

CHEMOTHERAPY ADMIXTURE CHART

<i>Drug</i>	<i>Diluent</i>	<i>Resulting Concentration</i>	<i>Final Product Stability</i>	<i>Other Comments</i>
Ado-Trastuzumab (Kadcyla)	100 mg vial = 5 ml SW 160 mg vial = 8 ml SW	20 mg/ ml	24 hr refrigerate	Do NOT use dextrose. Do NOT shake. Dilute in NS 250 ml bag. Admin with 0.2 or 0.22 micron in line PES filter. (product refrigerated)
Amifostine (Ethyol)	500 mg vial = 9.7 ml NS	50 mg/ ml	5 hr room temp 24 hr refrigerate	Use only NS. Further dilute to concentration 5 to 40 mg per ml
Arsenic Trioxide (Trisenox)	N/A	2 mg/ ml	24 hr room temp 48 hr refrigerate	Dilute in 100-250 ml D5W or NS. Waste goes in 8 gallon black container (Lawson # 48427) Must be labeled arsenic P waste.
Azacitidine (Vidaza)	100 mg vial IV= 10 ml SW SubQ= 4 ml SW	10 mg/ ml (IV) 25 mg/ ml (SubQ)	Admin must be complete within 1 hour dilution (Room temp) See PI for additional SQ stability	Dilute with 50-100 ml NS for IV use. Use 2 syringes if subq dose is greater than 4 ml. Shake vigorously or roll vial
Bendamustine (Treanda)	25 mg vial = 5 ml SW 100 mg vial = 20 ml SW	5 mg/ ml	24 hr refrigerate	Further dilute in 500 ml NS. Final conc 0.2 to 0.6 mg/ml. Do NOT mix liquid and powder forms. Only the lyophilized powder form of Treanda can be used with Onguard system(CSTD). Bendeka is different from Treanda in ALL aspects. Must see PI for storage/prep/admin time.
Bleomycin (Blenoxane)	15 units = 5 ml NS	3 units/ ml	24 hr room temp in NS	Do NOT use dextrose. SQ test dose prior to admin. See PI for dilution. Further dilution not necessary (product refrigerated)

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Bortezomib (Velcade)	3.5 mg vial IV= 3.5 ml NS Subq= 1.4 ml NS	1 mg/ ml (IV) 2.5 mg/ ml (subq)	8 hr room temp	Contraindicated for Intrathecal use. Difficult to get all drug out if use Onguard
Brentuximab Vedotin (Adcetris)	50 mg = 10.5 ml SW	5 mg/ ml	24 hr refrigerate	Do NOT shake Further dilute in at least 100 ml to final conc 0.4 to 1.8 mg per ml. IV only. CI with bleomycin. (product refrigerated)
Cabazitaxel (Jevtana)	60 mg vial Use entire contents of supplied diluent 13% ethanol in water for 1 st dilution	10 mg/ ml	8 hr room temp (includes 1 hr infusion time) 24 hr refrigerate (includes 1 hr infusion time)	Drug & diluent vials contain overfill. Do NOT shake. Must be further diluted in at least 250 ml for final conc 0.10-0.26 mg per ml. Use PVC-free bag (Braun bag) Admin with 0.2 or 0.22 micron in line filter . Discard if crystallization or precip
Carboplatin	50 mg =5ml SW 150 mg = 15 ml SW 450mg = 45 ml SW or N/A	10 mg/ ml	8 hr room temp	Dose based on AUC. Can be further diluted to concentrations as low as 0.5 mg to 4 mg per ml. See Trissels for other concentrations
Carfilzomib (Kyprolis)	10 mg= 5 ml SW 30 mg=15 ml SW 60 mg=29 ml SW	2 mg/ ml	4 hr room temp (D5W) 24 hr refrigerate (D5W)	Do NOT shake. Gently swirl. Use 21 gauge or larger needle to reconstitute (No on-guard or CSTD). May further dilute in D5W 50-100 ml. NO IVP. (product refrigerated)

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Carmustine (BiCNU)	100 mg vial 1 st use supplied 3 ml of dehydrated alcohol 2 nd add 27 ml SW	3.3 mg/ ml	8 hr room temp (0.2 mg/ml) 24 hr refrigerate	Must be further diluted. Use glass container or PVC-free bag (Braun bag) . Protect from light. (product refrigerated)
Cidofovir (Vistide)	N/A	75 mg/ ml	24 hr refrigerate	Must be diluted in 100 ml NS. Allow to come to room temp prior to administration.
Cisplatin	N/A	1 mg/ ml	24 hr room temp	Protect from light Do not refrigerate Use immediately if mixed with mannitol. Must contain some NS
Cladribine (Leustatin)	N/A	1 mg/ ml	24 hr room temp for a single dose in 500ml NS 24 infusion bag may be stored refrigerate upto 8 hours prior to administration	Do NOT use Dextrose Warm naturally to RT. Shake well. Use a 0.22 micron syringe filter prior to adding to infusion bag (product refrigerated)
Clofarabine (Clolar)	N/A	1 mg/ ml	24 hr room temp	Using a 0.2 micron syringe filter add dose to D5 or NS for a final concentration between 0.15 to 0.4 mg per ml
Cyclophosphamide (Cytoxan)	N/A	200 mg/ ml	24 hr room temp 48 hr refrigerate (797 guidelines)	Minimum conc 2 mg per ml (product refrigerated)

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Cytarabine (ARA-C)	100 mg = 5 ml SW 500 mg = 10 ml SW Or N/A	20 mg/ ml 50 mg/ ml 20 mg/ ml and 100 mg/ ml	30-48 hr room temp (due to 797 guidelines)	Intrathecal- reconstitute with NS preservative free
Dacarbazine (DTIC-Dome)	100 mg = 9.9 ml SW 200mg = 19.7 ml SW	10 mg/ ml	8 hr room temp 24 hr refrigerate	Discard if soln is pink (product refrigerated)
DAUNOrubicin (Cerubidine)	N/A	5 mg/ ml	24 hr room temp	
Decitabine (Dacogen)	50 mg = 10 ml SW	5 mg/ ml	4 hr refrigerate	Must be prepared using refrigerated bag. Further dilute to 0.1 to 1 mg per ml
Degarelix (Firmagon)	80 mg= 4.2ml SW (supplied in kit) 120 mg= 3 ml SW (supplied in kit)	20 mg/ ml 40 mg/ ml	Must be used within 1 hour	Do NOT shake. Use ALL materials in supplied kit per included instructions. SUBQ use only (orange cap) and send needle(s) from kit with final product. Place yellow caution antineoplastic sticker on syringe
Docetaxel (Taxotere)	N/A	10 mg/ ml (generic 1 vial formulation)	4 hr room temp. Must be used (complete) within 4 hours	Final concentration 0.3 to 0.74 mg/ml. Use PVC free bag (Braun bag) . Use 21 gauge needle when preparing to prevent coring. Available in several concentrations that are NOT interchangeable in a single dose

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DOXOrubicin (Adriamycin)	N/A	2 mg/ ml	48 hr refrigerate	May be put in syringe or bag Send syringes to infusion center Look alike sound alike (product refrigerated)
DOXOrubicin Liposomal (Doxil)	N/A	2 mg/ ml	24 hr refrigerate (D5W)	Less than or equal to 90 mg goes in 250 ml D5W Greater than 90 mg goes in 500 ml D5W Look alike sound alike (product refrigerated)
DOXOrubicin/ Etoposide/ Vincristine	N/A	See individual drug	48 hours refrigerate Concentration dependent	Must use PVC-Free Bag (Braun bag) Use high flow CADD tubing if CADD pump being used (infusion center) Depending on concentration stability may be extended. See Trissells for more information
Enfortumab Vedotin-ejfv (Padcev)	20 mg=2.3 ml SW 30 mg= 3.3 ml SW	10 mg/ ml	8 hr refrigerate	Do NOT shake. Gently swirl. Do not expose to direct sunlight. Dilute to concentration 0.3-4 mg per ml. (product refrigerated)
Epirubicin (Ellence)	N/A	2 mg/ ml	24 hr room temp undiluted	Further dilution not required. IV infusion only. Compatible with NS or D5W. Recommended start dose 100 to 120 mg per m ² Look alike sound alike (product refrigerated)

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Eribulin Mesylate (Halaven)	N/A	0.5 mg/ ml	4 hr room temp 24 hr refrigerate	Usual dose 1.4 mg per m ² . Admin undiluted or may dilute in 100 ml NS only Look alike sound alike
Etoposide (Vepesid)	N/A	20 mg/ ml	24 hr room temp (0.4 mg/ml)	Max 0.4 mg/ml Use at least 250 ml NS or D5W. Must use PVC-Free Bag (Braun bag). See Handbook on Injectable Drugs (Trissels) for stability at other concentrations
Fam-Trastuzumab Deruxtecantxki (Enhertu)	100 mg = 5 ml SW	20 mg/ ml	4 hrs room temp (including prep and infusion time) 24 hr refrigerate	Do NOT use NS. Do NOT shake. Gently swirl. Dilute in 100 ml D5W ONLY, Protect from light. Admin with 0.2 or 0.22 micron in line PES filter. Bring to room temp prior to admin (product refrigerated)
Fludarabine (Fludara)	N/A	25 mg/ ml	48 hr refrigerate	Dilute in NS or D5 (product refrigerated)
Fluorouracil (5-FU)	N/A	50 mg/ ml	7 days room temp (However per current 797 guidelines regarding BUD, IV must commence within 48 hrs of preparation therefore use clinical judgment and review current guidelines prior to assigning expiration date) 48 hr room temp if straight drug (undiluted)	May be given undiluted For Infusion Center: Remove air from bag Prime with CADD admin set for pump (Lawson #15784). NO pigtail Rate minimum 2 ml/hr.

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Ganciclovir	500 mg = 10 ml SW	50 mg/ ml	24 hr refrigerate if diluted w/ SW and prepared in NS bag	Cytotoxic. Final concentration no more than 10 mg per ml
Gemcitabine (Gemzar)	N/A	38 mg/ ml	24 hr room temp	Do not refrigerate. Must be further diluted with NS to concentration as low as 0.1 mg per ml to 40 mg per ml (product refrigerated)
Idarubicin (Idamycin)	N/A	1 mg/ ml	48 hr room temp/refrigerate (due to 797 guidelines)	Protect from light for periods greater than 6 hours. (product refrigerated)
Ifosfamide (Ifex)	1 gm = 20 ml SW 3 gm= 60 ml SW	50 mg/ ml	24 hr refrigerate	Administer with Mesna. Final concentration 0.6 to 20 mg per ml
Irinotecan (Camptosar)	N/A	20 mg/ ml	12 hr room temp 24 hr refrigerate (D5W)	D5W 250-500ml preferred. Final concentration 0.12 to 2.8 mg per ml. Do not refrigerate if mixed with NS. Protect from light
Irinotecan Liposomal (Onivyde)	N/A	4.3 mg/ ml	4 hr room temp 24 hr refrigerate	Dilute in 500 ml D5W or NS. Gently invert to mix. Protect from light. Must be room temp prior to administration. Look alike sound alike (product refrigerated)
Ixabepilone (Ixempra)	Use diluent provided 15 mg vial= 8 ml 45 mg vial= 23.5 ml	2 mg/ ml	6 hr room temp (includes administration time)	Allow product to sit at room temp 30 minutes prior to reconstituting. Must use PVC-Free Bag (Braun bag) and 0.2 to 1.2 micron in line filter-PVC free. Dilute in LR or NS buffered with 2 meq of sodium bicarb. Final concentration between 0.2 and 0.6 mg/ml (product refrigerated)

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Leuprolide (Eligard)	Syringe A contains ATRIGEL Delivery System Syringe B contains the drug	N/A	30 minutes	Must reach room temp prior to mixing. Follow detailed instructions included in package. Contents MUST be pushed back and forth between BOTH syringes to mix suspension. Shaking will NOT mix the suspension (product refrigerated)
Lurbinectedin (Zepzelca)	4 mg = 8 ml SW	0.5 mg/ ml	24 hrs room temp or refrigerate (includes infusion time)	Dilute in at least 100 ml for admin thru central line or at least 250 ml for admin thru peripheral line (product refrigerated)
Melphalan (Alkeran)	Use diluent provided	5 mg/ ml	Admin must be complete within 1 hour reconstitution (room temp) Alkeran formulation	Rapidly inject diluent and shake vigorously until soln is clear. Further dilute in NS to concentration 0.1 to 0.45 mg per ml. Available in different formulations. Do NOT MIX or combine different forms as prep, indication and storage differ
Methotrexate	N/A	25 mg/ ml	24 hr room temp Use immediately if preservative free (intrathecal) or undiluted (within 8 hours per policy)	Less than 100 mg- straight drug. Use 10ml syringe and on guard adaptor for IVP. For SubQ/IM use orange cap. Max syringe volume $\frac{3}{4}$ full. See Handbook on Injectable Drugs (Trissels) for more information on stability

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Mitomycin (Mutamycin)	5 mg = 10 ml SW 20 mg = 40 ml SW	0.5 mg/ ml	12 hr room temp in NS (20-40mcg per ml)	Dilute in NS to 20-40 mcg/ml. <u>Eye surgery syringes:</u> stable for 48 hr room temp (per 797).--> dilute 5 mg with 12.5 ml SW to make 0.4 mg per ml syringes. <u>Bladder irrigation:</u> 20-40 mg in 20-40 ml of NS or SW → 1 mg per ml- 60 ml syringe
MitoXantrone (Novantrone)	N/A	2 mg/ ml	48 hr room temp	Must be diluted in at least 50 ml NS (or D5W). IV only
Nelarabine (Arranon)	N/A	5 mg/ ml	8 hr room temp	Do not dilute prior to administration. Transfer dose to empty bag or glass container
Oxaliplatin (Eloxatin)	N/A	5 mg/ ml	6 hr room temp 24 hr refrigerate	Must be further diluted with 250-500 ml D5W only to concentration 0.2-0.7 mg per ml
Paclitaxal Protein Bound (Abraxane)	100 mg = 20 ml NS	5 mg/ ml	4 hr room temp (ambient lighting)	Inject NS slowly to avoid foaming. Allow to sit for 5 min. Place in empty bag. DO NOT FILTER.
Paclitaxal (Taxol)	N/A	6 mg/ ml	27 hr room temp	Must be diluted. Must use PVC-Free Bag (Braun bag) and Low Sorbing Set (Use Taxol tubing). Final concentration 0.3 to 1.2 mg per ml
Pemetrexed (Alimta)	100 mg= 4.2 ml NS-PF 500 mg = 20 ml NS-PF	25 mg/ ml	24 hr refrigerate	Gently swirl reconstituted product. Total volume 100 ml in NS
Pertuzumab (Perjeta)	N/A	30 mg/ ml	24 hr refrigerate	Dilute in 250 ml NS only. Do NOT shake (product refrigerated)

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Polatuzumab-dedotin-piiq (Polivy)	30 mg = 1.8 ml SW 140 mg = 7.2 ml SW	20 mg/ ml	4 hrs room temp in NS or 6 hrs in D5W 36 hrs refrigerate	DO NOT shake Dilute to 0.72-2.7 mg/ml in minimum 50 ml NS or D5W Admin with low protein binding in-line or add on filter (0.2 or 0.22 micron) (product refrigerated)
Pralatrexate (Folotyn)	N/A	20 mg/ ml	Use immediately	Do NOT dilute. Draw up in a syringe. Store in original carton to protect from light (product refrigerated)
Romidepsin (Istodax)	Use diluent provided 10 mg vial = 2.2 ml	5 mg/ ml	24 hr room temp	Further dilute in 500 ml NS. Drug & diluent contain overfill in order to get full dose. However due to the viscosity you may only get a total of 1.6-1.8 ml of drug from a vial. <u>it may be best to NOT use onguard</u> to prevent further drug loss.
Sacituzumab Govitecan-hziy (Trodelvy)	180 mg vial = 20 ml NS	10 mg/ ml	4 hr refrigerate plus 4 hours room temp after refrigeration. (Includes infusion time)	IV only. Allow to warm to room temp. Do NOT shake. Protect from light Final concentration 1.1 to 3.4 mg per ml. Total volume should not exceed 500 ml NS (product refrigerated)
Topotecan (Hycamtin)	4 mg = 4 ml SW N/A	1 mg/ ml	4 hr room temp 12 hr refrigerate (generic soln) 24 hr room temp (brand-powder)	Further dilute in 50 to 100 ml of NS or D5W. final concentration 0.01 to 0.5 mg per ml (soln stored in refrigerator, powder at room temp)

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Vinblastine (Velban)	N/A	1 mg/ ml	24 hr room temp	FATAL IF GIVEN INTRATHECALLY. FOR IV USE ONLY. Best practice to dispense in minibag (25-50 ml) (product refrigerated)
Vincristine (Oncovin)(Vincasar)	N/A	1 mg/ ml	8 hr room temp	FATAL IF GIVEN INTRATHECALLY. FOR IV USE ONLY. Dilute with 50 ml NS. <u>Total dose never to exceed 2 mg</u> (product refrigerated)
Vinorelbine (Navelbine)	N/A	10 mg/ ml	24 hr room temp	FATAL IF GIVEN INTRATHECALLY. FOR IV USE ONLY. Further dilute to concentration 0.5 to 2 mg/ml in a mini bag (product refrigerated)

Developed 5/09 revised 10/10, 11/12, 10/15, 11/17, 5/19,7/21,1/22.
NS= 0.9% Normal Saline. SW= Sterile Water, D5W= Dextrose

It is the responsibility of the technician and pharmacist to ensure the most up to date information is used in the preparation and assigning of the final product stability. This may require consulting the most current package insert and following the most current USP guidelines.

References:

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