




MEDICAL CONTROL DIRECTIVE 2020-22

DATE: November 5, 2020

TO: Pinellas County EMS Agencies
Pinellas County Emergency Communications
Pinellas County Certified EMTs and Paramedics
Pinellas County Certified Advanced Practice Paramedics, Nurses
Pinellas County Online Medical Control Physicians
Pinellas County Ambulance Billing and Financial Services
ED Nurse Managers

FROM: Dr. Angus Jameson, EMS Medical Director 

RE: Sapphire Infusion Pump Authorization

Effective Date: Immediately

1. The Eitan Sapphire Infusion Pump is authorized for use as the primary infusion pump of the Sunstar Critical Care Team.
 - a. Authorized settings for the Sapphire Infusion Pump are specified in CCT-AD1 Sapphire Infusion Pump Configuration (attached).
 - b. Selection of infusion pump tubing for use with the Sapphire Infusion Pump is specified in CCT-CS15 Sapphire Infusion Pump Tubing Selection (attached).
2. The CME America BodyGuard 121 Dual Channel Infusion pump is no longer authorized for use effective November 11, 2020.
3. The BBraun Single Channel Infusomat Infusion Pump remains authorized for use on Critical Care Paramedic (CCP) units and as back up for CCT.
4. Attachments:
 - CCT-AD1 Sapphire Infusion Pump Configuration
 - CCT-CS15 Sapphire Infusion Pump Tubing Selection

CCT-AD1 Sapphire Infusion Pump Configuration

The Sapphire Infusion Pump Clinical Configuration is the clinical standard for Critical Care Patient transports. It reflects a standard configuration for ALL Sapphire Infusion Pump devices utilized as a component of Critical Care Transports under the auspices of Pinellas County EMS. *This configuration is not to be altered without prior approval of the EMS Medical Director.*

This pump is only to be used in Continuous Mode. Additional modes are disabled/hidden. The following settings apply to the continuous mode. If any other setting is visible, please contact your administrator.

System Settings	
Parameter	Setting
New Patient	Off
Calculate Concentration	On
Prime Reminder	Off
Bolus Reminder	Off
Allow Delayed Start	Off
Automatic Patient Lockout	Off
Medium Titration	On
US Format	On
Screen Saver	On
Backlight	Partially dimmed
Keys Volume	Low
Alarm volume	Maximum
Bolus Handle	Always On
Repeat Last Infusion	On
PreProgram	Off
Single Air Detector*	Off
Accumulated air Detector	0.2 mL
Accumulated Threshold	0.5 mL
Prime Volume**	10 mL

* If an infusion is running at a rate of 1-4 mL/h or lower, the single air detector will automatically switch to "On" at 0.5 mL. If an infusion is running at a rate lower than 1 mL/h, the single air detector will automatically switch to 0.1 mL.

**When able (such as with macro bore tubing), prime the pump by opening the clamp and allowing gravity to prime the tubing.

Regional (All Modes)	
Parameter	Setting
Date	MM/DD/YY
Time	12 hour clock
Language	English
US Format	ON

Alarms Settings	
Parameter	Setting
Occlusion Units	mmHg
Occlusion Pressure	600 mmHg
Pump Unattended	5 minutes
Infusion Near End	5 minutes
Alarm Volume	Maximum

Mode Options	
Parameter	Setting
Allow Bolus Continuous	Off
Advance Bolus Continuous	Off
Bolus Rate Continuous	500 mL/h
Bolus Rate Secondary	125 mL/h
Set Secondary	Off

Hard Limits	
Parameter	Setting
VTBI Continuous	9999 mL
Rate Continuous	999 mL/h
VTBI Secondary	9999 mL
Rate Secondary	500 mL/h
Minimum Bolus Lockout	00:01 h:min
Maximum Bolus Lockout	24:00 h:min

Reset System: Password
The device password is managed by Pinellas County EMS and Sunstar administration. Distribution of the password is only permitted with prior approval of the EMS Medical Director.

Set Hard Limits; Mode Specific		
Mode	Parameter	Setting
Continuous	Primary VTBI (Volume to be Infused)	9999 mL
	Primary Rate	999 mL/h
	Secondary VTBI	9999 mL
	Secondary Rate	500 mL/h

Set KVO	
Mode	Setting
Continuous	3 mL/h

CCT-AD1 - SAPPHIRE INFUSION PUMP CONFIGURATION

CCT-AD1 - SAPPHIRE INFUSION PUMP CONFIGURATION

Delivery Mode	
Mode	Visibility
Continuous	Visible
Intermittent	Hidden
TPN	Hidden
PCA	Hidden
Multi-step	Hidden
Epidural Intermittent	Hidden
PCEA	Hidden

Configurable Units			
Units	Visibility	Units	Visibility
mL/h	Visible	nanog/kg/min	Visible
mL/min	Visible	mmol/h	Visible
mL/kg/h	Visible	mmol/min	Visible
mL/kg/min	Visible	mmol/kg/h	Visible
grams/h	Visible	mmol/kg/min	Visible
grams/min	Visible	Million Units/h	Hidden
grams/kg/h	Visible	Units/h	Visible
grams/kg/min	Visible	Units/min	Visible
mg/h	Visible	Units/kg/h	Visible
mg/min	Visible	Units/kg/min	Visible
mg/kg/h	Visible	mUnits/h	Visible
mg/kg/min	Visible	mUnits/min	Visible
mcg/h	Visible	mUnits/kg/h	Visible
mcg/kg/h	Visible	mUnits/kg/min	Visible
mcg/kg/min	Visible	mEq/h	Visible
nanog/h	Visible	mEq/min	Visible
nanog/min	Visible	mEq/kg/h	Visible
nanog/kg/h	Visible	mEq/kg/min	Visible

Generic Name	DOBUTamine		
Displayed Name	DOBUTamine (Dobutrex)	Concentration	500 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.5	40

Generic Name	DOBUTamine		
Displayed Name	DOBUTamine (Dobutrex)	Concentration	1000 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.5	40

Generic Name	DOPamine		
Displayed Name	DOPamine (Intropin)	Concentration	400 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	2	50

Generic Name	DOPamine		
Displayed Name	DOPamine (Intropin)	Concentration	800 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	2	50

Generic Name	EPINEPHrine		
Displayed Name	EPINEPHrine	Concentration	4 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	1	20

Generic Name	EPINEPHrine		
Displayed Name	EPINEPHrine	Concentration	8 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	1	20

Generic Name	IV Fluids		
Displayed Name	IV Fluids Normal Saline	Concentration	__ mL/ __ mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Simple	n/a	n/a
Dose Rate	mL/h	1	999
Bolus Amount	mL	1	999

Generic Name	IV Fluids		
Displayed Name	IV Fluids Lactated Ringers	Concentration	__ mL/ __ mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Simple	n/a	n/a
Dose Rate	mL/h	1	999
Bolus Amount	mL	1	999

Generic Name	IV Fluids		
Displayed Name	IV Fluids (3% Saline Wt)	Concentration	__ mL/500 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mL/kg/h	0.1	1

CCT-AD1 - SAPPHIRE INFUSION PUMP CONFIGURATION

Generic Name	IV Fluids		
Displayed Name	IV Fluids 3% Saline	Concentration	___mL/500 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mL/h	10	200

Generic Name	LORazepam		
Displayed Name	LORazepam (Ativan)	Concentration	40 mg/40 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	1	10

Generic Name	LORazepam		
Displayed Name	LORazepam (Ativan)	Concentration	50 mg/50 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	1	10

Generic Name	LORazepam		
Displayed Name	LORazepam (Ativan)	Concentration	100 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	1	10

Generic Name	Sodium Bicarbonate		
Displayed Name	Sodium Bicarbonate	Concentration	___mEq/1000 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mL/h	1	250

Generic Name	TPN		
Displayed Name	TPN	Concentration	___mL/___mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mL/h	1	200

Generic Name	Tranexamic Acid		
Displayed Name	tranexamic acid (TXA)	Concentration	1 gram/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	grams/h	0.124	0.125

Generic Name	abciximab		
Displayed Name	abciximab (ReoPro)	Concentration	9 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	n/a	0.125

Generic Name	alteplase		
Displayed Name	alteplase (t-PA)	Concentration	100 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	0.1	100

Generic Name	amiodarone		
Displayed Name	amiodarone (Cordarone)	Concentration	360 mg/200 mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Advanced	n/a	n/a
Dose Rate	mg/min	0.5	1
Bolus Amount	mg	n/a	150
Max Bolus Amount	n/a	n/a	n/a
Bolus Rate	mL/h	n/a	500
Bolus Time	h:min	0:10	0:11

Generic Name	amiodarone		
Displayed Name	amiodarone (Cordarone)	Concentration	450 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Advanced	n/a	n/a
Dose Rate	mg/min	0.5	1
Bolus Amount	mg	n/a	150
Max Bolus Amount	n/a	n/a	n/a
Bolus Rate	mL/h	n/a	500
Bolus Time	h:min	0:10	0:11

Generic Name	amiodarone		
Displayed Name	amiodarone (Cordarone)	Concentration	900 mg/500 mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Advanced	n/a	n/a
Dose Rate	mg/min	0.5	1
Bolus Amount	mg	n/a	150
Max Bolus Amount	n/a	n/a	n/a
Bolus Rate	mL/h	n/a	500
Bolus Time	h:min	0:10	0:11

Generic Name	amiodarone bolus		
Displayed Name	amiodarone bolus	Concentration	150 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Advanced	n/a	n/a
Dose Rate	mg/min	n/a	n/a
Bolus Amount	mL	100	n/a
Max Bolus Amount	n/a	n/a	n/a
Bolus Rate	mL/h	600	n/a
Bolus Time	h:min	0:10	0:11

Generic Name	argatroban		
Displayed Name	argatroban	Concentration	250 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.5	10

Generic Name	bivalirudin		
Displayed Name	bivalirudin (Angiomax)	Concentration	250 mg/500 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/kg/h	0.25	1.75

CCT-AD1 - SAPPHIRE INFUSION PUMP CONFIGURATION

Generic Name	bivalirudin		
Displayed Name	bivalirudin (Angiomax)	Concentration	250 mg/50 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/kg/h	0.25	1.75

Generic Name	cisatracurium		
Displayed Name	cisatracurium (Nimbex)	Concentration	200 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.5	10

Generic Name	cisatracurium		
Displayed Name	cisatracurium (Nimbex)	Concentration	100 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.5	10

Generic Name	dexmedetomidine		
Displayed Name	dexmedetomidine (Precedex)	Concentration	200 mcg/50 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/h	0.1	1.5

Generic Name	dexmedetomidine		
Displayed Name	dexmedetomidine (Precedex)	Concentration	400 mcg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/h	0.1	1.5

Generic Name	diltiazem		
Displayed Name	diltiazem (Cardizem)	Concentration	100 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	2.5	15

Generic Name	diltiazem		
Displayed Name	diltiazem (Cardizem)	Concentration	125 mg/125 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	2.5	15

Generic Name	eptifibatid		
Displayed Name	eptifibatid (Integrilin)	Concentration	75 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	1	2

Generic Name	esmolol		
Displayed Name	esmolol (Brevibloc)	Concentration	2500 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	50	300

Generic Name	fentanyl		
Displayed Name	fentanyl (Sublimaze)	Concentration	1000 mcg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/h	1	200

Generic Name	fentaNYL		
Displayed Name	fentaNYL (Sublimaze)	Concentration	2000 mcg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/h	2	200

Generic Name	fentaNYL		
Displayed Name	fentaNYL (Sublimaze)	Concentration	2500 mcg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/h	1	200

Generic Name	heparin		
Displayed Name	heparin (Heparin Sodium)	Concentration	25000 Units/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	Units/h	100	1800

Generic Name	heparin		
Displayed Name	heparin (Heparin Sodium)	Concentration	25000 Units/500 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	Units/h	100	1800

Generic Name	heparin Wt		
Displayed Name	heparin Wt (Heparin Sodium Wt)	Concentration	25000 Units/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	Units/kg/h	10	18

Generic Name	heparin Wt		
Displayed Name	heparin Wt (Heparin Sodium Wt)	Concentration	25000 Units/500 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	Units/kg/h	10	18

Generic Name	insulin		
Displayed Name	insulin (Regular Insulin)	Concentration	100 Units/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	Units/h	0.1	15

Generic Name	insulin Wt		
Displayed Name	insulin Wt (Regular Insulin Wt)	Concentration	100 Units/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	Units/kg/h	0.01	1

Generic Name	isoproterenol		
Displayed Name	isoproterenol (Isuprel)	Concentration	1000 mcg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	0.5	30

Generic Name	ketamine		
Displayed Name	ketamine (Ketalar)	Concentration	500 mg/500 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/kg/h	0.1	3

CCT-AD1 - SAPPHIRE INFUSION PUMP CONFIGURATION

Generic Name	ketamine		
Displayed Name	ketamine (Ketalar)	Concentration	___ mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/kg/h	0.1	3

Generic Name	labetalol		
Displayed Name	labetalol (Trandate)	Concentration	200 mg/200 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/min	1	6

Generic Name	labetalol		
Displayed Name	labetalol (Trandate)	Concentration	___mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/kg/h	0.4	3

Generic Name	lidocaine		
Displayed Name	lidocaine (Xylocaine)	Concentration	2000 mg/500 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/min	1	4

Generic Name	lidocaine		
Displayed Name	lidocaine (Xylocaine)	Concentration	2000 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/min	1	4

Generic Name	mag sulfate		
Displayed Name	magnesium sulfate (Mag Sulfate)	Concentration	20 grams/500 mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Advanced	n/a	n/a
Dose Rate	grams/h	1	3
Bolus Amount	grams	2	6
Max Bolus Amount	n/a	n/a	n/a
Bolus Rate	mL/h	100	300
Bolus Time	h:min	0:10	0:30

Generic Name	mag sulfate		
Displayed Name	magnesium sulfate (Mag Sulfate)	Concentration	40 grams/1000 mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Advanced	n/a	n/a
Dose Rate	grams/h	1	3
Bolus Amount	grams	2	6
Max Bolus Amount	n/a	n/a	n/a
Bolus Rate	mL/h	100	300
Bolus Time	h:min	0:10	0:30

Generic Name	mag sulfate		
Displayed Name	magnesium sulfate (Mag Sulfate)	Concentration	10 grams/250 mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Advanced	n/a	n/a
Dose Rate	grams/h	1	3
Bolus Amount	grams	2	6
Max Bolus Amount	n/a	n/a	n/a
Bolus Rate	mL/h	100	300
Bolus Time	h:min	0:10	0:30

Generic Name	mannitol 20%		
Displayed Name	mannitol (Osmitrol)	Concentration	100 grams/500 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	grams/h	1	199

Generic Name	midazolam		
Displayed Name	midazolam (Versed)	Concentration	100 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	0.5	20

Generic Name	midazolam		
Displayed Name	midazolam (Versed)	Concentration	50 mg/50 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	0.5	20

Generic Name	milrinone		
Displayed Name	milrinone (Primacor)	Concentration	20 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.1	0.75

Generic Name	morphine		
Displayed Name	morphine sulfate (Morphine)	Concentration	50 mg/50 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	0.5	20

Generic Name	morphine		
Displayed Name	morphine sulfate (Morphine)	Concentration	100 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	0.5	20

Generic Name	narcan		
Displayed Name	narcan (Naloxone)	Concentration	___mg/500 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	0.1	10

Generic Name	narcan		
Displayed Name	narcan (Naloxone)	Concentration	___mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	0.1	10

CCT-AD1 - SAPPHIRE INFUSION PUMP CONFIGURATION

Generic Name	nicardipine		
Displayed Name	nicardipine (Cardene)	Concentration	20 mg/200 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	1	15

Generic Name	nicardipine		
Displayed Name	nicardipine (Cardene)	Concentration	25 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	1	15

Generic Name	nicardipine		
Displayed Name	nicardipine (Cardene)	Concentration	40 mg/200 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	1	15

Generic Name	nitroglycerin		
Displayed Name	nitroGLYcerin (Tridil)	Concentration	50 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	2.5	300

Generic Name	nitroglycerin		
Displayed Name	nitroGLYcerin (Tridil)	Concentration	25 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	2.5	300

Generic Name	nitroglycerin		
Displayed Name	nitroGLYcerin Wt (Tridil Wt)	Concentration	___mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.05	5

Generic Name	nitroprusside		
Displayed Name	nitroPRUsside (Nipride)	Concentration	50 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.1	10

Generic Name	norepi Wt		
Displayed Name	NORepinephrine wt (Levophed Wt)	Concentration	4 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.01	3

Generic Name	norepi Wt		
Displayed Name	NORepinephrine wt (Levophed Wt)	Concentration	8 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.01	3

Generic Name	norepi Wt		
Displayed Name	NORepinephrine wt (Levophed Wt)	Concentration	16 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.01	3

Generic Name	norepi Wt		
Displayed Name	NORepinephrine wt (Levophed Wt)	Concentration	___mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.01	3

Generic Name	norepinephrine		
Displayed Name	NORepinephrine (Levophed)	Concentration	4 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	0.25	30

Generic Name	norepinephrine		
Displayed Name	NORepinephrine (Levophed)	Concentration	8 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	0.25	30

Generic Name	norepinephrine		
Displayed Name	NORepinephrine (Levophed)	Concentration	16 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	0.25	30

Generic Name	octreotide		
Displayed Name	octreotide (Sandostatin)	Concentration	1000 mcg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/h	25	50

Generic Name	oxytocin		
Displayed Name	oxytocin (Pitocin)	Concentration	___Units/1000 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mUnits/min	2	42

Generic Name	pantoprazole		
Displayed Name	pantoprazole (Protonix)	Concentration	40 mg/50 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	7	8

Generic Name	pantoprazole		
Displayed Name	pantoprazole (Protonix)	Concentration	80 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/h	7	8

Generic Name	phenylephrine		
Displayed Name	phenylephrine (Neosynephrine)	Concentration	10 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	50	200

Generic Name	phenylephrine		
Displayed Name	phenylephrine (Neosynephrine)	Concentration	50 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	50	200

CCT-AD1 - SAPPHIRE INFUSION PUMP CONFIGURATION

Generic Name	phenylephrine		
Displayed Name	phenylephrine (Neosynephrine)	Concentration	___mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/min	50	200

Generic Name	potassium chloride		
Displayed Name	potassium chloride (KCL Maintenance)	Concentration	___mEq/1000 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mL/h	1	200

Generic Name	potassium chloride		
Displayed Name	potassium chloride (K Rider Peripheral)	Concentration	___mEq/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mEq/h	1	10

Generic Name	potassium chloride		
Displayed Name	potassium chloride (K Rider Central)	Concentration	___mEq/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mEq/h	1	40

Generic Name	procainamide		
Displayed Name	procainamide (Pronestyl)	Concentration	1000 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/min	1	6

Generic Name	procainamide		
Displayed Name	procainamide (Pronestyl)	Concentration	2000 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mg/min	1	6

Generic Name	propofol		
Displayed Name	propofol (Diprivan)	Concentration	500 mg/50 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	5	100

Generic Name	propofol		
Displayed Name	propofol (Diprivan)	Concentration	1000 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	5	100

Generic Name	rocuronium		
Displayed Name	rocuronium (Zemuron)	Concentration	100 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	4	16

Generic Name	tirofiban		
Displayed Name	tirofiban (Aggrastat)	Concentration	12.5 mg/250 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.075	0.15

Generic Name	tranexamic acid		
Displayed Name	tranexamic acid (TXA Bolus)	Concentration	1 gram/100 mL
RULE	DOSING UNIT	LHL	UHL
Bolus Options	Advanced	n/a	n/a
Dose Rate	grams/h	n/a	n/a
Bolus Amount	mL	99.9	100
Max Bolus Amount	n/a	n/a	n/a
Bolus Rate	mL/h	n/a	600
Bolus Time	h:min	0:10	0:11

Generic Name	vasopressin		
Displayed Name	vasopressin (Vasopstrict)	Concentration	40 Units/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	Units/min	0.01	0.1

Generic Name	vasopressin		
Displayed Name	vasopressin (Vasopstrict)	Concentration	100 Units/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	Units/min	0.01	0.1

Generic Name	vecuronium		
Displayed Name	vecuronium (Norcuron)	Concentration	100 mg/100 mL
RULE	DOSING UNIT	LHL	UHL
Dose Rate	mcg/kg/min	0.8	1.2

CCT-CS15 Sapphire Infusion Pump Tubing Selection

The Sapphire Infusion Pump is equipped to handle both “Full Set” (BP450-01) IV tubing which includes a spike for accessing medication containers and “Half Set” (AP416-01) IV tubing which does not. Selection of appropriate tubing is important to ensure the safe and accurate administration of a medication.

Full Set:

- Full set tubing shall be used as the default tubing for all fluids and medications administered with the Sapphire Infusion pump.

Half Set:

- Half set tubing may be used instead of Full Set tubing in the following situations:
 - When there is a small volume (less than or equal to 100 mL) of medication left to be infused upon arrival to patient (i.e. patient has already received most of the medication and small volume is remaining prior to transport).
 - When assuming care during an ongoing infusion of a medication where switching to a Full Set would result in loss of medication (i.e. in the discarded tubing) causing significant alteration of intended dosing or when re-spiking a medication bag or bottle is not possible. Examples include but are not limited to:
 - TPA
 - Propofol
 - Dexmedetomidine
 - Antibiotics - when remaining volume is less than or equal to 100 mL
 - When authorized via specific OLMC order.