

Xigris (drotrecogin alpha)

Indication: Sepsis associated with acute organ dysfunction (APACHE II score ≥ 25)

Standard Concentration: 0.2mg/ml (20mg in 100ml) (may be 0.1 to 0.2mg/ml)

Stable for 14 hours at room temperature or 24 hours under refrigeration

Dosing:

Infusion Rate: 24mcg/kg/hour X 96 hours

At 0.2mg/ml (Standard concentration), rate = 0.12ml/kg/hr

Dose based on actual body weight at the start of the infusion

If infusion interrupted, recalculate stop time for total of 96 hours of infusion.

Dosing Chart:

Patient Weight (kg)	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
Infusion Rate:	5.4	6.0	6.6	7.2	7.8	8.4	9.0	9.6	10.2	10.8	11.4	12.0	12.6	13.2	13.8	14.4	15.0	15.6

Note: This chart is dependant on a drip concentration of 0.2mg/ml.

Adverse reactions: Bleeding

Drug Interactions: Anticoagulants, platelet inhibitors, and thrombolytic agents increase the risk of bleeding.

Contraindications: Bleeding, brain tumor, epidural anesthesia, head trauma, intracranial mass, GI bleed in last 6 weeks, and stroke.

Nursing Considerations:

1. Physician must complete Xigris worksheet and obtain verbal order from Infectious Disease or Intensivist.
2. Labs: H&H with PT daily.
3. Xigris must be run through a dedicated line or a dedicated lumen of a multi-lumen central venous catheter
4. Do not allow Xigris drip to hang more than 12 hours due to stability. (see above)
5. Discontinue Xigris 2 hours prior to undergoing an invasive or surgical procedure. Restart Xigris 12 hours after the procedure.

Apache II Score

Age in years	< 44	0 points	Arterial pH	> 7.69	4 points	
	45-54	2 points		7.60-7.69	3 points	
	55-64	3 points		7.50-7.59	1 points	
	65-74	5 points		7.33-7.49	0 points	
	over 74	6 points		7.25-7.32	2 points	
				7.15-7.24	3 points	
			below 7.15	4 points		
History of severe organ insufficiency or immunocompromised?	Yes, and non-operative or emergency post-operative patient	5 points	Serum sodium (mMol/L)	> 179	4 points	
	Yes, and elective post-operative patient	2 points		160-179	3 points	
	No	0 points		155-159	2 points	
Temperature (Celsius)	> 40.9	4 points		150-154	1 points	
	39-40.9	3 points		130-149	0 points	
	38.5-38.9	1 points		120-129	2 points	
	36-38.4	0 points	111-119	3 points		
	34-35.9	1 points	below 111	4 points		
	32-33.9	2 points	Serum potassium (mMol/L)	> 6.9	4 points	
	30-31.9	3 points		6-6.9	3 points	
below 30	4 points	5.5-5.9		1 points		
Mean arterial pressure (mmHg)	> 159	4 points		3.5-5.4	0 points	
	130-159	3 points		3-3.4	1 points	
	110-129	2 points		2.5-2.9	2 points	
	70-109	0 points	below 2.5	4 points		
	50-69	2 points	Oxygenation (Only use pO ₂ if FiO ₂ < 50%)	pO₂ more than 70	0 points	
	below 50	4 points		pO₂ = 61-70	1 points	
Heart rate (ventricular response)	> 179	4 points		pO₂ = 55-60	3 points	
	140-179	3 points		pO₂ below 55	4 points	
	110-139	2 points		A-a gradient < 200	0 points	
	70-109	0 points		A-a gradient 200-349	2 points	
	55-69	2 points	A-a gradient 350-499	3 points		
	40-54	3 points	A-a gradient ≥ 500	4 points		
below 40	4 points	Respiratory Rate (non-ventilated or ventilated)	over 49	4 points		
Hematocrit (%)	> 59.9		4 points	35-49	3 points	
	50-59.9		2 points	25-34	1 points	
	46-49.9		1 points	12-24	0 points	
	30-45.9		0 points	10-11	1 points	
	20-29.9		2 points	6-9	2 points	
	below 20	4 points	below 6	4 points		
Serum Creatinine (mg/dL)	> 3.4 and ACUTE renal failure	8 points	White blood count (total/cubic mm in 1000's)	over 39.9	4 points	
	2.0-3.4 and ACUTE renal failure	6 points		20-39.9	2 points	
	> 3.4 and chronic	4 points		15-19.9	1 points	
	1.5-1.9 and ACUTE renal failure	4 points		3.0-14.9	0 points	
	2.0-3.4 and chronic	3 points		1.0-2.9	2 points	
	1.5-1.9 and chronic	2 points		below 1.0	4 points	
	0.6-1.4	0 points		15 minus Glasgow Coma Scale = _____ points		
	below 0.6	2 points		Total Apache II Score: _____		

Glasgow Coma Scale

	1	2	3	4	5	6
Eyes	Does not open eyes	Opens eyes in response to painful stimuli	Opens eyes in response to voice	Opens eyes spontaneously	N/A	N/A
Verbal	Makes no sounds	Incomprehensible sounds	Utters inappropriate words	Confused, disoriented	Converses, oriented, normally	N/A
Motor	Makes no movements	Extension to painful stimuli	Abnormal flexion to painful stimuli	Flexion / Withdrawal to painful stimuli	Localizes painful stimuli	Obeys Commands