HEM/ONC News

By Devon Schuyler

Use of Intraperitoneal Chemotherapy in Ovarian Cancer Is Limited

Fewer than half of women with stage III ovarian cancer receive intraperitoneal (IP) chemotherapy after surgery, according to a prospective cohort study of 823 women published online on August 3 in the *Journal of Clinical Oncology*.

This finding is striking because the National Cancer Institute issued an alert in 2006 encouraging the use of IP chemotherapy in these patients. The alert was based on results from the Gynecologic Oncology Group-172 study, which demonstrated a 16-month increase in median overall survival (OS) with IP chemotherapy.

All participants in the current study were diagnosed between 2003 and 2012 and treated at one of 6 National Comprehensive Cancer Network institutions. Chemotherapy consisted of either intravenous (IV) chemotherapy alone, or IV plus IP chemotherapy.

The researchers, led by Dr Alexi Wright, found that the use of IP chemotherapy increased from 0% to 33% between 2003 and 2006, increased to 48% from 2007 to 2008, and remained flat from 2009 to 2010 (38%) and from 2011 to 2012 (39%). Individual institutions varied in how often they provided IP chemotherapy, from a low of 4% to a high of 67%.

A separate analysis of 402 patients diagnosed between 2006 and 2012 who were matched for propensity score revealed that 3-year OS was significantly better with IP chemotherapy (81%) than without (71%). Discontinuation of chemotherapy or alteration of administration route was significantly more common with IP chemotherapy (20.4%) than without (10.0%).

The authors wrote that "these findings suggest that IP/IV is an important and possibly underused, evidence-based treatment strategy for improving outcomes in ovarian cancer."

Docetaxel Improves Survival in Metastatic Hormone-Sensitive Prostate Cancer

The addition of docetaxel to androgen deprivation therapy (ADT) improves OS in metastatic hormone-sensitive prostate cancer better than ADT alone, according to a study published online on August 5 in the *New England Journal of Medicine*.

For the E3805 study, Dr Christopher Sweeney and coinvestigators randomly assigned 790 patients (median age, 63 years) with metastatic hormone-sensitive prostate cancer to receive either a combination of docetaxel and ADT or ADT alone. Docetaxel was given at a dose of 75 mg per m^2 of body surface area for 6 cycles.

After a median follow-up of 28.9 months, the median OS was significantly longer with combination therapy than with ADT alone: 57.6 months vs 44.0 months. In addition, the median time to biochemical, symptomatic, or radiographic progression was significantly higher in the combination group than in the ADT group: 20.2 months vs 11.7 months. Men in the combination group also were more likely than those in the ADT group to have a prostate-specific antigen level of less than 0.2 ng/mL at 12 months: 27.7% vs 16.8%.

An analysis of the 390 patients who received combination therapy revealed a 6.2% rate of grade 3 or 4 febrile neutropenia, a 2.3% rate of grade 3 or 4 infection with neutropenia, and a 0.5% rate of grade 3 sensory neuropathy and of grade 3 motor neuropathy. Approximately 86% of the patients who received combination therapy completed all 6 cycles of docetaxel.

Hypofractionated Radiotherapy Reduces Morbidity in Early Breast Cancer

Hypofractionated radiotherapy is associated with less short-term morbidity than conventionally fractionated radiotherapy in women with early-stage breast cancer, according to 2 studies published online August 6 in *JAMA Oncology*.

For the first study, Dr Reshma Jagsi and colleagues prospectively collected data on 2309 women undergoing adjuvant whole-breast irradiation for stage 0 to III breast cancer. Based on physician- and patient-reported outcome measures, hypofractionation (>2 Gy/fraction) was associated with significantly lower rates of pain, skin reaction, swelling, and fatigue compared with conventional fractionation (≤2 Gy/fraction) after adjustment for sociodemographic, clinical, and treatment-related factors.

For the second study, Dr Simona Shaitelman and coinvestigators conducted an unblinded trial of 267 women with stage 0 to II breast cancer. Women who received hypofractionation (42.45 Gy/16 fractions) had significantly less pain, skin reaction, and fatigue during treatment than those who received conventional fractionation (50.0 Gy/25 fractions). Six months after treatment, women who received hypofractionation had significantly less physician-reported fatigue and significantly less patient-reported "lack of energy" and "trouble meeting family needs."

In a commentary, Drs Shyam Tangturi and Jennifer Bellon wrote that "hypofractionation should be strongly considered for the majority of patients with early-stage disease."