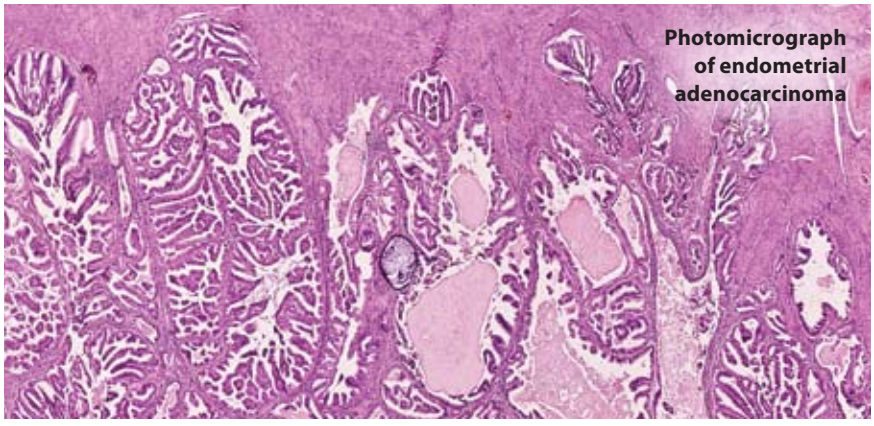

Photomicrograph of endometrial adenocarcinoma

Managing side effects: tamoxifen; crizotinib

What is the risk for endometrial cancer in a patient taking tamoxifen (Nolvadex, Tamox, generics) to reduce recurrence of ER/PR positive breast cancer after treatment?

— Kimberly Meixner, RN, MSN, FNP-C

Tamoxifen is a selective estrogen receptor modulator (SERM) used in pre- and postmenopausal women whose breast cancers are estrogen-receptor or progesterone-receptor (ER/PR) positive. Tamoxifen binds to estrogen receptors in a variety of tissues in the body. Whether this stimulates (agonistic activity) or inhibits (antagonistic activity) cell growth and proliferation depends on the type of tissue the ER is present in. For instance, when tamoxifen binds to breast tissue it antagonizes growth and proliferation. In certain tissues, tamoxifen has agonistic activity. These tissues include the bones, liver, and endometrium. Because tamoxifen stimulates endometrial growth, it has been associated with an increased risk of abnormal endometrial pathology and endometrial cancer.

Although the risk of endometrial cancer is increased in women receiving tamoxifen, the overall risk observed in clinical trials was 1% or less. A larger percentage of patients may have abnormal endometrial findings or require a hysterectomy. Other abnormal findings include endometrial polyps, fibroids, and endometrial hyperplasia. Up to 9% of patients in clinical trials developed symptoms requiring an endometrial biopsy. Women who are taking or have taken tamoxifen and experience any abnormal vaginal bleeding should be evaluated immediately.

Patients undergoing tamoxifen therapy should be advised of the risk of endometrial cancer. When counseling these patients, I think discussing early signs and symptoms (such as abnormal vaginal bleeding) is also beneficial. It is important to explain to patients that the benefits of tamoxifen (decrease in breast cancer recurrence of 40%) outweigh this particular risk of therapy.

What specific visual changes are associated with the new drug crizotinib (Xalkori) and what causes them?

— Karen Overmeyer, MS, RN, APN

Crizotinib is an ALK and c-MET inhibitor recently approved for use in patients with non-small-cell lung cancer (NSCLC) with the EML4 ALK mutation. Eye disorders and visual changes have been noted in up to 62% of patients receiving crizotinib in clinical trials. The most common visual changes occurring with crizotinib include trailing lights in the peripheral vision field. This usually occurs during light transitions (eg, from dark to light), so it may be more noticeable during certain activities and typically lasts only seconds. This usually occurs within a few weeks of starting crizotinib, and occurs less often with prolonged crizotinib therapy. Patients may also complain of blurred vision, floaters, double vision, and sensitivity to light. Patients experiencing any changes in vision should undergo an ophthalmologic evaluation. Ongoing studies of crizotinib are collecting additional data about these visual disturbances. ■

Lisa A. Thompson, PharmD, BCOP

Assistant Professor, Department of Clinical Pharmacy, University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences, Aurora, Colorado