PHARMACY CORNER

Cetuximab Shown to Improve Lung Cancer Survival

As reported by Pirker et al. (2009), modest improvements in survival (11.3 months versus 10.1 months) were seen with the addition of the monoclonal antibody cetuximab (Erbitux™, Bristol-Myers Squibb) to a standard platinum doublet in treating epidermal growth factor receptor (EGFR)-positive lung cancer. Patients were randomized to receive chemotherapy alone (n = 568) or chemotherapy plus cetuximab (n = 557). Chemotherapy consisted of cisplatin 80 mg/m^2 on day 1 and vinorelbine 25 mg/m^2 on days 1 and 8 of each three-week cycle for up to six cycles. Cetuximab was dosed at 400 mg/m^2 on day 1 followed by weekly infusions at 250 mg/m^2 until disease progression.

Pirker, R., Pereira, J.R., Szczesna, A., von Pawel, J., Krzakowski, M., Ramlau, R., et al. (2009). Cetuximab plus chemotherapy in patients with advanced non-small cell lung cancer: An open-label randomized phase III trial. *Lancet, 373*(9674), 1525–1531.

Vaccine Improves Survival in Patients at Risk for Recurrence

Patients at intermediate risk for recurrence of kidney cancer (stages I–II high grade or stage III T1, T2, or T3a low grade) following surgery who were randomized to receive the vitespen (Oncophage™, Antigenics Inc.) cancer vaccine demonstrated a 46% reduced risk of death compared to observation alone (n = 362, p = 0.036, hazard ratio = 0.54) at a median follow-up of 4.5 years. Vitespen is a vaccine derived from an individual's own tumor. By using a tumor's antigenic fingerprint, the vaccine enables an individual's immune system to target cancer cells. Vitespan has received U.S. Food and Drug Administration (FDA) orphan drug designation for the treatment of kidney cancer, metastatic melanoma, and glioma.

For more information, visit www.antigenics.com/news/2009/0601.phtml.

Bevacizumab Approved for Glioblastoma Treatment

Based on the objective response rates seen in two single-arm trials, bevacizumab (Avastin®, Genentech, Inc.) has been granted FDA accelerated approval in the setting of previously treated glioblastoma.

In the AVF3708g trial, patients treated with bevacizumab monotherapy (n = 85) demonstrated a 25.9% response rate with a median response duration of 4.2 months. The most commonly observed adverse events of any grade included infection (55%), fatigue (45%), headache (37%), hypertension (30%), epistaxis (19%), and diarrhea (21%).

In the separate National Cancer Institute study (06-C-0064E), patients (n = 56) demonstrated a 19.6% response rate to bevacizumab with a median response duration of 3.9 months.

For both studies, patients received bevacizumab 10 mg/kg IV every two weeks until disease progression or intolerable side effects occurred. All patients were previously treated with temozolomide and radiation therapy.

For more information, visit www.accessdata.fda.gov/drugsatfda_docs/label/2009/125085s0169lbl.pdf and www.ons.org/fda/documents/FDA050409.pdf.

Trial Points to New Treatment for Non-Hodgkin Lymphoma

As reported by Pettengell et al. (2009), phase III clinical trial results indicate pixantrone (Cell Therapeutics, Inc.) may be a viable option for salvage therapy in patients with aggressive relapsed non-Hodgkin lymphoma (NHL).

In the randomized, controlled international study, patients were randomized to receive pixantrone (n = 70) or one of several standard chemotherapy regimens (n = 70). Compared to the control group, patients treated with pixantrone demonstrated a significant increase in complete remission (20% versus 5.7%, p = 0.021), overall response rate (37.1% versus 14.3%, p = 0.003), and progression-free survival (4.7 months versus 2.6 months, p = 0.007).

Pixantrone was dosed at three 85 mg/m^2 IV infusions per week in four-week cycles for up to six cycles. Compared to the standard control group, the most common grade 3 and 4 adverse reaction in the pixantrone arm was neutropenia (41.2% versus 19.4%), and a greater number of cardiac disorders occurred compared to the control group (8.8% versus 4.5%).

Pettengell, R., Narayanan, G., Hurtadode de Mendoza, F., Digumarti, R., Gomez, H., Cernohous, P., et al. (2009). Randomized phase 3 trial of pixantrone versus other chemotherapeutic agents for third-line single-agent treatment of relapsed aggressive non-Hodgkin lymphoma. Retrieved June 20, 2009, from http://www.celltherapeutics.com/pdf/ASCO09_PIX301.pdf

Dasatinib Gains Approval for Various Treatments

The FDA has granted dasatinib (Sprycel™, Bristol-Myers Squibb) full approval for the treatment of chronic myeloid leukemia (CML) in the setting of imatinib mesylate (Gleevec™, Novartis Oncology) resistance or intolerance.

Dasatinib has also been approved in the treatment of Philadelphia chromosome-positive acute lymphoblastic leukemia (Ph+ ALL). For patients in chronic phase CML, the recommended dosage is 100 mg daily with or without food. All other phases of CML and Ph+ ALL are dosed at 140 mg daily.

Common reactions associated with dasatinib usage include myelosuppression, bleeding, fluid retention, QT prolongation, diarrhea, and skin rash.

For more information, visit www.accessdata.fda.gov/drugsatfda_docs/label/2009/021986s004lbl.pdf.

SAFETY CONCERNS

Erlotinib Warnings and Precautions Updated

Labeling for erlotinib (Tarceva™, OSI & Genentech) has been updated to include warnings regarding the risk for gastrointestinal perforations and serious dermal and ocular toxicities.