

Appendix 1: Stability data of the medication preparations in IV piggyback

Medication	Dose	Volume of Compatible Diluents	Compatible Diluents	Refrigerator Stability	Vial Strength / Diluent Volume	Final Concentration
Ampicillin	1000 mg	50 ml	NS	48 hrs	1 gm/5 ml SWI	200 mg/ml
Cefazolin	2000 mg	100 ml	D5W	7 days	1 gm/5 ml SWI	200 mg/ml
Cefepime	1000 mg	50 ml	D5W	7 days	2 gm/8 ml SWI	200 mg/ml
Cefepime	2000 mg	100 ml	D5W	7 days	2 gm/8 ml SWI	200 mg/ml
Cefoxitin	2000 mg	50 ml	D5W	7 days	1 gm/10 ml SWI	100 mg/ml
Ceftazidime	1000 mg	50 ml	D5W	3 days	1 gm/4.8 ml SWI or 2 gm/9.6 ml SWI	200 mg/ ml
Ceftazidime	2000 mg	50 ml	D5W	3 days	1 gm/4.8 ml SWI or 2 gm/9.6 ml SWI	200 mg/ml
Ceftriaxone	1000 mg	50 ml	D5W	7 days	1 gm/10 ml SWI	100 mg /ml
Ceftriaxone	2000 mg	100 ml	D5W	7 days	1 gm/10 ml SWI	100 mg/ ml
Clindamycin	900 mg	100 ml	D5W	7 days	300 mg/ 2 ml	150 mg/ ml
Clindamycin	600 mg	100 ml	D5W	7 days	300 mg/ 2 ml	150 mg/ ml
Clindamycin	450 mg	100 ml	D5W	7 days	300 mg/ 2 ml	150 mg/ ml
Clindamycin	300 mg	50 ml	D5W	7 days	300 mg/ 2 ml	150 mg/ ml
#Colistin	3000,000 IU	100 ml	NS, D5W	24 hrs	2 Million IU/ 2ml SWI	1 Million IU/ ml
#Colistin	2000,000 IU	100 ml	NS, D5W	24 hrs	2 Million IU/ 2ml SWI	1 Million IU/ ml
#Colistin	1000,000 IU	50 ml	NS, D5W	24 hrs	2 Million IU/ 2ml SWI	1 Million IU/ ml
Dexamethasone	10 mg	10 ml in 10 ml syringe	NS	48 hrs	10 mg/ ml	10 mg/ ml
*Dexamethasone	10 mg	50 ml	NS	48 hrs	10 mg/ ml	10 mg/ ml
Diphenhydramine	25 mg	50 ml	D5W	7 days	50 mg/ ml	50 mg/ ml
Diphenhydramine	50 mg	50 ml	D5W	7 days	50 mg/ ml	50 mg/ ml
Dobutamine	800 mg	250 ml	D5W	48 hrs	250 mg/ 20 ml	12.5 mg/ ml
Dopamine	800 mg	250 ml	D5W	48 hrs	200 mg/ 5 ml	40 mg/ ml
Epinephrine	12 mg	250 ml	D5W	48 hrs	30 mg/ 30 ml	1 mg/ ml

Gentamicin	80 mg	100 ml	D5W	48 hrs	800 mg/ 20 ml	40 mg/ ml
Gentamicin	100 mg	100 ml	D5W	48 hrs	800 mg/ 20 ml	40 mg/ ml
Granisetron	1 mg	25 ml	D5W	7 days	1 mg/ ml or 3 mg/ 3 ml	1 mg/ ml
Granisetron	2 mg	50 ml	D5W	7 days	1 mg/ ml or 3 mg/ 3 ml	1 mg/ ml
Heparin	25000 IU	250 ml	D5W	24 hrs	25000 IU/ 5 ml	5000 IU/ ml
Heparin	25000 IU	250 ml	NS	7 days	25000 IU/ 5 ml	5000 IU/ ml
#Imipenem	1000 mg	250 ml	NS	24 hrs	500 mg/ 10 ml SWI	50 mg/ ml
#Imipenem	500 mg	100 ml	NS	24 hrs	500 mg/ 10 ml SWI	50 mg/ ml
#Imipenem	250 mg	50 ml	NS	24 hrs	500 mg/ 10 ml SWI	50 mg/ ml
Magnesium Sulphate	20 mmol	100 ml	NS,D5W	48 hrs	10 mmol/5 ml	2 mmol / ml
Metoclopramide	20 mg	50 ml	NS	7 days	10 mg/ 2 ml	5 mg/ ml
Metoclopramide	10 mg	50 ml	NS	7 days	10 mg/ 2 ml	5 mg/ ml
Milrinone	40 mg	100 ml	D5W	72 hrs	10 mg/ 10 ml	1 mg/ ml
Nafcillin	2000 mg	100 ml	D5W	7 days	10 gm /43 ml SWI or 2 gm/ 8.6 ml SWI	200 mg/ ml
Norepinephrine	12 mg	250 ml	D5W	24 hrs	4 mg/ 4 ml	1 mg/ ml
Omeprazole	100 mg	250 ml	NS	48 hrs	40 mg/ 5ml SWI	8 mg/ ml
Omeprazole	40 mg	100 ml	NS	48 hrs	40 mg/ 5ml SWI	8 mg/ ml
Omeprazole	20 mg	50 ml	NS	48 hrs	40 mg/ 5ml SWI	8 mg/ ml
Ondansetron	8 mg	50 ml	D5W	7 days	8 mg/ 4 ml	2 mg/ ml
Ondansetron	4 mg	50 ml	D5W	7 days	8 mg/ 4 ml	2 mg/ ml
Ondansetron	2 mg	50 ml	D5W	7 days	8 mg/ 4 ml	2 mg/ ml
Potassium Chloride	30 mmol	100 ml	NS	7 days	40 mmol/ 20 ml	2 mmol/ml
Potassium Chloride	20 mmol	50 ml	NS	7 days	40 mmol/ 20 ml	2 mmol/ml
Piperacillin- Tazobactam	4.5 gm	100 ml	D5W	7 days	4.5 gm/ 20 ml SWI	200 mg/ml
Piperacillin- Tazobactam	3.375 gm	100 ml	D5W	7 days	4.5 gm/ 20 ml SWI	200 mg/ml
Piperacillin- Tazobactam	2.25 gm	100 ml	D5W	7 days	4.5 gm/ 20 ml SWI	200 mg/ml
Ranitidine	50 mg	50 ml	D5W	7 days	50 mg/ 2 ml	25 mg/ ml
Tigecycline	50 mg	50 ml	NS	48 hrs	50 mg/ 5.3 ml SWI	10 mg/ ml

Tigecycline	100 mg	100 ml	NS	48 hrs	50 mg/ 5.3 ml SWI	10 mg/ ml
Vancomycin	1000 mg	250 ml	D5W	7 days	1 gm/ 10 ml SWI	100 mg/ ml
Vancomycin	750 mg	250 ml	D5W	7 days	1 gm/ 10 ml SWI	100 mg/ ml
Vancomycin	1000 mg	100 ml	D5W	7 days	1 gm/ 10 ml SWI	100 mg/ ml
Vancomycin	750 mg	100 ml	D5W	7 days	1 gm/ 10 ml SWI	100 mg/ ml
Vancomycin	500 mg	100 ml	D5W	7 days	1 gm/ 10 ml SWI	100 mg/ ml
Voriconazole	200 mg	100 ml	NS	7 days	200 mg/ 19ml SWI	10 mg/ ml

This Table is the stability data of the medications that was prepared manually in IV piggy backs.

reflect the users recommendations

Volume of Compatible Diluents in column 3 means the volume of final IVPB (25, 50,100,250 mls)

Diluent volume in column 6 means the volume of SWI used for reconstitution the powdered medications.

The one without SWI means these medications come in liquid form no need for reconstitution by SWI.

*practice changed to

Short Expiry

Appendix 2: Disposable Riva Supplies

Description	UO M	*Suggested AMU	Qty on hand	No. of months stock as per suggested AMU	Actual AMU 4 months according to actual usage	Qty on order
*SYRINGE 3CC LUER- LOK™TIP GRADUATED NON LATEX PEEL PACK FOR ROBOTIC SYSTEM DISPOSABLE STERILE	EA	12000	77600	6.46	0	
#SYRINGE 5CC LUER- LOK™TIP GRADUATED NON LATEX PEEL PACK ROBOTIC SYSTEM DISPOSABLE STERILE	EA	15000	67900	4.53	500	20000
#SYRINGE 10CC LUER- LOK™TIP GRADUATED NON LATEX PEEL PACK FOR ROBOTIC SYSTEM DISPOSABLE STERILE	EA	15000	86000	5.73	700	
#SYRINGE 20CC LUER- LOK™TIP GRADUATED NON LATEX PEEL PACK FOR ROBOTIC SYSTEM STERILE DISPOSABLE	EA	5952	31680	5.32	384	2304
#SYRINGE LUER- LOK™TIP GRADUATED NON LATEX PEEL PACK 30ML FOR ROBOTIC SYSTEM DISPOSABLE STERILE	EA	5152	29120	5.65	498	

%NEEDLE FILL BLUNT 18G 40MM FOR RIVA ROBOTIC SYSTEM DISPOSABLE BX/100	BX	300	970	3.23	50	830
!SYRINGE TIP CAPS FOR RIVA-ROBOTIC SYSTEM DISPOSABLE	EA	30000	24000 0	8	0	**

Locally purchased items were ordered for 4-6 months supplies only while order with overseas was placed for 8 month supply to avoid any critical situation once item(s) are used as planned.

*Based on manual preparation data,

mainly for Ranitidine which went out of stock.

batch. Not more than 2 syringes are used to prepare a batch of 30 Piperacillin-Tazobactam
needle per 1 preparation

3cc was used

#Less syringes are used by RIVA per

% 1 needle is used for 10 bags. Manual preparations need 1

! no syringes by RIVA

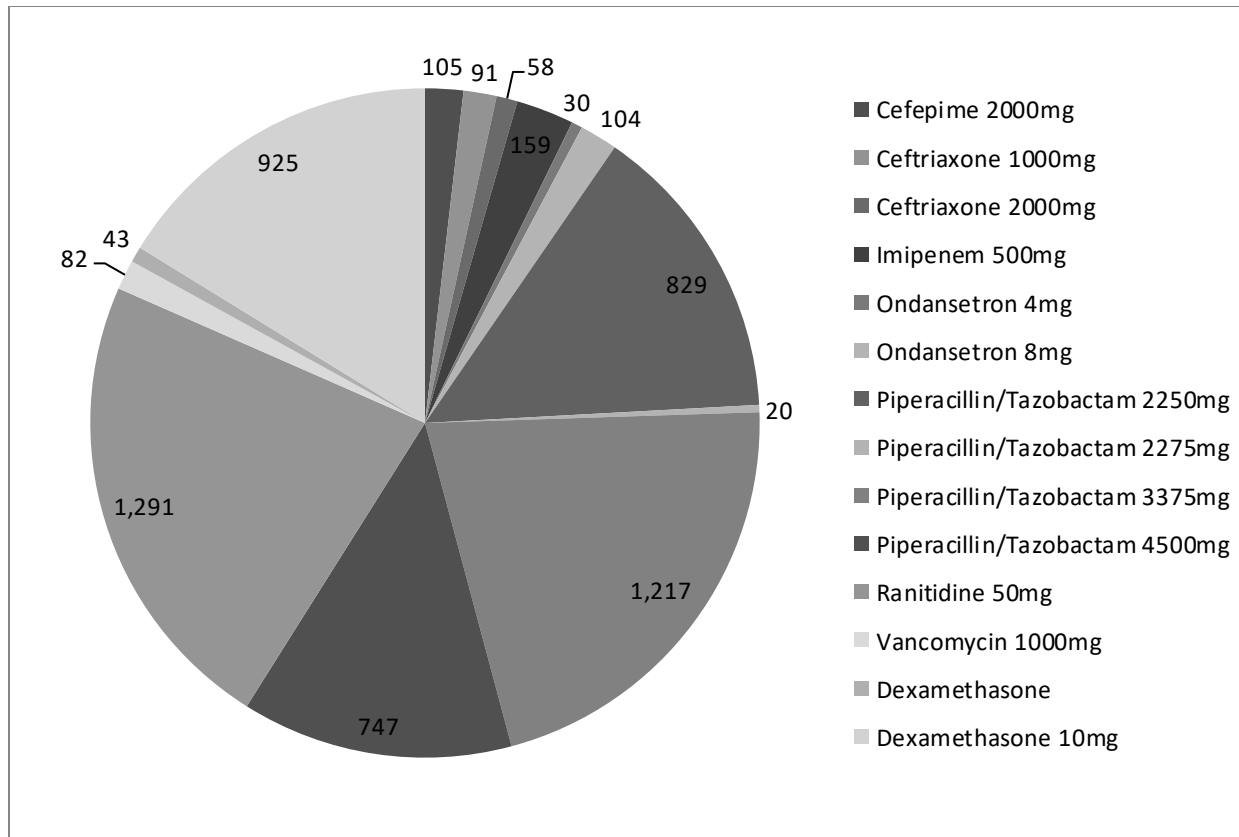
Appendix 3: Inventory Racks

Rack Type		Std	
		Conf.	
BAXTERIV BAG RACKS (BAG RACK OPTION ONE)		2	ASSY, RACK, BAG, BAXTER, 1000 mL
- North America, without Bag Spikes		2	ASSY, RACK, BAG, BAXTER, 150 TO 500 mL
		2	ASSY, RACK, BAG, BAXTER, 25 TO 100 mL

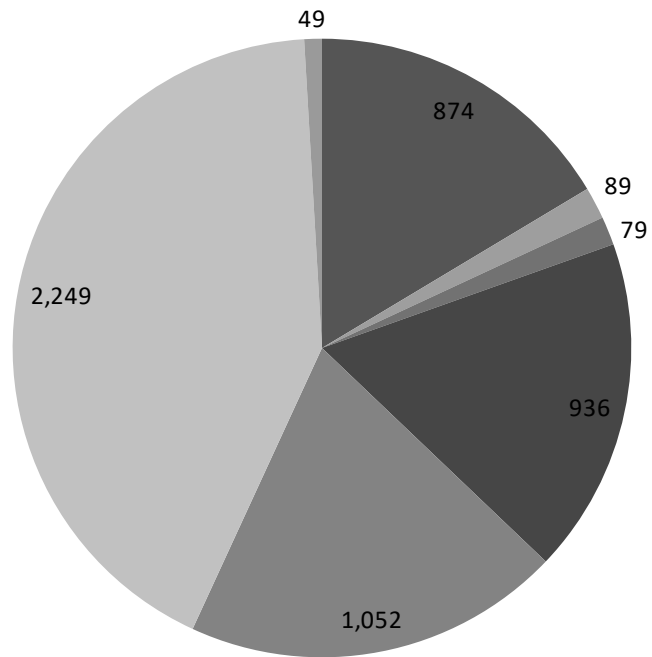
		1	ASSY, RACK, VIAL, 100 mL, 51-54 mm DIA/ 2.00-2.13 DIA
		1	ASSY, RACK, VIAL, 50 mL, 44-46 mm DIA/ 1.73-1.81 DIA
		1	ASSY, RACK, VIAL, 30 mL, 38-40 mm DIA/ 1.50-1.58 DIA
VIAL RACKS		1	ASSY, RACK, VIAL, 30 mL, 32-34 mm DIA/ 1.26-1.34 DIA
		1	ASSY, RACK, VIAL, 20 mL, 28-31 mm DIA, 1.10-1.22 DIA
		1	ASSY, RACK, VIAL, 10 mL, 25-27 mm DIA/ 1.00-1.06 DIA
			ASSY, RACK, VIAL, 2-5 mL, 16-21 mm DIA/ .63"-.83" DIA, 2" tall
		1	ASSY, RACK, VIAL, 2-5 mL, 16-21 mm, DIA/ .63" - .83" DIA, 2.5" tall
		2	ASSY, RACK, SYRINGE, 60 CC
SYRINGE RACKS		4	ASSY, RACK, SYRINGE, 20-30 CC
		4	ASSY, RACK, SYRINGE, 1-12 CC
SYRINGE CAPS		1	ASSY, RACK, 25 SRNG CAPS
REJECT RACK Choose one		1	ASSY, RACK, REJECT, BAXTER
Total		25	

RIVA come with 25 racks to start. These are the racks required to perform basic functionality that all customers require. ARxIUM provides an additional 5 racks to suit the customer's preferences. As well, the customer may switch out their original 25 racks as required.

Appendix 4a: Monthly Outputted Doses (Bags & Syringes) - All Types - All Sizes for 2015-12 (N=5701)



Appendix 4b: Monthly Outputted Doses (Bags & Syringes) - All Types - All Sizes for 2016-12 (N=5328)



- Imipenem 500mg
- Ondansetron 4mg
- Ondansetron 8mg
- Piperacillin/Tazobactam 2250mg
- Piperacillin/Tazobactam 3375mg
- Piperacillin/Tazobactam 4500mg
- Vancomycin 1000mg