APhA DrugInfoLine®

August 2018

Focus on Immunizations

Advising on this article: John D. Grabenstein

August 6, 2018

DTaP vaccines are safe, but take care to prevent vaccination-related errors

Key Point

An in-depth review of data from the Vaccine Adverse Event Reporting System (VAERS) on DTaP-based vaccines over a 19-year period showed no new or unexpected safety signals, with the most common adverse events being injection-site reactions and fever. Nonserious vaccination errors were also identified as an issue.

Source URL:

http://www.aphadruginfoline.com/focus-immunizations/dtap-vaccines-are-safe-take-care-prevent-vaccination-related-errors

Endocrinology

Advising on this article: Frank Pucino

August 6, 2018

Denosumab is a good option for patients receiving glucocorticoids

Key Point

Use of denosumab (Prolia—Amgen) for 12 months was shown to be both noninferior and superior to risedronate on select bone mineral density endpoints for patients newly initiating glucocorticoids or those continuing therapy, according to results of a trial published in The Lancet Diabetes and Endocrinology.

Source URL:

http://www.aphadruginfoline.com/endocrinology/denosumab-good-option-patients-receiving-glucocorticoids

Alternative Medicines Corner

Advising on this article: Nicole M. Maisch

August 14, 2018

Nearly one-third of children use dietary supplements

Key Point

An analysis of data from the National Health and Nutrition Examination Surveys (NHANES) from 2003 to 2014 published in JAMA Pediatrics found that approximately 33% of children and young adults (aged 0–19 y) use dietary supplements that range from multivitamins to melatonin to omega-3 fatty acids.

Source URL:

http://www.aphadruginfoline.com/alternative-medicines-corner/nearly-one-third-children-use-dietary-supplements

Endocrinology

Advising on this article: Frank Pucino

August 14, 2018

Updated guideline released on use of testosterone therapy for hypogonadism

Key Point

The Endocrine Society released an updated clinical practice guideline on use of testosterone therapy for men with hypogonadism in the Journal of Clinical Endocrinology and Metabolism. The guideline recommends that men with symptoms of low testosterone be tested and treatment be given to hypogonadal men (<65 y) to induce or maintain secondary sex characteristics and improve symptoms of testosterone deficiency, but only after the risks and benefits of therapy are thoroughly discussed.

Source URL:

http://www.aphadruginfoline.com/endocrinology/updated-guideline-released-use-testosterone-therapy-hypogonadism

New Drug Approvals

Generic Name (Trade Name—Company)	**Uses**/Notes
August 1, 2018	
Lusutrombopag ***(Mulpleta—Shionogi)*** **New drug targets thrombocytopenia in adults with chronic liver disease**	FDA approved lusutrombopag, a once-daily, orally administered, small molecule thrombopoietin receptor agonist, for treatment of thrombocytopenia in adults with chronic liver disease who are scheduled to undergo a medical or dental procedure. Approval was based on two randomized, double-blind, placebo-controlled trials involving 312 patients with chronic liver disease and severe thrombocytopenia who were undergoing an invasive procedure and had a platelet count of less than 50 x 109/L. Patients were randomized 1:1 to receive 3 mg of lusutrombopag or placebo once daily for up to 7 days. In one trial, 78% of patients (38/49) receiving lusutrombopag required no platelet transfusion prior to the primary invasive procedure, compared with 13% (6/48) who received placebo. In the second trial, 65% (70/108) of patients who received lusutrombopag required no platelet transfusion prior to the primary invasive procedure or rescue therapy for bleeding from randomization through 7 days after the procedure, compared with 29% (31/107) receiving placebo. The most common adverse reaction (?3% of patients) was headache. The recommended lusutrombopag dosage is 3 mg orally once daily with or without food for 7 days.

Source URL:

http://www.aphadruginfoline.com/new-drug-approvals/new-drug-targets-thrombocytopenia-adults-chronic-liver-disease

Alerts and Recalls

Generic Name (Trade Name—Company)	**Uses**/Notes
August 3, 2018 **Azithromycin** ***(Zithromax, Zmax—Pfizer, others)*** **Increased risk of cancer relapse with long-term use of azithromycin after donor stem cell transplant**	FDA is warning that the antibiotic azithromycin should not be given long term to prevent an inflammatory lung condition known as bronchiolitis obliterans syndrome in patients with cancers of the blood or lymph nodes who undergo a donor stem cell transplant. Results of a clinical trial found an increased rate of relapse in cancers affecting the blood and lymph nodes, including death, in these patients. Bronchiolitis obliterans syndrome is caused by inflammation and scarring in the airways of the lungs, resulting in severe shortness of breath and dry cough. Patients with cancer who undergo stem cell transplants from donors are at risk for bronchiolitis obliterans syndrome.There are no known effective antibiotic treatments that prevent the syndrome, and azithromycin is not approved for this use. It is an FDA-approved antibiotic used to treat many types of infections affecting the lungs, sinuses, skin, and other parts of the body. The drug, which has been used for more than 26 years, is sold under the brand names Zithromax and Zmax and as generics by many different drug companies. Pfizer, the manufacturer of brand name azithromycin, is providing a Dear Healthcare Provider letter on this safety issue to health professionals who care for patients undergoing donor stem cell transplants. FDA is reviewing additional data and will communicate its conclusions and recommendations when the review is complete. Patients who have had a stem cell transplant should not stop taking azithromycin without first consulting with their health care provider.

Source URL:

http://www.aphadruginfoline.com/alerts-and-recalls/increased-risk-cancer-relapse-long-term-use-azithromycin-after-donor-stem-cell

New Drug Approvals

Generic Name (Trade Name—Company)	**Uses**/Notes
August 16, 2018	
Mogamulizumab-kpkc ***(Poteligeo—Kyowa Kirin)*** **FDA approves treatment for two rare types of non-Hodgkin lymphoma**	FDA approved mogamulizumab-kpkc injection for I.V. use for the treatment of adult patients with relapsed or refractory mycosis fungoides (MF) or Sézary syndrome (SS) after at least one prior systemic therapy. This approval provides a new treatment option for patients with MF and is the first FDA approval of a drug specifically for SS. The agent is a monoclonal antibody that binds to a CC chemokine receptor type 4 (CCR4) found on some cancer cells. Approval was based on a clinical trial of 372 patients with relapsed MF or SS who received either mogamulizumab-kpkc or a type of chemotherapy called vorinostat. Progression-free survival was longer for patients taking mogamulizumab-kpkc (median 7.6 mo) compared with patients taking vorinostat (median 3.1 mo). In clinical trials, the most common adverse effects of treatment included rash, infusion-related reactions, fatigue, diarrhea, musculoskeletal pain, and upper respiratory tract infection. Serious warnings include the risk of dermatologic toxicity, infusion reactions, infections, autoimmune problems, and complications of stem cell transplantation that uses donor stem cells (allogeneic) after treatment with the drug.

Source URL:

http://www.aphadruginfoline.com/new-drug-approvals/fda-approves-treatment-two-rare-types-non-hodgkin-lymphoma

New Drug Approvals

Generic Name (Trade Name—Company)	**Uses**/Notes
August 16, 2018	
Patisiran	FDA approved patisiran infusion for the treatment of peripheral nerve disease (polyneuropathy) caused by hereditary transthyretin-mediated amyloidosis (hATTR) in adult patients. This is the first FDA-approved treatment for patients with polyneuropathy caused by hATTR, a rare, debilitating, and often fatal genetic disease characterized by the buildup of abnormal amyloid protein in peripheral nerves, the heart, and other organs. It is also the first FDA approval of a new class of drugs called small interfering ribonucleic acids (siRNAs). siRNAs work by silencing a portion of RNA involved in causing the disease. More specifically, patisiran encases the siRNA into a lipid nanoparticle to deliver the drug directly into the liver, in an infusion treatment, to alter or halt the production of disease-causing proteins. The agent is designed to interfere with RNA production of an abnormal form of the protein transthyretin (TTR). By preventing the production of TTR, the drug can help reduce the accumulation of amyloid deposits in peripheral nerves, improving symptoms and helping patients better manage the condition. Efficacy was shown in a clinical trial involving 225 patients, 148 of whom were randomly assigned to receive a patisiran infusion once every three weeks for 18 months, and 77 of whom were randomly assigned to receive a placebo infusion at the same frequency. The patients who received patisiran had better outcomes on measures of polyneuropathy, including muscle strength, sensation (pain, temperature, numbness), reflexes, and autonomic symptoms (blood pressure, heart rate, digestion) compared with those receiving the placebo infusions. Patisiran-treated patients also scored better on assessments of walking, nutritional status, and the ability to perform activities of daily living. The most common adverse reactions reported by patients in clinical trials included flushing, back pain, nausea, abdominal pain, dyspnea, and headache. All patients who participated in the clinical trials received

(Onpattro—Alnylam Pharmaceuticals)

First-of-its kind targeted RNA-based therapy approved for rare peripheral nerve disease

premedication with a corticosteroid, acetaminophen, and antihistamines (H1 and H2 blockers) to reduce the occurrence of infusion-related reactions.

Patients may also experience vision problems, including dry eyes, blurred vision, and eye floaters (vitreous floaters). Use of the agent can cause a decrease in serum vitamin A levels, so patients should take a daily Vitamin A supplement at the recommended daily allowance.

Source URL:

http://www.aphadruginfoline.com/new-drug-approvals/first-its-kind-targeted-rna-based-therapy-approved-rare-peripheral-nerve-disease

New Drug Approvals

Generic Name (Trade Name—Company)	**Uses**/Notes
August 16, 2018	
Migalastat ***(Galafold—Amicus Therapeutics U.S.)*** **New oral medication targets a rare genetic disorder, Fabry disease**	FDA approved migalastat, the first oral medication for the treatment of adults with Fabry disease, a rare and serious genetic disorder caused by mutations in the alpha-galactosidase A (GLA) gene located on the X-chromosome. The disease results from buildup of globotriaosylceramide (GL-3) in blood vessels, the kidneys, the heart, the nerves, and other organs. It is estimated that classic Fabry disease (the most severe type) affects approximately one in 40,000 males. The later-onset type is more frequent and in some populations may occur in one in 1,500 to 4,000 males. Patients with Fabry disease develop slowly progressive kidney disease, cardiac hypertrophy, arrhythmias, stroke, and early death. Efficacy was demonstrated in a 6-month, placebo-controlled clinical trial in 45 adults with Fabry disease. Patients treated with migalastat had a greater reduction in GL-3 in blood vessels of the kidneys (as measured in kidney biopsy samples) compared with patients on placebo. Migalastat's safety was studied in four clinical trials that included 139 patients with Fabry disease. The most common adverse drug reactions were headache, nasal and throat irritation, urinary tract infection, nausea, and fever.

Source URL:

http://www.aphadruginfoline.com/new-drug-approvals/new-oral-medication-targets-rare-genetic-disorder-fabry-disease

New Drug Approvals

Generic Name (Trade Name—Company)	**Uses**/Notes
August 16, 2018	
Segesterone acetate and ethinyl estradiol vaginal system	FDA has approved segesterone acetate and ethinyl estradiol vaginal system under the trade name Annovera. The combined hormonal contraceptive is the first vaginal ring contraceptive that can be used for an entire year. Annovera is a reusable donut-shaped (ring), nonbiodegradable, flexible vaginal system that is placed in the vagina for 3 weeks, followed by 1 week out of the vagina, at which time women may experience a period (a withdrawal bleed). This schedule is repeated every 4 weeks for 1 year (thirteen 28-day menstrual cycles). The ring is washed and stored in a compact case for the 7 days not in use. It does not require refrigeration prior to dispensing and can withstand storage temperatures up to 30° C (86° F). Efficacy and safety of Annovera were studied in three open-label clinical trials that included healthy women ranging in age from 18 to 40 years. The results showed that about 2 to 4 women out of 100 may get pregnant during the first year they use Annovera. Annovera carries a boxed warning on cigarette smoking and serious cardiovascular events. Women older than 35 who smoke should not use Annovera. Cigarette smoking increases the risk of serious cardiovascular events from combination hormonal contraceptive use. Annovera also is contraindicated and should not be used in women with a high risk of arterial or venous thrombotic diseases; current or history of breast cancer or other estrogen- or progestin-sensitive cancer; liver tumors, acute hepatitis, or severe (decompensated) cirrhosis; undiagnosed abnormal uterine bleeding; hypersensitivity to any of the Annovera components; and use of Hepatitis C drug combinations containing ombitasvir/paritaprevir/ritonavir, with or without dasabuvir. The most common adverse effects are similar to those of other combined hormonal contraceptive products, such as headache/migraine, nausea/vomiting, yeast

(Annovera—The Population Council)

New vaginal ring provides 1 year of birth control

infections, abdominal pain, dysmenorrhea, breast tenderness, irregular bleeding, diarrhea, and genital itching.

FDA is requiring postmarketing studies to further evaluate the risks of venous thromboembolism and the effects of CYP3A-modulating drugs and tampon use on the pharmacokinetics of Annovera.

Source URL:

http://www.aphadruginfoline.com/new-drug-approvals/new-vaginal-ring-provides-1-year-birth-control

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