WASHINGTON STATE UNIVERSITY
College of Pharmacy and Pharmaceutical Sciences

Drug Information Center

Highlights of FDA Activities – 11/1/22 – 11/30/22

FDA Drug Safety Communications & Drug Information Updates:

FDA Warnings About Artri and Ortiga Products – Medication Health Fraud Update 11/1/22
The FDA continued to warn consumers not to purchase or use Artri and Ortiga products as the agency received reports of adverse events, including liver toxicity and death. These products are promoted with unproven claims to treat arthritis and osteoarthritis, restore cartilage, and stop joint deterioration. FDA analysis revealed hidden drug ingredients including dexamethasone, diclofenac sodium, and methocarbamol prompting earlier public health notifications in April and October 2022. The FDA also warned that suddenly stopping corticosteroids, as contained in these products, could result in a serious withdrawal syndrome.

FDA Temporarily Exercising Additional Enforcement Discretion for Clozapine REMS Program 11/2/22
The FDA announced it is temporarily exercising additional enforcement discretion with respect to certain Clozapine REMS programs requirements to ensure continuity of care for patients taking clozapine. To address the concern that inpatient pharmacies are only allowed to dispense a 7-days' supply of clozapine to a patient upon discharge, the FDA does not intend to object if inpatient pharmacies dispense a days' supply of clozapine that aligns with the patient's monitoring frequency (e.g., weekly monitoring = 7 days' supply, twice monthly monitoring = 14 days' supply, monthly monitoring = 30 days' supply) upon discharge from an inpatient facility.

FDA Updates Bebtelovimab Emergency Use Authorization 11/4/22 and 11/30/22
The FDA updated the Health Care Provider Fact Sheet for bebtelovimab with specific information regarding expected reduced activity against certain emerging Omicron subvariants of SARS-CoV-2. Bebtelovimab is not expected to neutralize Omicron subvariants BQ.1 and BQ.1.1. Subsequently the FDA announced bebtelovimab is not authorized for use in any region in the US as of 11/30/22 as the proportion of cases caused by these subvariants rose above 50%.

FDA Authorizes Anakinra (Kineret) Injection Treatment of COVID-19 in Certain Hospitalized Adults 11/8/22
The FDA issued an EUA for anakinra (Kineret) injection for the treatment of COVID-19 in hospitalized adults with pneumonia requiring supplemental oxygen (low- or high-flow) who are at risk of progressing to severe respiratory failure and are likely to have an elevated plasma soluble urokinase plasminogen activator receptor (suPAR).

FDA Alerts Health Care Professionals of Risks to Patients Exposed to Xylazine in Illicit Drugs 11/8/22
The FDA issued an alert to health care professionals about the risk of xylazine in illicit drugs. Health care professionals should be cautious of possible xylazine inclusion in fentanyl, heroin, and other illicit drug overdoses, as naloxone may not be able to reverse its effects. Xylazine is FDA-approved for use in animals as a sedative and pain reliever, however, it is not safe for use in humans and may result in serious and life-threatening side effects.

FDA Designates Insulin Glargine-aglr (Rezvoglar) as an Interchangeable Biosimilar 11/17/22
The FDA designated Rezvoglar, a biosimilar to Lantus, as an interchangeable biosimilar. It was previously approved as a biosimilar in December 2021.

Compatibility Issues with Prefilled Glass Syringes and Luer-Activated Valve Connectors 11/22/22
The FDA alerted health care professionals that certain Luer-activated valve (LAV) connectors (aka, needleless Luer access devices or needleless connectors) with internal pin designs may not be compatible with prefilled glass syringes (eg, naloxone prefilled glass syringes). The pin may break when attached to the syringe preventing administration of the drug. In facilities using LAV connectors with an internal pin and drug packaged in prefilled glass syringes, a plan should be implemented to ensure safe administration of medications.

FDA Investigates Risk of Severe Hypocalcemia in Patients on Dialysis Treated with Denosumab 11/22/22
The FDA is investigating the risk of severe hypocalcemia with serious outcomes, including hospitalization and death, in patients with advanced kidney disease on dialysis treated with the osteoporosis medicine denosumab (Prolia). The FDA's review of interim results from an ongoing safety study of denosumab suggests an increased risk of hypocalcemia in patients with advanced kidney disease. Preliminary results from a separate internal FDA study further investigating hypocalcemia in dialysis patients treated with denosumab show a substantial risk of serious outcomes, including hospitalization and death. The risks of hypocalcemia with the use of denosumab should be considered in patients on dialysis. Adequate calcium and vitamin D supplementation and frequent blood calcium monitoring is necessary and may decrease the likelihood and severity of these risks

Major Medication/Drug-Related Product Recalls Announced Through MedWatch:

Hand Sanitizer by Adam's Polishes: Recall – Potential Contamination with Methanol 11/8/22
Adam's Polishes recalled lot 133475 of Adam's Polishes Hand Sanitizer because FDA testing has found this lot to contain undeclared methanol. Adam's Polishes is recalling 19 other lots in an abundance of caution. Products were distributed nationwide in the USA to internet customers between June 2020 and March 2022.

Omnipod 5 Automated Insulin Delivery System, Insulet: Device Correction - Overheating 11/15/22
Insulet Corp. announced a medical device correction for the Omnipod 5 Automated Insulin Delivery System due to an issue with the charging port and cable including reports of the charging port (USB-C port) or cable (USB cable) melting, deforming, or discoloring due to heat generated by a poor connection.

Omnipod DASH Insulin Management System's Personal Diabetes Manager (PDM), Insulet: Recall - Battery Swelling, Leakage, or Extreme Overheating 11/15/22
Insulet Corp. recalled the Omnipod DASH Insulin Management System's Personal Diabetes Manager (PDM) due to reports of battery issues including battery swelling, leakage, or extreme overheating, including 3 fires. The recall includes all serial numbers of models 18239 ASM Omnipod DASH PDM, PT-000010 (Assembly, DASH Final PDM U100, mg/dL), and PT-000011 (Assembly, DASH Final PDM U100, mmol/L) distributed from 7/27/18 to 8/31/22.

Healthy Sense Daily Multiple with Iron Tablets and People's Choice Women's Daily Vitamins with Iron Tablets, Mason Vitamins Inc.: Recall - Inconsistent Product Labeling 11/17/22
Mason Vitamins Inc. recalled specific lots of Healthy Sense Daily Multiple with Iron (UPC 311845353238, lots 25807G, A25807G) and People's Choice Women's Daily Vitamins with Iron (UPC 311845486882, lots B25807G, C25807G, D25807G) due to vitamin A, vitamin B12, vitamin C, vitamin E, and pantothenic acid amounts being lower than the declared amount on the label as determined during an FDA inspection.

WatchCare Incontinence Management System, Baxter Hillrom: Recall – Interferes with Medical Equipment 11/23/22
Baxter Hillrom recalled the WatchCare Incontinence Management System including specific Centrella, Progressa, and VersaCare hospital beds and disposable incontinence pads following reports that the radiofrequency emissions from the devices may interfere with other medical devices including infusion pumps, insulin pumps, blood glucose sensors, fetal monitors/dopplers, telemetry devices, and bladder scanners. Interference may affect patients receiving care in such beds and staff providing care for patients in beds with the accessory installed.

Sodium Bicarbonate Injection USP, 8.4%, 50 mEq/50 mL Vial, Exela Pharma Sciences: Recall Expanded - Vial Breakage 11/28/22
Exela Pharma expanded their recall to include a total of 63 lots of sodium bicarbonate USP 8.4% 50 mEq/50 mL vial, 20-count cartons due to a safety concern with vial breakage and flying glass causing potential injury. Vial breakage has been reported in association with pressurization while preparing product for administration. An additional 14 lots were added to the ongoing recall, with the additional lots distributed from 10/26/21 through 4/25/22. The complete list of recalled lots can be found on the FDA site.

Dietary Supplement Recalls & Public Notifications

Notifications were issued regarding undeclared active ingredients or contaminants in the following products. Patients are advised not to purchase or use these products.

Product	***Promoted Use***	***Undeclared Ingredient(s) or Contaminants***
Sangter Natural Male Energy Supplement	Sexual enhancement	Sildenafil
JACK'D Sexual Enhancement capsules	Sexual enhancement	Sildenafil
JACK'D Sexual Enhancement liquid	Sexual enhancement	Sildenafil

New Product Shortages	***Date Initially Posted***
Neomycin sulfate tablets	11/16/22
Collagenase ointment	11/21/22

Brand Name or Sole Source Product Discontinuations/Withdrawals	***Date Posted***
Butenafine HCl 1% Cream (Mentax, Mylan): butenafine HCl 1% cream remains available from other manufacturers	11/2/22
Glucagon Injection 0.5 mg per 0.1 mL, Pre-Filled Syringe (Gvoke, Xeris Pharmaceuticals): 1 count (NDC 72065-130-11), 2 count (NDC 72065-130-12); distribution will continue in the US until January 30, 2023 and will continue to be available for pediatric patients (NDC 72065-120-12). All other Gvoke products will continue to be available.	11/8/22
Hydrochlorothiazide and spironolactone tablets (Aldactazide, Pfizer): 25 mg tablets – supply expected to exhaust in December 2022; 50 mg tablets previously discontinued; combination remains available from other manufacturers	11/8/22
Glucagon injection (GlucaGen, Boehringer Ingelheim), 1 mg/mL single dose vial pack of 10 (NDC 0597-0053-45) and Diagnostic Kit (NDC 0597-0260-10); glucagon products remain available from other manufacturers	11/18/22

New Drug Approvals:	***Description (See Attached Drug Summaries)***	***Date Approved***
Mirvetuximab soravtansine-gynx / Elahere / ImmunoGen, Inc.	Folate receptor alpha (FRα)-directed antibody and microtubule inhibitor conjugate indicated for the treatment of adult patients with FRα positive, platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer, who have received one to three prior systemic treatment regimens	11/14/22
Teplizumab-mzwv / Tzield / Provention Bio Inc.	CD3-directed antibody indicated to delay the onset of Stage 3 type 1 diabetes in adults and pediatric patients aged 8 years and older with Stage 2 T1D	11/17/22
Etranacogene dezaparvovec-drlb / Hemgenix / CSL Behring LLC	Adenovirus-based gene therapy for the treatment of patients with hemophilia B who currently use factor IX prophylaxis therapy, or have current or historical life-threatening bleeding, or have repeated, serious spontaneous bleeding episodes	11/22/22
Fecal microbiota, live - jslm / Rebyota / Ferring Pharmaceuticals Inc.	Fecal transplant therapy for individuals 18 years of age and older with recurring *Clostridioides difficile* infection (CDI), following antibiotic treatment for recurrent CDI	11/30/22

New Indications:	***Description***	***Date Approved***
Ioflupane I-23 / Datscan / GE Healthcare Incorporated	As an adjunct to other diagnostic evaluations for striatal dopamine transporter visualization using single photon emission computed tomography (SPECT) brain imaging in adult patients with suspected dementia with Lewy bodies	11/1/22
Cemiplimab-rwlc / Libtayo / Regeneron Pharmaceuticals	In combination with platinum-based chemotherapy for the first line treatment of adult patients with non-small cell lung cancer (NSCLC) with no EGFR, ALK, or ROS1 aberrations that is locally advanced or metastatic	11/8/22
Brentuximab / Adcetris / Seattle Genetics	Indication expanded to include use in pediatric patients 2 years and older with previously untreated high risk Hodgkin lymphoma (cHL), in combination with doxorubicin, vincristine, etoposide, prednisone, and cyclophosphamide	11/10/22
Levonorgestrel / Liletta / Medicines360	Extended the duration of use for the prevention of pregnancy from 6 years to 8 years	11/10/22
Durvalumab / Imfinzi / AstraZeneca Pharmaceuticals	For use in combination with tremelimumab-actl and platinum-based chemotherapy, for the treatment of adult patients with metastatic NSCLC with no sensitizing EGFR mutations or ALK genomic tumor aberrations	11/10/22
Tremelimumab-actl / Imjudo / AstraZeneca Pharmaceuticals	In combination with durvalumab and platinum-based chemotherapy, for the treatment of adult patients with metastatic NSCLC with no sensitizing EGFR mutations or ALK genomic tumor aberrations	11/10/22
Dulaglutide / Trulicity / Eli Lilly and Co	Indication expanded to include use as an adjunct to diet and exercise to improve glycemic control in pediatric patients 10 years of age and older with type 2 diabetes mellitus	11/17/22
Pegfilgrastim-cbqv / Udenyca / Coherus BioSciences, Inc.	To increase survival in patients acutely exposed to myelosuppressive doses of radiation (Hematopoietic Subsyndrome of Acute Radiation Syndrome).	11/28/22
Ibrexafungerp / Brexafemme / Scynexis	For reduction of the incidence of recurrent vulvovaginal candidiasis in adult and post-menarchal pediatric females	11/30/22

New Dosage Forms or Formulation:	***Description***	***Date Approved***
Etanercept-szzs / Erelzi / Sandoz	Lyophilized powder for reconstitution, 25 mg in a multiple-dose vial; for pediatric patients with polyarticular juvenile idiopathic arthritis (2 years or older) or plaque psoriasis (4 years or older) that weigh less than 63 kg.	11/10/22
Phenobarbital sodium / Sezaby / Sun Pharmaceutical	Powder for IV injection, 100 mg/vial; for treatment of neonatal seizures in term and preterm infants	11/17/22
Methotrexate / Jylamvo / Therakind Ltd	Oral solution: 2 mg/mL; indicated for treatment of adults with rheumatoid arthritis, severe psoriasis, acute lymphoblastic leukemia as part of a combination chemotherapy maintenance regimen, mycosis fungoides, or non-Hodgkin lymphoma as part of a metronomic combination regimen	11/29/22

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Mirvetuximab soravtansine-gynx / Elahere / ImmunoGen, Inc.	
Generic Name / Brand Name / Company	Mirvetuximab soravtansine-gynx / Elahere / ImmunoGen, Inc.
Date of approval	11/14/22
Drug Class (Mechanism of Action if novel agent)	Folate receptor alpha (FRα)-directed antibody and microtubule inhibitor conjugate
Indication	Treatment of adult patients with FRα positive, platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer, who have received one to three prior systemic treatment regimens
Comparative agent – Therapeutic interchange?	None – first in its class
Dosage forms/strengths.	Injection 100 mg/20 mL (5 mg/mL) in a single-dose vial
Common Dose/sig	6 mg/kg adjusted ideal body weight IV every 3 weeks
DEA Schedule	Not applicable
Date of market availability	Available
Similar Medication Names	Margetuximab, Mirtazapine, Mirabegron, Rituximab
Clinical Use Evaluation	
Common Adverse Effects	≥20%: Vision impairment, fatigue, nausea, keratopathy, abdominal pain, peripheral neuropathy, diarrhea, constipation, dry eyes
Severe Adverse Effects	Ocular toxicities, pneumonitis, peripheral neuropathy, intestinal obstruction, ascites, infection, pleural effusion
Severe Drug-Drug Interactions	Monitor closely if administered with strong CYP3A3 inhibitors
Severe Drug-Food Interactions	None known
Important Labs Values to assess prior to order entry or at point of clinical follow up.	FRα tumor expression necessary for patient selection Pregnancy test prior to first dose in women of childbearing potential
Used in Pediatric Areas	Safety and efficacy not established in pediatric patients
Renal or Hepatic Dosing	No dose adjustment is recommended for patients with mild to moderate renal impairment or mild hepatic impairment. The effect of severe renal impairment is unknown. Avoid use in patients with moderate or severe hepatic impairment.
Critical Issues (i.e., contraindications, warnings, etc) that should be emphasized	Black box warning for ocular toxicity; frequent ophthalmic exams required. Monitor for pneumonitis and peripheral neuropathy. Embryo-fetal toxicity.
Special administration technique or considerations	Administer as an IV infusion at an initial rate of 1 mg/min, adjusted to 3 mg/min, and 5 mg/min if tolerated. Flush with 5% dextrose injection. Administer intravenous corticosteroids, intravenous or oral antihistamines, intravenous or oral antipyretic, and intravenous or oral antiemetic prior to administration of mirvetuximab. Administer ophthalmic corticosteroids and lubricating eye drops during therapy.
Prepared by	Samuel Nahulu
Source	Elahere (Mirvetuximab soravtansine-gynx) [prescribing information]. Waltham, MA: ImmunoGen, Inc.; November 2022.

Teplizumab-mzwv / Tzield / Provention Bio Inc.	
Generic Name / Brand Name / Company	Teplizumab-mzwv / Tzield / Provention Bio Inc.
Date of approval	11/17/22
Drug Class (Mechanism of Action if novel agent)	CD3-directed antibody
Indication	Delay the onset of Stage 3 type 1 diabetes (T1D) in adults and pediatric patients aged 8 years and older with Stage 2 T1D
Comparative agent – Therapeutic interchange?	None
Dosage forms/strengths	Injection: 2 mg/2 mL single-dose vial
Common Dose/sig	Intravenous infusion once daily for 14 days; 65 mcg/m^2 on day 1, 125 mcg/m^2 on day 2, 250 mcg/m^2 on day 3, 500 mcg/m^2 on day 4, 1030 mcg/m^2 on days 5 through 14
DEA Schedule	Not applicable
Date of market availability	December 2022
Similar Medication Names	Tedizolid
Clinical Use Evaluation	
Common Adverse Effects	≥10%: lymphopenia, rash, leukopenia, headache
Severe Adverse Effects	Cytokine release syndrome (CRS), serious infections, lymphopenia, hypersensitivity reactions
Severe Drug-Drug Interactions	Administer live attenuated vaccines at least 8 weeks prior and inactivated or mRNA vaccines at least 2 weeks prior or 6 weeks after treatment; live vaccines are not recommended for up to 52 weeks after treatment
Severe Drug-Food Interactions	None known
Important Labs Values to assess prior to order entry or at point of clinical follow up.	Confirm Stage 2 T1D (pancreatic islet cell autoantibodies, oral glucose tolerance test); CBC, liver enzymes, laboratory evidence of acute infection with Epstein-Barr virus (EBV) or cytomegalovirus (CMV)
Used in Pediatric Areas	Indicated in pediatric patients 8 or older with a diagnosis of Stage 2 T1D; safety and efficacy not established in patients younger than 8 years
Renal or Hepatic Dosing	Use not recommended in patients with elevated ALT, AST or bilirubin; no recommendations for renal or hepatic dosing adjustments
Critical Issues (i.e., contraindications, warnings, etc) that should be emphasized	No contraindications Warnings include cytokine release syndrome, serious infection, lymphopenia, hypersensitivity If vaccinations are needed during time of treatment, avoid concurrent use of live, inactivated, and mRNA vaccines. Administer all age-appropriated doses prior to treatment.
Special administration technique or considerations	Dilute in 0.9% Sodium Chloride Injection, USP prior to infusion. Premedicate prior to infusion for the first 5 days of dosing with a nonsteroidal anti-inflammatory drug or acetaminophen, an antihistamine, and/or an antiemetic Administer by intravenous infusion over a minimum of 30 minutes. If an infusion is missed, continue dosing by administering all remaining doses on consecutive days to complete the 14-day treatment course
Prepared by	Jessica Ponkratov
Source	*Tzield* (Teplizumab-mzwv) [prescribing information]. Red Bank, NJ: Provention Bio Inc.; November 2022.

Etranacogene dezaparvovec-drlb / Hemgenix / uniQure Inc.	
Generic Name / Brand Name / Company	Etranacogene dezaparvovec-drlb / Hemgenix / uniQure Inc.
Date of approval	11/22/22
Drug Class (Mechanism of Action if novel agent)	Adenovirus-based gene therapy
Indication	Treatment of patients with Hemophilia B who currently use Factor IX prophylaxis therapy, or have current or historical life-threatening bleeding, or have repeated, serious spontaneous bleeding episodes
Comparative agent – Therapeutic interchange?	Not applicable
Dosage forms/strengths	Kits containing 10 to 48 vials with the patient-specific dose
Common Dose/sig	2×10^{13} genome copies/kg (2 mL/kg) as a single IV infusion
DEA Schedule	Not applicable
Date of market availability	Available
Similar Medication Names	Elivaldogene autotemcel, Etravirine, Hemangeol
Clinical Use Evaluation	
Common Adverse Effects	≥5%: Infusion-related reactions, elevated ALT/AST, headache, elevated blood creatine kinase, flu-like symptoms, fatigue, malaise
Severe Adverse Effects	Infuse-related reactions; hepatotoxicity and hepatocellular carcinogenicity are a risk
Severe Drug-Drug Interactions	None known
Severe Drug-Food Interactions	None known
Important Labs Values to assess prior to order entry or at point of clinical follow up.	Factor IX activity levels and factor IX inhibitors at baseline; monitor factor IX activity weekly for first 3 months Liver function tests (ALT, AST, alkaline phosphatase, bilirubin) at baseline; monitor ALT and AST weekly for at least 3 months
Used in Pediatric Areas	Safety and efficacy not established in pediatric patients
Renal or Hepatic Dosing	No dose adjustments in renal or hepatic disease
Critical Issues (i.e., contraindications, warnings, etc) that should be emphasized	Warnings: - Infusion reactions (monitor for 3 hours after end of administration; if reaction occurs, slow down or stop infusion and then restart once symptoms resolve) - Hepatotoxicity (monitor weekly for 3 months post administration; if liver enzyme levels increase, consider corticosteroid therapy) - Hepatocellular carcinogenicity (for those with pre-existing liver disorders, perform an annual liver ultrasound and alpha-fetoprotein testing for 5 years)
Special administration technique or considerations	Administer Hemgenix as an intravenous infusion after dilution with 0.9% normal saline at a constant infusion rate of 500 ml/hour (8 mL/min). Dose may require more than one IV bag. Flush line with normal saline after all bags are infused.
Prepared by	Jessica Ponkratov
Source	*Hemgenix* (Etranacogene dezaparvovec-drlb) [prescribing information]. Lexington, MA. uniQure Inc.; November 2022.

Fecal microbiota, live - jslm / Rebyota / Ferring Pharmaceuticals Inc.	
Generic Name / Brand Name / Company	Fecal microbiota, live - jslm / Rebyota / Ferring Pharmaceuticals Inc.
Date of approval	11/30/22
Drug Class (Mechanism of Action if novel agent)	Restoration of microbiome
Indication	Used to prevent the recurrence of *Clostridioides difficile* infection (CDI) in individuals 18 years of age and older, post antibiotic treatment for recurrent CDI.
Comparative agent – Therapeutic interchange?	Not applicable
Dosage forms/strengths	Rectal suspension: 150 mL per dose 24 to 72 hours after the last dose of antibiotics
Common Dose/sig	150 mL rectally 24 to 72 hours after the last dose of antibiotics
DEA Schedule	Not applicable
Date of market availability	Currently unavailable
Similar Medication Names	Reyataz, Byetta, Rebetol
Clinical Use Evaluation	
Common Adverse Effects	Abdominal pain (8.9%), diarrhea (7.2%), abdominal distention (3.9%), flatulence (3.3%), nausea (3.3%)
Severe Adverse Effects	No serious adverse effects reported
Severe Drug-Drug Interactions	Avoid use of oral antibiotics for up to 8 weeks if possible
Severe Drug-Food Interactions	None known
Important Labs Values to assess prior to order entry or at point of clinical follow up.	Not applicable
Used in Pediatric Areas	Safety and efficacy not established in pediatric patients
Renal or Hepatic Dosing	No dosage adjustments recommended
Critical Issues (i.e., contraindications, warnings, etc) that should be emphasized	Contraindicated if history of severe allergic reaction to any product components (polyethylene glycol 3350). Because the product is manufactured from human fecal matter there is a potential for transmitting infectious disease. Allergic reactions to product components, including food allergens present in the fecal matter, may occur.
Special administration technique or considerations	This solution is kept frozen but should be thawed 24 hours prior to administration in the refrigerator; do not re-freeze after thawing.
Prepared by	Jessica Ponkratov
Source	*Rebyota* (Fecal microbiota, live - jslm) [prescribing information]. Roseville, MN. Ferring Pharmaceuticals Inc.; November 2022.