

Q3 2023

Clinical Pipeline Report

Insight into recent and upcoming drug and biologic approvals



Prepared by Risk Strategies Consulting Clinical Team
September 2023

Risk Strategies Consulting Clinical Pipeline Report

Our clinical pipeline report highlights recent impactful FDA approvals or expanded indications, upcoming generic drug and biosimilar availability, and the cell and gene therapy pipeline. Please note this report is not all-inclusive.

Risk Strategies Consulting closely monitors the clinical pipeline and provides our clients with this quarterly publication as a resource.

Risk Strategies Consulting is comprised of experienced clinical pharmacist consultants, registered nurses, pharmacy financial experts, actuaries, data scientists, and other experts which help plan sponsors more clearly understand the pharmacy landscape and the impact it is likely to have on utilization trends and the overall healthcare ecosystem.

As a national consulting and actuarial services business, Risk Strategies Consulting provides high-touch consulting and state-of-the-art analytics services including strategy and consulting. Services are provided for a wide variety of industry segments including government entities, manufacturing and distribution, and self-funded organizations including corporations and trusts, healthcare organizations, national and regional insurance companies, and private equity firms, among others.

Table of Contents

<u>Recent FDA Approvals & Additional Indications</u>	3
<u>Upcoming Significant Approvals</u>	5
<u>Upcoming Generics & Biosimilars</u>	6
<u>Cell & Gene Therapy Pipeline</u>	7

Recent FDA Approvals & Additional Indications

Elevidys (delandistrogene moxeparvovec-rockl) – *Sarepta Therapeutics*

Indication

Duchenne muscular dystrophy (DMD) in pediatric patients aged 4-5 years old who are ambulatory and have a confirmed mutation in the DMD gene.

Disease State & Population

DMD is a rare genetic disease that results in progressive muscle degeneration and weakness. Boys are mainly affected by DMD, about 1 in every 3,300 boys have DMD but girls can, in very rare cases, be diagnosed with DMD. In the United States, an estimated 10,000-15,000 males have DMD. The rarity of the condition and the narrow indication result in approximately only 160 individuals with DMD being eligible for treatment.

Place in Therapy

Unlike current DMD treatments which aim to address symptoms of the disease, Elevidys is a one-time gene therapy. A few gene-based therapies for DMD are FDA-approved, but they are limited to very small and specific subsets of individuals with DMD and only work to reduce the severity.

Payor Impact

Elevidys is a one-time gene therapy. This drug will likely be administered on the medical benefit; it is recommended that plan sponsors utilize a medical-only drug list through their PBM. This one-time treatment is estimated to cost about \$3.2 million. RSC recommends reviewing precertification criteria with your medical vendor. Value-based contracting is a very important consideration for gene therapies in managing the long-term viability of the product. Plan sponsors may consider risk pool strategies and reviewing stop-loss reinsurance coverage of gene therapy.

Roctavian (valoctocogene roxaparvovec-rvox) – *BioMarin Pharmaceuticals*

Indication

Adults with severe hemophilia A who do not have certain pre-existing antibodies, as detected by an FDA-approved test.

Disease State & Population

Hemophilia A is an x-linked, inherited blood disorder in which individuals are missing or have defective factor VIII. Most individuals with hemophilia are male (x-linked).

Place in Therapy

Typical treatment involves replacing factor VIII and/or using medications (Hemlibra, Advate, etc.) to help reduce the risk of bleeding. Roctavian will likely be an alternative treatment option to prophylactic factor VIII therapy or Hemlibra. Severe hemophilia is classified as extremely low levels of factor VIII (<1% in the blood). Approximately 2,500 patients may be eligible to receive Roctavian.

Payor Impact

Roctavian is a one-time gene therapy. This drug will likely be administered on the medical benefit. Roctavian is listed at \$2.9 million. RSC recommends reviewing precertification criteria with your medical vendor. Value-based contracting is extremely important because of signals in clinical trials that may indicate issues with the long-term durability of the product. Ensuring that payors aren't exposed to this additional risk is very important. Plan sponsors may consider risk pool strategies and reviewing stop-loss reinsurance coverage of gene therapy.

Recent FDA Approvals & Additional Indications

Beyfortus (nirsevimab-alip) – AstraZeneca

Indication

Prevention of respiratory syncytial virus (RSV) lower respiratory tract disease in neonates and infants born during or entering their first RSV season, and children up to 24 months of age who remain vulnerable to severe RSV.

Disease State & Population

RSV is a viral infection that affects the airways and lungs. It usually presents as a mild cold in healthy adults but can progress to a severe infection in babies and young children. On average, between 58,000-80,000 children under 5 years old are hospitalized with RSV each year.

Place in Therapy

Beyfortus fills an unmet need in pediatric RSV prevention. While it is not the first preventative treatment, it has a much wider indication and a more convenient once-per-season administration. The Advisory Committee on Immunization Practices (ACIP), recommends all infants <8 months of age born during or entering their first RSV season and a single dose for children 8-19 months at increased risk for severe RSV entering their second season, receive Beyfortus.

Payor Impact

Beyfortus is an IM injection, administered once per RSV season. Beyfortus will cost approximately \$495 for one season and \$990 for children who require Beyfortus in their second season. RSC recommends talking to your PBM about the ACA preventative drug list and the addition of RSV immunizations.

Leqembi (lecanemab-irmb) – Eisai

Indication

Treatment of Alzheimer's disease in individuals with mild cognitive impairment or mild dementia. Leqembi received accelerated approval at the beginning of 2023 and was recently granted full approval in July 2023.

Disease State & Population

Alzheimer's is a progressive, irreversible brain disorder that slowly destroys memory, thinking skills, and eventually leaves individuals unable to complete simple tasks. Over 6.5 million individuals aged 65 years and older have Alzheimer's in the United States.

Place in Therapy

Leqembi is the second drug in its class. Aduhelm was approved first in 2021 but its approval and rollout were marred with controversy. In clinical trials, Leqembi demonstrated a statistically significant impact on slowing cognitive decline, something Aduhelm was unable to do. Now that Leqembi has received full FDA approval, it will be covered by Medicare for all indicated populations.

Payor Impact

The total cost of Leqembi will vary (weight-based dosing); for a 75kg individual, the drug will cost about \$26,500 per year. Leqembi will be available through specialty distributors. Plan sponsors can expect claims for this drug to come through the medical benefit. Consider your PBM's medical-only list as this likely will process under the plan sponsor's medical benefit. RSC recommends reviewing precertification criteria with your medical vendor.

Recent FDA Approvals & Additional Indications

Zurzuvae (zuranolone) – Sage & Biogen

Indication

Treatment of postpartum depression (PPD).

Disease State & Population

PPD is a type of major depressive episode that typically occurs within 6 weeks following childbirth, however, it can occur during pregnancy or up to 1 year after birth. Approximately 1 in 7 to 1 in 9 women will experience PPD.

Place in Therapy

Zurzuvae is the first oral medication that treats PPD. Prior to the approval of Zurzuvae, medication options included oral antidepressants and Zulresso (brexanolone) intravenous infusion. Zurzuvae and Zulresso are in the same drug class, but the convenient administration of Zurzuvae will likely make it a first-line therapy. Zurzuvae will receive designated scheduling as a controlled substance given that the drug can be abused or lead to dependence.

Payor Impact

Zurzuvae is taken by mouth once daily for 14 days. Repeat administration was studied in clinical trials, but the majority of patients sustained long-term effects from a singular treatment course. This should be reflected in the prior authorization reauthorization criteria, allowing only for 1-2 treatment courses per 12 months. This should be reflected in prior authorization criteria. The manufacturers have not yet released the pricing for Zurzuvae. Zurzuvae is expected to be available in Q4 of 2023.

Sohonos (palovarotene) – Ipsen

Indication

Reduction in the volume of new extra-skeletal bone formations (heterotopic ossification) in adults and children aged 8 years and older for females and 10 years and older for males with fibrodysplasia ossificans progressive (FOP).

Disease State & Population

FOP is an ultra-rare, genetic condition that causes connective tissue (muscles, tendons, ligaments) to slowly turn to bone tissue over time. This causes limited movement, deformities, and disability. Approximately 400 people in the United States have FOP.

Place in Therapy

Sohonos is the first FDA-approved treatment for individuals with FOP. Prior to the approval of Sohonos, treatment for FOP was solely based on palliative care. The manufacturers have stated that healthcare providers may begin prescribing Sohonos immediately. Regeneron currently has a drug in the pipeline that could be approved as early as next year and serve as competition to Sohonos.

Payor Impact

Sohonos is an oral medication, therefore it will likely run through the pharmacy benefit. During clinical trials, treatment with Sohonos was studied for 18 months and treatment will be an ongoing maintenance therapy. The estimated annual cost of Sohonos is \$624,000. Given the ultra-rarity of the condition and the cost of treatment, prior authorization is recommended for Sohonos.

Impactful Industry News

Semaglutide Demonstrates Potential Positive Cardiovascular Outcomes in Major Trial

On August 8, 2023, the manufacturer of Wegovy, Novo Nordisk, announced topline results from SELECT clinical trial. This double-blinded trial compared the cardiovascular (CV) outcomes between once-weekly semaglutide 2.4mg vs. placebo. The results of the complete study have not yet been released.

The trial met its primary objective as semaglutide 2.4mg reduced major adverse cardiovascular events (MACEs) over a period of up to 5 years by 20% compared to placebo. The study was included patients aged 45 years or older who were overweight or obese, with established cardiovascular disease (CVD) and no history of diabetes.

Semaglutide, a GLP-1 agonist, is approved under 2 brand names; Ozempic indicated for Type 2 Diabetes Mellitus (T2DM), and Wegovy for weight management.

Prior to the SELECT trial, there was no direct clinical evidence demonstrating the effects of semaglutide reducing MACE in overweight or obese individuals without T2DM. The SUSTAIN-6 trial evaluated the cardiovascular effects of semaglutide (Ozempic) in overweight or obese individuals with T2DM.

Given the outcomes of this study, Novo Nordisk has announced they plan to submit a label expansion for Wegovy by the end of 2023. The current annual cost of Wegovy is just under \$18,000.

The results of this clinical trial, and the possible expanded indication, will have a huge impact on a drug class that is already considered a blockbuster. Historically, plan sponsor coverage of weight management has varied, with some excluding the class from coverage altogether. This expanded indication could shift coverage of weight management from optional to expected and bring with it a cost increase on the pharmacy benefit. It is yet to be demonstrated if pharmacy spend increase from treatment with GLP-1s is negated by a decrease in medical spend on complications from obesity as individuals lose weight.

Risk Strategies Consulting is closely monitoring this clinical trial to provide an analysis of financial justification based on clinical outcomes.



Upcoming Significant Approvals



Products Anticipated to Reach Market by End of Year 2023

Drug	Indication	Anticipated Approval	Place in Therapy & Est. Cost
Miglustat + Cipaglucosidase	Late-Onset Pompe Disease	Q3 2023	Would compete with existing treatments Est. cost \$500k-1M per year
Lebrikizumab	Atopic Dermatitis	Q3 2023	Competitor with Dupixent & Adbry Est. cost \$50k per year
Nedosiran	Primary Hyperoxaluria	Q3 2023	Direct competitor with Oxlumo Est. cost \$70k per year
Bimekizumab	Plaque Psoriasis	Q3 2023	Competitor with Cosentyx & Taltz Est. cost \$100k per year
Zilucoplan	Myasthenia Gravis	Q4 2023	1 st self-administered, at-home option Est. cost \$450-500k per year
Eplontersen	Familial Amyloid Polyneuropathy	12/22/2023	Alternative option to existing treatments Est. cost \$450-500k per year
Exagamglogene autotemcel	Sickle Cell Disease	12/8/2023	Competing with lovetibeglogene to be the first gene therapy for SCD Est. cost \$2-3 M for one-time treatment
Lovotibeglogene autotemcel	Sick Cell Disease	12/20/2023	Competing with exagamglogene to be the first gene therapy for SCD Est. cost \$2-3 M for one-time treatment
Tirzepatide	Obesity	EOY 2023	Direct competitor with Wegovy & Saxenda Est. cost \$13k per year
Donanemab	Alzheimer's Disease	EOY 2023	3 rd in class option, dosed less frequently Est. cost \$26k per year
Etrasimod	Ulcerative Colitis	EOY 2023	Will compete with Zeposia Est. cost \$100k per year
Iptacopan	Paroxysmal Nocturnal Hemoglobinuria	EOY 2023 – Early 2024	First-in-class, oral monotherapy for PNH Est. cost \$470k per year

What You Should Know

By the end of 2023, there are significant approvals expected for both rare and more common diseases. The approval of tirzepatide for obesity will mark the 3rd GLP-1 drug approved for obesity and will continue to have a groundbreaking impact on the weight management space.

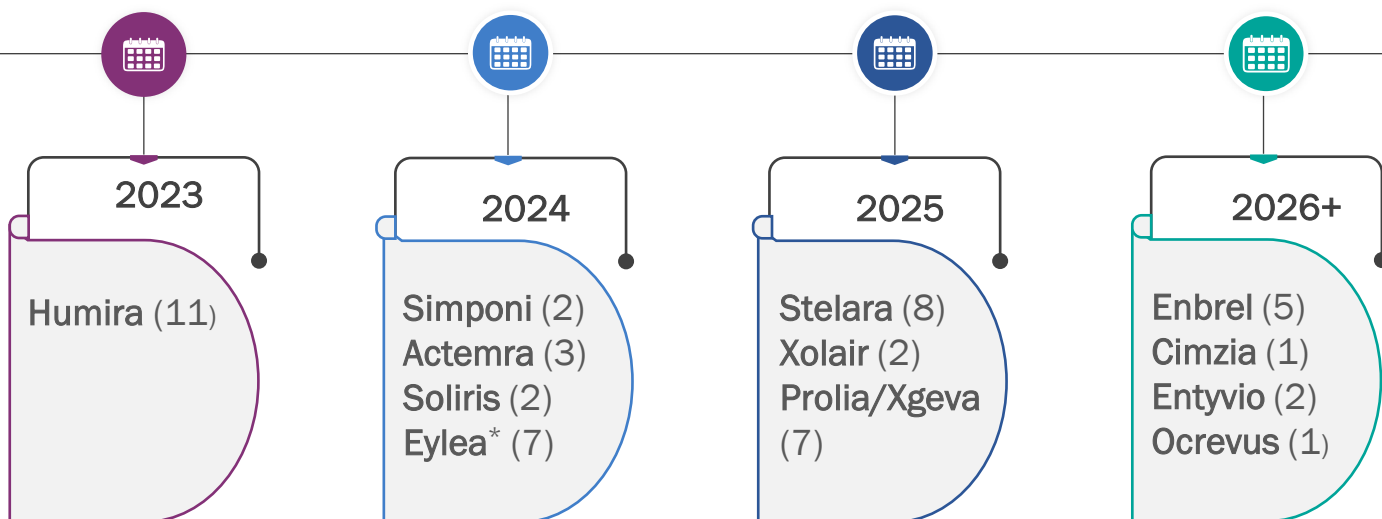
Upcoming Generics & Biosimilars

Newly Available Generics Anticipated by End of Year 2023

Brand	Generic	Indication	Generic Launch %	Anticipated Launch
Vyvanse	Lisdexamfetamine Dimesylate	ADHD Binge Eating	90%	8/25/23
Vorient	Pazopanib Hydrochloride	Renal Cell Carcinoma Soft Tissue Sarcoma	60%	10/19/23
Prolensa	Bromfenac Sodium	Inflammation Post Cataract Surgery	70%	Q4 2023
Livalo	Pitavistatin Calcium	Reduce LDL Cholesterol	90%	2H 2023
Dulera	Formoterol Fumarate; Mometasone Furoate	Asthma	60%	2023
Spiriva	Tiotropium Bromide	COPD Asthma	60%	2023

Recently Approved & Anticipated Biosimilars

(#) indicates total approved biosimilars by the end of the specified year



*Launch depends on patent expiration. Possible launch may extend to 2032.

What You Should Know

Generic availability of Vyvanse will impact drug spend that has increased since the pandemic due to an increase in ADHD diagnoses. Humira continues to see the approval of additional biosimilars and the cost impact of this ability is just beginning to be seen as these biosimilars are added to formularies.

Cell & Gene Therapy Pipeline

Cell & Gene Therapies Anticipated by 1H 2024



Focus on Exa-cel & Lovo-cel

Competition for the 1st Gene Therapy for Sickle Cell Disease

CRISP & Vertex's Exa-cel and bluebird bio's Lovo-cel are in competition to be the first gene therapy approved for Sickle Cell Disease (SCD). The two gene therapies work in different ways but both work to resolve the same types of clinical events that occur in patients with SCD.

Both treatments are one-time only, administered via infusion. Exa-cel and Lovo-cel have an estimated \$2-3 million price tag.

What You Should Know

Cell & gene therapies are a more recent form of groundbreaking therapy that can improve or cure, rare, chronic diseases, often in a one-time administration. As the pipeline only deepens, plan sponsors must ensure medical carriers prepare to manage the extremely high costs associated with treatment.



**For more information, please
reach out to your clinical
consultant.**

Get to know us.

• • • • •

Risk Strategies Consulting is comprised of experienced consultants, actuaries, data scientists, auditors, pharmacists, accountants, and other experts able to help payers, providers, and plan sponsors clearly understand the risks of their business and ways to minimize and manage them.

As a national consulting and actuarial services business, Risk Strategies Consulting provides high-touch consulting and state-of-the-art analytics services including strategy and consulting (encompassing health and welfare with deep pharmacy expertise, as well as mergers and acquisitions); actuarial services for plan sponsors, providers, and insurers; and benefit and claim audit services. Services are provided for a wide variety of industry segments including government entities, manufacturing and distribution, and self-funded organizations including corporations and trusts, healthcare organizations, national and regional insurance companies, and private equity firms, among others.

Learn more.

• • • • •

Visit us at risk-strategies.com/consulting

The contents of this article are for general informational purposes only and Risk Strategies Consulting makes no representation or warranty of any kind, express or implied, regarding the accuracy or completeness of any information contained herein.

Any recommendation contained herein are intended to provide insight based on currently available information for consideration and should be vetted against applicable legal and business needs before application.