

Oncology Pharmacy Newsletter

The Oncology Pharmacy Newsletter is publication dedicated to providing useful information for the staff treating patients who come to the Oncology Outpatient Pavilion.

Questions and requests for topics are welcome.

References available upon request.

New Carboplatin Admixture and Infusion Rate:

Starting Monday, 3/13/17, all carboplatin doses will be mixed in 250ml NS and infused over 30 minutes.

Protocols will be updated to use this new admixture and infusion rate, but daughter orders may still contain orders for the old method.

Pharmacists may alter the infusion volume and rate to any daughter orders that still follow the old protocol. Over time orders will no longer contain the old directions, but prescribers are not required to write new orders to reflect this change.

The programming in the Alaris pumps will be updated to reflect this change with the next library update.

Atezolizumab (Tecentriq®)

Atezolizumab is a programmed death-ligand 1 (PD-L1) monoclonal antibody indicated for the treatment of metastatic non-small cell lung cancer and locally advanced or metastatic urothelial cancer who have progressed after receiving platinum based chemotherapy. Patients with non-small lung cancer with genetic profiles suggesting they may benefit from tyrosine kinase inhibitors (ALK or EGFR mutations) should have received these agents and progressed prior to starting atezolizumab.

Patients with either indication receive atezolizumab IV 1200mg in 250ml NS every 3 weeks. The admixture may be gently inverted to mix, but should not be shaken. The first infusion is over 60 minutes, but subsequent doses may be infused over 30 minutes if the first dose is well tolerated. Infusion reactions are not common, but have been reported in 1.3% of patients. The room temperature infusion must be completed within 6 hours of mixing, but can be stored up to 24hours if refrigerated.

Premedication is not necessary, but an antiemetic should be available to the patient should nausea or vomiting develop.

Monitoring should include CBC with diff, BUN/Cr, LFTs, electrolytes, and TSH baseline and every 3 months.

Dose modifications are not recommended, but patients must be closely monitored for immune related adverse effects that require interruption or discontinuation of therapy depending on the severity. These include: Pneumonitis ($\leq 4\%$), hepatitis ($\leq 1\%$), colitis (21%), hypophysitis, hypo- or hyperthyroidism ($\leq 4\%$), rash (15%), diabetes, myasthenia gravis, Guillian-Barré syndrome, meningoencephalitis, pancreatitis, ocular inflammation, and infections (38%). Corticosteroid treatment of these adverse effects may be required.

Other commonly reported side effects include fatigue (52%), nausea (25%), vomiting (17%), diarrhea (18%, may be severe), anorexia (26%), constipation (21%), abdominal pain (17%), urinary tract infections (22%), Increase in serum Cr (19%), hematuria (14%), fever (21%), peripheral edema (18%), arthralgia or back pain (17%), dyspnea (16%), cough (14%), and insomnia (14%).

http://online.lexi.com/lco/action/doc/retrieve/docid/patch_f/6037266

https://www.gene.com/download/pdf/tecentriq_prescribing.pdf

<https://www.nccn.org/TemplateManagement/Get/1473>

New Intravenous Iron Product Available in AACU and NCCC

Pharmacy and Therapeutics committee has recently approved a switch from Venofer® (iron sucrose) to Injectafer® (ferric carboxymaltose) as our preferred formulary agent in the outpatient setting for patients who require intravenous iron replacement and are not dialysis dependent or hyperphosphatemic.

Ferric carboxymaltose (Injectafer®) is a colloidal iron (III) hydroxide in complex with carboxymaltose, a carbohydrate polymer that releases iron. Ferric carboxymaltose is a non-dextran formulation that allows iron uptake (into reticuloendothelial system) without the release of free iron.

Dosage and Administration:

For patients weighing 50kg or more:

Give Injectafer® in 2 doses separated by at least 7 days

Give each dose as 750mg/250mL NS over 15 minutes for a total cumulative dose of 1500mg

For patients weighing less than 50kg:

Give Injectafer® in 2 doses separated by at least 7 days

Give each dose as 15mg/kg of body weight

Injectafer® can be repeated if iron deficiency anemia reoccurs. There are no modifications for renal or hepatic impairment, or advanced age.

Injectafer® can be given as an IV infusion (750mg mixed in 250mL 0.9% sodium chloride) over 15 minutes or as slow IV push (straight drug) over 7.5 minutes. Once mixed in 0.9% Sodium chloride, ferric carboxymaltose is stable for 72 hours at room temperature.

Injectafer® is pregnancy category C and is excreted into breast milk.

In clinical trials, serious anaphylactic/anaphylactoid reactions were reported in 0.1% (2/1775) of subjects receiving Injectafer®. Patients may present with shock, clinically significant hypotension, loss of consciousness, and/or collapse. Monitor patients for signs and symptoms of hypersensitivity during and after Injectafer administration for at least 30 minutes and until clinically stable following completion of the infusion. Other serious or severe adverse reactions potentially associated with hypersensitivity which included, but not limited to, pruritus, rash, urticaria, wheezing, or hypotension were reported in 1.5% (26/1775) of these subjects. Extravasation may cause permanent discoloration.

ADVERSE DRUG REACTIONS: reported in $\geq 1\%$ of Study Patients in Clinical Trials 1 and 2.

	Injectafer (N=1775) %	Pooled Comparators (N=1783) %	Oral iron (N=253) %
Nausea	7.2	1.8	1.2
Hypertension	3.8	1.9	0.4
Flushing/Hot flush	3.6	0.2	0.0
Blood Phosphorus Decrease	2.1	0.1	0.0
Dizziness	2.0	1.2	0.0
Vomiting	1.7	0.5	0.4
Injection Site Discoloration	1.4	0.3	0.0
Headache	1.2	0.9	0.0
Hypotension	1.0	1.9	0.0
Constipation	0.5	0.9	3.2

Injectafer® may decrease the absorption of zinc, sparfloxacin, and entacapone. It may also decrease the effectiveness of mycophenolate and minocycline.

Adapted from the monograph prepared for Pharmacy and Therapeutics Committee consideration. References available upon request.