NEW DRUGS

Mometasone for Asthma

The U.S. Food and Drug Administration (FDA) has approved the use of mometasone furoate inhalation powder (Asmanex® Twischaler®, Schering-Plough) 220 mcg for the first-line maintenance treatment of asthma as preventive therapy in patients 12 years of age and older. This is the only inhaled asthma controller therapy approved for once-daily initiation and management of asthma in patients previously treated with bronchodilators alone or inhaled corticosteroids.

Clinical studies have shown improved lung function, a decreased use of rescue medication, a reduced incidence of nighttime awakenings, and less daytime coughing and wheezing.

An inhalation-driven device does not use a propellant, thus eliminating the need for hand–breath coordination. A numeric dose counter provides a visual indication of the remaining doses.

Mometasone furoate was introduced in the U.S. in 1987 as the dermatological ointment Elocon® and in 1997 as the nasal spray Nasonex®.

(Source: Schering-Plough, March 31, 2005; www.spfiles.com/piasmanex.pdf.)

Generic Agrylin® Approved

Barr Laboratories, Inc., has received approval from the FDA for its generic version of Shire’s Agrylin® (anagrelide HCl) capsules, 0.5 and 1 mg. The capsules are indicated for treating thrombocytopenia (an increased platelet count) secondary to myeloproliferative disorders, to reduce the elevated platelet count and the risk of thrombosis, and to ameliorate associated symptoms.

(Source: Barr Pharmaceuticals, April 18, 2005.)

Entecavir Blocks Hepatitis B

Bristol-Myers Squibb has announced the FDA’s approval of the nucleoside analogue entecavir (Baraclude™) for the treatment of chronic hepatitis B infection in adults with active viral replication and either persistently elevated serum aminotransferase levels or active disease. This oral antiviral therapy blocks the replication of hepatitis B virus (HBV) in the body by interfering with the ability of the virus to infect cells.

The recommended dosages are a single 0.5-mg tablet once daily for patients new to treatment and a single 1-mg tablet once a day for patients experiencing resistance to lamivudine (Epivir®, Glaxo-SmithKline). Lamivudine-resistant patients may not respond as well to entecavir therapy as nucleoside-naïve patients.

(Source: Bristol-Myers Squibb, March 29, 2005.)

NEW FORMULATION

Metformin XR Tablets, 750 mg

Teva Pharmaceuticals USA has introduced Metformin HCl Extended-Release Tablets, 750 mg. This product is “AB-rated” and bioequivalent to Glucophage® XR Tablets (Lipha/Bristol-Myers Squibb).

The AB rating generally applies if a study has demonstrated bioequivalence.

(Source: Teva, April 13, 2005.)

DRUG NEWS

Risky Eczema Drugs

Two topical creams used to treat the skin condition eczema need a stronger warning on their labels about the possible risk of cancer, medical experts say.

The panelists told the FDA that the drugs—pimecrolimus (Elidel®, Novartis) and tacrolimus (Protopic®, Fujisawa)—should have a “black-box” warning to emphasize that they should not be used in patients younger than two years of age. At issue is whether the drugs, which treat eczema by suppressing the body’s immune response, can allow skin cancers and lymphoma to develop or whether other factors are at work.

Novartis considers Elidel® safe but agrees that monitoring should continue. Fujisawa officials state that Protopic® does not show an increased cancer risk.

(Source: Reuters, February 15, 2005.)

Sildenafil in Pulmonary Arterial Hypertension

Oral sildenafil citrate (Viagra®, Pfizer) 20 mg three times daily might be effective for both men and women with pulmonary arterial hypertension (PAH).

Patients improved their exercise capacity and cardiopulmonary hemodynamic parameters after 12 weeks of therapy. These findings were presented at the 54th scientific session of the American College of Cardiology in March 2005.

In a 12-week study, patients with PAH who received sildenafil experienced decreased mean pulmonary arterial pressure and pulmonary vascular resistance and increased cardiac output and mixed venous arterial saturation.

Adverse events were mild to moderate and usually not related to treatment.

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**NEW DRUGS**

**Bevacizumab Beneficial for Non-Small Cell Lung Cancer**

Preliminary results from a large, randomized clinical trial of patients with previously untreated advanced nonsquamous, non-small cell lung cancer (NSCLC) show that those who received bevacizumab (Avastin™, Genentech), combined with standard chemotherapy (paclitaxel plus carboplatin), lived longer than patients who received the same chemotherapy without bevacizumab. A humanized monoclonal antibody, bevacizumab binds to and inhibits vascular endothelial growth factor (VEGF), a protein that is essential for tumor angiogenesis.

The difference in survival times was statistically significant. Patients with squamous cell carcinoma of the lung were not included in the study because previous clinical experience suggested that patients with this type of NSCLC had a higher risk of serious pulmonary bleeding after bevacizumab therapy. Patients with a history of hemoptysis (coughing up blood) were also excluded.


**New Heart Drug Torcetrapib: Available Only in Combination?**

A drug called torcetrapib could be one of the most promising new heart treatments in a decade, but it is generating controversy even before it is approved. Pfizer plans to sell it only in combination with its best-selling cholesterol agent atorvastatin (Lipitor®). The new drug must clear many hurdles, including concerns that it may raise blood pressure. It will not reach the market before 2007.

Some cardiologists say that Pfizer could offer torcetrapib as a stand-alone tablet so that patients could take it either with atorvastatin or with similar drugs that might work better for them. It might even work best by itself in some cases.

Pfizer says that combining the drugs makes sense because they are complementary. Statins reduce “bad” cholesterol; torcetrapib raises “good” cholesterol.

(Source: The New York Times, March 7, 2005.)

**Rosuvastatin Label Advisory For Asian-Americans, Others**

The FDA has added recommendations for the safe use of rosuvastatin calcium (Crestor®, AstraZeneca). This agent is indicated as an adjunct to diet in patients with lipid disorders (e.g., primary hypercholesterolemia, mixed dyslipidemia, and isolated hypertriglyceridemia).

The FDA’s recommendations were added to the product’s safety labeling to reflect data from a phase 4 pharmacokinetic study in Asian-Americans and from postmarketing adverse drug events reported in the 15 months after the FDA’s approval for use in the U.S.

Rosuvastatin and other statins have been associated with a low incidence of rhabdomyolysis, and the FDA emphasizes the need for an initial dose reduction to 5 mg in patients who do not require aggressive cholesterol reduction or who have predisposing factors for myopathy, such as being of Asian descent, concurrent use of cyclosporine, and renal insufficiency.

Rosuvastatin levels in Asian-Americans are approximately twofold that of white patients receiving the same dose. Approval of the drug in Japan in February included the recommendation of a 2.5-mg starting dose, with maximal titration to 20 mg. In the U.S., rosuvastatin is available in strengths of 5 to 40 mg. The FDA notes that 40 mg is not an appropriate starting dose; this dose should be reserved for patients not achieving an
Thiazides and the Gallbladder

Some research has suggested that thiazide diuretics, commonly used to treat hypertension and cardiovascular disease, might be a contributing cause of gallstones. Researchers who evaluated 81,351 women prospectively in the Nurses’ Health Study found an increased but modest risk. At the baseline examination, nearly 8% of the women reported using thiazide diuretics. Between 1980 and 2000, 8,607 women had a cholecystectomy. Compared with women who had never used these diuretics, the relative risk of cholecystectomy was 1.16 for previous users and 1.39 for current users.

No association was noted between furosemide (Lasix®, Aventis) diuretic use and gallbladder surgery. The women’s concomitant use of other anti-hypertensive agents (e.g., beta blockers, calcium-channel blockers, and angiotensin-converting enzyme–inhibitors) might explain the results.

(Source: Arch Intern Med 2005;165:567–573.)

Fluvastatin and Diabetes After Coronary Procedure

Fluvastatin (Lescol®, Novartis) essentially erases the negative effects of diabetes in patients who have had percutaneous coronary intervention (PCI), according to the Lescol Intervention Prevention Study (LIPS) in the Netherlands. Fluvastatin’s positive effects were observed after 1.5 years of treatment and were maintained throughout the remaining three years.

Fluvastatin also reduced low-density lipoprotein-cholesterol (LDL-C) levels in six weeks by a median of −29%, compared with a nearly 8% increase in the placebo patients. It also reduced LDL-C levels in patients without diabetes by 26%.

(Source: Am Heart J 2005;149:329–333.)

Nesiritide and Mortality Risk

A genetically engineered drug that was hailed as a breakthrough in the treatment of heart failure in 2001 might actually raise patients’ risk of dying soon after treatment, researchers say.

Pooling results from three studies, researchers found that hospitalized patients given nesiritide (Natrecor®, Scios, Johnson & Johnson) appeared more likely to die in the first month after treatment than those given traditional medication (e.g., nitroglycerin) or a placebo. Nesiritide, a laboratory version of a hormone that the heart produces to ease breathing, is designed to treat the breathing problems that often accompany heart failure.

The researchers acknowledged that the studies were small and not designed to examine increased death risks. It is possible that nesiritide might have prolonged the lives of patients who would have otherwise died earlier, and they do not believe that explains their findings. The analysis follows a recent study linking nesiritide to an increased risk of kidney problems.

The FDA was aware of the higher death rates before it approved the drug. The warning label already mentions the potential for low blood pressure, kidney problems, and more deaths than are seen with nitroglycerin. Some physicians believe that the data are insufficient to cause alarm.


Internet Prescription Ring Busted

Twenty suspects have been arrested and charged with running Internet pharmacies that illegally shipped counterfeit and unapproved pharmaceuticals to consumers around the world.

Operation “Cyber Chase” showed that buying prescription drugs from Internet pharmacies can be dangerous. “Cyber criminals” expose children and unsuspecting adults to illicit medications. More than 200 Web sites exist for the illegal distribution of questionable products.

Illicit drugs are distributed with no oversight from licensed physicians or pharmacists. These drugs are usually made by shady operators, they do not contain enough of an active ingredient to be effective, and they are mislabeled.

Revised Oxcarbazepine Label

Novartis Pharmaceuticals and the FDA have notified health care professionals about revisions to the prescribing information for oxcarbazepine (Trileptal®) tablets and oral suspension. Oxcarbazepine is indicated for the treatment of partial seizures in epileptic adults and children 4 to 16 years of age.

The updated Warnings section lists serious dermatological reactions, including Stevens–Johnson syndrome and toxic epidermal necrolysis. The Precautions section mentions associated multiorgan hypersensitivity reactions.

(Source: FDA, April 19, 2005.)

ADHD Drug Linked to Cancer?

Methylphenidate (Ritalin®, Novartis) has been the most popular drug for treating attention-deficit problems for more than 50 years, but a small study has linked its use with a higher risk of cancer.

Texas researchers found that after only three months, 12 treated children had a three-fold increase in chromosome abnormalities associated with increased cancer risk.

Novartis has emphasized the safety record of the drug, which has shown no clinical evidence of a link to the development of cancer in humans. A mild central nervous system stimulant, it is the most widely prescribed drug for treating attention deficit/hyperactivity disorder (ADHD).

In 1996, two-year animal studies that showed that high levels of methylphenidate caused liver tumors in male and female mice; studies of rats, however, did not show these results. The FDA concluded those findings were not sufficient to have children discontinue therapy.

Canada recently pulled the amphetamine/mixed salts medication Adderall® XR from the market after Shire provided information about 20 patient deaths, and the FDA has linked atomoxetine (Strattera®, Eli Lilly), a nonstimulant ADHD medication, with liver damage.

Medical experts say that until more is known, parents should not be overly frightened of giving methylphenidate to their children. Larger studies are needed to confirm these findings.

(Source: Knight-Ridder Newspapers, March 17, 2005.)

Lamotrigine Kits Recalled

GlaxoSmithKline is recalling about 100,000 starter kits of lamotrigine (Lamictal®), used to treat epilepsy and bipolar disorder, after finding the wrong dosage in two of the kits. The kits are designed so that patients gradually increase their dosage over several weeks. The kits supplied a white 25-mg tablet rather than a pink 100-mg pill for the fifth week.

Patients with a prescription for the medication need not worry; there was no problem with the tablets or bottles.

(Source: Associated Press, April 17, 2005.)

NEW MEDICAL DEVICES

Marvin M. Goldenberg, PhD, RPh, MS

Name: DuraSeal™ Dural Sealant System
Supplier: Confluent Surgical, Inc., Waltham, MA
Approval Date: April 7, 2005
Use Classification: This is the first product indicated as an adjunct to sutured dural repair during cranial surgery to achieve watertight closure. The FDA has approved the sealant with the condition that a post-approval study be conducted. Approximately 250,000 craniotomies are performed in the U.S. each year, and almost all cases involve a suture repair of the dura.

Description: A patented synthetic, absorbable hydrogel is delivered by a dual-syringe applicator. The device can be stored at room temperature and prepared in less than two minutes.

Purpose: When sprayed on to the dura, a strong, adherent sealing layer is produced, effectively sealing the suture line within seconds. Until now, watertight closure of the dura was an elusive goal.

Benefit: The sealant’s blue colorant aids the surgeon in visualizing the coverage and thickness of the material upon application to the dura. Postoperatively, the sealant continues to seal the suture line as healing progresses under the gel. After several weeks, the hydrogel breaks down into water-soluble molecules that are absorbed and cleared through the kidneys. In clinical studies, the sealant achieved watertight closure in 98% of cases, and immediate sealing was obtained on the first application in 95% of cases.

Source: www.pharmacyonesource.com

Name: PureVision™ Toric Contact Lens
Manufacturer: Bausch & Lomb, Rochester, NY
Approval Date: April 7, 2005
Use Classification: This tinted contact lens is used for vision correction in people with astigmatism.

Description: The toric lens, made from a patented silicone hydrogel material (balafilcon A), is indicated for the correction of refractive ametropia, nearsightedness (myopia), or farsightedness (hyperopia) with astigmatism of up to 5.00 diopters.

Purpose: The lens is replaced each month and is approved for either daily wear or up to 30-day continuous wear.

Benefit: In the past, patients with astigmatism could not wear contact lenses. With the development of new materials and manufacturing methods, most people can now use them. Astigmatism is caused when the eye does not

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focus light evenly. Most types of astigmatism can be corrected with contact lenses.

Source: www.pharmacyonesource.com

Name: AcrySof® ReSTOR® Intraocular Lens
Manufacturer: Alcon, Inc., Fort Worth, TX
Approval Date: March 23, 2005
Use Classification: This lens is indicated for cataract patients with and without presbyopia.
Description: The device offers patients a full range of near, intermediate, and distance vision that increases their independence from eyeglasses after surgery. Other intraocular lenses produce vision at all ranges, depending on the accommodation of the eye’s muscles.
Purpose: The lens configuration enables distribution of light in response to the width or narrowness of the pupil.
Benefit: Most patients who received the lens in both eyes achieved a distance visual acuity of 20/25 or better and a near visual acuity of 20/32 or better without correction by contact lenses or glasses. Only 23% of the patients wearing conventional or monofocal lenses achieved this level. A near visual acuity of 20/32 means that patients can read the very small stock quotes in the newspaper.
Sources: www.pharmacyonesource.com; www.allaboutvision.com

Name: Gore Tag Thoracic Endoprosthesis
Manufacturer: W. L. Gore & Associates, Inc., Flagstaff, AZ
Approval Date: March 23, 2005
Use Classification: This device is used to repair thoracic aortic aneurysms.
Description: The endoprosthesis is an endovascular graft made of expanded polytetrafluoroethylene, with an outer metallic stent. Each graft is compressed into the end of a long, thin, tube-like delivery catheter. The catheter containing the graft is inserted into an artery in the groin through a small surgical cut in the skin. It is carefully guided within the artery through the abdomen into the chest, near the heart, to bridge the site of the aneurysm in the aorta. The graft is then released. It self-expands to the diameter of the aorta to seal off the aneurysm and to reline the artery wall to prevent further growth and possible rupture of the aneurysm.
Purpose: This is the first endovascular grafting system approved to treat aneurysms of the thoracic aorta.
Benefit: The endoprosthesis is used instead of more invasive open surgery and helps to prevent further growth and rupture of the aneurysm.
Sources: www.goremedical.com; www.fda.gov