

# PERSPECTIVE

ON THE

# Rx PIPELINE

Understanding changes in the medication market and their impact on cost and care.

Elixir continuously monitors the drug pipeline. As treatment options change, we evaluate and share our perspective on the clinical benefits, cost effectiveness and overall impact to payers and members. Our Perspective on the Rx Pipeline report provides ongoing actionable insights from our team of clinical experts and the steps we are taking to protect and improve plan performance.

#### **INCLUDED IN THIS EDITION:**

- Clinical Pipeline
- Key New Drug Approvals
- New Indications
- Upcoming and Recent Generic and Biosimilar Launches
- FDA Safety Update
- Drug Shortages, Discontinuations and Recalls

# Clinical Pipeline

## PIPELINE STAGE



## GS-6207 *lenacapavir*

**Manufacturer:** Gilead

**Indication/Use:** HIV-1 infection

**Dosage Form:** Oral and subcutaneous

**Pipeline Stage:** PDUFA 1H 2022

An estimated 1,189,700 people in the United States had HIV at the end of 2019, with 36,801 people receiving an HIV diagnosis—down 9% from the 2015-2019 timeframe. While the diagnosis of HIV may be decreasing there is an unmet medical need for patients that have treatment resistant HIV, as current therapy does not allow for adequate viral suppression and puts patients at risk for HIV-1 complications.

Lenacapavir has a novel mechanism of action, interrupting the activity of HIV capsid, a protein that surrounds and protects the virus's genetic material and essential enzymes. This interrupts several stages of the viral lifecycle, potentially keeping the virus from becoming infectious and invading uninfected cells.<sup>[1]</sup>

CAPELLA is an ongoing phase II/III clinical trial evaluating heavily treatment experienced patients living with multi-drug resistant HIV. Initial trial data looking at oral therapy with lenacapavir found that 88% of participants receiving the drug (n=21/24) experienced at least a 0.5 log<sub>10</sub> reduction in HIV-1 viral load by the end of 14 days of monotherapy, as compared with 17% of those receiving placebo (n=2/12). Participants were then transitioned to a subcutaneous injectable lenacapavir every six months in conjunction with other antiretroviral therapy. Patients achieved high rates of virologic suppression at week 26, with 81% (n=29/36) achieving an undetectable viral load (<50 copies/mL).<sup>[2,3]</sup> Safety is being evaluated in many ongoing trials.

Along with treatment of HIV, lenacapavir is in phase III trials for prevention or pre-exposure prophylaxis (PrEP). Lenacapavir will not be the first long-acting PrEP therapy in the pipeline. As of September 28, 2021, Viiv Healthcare announced that the FDA granted priority review to cabotegravir, a long-acting intramuscular injection given every eight weeks after an oral lead-in period. An FDA decision is expected on cabotegravir in early 2022.<sup>[3,4]</sup> However, the different mechanism of lenacapavir and every six months dosing schedule may be a unique benefit in comparison to cabotegravir.

Incorporation of long-acting products has the opportunity to change the treatment landscape and provide healthcare providers with different products to prevent and treat HIV.

### Glossary of Terms

**BLA** - Biologics License Application    **NDA** - New Drug Application    **PDUFA** - Prescription Drug User Fee Act

# Clinical Pipeline

## PIPELINE STAGE



## TEZSPIRE™ *tezepelumab*

**Manufacturer:** AstraZeneca  
**Indication/Use:** Severe asthma  
**Dosage Form:** Subcutaneous  
**Pipeline Stage:** PDUFA 1Q 2022

An estimated 300 million people are impacted by asthma worldwide, or about one in 13 Americans. Anywhere from 2% to 30% suffer from severe asthma; however, estimates are most commonly referenced as approximately 5%-10%.<sup>[5, 6]</sup> It is a complex multifactorial disorder involving genetics, host factors and environmental conditions. Severe asthma is defined by the European Respiratory Society (ERS)/American Thoracic Society (ATS) Task Force as requiring high-dose treatment of inhaled corticosteroids (ICS) with a second medication to prevent the condition from becoming or remaining uncontrolled.<sup>[7]</sup> In 2018, asthma accounted for almost 180K inpatient hospital visits and 1.6M emergency department visits.<sup>[7, 8]</sup>

Severe asthma patients that cannot control their condition with a high-dose inhaled glucocorticoids or continuous glucocorticoid treatment and one or more non-glucocorticoid controller medications may be candidates for biologic treatment, possibly including an anti-immunoglobulin E (anti-IgE) therapy (Xolair®), anti-interleukin-5 (anti-IL-5) (Nucala, Cinqair®), anti-IL-5R (Fasenra®) or anti-IL-4R (Dupixent®). GINA 2020 guidelines, which provides global strategy for asthma management and prevention, place biologics as the final step, or step 5, for severe asthma patients uncontrolled on recommended inhalers.<sup>[9]</sup> Biologics have not been compared head to head, but may be prescribed depending on different patient characteristics. A 2018 Institute for Clinical and Economic Review (ICER) assessment reported low certainty in comparative clinical effectiveness of the five current asthma biologic treatments.<sup>[10]</sup>

Tezepelumab is a biologic with a new mechanism of action that inhibits the expression of thymic stromal lymphopoietin (TSLP), an epithelial cytokine that may lead to inflammatory cascade and airway inflammation. It is thought because tezepelumab works high atop the inflammatory cascade it may impact a broad population of asthma patients.<sup>[11]</sup>

In a phase III, multicenter, randomized, double-blinded, placebo-controlled trial tezepelumab was studied in 529 severe, uncontrolled asthmatic adults and adolescents (12 years of age and older) versus placebo in 532 patients. The annualized rate of asthma exacerbation over 52 weeks achieved a 56% reduction ( $p < 0.001$ ), rate ratio of 0.44 (95% CI, 0.37 to 0.53) when added to standard of care (SOC, defined as: medium- or high-dose inhaled corticosteroids plus at least one additional controller medication with or without oral corticosteroids (OCS)). The serious adverse event occurrence was 9.8% in the tezepelumab group versus 13.7% in the placebo participants with no meaningful difference between groups. Statistically significant improvements in the Asthma Quality of Life Questionnaire (AQLQ) were also reported for the tezepelumab group.<sup>[11, 12]</sup>

Currently there are no comparative studies showing superiority of biologics for asthma. Biologics for asthma are often high cost and lack guidance on starting and stopping therapy. Tezepelumab's differentiator could be showing efficacy irrespective of baseline eosinophil counts in clinical trials, a new mechanism of action and AstraZeneca's attempt to investigate quality of life outcomes. Tezepelumab is being studied in patients 12 years and older, compared to Nucala and Xolair, which are currently approved for six years and older. However, most often severe asthma occurs in adolescent or adult patients. ICER is set to release a report called "Asthma: Assessment on Tezepelumab" in November 2021.

Tezepelumab also has additional indications in the pipeline, such as chronic rhinosinusitis, chronic obstructive pulmonary disease (COPD) and chronic idiopathic urticaria (CIU). Expect clinical utilization management of tezepelumab to be much like the current asthma biologic options.

# Clinical Pipeline

## PIPELINE STAGE



## MK-7264 *gefapixant*

**Manufacturer:** Merck & Co

**Indication/Use:** Refractory chronic cough

**Dosage Form:** Oral

**Pipeline Stage:** PDUFA 03/21/2022

Refractory chronic cough (RCC), as its name implies, is a chronic condition that persists despite treatment. Unexplained chronic cough (UCC) is also persistent, but has no identifiable underlying condition. While a cough doesn't sound like much, chronic cough can be debilitating and greatly reduce a patient's quality of life.

Chronic coughs persist longer than eight weeks. Potential causes may be postnasal drip syndrome, ACE inhibitor-induced cough, asthma, chronic obstructive pulmonary disease (COPD) or gastroesophageal reflux disease (GERD).<sup>[13]</sup> UCC is often a diagnosis of exclusion where the potential causes are ruled out. It is estimated that 5% to 10% of patients seeking medical assistance for a chronic cough may have an unexplained origin.<sup>[14]</sup>

Current treatment of UCC/RCC is most often off-label products. Inhaled corticosteroids may be used, but efficacy could be indicative of a misdiagnosed asthma patient and American College of Chest Physicians (CHEST) guidelines do not recommend them. Opiates such as codeine and morphine may be tried for their antitussive, or cough-relieving, properties, but long-term use may be concerning with this drug class. Morphine is recommended by the 2020 European Respiratory Society (ERS) Guidelines, but not the 2016 CHEST Guidelines. A potential therapeutic trial of gabapentin may be attempted though it too is an off-label use.<sup>[15-17]</sup>

Gefapixant is a non-narcotic, selective antagonist of the P2X3 receptor that is on vagal sensory c-fibers in the airway. It is proposed that the indirect action with an enzyme may reduce the response to stimulation of the airway, causing a cough. It was studied in the COUGH-1 and COUGH-2 randomized, double-blind, placebo controlled clinical trials. In the trials, 730 participants were randomized, with both studies being predominantly female and a mean age near 60 years. Cough frequency while awake was examined at 12 weeks and 24 weeks respectively. Compared to placebo, a reduction in cough of 18.5% (P=0.041) was seen in COUGH-1 and 14.6% (P=0.031) in COUGH-2. The 45 mg oral twice daily dose demonstrated a statistically significant reduction in cough, but the 15 mg twice daily did not. Improvement in quality life using the Leicester Cough Questionnaire (LCQ) was also reported, though there may have been a placebo effect. The most frequent adverse events, reported in over one-third of gefapixant patients, were taste related. Serious adverse events were uncommon.<sup>[15, 18]</sup>

Gefapixant is not the only new potential target for chronic cough in the pipeline, but may be the first granted FDA approval. Gefapixant may provide relief for these patients that have limited pharmacological options, if they are able to tolerate or do not experience taste alterations that may occur.

# Key New Drug Approvals

## PIPELINE STAGE



## Bylvay™ *odevixibat*

**Manufacturer:** Albireo

**Indication/Use:** Pruritus due to progressive familial intrahepatic cholestasis (PFIC)

**Dosage Form:** Oral capsules and sprinkle capsules

**Traditional or Specialty:** Specialty

Patients with PFIC may experience itching that greatly impacts their quality of life and on July 20, 2021, Bylvay became the first FDA-approved medication to treat PFIC-associated pruritus (itching). While Bylvay met pruritus and serum bile acid primary endpoints in clinical studies, not all patients had improvements and an ongoing trial extension is monitoring for continued reduction in serum bile acid levels and improvement in pruritus.

**For more information:** <https://ir.albireopharma.com/news-releases/news-release-details/albireo-announces-fda-approval-bylvaytm-odevixibat-first-drug>

## Comirnaty® *COVID-19 vaccine mRNA*

**Manufacturer:** Pfizer/BioNTech

**Indication/Use:** Active immunization to prevent coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

**Dosage Form:** Intramuscular injection

**Traditional or Specialty:** Traditional

As of August 23, 2021, the FDA granted full approval for Comirnaty as a COVID-19 vaccine for individuals 16 years of age and older. However, the emergency use authorization (EUA) is still in place for individuals 12-15 years of age. Pfizer/BioNTech also had an EUA approval on September 22, 2021 for a booster for specific populations that have previously received the vaccine. It is anticipated that there will be additional pediatric EUA approval in the near future.

**For more information:** <https://www.fda.gov/vaccines-blood-biologics/comirnaty>

# Key New Drug Approvals

## PIPELINE STAGE



## Kerendia<sup>®</sup> *finerenone*

**Manufacturer:** Bayer

**Indication/Use:** Risk of kidney function decline, kidney failure, cardiovascular death, non-fatal heart attacks and hospitalizations for heart failure in adults with chronic kidney disease and type 2 diabetes

**Dosage Form:** Oral tablet

**Traditional or Specialty:** Traditional

On July, 28, 2021, Kerendia was approved to reduce the risk of complications in patients with chronic kidney disease and type 2 diabetes. This product is similar to long-time approved generic spironolactone but hypothesized to be selective to receptors, potentially reducing the side effects that patients may experience with spironolactone. Kerendia will compete with sodium-glucose cotransporters-2 inhibitors (e.g., Farxiga<sup>®</sup>, Invokana<sup>®</sup>, Jardiance<sup>®</sup>) as add-on therapy to patients with type 2 diabetes and chronic kidney disease.

**For more information:** <https://www.fda.gov/drugs/news-events-human-drugs/fda-approves-drug-reduce-risk-serious-kidney-and-heart-complications-adults-chronic-kidney-disease>

## Korsuva<sup>™</sup> *difelikefalin*

**Manufacturer:** Cara Therapeutics

**Indication/Use:** Chronic kidney disease (CKD) associated pruritus, moderate to severe

**Dosage Form:** Intravenous bolus injection into the venous line of the dialysis circuit

**Traditional or Specialty:** Specialty

Nearly 661,000 Americans have kidney failure and approximately 468,000 individuals are on a form of dialysis; many of which experience chronic pruritus.<sup>[19]</sup> On August 23, 2021, the FDA approved Korsuva as an intravenous pruritus treatment for those with chronic kidney disease undergoing hemodialysis. Previously, treatments for CKD-related pruritus were limited. Korsuva is a new mechanism of action for alleviating itching, as it is a selective kappa opioid receptor agonist that may find its place in therapy treating various pruritus indications. An oral formulation for difelikefalin is in the pipeline as well.

**For more information:** [https://page.elixirsolutions.com/hubfs/Documents/february%20highlights%20pop\\_21-6025\\_vpf4.pdf](https://page.elixirsolutions.com/hubfs/Documents/february%20highlights%20pop_21-6025_vpf4.pdf)

# Key New Drug Approvals

## PIPELINE STAGE



## Rezurock™ *belumosudil*

**Manufacturer:** Kadmon Pharmaceuticals

**Indication/Use:** Graft-vs-host disease, chronic

**Dosage Form:** Oral tablet

**Traditional or Specialty:** Specialty

On July 16, 2021, Rezurock was approved for the treatment of graft-vs-host disease (GVHD), qualifying for priority review and orphan status. GVHD is a common complication of allogeneic hematopoietic cell transplant and can be acute or chronic. Approximately 40% to 50% of GVHD patients develop steroid-refractory disease. While not the first FDA-approved drug to treat cGVHD, Rezurock will offer another option with a different mechanism of action in treatment resistant GVHD cases. Additionally, Rezurock appears to be well tolerated.

**For more information:** [https://www.nccn.org/professionals/physician\\_gls/pdf/hct.pdf](https://www.nccn.org/professionals/physician_gls/pdf/hct.pdf)

<https://investors.kadmon.com/news-releases/news-release-details/us-fda-grants-full-approval-rezurocktm-belumosudil-treatment>

## Saphnelo™ *anifrolumab*

**Manufacturer:** AstraZeneca

**Indication/Use:** Systemic lupus erythematosus (SLE), moderate to severe

**Dosage Form:** Intravenous infusion

**Traditional or Specialty:** Specialty

Saphnelo became the first SLE medication approved in over 10 years on July 30, 2021. SLE can be an especially hard to diagnosis disease, as severity of disease and location of symptoms may vary patient to patient. Its new mechanism of action, a type 1 interferon blocker, showed an overall reduction in disease activity. However, infections were a commonly reported adverse event. Systemic lupus erythematosus guidelines are still pending for inclusion of Saphnelo.

**For more information:** <https://www.saphnelo.com/hcp.html>

## Semglee® *insulin glargine-yfgn*

**Manufacturer:** Mylan

**Indication/Use:** Type 1 and 2 diabetes

**Dosage Form:** Subcutaneous injection

**Traditional or Specialty:** Traditional

Semglee is the first biosimilar insulin that is interchangeable (can be substituted for) with the reference product (Lantus®) on July 28, 2021. The interchangeable product is expected to come to market shortly with unique NDCs that allow for interchangeability.

**For more information:** <https://www.fda.gov/news-events/press-announcements/fda-approves-first-interchangeable-biosimilar-insulin-product-treatment-diabetes>

# New Indications

## PIPELINE STAGE



## Brukinsa<sup>®</sup> *zanubrutinib*

**Manufacturer:** BieGene, Ltd.

**Indication/Use:** Mantle cell lymphoma (MCL) patients who have received at least one prior therapy

**Dosage Form:** Oral tablet

**Traditional or Specialty:** Specialty

**Date of Original Approval:** 11/14/2019

On August 31, 2021, Brukinsa was FDA approved for treatment of adult patients with Waldenström’s macroglobulinemia (WM). Shortly after, on September 14, 2021, Brukinsa also received the indication for patients with relapsed or refractory marginal zone lymphoma (MZL) who have received at least one anti-CD20-based regimen.

**For more information:** [https://www.brukinsa.com/hcp/BeiGene%20Press%20Release\\_BRUKINSA%20WM%20Approval%20US\\_9.1.21.pdf](https://www.brukinsa.com/hcp/BeiGene%20Press%20Release_BRUKINSA%20WM%20Approval%20US_9.1.21.pdf)

## Invega Hafyera<sup>™</sup> *paliperidone*

**Manufacturer:** Janssen Pharmaceuticals

**Indication/Use:** Schizophrenia

**Dosage Form:** Intramuscular injection

**Traditional or Specialty:** Traditional

**Date of Original Approval:** 5/18/2015

The FDA approved Invega Hafyera, a long-acting atypical antipsychotic, for the additional indication of treatment of schizophrenia on August 30, 2021. Invega Hafyera can be used after a patient has been stable on four monthly injections of Invega Sustenna or one injection of Invega Trinza (dosed every three months). This product is administered by a healthcare professional every six months.

**For more information:** <https://www.jnj.com/janssen-announces-u-s-fda-approval-of-invega-hafyera-6-month-paliperidone-palmitate-first-and-only-twice-yearly-treatment-for-adults-with-schizophrenia>



# New Indications

## PIPELINE STAGE



## Jardiance<sup>®</sup> empagliflozin

**Manufacturer:** Boehringer Ingelheim and Eli Lilly

**Indication/Use:** Risk of cardiovascular (CV) death plus hospitalization for heart failure in adults with heart failure with reduced ejection fraction

**Dosage Form:** Oral tablet

**Traditional or Specialty:** Traditional

**Date of Original Approval:** 8/1/2014

Jardiance received an expanded indication on August 18, 2021, for reducing the risk of CV death plus hospitalization for heart failure in adults with heart failure with reduced ejection fraction. This indication is similar to the label for Farxiga and can be used in a patient with heart failure with or without type 2 diabetes.

**For more information:** <https://www.boehringer-ingelheim.us/press-release/us-fda-approves-jardiance-empagliflozin-treat-adults-living-heart-failure-reduced#:~:text=and%20Indianapolis%2C%20August%2018%2C%202021,Ingelheim%20and%20Eli%20Lilly%20and>

## Pradaxa<sup>®</sup> and Pradaxa<sup>®</sup> pellets dabigatran etexilate

**Manufacturer:** Boehringer Ingelheim

**Indication/Use:** Treatment of deep venous thrombosis (DVT) and pulmonary embolism (PE) in patients who have been treated with a parenteral anticoagulant for 5-10 days to reduce the risk of recurrence of DVT and PE in patients who have been previously treated, for the prophylaxis of DVT and PE in patients who have undergone hip replacement surgery, and to reduce the risk of stroke and systemic embolism in patients with non-valvular atrial fibrillation

**Dosage Form:** Oral capsule and pellet

**Traditional or Specialty:** Traditional

**Date of Original Approval:** 10/19/2010 (capsules)

On June 21, 2021, a new formulation of Pradaxa and Pradaxa pellets was FDA approved for the pediatric indications of:

- Treatment of venous thromboembolic events (VTE) in pediatric patients aged three months to less than 12 years of age who have been treated with a parenteral anticoagulant for at least five days
- To reduce the risk of recurrence of VTE in pediatric patients aged three months to less than 12 years of age who have been previously treated

The capsules also obtained the reduced risk indication, but for patients eight to 18 years of age. Pradaxa is the first oral blood thinning medication approved for children.

**For more information:** <https://www.fda.gov/news-events/press-announcements/fda-approves-first-oral-blood-thinning-medication-children>

# New Indications

## PIPELINE STAGE



## Xarelto<sup>®</sup> rivaroxaban

**Manufacturer:** Janssen

**Indication/Use:** Risk of stroke and systemic embolism in nonvalvular atrial fibrillation, treatment of deep vein thrombosis (DVT), pulmonary embolism (PE), risk reduction of recurrence of DVT or PE, prophylaxis of DVT, which may lead to PE in patients undergoing knee or hip replacement surgery, prophylaxis of venous thromboembolism (VTE) in acutely ill medical patients, and risk of major cardiovascular events in patients with chronic coronary artery disease (CAD) or peripheral artery disease (PAD)

**Dosage Form:** Oral tablet

**Traditional or Specialty:** Traditional

**Date of Original Approval:** 11/04/2011

The FDA approved Xarelto for the indication to reduce the risk of major thrombotic vascular events (myocardial infarction, ischemic stroke, acute limb ischemia, and major amputation of a vascular etiology) in patients with PAD, including patients who have recently undergone a lower extremity revascularization procedure due to symptomatic PAD. It is used in combination with aspirin. The previous indication for coronary artery disease or peripheral artery disease is now listed separately.

**For more information:** <https://www.janssenlabels.com/package-insert/product-monograph/prescribing-information/XARELTO-pi.pdf#page=16>

## Xywav<sup>®</sup> calcium oxybate; magnesium oxybate; potassium oxybate; sodium oxybate

**Manufacturer:** Jazz Pharmaceuticals

**Indication/Use:** Treatment of cataplexy or excessive daytime sleepiness (EDS) in patients seven years of age and older with narcolepsy

**Dosage Form:** Oral solution

**Traditional or Specialty:** Specialty

**Date of Original Approval:** 07/21/2020

Xywav is now indicated for treatment of idiopathic hypersomnia (IH) in adults. Those with IH have a hard time staying alert and awake during the day and may unintentionally fall asleep with no known cause. Daytime naps do not work to resolve sleepiness or refresh patients who have IH. Xywav is the first FDA-approved medication for this condition.

**For more information:** <https://www.fda.gov/news-events/press-announcements/fda-grants-first-its-kind-indication-chronic-sleep-disorder-treatment>

# Upcoming and Recent Generic and Biosimilar Launches

## PIPELINE STAGE



Brand Name	Generic or Biosimilar	Generic Name	# of Mfg Entrants	Indication	Launched or Potential Launch Date
<b>Epaned</b>	Generic	enalapril maleate	2	Hypertension	Launched
<b>Sutent®</b>	Generic	sunitinib malate	2	Multiple oncology indications	Launched
<b>Duexis®</b>	Generic	famotidine; ibuprofen	1	Osteoarthritis/rheumatoid arthritis	Launched
<b>Miacalcin® (injection)</b>	Generic	calcitonin salmon	3	Osteoporosis, paget disease	Launched
<b>Bystolic®</b>	Generic	nebivolol hydrochloride	3	Hypertension	Launched
<b>Roszet</b>	Generic	ezetimibe; rosuvastatin calcium	1	Homozygous familial hypercholesterolemia, primary hyperlipidemia	Launched
<b>Durezol®</b>	Generic	difluprednate	2	Endogenous anterior uveitis, ocular inflammation and pain	Launched
<b>Gadavist®</b>	Generic	gadobutrol	1	Imaging	11/09/2021
<b>Gilenya® (0.25 mg)</b>	Generic	fingolimod hydrochloride	1	Multiple sclerosis	11/11/2021
<b>Cayston®</b>	Generic	aztreonam	1	Cystic fibrosis	12/20/2021
<b>Gilenya® (0.25 mg)</b>	Generic	fingolimod hydrochloride	1	Multiple sclerosis	11/11/2021
<b>Jevtana® Kit</b>	Generic	cabazitaxel	1	Prostate cancer, metastatic	2H 2021
<b>Epiduo® Forte</b>	Generic	adapalene; benzoyl peroxide	1	Acne vulgaris	2H 2021

# Upcoming and Recent Generic and Biosimilar Launches

## PIPELINE STAGE



Brand Name	Generic or Biosimilar	Generic Name	# of Mfg Entrants	Indication	Launched or Potential Launch Date
<b>Oxaydo®</b>	Generic	oxycodone hydrochloride	3	Pain management	01/01/2022
<b>Semglee® (biosimilar for Lantus)</b>	Biosimilar	insulin glargine-yfgn	1	Diabetes mellitus, types 1 and 2	2H 2021
<b>Byooviz™ (biosimilar for Lucentis)</b>	Biosimilar	ranibizumab-nuna	2	Neovascular (wet) age-related macular degeneration (AMD), macular edema following retinal vein occlusion (RVO), myopic choroidal neovascularization (mCNV)	06/2022

# FDA Safety Updates

Drug Safety Communication

## FDA Requires Warnings for JAK Inhibitors that Treat Certain Chronic Inflammatory Conditions

After evaluating the safety of Xeljanz® products since February 2019, the FDA has announced required warnings related to an increased risk of serious heart-related events, such as heart attack or stroke, cancer, blood clots and death with the arthritis and ulcerative colitis medicines Xeljanz and Xeljanz XR (tofacitinib). Updates to prescribing information will be required for these products, as well as Olumiant® (baricitinib) and Rinvoq™ (upadacitinib). Olumiant and Rinvoq were not included in the Xeljanz post-marketing safety analysis; however, since all of these drugs work similarly for the same indications, there is an assumption of similar risks. As part of these updates the FDA will be limiting the use of products to patients who have not responded or cannot tolerate one or more tumor necrosis factor (TNF) blockers.

Patients currently taking Xeljanz, Xeljanz XR, Olumiant or Rinvoq should tell their healthcare professional if they are a current or past smoker, have had a heart attack or other heart problems, stroke, or blood clots, as these individuals may be at a higher risk using the medications.

Of note, Jakafi® (ruxolitinib) and Inrebic® (fedratinib) are not indicated for the treatment of arthritis and other inflammatory conditions and so are not a part of the updates being required.

### For more information:

<https://www.fda.gov/drugs/drug-safety-and-availability/fda-requires-warnings-about-increased-risk-serious-heart-related-events-cancer-blood-clots-and-death>

## FDA Requests Removal of Strongest Warning Against Using Statins During Pregnancy

On July 20, 2021, the FDA requested removal of its strongest warning against using cholesterol-lowering statin medications in pregnant women. However, most patients should stop statins once they learn they are pregnant and discuss risk versus benefit with their healthcare provider. Recommendations to not breastfeed while taking a statin remain. If a patient requires a statin postpartum, infants should use alternatives to breast milk, such as infant formula. This update in labeling was part of an effort by the FDA to continue to update pregnancy and breastfeeding information for all prescription medications.

### For more information:

<https://www.fda.gov/drugs/drug-safety-and-availability/fda-requests-removal-strongest-warning-against-using-cholesterol-lowering-statins-during-pregnancy>

# Drug Shortages, Discontinuations and Recalls

## Actemra® (tocilizumab)

An increase in demand for Actemra IV, attributed to the COVID-19 pandemic, has caused a shortage for Actemra products. The following products are listed as stocked out: Actemra 200 mg/10 mL, 400mg/20mL and 80mg/4mL vials. ACTPen® has been added to the American Society of Health System Pharmacists' (ASHPs') shortage list as on allocation. As of October 5, 2021, the FDA lists the Actemra IV solutions as currently in shortage. The manufacturer of Actemra, Genentech, is unable to provide an estimated release date and all orders have been canceled as of August 2021. This shortage is expected to be intermittent. Updates on the shortage can be found on the FDA website, ASHP website and through Genentech.

### For more information:

<https://www.ashp.org/drug-shortages/current-shortages/drug-shortage-detail.aspx?id=744&loginreturnUrl=SSOCheckOnly>

[https://www.accessdata.fda.gov/scripts/drugshortages/dsp\\_ActiveIngredientDetails.cfm?AI=Tocilizumab%20Injection&st=c](https://www.accessdata.fda.gov/scripts/drugshortages/dsp_ActiveIngredientDetails.cfm?AI=Tocilizumab%20Injection&st=c)

<https://www.gene.com/contact-us/customer-service/product-distribution/purchasing-actemra>

<https://www.covid19treatmentguidelines.nih.gov/management/clinical-management/hospitalized-adults--therapeutic-management/>

## Chantix® (varenicline)

Pfizer has expanded the voluntary nationwide recall of smoking cessation medication Chantix to include all lots due to N-Nitroso Varenicline being above the daily intake level. The nationwide recall has caused shortage of Chantix. To combat this shortage the FDA has allowed for temporary importation of Apo-Varenicline (Varenicline) from Apotex in Canada. There is no information in regards to resupply of Chantix at this time; however, generic varenicline was recently approved.

### For more information:

<https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts/pfizer-expands-voluntary-nationwide-recall-include-all-lots-chantixr-varenicline-tablets-due-n>

# Drug Shortages, Discontinuations and Recalls

## **Firvanq® (vancomycin hydrochloride for oral solution)**

One lot of Firvanq has been recalled due to a mix-up of the diluent included in the kit. Firvanq is indicated in patients less than 18 years of age for the treatment of clostridium difficile-associated diarrhea and enterocolitis caused by staphylococcus aureus, including methicillin-resistant strains. The concern with the incorrect diluent is that vancomycin may not be able to be completely solubilized in the diluent and could lead to doses above or below the recommended label.

### **For more information:**

<https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts/azurity-pharmaceuticals-inc-issues-voluntary-nationwide-recall-one-lot-firvanqr-vancomycin>

## **Ruzurgi® (amifampridine)**

A worldwide recall for three control numbers of Ruzurgi 10 mg tablets was issued on September 13, 2021, due to exceeded specifications of total yeast and mold count, putting utilizers at risk for serious and life-threatening infections. Ruzurgi is indicated for immunosuppressive conditions such as Lambert-Eaton syndrome.

### **For more information:**

<https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts/jacobus-pharmaceutical-company-inc-issues-voluntary-worldwide-recall-ruzurgir-amifampridine-10-mg>

## Sources

- [1] HIV Basic Statistics. <https://www.cdc.gov/hiv/basics/statistics.html>.
- [2] Study to Evaluate the Safety and Efficacy of Lenacapavir in Combination With an Optimized Background Regimen in Heavily Treatment Experienced Participants Living With HIV-1 Infection With Multidrug Resistance (CAPELLA). <https://clinicaltrials.gov/ct2/show/NCT04150068>.
- [3] New Phase 3 Data Support the Sustained, Long-Acting Efficacy of Lenacapavir, Gilead's Investigational HIV-1 Capsid Inhibitor. <https://www.gilead.com/news-and-press-room/press-releases/2021/7/new-phase-3-data-support-the-sustained-longacting-efficacy-of-lenacapavir-gileads-investigational-hiv1-capsid-inhibitor> Published July 17, 2021.
- [4] FDA grants Priority Review to ViiV Healthcare's New Drug Application for cabotegravir long-acting for prevention of HIV. <https://viivhealthcare.com/en-gb/media/press-releases/2021/september/viiv-healthcare-announces-fda-priority-review/>. September 28, 2021.
- [5] Dharmage, S. C., Perret, J. L., & Custovic, A. (2019). Epidemiology of Asthma in Children and Adults. *Frontiers in pediatrics*, 7, 246. <https://doi.org/10.3389/fped.2019.00246>
- [6] [Centers for Disease Control and Prevention. (2020). 2019 National Health Interview Survey data. U.S. Department of Health & Human Services. <https://www.cdc.gov/asthma/nhis/2019/data>.
- [7] Agency for Healthcare Research and Quality. (2019). Healthcare Cost and Utilization Project (2018). U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. <https://www.cdc.gov/asthma/national-surveillance-data/healthcare-use.htm>.
- [8] National Center for Health Statistics. (2019). National Hospital Ambulatory Medical Care Survey (2010-2018). U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. <https://www.cdc.gov/asthma/national-surveillance-data/healthcare-use.htm>
- [9] Reddel, H., Cruz, A., Levy, M., & Boulet, L.-P. (2020). Main pocket guide - ginasthma.org. [https://ginasthma.org/wp-content/uploads/2020/04/Main-pocket-guide\\_2020\\_04\\_03-final-wms.pdf](https://ginasthma.org/wp-content/uploads/2020/04/Main-pocket-guide_2020_04_03-final-wms.pdf).
- [10] Institute for Clinical and Economic Review (ICER). Asthma. An assessment of biologics for severe asthma. November 2018. <https://icer.org/assessment/asthma-2018/>.
- [11] AstraZeneca. (2021, February 26). Tezepelumab is the first biologic to consistently and significantly reduce exacerbations in broad population of severe asthma patients. <https://www.astrazeneca.com/media-centre/press-releases/2021/tezepelumab-is-the-first-biologic-to-consistently-and-significantly-reduce-exacerbations-in-broad-population-of-severe-asthma-patients.html>.
- [12] Menzies-Gow, A., et al (2021). Tezepelumab in Adults and Adolescents with Severe, Uncontrolled Asthma. *The New England journal of medicine*, 384(19), 1800–1809. <https://doi-org.neomed.idm.oclc.org/10.1056/NEJMoa2034975>
- [13] Phung, C. (2020). Updates in treatment of adults with chronic cough. *AJMC*. <https://www.ajmc.com/view/updates-in-treatment-of-adults-with-chronic-cough>.
- [14] Irwin, Richard S. et al (2006). Diagnosis and Management of Cough Executive Summary: ACCP Evidence-Based Clinical Practice Guidelines, *Chest*, Volume 129, Issue 1, Supplement, 2006, Pages 1S-23S, ISSN 0012-3692, [https://doi.org/10.1378/chest.129.1\\_suppl.1S](https://doi.org/10.1378/chest.129.1_suppl.1S).
- [15] Merck. (2020). Merck's gefapixant (45 mg twice daily) significantly decreased cough frequency compared to placebo at week 12 and 24 in patients with refractory or unexplained chronic cough. <https://www.merck.com/news/mercks-gefapixant-45-mg-twice-daily-significantly-decreased-cough-frequency-compared-to-placebo-at-week-12-and-24-in-patients-with-refractory-or-unexplained-chronic-cough>.
- [16] Gibson, P., et al (2016). Treatment of Unexplained Chronic Cough: CHEST Guideline and Expert Panel Report. *Chest*, 149(1), 27–44. <https://doi.org/10.1378/chest.15-1496>.
- [17] Morice AH, Millqvist E, Bieksiene K, et al. ERS guidelines on the diagnosis and treatment of chronic cough in adults and children. *Eur Respir J*. 2020;55(1):1901136. doi: 10.1183/13993003.01136-2019
- [18] Muccino, D. R., et al (2020). Design and rationale of two phase 3 randomised controlled trials (COUGH-1 and COUGH-2) of gefapixant, a P2X3 receptor antagonist, in refractory or unexplained chronic cough. *ERJ open research*, 6(4), 00284-2020. <https://doi.org/10.1183/23120541.00284-2020>
- [19] National Institute of Diabetes and Digestive and Kidney Diseases. (2016, October). Kidney Disease Statistics for the United States. NIH. Retrieved October 11, 2021, from <https://www.niddk.nih.gov/health-information/health-statistics/kidney-disease>

---

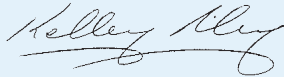
*Clinical efficacy and safety, balanced with a drug's value, are always at the forefront in the Elixir formulary decisions and pipeline planning. The rationale for those decisions may go beyond the use of the FDA's labeled indication. Our clinical reviews may utilize, but are not limited to, recognized consensus guidelines, the Institute for Clinical and Economic Review (ICER), and compendium such as the National Comprehensive Cancer Network (NCCN Guidelines<sup>®</sup>) and DRUGDEX<sup>®</sup>. Elixir monitors FDA updates and safety announcements daily, as well as follows guidance from the Center of Disease Control and Prevention (CDC) and the U.S. Preventive Service Task Force (USPSTF).*



## Our Clinical Steering Committee

The Elixir Clinical Steering Committee brings together leaders from across our national pharmacy care company to monitor the drug landscape, provide recommendations on how to address changes, and to ensure our clients and patients are prepared—in advance.

With any new development, we partner with our Pharmacy & Therapeutics (P&T) committee and consult with our best-in-class specialty pharmacy, to provide a balanced perspective on the clinical effectiveness of all available options, the cost impact to our plan sponsors and patients, and the impact on the overall patient experience.



**Kel Riley, MD**

*Chief Medical Officer*



More ways to improve member and plan outcomes

[elixirsolutions.com](https://elixirsolutions.com)

**About Elixir | [elixirsolutions.com](https://elixirsolutions.com)**

With the unique ability to optimize the full pharmacy care experience, Elixir is crafting solutions for today's pharmacy benefits challenges. For more information, visit [elixirsolutions.com](https://elixirsolutions.com).

© 2021 Elixir Rx Solutions, LLC - All Rights Reserved. 21-6642

**elixir**  
CRAFTED Rx SOLUTIONS