PHARMNOTES

April 2023

Date: 5/10/2023

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Drug Safety Alert Notification

FDA Drug Safety Communication	Details
FDA updates prescribing information for all opioid pain medicines to provide additional guidance for safe use	As part of its ongoing efforts to address the nation's opioid crisis, the FDA is making several updates to the prescribing information of opioid pain medications. The FDA is requiring the following updates to the prescribing information for both immediate-release (IR) and extended-release (ER)/long-acting (LA) opioid pain medicines: • For all opioid pain that the risk of overdose increases as the dose increases • For IR opioids - these products should not be used for an extended period unless the pain remains severe enough to require them and alternative treatments continue to be inadequate • For ER/LA opioids – these products should be reserved for severe and persistent pain that requires an extended treatment period with a daily opioid pain medicine and for which alternative treatment options are inadequate • The agency has determined that a new warning is needed about opioid-induced hyperalgesia (OIH), which is when an administration of an opioid for pain relief causes an increase in pain or an increased sensitivity to pain. The warning for both IR and ER/LA opioid pain medications with a description of symptoms that differentiate OIH from opioid tolerance and withdrawal.

New FDA-Approved Drug Products

DRUG NAME	MANUFACTURER	APPROVAL DATE
OMISIRGE™ (OMIDUBICEL-ONLV) SUSPENSION FOR INFUSION	GAMIDA CELL, INC.	4/17/2023

THERAPEUTIC CLASS
Antineoplastics

FDA-APPROVED INDICATION(S)
Omisirge™ is a nicotinamide modified allogeneic hematopoietic progenitor cell therapy derived from cord blood indicated for use in adults and pediatric patients 12 years and older with hematologic malignancies who are planned for umbilical cord blood transplantation following myeloablative conditioning to reduce the time to neutrophil recovery and the incidence of infection.

DOSAGE AND ADMINISTRATION
Premedicate the patient approximately 30-60 minutes prior to infusion. The CF (Cultured Fraction) bag must be administered FIRST, and infusion should not exceed 2 hours from the end of dilution. Infusion of the NF (Non-cultured) bag should not exceed 1 hour from the end of dilution. Administration should be under the supervision of a physician experienced in treatment of hematologic malignancies, in centers with expertise in hematopoietic stem cell transplants.

DOSAGE FORMS AND STRENGTHS
A single dose of Omisirge™ consists of: Cultured Fraction (CF): a minimum of 8.0 × 108 total viable cells of which a minimum of 8.7% is CD34+ cells and a minimum of 9.2 × 107 CD34+ cells, and Non-cultured Fraction (NF): a minimum of 4.0 × 108 total viable cells with a minimum of 2.4 × 107 CD3+ cells

SAFETY PROFILE

CONTRAINDICATIONS
- Known sensitivity to dimethyl sulfoxide (DMSO), Dextran 40, gentamicin, human serum albumin or bovine material

WARNINGS AND PRECAUTIONS
- **BLACK BOX WARNING: INFUSION REACTIONS, GRAFT VERSUS HOST DISEASE, ENGRAFTMENT SYNDROME, AND GRAFT FAILURE**
  - Infusion reactions: Infusion reactions may be fatal. Monitor patients during infusion and discontinue for severe reactions. Use is contraindicated in patients with known allergy to dimethyl sulfoxide (DMSO), Dextran 40, gentamicin, human serum albumin, or bovine material
  - Graft-vs-Host Disease (GvHD): GvHD may be fatal. Administration of immunosuppressive therapy may decrease the risk of GvHD
  - Engraftment syndrome: Engraftment syndrome may be fatal. Treat engraftment syndrome promptly with corticosteroids
  - Graft failure: Graft failure may be fatal. Monitor patients for laboratory evidence of hematopoietic recovery

WARNINGS AND PRECAUTIONS (CONT).
- Malignancies of donor origin: Monitor life-long for secondary malignancies. In the event that a secondary malignancy occurs after treatment with Omisirge™, contact Gamida Cell at (844) 477-7478
- Transmission of serious infections: Monitor patients closely for serious infections
- Transmission of rare genetic diseases: Monitor patients for rare genetic diseases

ADVERSE REACTIONS
- The most common adverse reactions (incidence > 20%) are infections, Graft-vs-Host disease, and infusion reaction.

USE IN SPECIFIC POPULATIONS
- Pregnancy: No animal or human data. Omisirge™ should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

Orphan status: Yes

DRUG NAME	MANUFACTURER	APPROVAL DATE
QALSODY™ (TOFERSEN) INJECTION FOR INTRATHECAL USE	BIOGEN IDEC INC	4/25/2023

THERAPEUTIC CLASS
Central nervous system agents

FDA-APPROVED INDICATION(S)
Qalsody™ is an antisense oligonucleotide indicated for the treatment of amyotrophic lateral sclerosis (ALS) in adults who have a mutation in the superoxide dismutase 1 (SOD1) gene.

DOSAGE AND ADMINISTRATION
- Recommended dose: 100 milligrams (15 mL) per administration
- Initiate Qalsody™ treatment with 3 loading doses administered at 14-day intervals. A maintenance dose should be administered once every 28 days thereafter.

DOSAGE FORMS AND STRENGTHS
Injection: 100mg/15mL (6.7mg/mL) solution in a single-dose vial

Orphan status: Yes

SAFETY PROFILE

CONTRAINDICATIONS
- None

WARNINGS AND PRECAUTIONS
- Myelitis and/ or Radiculitis: Serious events of myelitis and radiculitis have been reported. Monitor for symptoms; diagnostic workup and treatment should be initiated according to the standard of care.
- Papilledema and Elevated Intracranial Pressure: Serious events of papilledema and elevated intracranial pressure have been reported. Monitor for symptoms; diagnostic workup and treatment should be initiated according to standard of care.
- Aseptic Meningitis: Serious events of aseptic meningitis have been reported. Monitor for symptoms; diagnostic workup and treatment should be initiated according to standard of care.

ADVERSE REACTIONS
- The most common adverse reactions (≥ 10% of patients treated with Qalsody™ and greater than placebo) were pain, fatigue, arthralgia, cerebrospinal fluid white blood cell increased, and myalgia.

USE IN SPECIFIC POPULATIONS
- Geriatric Use: No overall differences in safety or effectiveness were observed between these patients and younger patients, but a greater sensitivity of some older individuals cannot be ruled out. There is no evidence for special dosage considerations based on age when Qalsody™ is administered.

New Biosimilar Products

- No new biosimilar product was approved in April.

New Formulations, Combination Products & Line Extensions

Drug Name and Manufacturer	Date	Therapeutic Class	Indication(s)	Additional Information
Rizafilm™ (rizatriptan) oral film / IntelGenx Corp.	4/14/2023	Antimigraine agents	For the acute treatment of migraine with or without aura in adults and in pediatric patients 12 to 17 years of age weighing 40kg or more	This product was approved by the FDA based on successful results from a bioequivalence study comparing Rizafilm™ with other rizatriptan products. It provides an additional alternative for migraine patients who suffer from migraine-related nausea. Orphan: No
Zejula™ (niraparib) tablets / GlaxoSmithKline	4/26/2023	Antineoplastics	[1] For the maintenance treatment of adult patients with advanced epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in a complete or partial response to first-line platinum-based chemotherapy; [2] For the maintenance treatment of adult patients with deleterious or suspected deleterious germline BRCA-mutated recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in a complete or partial response to platinum-based chemotherapy	This is a new dosage form for Zejula™ that comes in 3 different strengths allowing for dose optimization and reducing pill burden. Orphan: Yes

New Formulations, Combination Products & Line Extensions

Drug Name and Manufacturer	Date	Therapeutic Class	Indication(s)	Additional Information
Trikafta™ (elexacaftor, tezacaftor, and ivacaftor oral granules; ivacaftor oral granules) co-packaged for oral use / Vertex Pharmaceuticals	4/26/2023	Respiratory tract/Pulmonary agents	Treatment of cystic fibrosis in patients aged 2 years and older who have at least one *F508del* mutation in the *CFTR* gene or a mutation in the *CFTR* gene that is responsive based on *in vitro* data	This new formulation of Trikafta™ offers a new effective treatment to pediatric patients between the ages of 2 to less than 6 years with cystic fibrosis. The granules need to be mixed with soft food or liquid. Orphan: Yes
Abilify Asimtufii™ (aripirazole) extended-release injectable suspension / Otsuka Pharm Co. Ltd.	4/27/2023	Antipsychotics	[1] For the treatment of schizophrenia in adults; [2] As maintenance monotherapy treatment of bipolar I disorder in adults	Abilify Asimtufii™ is the first once-every-two-months long-acting injectable for schizophrenia or maintenance monotherapy treatment of bipolar I disorder. Orphan: No

New Formulations, Combination Products & Line Extensions

Drug Name and Manufacturer	Date	Therapeutic Class	Indication(s)	Additional Information
Uzedy™ (risperidone) extended-release injectable suspension / Teva Neuroscience Inc.	4/28/2023	Antipsychotics	For the treatment of schizophrenia in adults	Uzedy™ is a long-acting injectable that allows for administration at one- or two-month intervals. After it is dosed, therapeutic blood concentrations are reached in six to 24 hours. Orphan: No
Liqrev™ (sildenafil citrate) oral suspension / CMP Dev LLC	4/28/2023	Respiratory tract/Pulmonary agents	For the treatment of pulmonary arterial hypertension (PAH) (World Health Organization Group I) in adults to improve exercise ability and delay clinical worsening	Liqrev™ is an oral suspension of sildenafil citrate with the same dosing recommendations as the tablets. Orphan: No
Symbicort Aerosphere™ (budesonide and formoterol fumarate) inhalation aerosol / AstraZeneca	4/28/2023	Respiratory tract/Pulmonary agents	For the maintenance treatment of patients with chronic obstructive pulmonary disease	This new aerosphere formulation of Symbicort™ may offer advantages as it provides consistent delivery of optimal particle size and effective delivery to the central and peripheral airways. Orphan: No

New First-Time Generic Approvals

Product	Manufacturer	Approval Date	Generic For:	Therapeutic Class	Indication(s)	Projected Launch Date
Budesonide rectal foam 2mg/actuation	Padagis Israel Pharmaceuticals Ltd.	4/12/2023	Uceris™	Inflammatory bowel disease agents	Ulcerative colitis	4/28/2023
Loteprednol etabonate ophthalmic suspension 0.2%	Akorn Operating Company LLC	4/12/2023	Alrex™	Ophthalmic agents	Seasonal allergic conjunctivitis	Unknown

New FDA-Approved Indications for Existing Drugs

New FDA-Approved Indications

Drug Name and Manufacturer	Therapeutic Class	Previous Indication(s)	New Indication(s)	Date
Keytruda™ (pembrolizumab) injection / Merck	Antineoplastics	Melanoma, non-small cell lung cancer, head and neck squamous cell cancer, classical Hodgkin lymphoma, primary mediastinal large B-cell lymphoma, urothelial carcinoma, microsatellite instability-high or mismatch repair deficient cancer, microsatellite instability-high or mismatch repair deficient colorectal cancer, gastric cancer, esophageal cancer, cervical cancer, hepatocellular carcinoma, Merkel cell carcinoma, renal cell carcinoma, endometrial carcinoma, tumor mutation burden-high cancer, cutaneous squamous cell carcinoma, triple-negative breast cancer	In combination with enfortumab vedotin, for the treatment of adult patients with locally advanced or metastatic urothelial carcinoma who are not eligible for cisplatin-containing chemotherapy	4/3/2023
Hyqvia™ (immune globulin infusion 10% [human] with recombinant human hyaluronidase) solution / Takeda	Immunological agents	Treatment of Primary Immunodeficiency in adults	Treatment of Primary Immunodeficiency in adults and pediatric patients two years of age and older	4/11/2023
Qulipta™ (atogepant) tablets / Abbvie	Antimigraine agents	Preventive treatment of episodic migraine in adults	Preventive treatment of migraine in adults	4/17/2023

New FDA-Approved Indications

Drug Name and Manufacturer	Therapeutic Class	Previous Indication(s)	New Indication(s)	Date
Trikafta™ (elexacaftor/tezacaftor/ivacaftor and ivacaftor) tablets and oral granules / Vertex Pharms Inc.	Respiratory tract/pulmonary agents	Treatment of cystic fibrosis in patients aged 6 years and older who have at least one *F508del* mutation in the *CFTR* gene or a mutation in the *CFTR* gene that is responsive based on *in vitro* data	Treatment of cystic fibrosis in patients aged 2 years and older who have at least one *F508del* mutation in the *CFTR* gene or a mutation in the *CFTR* gene that is responsive based on *in vitro* data	4/26/2023
Prevnar 20™ (pneumococcal 20-valent conjugate vaccine) suspension / Pfizer	Immunological agents	Active immunization for the prevention of pneumonia caused by *Streptococcus pneumoniae* serotypes 1, 3, 4, 5, 6A, 6B, 7F, 8, 9V, 10A, 11A, 12F, 14, 15B, 18C, 19A, 19F, 22F, 23F, and 33F in individuals 18 years of age and older	[1] Active immunization for the prevention of invasive disease caused by *Streptococcus pneumoniae* serotypes 1, 3, 4, 5, 6A, 6B, 7F, 8, 9V, 10A, 11A, 12F, 14, 15B, 18C, 19A, 19F, 22F, 23F, and 33F in individuals 6 weeks of age and older; [2] Active immunization for the prevention of otitis media caused by *Streptococcus pneumoniae* serotypes 4, 6B, 9V, 14, 18C, 19F, and 23F in individuals 6 weeks through 5 years of age	4/27/2023
Sogroya™ (somapacitan-beco) injection / Novo Nordisk Inc.	Hormonal agents, stimulant/replacement/modifying (pituitary)	Replacement of endogenous growth hormone in adults with growth hormone deficiency	Treatment of pediatric patients aged 2.5 years and older who have growth failure due to inadequate secretion of endogenous growth hormone	4/28/2023

Pipeline

Pipeline

- No New Drug Application or Biologics License Application submitted or accepted by the FDA in April.

References

- *New Drug Approvals*. Drugs.com. (2023). https://www.drugs.com/newdrugs.html.
- *Latest Generic Drug Approvals*. Drugs.com. (2023). https://www.drugs.com/generic-approvals.html.
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