

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Leucovorin 50 mg/5 mL 200 mg/20 mL 1000 mg/100 mL (GMP) (F)(PFL) no preservative ¹	N/A	10 mg/mL ¹	50 mg: discard unused portion ^{1,2} 200 mg, 1000 mg: 8 h F ^{1,2}	syringe	8 h RT ^{1,2}	
				0.05-10 mg/mL NS, D5W, Ringer's, LR, D10W, D5-NS ^{1,2} 50-250 mL†	NS , D5W, LR, Ringer's: 24 h RT ¹ D10W, D5-NS: 8 h RT ¹	
Leucovorin 50 mg/5 mL 500 mg/50 mL (Pfizer/Hospira) (F)(PFL) no preservative ³	N/A	10 mg/mL ³	8 h ³	syringe	8 h RT ³	
				0.05–10 mg/mL NS , D5W, LR, Ringer's, D10W, D5NS ³ 50-250 mL†	NS , D5W, LR, Ringer's: 24 h RT ³ D10W, D5NS: 8 h RT ³	

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Leucovorin 50 mg/5 mL 500 mg/50 mL (Teva) (F)(PFL) no preservative ⁴	N/A	10 mg/mL ⁵	discard unused portion ⁵	syringe	8 h ^{6,7}	
				0.4 - 4.8 mg/mL NS , D5W ⁸ 50-250 mL†	72 h F, RT ⁸	
				0.06 - 0.4 mg/mL NS , D5W ⁴ 50-250 mL†	NS: 24 h RT ⁴ D5W: 12 h RT ⁴	
				0.06 - 1 mg/mL Ringer's, Lactated Ringer's, D10W, D10-NS ⁴	Ringer's, LR: 24 h RT ⁴ D10W: 12 h RT ⁴ D10NS: 6 h RT ⁴	

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Lurbinectedin 4 mg (Jazz) (F) no preservative ⁹	8 mL SWI ⁹	0.5 mg/mL ⁹	12 h F, RT ^{9,10}	100-250 mL NS, D5W ⁹	complete administration within 24 h F, RT ⁹	- larger infusion volume is recommended for peripheral line ⁹ - do not use nylon membrane filters for administration if diluted in NS ⁹ ; BD Alaris pumps and syringe sets have polyethersulfone membrane in-line filters ¹¹
Lurbinectedin 4 mg (Pharma Mar) (F) no preservative ¹² (SAP)	8 mL SWI ¹²	0.5 mg/mL ¹²	12 h F, RT ^{10,12}	100–250 mL NS, D5W ¹²	30 h F, RT ¹²	- larger infusion volume is recommended for peripheral line ¹²

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Melphalan 50 mg (Marcan) (RT)(PFL) no preservative ¹³	10 mL supplied diluent ¹³ rapidly add diluent and immediately shake vigorously to dissolve ¹³ record time of reconstitution	5 mg/mL ¹³	2 h RT ¹³ do NOT refrigerate¹³	0.1-0.45 mg/mL NS only¹³	complete administration within 50 min RT from time of initial reconstitution ¹³	- will precipitate if stored in fridge ¹³
Melphalan 50 mg (Taro) (RT)(PFL) no preservative ¹⁴	10 mL supplied diluent ¹⁴ rapidly add diluent and immediately shake vigorously to dissolve ¹⁴ record time of reconstitution	5 mg/mL ¹⁴	2 h RT ¹⁴ do NOT refrigerate¹⁴	0.1-0.45 mg/mL NS only¹⁴	complete administration within 50 min RT from time of initial reconstitution ¹⁴	- will precipitate if stored in fridge ¹⁴

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Mesna 400 mg/4 mL 1000 mg/10 mL (Baxter) (RT) no preservative ¹⁵	N/A	100 mg/mL ¹⁵ (use filter needle to withdraw from ampoule)	discard unused portion ¹⁵	≥1 mg/mL NS , D5W, D5½-NS, LR ¹⁵⁻¹⁷ 100 mL†	24 h RT ¹⁵	
Mesna 1000 mg/10 mL 5000 mg/50 mL (Baxter) (RT) preservative ¹⁵	N/A	100 mg/mL ¹⁵	8 d RT ¹⁵ (vial may be punctured up to 4 times) ¹⁵	≥1 mg/mL NS , D5W, D5½-NS, LR ¹⁵⁻¹⁷ 100 mL†	24 h RT ¹⁵	
Mesna 1000 mg/10 mL (Fresenius Kabi) (RT) preservative ¹⁸	N/A	100 mg/mL ¹⁸	14 d F , RT ^{18,19}	≥1 mg/mL NS , D5W ²⁰ 100 mL†	48 h F, 24 h RT ¹⁸	

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Methotrexate 50 mg/2 mL 500 mg/20 mL 1 g/40 mL (Accord) (RT)(PFL) no preservative ²¹	N/A	25 mg/mL ²¹	50mg: discard unused portion ²¹ 500 mg, 1 g: 8 h RT ²¹	syringe	use within 8 h RT of initial puncture ²¹	- for high-dose regimens (e.g., 1-12 g/m ² as a single dose) ²²⁻²⁶ : use preservative- free methotrexate ²¹ - do not use for IT injection
				0.4–2 mg/mL NS , D5W ²¹ 50-500 mL†	use within 24 h RT of initial puncture ²¹ **(PFL)	
				high dose (e.g., 1-12 g/m ² as a single dose) ²²⁻²⁶ : 1000 mL * NS	use within 24 h RT of initial puncture ²¹ **(PFL)	
Methotrexate IT Injection Only preservative free methotrexate may be administered by the intrathecal route ²⁷ 50 mg/2 mL (Accord) (RT)(PFL) no preservative ²¹	N/A	25 mg/mL ²¹	discard unused portion ²¹	qs to 6 mL with preservative free NS ^{28,29}	use within 4 h of initial puncture ²	- auxiliary info ² - label to include route in full (i.e., INTRATHECAL injection) attached to both syringe and outer Ziploc bag ³⁰

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Methotrexate 50 mg/2 mL 500 mg/20 mL (Accord) (RT)(PFL) preservative ²¹	N/A	25 mg/mL ²¹	28 d F ^{10,21}	syringe	10 d F ^{10,21}	- contains benzyl alcohol ²¹ - do NOT use for high-dose regimens (e.g., 1-12 g/m ² as a single dose) ²¹ - do NOT use for IT injection ²¹
				0.4–2 mg/mL NS , D5W ²¹ 50-500 mL†	24 h RT ²¹	
Methotrexate 50 mg/ mL 500 mg/20 mL 1 g/40 mL 2.5 g/100 mL (Pfizer/Hospira) (RT)(PFL) no preservative ³¹	N/A	25 mg/mL ³¹	50mg: discard unused portion ³¹ 500 mg, 1 g, or 2.5 g: 8 h RT ³¹	syringe	use within 8 h RT of initial puncture ³¹	- for high-dose regimens (e.g., 1-12 g/m ² as a single dose) ²²⁻²⁶ : use preservative-free methotrexate ³¹ - do not use for IT injection
				0.4–2 mg/mL NS , D5W ³¹ 50-500 mL†	use within 24 h RT of initial puncture ³¹ **(PFL)	
				high dose (e.g., 1-12 g/m ² as a single dose) ²²⁻²⁶ : 1000 mL* NS	use within 24 h RT of initial puncture ³¹ **(PFL)	

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Methotrexate IT Injection Only preservative free methotrexate may be administered by the intrathecal route ²⁷ 50 mg/2 mL (Pfizer/Hospira) (RT)(PFL) no preservative ³¹	N/A	25 mg/mL ³¹	discard unused portion ³¹	qs to 6 mL with preservative free NS ^{28,29}	use within 4 h of initial puncture ¹⁹	- auxiliary info ² : “IT” - label to include route in full (i.e., INTRATHECAL injection) attached to both syringe and outer Ziploc bag ³⁰
Methotrexate 50 mg/2 mL 500 mg/20 mL (Pfizer/Hospira) (RT)(PFL) preservative ³¹	N/A	25 mg/mL ³¹	28 d F ^{10,31}	syringe	10 d F ^{10,31}	- contains benzyl alcohol ³¹ - do NOT use for high-dose regimens (e.g., 1-12 g/m ² as a single dose) ³¹ - do NOT use for IT injection ³¹
				0.4–2 mg/mL NS, D5W ³¹ 50-500 mL†	24 h RT ³¹	
Mitomycin 20 mg (Accord) (RT)(PFL) no preservative ³²	40 mL SWI ³² shake well ³²	0.5 mg/mL ³²	12 h F, 6 h RT ^{10,33} **(PFL) ³³	syringe	72 h F, 6 h RT ³³ **(PFL) ³³	

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Mitomycin intravesical 20 mg (Accord) (RT)(PFL) no preservative ³²	40 mL SWI ³² shake well ³²	0.5 mg/mL ³²	12 h F, 6 h RT ^{10,33} **(PFL) ³³	syringe	72 h F, 6 h RT ³³ **(PFL) ³³	
	10 mL SWI ³⁴ shake well ³²	2 mg/mL ³⁴	use immediately after preparation to prevent precipitation ³⁵	syringe	use immediately after preparation to prevent precipitation ³⁵	- may precipitate due to low solubility ^{35,36} - do NOT refrigerate ³⁵
	25 mL SWI shake well	0.8 mg/mL ³⁷	discard unused portion ^{2,37} **(PFL) ^{2,37}	syringe	4 days RT ³⁷ **(PFL) ^{2,37}	- do NOT refrigerate ³⁷
	33.3 mL SWI shake well	0.6 mg/mL ³⁷	discard unused portion ^{2,37} **(PFL) ^{2,37}	syringe	4 days F, RT ³⁷ **(PFL) ^{2,37}	
Mitomycin intraperitoneal 20 mg (Accord) (RT)(PFL) no preservative ³²	40 mL SWI ³² shake well ³²	0.5 mg/mL ³²	12 h F, 6 h RT ^{10,33} **(PFL) ³³	0.02-0.04 mg/mL NS , sodium lactate ³²	NS: 18 h F, 3 h RT ³³ sodium lactate: 6 h F, 3 h RT ³³	

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Mitomycin 20 mg (Teva) (RT)(PFL) no preservative ³⁸	40 mL SWI ³⁸ shake well ³⁸	0.5 mg/mL ³⁸	12 h F, 6 h RT ^{10,38} **(PFL) ³⁸	syringe	72 h F, 6 h RT ³⁸ **(PFL) ³⁸	
Mitomycin intravesical 20 mg (Teva) (RT)(PFL) no preservative ³⁸	40 mL SWI ³⁸ shake well ³⁸	0.5 mg/mL ³⁸	12 h F, 6 h RT ^{10,38} **(PFL) ³⁸	syringe	72 h F, 6 h RT ³⁸ **(PFL) ³⁸	
	10 mL SWI ³⁴ shake well ³⁸	2 mg/mL ³⁴	use immediately after preparation to prevent precipitation ³⁵	syringe	use immediately after preparation to prevent precipitation ³⁵	- may precipitate due to low solubility ^{35,36} - do NOT refrigerate ³⁵
	25 mL SWI shake well	0.8 mg/mL ³⁷	discard unused portion ^{2,37} **(PFL) ^{2,37}	syringe	4 days RT ³⁷ **(PFL) ^{2,37}	- do NOT refrigerate ³⁷
	33.3 mL SWI shake well	0.6 mg/mL ³⁷	discard unused portion ^{2,37} **(PFL) ^{2,37}	syringe	4 days F, RT ³⁷ **(PFL) ^{2,37}	

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Mitomycin intraperitoneal 20 mg (Teva) (RT)(PFL) no preservative ³⁸	40 mL SWI ³⁸ shake well ³⁸	0.5 mg/mL ³⁸	12 h F, 6 h RT ^{10,38} **(PFL) ³⁸	0.02-0.04 mg/mL NS , sodium lactate ³⁸	NS: 18 h F, 6 h RT ³⁸ sodium lactate: 6 h F, RT ³⁸	
mitoXANTRONE 20 mg/10 mL (Fresenius Kabi) (RT) no preservative ³⁹	N/A	2 mg/mL ³⁹	discard unused portion ³⁹	0.2-0.6 mg/mL NS , D5W ³⁹ 50 mL†	24 h RT ³⁹	
mitoXANTRONE 20 mg/10 mL 25 mg/12.5 mL 30 mg/15 mL (Pfizer/Hospira) (RT)(PFL) no preservative ⁴⁰	N/A	2 mg/mL ⁴⁰	discard unused portion ⁴⁰	0.2-0.6 mg/mL NS , D5W ⁴⁰ 50 mL†	72 h F, 24 h RT ⁴⁰ **(PFL) ⁴⁰	
Mogamulizumab 20 mg/5 mL (Kyowa) (F)(PFL) do not shake no preservative ⁴¹ (SAP)	N/A	4 mg/mL ⁴¹	discard unused portion ⁴¹	0.1-3 mg/mL NS ⁴¹ 100 mL* mix by gentle inversion; do not shake ⁴¹	24 h F ⁴¹	- discard if cloudy or discoloured ⁴¹ - administer with 0.2 micron in-line filter ⁴¹

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Nivolumab 40 mg/4 mL 100 mg/10 mL (BMS) (F)(PFL) do not shake no preservative ⁴²	N/A	10 mg/mL ⁴²	discard unused portion ⁴²	1-10 mg/mL NS , D5W ⁴² 25-100 mL† mix by gentle inversion; do not shake ⁴² OR undiluted in empty infusion bag or glass bottle ⁴²	complete administration within 7 days F, including max 8 h at RT ⁴² **(PFL) ⁴² (can be in room light when at RT) ⁴²	- do not shake ⁴² - administer with 0.2 micron in-line filter ⁴² - may contain a few amorphous particles ⁴² - discard if cloudy, has pronounced colour change (should be clear to pale yellow) ⁴²
oBINutuzumab 1000 mg/40 mL (Roche) (F)(PFL)** do not shake no preservative ⁴³	N/A	25 mg/mL ⁴³	discard unused portion ⁴⁴	NS 100 mg: 100 mL ⁴³ 900 mg: 250 mL ⁴³ 1000 mg: 250 mL ⁴³	24 h F, 48 h RT ^{43,45}	-once removed from the fridge, diluted product is stable for an additional 48 h RT ^{43,45} - do NOT shake ⁴³ - do NOT use dextrose containing solutions ⁴³

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Octreotide 50 mcg/1 mL 100 mcg/1 mL 500 mcg/1 mL (Omega) (F)(PFL) no preservative ⁴⁶	N/A	50 mcg/mL ⁴⁶	discard unused portion ⁴⁶	NS ⁴⁶ volume adjusted to ensure a continuous infusion of octreotide at 25 mcg/h ⁴⁶	24 h RT ⁴⁶	
		100 mcg/mL ⁴⁶				
		500 mcg/mL ⁴⁶				
Octreotide multidose vial: 1000 mcg/5 mL (Omega) (F)(PFL) preservative ⁴⁶	N/A	200 mcg/mL ⁴⁶	15 d F ⁴⁶	NS ⁴⁶ volume adjusted to ensure a continuous infusion of octreotide at 25 mcg/h ⁴⁶	24 h RT ⁴⁶	
Octreotide (SANDOSTATIN®) 50 mcg/1 mL 100 mcg/1 mL 500 mcg/1 mL (Novartis) (F)(PFL) no preservative ⁴⁷	N/A	50 mcg/mL ⁴⁷	discard unused portion ⁴⁷	NS ⁴⁷ volume adjusted to ensure a continuous infusion of octreotide at 25 mcg/h ⁴⁷	24 h RT ⁴⁷	
		100 mcg/mL ⁴⁷				
		500 mcg/mL ⁴⁷				

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Octreotide (SANDOSTATIN®) multi-dose vial: 1000 mcg/5 mL (Novartis) (F)(PFL) preservative ⁴⁷	N/A	200 mcg/mL ⁴⁷	14 d F, RT ⁴⁷	NS ⁴⁷ volume adjusted to ensure a continuous infusion of octreotide at 25 mcg/h ⁴⁷	24 h RT ⁴⁷	
Octreotide (SANDOSTATIN LAR®) (long acting) 10 mg 20 mg 30 mg (Novartis) (F)(PFL) no preservative ⁴⁷	2 mL supplied diluent ⁴⁷ add diluent: gently run diluent down sides of vial ⁴⁷ do NOT disturb for 2–5 min; then swirl moderately ⁴⁷ record time of reconstitution	10 mg: 5 mg/mL ⁴⁷	discard unused portion ⁴⁷	syringe (for deep intragluteal administration only) ⁴⁷	use within 4 h of initial reconstitution ^{10,47}	- do NOT shake ⁴⁷
		20 mg: 10 mg/mL ⁴⁷				
		30 mg: 15 mg/mL ⁴⁷				

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<p>Octreotide suspension (long acting) 10 mg 20 mg 30 mg (Teva) (F)(PFL) no preservative⁴⁸</p>	<p>2 mL supplied diluent</p> <p>let stand at room temperature x 30 min prior to reconstitution⁴⁸</p> <p>add supplied diluent⁴⁸</p> <p>let vial stand x 5 min after adding diluent to saturate powder⁴⁸</p> <p>shake moderately in horizontal direction x at least 30 sec to create suspension⁴⁸</p> <p>record time of reconstitution</p>	<p>10 mg: 5 mg/mL⁴⁸</p> <hr/> <p>20 mg: 10 mg/mL⁴⁸</p> <hr/> <p>30 mg: 15 mg/mL⁴⁸</p>	<p>discard unused portion⁴⁸</p>	<p>syringe (for deep intragluteal administration only)⁴⁸</p>	<p>use within 4 h of initial reconstitution^{10,48}</p>	<p>- gently shake to resuspend before administration⁴⁸ - delay in administration may result in sedimentation⁴⁸</p>

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Oxaliplatin 50 mg/10 mL 100 mg/20 mL 200 mg/40 mL (Dr. Reddy's) (RT)(PFL) no preservative ⁴⁹	N/A	5 mg/mL ⁴⁹	discard unused portion ⁴⁹	0.2-0.7 mg/mL D5W ⁴⁹ 100-500 mL† do NOT use NS or other chloride- containing solution ⁴⁹ do NOT use aluminum-containing needle and syringe ⁴⁹	0.2-2 mg/mL: 48 h F, 24 h RT ⁴⁹	- do NOT use aluminum- containing needle, syringe, or tubing ⁴⁹
Oxaliplatin 50 mg/10 mL 100 mg/20 mL 200 mg/40 mL (Pfizer/Hospira) (RT) no preservative ⁵⁰	N/A	5 mg/mL ⁵⁰	discard unused portion ⁵⁰	0.2-0.7 mg/mL D5W ⁵⁰ 100-500 mL† do NOT use NS or other chloride- containing solutions ⁵⁰ do NOT use aluminum-containing needle and syringe ⁵⁰	0.2-0.4 mg/mL: 24 h RT ⁵⁰ or 5 d F plus an additional 8 h RT ⁵¹ 0.5-2 mg/mL: 24 h RT ⁵⁰ or 10 d F, plus an additional 8 h RT ^{10,51} **(PFL) when stored in F ⁵¹	- do NOT use aluminum- containing needle, syringe, tubing ⁵⁰

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Oxaliplatin 50 mg/10 mL 100 mg/20 mL 150 mg/30 mL 200 mg/40 mL (Sandoz) (RT)(PFL) no preservative ⁵²	N/A	5 mg/mL ⁵²	12 h F, RT ^{10,53}	0.2-0.7 mg/mL D5W ⁵² 100-500 mL† do NOT use NS or other chloride- containing solution ⁵² do NOT use aluminum-containing needle and syringe ⁵²	0.2-2 mg/mL: 48 h F, 24 h RT ⁵²	- do NOT use aluminum- containing needle, syringe, tubing ⁵²
Oxaliplatin 50 mg/10 mL 100 mg/20 mL 200 mg/40 mL (Teva) (RT)(PFL) no preservative ⁵⁴	N/A	5 mg/mL ⁵⁴	discard unused portion ⁵⁴	0.2-0.7 mg/mL D5W ⁵⁴ 100-500 mL† do NOT use NS or other chloride- containing solution ⁵⁴ do NOT use aluminum-containing needle and syringe ⁵⁴	0.2-2 mg/mL: 48 h F, 24 h RT ⁵⁴	- do NOT use aluminum- containing needle, syringe or tubing ⁵⁴

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PACLitaxel 30 mg/5 mL 100 mg/16.7 mL 300 mg/50 mL (Accord) (RT)(PFL) preservative ⁵⁵	N/A	6 mg/mL ⁵⁵	30 mg, 100 mg: 28 d RT ^{10,55} 300 mg: 24 h RT ^{10,55}	0.3-1.2 mg/mL NS , D5W, D5NS, D5LR ⁵⁵ 50-500 mL†	complete administration within 27 h RT ⁵⁵	- use non-DEHP bag and tubing ⁵⁵ - administer with 0.2 micron in-line filter ⁵⁵ - avoid excessive shaking ⁵⁵
				0.1 mg/mL NS ⁵⁶	44 h F , RT ⁵⁶	
PACLitaxel 30 mg/5 mL 100 mg/16.7 mL 300 mg/50 mL (Biolyse) (RT) preservative ⁵⁷	N/A	6 mg/mL ⁵⁷	28 d RT ⁵⁸	0.3-1.2 mg/mL NS , D5W ⁵⁷ 50-500 mL†	complete administration within 27 h RT ^{59,60}	- use non-DEHP bag and tubing ⁵⁷ - administer with 0.2 micron in-line filter ⁵⁷
				0.1 mg/mL NS ⁵⁶	44 h F , RT ⁵⁶	
				0.012-0.12 mg/mL NS ⁶¹	16 h RT ⁵⁹	
				devices with spikes (e.g., chemo dispensing pins) may be used with vials ⁶²		

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Paclitaxel 30 mg/5 mL 100 mg/16.7 mL 300 mg/50 mL (Sandoz) (RT)(PFL) preservative ⁶³	N/A	6 mg/mL ⁶³	30 mg, 100 mg: 28 d RT ^{10,63} 300 mg: 24 h RT ^{10,63}	0.3-1.2 mg/mL NS , D5W, D5NS ⁶³ 50-500 mL†*	complete administration within 27 h RT ⁶³	- use non-DEHP bag and tubing ⁶³ - administer with 0.2 micron inline filter ⁶³ - avoid excessive shaking
				0.1 mg/mL NS ⁵⁶	44 h F , RT ⁵⁶	
PAcLitaxel, nanoparticle, albumin- bound (NAB) (ABRAXANE®) 100 mg (Bristol Myers Squibb) (RT)(PFL) no preservative ^{64,65}	20 mL NS ⁶⁵ slowly direct diluent against side of vial (i.e., greater than or equal to 1 min) during reconstitution ⁶⁵ let stand for greater than or equal to 5 min to wet powder ⁶⁵ gently swirl or invert for greater than or equal to 2 min ⁶⁵	5 mg/mL ⁶⁵	use immediately (RT) or 8 h F ⁶⁵ **(PFL) ⁶⁵	in empty sterile PVC, non-PVC, or non-DEHP infusion bag ⁶⁵	48 h F plus an additional 8 h RT ⁶⁶	- each vial contains 900 mg human albumin ⁶⁵ - to prevent foaming, do NOT inject NS directly onto the powder ⁶⁵ - some settling may occur; use mild agitation to resuspend ⁶⁵ - administer with 15 micron filter ONLY ⁶⁵ (NOTE: filters with pore size less than 15 microns may cause filter blockage) ⁶⁷

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
<p>PACLitaxel, nanoparticle, albumin- bound (NAB) (ABRAXANE®) 100 mg (Celgene) (RT)(PFL) no preservative⁶⁵</p>	<p>20 mL NS⁶⁵</p> <p>slowly direct diluent against side of vial (i.e., greater than or equal to 1 min) during reconstitution⁶⁵</p> <p>let stand for greater than or equal to 5 min to wet powder⁶⁵</p> <p>gently swirl or invert for greater than or equal to 2 min⁶⁵</p>	<p>5 mg/mL⁶⁵</p>	<p>use immediately (RT) or 8 h F⁶⁵</p> <p>** (PFL)⁶⁵</p>	<p>in empty sterile PVC, non-PVC, or non- DEHP infusion bag⁶⁵</p>	<p>48 h F plus an additional 8 h RT⁶⁶</p>	<ul style="list-style-type: none"> - each vial contains 900 mg human albumin⁶⁵ - to prevent foaming, do NOT inject NS directly onto the powder⁶⁵ - some settling may occur; use mild agitation to resuspend⁶⁵ - administer with 15 micron filter ONLY⁶⁵ (NOTE: filters with pore size less than 15 microns may cause filter blockage)⁶⁷

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PACLitaxel, nanoparticle, albumin- bound (NAB) (ABRAXANE®) 100 mg (Celgene-UAE) (RT)(PFL) no preservative ^{65,68}	20 mL NS ⁶⁵ slowly direct diluent against side of vial during reconstitution (i.e., greater than or equal to 1 min) ⁶⁵ let stand for greater than or equal to 5 min to wet powder ⁶⁵ gently swirl or invert for greater than or equal to 2 min ⁶⁵	5 mg/mL ⁶⁵	use immediately (RT) or 8 h F ⁶⁵ **(PFL) ⁶⁵	in empty sterile PVC, non-PVC, or non- DEHP infusion bag ⁶⁵	48 h F plus an additional 8 h RT ⁶⁶	- each vial contains 900 mg human albumin ⁶⁵ - to prevent foaming, do NOT inject NS directly onto the powder ⁶⁵ - some settling may occur; use mild agitation to resuspend ⁶⁵ - administer with 15 micron filter ONLY (pore size less than 15 microns may cause filter blockage) ⁶⁷
Pamidronate 30 mg/10 mL 60 mg/10 mL 90 mg/10 mL (Fresenius Kabi) (RT) no preservative ⁶⁹	N/A	3 mg/mL ⁶⁹	discard unused portion ⁶⁹	≤ 0.36 mg/mL ⁶⁹ NS, D5W ⁶⁹ 250 mL†	24 h RT ⁶⁹	- do NOT mix with calcium containing solutions ⁶⁹
		6 mg/mL ⁶⁹				
		9 mg/mL ⁶⁹				

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Pamidronate 30 mg/10 mL 60 mg/10 mL 90 mg/10 mL (Hospira) (RT) no preservative ⁷⁰	N/A	3 mg/mL ⁷⁰	discard unused portion ⁷⁰	0.06–0.36 mg/mL NS , D5W ⁷⁰ 250 mL†	24 h F plus an additional 24 h RT (total 48 h) ⁷⁰ **(PFL) ⁷⁰	- do NOT mix with calcium containing solution (e.g., Ringer's) ⁷⁰
		6 mg/mL ⁷⁰				
		9 mg/mL ⁷⁰				
Pamidronate 30 mg/10 mL 60 mg/10 mL 90 mg/10 mL (Omega) (RT) no preservative ⁷¹	N/A ⁷¹	3 mg/mL ⁷¹	discard unused portion ⁷¹	0.06–0.36 mg/mL NS , D5W ⁷¹ 250 mL†	24 h F plus an additional 24 h RT (total 48 h) ⁷¹ **(PFL) ⁷¹	- do NOT mix with calcium containing solution (e.g., Ringer's) ⁷¹
		6 mg/mL ⁷¹				
		9 mg/mL ⁷¹				
Pamidronate 30 mg/10 mL 60 mg/10 mL 90 mg/10 mL (Pfizer) (RT) no preservative ⁷²	N/A	3 mg/mL ⁷²	discard unused portion ⁷²	0.06-0.36 mg/mL NS , D5W ⁷² 250 mL†	24 h F plus an additional 24 h RT (total 48 h) ⁷² **(PFL) ⁷²	- do NOT mix with calcium containing solution (e.g., Ringer's) ⁷²
		6 mg/mL ⁷²				
		9 mg/mL ⁷²				

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DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Pamidronate 30 mg/10 mL 60mg/10 mL 90 mg/10 mL (Sandoz Canada) RT no preservative ⁷³	N/A	3 mg/mL ⁷³	discard unused portion ^{73,74}	NS ; D5W ⁷³ 250 mL†	24 h RT ⁷³	- do NOT mix with calcium containing solution (e.g., Ringer's) ⁷³
		6 mg/mL ⁷³				
		9 mg/mL ⁷³				
PANitumumab 100 mg/5 mL 400 mg/20 mL (Amgen) (F)(PFL) do not shake no preservative ⁷⁵	N/A	20 mg/mL ⁷⁵	discard unused portion ⁷⁵	1-10mg/mL NS ⁷⁵ 100 mL†	24 h F, 6 h RT ⁷⁵⁻⁷⁸	- administer with 0.2 micron in-line filter ⁷⁵ - solution may contain particulates which do not affect product quality ⁷⁵ - do not administer if discoloured ⁷⁵

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DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Pegaspargase (pegylated asparaginase <i>E. coli</i>) 3750 units/5 mL (Servier) (F)(PFL) do not shake no preservative ⁷⁹	N/A	750 units/mL ⁷⁹	discard unused portion ⁷⁹	IM ⁷⁹ : max volume: 2 mL in children and adolescents; 3 mL in adults if volume greater than above, use multiple sites ⁷⁹	syringe: use within 4 h of vial puncture ^{2,79}	- do NOT shake ⁷⁹
				IV ⁷⁹ : 100 mL NS , D5W	bag: use within 4 h of vial puncture ^{2,79}	
Pembrolizumab 100 mg/4 mL (Merck) (F)(PFL) do not shake no preservatives ⁸⁰	N/A	25 mg/mL ⁸⁰	discard unused portion ^{2,80}	1-10 mg/mL NS , D5W ⁸⁰ 50 mL * mix by gentle inversion ⁸⁰	complete administration within 96 h F, 6 h RT ⁸⁰	- administer with 0.2 micron in-line filter ⁸⁰ - allow vials and diluted solutions to come to RT prior to use ⁸⁰ - vials contain 0.25 mL overfill ⁸⁰

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Pemetrexed 100 mg 500 mg (Accord) (RT) no preservative ⁸¹	100 mg: 4.2 mL NS ⁸¹ 500 mg: 20 mL NS ⁸¹	25 mg/mL ⁸¹	12 h F, RT ^{10,81}	100 mL NS ⁸¹	24 h F, RT ⁸¹	- do NOT mix with calcium containing solution (e.g., Ringer's) ⁸¹
Pemetrexed 100 mg/4 mL 500 mg/20 mL 850 mg/34 mL 1000 mg/40 mL (Accord) (RT)(PFL) no preservative ⁸²	N/A	25 mg/mL ⁸²	discard unused portion ⁸²	100 mL NS ⁸²	24 h F ⁸²	- do NOT mix with calcium containing solution (e.g., Ringer's) ⁸²
Pemetrexed 100 mg 500 mg (Dr. Reddy's) (RT) no preservative ⁸³	100 mg: 4.2 mL NS ⁸³ 500 mg: 20 mL NS ⁸³	25 mg/mL ⁸³	12 h F, RT ^{10,84-86}	100 mL NS ⁸³	24 h F, RT ⁸⁴⁻⁸⁶	- do NOT mix with calcium containing solution (e.g., Ringer's) ⁸³
Pemetrexed 100 mg 500 mg (Lilly) (RT) no preservative ⁸⁷	100 mg: 4.2 mL NS ⁸⁷ 500 mg: 20 mL NS ⁸⁷	25 mg/mL ⁸⁷	12 h F ^{10,87}	100 mL NS ⁸⁷	24 h F ⁸⁷	- do NOT mix with calcium containing solution (e.g., Ringer's) ⁸⁷

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Pemetrexed 100 mg 500 mg 1000 mg (Taro) (RT) no preservative ⁸⁸	100 mg: 4.2 mL NS ⁸⁸ 500 mg: 20 mL NS ⁸⁸ 1000 mg: 40 mL NS ⁸⁸	25 mg/mL ⁸⁸	12 h F ^{10,88}	100 mL NS ⁸⁸	24 h F ⁸⁸	- do NOT mix with calcium containing solution (e.g., Ringer's) ⁸⁸
Pentostatin 10 mg (Hospira/Pfizer) (F) no preservative ⁸⁹	5 mL SWI ⁸⁹	2 mg/mL ⁸⁹	8 h RT ⁸⁹	0.18-0.33 mg/mL ⁸⁹ 25-50 mL NS, D5W ⁸⁹	8 h RT ⁸⁹	
PERTuzumab 420 mg/14 mL (Roche) (F)(PFL) no preservative ⁹⁰	N/A	30 mg/mL ⁹⁰ do NOT shake ⁹⁰	discard unused portion ^{44,90}	250 mL NS only ⁹⁰ mix by gentle inversion to avoid foaming ⁹⁰	24 h F, RT ⁹⁰	- do NOT use dextrose containing solutions ⁹⁰

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Plerixafor 24 mg/1.2 mL (sanofi-aventis) (RT) no preservative ⁹¹	N/A	20 mg/mL ⁹¹	discard unused portion ⁹¹	SC syringe ⁹¹	48 hours RT ^{74,92}	
Polatuzumab vedotin 30 mg 140 mg (Hoffman-La Roche) (F)(PFL) do not shake no preservative ⁹³	30 mg: 1.8 mL SWI ⁹³ 140 mg: 7.2 mL SWI ⁹³ direct diluent against side of vial during reconstitution ⁹³ swirl gently to mix ⁹³	20 mg/mL ⁹³ (PFL)	12 h F, RT ^{10,93}	0.72-2.7 mg/mL NS, D5W, ½NS⁹³ (dilute to a minimum volume of 50 mL) ⁹³ gently invert bag to mix ⁹³	in NS: 72 h F, 4 h RT ⁹³ in D5W or ½NS: 72 h F, 8 h RT ⁹³	- do NOT shake ⁹³ - administer with 0.2 micron in-line filter ⁹³ -discard if discolouration or visible particulates are present ⁹³

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Pralatrexate 20 mg/1 mL 40 mg/2 mL (Servier) (F)(PFL) no preservative ⁹⁴	N/A	20 mg/mL ⁹⁴	discard unused portion ²	syringe ⁹⁴	24 h F, RT ⁹⁵ **(PFL) ⁹⁵	- do NOT dilute ⁹⁴
Raltitrexed 2 mg (Pfizer) (F,RT)(PFL) no preservative ⁹⁶	4 mL SWI ⁹⁶	0.5 mg/mL ⁹⁶	12 h F, RT ^{10,96}	50-250 mL NS , D5W ⁹⁶	complete administration within 24 h F, RT ⁹⁶	
Ramucirumab 100 mg/10 mL 500 mg/50 mL (Eli Lilly) (F)(PFL) (do not shake) no preservative ⁹⁷	N/A	10 mg/mL ⁹⁷	discard unused portion ⁹⁷	0.4–4 mg/mL NS ^{97,98} 250-500 mL† gently invert to mix ⁹⁷ do NOT shake ⁹⁷	24 h F, 4 h RT ⁹⁷	- administer with 0.2 micron in-line filter ⁹⁷ - do NOT use dextrose containing solutions ⁹⁷

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DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
riTUXimab (RITUXAN®) 100 mg/10 mL 500 mg/50 mL (Roche) (F)(PFL) no preservative ⁹⁹	N/A	10 mg/mL ⁹⁹	discard unused portion ⁹⁹	1-4 mg/mL NS , D5W ⁹⁹ 250-500 mL†	NS: 10 d F plus an additional 24 h RT ^{10,99} D5W: 24 h F plus an additional 12 h RT ⁹⁹	
riTUXimab subcutaneous (RITUXAN® SC) 1400 mg/11.7 mL 1600 mg/13.4 mL (Roche) (F)(PFL) no preservative ¹⁰⁰	N/A	120 mg/mL ¹⁰⁰	discard unused portion ¹⁰⁰	SC syringe ¹⁰⁰	48 h F plus 8 h RT ¹⁰⁰	- contains hyaluronidase ¹⁰⁰ - formulations are NOT interchangeable ¹⁰⁰
riTUXimab (RIXIMYO®) 100 mg/10 mL 500 mg/50 mL (Sandoz) (F)(PFL) (do NOT shake) no preservative ¹⁰¹	N/A	10 mg/mL ¹⁰¹	discard unused portion ¹⁰¹	1-4 mg/mL NS , D5W ¹⁰¹ 250-500 mL† gently invert to mix	NS: 10 d F plus an additional 24 h RT ^{10,101} D5W: 24 h F plus an additional 12 h RT ¹⁰¹	

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riTUXimab (RUXIENCE®) 100 mg/10 mL 500 mg/50 mL (Pfizer) (F)(PFL) no preservative ¹⁰²	N/A	10 mg/mL ¹⁰²	discard unused portion ¹⁰²	1-4 mg/mL NS , D5W ¹⁰² 250-500 mL† gently invert to mix	24 h F plus an additional 24 h RT ¹⁰²	
riTUXimab (TRUXIMA®) 100 mg/10 mL 500 mg/50 mL (Teva/Celltrion) (F)(PFL) no preservative ¹⁰³	N/A	10 mg/mL ¹⁰³	discard unused portion ¹⁰³	1-4 mg/mL NS , D5W ¹⁰³ 250-500 mL† gently invert to mix	24 h F plus an additional 12 h RT ¹⁰³	
romiDEPsin 10 mg (Celgene Inc.) (RT) ¹⁰⁴ no preservative ⁴⁴	2.2 mL supplied diluent ^{104,105} swirl gently to mix ¹⁰⁴	5 mg/mL ¹⁰⁴	8 h RT ¹⁰⁴	500 mL NS ¹⁰⁴	24 h RT ¹⁰⁴	- reconstituted solution will be slightly viscous ¹⁰⁶ - vials contain overflow to allow for full drug recovery (drug vial contains 11 mg romidepsin; diluent vial contains 2.4 mL diluent) ¹⁰⁴

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Sacituzumab govitecan 180 mg (Gilead) (F)(PFL) no preservative ¹⁰⁷	20 mL NS ¹⁰⁷ allow vials to come to RT before reconstitution ¹⁰⁷ slowly add diluent to vial and gently swirl to dissolve powder; allow to dissolve (up to 15 min) ¹⁰⁷ do NOT shake ¹⁰⁷	10 mg/mL ¹⁰⁷	discard unused portion ¹⁰⁷ use immediately after reconstitution to prepare infusion solution ¹⁰⁷	1.1-3.4 mg/mL NS ¹⁰⁷ 250-500 mL NS* dilute to final volume by withdrawing volume from bag equal to volume of drug to be added slowly inject solution into infusion bag to minimize foaming; do NOT shake ¹⁰⁷	4 h F plus an additional 6 h RT including infusion time ¹⁰⁷ **(PFL)	- do NOT shake ¹⁰⁷ - protect infusion bag from light during administration ¹⁰⁷ - patients with body weight >170 kg: divide total dose equally between 2x500 mL bags and administer sequentially ¹⁰⁷ - vials contain overfill (~20 mg per vial) ¹⁰⁸

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<p>Sacituzumab govitecan 180 mg (Immunomedics) (F)(PFL) no preservative¹⁰⁹ (SAP)</p>	<p>20 mL NS¹⁰⁹ allow vials to come to room temperature before reconstitution¹⁰⁹ slowly add solution to vial and gently swirl to dissolve powder; allow to dissolve (up to 15 min)¹⁰⁹</p>	<p>10 mg/mL¹⁰⁹</p>	<p>discard unused portion¹⁰⁹ use immediately after reconstitution to prepare infusion solution¹⁰⁹</p>	<p>1.1-3.4 mg/mL NS¹⁰⁹ 250-500 mL* dilute to final volume by withdrawing volume from bag equal to volume of drug to be added slowly inject solution into infusion bag to minimize foaming; do NOT shake¹⁰⁹</p>	<p>4 h F plus an additional 4 h RT including infusion time¹⁰⁹ **(PFL)</p>	<p>- do NOT shake - protect infusion bag from light during administration¹⁰⁹ - patients with body weight >170 kg: divide total dose equally between 2x500 mL bags and administer sequentially¹⁰⁹</p>

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Siltuximab 100 mg 400 mg (Janssen) (F)(PFL) no preservative ¹¹⁰	100 mg: 5.2 mL SWI ¹¹⁰ 400 mg: 20 mL SWI ¹¹⁰ allow vial to come to room temperature prior to use (~30 min) ¹¹⁰ gently swirl, do NOT shake ¹¹⁰	20 mg/mL ¹¹⁰	2 h RT ¹¹⁰	250 mL D5W ¹¹⁰ dilute to final volume by withdrawing volume from bag equal to volume of drug to be added ¹¹⁰	complete administration within 6 h RT ¹¹⁰	- administer with 0.2 micron in-line filter ¹¹⁰

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<p>Sirolimus, nanoparticle, albumin- bound (NAB) 100 mg (Aadi) (F)(PFL) no preservative¹¹¹ (SAP)</p>	<p>20 mL NS¹¹¹</p> <p>slowly direct diluent against side of vial (over at least 1 minute)¹¹¹</p> <p>let stand for at least 5 min to wet powder¹¹¹</p> <p>gently swirl or invert for at least 2 min to avoid foaming¹¹¹</p> <p>if foaming/clumping occurs, let stand until foam subsides (at least 15 min)¹¹¹</p>	<p>5 mg/mL¹¹¹</p>	<p>4 h F^{112,113}</p> <p>** (PFL)¹¹¹</p>	<p>undiluted in empty PVC or non-PVC infusion bag¹¹¹</p>	<p>9 h F, followed by max 4 h RT¹¹¹</p> <p>** (PFL)¹¹¹</p>	<p>- each vial contains ~800-900 mg human albumin^{111,114} - to prevent foaming, do NOT inject NS directly onto the powder¹¹¹ - if powder is visible after reconstitution, gently invert to resuspend powder¹¹¹ - to prevent administration of proteinaceous strands, administer with 15 micron filter ONLY¹¹¹</p>

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Streptozocin 1g (Keocyt) (F)(PFL) no preservative ¹¹⁵⁻¹¹⁸ (SAP)	9.5mL NS , SWI, D5W ¹¹⁵⁻¹¹⁸	100 mg/mL ¹¹⁵⁻¹¹⁸	12 h F ^{10,116-118}	syringe ¹¹⁶⁻¹¹⁸	48 h F ^{10,116-118}	
				100-500 mL NS , D5W, SWI ¹¹⁵⁻¹¹⁸	24 h F ¹¹⁶⁻¹¹⁸	

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<p>Tebentafusp 100 mcg/0.5 mL (Immunocore/Medison) (F)(PFL) do not shake no preservative¹¹⁹</p>	<p>N/A</p>	<p>200 mcg/mL¹¹⁹</p>	<p>discard unused portion¹¹⁹</p>	<p>100 mL NS¹¹⁹</p> <p>Step 1: add calculated volume of human albumin 5% to provide 225-275 mcg/mL final concentration¹¹⁹</p> <p>to mix: invert the bag and then gently rotate x ≥5 times; do NOT shake bag (repeat x3)¹¹⁹</p> <p>Step 2: add calculated volume of drug¹¹⁹</p> <p>to mix: invert the bag and then gently rotate x ≥5 times; do NOT shake bag (repeat x3)¹¹⁹</p>	<p>complete administration within 24 h F, 4 h RT¹¹⁹</p>	<ul style="list-style-type: none"> - do NOT use closed system transfer device or filters during preparation¹¹⁹ - CSTD can be used for administration¹²⁰ - administer using 0.2 micron in-line filter¹¹⁹ - once the bag has been removed from fridge, it must remain at room temperature¹¹⁹

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<p>Tebentafusp 100 mcg/0.5 mL (Immunocore/Clinigen) (F)(PFL) do not shake no preservative^{121,122} (SAP)</p>	<p>N/A</p>	<p>200 mcg/mL¹²¹</p>	<p>discard unused portion^{2,121,122}</p>	<p>100 mL NS^{121,122}</p> <p>Step 1: add calculated volume of human albumin 5% to provide 225-275 mcg/mL final concentration^{121,122}</p> <p>to mix: invert the bag and then gently rotate x ≥5 times; do NOT shake bag (repeat x3)^{121,122}</p> <p>Step 2: add calculated volume of drug^{121,122}</p> <p>to mix: invert the bag and then gently rotate x ≥5 times; do NOT shake bag (repeat x3)^{121,122}</p>	<p>complete administration within 24 h F, 4 h RT^{121,122}</p>	<p>- do NOT use closed system transfer device or filters during preparation¹²¹ - CSTD can be used for administration¹²⁰ - administer using 0.2 micron in-line filter^{121,122} - once the bag has been removed from fridge, it must remain at room temperature^{121,122}</p>

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Temsirolimus 30 mg/1.2 mL (Pfizer/Wyeth) (F)(PFL) ¹²³ no preservative ¹²⁴	1.8 mL supplied diluent ¹²³	10 mg/mL ¹²³	12 h RT ^{10,123} **(PFL) ¹²³	250 mL NS ¹²³ record time of dilution ¹²³	complete administration within 6 h ¹²³ mix by gentle inversion to avoid foaming ¹²³	- use non-DEHP bag and tubing - administer with 0.2 micron in-line filter ¹²³
Teniposide 50 mg/5 mL (BMS) (RT) preservative ¹²⁵	N/A	10 mg/mL ¹²⁵	discard unused portion	0.1-1 mg/mL NS , D5W ¹²⁵ 50–500 mL*	0.1-0.4 mg/mL: 24 h RT ¹²⁵ 1 mg/mL: complete administration within 4 h RT of preparation ^{125,126}	- do not refrigerate - use non-DEHP bag and tubing ¹²⁵ - do not use if precipitates ^{125,126} - contains DMA*** - excessive agitation may cause precipitation ¹²⁵

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Thiotepa 15 mg 100 mg (Adienne/Methapharm) (F) no preservative ¹²⁷ (SAP)	<p>15 mg: 1.5 mL SWI¹²⁷</p> <p>100 mg: 10 mL SWI¹²⁷</p> <p>to remove haze, filter through 0.22 micron filter after reconstitution¹²⁸</p> <p>record time of reconstitution</p>	10 mg/mL ¹²⁷	8 h F ¹²⁷	0.5-1 mg/mL NS ¹²⁷ ≤ 500 mg: 500 mL ¹²⁷ > 500 mg: 1000 mL ¹²⁷ reconstituted solution is hypotonic and must be further diluted with NS prior to use ¹²⁷	24 h F, 4 h RT ¹²⁷	<ul style="list-style-type: none"> - do not use if precipitates are present¹²⁷ - reconstituted solution may be used if opalescent¹²⁷ - administer with 0.2 micron in-line filter¹²⁷

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DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
<p>Thiotepa IT injection 15 mg 100mg (Adienne/Methapharm) (F) no preservative¹²⁷ (SAP)</p>	<p>15 mg: 1.5 mL SWI¹²⁷</p> <p>100 mg: 10 mL SWI¹²⁷</p> <p>diluents containing preservatives should NOT be used for intrathecal administration¹²⁹</p> <p>to remove haze, filter through 0.22 micron filter after reconstitution¹²⁸</p> <p>record time of reconstitution</p>	<p>10 mg/mL¹²⁷</p>	<p>8 h F¹²⁷</p>	<p>qs to 6 mL with preservative free NS²⁹</p>	<p>use within 4 h of initial reconstitution²</p>	<p>- auxiliary info³⁰: “IT” - label to include route in full (i.e., INTRATHECAL injection) attached to both syringe and outer ziplock bag³⁰ - do not use if precipitates are present¹²⁷ - reconstituted solution may be used if opalescent¹²⁷</p>
<p>Thyrotropin alfa 1.1 mg (Genzyme) (F)(PFL) no preservative¹³⁰</p>	<p>1.2 mL SWI¹³⁰</p> <p>swirl gently to mix¹³⁰</p> <p>do NOT shake¹³⁰</p>	<p>0.9 mg/mL¹³⁰</p>	<p>12 h F^{10,130}</p>	<p>syringe¹³⁰</p>	<p>24 h F^{10,130}</p>	<p>- do not use if particulates are present¹³⁰</p>

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Tislelizumab 100 mg/10 mL (BeiGene) (F) ^{131,132} (do not shake) no preservative ¹³³ (SAP)	N/A	10 mg/mL ¹³³	discard unused portion ¹³³	1-10 mg/mL NS ¹³³ 50-100 mL*	complete administration within 20 h F, 4 h RT (max 24 h from preparation) ¹³³ allow to come to RT prior to administration ¹³³ mix by gentle inversion; do not shake ¹³³	
Tocilizumab 80 mg/4 mL 200 mg/10 mL 400 mg/20 mL (Roche) (F)(PFL) no preservative ¹³⁴	N/A	20 mg/mL ¹³⁴	discard unused portion ¹³⁴	100 mL NS ¹³⁴ dilute to final volume by withdrawing volume from bag equal to volume of drug to be added ¹³⁴ gently invert to mix ¹³⁴	complete administration within 24 h F, RT ¹³⁴ bring to room temperature prior to administration ¹³⁴	- to prevent foaming: slowly add drug to infusion bag and gently invert bag to mix ¹³⁴
Topotecan 4 mg/4 mL (Accord) (RT)(PFL) no preservative ¹³⁵	N/A	1 mg/mL ¹³⁵	12 h F, RT ^{10,135}	0.025-0.5 mg/mL NS, D5W ¹³⁵ 25-50 mL†	10 d F, 4 d RT ^{10,135}	

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Topotecan 4 mg/4 mL (Pfizer/Hospira) (F)(PFL) no preservative ¹³⁶	N/A	1 mg/mL ¹³⁶	discard unused portion ¹³⁶	0.02-0.5 mg/mL NS , D5W ¹³⁶ 25-50 mL†	24 h F, RT ¹³⁶	
Topotecan 4 mg/4 mL (Sandoz) (F)(PFL) no preservative ¹³⁷	N/A	1 mg/mL ¹³⁷	discard unused portion ¹³⁷	0.02-0.5 mg/mL NS , D5W ¹³⁷ 25-50 mL†	24 h F ¹³⁷ **(PFL) ¹³⁷	
Trastuzumab (HERCEPTIN®) 440 mg (Roche) (F) no preservative ¹³⁸	20 mL supplied BWI ¹³⁸ swirl vial gently; allow to stand undisturbed for 5 min ¹³⁸	21 mg/mL ¹³⁸	28 d F ¹³⁸	250 mL NS only ¹³⁸ do NOT use dextrose containing solutions ¹³⁸	24 h F, RT ¹³⁸	- do NOT shake ¹³⁸

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Trastuzumab (HERZUMA®) 150 mg 440 mg (Teva/Celtrion) (F) no preservative ¹³⁹	150 mg: 7.2 mL SWI ¹³⁹	21 mg/mL ¹³⁹	discard unused portion ¹³⁹	250 mL NS only ¹³⁹ do NOT use dextrose containing solutions ¹³⁹	24 h F, RT ¹³⁹	- do NOT shake ¹³⁹ - supplied BWI contains benzyl alcohol ¹³⁹
	440 mg: 20 mL supplied BWI ¹³⁹		28 d F ¹³⁹			
	swirl vial gently; allow to stand undisturbed for 5 min ¹³⁹					
Trastuzumab (OGIVRI®) 150 mg 440 mg (BGP) (F) no preservative ¹⁴⁰	150 mg: 7.2 mL SWI ¹⁴⁰	21 mg/mL ¹⁴⁰	discard unused portion ¹⁴⁰	250 mL NS only ¹⁴⁰ do NOT use dextrose containing solutions ¹⁴⁰	24 h F, RT ¹⁴⁰	- do NOT shake ¹⁴⁰ - supplied BWI contains benzyl alcohol ¹⁴⁰
	440 mg: 20 mL supplied BWI ¹⁴⁰		28 d F ¹⁴⁰			
	swirl vial gently; allow to stand undisturbed for 5 min ¹⁴⁰					

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Trastuzumab (TRAZIMERA®) 150 mg 440 mg (Pfizer) (F) no preservative ¹⁴¹	150 mg: 7.2 mL SWI ¹⁴¹	21 mg/mL ¹⁴¹	discard unused portion ¹⁴¹	250 mL NS only ¹⁴¹ do NOT use dextrose containing solutions ¹⁴¹	24 h F, RT ¹⁴¹	- do NOT shake ¹⁴¹ - supplied BWI contains benzyl alcohol ¹⁴¹
	440 mg: 20 mL supplied BWI ¹⁴¹		28 d F ¹⁴¹			
	swirl vial gently; allow to stand undisturbed for 5 min ¹⁴¹					

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
<p>Trastuzumab deruxtecan (ENHERTU®) 100 mg (AstraZeneca) (F)(PFL) no preservative¹⁴²</p>	<p>5 mL SWI¹⁴² swirl gently until completely dissolved¹⁴² do NOT shake¹⁴²</p>	<p>20 mg/mL¹⁴²</p>	<p>12 h F^{10,142} **(PFL)¹⁴²</p>	<p>100 mL D5W only¹⁴² gently invert to mix¹⁴² do NOT shake¹⁴² do NOT use sodium chloride solution¹⁴²</p>	<p>complete administration within 24 h F, 4 h RT¹⁴² **(PFL)¹⁴²</p>	<p>- do not use if reconstituted solution contains visible particulates or is cloudy or discoloured¹⁴² - protect container from light during storage and administration¹⁴³ - administer with 0.2 micron in-line filter¹⁴² - if stored in fridge, allow infusion solution to come to RT prior to use¹⁴²</p>

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
<p>Trastuzumab emtansine (KADCYLA®) 100 mg 160 mg (Roche) (F)(PFL) no preservative¹⁴⁴</p>	<p>100 mg: 5 mL SWI¹⁴⁴</p> <p>160 mg: 8 mL SWI¹⁴⁴</p> <p>swirl gently until completely dissolved</p> <p>do NOT shake¹⁴⁴</p>	<p>20 mg/mL¹⁴⁴</p>	<p>12 h F^{10,145}</p>	<p>250 mL NS or ½NS only¹⁴⁴</p> <p>do NOT shake¹⁴⁴</p> <p>do NOT use dextrose containing solutions¹⁴⁴</p>	<p>24 h F¹⁴⁴</p>	<p>- do not use if reconstituted solution contains visible particulates or is cloudy or discolored¹⁴⁴</p> <p>- D5W causes aggregation of the protein¹⁴⁴</p> <p>- for infusions prepared in NS: administer with 0.2 micron in-line filter or 0.22 micron polyethersulfane (PES) filter¹⁴⁴</p> <p>- for infusions prepared in ½NS: filter is optional for administration¹⁴⁴</p>

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
<p>Treosulfan 1 g 5 g (Medexus) (RT) no preservative¹⁴⁶</p>	<p>1 g¹⁴⁶: 20 mL NS, D5W, SWI, ½NS</p> <p>5 g¹⁴⁶: 100 mL NS, D5W, SWI, ½NS</p> <p>pre-heat diluent to 25-30°C (max)¹⁴⁷</p> <p>shake vial to loosen powder before adding the warmed diluent¹⁴⁸</p> <p>vigorous shaking may be required¹⁴⁸; prolonged standing time may improve solubility¹⁴⁶</p>	<p>50 mg/mL¹⁴⁶</p>	<p>12 h RT^{10,146}</p>	<p>undiluted in empty infusion bag^{146,147}</p>	<p>3 d RT¹⁴⁶</p>	<p>- do NOT refrigerate as may precipitate¹⁴⁶</p>

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Treosulfan 1 g 5 g (medac) (RT) no preservative ^{149,150} (SAP)	1 g ^{149,150} : 20 mL SWI, ½NS 5 g ^{149,150} : 100 mL SWI, ½NS pre-heat diluent to 25-30°C (max) ^{149,150} shake vial carefully to loosen powder before adding the warmed diluent ^{149,150} gently shake while adding diluent ^{149,150} (takes ~2 min to reconstitute) ^{149,150}	50 mg/mL ^{149,150}	12 h RT ^{10,149,151}	undiluted ¹⁵² or dilute with NS or D5W in empty infusion bag for final concentration = 20 mg/mL ¹⁵¹	4 d RT ^{149,151}	- compatible with polytetrafluoroethyl ene filters ¹⁵³ - may sometimes require vigorous shaking to reconstitute ^{149,150} - do NOT refrigerate as may cause precipitation ^{149,150}
vinBLAStine 10 mg/10 mL (Pfizer) (F)(PFL) no preservative ¹⁵⁴	N/A	1 mg/mL ¹⁵⁴	discard unused portion ^{2,154}	25-50 mL NS , D5W ¹⁵⁵	use within 4 h of initial vial puncture ^{2,154}	- auxiliary info: WARNING: FOR INTRAVENOUS USE ONLY – FATAL IF GIVEN BY OTHER ROUTES ^{156,157}

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
vinBLAStine 10 mg/10 mL (Teva) (F)(PFL) no preservative ¹⁵⁸	N/A	1 mg/mL ¹⁵⁸	discard unused portion ^{2,158}	25-50 mL NS , D5W ¹⁵⁵	use within 4 h of initial vial puncture ^{2,158}	- auxiliary info: WARNING: FOR INTRAVENOUS USE ONLY – FATAL IF GIVEN BY OTHER ROUTES ^{156,157}
vinCRISStine 2 mg/2 mL 5 mg/5 mL (Pfizer/Hospira) (F)(PFL) no preservative ¹⁵⁹	N/A	1 mg/mL ¹⁵⁹	8 h F, RT ¹⁵⁹	0.01-0.1 mg/mL NS , D5W ¹⁵⁹ 50 mL†	24 h F, RT ¹⁵⁹ **(PFL) ¹⁵⁹	- auxiliary info: WARNING: FOR INTRAVENOUS USE ONLY – FATAL IF GIVEN BY OTHER ROUTES ^{156,157} - for LYEPOCHR protocol, see entry for EPOCHR (3-in-1 solution containing either etoposide or etoposide phosphate AND DOXOrubicin and vinCRISStine)

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
vinCRISTine 1 mg/1 mL 2 mg/2 mL 5 mg/5 mL (Teva) (F)(PFL) no preservative ¹⁶⁰	N/A	1 mg/mL ¹⁶⁰	8 h F, RT ¹⁶⁰	0.01-0.1 mg/mL NS , D5W ¹⁶⁰ 50 mL†	24 h F, RT ¹⁶⁰	- auxiliary info: WARNING: FOR INTRAVENOUS USE ONLY – FATAL IF GIVEN BY OTHER ROUTES^{156,157} - for LYEPOCHR protocol, see entry for EPOCHR (3-in-1 solution containing either etoposide or etoposide phosphate AND DOXOrubicin and vinCRISTine)
Vinorelbine 10 mg/1 mL 50 mg/5mL (Fresenius Kabi) (F)(PFL) no preservative ¹⁶¹	N/A	10 mg/mL ¹⁶¹	discard unused portion ¹⁶¹	0.5-2.0 mg/mL NS , D5W, ½NS, D5-½NS, Ringer's, Ringer's Lactate ¹⁶¹ 50 mL†	24 h F, RT ¹⁶¹	- auxiliary info: WARNING: FOR INTRAVENOUS USE ONLY – FATAL IF GIVEN BY OTHER ROUTES^{156,157}

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Vinorelbine 10 mg/1 mL 50 mg/5 mL (GMP) (F)(PFL) no preservative ¹⁶²	N/A	10 mg/mL ¹⁶²	discard unused portion ²	0.5-2.0 mg/mL NS , D5W, ½NS, D5-½NS, Ringer's, Ringer's Lactate ¹⁶² 50 mL†	24 h F, RT ¹⁶²	- auxiliary info: WARNING: FOR INTRAVENOUS USE ONLY – FATAL IF GIVEN BY OTHER ROUTES ^{156,157}
Vinorelbine 10 mg/1 mL 50 mg/5 mL (Teva) (F)(PFL) no preservative ¹⁶³	N/A	10 mg/mL ¹⁶³	discard unused portion ¹⁶³	0.5–2.0 mg/mL NS , D5W, ½NS, D5-½NS, Ringer's, Ringer's Lactate ¹⁶³ 50 mL†	24 h F, RT ¹⁶³	- auxiliary info: WARNING: FOR INTRAVENOUS USE ONLY – FATAL IF GIVEN BY OTHER ROUTES ^{156,157}
Zoledronic acid 4 mg/5 mL (Dr Reddy's) (RT) no preservative ¹⁶⁴	N/A	0.8 mg/mL ¹⁶⁴	discard unused portion ¹⁶⁴	100 mL NS , D5W ¹⁶⁴	complete infusion within 24 h of preparation ¹⁶⁴ refrigerate diluted product if not used immediately after preparation; bring to RT prior to administration ¹⁶⁴	- do NOT mix with calcium containing solutions ¹⁶⁴

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Zoledronic acid 4 mg/5 mL (Marcan) (RT) no preservative ¹⁶⁵	N/A	0.8 mg/mL ¹⁶⁵	discard unused portion ¹⁶⁵	100 mL NS , D5W ¹⁶⁵	complete infusion within 24 h of preparation ¹⁶⁵ refrigerate diluted product if not used immediately after preparation; bring to RT prior to administration ¹⁶⁵	- do NOT mix with calcium containing solutions (e.g., Lactated Ringer's) ¹⁶⁵
Zoledronic acid 4 mg/5 mL (MDA) (RT) no preservative ¹⁶⁶	N/A	0.8 mg/mL ¹⁶⁶	discard unused portion ¹⁶⁶	100 mL NS , D5W ¹⁶⁶	complete infusion within 24 h of preparation ¹⁶⁶ refrigerate diluted product if not used immediately after preparation; bring to RT prior to administration ¹⁶⁶	- do NOT mix with calcium containing solutions ¹⁶⁶

BC CANCER CHEMOTHERAPY PREPARATION AND STABILITY CHART

DRUG & STRENGTH (Storage Prior to Use, Manufacturer, Preservative Status)	Reconstitute With:	To Give:	Vial Stability	Product (for IV bag size selection, see Notes†)	Product Stability	Special Precautions/Notes
Zoledronic acid (ZOMETA) 4 mg/ 5 mL (Novartis) (RT) no preservative ¹⁶⁷	N/A	0.8 mg/mL ¹⁶⁷	discard unused portion ⁴⁴	100 mL NS, D5W ¹⁶⁷	complete infusion within 24 h of preparation ¹⁶⁷ refrigerate diluted product if not used immediately after preparation; bring to RT prior to administration ¹⁶⁷	- do NOT mix with calcium containing solutions ¹⁶⁷
Zoledronic acid 4 mg/5 mL (Sandoz) (RT) no preservative ¹⁶⁸	N/A	0.8 mg/mL ¹⁶⁸	discard unused portion ¹⁶⁸	100 ml NS, D5W ¹⁶⁸	complete infusion within 24 h of preparation ¹⁶⁸ refrigerate diluted product if not used immediately after preparation; bring to RT prior to administration ¹⁶⁸	- do NOT mix with calcium- or other divalent cation- containing infusion solutions (e.g., Lactated Ringer's) ¹⁶⁸

* Suggested volume based on usual dose range and any concentration range of stability data

† see [BC Cancer IV Bag Selection table](#): standardized bag sizes are provided for select Benefit Drugs with concentration-dependent stability or large drug volume

** Protect from light means minimizing exposure to direct sunlight over a *storage* period. More specific information on protection from light (eg, protecting container and tubing during *administration*) will be indicated in the Special Precautions/Notes column.

*** Contains DMA (N,N dimethylacetamide). Product may be incompatible with closed system transfer devices such as ChemoLock.

Centres are not to change content locally. All suggestions for change are to be forwarded to the Cancer Drug Manual editor.

Explanatory Notes:

Stability data assumes products prepared using standard aseptic technique in biological safety cabinet at low risk for contamination according to the classification outlined in USP 797.^{169,170}

Vial stability: Stability of solution after first puncture or reconstituted solution.

Storage temperature: If information states same stability with refrigerator and room temperature storage, then fridge stability is bolded as preferred (ie, to minimize growth of micro-organisms).

Discard unused portion: Unused portion from single use vials should be discarded at the end of the day.

“overflow known” is stated if the manufacturer states overflow that is present is within acceptable limits.

“Complete administration within ___” is stated if the manufacturer specifies that the infusion must be completed in a specific time frame following preparation, usually including entire time required for preparation (from first puncture), storage, and administration of infusion.

Nomenclature for **In-line filters** has been standardized to 0.2 micron filter size. For more information, refer to CDM monograph.

Abbreviations:

BWI = bacteriostatic water for injection

CIVI: ambulatory pump = Continuous Intravenous Infusion (e.g., elastomeric infusor)

D5W = dextrose 5% in water

DMA = N,N dimethylacetamide

F = refrigerate

Non-DEHP = not containing Di(2-ethylhexyl) phthalate (DEHP)

NS = normal saline

PFL = protect from light

RT = room temperature

SAP = drug is approved for use through the Health Canada Special Access Program

SWI = sterile water for injection

References:

1. Generic Medical Partners Inc. Leucovorin calcium injection product monograph. Toronto, Ontario; 6 March 2020
2. BC Cancer. Provincial Pharmacy Directive Number II-20: Chemotherapy Preparation Chart. Vancouver, British Columbia: BC Cancer; December 5 2018
3. Pfizer Canada Inc. Leucovorin calcium injection product monograph. Kirkland, Quebec; 21 June 2018
4. Teva Canada Limited. Leucovorin calcium injection® product monograph. Toronto, Ontario; 5 May 2014
5. Hospira Healthcare Corporation. LEUCOVORIN CALCIUM INJECTION® product monograph. Saint-Laurent, Quebec; 7 June . 2007
6. Novopharm Limited (Teva). LEUCOVORIN CALCIUM® Injection product information package. Toronto, Ontario; undated undated
7. BC Cancer Agency. Pharmacy Policy Number II-20: Guiding Principles for Chemotherapy Preparation Chart. Vancouver, British Columbia: BC Cancer Agency; 6 January 2006
8. Jenny Yeung. Medical Information Specialist, Teva Canada. Personal communication. 12 April 2017
9. Jazz Pharmaceuticals Canada Incorporated. ZEPZELCA® product monograph. Mississauga, Ontario; September 29, 2021

10. BC Cancer. Provincial Pharmacy Directive Number II-20: Chemotherapy Preparation Chart. Vancouver, British Columbia: BC Cancer; May 1 2022
11. Linda Ewing. BD US Market Manager. WW Infusion Disposables. Personal communication. Feb 2018
12. Pharma Mar. Lurbinectedin Compassionate Use: Preparation Guide for Infusion - edition 1. Madrid, Spain; April 2019
13. Marcan Pharmaceuticals Inc. Melphalan for injection product monograph. Ottawa, ON; July 26, 2019
14. Taro Pharmaceuticals Inc. Taro-Melphalan product monograph. Brampton, Ontario; April 5, 2019
15. Baxter Corporation. UROMITEXAN® product monograph. Mississauga, Ontario; 6 August 2013
16. Mona Ghobros BPharm MSc. Medical Information, Baxter Corporation. Personal communication. 29 November 2018
17. Trissel's® 2 Clinical Pharmaceutics Database (database on the Internet). Mesna. Lexi-Comp Inc.; created by Lawrence A. Trissel, Available at: <http://online.lexi.com>. Accessed 29 November, 2018
18. Fresenius Kabi Canada Ltd. Mesna for injection product monograph. Richmond Hill, Ontario; 21 December 2017
19. BC Cancer. Pharmacy Policy Number II-20: Guiding Principles for Chemotherapy Preparation Chart. Vancouver, British Columbia: BC Cancer; 19 September 2007
20. Fresenius Kabi Canada Ltd. Mesna for injection product monograph. Richmond Hill, Ontario; 30 March 2015
21. Accord Healthcare Inc. Methotrexate injection product monograph. Kirkland, Quebec; 6 April 2018
22. BC Cancer Agency Miscellaneous Origins Tumour Group. (MOHDMTX) BCCA Protocol Summary for Treatment of Meningeal Disease (Miscellaneous Tumour Origins) using High Dose Methotrexate with Leucovorin Rescue. Vancouver, British Columbia: BC Cancer Agency; 1 Jan 2013
23. BC Cancer Agency Sarcoma Tumour Group. (SAHDMTX) BCCA Protocol Summary for Treatment of Osteosarcoma Using High Dose Methotrexate with Leucovorin Rescue. Vancouver, British Columbia: BC Cancer Agency; 1 Nov 2012
24. BC Cancer Agency Lymphoma Tumour Group. (LYHDMRP) BCCA Protocol Summary for Treatment of Primary Intracerebral Lymphoma with High Dose Methotrexate and rituximab. Vancouver, British Columbia: BC Cancer Agency; 1 Jun 2014
25. BC Cancer Agency Lymphoma Tumour Group. (LYHDMTXP) BCCA Protocol Summary for Treatment of Primary Intracerebral Lymphoma with High Dose Methotrexate. Vancouver, British Columbia: BC Cancer Agency; 1 Jun 2014
26. BC Cancer Agency Lymphoma Tumour Group. (LYHDMTXR) BCCA Protocol Summary for Treatment of Leptomeningeal Lymphoma or Recurrent Intracerebral Lymphoma with High Dose Methotrexate. Vancouver, British Columbia: BC Cancer Agency; 1 Jun 2014
27. Mayne Pharma Canada. Methotrexate Product Monograph. Montreal, Quebec; December 2003
28. BC Cancer Lymphoma Tumour Group. (LYIT) BC Cancer Protocol Summary for Treatment of Lymphoma using Intrathecal Methotrexate and Cytarabine. Vancouver, British Columbia: BC Cancer; 1 June 2014
29. BC Cancer Miscellaneous Origin Tumour Group. (MOIT) BC Cancer Protocol Summary for Solid Tumours using Intrathecal Methotrexate and/or Thiotepa and/or Cytarabine. Vancouver, British Columbia: BC Cancer; 1 October 2018
30. BC Cancer. Systemic Therapy Policy and Procedure III-50: Administration of High Alert Medications by the Intrathecal Route via Lumbar Puncture or Ommaya Reservoir. Vancouver, British Columbia; 1 May 2019
31. Pfizer Canada Inc. Methotrexate injection product monograph. Kirkland, Quebec; 13 October 2017
32. Accord Healthcare Inc. Mitomycin product monograph. Kirkland, Quebec; 7 June 2017
33. Accord Healthcare Inc. Mitomycin product monograph. Kirkland, Quebec; 16 July 2018
34. Au JLS, Badalament RA, Wientjes MG, et al. Methods to improve efficacy of intravesical mitomycin C: results of a randomized phase III trial. J Natl Cancer Inst 2001;93(8):597-604
35. Jessie LS Au PharmD PhD. Professor, Ohio State University. Personal communication. 14 May 2007
36. Myers AL, Zhang Y, Kawedia JD, et al. Solubilization and stability of mitomycin C solutions prepared for intravesical administration. Drugs R D 2017;17:297-304
37. Beijnen JH, Van Gijn R, Underberg WJM. Chemical stability of the antitumor drug mitomycin C in solutions for intravesical instillation. Journal of Parenteral Science and Technology 1990;44(6):332-335
38. Teva Canada Limited. Mitomycin for injection® product monograph. Toronto, Ontario; 30 June 2017
39. Fresenius Kabi Canada Ltd. Mitoxantrone injection® product monograph. Richmond Hill, Ontario; 28 September . 2016
40. Pfizer Canada Inc. Mitoxantrone injection product monograph. Kirkland, Quebec; 17 October 2018
41. Kyowa Kirin Inc. POTELIGEO® full prescribing information. Bedminster, NJ; July 2021
42. Bristol-Myers Squibb Canada Co. OPDIVO® product monograph. Montreal, Canada; February 28, 2022
43. Hoffmann-La Roche Ltd. GAZYVA® product monograph. Mississauga, Ontario; 21 December . 2015
44. BC Cancer Agency. Pharmacy Policy Number II-20: Guiding Principles for Chemotherapy Preparation Chart. Vancouver, British Columbia: BC Cancer Agency; 19 September 2007
45. Anna Sivojelezova MSc. Drug Information Associate, Hoffmann-La Roche Ltd. Personal communication. 24 April 2015

46. Omega Laboratories Limited. OCTREOTIDE ACETATE solution product monograph. Montreal, Quebec; January 25, 2022
47. Novartis Pharmaceuticals Canada Inc. SANDOSTATIN® and SANDOSTATIN® LAR® product monograph. Dorval, Quebec; April 19 2021
48. Teva Canada Limited. OCTREOTIDE for injectable suspension Product Monograph. Toronto, Ontario; Aug 30, 2021
49. Dr. Reddy's Laboratories Canada Inc. Oxaliplatin injection product monograph. Mississauga, Ontario; February 8, 2022
50. Pfizer Canada Inc. Oxaliplatin injection product monograph. Kirkland, Quebec; 31 May 2017
51. Medical Information Pfizer Canada Inc. Personal communication. 6 June 2017
52. Sandoz Canada Inc. Oxaliplatin injection product monograph. Boucherville, Quebec; 12 August 2015
53. Katryn Vosburg. Drug Information & Pharmacovigilance Specialist, Sandoz Canada Inc. Personal communication. 26 February 2016
54. Teva Canada Limited. Teva-Oxaliplatin injection® product monograph. Toronto, Ontario; 11 September 2015
55. Accord Healthcare Inc. Paclitaxel Injection. Kirkland, Quebec; September 14, 2020
56. Mercure C. Stability of 0.1 mg/mL of paclitaxel for injection in sodium chloride (0.9%) solution. St Catharines, Ontario: Biolyse Pharma; 2 February 2007
57. Biolyse. PACLITAXEL FOR INJECTION® product monograph. St. Catherines, Ontario; 12 September 2013
58. Claude Mercure. Manager, Biolyse Pharma Corporation. Personal communication. 24 June 2014
59. Zeng Z, Lazakovitch E. Study IR 120: Physical and Chemical Stability Study of Paclitaxel for Injection in 0.9 % Sodium Chloride in concentration range 0.012-0.12 mg/mL. Biolyse Pharma 2010
60. Biolyse. PACLITAXEL FOR INJECTION® product monograph. St. Catherines, Ontario; 2 December . 2005
61. Xu Q, Trissel LA, Martinez JF. Stability of paclitaxel in 5% dextrose injection or 0.9% sodium chloride injection at 4, 22, or 32 degrees C. Am J Hosp Pharm 1994;51(24):3058-60
62. Lisa Tavano. Biolyse Pharma Corporation. Personal communication. 14 May 2012
63. Sandoz Canada Inc. Paclitaxel injection USP product monograph . Boucherville, Quebec; October 18, 2021
64. Bristol Myers Squibb. Personal Communication: Importation of German-labelled ABRAXANE® Powder for Dispersion for Infusion (Paclitaxel) due to a Shortage of Canadian-labelled ABRAXANE® for Injectable Suspension. December 16, 2021
65. Celgene Inc. ABRAXANE® product monograph. Mississauga, Ontario; 31 August 2018
66. Aisling Cahill. Drug Safety and Medical Information Specialist. Celgene Inc. Personal communication. 23 April 2015
67. Celgene Europe Limited. ABRAXANE® product monograph. Uxbridge, UK; 11 January 2013
68. Bristol Myers Squibb. Personal Communication: Importation of United-Arab-Emirates-labelled ABRAXANE® Powder for Suspension for Infusion (Paclitaxel) due to a Shortage of Canadian-labelled ABRAXANE® for Injectable Suspension. November 15, 2021
69. Pharmaceutical Partners of Canada. Pamidronate Disodium For Injection product monograph. Richmond Hill, Ontario; 18 January . 2010
70. Mayne Pharma (Canada) Inc. Pamidronate Package Insert. Montreal, Quebec; 2002
71. Omega Laboratories Ltd. Pamidronate Disodium product monograph. Montreal, Quebec; 06 June . 2005
72. Pfizer Canada-ULC. Pamidronate disodium for injection product monograph. Kirkland, Quebec; December 11, 2018
73. Sandoz Canada Inc. Pamidronate injection product monograph. Boucherville, Quebec; 28 February 2006
74. BC Cancer Agency. Pharmacy Policy Number II-20: Guiding Principles for Chemotherapy Preparation Chart. Vancouver, British Columbia: BC Cancer Agency; 19 September 2007
75. Amgen Canada. VECTIBIX® product monograph. Mississauga, Ontario; 31 March 2017
76. Amgen Inc. VECTIBIX® full prescribing information. Thousand Oaks, California USA; June 2017
77. Amgen Canada. VECTIBIX® product monograph. Mississauga, Ontario; 5 March . 2009
78. Diane Lord. Medical Information Department, Amgen Canada Inc. Personal communication. 19 June 2009
79. Servier Canada Inc. ONCASPAR® product monograph. Laval, Quebec; November 22 2021
80. Merck Canada Inc. KEYTRUDA® product monograph. Kirkland, Quebec; 6 December 2019
81. Accord Healthcare Inc. Pemetrexed disodium for injection product monograph. Kirkland, Quebec; 12 March 2015
82. Accord Healthcare Inc. Pemetrexed solution for injection product monograph. Kirkland, QC; April 26, 2021
83. Dr. Reddy's Laboratories Limited. Pemetrexed for Injection product monograph . Oakville, Ontario; April 12, 2017
84. Dr. Reddy's Laboratories Ltd. Pemetrexed for Injection product monograph. Mississauga, Ontario; May 3, 2022
85. Dr. Reddy's Laboratories Inc. Pemetrexed for injection full prescribing information (package insert). Princeton, NJ, USA; Mar 2022
86. Md Aslam. Medical information Associate. Drug information. Dr Reddy's Laboratories. Personal Communication (verbal). December 1, 2022
87. Eli Lilly and Company. ALIMTA® product monograph. Indianapolis, Indiana, USA; September 2013
88. Taro Pharmaceuticals Inc. Pemetrexed disodium for injection product monograph. Brampton, Ontario; 30 August 2018

89. Hospira Inc. NIPENT® full prescribing information. Lake Forest, Illinois USA; Oct 2019
90. Hoffmann-La Roche Limited. PERJETA® product monograph. Mississauga, Ontario; April 12, 2013
91. sanofi-aventis Canada Inc. MOZOBIL® product monograph. Laval, Quebec; 8 October . 2014
92. Maureen Coughlin BSc Pharm. Solutions in Health Inc. (acting as an authorized agent of sanofi-aventis and). Personal communication. 24 May2017
93. Hoffman-La Roche Limited. POLIVY® product monograph. Mississauga, Ontario; April 27, 2021
94. Servier Canada Inc. FOLOTYN® product monograph. Laval, Quebec; 19 October 2018
95. Marjolaine Migeon PharmD. Servier Canada Medical Information. Personal communication. 24 September2019
96. Pfizer Canada Inc. TOMUDEX® product monograph. Kirkland, Quebec; 8 August 2017
97. Eli Lilly Canada Inc. CYRAMZA® product monograph. Toronto, Ontario; 16 July 2015
98. Marilyn Bain BScN. Senior Medical Information Associate, Eli Lilly Canada Inc. Personal communication. 16 January2017
99. Hoffmann-La Roche Ltd. RITUXAN® product monograph. Mississauga, Ontario; 10 October 2019
100. Hoffmann-La Roche Ltd. RITUXAN® SC product monograph. Mississauga, Ontario; 21 March . 2018
101. Sandoz Canada Inc. RIXIMYO® product monograph. Boucherville, Quebec; 28 April 2020
102. ULC Pfizer Canada. RUXIENCE® product monograph. Kirkland, Quebec; 4 May 2020
103. Teva Canada Limited for Celtrion Healthcare Co Ltd. TRUXIMA® product monograph. Toronto, Ontario; 22 July 2019
104. Celgene Inc. ISTODAX® product monograph. Mississauga, Ontario; 13 December 2016
105. Celgene Inc. INFO Rx ISTODAX® (romidepsin) for Injection. Mississauga, Ontario; 10 July 2017
106. Aisling Cahill. Drug Safety and Medical Information Specialist. Celgene Inc. Personal communication. 17 July2015
107. Gilead Sciences Canada Inc. TRODELVY® product monograph. Mississauga, ON; February 14, 2022
108. Gilead Medical Information. Gilead Sciences Inc. Personal Communication: Trodelvy® (sacituzumab govitecan) Concentration After Reconstitution. Jan 24,2022
109. Immunomedics Inc. TRODELVY® full prescribing information. Morris Plains, New Jersey, USA; Apr 2020
110. Janssen Inc. SYLVANT® product monograph. Toronto, Ontario; 6 January 2016
111. Aadi Bioscience Inc. Pharmacy Manual Protocol PEX-002 (Version 4.0) Expanded Access for an Intermediate-size Population for ABI-009 (Sirolimus Albumin-bound Nanoparticles for Injectable Suspension) in Patients with Perivascular Epithelioid Cell Tumors (PEComa) or Patients with Relevant Genetic Mutations for mTOR Pathway Activation. Pacific Palisades, CA, USA; July 16, 2021
112. Aadi Bioscience Inc. ABI-009 sirolimus albumin-bound nanoparticle (packaging information - BOX). Pacific Palisades, CA; Feb 1 , 2022
113. Aadi Bioscience Inc. ABI-009 sirolimus albumin-bound nanoparticle (packaging information - VIAL). Pacific Palisades, CA; Feb 1, 2022
114. Aadi Bioscience Inc. ABI-009 (*nab*-Sirolimus) Investigator's Brochure - version 10.0. Pacific Palisades, CA, USA; July 27, 2021
115. Keocyt. Streptozocin Keocyt summary of product characteristics, version 5. Montrouge, France; February 2016
116. Keocyt. ZANOSAR® package leaflet. Montrouge, France; 24 February 2016
117. Keocyt. ZANOSAR® summary of product characteristics, version 3. Montrouge, France; 31 October 2017
118. Keocyt-Riemser Pharma. Marie-Laure Vedel, Sales Order Handling and Hospital Relationship Manager. 16 September2021
119. Medison Pharma Canada Inc.for Immunocore Ireland Limited. KIMMTRAK® product monograph. Toronto, Ontario; June 7, 2022
120. Pfeiffer, Connie. Head of Medical Affairs Immunocore. Personal Communication. Feb 16,2022
121. Immunocore and Clinigen. MAP Pharmacy Manual – Tebentafusp 0.2 mg/mL formulation. Abingdon, Oxfordshire, UK; May 19, 2021
122. Immunocore Commercial-LLC. KIMMTRAK® full prescribing information. Conshohocken, PA, USA; Jan 2022
123. Pfizer Canada Inc (for Wyeth Canada). TORISEL® product monograph. Kirkland, Quebec; 21 December . 2016
124. Anna Sivojelezova M.Sc. Medical Information Associate, Wyeth. Personal communication. 6 January2010
125. Bristol-Myers Squibb Canada. VUMON® product monograph. St. Laurent, Quebec; 26 October . 2004
126. Trissel's®2 IV Compatibility (database on the Internet). Teniposide. Thomson Reuters MICROMEDEX® 2.0, updated periodically. Available at: <http://www.micromedex.com>. Accessed 27 April, 2011
127. Adienne-SA. TEPADINA® product monograph. Lugano, Switzerland; 28 March 2017
128. AHFS Drug Information® (database on the Internet). Thiotepa. Lexi-Comp Inc., 2018. Available at: <http://online.lexi.com>. Accessed 21 August, 2018
129. Hematology/Oncology Pharmacy Association. HOPA News Clinical Pearls: Intrathecal Chemotherapy: Focus on Drugs, Dosing, and Preparation. 13(4) ed. Chicago, Illinois, USA: Hematology/Oncology Pharmacy Association; 2016
130. Sanofi Genzyme. THYROGEN® product monograph. Mississauga, Ontario; July 29, 2021

131. Lillian Phan. Senior Manager, Medical Affairs US, EU & New Markets. Personal communication. 15 January 2021
132. BeiGene Ltd. Clinical Study Pharmacy Manual Protocol BGB-A317-207: An phase 2, open-label study of BGB-A317 in patients with relapsed or refractory mature T- and NK-cell neoplasms. (Version 5.0). San Mateo, California, USA; 8 November 2019
133. BeiGene Ltd. Tislelizumab (BGB-A317) Product Information for Investigator Sponsored Research (ISR) Investigators (Version 0.0). San Mateo, California, USA; 19 May 2020
134. Hoffmann-La Roche Limited. ACTEMRA® product monograph. Mississauga, Ontario; 27 October 2017
135. Accord Healthcare Inc. Topotecan hydrochloride for injection product monograph. Kirkland, Quebec; 9 May 2019
136. Pfizer Canada Inc. Topotecan hydrochloride for injection product monograph. Kirkland, Quebec; 5 January 2018
137. Sandoz Canada Inc. Topotecan injection product monograph. Boucherville, Quebec; 5 September . 2014
138. Hoffmann-La Roche Limited. HERCEPTIN® product monograph. Mississauga, Ontario; May 7, 2020
139. Celltrion Healthcare Co Ltd (distributed by Teva Canada Limited). HERZUMA® product monograph. Toronto, Ontario; 20 October 2020
140. BGP Pharmacy ULC. OGIVRI® product monograph. Etobicoke, Ontario; 3 May 2019
141. ULC Pfizer Canada. TRAZIMERA® product monograph. Kirkland, Quebec; 15 August 2019
142. AstraZeneca Canada Inc. ENHERTU® product monograph. Mississauga, Ontario; 15 April 2021
143. AstraZeneca Canada Inc. Medical Information. 5 October 2021
144. Hoffmann-La Roche Limited. KADCYLA® product monograph. Mississauga, Ontario; 11 September 2013
145. Hoffmann-La Roche Limited. KADCYLA® product monograph. Mississauga, Ontario; July 3, 2020
146. Medexus Inc. TRECONDYV® product monograph. Bolton, Ontario; June 25, 2021
147. Erin Wallace. Ontario Territory Manager, Medexus Pharmaceuticals Inc. Personal Communication - TRECONDYV®. November 2, 2021
148. Medical Information team. Medexus Pharmaceuticals Inc. Personal Communication - TRECONDYV®. November 1, 2021
149. medac GmbH. TRECONDI® summary of product characteristics. Wedel, Germany;
150. medac-UK. TREOSULFAN injection® summary of product characteristics. Wedel, Germany; 26 Jan 2017
151. medac-UK. TREOSULFAN injection® Details about Handling and Stability. Hamburg, Germany; August 2008
152. Henrik Fenger. Management Associate, International Division medac. Personal communication. 03 March 2010
153. medac-UK. TREOSULFAN injection® summary of product characteristics. Hamburg, Germany; 24 Jun 2008
154. ULC Pfizer Canada. Vinblastine sulfate injection product monograph. Kirkland, Quebec; 18 April 2019
155. Lexi-Drugs® (database on the Internet). VinBLASTine. Lexi-Comp Inc., 2020. Available at: <http://online.lexi.com>. Accessed 30 January, 2020
156. BC Cancer Provincial Systemic Therapy Program. Policy V-40: Dispensing and Labelling of Vinca Alkaloid Preparations. Vancouver, British Columbia: BC Cancer; 1 April 2015
157. World Health Organization. Information Exchange System - Vincristine (and other vinca alkaloids) should only be given intravenously via a minibag. Alert No. 115 ed. Geneva, Switzerland: World Health Organization; 18 July 2007
158. Teva Canada Limited. Vinblastine sulfate injection product monograph. Toronto, Ontario; 22 October 2019
159. Pfizer Canada-ULC. Vincristine sulfate injection product monograph. Kirkland, Québec; July 26, 2021
160. Teva Canada Limited. Vincristine sulfate injection® product monograph. Scarborough, Ontario; March 27, 2014
161. Pharmaceutical Partners of Canada. Vinorelbine Injection product monograph. Richmond Hill, Ontario; 15 January . 2008
162. Generic Medical Partners Inc. Vinorelbine Injection product monograph. Toronto, Ontario; 3 September 2014
163. Teva Canada Limited. Vinorelbine tartrate for Injection product monograph. Toronto, Ontario; 20 March 2014
164. Innomar Strategies Inc. (for Dr. Reddy's Laboratories Limited). Zoledronic acid for injection concentrate® product monograph. Oakville, Ontario; 11 March 2015
165. Marcan Pharmaceuticals Inc. Zoledronic acid concentrate for injection product monograph. Ottawa, Ontario; 5 February 2018
166. MDA Inc. Zoledronic acid for injection product monograph. Mississauga, Ontario; 11 August 2015
167. Novartis Pharmaceuticals Canada Inc. ZOMETA® product monograph. Dorval, Quebec; 26 July 2013
168. Sandoz Canada Inc. Zoledronic Acid - Z® product monograph. Boucherville, Quebec; 02 December 2016
169. The United States Pharmacopeia, (USP). General Chapter 797: Pharmaceutical compounding - sterile preparations. USP 27-NF 22. Rockville, Maryland: The United States Pharmacopeial Convention, Inc.; 2004
170. Kastango ES. The ASHP discussion guide for compounding sterile preparations. Bethesda (MD): American Society of Health-System Pharmacists, Inc.; 2004. p. 5