

## 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.

### Can I infuse electrolytes in the same line as paclitaxel?

Paclitaxel and docetaxel are drugs that have limited and concentration dependent solubility, so it is not a good idea to add other drugs, electrolytes, or even fluids to the same line as these chemotherapies.

Although some data does exist to administer other agents along with chemotherapy in some instances, it most often will not be something well supported by literature.

In general, it is a good idea not to administer other agents in the same line as chemotherapy, but if no alternative exists, please contact your pharmacist to check on compatibility before hooking an additional product into a line containing any chemotherapy or biologic agent.

## New Oncology Approvals

It's hard to keep up with the new indications and approvals in oncology medications with the rate they are being announced! These are some of the new approvals not already reviewed:

**Atezolizumab (Tecentriq®)** Previously approved for urothelial carcinoma, atezolizumab has been granted approval for treatment of metastatic non-small cell lung cancer (NSCLC) in patients who have failed platinum therapy. A programmed death ligand-1 (PD-L1) inhibitor, atezolizumab prolongs survival in NSCLC patients who have progressed on or after treatment with platinum agents. Both indications are treated with 1,200mg every 21 days until progression or intolerable side effects.

**Daratumumab (Darzalex):** Daratumumab was recently granted accelerated approval as monotherapy for multiple myeloma. This week, daratumumab has been granted approval as part of combination regimen with either lenalidomide and dexamethasone, or bortezomib and dexamethasone in patients with one or more prior lines of therapy. The initial dose of daratumumab remains at 16mg/kg per dose weekly, but because the other regimens are given as either a 28 day cycle or a 21 day cycle, daratumumab administration is varied to coordinate with the other therapy.

When daratumumab is given in combination with lenalidomide and dexamethasone, a 28 day cycle is followed. This does not change the actual pattern of doses for daratumumab in comparison with monotherapy, only the terminology. For 2 cycles (the first 8 doses), it is given days 1, 8, 15 and 22. For cycles 3, 4, 5, and 6, daratumumab is given days 1 and 15 for a total of 8 doses. For cycle 7 and beyond, daratumumab is given day 1 only until disease progression or intolerance. The dexamethasone dosage pattern of the lenalidomide/dexamethasone regimen does change, however dexamethasone must be given IV on the days daratumumab is given. Dexamethasone is given orally on the other days in the cycle.

When daratumumab is added to a bortezomib/dexamethasone backbone, the pattern of daratumumab administration is

## New Approvals, continued:

altered to fit the 21 day bortezomib regimen. Daratumumab is given weekly on for the first 3 cycles on days 1, 8, and 15 for 9 doses in total. For the next 5 cycles (4-8) it is given on day 1 only. During cycles 9 and on, the daratumumab is given every 28 days although the bortezomib cycle is 21 days. As with the lenalidomide combination, dexamethasone should be given IV whenever daratumumab is administered.

If a dose of daratumumab is missed, it should be given as soon as possible and the schedule for subsequent doses should be adjusted. If a patient tolerates the daratumumab well, the provider may consider switching the dexamethasone to be given orally instead of IV.

**Erlotinib (Tarceva®):** Approval has been tightened to limit the EGFR inhibitor erlotinib's use to only those non-small cell lung cancer (NSCLC) patients whose tumors have EGFR exon 19 or exon 21 L858R substitution mutations. The dose is 150mg PO once a day. Pancreatic cancer continues to be treated with 100mg once a day as part of a combination regimen with gemcitabine.

**Nivolumab (Opdivo®):** Nivolumab was recently approved as a single agent for recurrent or metastatic squamous cell carcinoma of the head and neck for patients who have progressed on or following a platinum based regimen. Nivolumab is a programmed death receptor-1 monoclonal antibody. For head and neck carcinoma, it is dosed as 3mg/kg IV every 2 weeks until progression or intolerable side effects.

**Olaratumab (Lartruvo®):** Olaratumab was newly approved to be given in combination with doxorubicin to treat soft tissue sarcomas in patients who have not already received anthracyclines. It is a PDGFR- $\alpha$  (platelet-derived growth factor alpha) blocking antibody that prevents tumor proliferation. Olaratumab is dosed at 15mg/kg on days 1 and 8 of a 21 day cycle for 8 cycles. The accompanying doxorubicin is dosed as 75mg/m<sup>2</sup> on day 1 only of each cycle. In the studies, day 1 dexrazoxane was added in cycles 5-8 to reduce the risk of cardiotoxicity as the doxorubicin cumulative dose exceeds the recommended limit at 600mg/m<sup>2</sup>. Single agent olaratumab may continue after the initial combination therapy until unacceptable side effects or progression of disease.

**Pembrolizumab (Keytruda®):** Pembrolizumab, a programmed death receptor (PD-1) blocking antibody, is now approved *first-line therapy* for patients with previously untreated non-small cell lung cancer (NSCLC) who express high levels of programmed death ligand 1 (PD-L1). It is dosed as a fixed dose of 200mg given every 21 days until disease progression or unacceptable side effects.



## Questions or comments?

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