

Drug	Diluent	pH	mOsmol/LL	Phlebitis from drug	Line
Acyclovir	NS @ 5mg/ml	10.5-11.6	316	yes	CL
Amikacin	NS @ 5mg/ml	3.5-5.5	349		CL
Aminophylline	NS @ 5mg/ml	8.6 - 9	327		CL
Amiodarone	D5W @ 2mg/ml	4.1		yes	CL
Amphotericin B	D5W @ 0.1mg/ml	5.7	256	yes	PIV ML
Amphotericin B Albecet	D5W @ 1-2mg/ml	5.5 - 6	~280	yes	PIV ML
Amphotericin B Ambisome	D5W @ 1-2mg/ml	5 - 6	~280	yes	PIV ML
Amphotericin B Amphotec	D5W @ 0.2-0.8mg/ml	5 - 6	~280	yes	PIV ML
Ampicillin - Sulbactam	NS 100ml	9 (8 - 10)	~400	yes	CL
Ampicillin 1 & 2 gm	NS 100ml	9 (8 - 10)	328 - 372		CL
Amrinone	NS @ 2.5mg/ml	3.2 - 4	~300	yes	CL
Azithromycin 500 mg	NS @ 2mg/ml	6.4 - 6.8	~280	yes	PIV ML
Aztreonam 1 gm	SWI 10ml	6 (4.5-7.5)			PIV ML
Aztreonam 1 - 2 gm	NS 100 ml	6 (4.5-7.5)	315-352		PIV ML
Aztreonam 1- 2 gm Frozen	Dextrose 50ml	5.0 - 5.6	270 - 330		PIV ML
Bleomycin	NS@3units/ml	4.5 - 6	~300		PIV ML
Carboplatin	D5W 0.2 - 2 mg/ml	5 - 7	~250		PIV ML
Carmustine	D5W 250 - 500ml	5.6 - 6			PIV ML
Caspofungin	NS @ 0.28-0.35 mg/ml	6.6		yes	PIV ML
Cefamandole 1 gm	SWI 10 ml	6-8.5	466		PIV ML
Cefamandole 1 gm	NS 100ml	7 (6-8.5)	314		PIV ML
Cefazolin 1 - 2 gm	SWI 10 ml	4.5-7	293		PIV ML
Cefazolin 1 - 2 gm	NS 100 ml	4.5-7	317 - 351		PIV ML
Cefazolin 1 gm Frozen	Dextrose 50ml	5.4 - 6.4	270 - 330		PIV ML
Cefazolin 500mg Frozen	Dextrose 50ml	5.4 - 6.4	270 - 330		PIV ML
Cefepime 1 - 2 gm	NS 100 ml	4 - 6	307		PIV ML
Cefmetazole 2gm	NS 100 ml	4.2 - 6.2	317		PIV ML

Cefoperazone 1 gm	SWI 10ml	5 (4.5-6.5)	290		PIV ML
Cefoperazone 1 gm	NS 100ml	5 (4.5-6.5)	307		PIV ML
Cefoperazone 1gm Frozen	Dextrose 50ml	5.3 - 5.8	276 - 324		PIV ML
Cefoperazone 2 gm Frozen	Dextrose 50ml	5.3 - 5.8	276 - 324		PIV ML
Cefotaxime 1 - 2 gm	NS 100 ml	5-7.5	344 - 351		PIV ML
Cefotaxime 1 gm	SWFI 10 ml	5-7.5	357		PIV ML
Cefotaxime 1- 2 gm Frozen	Dextrose 50ml	6.2 - 6.8	270 - 330		PIV ML
Cefotetan 1 gm	NS 100 ml	4.5-6.5	~380		PIV ML
Cefotetan 2 gm	NS 100 ml	4.5-6.5	~420		PIV ML
Cefotetan 1- 2 gm Frozen	Dextrose 50ml	5.0 - 6.4	270 - 330		PIV ML
Cefotetan 1 gm	SWI 10 ml	4.5-6.5	400		PIV ML
Cefoxitin 1 - 2 gm	NS 100 ml	4.2-8	319 - 355		PIV ML
Cefoxitin 1 gm	SWI 10 ml	4.2-8	390		PIV ML
Cefoxitin 1- 2 gm Frozen	Dextrose 50ml	5.9 - 6.6	270 - 330		PIV ML
Ceftazidime 1 gm	SWI 10 ml	5.5 - 8	240		PIV ML
Ceftazidime 1 gm Frozen	Dextrose 50ml	5.4 - 6.0	270 - 330		PIV ML
Ceftazidime 1-2 gm	NS 100 ml	5.5 - 8	330		PIV ML
Ceftazidime 2 gm	SWI 20 ml	5.5 - 8	240		PIV ML
Ceftazidime 2 gm Frozen	Dextrose 50ml	5.4 - 6.0	270 - 330		PIV ML
Ceftizoxime 1 gm	SWI 10 ml	5.5-8	350		PIV ML
Ceftizoxime 1 gm	NS 100ml	6 - 8	320		PIV ML
Ceftizoxime 1-2 gm Frozen	Dextrose 50ml	6.7 - 8.0	270 - 330		PIV ML
Ceftriaxone 1 - 2 gm	NS 100 ml	6.6-6.7	350		PIV ML
Ceftriaxone 1 gm	SWI 10 ml	6.6-6.7	423		PIV ML
Ceftriaxone 1-2gm Frozen	Dextrose 50ml	6.2 - 6.9	270 - 330		PIV ML
Cefuroxime 0.75 - 1.5g	NS 100 ml	6-8.5	~300		PIV ML
Cefuroxime 1.5 gm Frozen	Dextrose 50ml	5.2 - 5.8	270 - 330		PIV ML
Cefuroxime 1gm	SWI 10ml	6-8.5	357		PIV ML
Cefuroxime 750mg Frozen	Dextrose 50ml	5.2 - 5.8	270 - 330		PIV ML
Chloramphenicol 1 gm	SWI 10 ml	6.4-7	344		PIV ML

Chloramphenicol 1 gm	NS 100 ml	6.4-7	330		PIV ML
Cidofovir	NS 100ml	7.4	~300		PIV ML
Cimetidine	NS 50ml	3.8 - 6	314		CL
Ciprofloxacin 200 mg	D5W 100 ml	3.3-4.6	285	yes	CL
Ciprofloxacin 400 mg	D5W 200 ml	3.3-4.6	285	yes	CL
Cisplatin	NS 0.05 - 2mg/ml	3.5 - 6	~300		CL
Cladrabine	NS 500 ml	5.7 - 8	~300	yes	PIV ML
Clindamycin 600 mg	NS 100 ml	6.3 (5.5-7)	294		PIV ML
Clindamycin 900 mg	NS 100 ml	6.3 (5.5-7)	294		PIV ML
Cyclophosphamide	NS 250ml	6.9 (3 - 7.5)	~300		PIV ML
Cytarabine	NS @ 100mg/ml	5 (4-6)	~300		PIV ML
Dacarbazine	10mg/ml SWI	3 - 4	109		CL
Dacarbazine	NS 250 ml	3 - 4	~300		CL
Daclizumab 5mg/ml	NS 50 ml	6.9	~300		PIV ML
Dactinomycin	SW 0.5 mg/ml	5.5 - 7	189		PIV ML
Dactinomycin	NS or D5W 50 ml	5.5 - 7	~300		PIV ML
Daunorubicin HCl	NS 15ml	4.5 - 6.5	~300		PIV ML
Daunorubicin HCl	NS 100ml	4.5 - 6.5	~300		PIV ML
Deferoxamine	SW @ 250mg/ml	4 - 6			PIV ML
Dexrazoxane	NS @ 5mg/ml	3.5 - 5.5		yes	CL
Dextrose 10%	NA	4.0 (3 - 6.5)	505		PIV ML
Dextrose 5%	NA	4.0 (3 - 6.5)	252		PIV ML
Dextrose 5% Sod Chl 0.45%	NA	4.0 (3 - 6.5)	406		PIV ML
Dextrose 5% Sod Chl 0.45%+KCl 20mEq	NA	4.0 (3 - 6.5)	447		PIV ML
Dextrose 5% Sod Chl 0.45%+KCl 40mEq	NA	4.0 (3 - 6.5)	487		PIV ML
Dextrose 5% Sod Chl 0.9%	NA	4.0 (3 - 6.5)	560		PIV ML
Dobutamine HCL	NS @ 4mg/ml	3.5 (2.5-5.5)	280	yes	CL
Docetaxel	NS 0.3-0.9mg/ml			yes	CL

Dolasetron	SW @ 20mg/ml	3.2 - 3.8	285	yes	CL
Dopamine HCL	D5W	3.3(2.5-4.5)	277	yes	CL
Doxurobucin	SW 2 mg/ml	2.5 - 4.5	280		CL
Doxurobucin	NS @ 2 mg/ml	3.8 - 6.5			CL
Doxurobucin HCL Liposome	D5W 250ml	6.5			PIV ML
Doxycycline 100mg-200mg	NS @ 1mg/ml	1.8-3.3	310		CL
Enalaprilat	D5W 50ml	6.5 - 7.5			PIV ML
Epirubicin - Ellence	SW 2mg/ml	3.0			CL
Epirubicin - Pharmorubicin	SW 2mg/ml	4 - 5.5			CL
Erythromycin 500 mg	NS 100 ml	7(6.5 - 7.7)	291	yes	CL
Erythromycin 1 gm	NS 250 ml	7(6.5 - 7.7)	290	yes	CL
Etoposide	NS 0.2-0.4 mg/ml	3 - 4		yes	CL
Etoposide phosphate	NS 10mg/ml	3 - 4	~290	yes	CL
Famotidine	NS 50ml	5 - 5.6	290		PIV ML
Floxuridine	NS @ 10mg/ml	4 - 5.5	355		PIV ML
Fluconazole 100 mg	NS 50 ml	4 - 8	315		PIV ML
Fluconazole 200 mg	NS 100 ml	4 - 8	315		PIV ML
Fludarabine	NS 100ml	7.2 - 8.2	352		PIV ML
Fluorouracil	SW @ 50mg/ml	9.2	650		PIV ML
Foscarnet	SW @ 24mg/ml	7.4	271	yes	CL
Fosphenytoin	NS @1.5-25PE/ml	8.6 - 9		yes	CL
Ganciclovir < 500 mg	NS 100 ml	11.0	320	yes	CL
Gatifloxacin	D5W 10mg/ml	3.5 - 5.5		yes	CL
Gemcitabine	NS 40mg/ml	2.7- 3.3			CL
Gentamicin 100 - 250 mg	NS 100 ml	3-5.5	280 - 290		CL
Granisetron	SW 1mg/ml	4.7 - 7.3	290		PIV ML
Hemin for injection	SW @ 7mg/ml	8 - 9.5	~300	yes	PIV ML
Heparin sodium	NS 1000 units/ml	5 - 8	283-384		PIV ML
Heparin sodium (Premix D5)	25,000 u /250 ml	5.5 (5 - 6)	298		PIV ML
Heparin sodium (Premix NS)	25,000 u /250 /ml	7 (6 - 8)	322		PIV ML

Hydrocortisone	SW @ 50mg/ml	7 - 8	360		PIV ML
Hydromorphone	SW 10mg/ml	4 - 5.5	~333		PIV ML
Idarubicin	1 mg/ml	3.5			CL
Ifosfamide	NS@0.6-20mg/ml	6			PIV ML
Imiglucerase	NS 20 units/ml	6.1			PIV ML
Imipenem/cilastatin	NS @ 5mg/ml	6.5-7.5	310	yes	CL
Infliximab	NS@0.4-4mg/ml	7.2	~300		PIV ML
Intravenous immunoglobulins	3% to 12%	4 - 7.2	~300		PIV ML
Irinotecan	D5W @ 0.12-1.1mg/ml	3 -3.8			CL
Iron Dextran Intravenous	NS @ 50mg/ml	5.2 - 6.5	2000	yes	CL
Iron Dextran Intravenous	NS @ 0.1mg/ml	5.2 - 6.5		yes	CL
Itraconazole	NS 3.3mg/ml	4.8		yes	CL
Leucovorin	SW 10mg/ml	8.1	274		PIV ML
Levofloxacin 250 mg	D5W 50 ml	3.8-5.8	~250	yes	CL
Levofloxacin 500 mg	D5W 100 ml	3.8-5.8	~250	yes	CL
Linezolid	Dextrose 2mg/ml	4.8	290		PIV ML
Meperidine	SW 50mg/ml	3.5 - 6	302		PIV ML
Meropenem	NS @ 5mg/ml	7.3 - 8.3	~300	yes	CL
Methicillin 1 gm	SWI 10 ml	7.6 (6-8.5)	510	yes	CL
Methicillin 2- 3 gm	100 ml NS	7.6 (6-8.5)	371 - 415	yes	CL
Methotrexate	SW @ 25 mg/ml	8.5	~300		PIV ML
Methylprednisolone 500 mg	D5W100 ml	7 - 8	301		PIV ML
Methylprednisolone 1 gm	D5W 250ml	7 - 8	319		PIV ML
Metoclopramide	SW @ 5mg/ml	4.5 - 6.5	280		PIV ML
Metoclopramide	NS @ 1.25mg/ml	4.4	285		PIV ML
Metronidazole	NS @ 5mg/ml	5 - 7	310		PIV ML
Milrinone	D5W 200mcg/ml	3.2 - 4			CL
Minocycline	NS@0.1-0.2mg/ml	2 - 2.8	~300		CL
Mitomycin	SW @ 0.5mg/ml	6 - 8	9		PIV ML
Mitoxantrone	NS @ 0.2mg/ml	3 - 4.5	~300	yes	CL

Morphine Sulfate	NS 10mg/ml	4 (2.5-6.0)	295	yes	PIV ML
Nafcillin 1 - 3 gm	NS 100 ml	6-8.5	361 - 398	yes	PIV ML
Nafcillin 1-2 gm Frozen	Dextrose 50ml	6.7 - 7.2	276 - 324	yes	PIV ML
Nicardipine	NS @ 0.1mg/ml	3.5	~300		CL
Octreotide	SW @0.5mg/ml	3.9 - 4.5	279		CL
Ofloxacin	D5W @ 4mg/ml	3.8 - 5.8	252		CL
Ondansetron	D5W 32mg/50ml	3.3 - 4	270		CL
Oxacillin 1 gm	SWI 10 ml	6-8.5	398	yes	CL
Oxacillin 1 - 2 gm	NS 100 ml	6-8.5	321 - 356	yes	CL
Oxacillin 1- 2 gm Frozen	Dextrose 50ml	6.8 - 7.2	270 - 324	yes	CL
Paclitaxel	D5W @ 0.3-1.2 mg/ml	4.4 - 6.5			CL
Pamidronate	NS @ 0.09mg/ml	6 - 7.4	~300	yes	CL
Pantoprazole 40mg	NS 100ml	9.0-10.0	295		CL
Parenteral Nutrition	Amino acids-dextrose-fat	5.5	>600	yes	CL
Parenteral Nutrition	Amino acids-dextrose	5.3 - 6.3	>800	yes	CL
Penicillin GK 1-3 MU Frozen	Dextrose 50ml	6.8 - 7.2	276 - 324		PIV ML
Penicillin GK or Na	NS @ 50units/ml	7 (6-8.5)	420		PIV ML
Pentamidine IVPB	D5W @ < 3mg/ml	4 - 4.4	455	yes	CL
Phenytoin	NS @ 5mg/ml	12	312	yes	CL
Piperacillin	SWI @ 163mg/ml	5.5-7.5	439		PIV ML
Piperacillin	NS @ 40mg/ml	5.5-7.5	404		PIV ML
Piperacillin/tazobactam 2.25-4.5gm Frozn	Dextrose 50ml	6.2 - 6.7	270 - 330		PIV ML
Piperacillin/tazobactam 3.375 gm	NS 100 ml	5.1-5.4	445		PIV ML
Plicamycin	NS 1000ml	7.0	~300		PIV ML
Potassium chloride premix	0.4 mEq/ml	5.0	800	yes	CL
Potassium chloride premix	0.3 mEq/ml	5.0	600	yes	CL
Potassium chloride premix	0.2 mEq/ml	5.0	400		PIV ML
Potassium chloride premix	0.1 mEq/ml	5.0	200		PIV ML
Quinupristin-dalfopristin	D5W @ 2mg/ml	4.5 - 5		yes	CL

Ranitidine 50mg	NS 50ml	6.7 - 7.3	302		PIV ML
Rifampin < 600 mg	D5W 100 ml	7.8-8.8			PIV ML
Rituximab	NS or D5W 1 - 4 mg/ml	6.5			PIV ML
Sargramostim	NS @ 10mcg/ml	7.1 - 7.7	~300		PIV ML
Sodium Chloride 0.45%	NA	5.0 (4.5 – 7.0)	154		PIV ML
Sodium Chloride 0.9%	NA	5.0 (4.5 – 7.0)	308		PIV ML
Streptozosin	D5W 100mg/ml	3.5 - 4.5			PIV ML
Sulfamethoxazole/Trimethoprim 80&400/5ml	D5W 100ml	10	541	yes	CL
Teniposide	NS @ 0.4mg/ml	5 (4 - 6.5)			PIV ML
Thiotepa	NS @ 1mg/ml	5.5 - 7.5	269		PIV ML
Ticarcillin 3 gm	NS 100 ml	6 - 8	442		PIV ML
Ticarcillin/clavulanate 3.1gm	SW @ 86mg/ml	6 - 8	573		PIV ML
Ticarcillin/clavulanate 3.1gm	NS 100 ml	5.5-7.5	450		PIV ML
Ticarcillin/clavulanate 3.1gm Frozen	Dextrose 50ml	6.8 - 7.2	265 - 305		PIV ML
Tobramycin 100 - 250 mg	NS 100 ml	3-6.5	290		CL
Topotecan	D5W 50ml	2.5 - 3.5			CL
Trastuzumab	NS 250 ml	6	~300		PIV ML
Trimetrexate	D5W@ 0.25-2mg/ml	3.5 - 5.5			CL
Vancomycin 1.5 gm	NS 250 ml	2.5-4.5	~300		CL
Vancomycin 1-1.25gm	NS 250 ml	2.5-4.5	290		CL
Vancomycin 500mg	NS 100 ml	2.5-4.5	291		CL
Vancomycin 1 gm Frozen	Dextrose 200ml	3.5 - 4.3	266 - 302		CL
Vancomycin 500mg Frozen	Dextrose 100ml	3.5 - 4.3	266 - 302		CL
Vinblastine	NS 1mg/ml	3.5 - 5	278		CL
Vincristine	SW 1mg/ml	3.5 - 5.5	610		CL
Vindesine	NS 1mg/ml	4.2 - 4.5			PIV ML
Vinorelbine	D5W@1.5-3mg/ml	3.5		yes	CL

Zidovudine	D5W @ 4mg/ml	5.5	~260	yes	CL
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