# Midodrine for the early liberation from vasopressor support LIBERATE Study

# **Case Report Form**

Site #:		
Enrollment #:		
Patient initials:		

SCREENING FOR ELIGIBILITY	
Date of screening (dd/mmm/yyyy)	//
INCLUSION CRITERIA (Each of criteria 1 through 3 must be fulfilled)	
1. Age $\geq 18$ years (on the day of assessment)	[]Y []N
2. Ongoing vasopressor support (any of norepinephrine $\geq 0.05 \text{mcg/kg/min}$ , epinephrine	[]Y []N
$\geq 0.05 mcg/kg/min$ , vasopressin $\geq 0.04 u/min$ or phenylephrine $\geq 0.1 mcg/kg/min$ )	
3. Decreasing vasopressor dose(s) (i.e., current dose less than peak dose(s))	[]Y []N
EXCLUSION CRITERIA (Any one criterion fulfilled and the patient is ineligible)	
1. Greater than 24 hours from peak vasopressor dose	[]Y []N
2. Contraindications to enteral medications	[]Y []N
3. Previous midodrine usage in last 7 days	[]Y []N
4. Known or presumed pregnancy	[]Y []N
5. Contraindication to midodrine	[]Y []N
6. Known allergy to midodrine	[]Y []N
7. High probability of death within 24 hours or compassionate care	[]Y []N
8. Treating clinician does not believe enrolment would be in the best interest of the	[]Y []N
patient	
ELIGIBILITY	
According to the screening criteria above, is the patient eligible for the study?	[]Y []N
If $NO \rightarrow PATIENT$ IS EXCLUDED $\rightarrow$ skip to signature block	
INFORMED CONSENT	
Was Informed Consent obtained?	[]Y []N
Was Deferred Consent obtained?	[]Y []N
If $YES \rightarrow Proceed$ to Randomization	

Form completed by:	Sign	nature:	Date:	,	/	_/
	(please print name)			(dd	mmm	уууу)

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# **CONSENT**

Was consent of ANY approved type (from participant of substitute decision maker) OR was a decision taken to randomize the participant using a deferred/delayed) consent mechanism (at sites where permitted)?	[]Y []N
Date and time of initial consent (from participant or SDM) or documentation for sure of deferred/delayed consent.	//;/ ddmmmyyyy 24 hh:mm
What type of consent model was used for study entry?	<ul> <li>Participant consent</li> <li>SDM consent</li> <li>Deferred/delayed consent</li> <li>Other; Specify</li> </ul>
If SDM consent (in person or via telephone) was obtained for the study, was consent ultimately obtained from the participant to continue participation in LIBERATE post-randomization?	[]Y []N
By what method(s) was consent to continue participation in LIBERATE post-randomization obtained?	<ul> <li>Participant consent</li> <li>SDM consent</li> <li>Other; Specify</li> </ul>
Participant randomized?	[]Y []N

Site #:	Enrollment #:	Patient initials:
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# **DEMOGRAPHICS**

Date of birth (dd/mmm/yyyy)	/
Age (yrs)	
Sex:	[] Male [] Female
Weight:	kg
Height:	cm

### **ICU INFORMATION**

Date of Study Eligibility (dd/mmm/yyyy 24hh:mm)	;;;;
Date of Hospital Admission (dd/mmm/yyyy)	:/
Date of ICU Admission (dd/mmm/yyyy)	:/
APACHE II Score at ICU admissio	1
SOFA score at time of first IP administratio	1
to calculate APACHE II and SOFA scores see App	endix 2 and 3 worksheets
Clinical Frailty Scale Score	
Etiology of Shock: Sepsi	; []Y []N
Hypovolemi	a []Y []N
Cardiogeni	2 []Y []N
Neurogeni	2 []Y []N
Anaphylacti	2 []Y []N
Unknow	n []Y []N
Type of ICU Admissio	1 [] Medical [] Surgical
If Surgical Admission - Reasor	: [] Elective surgery [] Emergency Surgery
ICU admission diagnosis cod	2
(see attached Appendix 1 guide sheet	)
	# diagnosis

# **COMORBID ILLNESSES**

Co-morbid disease		
AIDS	[]Y	[]N
Chronic Dialysis	[]Y	[]N
Congestive Heart Failure	[]Y	[]N
Respiratory Insufficiency	[]Y	[]N
Chronic Liver Failure (e.g., cirrhosis, hepatitis, etc.)	[]Y	[]N
Diabetes Mellitus	[]Y	[]N
Acute Liver Failure (e.g., Tylenol overdose, alcoholic hepatitis, etc)	[]Y	[]N
Immune Suppression	[]Y	[]N
Leukemia	[]Y	[]N
Lymphoma	[]Y	[]N
Metastatic Cancer	[]Y	[]N
Coronary Artery Disease	[] Y	[]N

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Patient initials:

1<sup>st</sup> dose study medication/IP administration:

**VASOPRESSOR THERAPY:** Study Day 1 starts at time of first IP administration and ends at 9659hrs

Day	Vasopressor Date (dd/mmm/yyyy)	Vasopressor Type	Started today?	Stopped today?	Highest Daily dose (include units)	Lowest Daily dose (include units)
1		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
2		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
3		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
4		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
5		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		

Site #:	Enrollment #:	Patient initials:

Day	Vasopressor Date (dd/mmm/yyyy)	Vasopressor Type	Started today?	Stopped today?	Highest Daily dose (include units)	Lowest Daily dose (include units)
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		<i>3.</i>	[]Yes []No	[]Yes []No		
		- <del>1</del> . 5	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		

Add additional Vasopressor Therapy sheets as needed.

Site #:	Enrollment #:	Patient initials:
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Day	Sedation Date (dd/mmm/yyyy)	Sedation Type (Hydromorphone, Morphine, Fentanyl, Midazolam, Propofol, Ketamine)	Started today?	Stopped today?	Highest Daily dose (include units)	Lowest Daily dose (include units)
1		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
2		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
3		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
4		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
5		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		

Site	<b>#</b> •
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Day	Sedation Date (dd/mmm/yyyy)	Sedation Type (Hydromorphone, Morphine, Fentanyl, Midazolam, Propofol, Ketamine)	Started today?	Stopped today?	Highest Daily dose (include units)	Lowest Daily dose (include units)
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		
		1.	[]Yes []No	[]Yes []No		
		2.	[]Yes []No	[]Yes []No		
		3.	[]Yes []No	[]Yes []No		
		4.	[]Yes []No	[]Yes []No		
		5.	[]Yes []No	[]Yes []No		

Add additional Sedation sheets as needed.

#### **CO-INTERVENTIONS** Study Day 1 starts at time of first IP administration and ends at 0659 the following morning. All following study days are from 0700 - 0659

Day	Ventilation	Renal Replacement Therapy	<b>Corticosteroids</b> (include units)	Blood Products	Total Daily Urine Output	Net Daily Fluid Balance
1	[]Yes []No	[]Yes []No	[]Yes []No	packed red blood cells units		
	If Yes, Type: [ ] invasive	If Yes, Type: [] CRRT	Type/Dose:	albumin []25% or []5%mls		+ / -
	[] non-invasive	[] SLED	Type/Dose	fresh frozen plasma mls	mls	mls
	[] high-flow	[] IHD		platelets mls	round up to next hour if required	to 2 decimal places
	[] nasai cannula			cryoprecipitate mls	1	
2	[]Yes []No	[]Yes []No	[]Yes []No	packed red blood cells units		
	If Yes, Type:	If Yes, Type:	Type/Dose:	albumin [] 25% or [] 5%mls		+ / -
	[] invasive			fresh frozen plasma mls	mls	
	[] high-flow	[] IHD	Type/Dose	platelets mls	round up to next	to 2 decimal places
	[] nasal cannula	[] PD		cryoprecipitate mls	nour if required	
3	[]Yes []No	[]Yes []No	[]Yes []No	packed red blood cells units		
	If Yes, Type:	If Yes, Type:	Type/Dose:	albumin [] 25% or [] 5% mls		+ / -
	[] invasive			fresh frozen plasma mls	mls	
	[] high-flow	[]]IHD	Type/Dose	platelets mls	round up to next	to 2 decimal places
	[] nasal cannula	[] PD		cryoprecipitate mls	nour if fequiled	
4	[]Yes []No	[]Yes []No	[]Yes []No	packed red blood cells units		
	If Yes, Type:	If Yes, Type:	Type/Dose:	albumin [] 25% or [] 5% mls		+ / -
	[] invasive	[]CRRT		fresh frozen plasma mls		
	[] non-invasive	[] SLED [] IHD	Type/Dose	platelets mls	round up to next	mls to 2 decimal places
	[] nasal cannula	[]PD		cryoprecipitate mls	hour if required	

LIBERATE CRF, Version 8.0 – May\_18\_2023

7 – Interventions

Si	te #:	Enrollment #:	Patient initials:	

Day	Ventilation	Renal Replacement Therapy	Corticosteroids	Blood Products	Total Daily Urine Output	Net Daily Fluid Balance
	[]Yes []No	[]Yes []No	[]Yes []No If Yes:	packed red blood cells units		
	If Yes, Type: [] invasive	If Yes, Type: []CRRT	Type/Dose:	albumin [] 25% or [] 5% mls		+/-
	[] non-invasive	[] SLED	Type/Dose	fresh frozen plasma mls	mls	mls
	[] high-flow	[] IHD		platelets mls	round up to next hour if required	to 2 decimal places
				cryoprecipitate mls	-	
	[]Yes []No	[]Yes []No	[]Yes []No If Yes:	packed red blood cells units		
	If Yes, Type:	If Yes, Type:	Type/Dose:	albumin [] 25% or [] 5%mls		+/-
	[] invasive			fresh frozen plasma mls	mls	
	[] high-flow	[] IHD	Type/Dose	platelets mls	round up to next	to 2 decimal places
	[] nasal cannula	[] PD		cryoprecipitate mls	nour if required	
	[]Yes []No	[]Yes []No	[]Yes []No If Ves:	packed red blood cells units		
	If Yes, Type:	If Yes, Type:	Type/Dose:	albumin [] 25% or [] 5%mls		+/-
	[] invasive			fresh frozen plasma mls	mls	
	[] high-flow	[] IHD	Type/Dose	platelets mls	round up to next	to 2 decimal places
	[] nasal cannula	[] PD		cryoprecipitatemls	nour if required	
	[]Yes []No	[]Yes []No	[]Yes []No	packed red blood cells units		
	T If Yes, Type:	If Yes, Type:	Type/Dose:	albumin [] 25% or [] 5%mls		+/-
	[] invasive	[]CRRT		fresh frozen plasma mls	mls	
	[] high-flow	[]] IHD	Type/Dose	platelets mls	round up to next	mls to 2 decimal places
	[] nasal cannula	[]PD		cryoprecipitate mls	nour if required	

Add additional Co-Intervention sheets as needed.

# **OUTCOMES**

ICU Stay	
Total duration of IV vasopressor support (hours)	
(from time of first study medication/IP administration to discontinuation of IV	
vasopressors for a continuous 24 hour period)	
Vasopressors re-initiated over 24 hours after cessation	[]Y []N
If Yes: Vasopressor restart date/time: (dd/mmm/yyyy	/;
24hh:mm)	:
Echocardiogram (number performed between study start and ICU discharge.	# of tests ·
Does not include bedside tests)	
Death in ICU	[]Y []N
Date of ICU Death/Discharge (dd/mmm/yyyy):	<u> </u>
ICU re-admission less than 48 hours after ICU discharge	[]Y []N
Death in Hospital	[]Y []N
Date hospital death/discharge (dd/mmm/yyyy):	//
Discharge location: n/a	[]
Home	[]
Another hospital	[]
Long-term care Facility	[]
Other (please specify)	[]

### 90 DAY FOLLOW UP ASSESSMENT

What is the patient's mortality status?	[] Alive [] Dead
Persistent Organ Dysfunction at 90 days	[]Y[]N[]NA
If yes, type :	[] mechanical ventilation
	[] renal replacement therapy
	[] ongoing vasopressor use

Patient initials:

### **ADVERSE EVENTS/SAFETY ENDPOINTS**

Were there any <u>adverse events</u> attributed to the study intervention? []Y []N

If YES, did they include any of the following?:

Clinically significant bradycardia (as per the	
judgement of the treating team)	
Acute coronary syndrome (unstable angina, non-	
/STEMI or STEMI	
Allergic event(s) (paraesthesia, piloerection, dysuria,	
pruritis, chills, pain or rash)	
Hypertension (sustained systolic measurement over	
180mm Hg)	
Bowel Ischemia – clinically significant as per the	
judgement of the treating team	
Limb Ischemia - clinically significant as per the	
judgement of the treating team	
Stroke – radiographical diagnosis	[]Y []N
Other event considered to be related to study treatment	
or in the PI's clinical judgement is not recognised as	
consistent with the subjects underlying critical illness	
and/or chronic disease and expected clinical course	

If YES for any of the above,					
Does the event meet any criteria for a Serious Adverse Event :					
Death	[]Y []N				
Life Threatening	[]Y []N				
Requires or prolongs hospital stay	[]Y []N				
Results in persistent or significant disability	[]Y []N				
Constitutes an important medical event as per local Principal Investigator	[]Y []N				
If YES to any of the above, please complete a <u>Serious Adverse Event form</u> for each event.					
If NO, please complete an <u>Adverse Event Form</u> for each event.					

Patient initials:

### **PROTOCOL VIOLATIONS**

Were there any **protocol violations AND/OR deviations**? []Y []N

Randomized but did not meet all inclusion/exclusion criteria	[]Y []N
Study medication dose missed	[]Y []N
Participant accidently unblinded	[]Y []N
Other, specify:	[]Y []N
If yes:	
Date of violation/deviation (dd/mmm/yyyy)	//
Did the deviation result in a:	[]Y []N
Adverse event	[]Y []N
Serious Adverse Drug Reaction	[]Y []N
Did the subject continue in the study?	[]Y []N
Was it determined the protocol deviation required REB notification?	[]Y []N
If yes: date of REB notification (dd/mmm/yyyy)	//
Date of REB acknowledgment	//
If the subject was withdrawn from the study please complete the Com	pletion Form in
the REDCap system	
Additional comments:	

Print additional sheets as needed for each protocol violation

Principal Investigator:	Signature of PI:	Date:// (ddmmyyyy)

#### Appendix 1: ICU Admitting Diagnosis

MEDICAL (NON OPERATIVE CONDITIONS)	SURGICAL (POST OPERATIVE CONDITIONS)
Cardiovascular / vascular:	Vascular / cardiovascular:
1. Cardiogenic shock	48. Dissecting/ruptured aorta
2. Cardiac arrest	49. Peripheral vascular surgery (no bypass graft)
3. Aortic aneurysm	50. Valvular heart surgery
4. Congestive heart failure	51. Elective abdominal aneurysm repair
5. Peripheral vascular disease	52. Peripheral artery bypass graft
6. Rhythm disturbance	53. Carotid endarterectomy
7. Acute myocardial infarction	54. Other cardiovascular disease:
8. Hypertension	Respiratory:
9. Other cardiovascular/vascular disease:	55. Respiratory infection
Respiratory:	56. Lung neoplasm
10. Parasitic pneumonia (ie.pneumocystis carinii)	57. Respiratory neoplasm (mouth, sinus, larynx, trachea)
11. Aspiration pneumonia	58. Other respiratory disease:
12. Respiratory neoplasm (include larynx, trachea)	Gastrointestinal:
13. Respiratory arrest	59. GI perforation/rupture
14. Pulmonary edema (non-cardiogenic)	60. GI inflammatory disease
15. Bacterial / Viral pneumonia	61. GI obstruction
16. Chronic obstructive pulmonary disease	62. GI bleeding
17. Pulmonary embolism	63. Liver transplant
18. IVIECNANICAL AIRWAY OBSTRUCTION	64. Gl neoplasm
19. Astrima	65. Gl cholecystitis / cholangitis
20. Other respiratory disease:	66. Other GI disease:
Gastrointestinai:	Neurologic:
21. Hepatic failure	67. Intracerebral hemorrhage
22. GI perforation/obstruction	68. Subdural/epidural hematoma
23. Gi bleeding due to varices	69. Subarachnoid hemorrhage
24. GI Inflammatory disease (ulcerative colitis, cronn's	70. Laminectomy/other spinal cord surgery
alsease)	71. Craniotomy for neoplasm
25. Gi bleeding due to diverticulesis	72. Other neurologic disease:
27. Other GL disease	Trauma:
Nourologic	73. Head trauma (with/without multiple trauma)
28 Intracorobral homorrhage	74. Multiple trauma (excluding head trauma)
20. Subarachnoid homorrhago	Kenal:
30 Stroke	75. Renal neoplasm
31 Neurologic infection	76. Other renal disease:
32. Neurologic neoplasm	Gynecologic:
33. Neuromuscular disease	77. Hysterectomy
34. Seizure	Orthopedic:
35. Other neurologic disease:	78. Hip or extremity fracture
Sepsis:	Other:
36. Sepsis (other than urinary tract)	79. Other surgical conditions:
37. Sepsis of urinary tract origin	Cardiovascular Surgery:
Trauma:	80. CABGx1
38. Head trauma (with/without multiple trauma)	81. CABGx2
39. Multiple trauma (excluding head trauma)	82. CABGx3
Metabolic:	83. CABG>4
40. Metabolic coma	84. valve Surgery
41. Diabetic ketoacidosis	٥٥. Utner:
42. Drug overdose	
43. Other metabolic disease:	
Hematologic:	
44. Coagulopathy //neutropeniathrombocytopenia	
45. Other hematologic condition:	
Renal:	
46: Renal diseases	
Other:	
47. Other medical diseases:	
	1

#### Appendix 2: APACHE II Calculation Worksheet

#### A. Physiologic Variables Points

	HIGH ABNORMAL RANGE					LOW ABNORMAL RANGE			РТ	
PHYSIOLOGIC VARIABLE	4	3	2	1	0	1	2	3	4	SCORE
Temperature - rectal (°C)	<u>≥</u> 41	39-40.9		38.5-38.9	36-38.4	34-35.9	32-33.9	30-31.9	<u>≤</u> 29.9	
MAP (mmHg)	<u>≥</u> 160	130-159	110-129		70-109		50-69		<u>≤</u> 49	
Heart Rate	<u>&gt;</u> 180	140-179	110-139		70-109		55-69	40-54	<u>&lt;</u> 39	
Respiratory Rate (non-ventilated or ventilated)	≥ 50	35-49		25-34	12-24	10-11	6-9		<u>&lt;</u> 5	
Oxygenation: $[A-aDO_2 = (FiO_2 \times 710)]$	$-(PCO_2 x)$	1.25) – PC	<b>D</b> <sub>2</sub> ]		FiO <sub>2</sub> =	PCO	2 =	$PO_2 =$		
a. $FiO_2 \ge 0.5$ record A-aDO <sub>2</sub>	<u>≥</u> 500	350-499	200-349		< 200					1
b. FiO <sub>2</sub> < 0.5 record only PaO <sub>2</sub>					PO <sub>2</sub> > 70	PO <sub>2</sub> 61-70		PO <sub>2</sub> 55-60	PO <sub>2</sub> < 55	<u> </u>
Arterial pH	<u>≥</u> 7.7	7.6-7.69		7.5-7.59	7.33-7.49		7.25-7.32	7.15-7.24	< 7.15	
Serum Na (mmol/L)	<u>≥</u> 180	160-179	155-159	150-154	130-149		120-129	111-119	<u>≤</u> 110	
Serum K (mmol/L)	<u>≥</u> 7	6-6.9		5.5-5.9	3.5-5.4	3-3.4	2.5-2.9		< 2.5	
<mark>Serum Creatinine (umol/L)</mark>	> 305	170-304	130-169		53-129		<53			
Hematocrit (%)	<u>≥</u> 60		50-59.9	46-49.9	30-45.9		20-29.9		< 20	
WBC (total/mm <sup>3</sup> )	$\geq$ 40		20-39.9	15-19.9	3-14.9		1-2.9		< 1	
Glasgow Coma Score (GCS) Score = 15 minus actual GCS (see below)						1				
Serum HCO <sub>3</sub> (venous mmol/L) - not	≥ 52	41-51.9		32-40.9	22-31.9		18-21.9	15-17.0	< 15	-
preferred, use if no ABG's										
Creatinine	Α	CUTE PH	YSIOLOG	Y SCORE (	(APS): Sum	of the 12 in	dividual vai	iable points	=	
double points for ACUTE Renal Failure										

#### B. Age Points - Assign points to age as follows:

AGE (yrs)	POINTS
<u>≤</u> 44	0
45-54	2
55-64	3
65-74	5
<u>≥</u> 75	6
AGE SCORE	=

#### C. Chronic Health Points

If the patient has a history of severe organ system insufficiency (see below) or is immunocompromised assign points as follows:

a. For nonoperative or emergency postoperative pt -- 5 points

**b.** For elective postoperative pt -- 2 points

CHRONIC HEALTH SCORE =

D. APACHE II SCORE - Sum of A + B + C

A. APS points	
B. Age points	
C. Chronic Health points	
APACHE II SCORE =	

# prior to this hospital admission and are consistent with the following criteria:

**CHRONIC HEALTH DEFINITIONS** 

**LIVER**: Biospy-proven cirrhosis and documented portal hypertension; prior episodes of upper GI bleeding attributed to portal hypertension; or prior episodes of hepatic failure/encephalopathy/coma

Organ insufficiency or immuno-compromised state evident

CARDIOVASCULAR: New York Heart Association Class IV

**RESPIRATORY**: Chronic restrictive, obstructive, or vascular disease resulting in severe exercise restriction (i.e., unable to climb stairs or perform activities of daily living or household duties; or documented chronic hypoxia, hypercapnia, secondary polycythemia, severe pulmonary hypertension (>40 mmHg), or ventilator dependency

**RENAL**: Receiving chronic dialysis

**IMMUNO-COMPROMISED**: The patient has received therapy that suppresses resistance to infection (i.e., immunosuppressive treatment, chemotherapy, radiation, long term or recent high dose steroids, or has a disease that is sufficiently advanced to suppress resistance to infection (i.e., leukemia, lymphoma, AIDS)

GLASCOW COMA SCALE						
Parameter	Response	Points Assigned (please circle )				
Eyes Open	Spontaneously	4				
	On spoken command	3				
	On pain	2				
	No response	1				
D. M.	To spoken command	6				
Best Motor Response	To painful stimulus:					
	Localized pain	5				
	Flexion withdrawal	4				
	Flexion abnormal	3				
	Extension	2				
	No response	1				
Best Verbal	(Not on ventilator)					
Response	Oriented & converses	5				
	Disoriented & converses	4				
	Inappropriate words	3				
	Incomprehensible sounds	2				
	No response	1				
	(On ventilator)					
	Appears oriented	5				
	Questionably oriented	3				
	Generally unresponsive	1				
	TOTAL GCS =					

#### Appendix 3: SOFA Score Worksheet

	0	1	2	3	4	Score
Respiration PaO <sub>2</sub> /FiO <sub>2</sub>	> 400	$\leq 400$ (± resp.	$ \leq 300 \qquad \leq 200 \\ (+ \text{ resp. s}) $		≤ 100 support)	
Coagulation Platelets(x 109/L)	>150	≤ 150	≤ 100	≤ 50	≤ 20	
Liver Bilirubin (µmol/L)	< 20	20-32	33-101	102-204	> 204	
Cardiovascular	MAP ≥ 70 mmHg	MAP < 70 mmHg	DA ≤ 5 μg/kg/min or dobutamine (any dose) or milrinone (any dose)	DA > 5 $\mu g/kg/min \text{ or }$ EPI $\leq 0.1$ $\mu g/kg/min \text{ or }$ NE $\leq 0.1$ $\mu g/kg/min$ or VP $\leq 0.02$ U/min or phenylephrine (any dose if given as infusion NOT bolus)	DA > 15 $\mu g/kg/min$ or EPI > 0.1 $\mu g/kg/min$ or NE > 0.1 $\mu g/kg/min$ or VP > 0.02 U/min	
CNS Glasgow Coma Scale	15	13-14	10-12	6-9	< 6	
Renal Creatinine (µmol /L)	≤ 106	107 – 176	177 – 308	309 – 441 or urine output ≤ 500 mL/d	≥ 442 or urine output < 200 mL/d or patient receiving RRT	
					TOTAL SCORE	