tazobactam		Monobactam	
1 st cephalosporin		Ertapenem	
Cephamycin 2 nd cephα		Non-ertapenem carbapenem	

Others

	Name		Name
2 nd quinolone		Lincosamide	
3 rd quinolone		Glycopeptide	

4 th quinolone		Oxazolidinone	
Aminoglycoside		Folate antagonist	
Macrolide		Polymycin	
Tetracycline			

Appropriateness of empirical antibiotics

1 st Empirical antibiotics	<input type="checkbox"/> Susceptible	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Resistant
2 nd Empirical antibiotics	<input type="checkbox"/> Susceptible	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Resistant

8. Bundle

Hour-1 Surviving Sepsis Campaign Bundle

Measure lactate level. Remeasure if initial lactate is >2mmol/L	<input type="checkbox"/> Yes <input type="checkbox"/> No
Obtain blood cultures prior to administration of antibiotics	<input type="checkbox"/> Yes <input type="checkbox"/> No
Administer broad-spectrum antibiotics	<input type="checkbox"/> Yes <input type="checkbox"/> No
Begin rapid administration of 30ml/Kg crystalloid for hypotension or lactate \geq 4mmol/L	<input type="checkbox"/> Yes <input type="checkbox"/> No
Apply vasopressors if patient is hypotensive during or after fluid resuscitation to maintain MAP \geq 65mmHg	<input type="checkbox"/> Yes <input type="checkbox"/> No

9. Additional modality

Initial fluid therapy

Crystalloid	<input type="checkbox"/> Yes <input type="checkbox"/> No
hydroxyethyl starches	<input type="checkbox"/> Yes <input type="checkbox"/> No
Total dosage of crystalloid fluid within first 3 hours: () mL/Kg

Total usage of Dopamine, Norepinephrine, Vasopressin, Dobutamine

	D10	D11	D12	D13	D14	D15	D16	D17	D18
--	-----	-----	-----	-----	-----	-----	-----	-----	-----

Dopamine								
Norepinephrine								
Vasopressin								
Dobutamine								

	D19	D20	D21	D22	D23	D24	D25	D26	D27
Dopamine									
Norepinephrine									
Vasopressin									
Dobutamine									

*Cumulative vasopressor index

VASOPRESSOR	1 Point	2 Points	3 Points	4 Points
Dopamine (mcg/kg/min)	0 < dose ≤ 5	5 < dose ≤ 10	10 < dose ≤ 15	>15
Epinephrine (mcg/kg/min)	---	0 < dose ≤ 0.05	0.05 < dose ≤ 0.1	>0.1
Norepinephrine (mcg/kg/min)	---	0 < dose ≤ 0.05	0.05 < dose ≤ 0.1	>0.1
Phenylephrine (mcg/kg/min)	---	0 < dose ≤ 0.4	0.4 < dose ≤ 0.8	>0.8
Vasopressin (units/min)	---	---	---	any dose

Special treatment

RBC	<input type="checkbox"/> Yes	<input type="checkbox"/> No
FFP	<input type="checkbox"/> Yes	<input type="checkbox"/> No
PC	<input type="checkbox"/> Yes	<input type="checkbox"/> No
IVIG	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Albumin	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Vit C	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Thiamine	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Steroid	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Anti-thrombin	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Mechanical ventilation (<24 hours, not applied)

Tidal volume		Plateau pressure	
PEEP		Driving pressure	
FIO2			

10. Outcomes

Hospital stay	Day
Sepsis related mortality	<input type="checkbox"/> Yes <input type="checkbox"/> No
All-cause mortality	<input type="checkbox"/> Yes <input type="checkbox"/> No (cause: _____)
Discharge to home or hospital	<input type="checkbox"/> Home <input type="checkbox"/> Hospital