Chemotherapy and Biologic Response Modifiers

Preparation and Stability Guide

Generic name (brand)/storage condition/special warning	Reconstitution and/or RTU information	Reconstitution and/or RTU Concentration	Standard diluent	Final bag/syringe concentration	Standard infusion duration/rate	Stability		Special precautions/filter requirement)	Ref
						RT	REF		
Bevacizumab **(Avastin)** Sound-alike, look-alike warning: do not confuse with bevacizumab-awwb (Mvasi) **REF**	RTU 100 mg/4 mL vial 400 mg/16 mL vial	25 mg/mL	IV: NS 100 mL (do not administer or mix with D5W) Intravitreal: straight drug	1.4-16.5 mg/mL	Flat rate: 30 min Or first cycle: 90 minutes Second cycle: 60 minutes (if the initial infusion is well tolerated) Third and subsequent: 30 minutes (if the 60-minute infusion is well tolerated)	IV: No data Intravitreal: No data	IV: 8 hr. Intravitreal: 3 months	Do not administer IV push Temporarily withhold bevacizumab for 4 weeks prior to elective surgery and for at least 4 weeks (and until the surgical incision is fully healed) after surgery Do not mix or administer with dextrose Do not shake Protect from light during storage	IV: Lexicomp Intra-vitreal: Paul M et al
Mitomycin **(Mutamycin)** **RT**	5 mg vial: SWFI 10mL 20 mg vial: SWFI 40 mL 40 mg vial: SWFI 80mL Intravesical: 40 mg in 20 mL NS or SWFI (40 mg in 40 mL NS or SWFI has been used) Intraocular: see appendix A	IV: 0.5mg/mL Intravesical: 2 mg/mL (1 mg/mL has been used) Intraocular: 0.2mg/mL (0.02%) 0.4 mg/mL (0.04%)	IV: NS 50 mL (may also dilute in sodium lactate) Intravesical: mitomycin 40 mg in 20 mL NS/SWFI 40 mg in 40 mL NS/SWFI has been used Intraocular conc.: see appendix A	IV: 0.02 - 0.04 mg/mL Intravesical: 2 or 1 mg/mL Intraocular: 0.2mg/mL (0.02%) and 0.4 mg/mL (0.04%)	IV: 15 minutes Intravesical: 1-2 hours	IV: 12 hr. (NS) or 24 hr. (sodium lactate) Intravesical: Immediate use Intraocular: Immediate use	IV: No data Intravesical: no data Intraocular: no data	Vesicant Shake to dissolve Protect from light Vesicant	Lexicomp Au J et al
Pegaspargase **(Oncospar)** *Asparaginase- no longer used in HHS* **REF**	RTU 3750 units vial (750 units/mL, 5 mL)	750 units/mL	NS 100 mL		2 hours	48 hr.	48 hr.	Do not administer IV push Do not filter Protect from light IM: max volume per syringe = 2 mL Do not give as IV Push	Ikesue H et al

Key: **BSWFI** = bacteriostatic water for injection**; CADD**= continuous ambulatory drug device; **CLL**= chronic lymphocytic leukemia; **DEHP**= diethylhexyl phthalate; **D5W** = Dextrose 5% in water; **IM**= intramuscular; **IT**= intrathecal; **IV**= intravenously; **N/A= not applicable**; **NHL= non Hodgkin lymphoma; NS** = 0.9% sodium chloride; **PF** = preservative free; **PPT** = precipitate; **Pt(s)** = patient(s); **PVC**= polyvinyl chloride; **REF** = refrigerate; **RT** = room temperature; **RTU** = ready to use; **SWFI** = sterile water for injection,; **SQ**= subcutaneously; **REMS**= risk evaluation mitigation strategy

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References:

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Myers AL, et al. Stability study of carboplatin infusion solutions in 0.9% sodium chloride in polyvinyl chloride bags. *J Onc Pharm Pract*. 2016; 22(1):31-6.

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Appendix A

To prepare a 0.2 mg/mL (0.02%) or 0.4 mg/mL (0.04%) mitomycin eye drop:

(1) Reconstitute 20 mg vial of mitomycin with 40 mL SWI to give a concentration of 0.5 mg/mL
(2) For 0.2 mg/mL (0.02%): transfer 6 mL (3 mg) to a sterile 15 mL eye dropper bottle
Then add 9 mL SWI to the eye dropper bottle to give final conc. of 0.2 mg/mL (0.02%)
(3) For 0.4 mg/mL (0.04%): transfer 12 mL (6 mg) to a sterile 15 mL bottle
Then add 3 mL SWI to the eye dropper bottle to give final conc. of 0.4 mg/mL (0.02%)

Appendix B

Compounding of TACE with doxorubicin liquid formulation

Dose of doxorubicin	# of doxorubicin liquid vial (2 mg/mL) needed	# of LC (or DC) beads (2 mL each vial)	Loading time required for doxorubicin liquid with LC beads 100-300 µm
50 mg	1	1	5 hours
75 mg	2	1	7 hours
100 mg	2	2	No data (presumed > 10 hours)
150 mg	3	2	No data (presumed > 10 hours)

Disclaimer: Follow most recent Houston Methodist guideline whenever there is discordance

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