



มหาวิทยาลัยราชภัฏนครปฐม



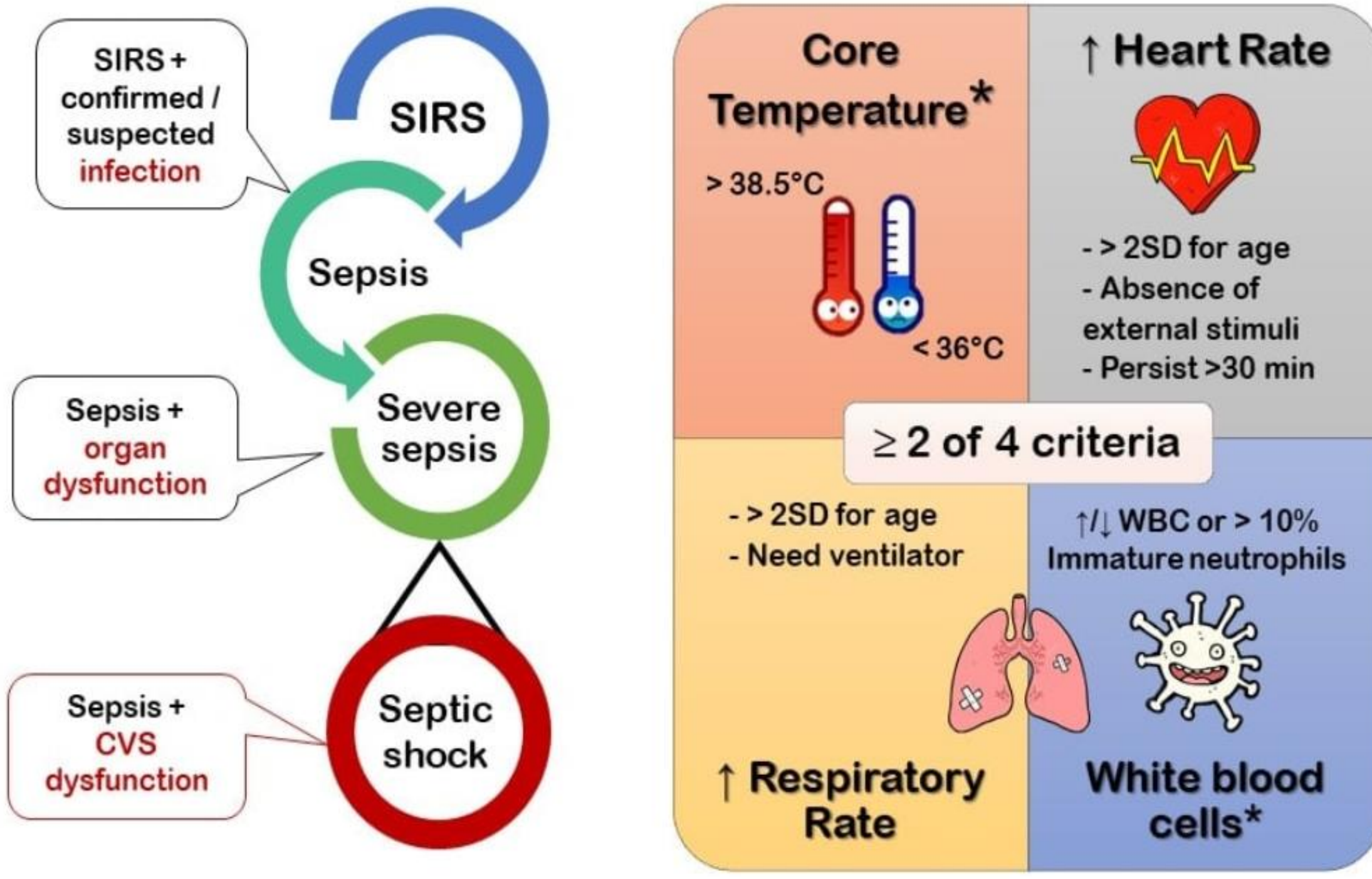
Adult and Geriatric Nursing Practicum 2

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Sepsis



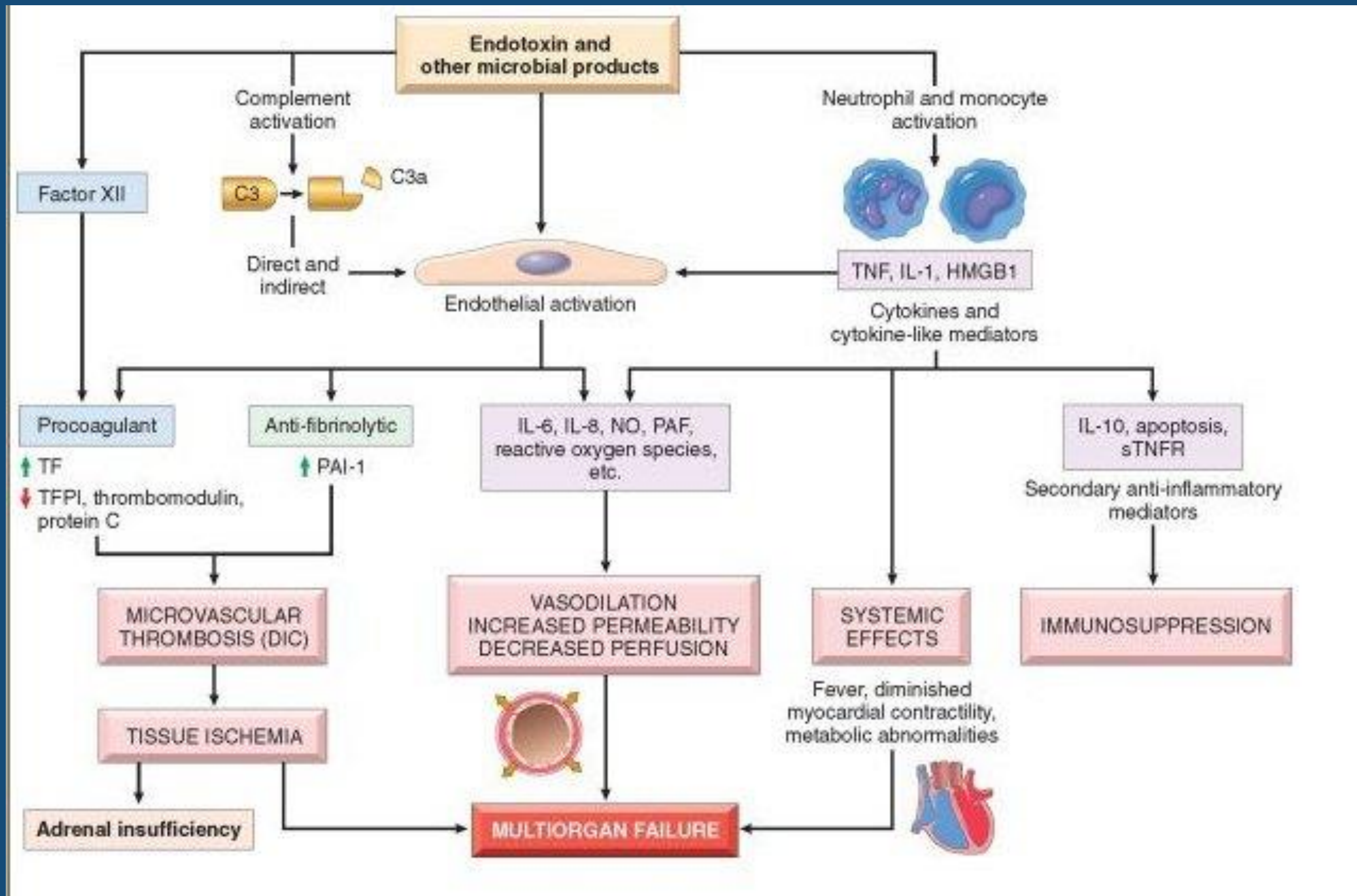
Sepsis Terminology



❑ SIRS (at least 2 of 4)

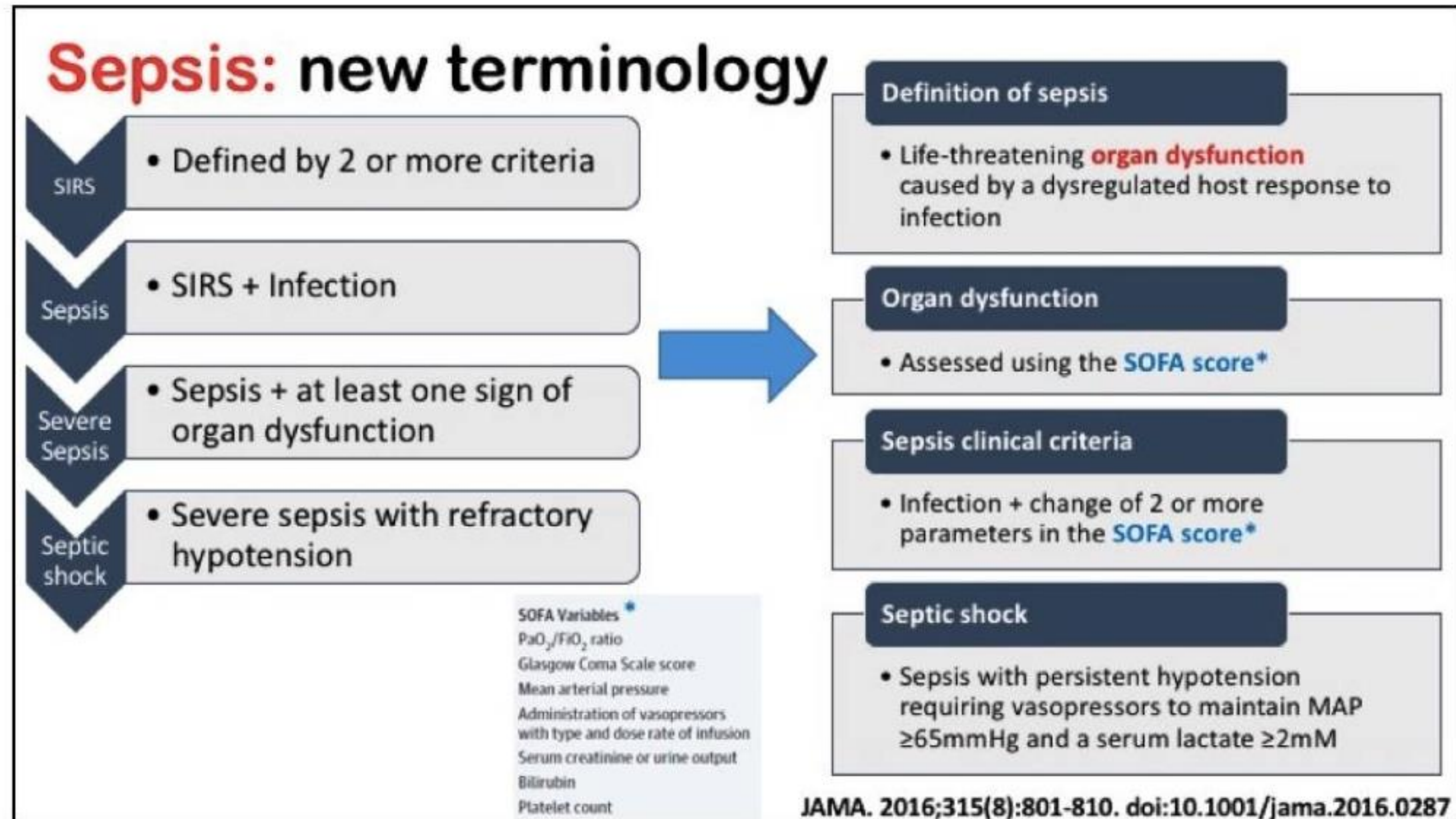
- ❑ BT > 38.3 or BT < 36
- ❑ PR > 90/min
- ❑ RR > 20/min or PaCO₂ < 32 mmHg
- ❑ WBC > 12,000 or < 4,000 or band > 10%

pathology



Definition of Sepsis/Septic Shock

Sepsis





Sequential [Sepsis-Related] Organ Failure Assessment (SOFA) Score

System	0	1	2	3	4
Respiration PaO ₂ /FiO ₂ , mmHg (kPa)	≥400 (53.3)	<400 (53.3)	<300 (40)	<200 (26.7) with respiratory support	<100 (13.3) with respiratory support
Coagulation Platelets, ×10 ³ /μL	≥150	<150	<100	<50	<20
Liver Bilirubin, mg/dL (μmol/L)	<1.2 (20)	1.2 - 1.9 (20 - 32)	2.0 - 5.9 (33 - 101)	6.0 - 11.9 (102 - 204)	>12.0 (204)
Cardiovascular	MAP ≥70mmHg	MAP <70mmHg	Dopamine <5 or Dobutamine (any dose)	Dopamine 5.1 - 15 or Epinephrine ≤0.1 or Norepinephrine ≤0.1	Dopamine >15 or Epinephrine >0.1 or Norepinephrine >0.1
CNS GCS Score	15	13 - 14	10 -12	6 - 9	<6
Renal Creatinine, mg/dL (μmol/L) Urine Output, mL/d	<1.2 (110)	1.2 - 1.9 (110 - 170)	2.0 - 3.4 (171 - 299)	3.5 - 4.9 (300 - 440) <500	>5.0 (440) <200
*Catecholamine Doses = ug/kg/min for at least 1hr					

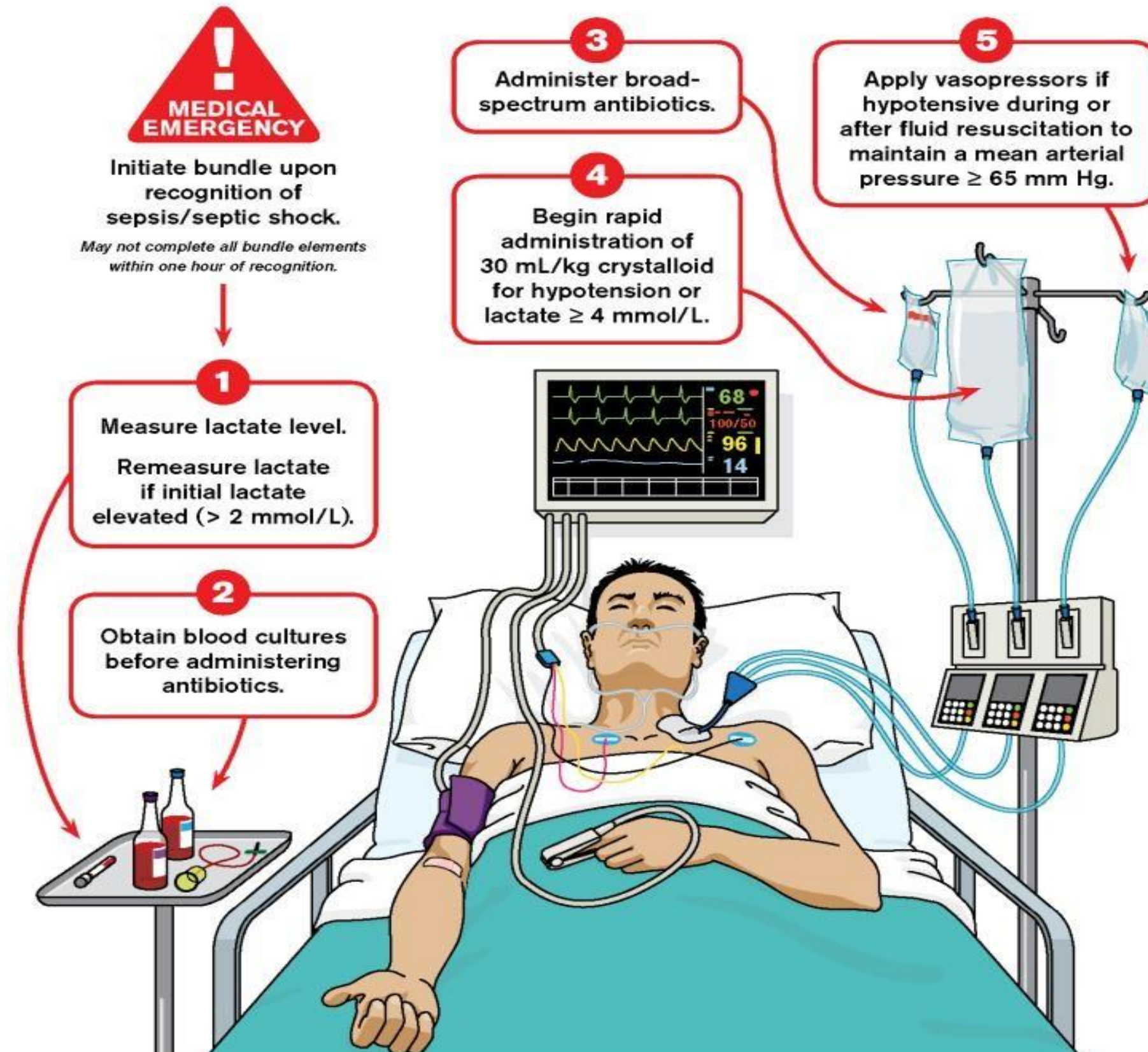
**SOFA
score**



Hour-1 Bundle

Initial Resuscitation for Sepsis and Septic Shock

Surviving Sepsis Campaign



septic work up
CBC, BUN, Cr.
Electrolyte, PT PTT
INR, LFT
Hemoculture x II

- Sputum C/S, gram stain
- Urine C/S
- Pus C/S

Nursing
Care



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Nursing Care



Measure lactate level. Re-measure if initial lactate is >2 mmol/L



Obtain blood cultures prior to administration of antibiotics



Administer broad-spectrum antibiotics

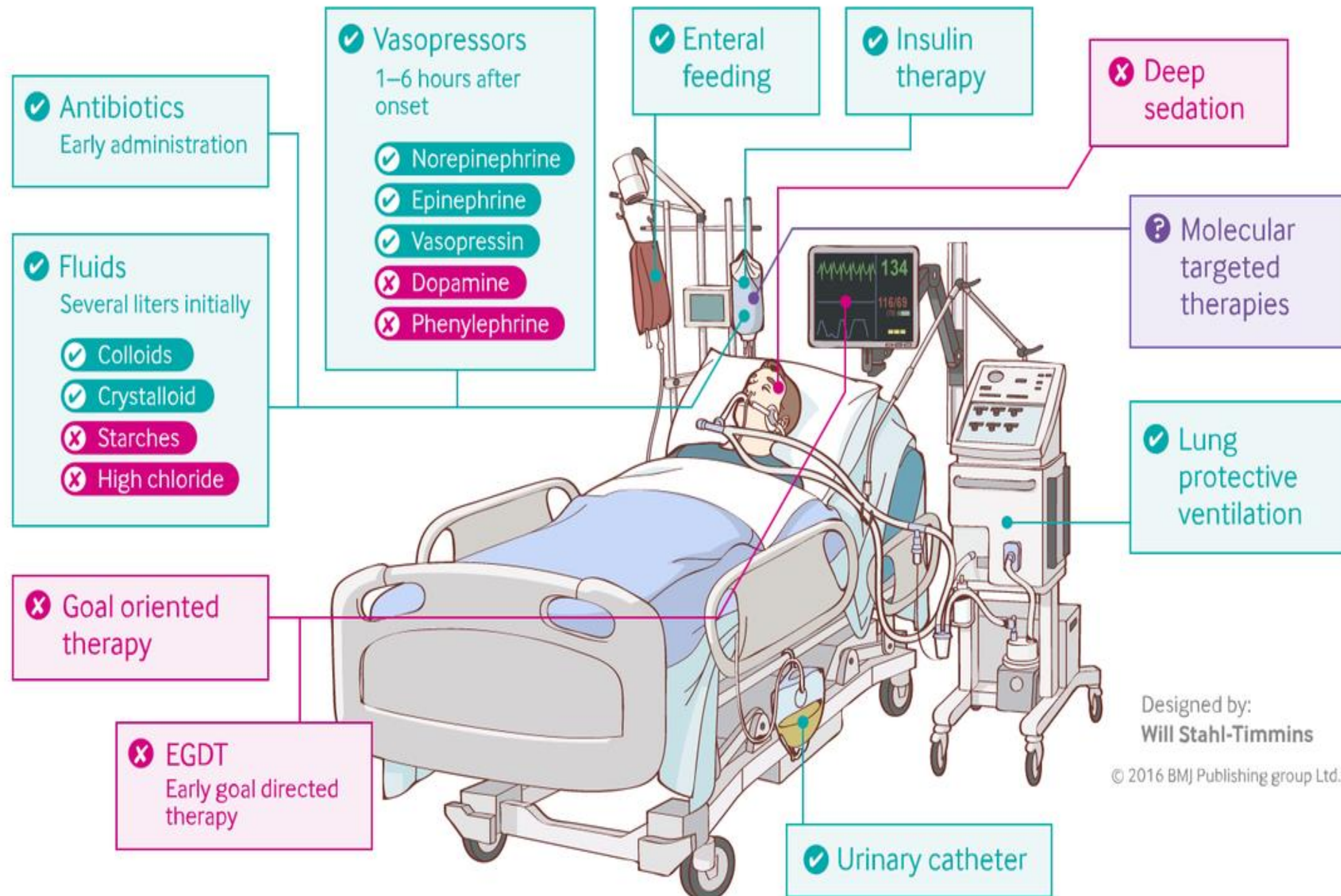


Rapidly administer 30 ml/kg crystalloid for hypotension or lactate ≥ 4 mmol/L



Apply vasopressors if patient is hypotensive during or after fluid resuscitation to maintain MAP* ≥ 65 mm Hg

Treating sepsis: the latest evidence



Designed by:
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Nursing
Care

Multiple organ dysfunction syndrome

Central nervous system

- Altered consciousness
- Confusion
- Psychosis

Respiratory system

- Hypoxia
- Tachypnea
- $\downarrow$ PaO_2 : FiO_2 ratio

Hepatic system

- Jaundice
- $\uparrow$ Bilirubin levels
- $\uparrow$ Liver enzymes
- $\downarrow$ Albumin

Cardiovascular system

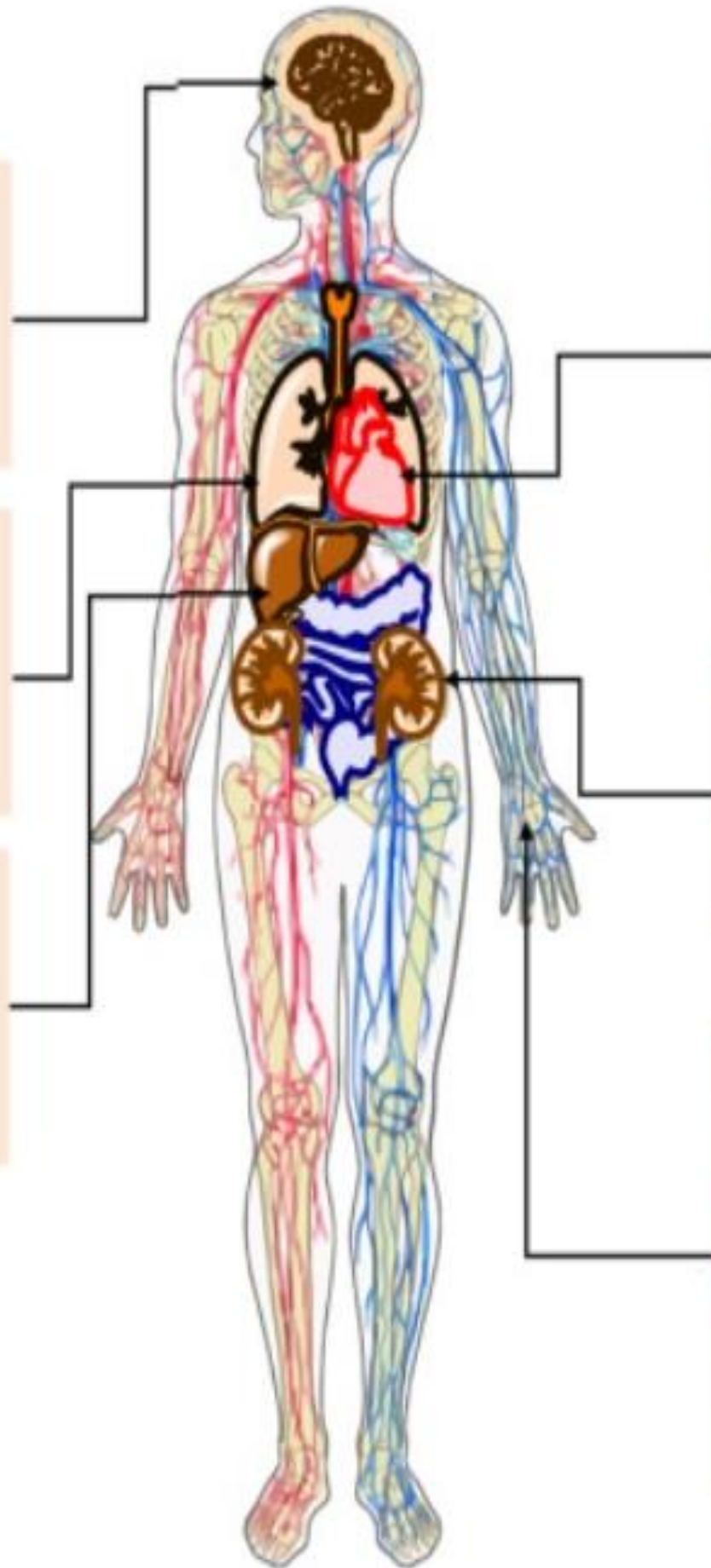
- Tachycardia
- Hypotension
- $\uparrow$ Lactate levels
- Altered echocardiography variables

Renal system

- Oliguria
- $\uparrow$ Creatinine
- $\uparrow$ Blood urea nitrogen

Hematological system

- $\downarrow$ Platelets
- Petechiae
- $\downarrow$ Protein C
- $\uparrow$ D-dimer
- Disseminated intravascular coagulation



Vasopressor drug

high alert drug

Norepinephrine (4:250), (4:100), (8:100) IV drop keep Map > 65 mmHg.
Titrate



dilution in D5W

Close monitoring
Record V/S q 15 min

If sign and symptoms notify

- BP >180/110 < 90/60 mmHg.
 - HR > 120 bpm.
 - Cardiac arrhythmia
 - extravasation
 - Phebritis
 - Cyanosis, limb ischemia
- Headache, dyspnea, nausea vomiting,
Palpitations, Chest pain



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