NEW DRUGS

Perlane, a Wrinkle Cream For Restricted Use

The Food and Drug Administration (FDA) has approved the dermal filler Perlane (Medicis) to correct moderate-to-severe facial folds and wrinkles. Perlane is composed of biotechnologically engineered, non-immunogenic, stabilized hyaluronic acid gel particles. The particles attract and bind to water molecules as they degrade, helping to maintain volume augmentation for about six months.

Perlane is a class III restricted medical device and should be administered only under supervision by licensed practitioners.

(Source: Medicis, May 2, 2007; www.medicis.com.)

Rotigotine (Neupro) Patch For Early Parkinson’s Disease

The new rotigotine transdermal system (Neupro, Schwarz Bioscience) is designed to treat symptoms of early Parkinson’s disease. A member of the dopamine agonist class of drugs, rotigotine is delivered continuously through the skin via a silicone-based patch that is replaced every 24 hours.

(Source: FDA, May 10, 2007.)

Generic Toprol XL

The FDA has approved an abbreviated New Drug Application (ANDA) for metoprolol succinate 50-mg extended release tablets, a generic equivalent of Toprol XL. This beta blocker is used to treat hypertension, angina, and heart failure.

(Source: Sandoz, May 21, 2007.)

Oral Contraceptive (Lybrel) For Continuous Use

Wyeth’s Lybrel, the first continuous-use oral contraceptive, has been approved. The tablet comes in a 28-day pack with low-dose combination tablets containing 90 mcg of a progestin (levonorgestrel) and 20 mcg of an estrogen (ethinyl estradiol).

With the traditional contraceptives, patients take the medication for 21 days, then stop for seven days; the placebo or pill-free time intervals last four to seven days to simulate a menstrual cycle. The Lybrel regimen does not include the week off from the placebo tablets.

Women who use Lybrel do not have a scheduled menstrual period but may experience unplanned breakthrough bleeding or spotting; this effect usually tapers off within the first year of use.

The safety and efficacy of Lybrel as a contraceptive method were supported by two one-year clinical studies enrolling more than 2,400 women 18 to 49 years of age.

(Source: FDA, May 23, 2007.)

NEW COMBINATION

Doxorubicin/Bortezomib (Doxil plus Velcade) For Multiple Myeloma

Ortho Biotech’s combination of doxorubicin HCl liposome injection (Doxil) plus bortezomib (Velcade) has been approved to treat patients with multiple myeloma who have not previously received Velcade and who have received at least one previous therapy.

In an international phase 3 trial, the combination, compared with bortezomib alone, significantly extended the median time to disease progression from 6.5 months to 9.3 months.

Doxil is also indicated for patients with ovarian cancer that has progressed or that has recurred after platinum-based chemotherapy. The FDA also granted accelerated approval for Doxil for AIDS-related Kaposi’s sarcoma in patients with disease that has progressed after combination chemotherapy or in patients who are intolerant to such therapy.


NEW FORMULATIONS

Nebulized Formoterol Fumarate (Performist) for Bronchial Disease

The FDA has approved Dey’s New Drug Application (NDA) for formoterol fumarate (Performist) inhalation solution for the twice-daily maintenance treatment of bronchoconstriction for patients with emphysema and chronic bronchitis. A rapid, long-lasting beta2 agonist, formoterol was previously approved in the U.S. as a dry powder.

In one study, the Performist patients needed less albuterol as a rescue agent than did patients receiving placebo.

This new treatment has the potential to be a valuable option when short-acting bronchodilators do not provide adequate control.

(Source: Dey, May 11, 2007.)

Quetiapine (Seroquel) Once Daily for Schizophrenia

Quetiapine fumarate extended-release tablets (Seroquel XR, AstraZeneca) are now available as a once-daily medication for schizophrenia in adults. With this formulation, patients can achieve a dose within the recommended range as early as the second day of treatment.

The FDA’s approval was based on a clinical trial of Seroquel XR at doses of 400, 600, and 800 mg/day.

The previously recommended initial dose was 25 mg twice daily with increments of 25 to 50 mg twice or three times daily on the second and third days, as tolerated, to a target dose range of 300 to 400 mg daily by the fourth day, given twice or three times per day.

The product includes two boxed warnings: one concerns elderly patients with dementia-related psychoses, and the other mentions a risk of suicidality in children and adolescents.

NEW INDICATIONS

Dalteparin (Fragmin) For Venous Thromboembolism

Dalteparin sodium injection (Fragmin, Eisai/Pfizer) is now approved for the extended treatment of symptomatic venous thromboembolism (VTE) (proximal deep vein thrombosis (DVT), or pulmonary embolism (PE)) to reduce the recurrence of VTE in patients with cancer. VTE is a common medical complication in immobilized patients.

During a six-month period, nearly twice as many patients treated with warfarin (Coumadin, Bristol-Myers Squibb) experienced at least one episode of DVT or PE, compared with those receiving dalteparin once daily. At the end of the study, mortality rates were similar between the groups.

In the U.S., dalteparin is also indicated for preventing DVT and ischemic complications resulting from unstable angina and non-Q-wave myocardial infarction when used with aspirin.

This product cannot be used interchangeably with unfractionated heparin or other low-molecular-weight heparins.

(Source: Eisai/Pfizer May 2, 2007; www.fragmin.com.)

Humate-P For Bleeding Disorder

The FDA has approved anti-hemophilic factor/von Willebrand factor complex (Humate-P, CSL Behring) for the prevention of excessive bleeding during and after surgery in patients with mild-to-moderate and severe von Willebrand disease (vWD).

vWD is an inherited bleeding disorder that affects about 1% of the U.S. population.

Humate-P was originally indicated to treat and prevent bleeding from hemophilia A in adults. It was later approved to treat spontaneous and traumatic bleeding for severe vWD and for mild and moderate vWD when desmopressin use is inadequate.

This product is made by purification of a clotting protein from human plasma from carefully screened U.S. donors.

(Source: FDA, April 30, 2007.)

Enoxaparin (Lovenox) for Acute ST-Segment Elevation Myocardial Infarction

Enoxaparin sodium injection (Lovenox, Sanofi-Aventis) is now approved for the treatment of acute ST-segment elevation myocardial infarction (STEMI). STEMI is a severe type of heart attack in which an artery is usually completely blocked by a blood clot long enough to cause heart muscle damage.

An anticoagulant, enoxaparin is approved in the U.S. for the prevention of ischemic complications of unstable angina and non–ST-segment elevation (NSTE-MI) when administered with aspirin and for preventing DVT, which can lead to PE. It is also indicated for abdominal surgical patients and immobilized, acutely ill patients at risk for thromboembolic complications; patients undergoing hip or knee replacement surgery; patients with acute DVT, with or without PE, when given with warfarin (Coumadin, Bristol-Myers Squibb); and outpatients with acute DVT without PE, when given with warfarin.

(Source: Sanofi-Aventis, May 18, 2007.)

Tinidazole (Tindamax) For Bacterial Vaginosis

Tinidazole (Tindamax, Mission Pharmaceutical) has been approved for the treatment of bacterial vaginosis (BV), the most common vaginal infection among women of childbearing age in the U.S.

This is the first new oral therapy to be approved for the treatment of BV in a decade. It provides a shorter course of oral therapy, with fewer doses per day and a better tolerability profile, compared with metronidazole, the current standard of care. It is the only FDA-approved therapy for both BV and trichomoniass.

Tinidazole is administered as 1 g (two tablets) once daily for five days or 2 g (four tablets) once daily for two days; by comparison, metronidazole needs to be taken twice daily for seven days. Unlike intravaginal treatments, tinidazole treats the entire reproductive tract.

The approval for BV was based on a randomized, placebo-controlled, double-blind multicenter trial evaluating two dosing regimens of the drug.

In the U.S., tinidazole been approved for use since May 2004 and is indicated for patients with bacterial vaginosis, trichomoniass, giardiasi and intestinal amebiass, and amebic liver abscess.

(Source: Mission Pharmacal, May 24, 2007.)

DRUG NEWS

Safety Alert for Rosiglitazone (Avandia)

The FDA has issued a safety alert about the diabetes drug rosiglitazone (Avandia, GlaxoSmithKline) after data from controlled clinical trials showed a possibly significant increase in cardiovascular adverse drug events. However, other data from long-term clinical trials provide contradictory evidence.

Analyses of all available data are ongoing. It is unclear whether pioglitazone (Actos, Takeda/Eli Lilly), another diabetes treatment from the same drug class, poses similar risks.

The FDA cautions that there is an inherent risk associated with switching patients from one treatment to another, even in the absence of risks associated with particular treatments. Thus, the FDA has not yet asked GlaxoSmithKline to take any specific action.

Rosiglitazone was approved in 1999 for the treatment of type-2 diabetes.

Takeda/Eli Lilly)
Dr. Robin Goland of Columbia University explains that patients with uncontrolled type-2 diabetes are at high risk for heart attack, and it is unclear whether and how much rosiglitazone affects this risk. A randomized, controlled trial might provide some answers.

(Sources: N Engl J Med, FDA, May 21, 2007.)

**Mequinol (Solagé) Label Includes “Age Spots” In Darker Skin**

Barrier Therapeutics has announced the FDA’s approval of the company’s application to add clinical data to the prescribing information for mequinol 2%, tretinoin 0.01% topical solution (Solagé). The revised labeling states that Solagé is safe and effective for darker skin types.

The new prescribing information includes data from a phase 4 post-approval study showing a favorable benefit-to-risk ratio in the treatment of solar lentigines in African-American, Asian, and Latin or Hispanic patients. These results were consistent with findings previously reported for Caucasians.

In the U.S., the solution is used to treat solar lentigines; in Canada, it is also used to treat related hyperpigmented lesions.

Solagé is the only FDA-approved combination skin–lightening agent that does not contain hydroquinone.

(Sources: Barrier Therapeutics, The Wall Street Journal, May 3, 2007.)

**NEW MEDICAL DEVICES**

**Marvin M. Goldenberg, PhD, RPh, MS**

**Name:** West Nile Virus Assay, Procleix Tigris System

**Manufacturer:** Gen-Probe, Inc., San Diego, CA, marketed by Chiron/Novartis

**Approval Date:** March 2, 2007

**Use Classification:** The assay detects genetic material of the West Nile virus (WNV) in plasma specimens from donors of blood, tissue, and organs. The assay is not indicated for cord blood specimens or as an aid in diagnosing WNV infection.

**Description:** Discovered in 1999, WNV is spread by mosquitoes and, less commonly, via blood transfusions or organ transplantation. The system’s flexibility permits individual samples from blood donors to be handled more extensively during periods of high WNV activity.

**Purpose:** The automated system can perform some steps that are usually performed by technologists who use semiautomated systems.

**Benefit:** The system’s ability to provide full automation can reduce the potential for human error while accelerating donor screening and enhancing the safety of blood and tissues. This is the latest advance in a successful effort by industry and government to keep blood safe from the emerging threat of WNV.


**Name:** Xpert Enterovirus Test

**Manufacturer:** Cepheid, Sunnyvale, CA

**Approval Date:** March 16, 2007

**Use Classification:** The enterovirus (EV) test, when used in combination with other laboratory tests, helps physicians distinguish between viral meningitis and bacterial meningitis, the less common but more severe form. Enteroviruses cause 85% to 95% of cases of viral meningitis.

**Description:** The Xpert EV test is the first fully automated medical diagnostic tool that isolates and amplifies viral genetic material present in a patient’s cerebrospinal fluid by a process called reverse-transcription polymerase chain reaction (RT–PCR). A sample of the fluid is added to a disposable, single-use cartridge. The cartridge is loaded into the GeneXpert DX instrument. All necessary laboratory procedures are then conducted in a one-step format to help minimize errors.

**Purpose:** The test detects enterovirus RNA in cerebrospinal fluid and can quickly distinguish viral from bacterial meningitis.

**Benefit:** Because this test is faster than existing methods for diagnosing meningitis, it minimizes delays in treating patients. Swift recognition of the cause and appropriate treatment are critical to patient recovery. Diagnostic tests for meningitis can take from three days to a week to obtain results; Xpert EV test results are available in 2.5 hours on a 24-hour basis all year round.

Of 255 samples tested, 96% of patients whose status was discovered to be positive did have viral meningitis, and 97% of patients with a negative result did not.

The test is simple to run. Little hands-on time is required, and the risk of contamination is minimal.


**Name:** Infuse Bone Graft

**Manufacturer:** Medtronic, Inc., Memphis, TN

**Approval Date:** March 13, 2007

**Use Classification:** The graft is used for oral maxillofacial and dental regenerative bone-grafting procedures. It was previously approved for use in lumbar spine fusion and in tibial fracture repair.

**Description:** Recombinant human bone morphogenetic protein-2 is applied to an absorbable collagen sponge carrier. The protein occurs naturally in the body and stimulates bone formation. When implanted into a bone-deficient site, the graft works with the body’s biology to induce normal bone formation.
**Purpose:** The bone graft encourages bone growth to enable patients to have corrective dental work.

**Benefit:** Each year in the U.S., surgeons perform more than 350,000 bone-grafting procedures to generate or regenerate bone in sinus augmentations and localized alveolar ridge augmentations for defects associated with extraction sockets. Autogenous bone grafts—bone harvested from the tibia, hip, or chin—are currently the standard grafting procedure used. This device offers surgeons and their patients an alternative to autogenous bone grafting, possibly reducing patients’ pain, limiting scarring, and decreasing surgical time.

**Sources:** www.pharmacyonesource.com; www.medtronic.com

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**FDA Proposals for Medical Devices**

The FDA is recommending that Congress reauthorize the Medical Device User Fee and Modernization Act, which expires in September 2007.

Under this program, the FDA collects fees from manufacturers seeking to market medical devices. The fees are intended to help the agency improve the timeliness, quality, and predictability of its pre-market review program. The new legislative package specifies that industry would provide total fee revenues of $287 million over the next five years. These fees would supplement appropriations provided by Congress.

The FDA’s proposal would continue to endorse interactive reviews between the agency and manufacturers; streamline the third-party inspection program to make it easier for companies to participate in the program; and encourage the development of innovative *in vitro* diagnostic tests.

**Source:** FDA, April 16, 2007, www.fda.gov/cdrh/mdufma/mdufmaii-factsheet.html