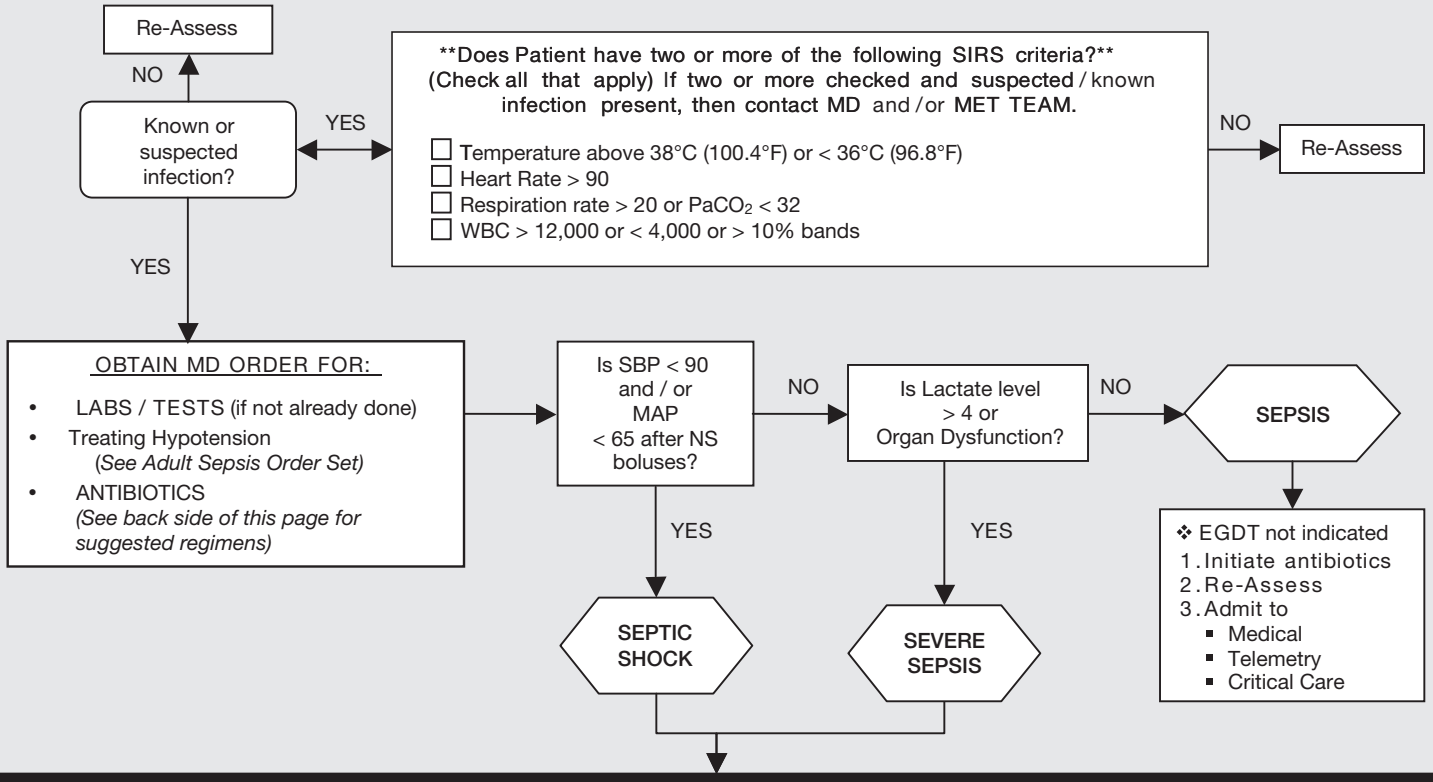
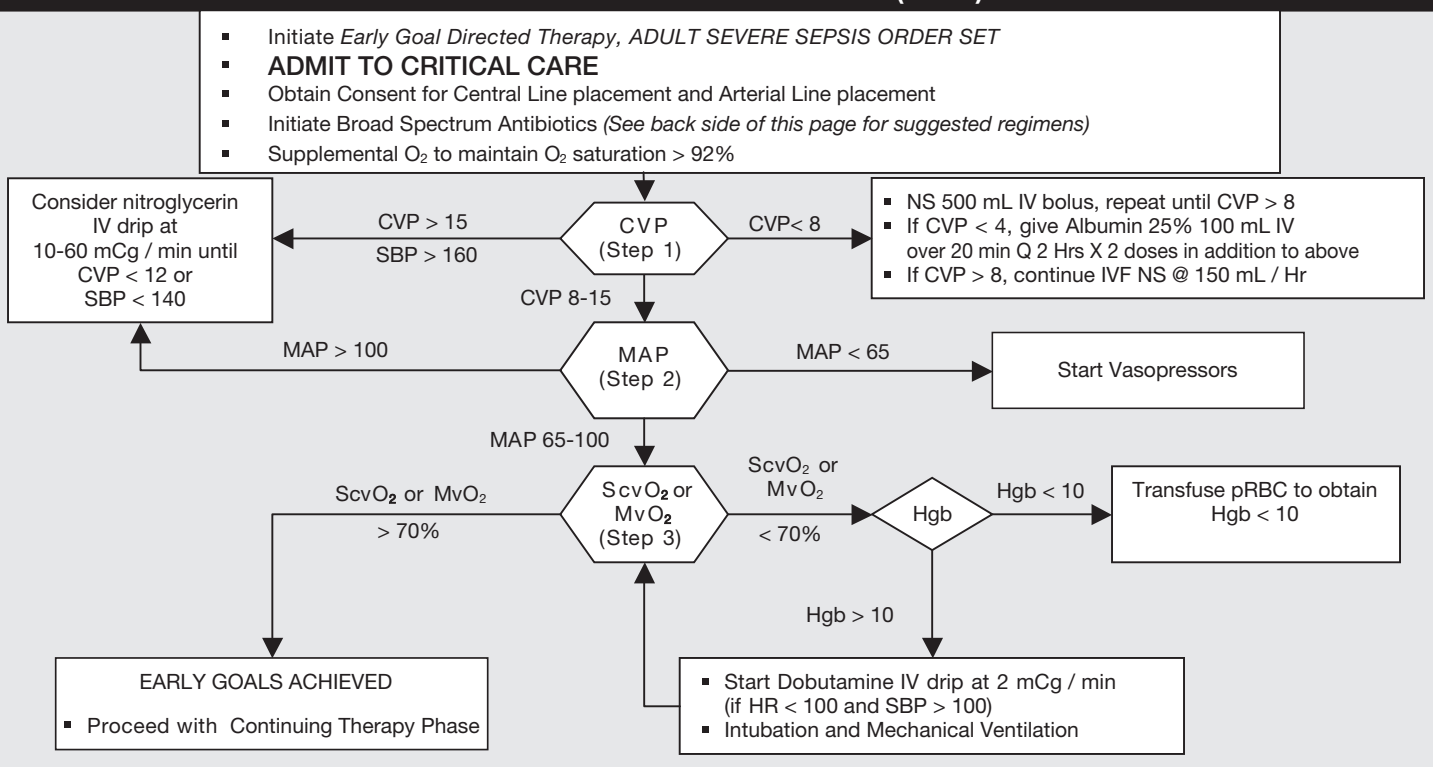
INITIAL ASSESSMENT AND IDENTIFICATION



EARLY GOAL DIRECTED THERAPY (EGDT)



St. Joseph Hospital
ST. JOSEPH HEALTH SYSTEM

ADULT SEVERE SEPSIS REFERENCE TOOL

PATIENT ID

6031-0008 (11/16/10)

PMM # 286635

Suggested *Initial* Empiric Anti-infective Therapy for Patients with a Diagnosis of Sepsis		
Source of Infection	**First-line**	**Second-line (PCN allergy)‡**
Unknown Origin	Zosyn 4.5 Gm IV Q 6 Hrs + Tobramycin 7 mg / Kg IV X 1, then per Rx ± Vancomycin* 20 mg / Kg IV X 1, then per Rx	Ciprofloxacin 400 mg IV Q 8 Hrs + Tobramycin 7 mg / Kg IV X 1, then per Rx ± Vancomycin* 20 mg / Kg IV X 1, then per Rx
Community -acquired Pneumonia	Ceftriaxone 1 Gm IV Q 24 Hrs + Azithromycin 500 mg IV Q 24 Hrs **If ICU:** Ceftriaxone 2 Gm IV Q 24 Hrs + Azithromycin 500 mg IV Q 24 Hrs ± Vancomycin* 20 mg / Kg IV X 1, then per Rx (may substitute Linezolid 600 mg IV Q 12 Hrs	Levofloxacin 750 mg IV Q 24 Hrs **If ICU:** Levofloxacin 750 mg IV Q 24 Hrs + Aztreonam 2 Gm IV Q 8 Hrs ± Vancomycin* 20 mg / Kg IV X 1, then per Rx (may substitute Linezolid 600 mg IV Q 12 Hrs for Vancomycin) for Vancomycin)
VAP / HCAP / Nosocomial Pneumonia	**First Line:** Zosyn 4.5 Gm IV Q 6 Hrs + Tobramycin 7 mg / Kg X 1, then per Rx + Vancomycin* 20 mg / Kg IV X 1, then per Rx (may substitute Linezolid 600 mg IV Q 12 Hrs for Vancomycin) **Second Line (patients with nephrotoxicity risks):** Zosyn 4.5 Gm IV Q 6 Hrs + Ciprofloxacin 400 mg IV Q 8 Hrs + Vancomycin* 20 mg / Kg IV X 1, then per Rx (may substitute Linezolid 600 mg IV Q 12 Hrs for Vancomycin)	Aztreonam 2 Gm IV Q 8 Hrs + Tobramycin 7 mg / Kg X 1, then per Rx ± Vancomycin* 20 mg / Kg IV X 1, then per Rx (may substitute Linezolid 600 mg IV Q 12 Hrs for Vancomycin)
Urosepsis	Ceftriaxone 1 Gm IV Q 24 Hrs	Ciprofloxacin 400 mg IV Q 12 Hrs
Intra-abdominal	Zosyn 4.5 Gm IV Q 6 Hrs	Ciprofloxacin 400 mg IV Q 8 Hrs + Metronidazole 500 mg IV Q 8 Hrs
Soft-tissue	Zosyn 4.5 Gm IV Q 6 Hrs + Vancomycin 20 mg / Kg IV X 1, then per Rx	Ciprofloxacin 400 mg IV Q 8 Hrs + Metronidazole 500 mg IV Q 8 Hrs + Vancomycin 20 mg / Kg IV X1, then per Rx
Febrile Neutropenia	**Mild Sepsis:** Cefepime 2 Gm IV Q 8 Hrs **Moderate-Severe Sepsis:** Zosyn 4.5 Gm IV Q 6 Hrs + Tobramycin 7 mg / Kg IV X 1, then per Rx + Vancomycin 20 mg / Kg IV X 1, then per Rx	Aztreonam 2 Gm IV Q 8 Hrs + Tobramycin 7 mg / Kg X 1, then per Rx + Vancomycin 20 mg / Kg IV X 1, then per Rx
Notes	**‡PCN allergy:** IgE mediated hypersensitivity (rash, hives, and laryngospasms) to PCN and cephalosporins ***Nosocomial MRSA Risk:** recent hospitalization, indwelling central line, history of MRSA infection/ colonization, residence in a nursing home or transfer from another hospital, recent surgery, dialysis **†Community-associated MRSA Risk:** recent influenza illness, necrotizing pneumonia, history of MRSA skin and soft tissue infection, intravenous drug use, participation in contact sports, leukopenia, and/or hemoptysis	

NOTE: Antibiotic selection should be reviewed daily and targeted based on culture results.

Selected References

1. American Thoracic Society. Guidelines for management of adults with hospital-acquired, ventilator-associated, and healthcare-associated pneumonia. Am J Resp Care Med 2005; 171:388-416
2. American Thoracic Society / Infectious Diseases Society of America. American Thoracic Society / Infectious Diseases Society of America consensus on the management of community-acquired pneumonia in adults. Clin Infect Dis 2007; 44 Suppl 2: S27-72.
3. Infectious Diseases Society of America. Guidelines for the Selection of Anti-infective Agents for Complicated Intra-abdominal Infections. Clin Infect Dis 2003; 37:997-1005.
4. Infectious Diseases Society of America. Practice Guidelines for the Diagnosis and Management of Skin and Soft-Tissue Infections. Clin Infect Dis 2005; 41:1373-406.
5. Infectious Diseases Society of America. Diagnosis and Treatment of Diabetic Foot Infections. Clin Infect Dis 2004; 39:885-910.
6. Surviving sepsis campaign: International guidelines for management of severe sepsis and septic shock: 2008. Intensive Care Med 2008; 34:17-60.
7. National Comprehensive Cancer Network (NCCN) Guidelines.
8. St. Joseph Hosptial Antiobiogram 2008.

Worksheet for the consideration of Xigris® (activated drotrecogin alfa).

(Please complete Drotrecogin Alfa (activated) order form if therapy is to be initiated)

Patients should meet all of the following criteria to receive drotrecogin alfa:

- Patient has met criteria for **diagnosis of sepsis** and is currently enrolled in the severe sepsis pathway.
- Evidence of at least one of the following signs of organ dysfunction *due to sepsis* must be **present, with a duration of < 24 Hrs.**
- *Cardiovascular* - An arterial systolic BP < 90 mm Hg or a mean arterial pressure (MAP) < 70 mm Hg for at least one Hr despite adequate fluid resuscitation, adequate intravascular volume status, or the use of vasopressors to maintain BP
- *Renal* - Urine output < 0.5mL / Kg Hr for one Hr, despite adequate fluid resuscitation
- *Respiratory* - $PaO_2 / FiO_2 < 250$ (if the pt. has pneumonia, the pt. must have a $PaO_2 / FiO_2 < 200$)
- *Hematology* - Platelet count of < 80,000 / mm^3 of a 50% decrease in the platelet count from the highest value recorded over the last 3 days
- *Metabolic Acidosis* - pH < 7.30 or base deficit > 5.0 mEq/L or a plasma lactate level > 1.5 times the upper limit of normal
- *Other evidence of organ dysfunction*:

  _____

  _____

- APACHE SCORE ≥ 25

Recommended contraindications for the use of Xigris® (activated drotrecogin alpha) include:

- Trauma patients with increased risk of life-threatening bleeding
- Active internal bleeding
- Recent (within 3 months) hemorrhagic stroke
- Recent (within 2 months) intracranial or intraspinal surgery, or severe head trauma
- Presence of epidural catheter
- Intracranial neoplasm or mass lesion or evidence of cerebral herniation
- Less than 12 Hrs post surgery requiring general or spinal anesthesia or potential need for surgery during infusion.

AGE (YEARS)		HEART RATE	
≤ 44	0	≥ 180	4
45-54	2	140-179	3
55-64	3	110-139	2
65-74	5	70-109	0
≥ 75	6	55-69	2
		40-54	3
		< 40	4
TEMPERATURE (RECTAL)		**MAP** (prior to vasoactive therapy)	
≥ 41	4	≥ 160	4
39-40.9	3	130-159	3
38.5-38.9	1	110-129	2
36-38.4	0	70-109	0
34-35.9	1	50-69	2
32-33.9	2	< 50	4
30-31.9	3		
< 30	4		
HEMATOCRIT (%)		**WBC**	
≥ 60	4	≥ 40	4
50-50.9	2	20-39.9	2
46-49.9	1	15-19.9	1
30-45.9	0	3-14.9	0
20-29.9	2	1-2.9	2
≤ 20	4	< 1	4
RESPIRATORY RATE		**ARTERIAL pH**	
≥ 50	4	≥ 7.7	4
35-49	3	7.6-7.69	3
25-34	1	7.5-7.59	1
12-24	0	7.33-7.49	0
10-11	1	7.25-7.32	2
6-9	2	7.15-7.24	3
≤ 5	4	< 7.15	4
SERUM CREATININE		**SERUM POTASSIUM**	
≥ 3.5	4	≥ 7	4
2-3.4	3	6-6.9	3
1.5-1.9	2	5.5-5.9	1
0.6-1.4	0	3.5-5.4	0
< 0.6	2	3-3.4	1
		2.5-2.9	2
		< 2.5	4
SERUM SODIUM		**CHRONIC HEALTH POINTS**	
≥ 180	4	Patients with history of severe organ system insufficiency or immunocompromised *AND*:	
160-179	3		
155-159	2	-Non-operative or emergency postoperative = 5	
150-154	1		
130-149	0	or	
120-129	2		
111-119	3	-Elective postoperative = 2	
< 111	4		

OXYGENATION	
$FiO_2 \geq 0.5$ record $AaDO_2 \geq 500$	4
$FiO_2 \geq 0.5$ record $AaDO_2$ 350-499	3
$FiO_2 \geq 0.5$ record $AaDO_2$ 200-349	2
$FiO_2 > 0.5$ $AaDO_2 < 200$ or FiO2 < 0.5 $PaO_2 > 70$	0
$FiO_2 < 0.5$ record PaO_2 61-70	1
$FiO_2 < 0.5$ record PaO_2 55-60	1
$FiO_2 < 0.5$ record $PaO_2 < 55$	1

APACHE SCORE: