THE TOOLS

Approved Drugs

● The Food and Drug administration (FDA) has approved **Taxotere®** (docetaxel) injection concentrate (Aventis, Bridgewater, N.J.) in combination with doxorubicin and cyclophosphamide for the adjuvant treatment of patients with operable, node-positive breast cancer.

The FDA based its decision on results from a second interim analysis from the pivotal Breast Cancer International Research Group 001/TAX 316 study, which demonstrated that women with node-positive, early stage breast cancer who received Taxotere-based chemotherapy regimen after surgery experienced a significant 25.7 percent reduction in their risk of relapse as compared to women treated with another adjuvant combination regimen of 5-fluorouracil, doxorubicin, and cyclophosphamide. Notably, with nearly five years of follow-up, the significant reduction in the risk of relapse of this Taxotere-based regimen was observed regardless of a woman's hormone receptor status.

On the Internet

● *www.cap.org/apps/docs/cancer_protocols/protocols_intro.html* provides the revised, downloadable version of the College of American Pathologists Cancer Protocols and checklists for staging and classification of 36 types of cancer. Checklists include lists of elements that the American College of Surgeons Commission on Cancer now requires pathologists to use when completing a surgical pathology report on a cancer specimen.

ILLUSTRATION/FRANK RENLIE/ARTVILLE

● The FDA has granted orphan drug status to **AGRO100** (Aptamera, Inc., Louisville, Ky.) in the treatment of pancreatic cancer. AGRO100 is an anti-nucleolin aptamer.

The FDA may award orphan drug designation to drugs that target conditions affecting 200,000 or fewer U.S. patients per year and provide a significant therapeutic advantage over existing treatments.

● The FDA has awarded orphan drug status to **Efaproxyn™** (efaproxiral) (Allos Therapeutics, Westminster, Colo.) for use as an adjunct to whole brain radiation therapy for the treatment of brain metastases in patients with breast cancer. Efaproxyn is currently being investigated in a Phase III clinical trial in this indication.

● BioCryst Pharmaceuticals, Inc. (Birmingham, Ala.) has received FDA orphan drug designation for **forodesine hydrochloride** [formerly known as BCX-1777 (forodesine)] in two additional cancer indications. Forodesine, a purine nucleoside phosphorylase inhibitor which functions by blocking the T-cell's ability to synthesize DNA, was granted orphan status for treatment of T-cell non-Hodgkin's lymphoma, including cutaneous T-cell lymphoma, in February 2004. The two additional indications are for treatment of chronic lymphocytic leukemia and related leukemias to include prolymphocytic leukemia, adult T-cell leukemia, and hairy cell leukemia; and for treatment of acute lymphoblastic leukemia.

The company is developing forodesine for treatment of T-cell mediated cancers, and a Phase IIa clinical trial in patients with T-cell leukemia is in progress.

● **HuMax-CD4** (Genmab A/S, Copenhagen, Denmark) has received FDA orphan drug designation for the treatment of

FAST FACTS

Grading the FDA—How Good is the Agency at…

Question	Excellent	Good	Fair	Poor	Not Sure
Ensuring the safety, as well as the efficacy of new prescription drugs	14%	43%	27%	10%	7%
Ensuring that truly innovative prescription drugs come to market more quickly	4%	25%	34%	28%	9%
Making the decision about which drugs can be marketed over-the-counter without a prescription	7%	34%	33%	17%	9%
Making decisions about which brand name prescription drugs can be marketed as generics	6%	31%	30%	21%	11%

Source: *The Wall Street Journal Online*/Harris Interactive Poll, Vol. 3, Issue 10.

mycosis fungoides, which constitutes 75 percent of all cutaneous T-cell lymphomas.

- Seattle Genetics, Inc. (Bothell, Wash.) has been granted orphan drug status from the FDA for its product candidate **SGN-40** for multiple myeloma. SGN-40 is a humanized monoclonal antibody that the company is currently evaluating in a Phase 1 clinical trial for the treatment of multiple myeloma.

- The **GLIADEL® Wafer** (polifeprosan 20 with carmustine implant) for brain cancer treatment, a product of Guilford Pharmaceuticals Inc. (Baltimore, Md.), has been assigned a new diagnosis related group (DRG) by the Centers for Medicare & Medicaid Services (CMS). DRG 543 Implantation of Chemotherapeutic Agents or Acute Complex Central Nervous System Principal Diagnosis took effect on October 1, 2004. The new DRG will increase payments to hospitals that provide the product to Medicare beneficiaries.

  GLIADEL Wafer is approved for use in newly diagnosed patients with high-grade malignant glioma as an adjunct to surgery and radiation, and in patients with recurrent glioblastoma multiforme as an adjunct to surgery and radiation.

  In September, GLIADEL® wafer received orphan drug designation for the treatment of patients with malignant glioma undergoing primary surgical resection.

Drugs in the News

- The FDA has granted accelerated approval for **Alimta®** (pemetrexed) (Eli Lilly, Indianapolis, Ind.) for the treatment of locally advanced or metastatic non-small cell lung cancer (NSCLC) in previously treated patients. In February 2004 Alimta was approved, in combination with cisplatin, for the treatment of malignant pleural mesothelioma, a cancer often associated with asbestos exposure.

  The FDA accelerated approval is based on Alimta's activity and favorable safety profile as evidenced in one of the largest Phase III studies to date in the second-line setting that compared Alimta directly to Taxotere. In July, the study was the basis for a unanimous recommendation for accelerated approval by the FDA's Oncologic Drugs Advisory Committee.

- Wyeth Pharmaceuticals, a division of Wyeth (Madison, N.J.), has been granted FDA fast track designation for **temsirolimus (CCI-779)**, an investigational mTOR kinase inhibitor, in the first-line treatment of poor-prognosis patients with advanced renal cell carcinoma.

- Roche (Nutley, N.J.) has submitted a supplemental New Drug Application (sNDA) with the FDA to market **Xeloda®** (capecitabine) for the treatment of colon cancer after surgery (adjuvant therapy). Xeloda is currently indicated as first-line treatment of patients with metastatic colorectal cancer when treatment with fluoropyrimidine therapy alone is preferred.

- OSI Pharmaceuticals, Inc. and Genentech, Inc. have completed the submission of a New Drug Application (NDA) with the FDA for **Tarceva™** (erlotinib HCI), as a monotherapy for the treatment of patients with advanced NSCLC for whom chemotherapy has failed.

  The NDA has been granted Pilot 1 status under the FDA's Pilot 1 Program for Continuous Marketing Applications, a new program designed for investigational products that have been given fast track status and that have demonstrated significant promise in clinical trials as a therapeutic advance over available therapy for a disease or condition.

  The NDA filing is based on a pivotal Phase III double-blind, placebo-controlled trial that included 732 patients and that compared Tarceva to placebo in the treatment of patients with relapsed NSCLC cancer who had previously received chemotherapy. Tarceva demonstrated a 42 percent improvement in median survival and improved one-year survival by 45 percent.

- Provectus Pharmaceuticals, Inc. (Knoxville, Tenn.) has achieved FDA clearance of its Investigational New Drug (IND) application for **Provecta™**, an advanced drug therapy designed to treat breast, liver, prostate, and other potentially deadly cancers. Provectus expects to begin enrolling patients with localized recurrent breast tumors in clinical trials beginning in early 2005.

- Barr Pharmaceuticals, Inc. (Woodcliff Lake, N.J.) announced that Barr Laboratories, Inc. has received tentative FDA approval for its **generic version of GlaxoSmithKline's Zofran ODT®** (ondansetron) Orally Disintegrating Tablets, 4mg and 8mg. The company anticipates receiving final approval and launching its generic product following the expiration of GlaxoSmithKline's patent on June 24, 2006 or following any additional applicable exclusivity.

  Barr's Ondansetron Orally Disintegrating Tablets are indicated for the prevention of nausea and vomiting associated with moderately emetogenic cancer chemotherapy, certain radiotherapies, and the prevention of postoperative nausea and/or vomiting.

New Products

- Varian Medical Systems (Palo Alto, Calif.) has received FDA 510(k) clearance for a new "AAA" dose calculation algorithm in the company's **Eclipse™ 3D** radiotherapy treatment planning software. The new AAA algorithm improves radiation dose distributions in heterogeneous areas of the body such as the lung, where bone, dense soft tissues, and air pockets each interact with radiation in unique ways.

- Agfa Corporation (Ridgefield Park, N.J.) has received FDA clearance for its **IMPAX Mammography Diagnostic Workstation**. The multi-modality workstation delivers 'one-stop' review and results distribution for digital breast-imaging studies, while also gaining access to other general imaging exams. The IMPAX Mammography Diagnostic Workstation is also cleared as a vendor neutral solution for regionally approved digital mammography modality vendors.