RISK strategies CONSULTING

Q3 2023
Clinical Pipeline Report

Insight into recent and upcoming drug and biologic approvals

Prepared by Risk Strategies Consulting Clinical Team
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Risk Strategies Consulting Clinical Pipeline Report

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

We will continue to closely monitor the clinical pipeline and provide our clients with this quarterly publication as a resource.

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Recent FDA Approvals & Additional Indications

Elevidys (delandistrogene moxeparvovec-rokl) – *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.

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, administered as a single IV infusion, and resides on the medical benefit. This one-time treatment is estimated to cost about $3.2 million. Given the extremely high cost and very specific patient population, prior authorization is recommended.

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

Indication

Adults with severe hemophilia A who do not have certain pre-existing antibodies (adeno-associated virus serotype 5, AAV5), 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). Severe hemophilia is classified as extremely low levels of factor VIII (<1% in the blood).

Place in Therapy

Typical treatment involves replacing factor VIII and/or using medications to help reduce the risk of bleeding. These medications include Hemlibra, Advate, and Altuviiio amongst others. Unlike other gene therapies approved to date, which are often the only available treatment option for rare diseases, there are other hemophilia A treatments. Roctavian will likely be an alternative treatment option to prophylactic factor VIII therapy or Hemlibra.

Payor Impact

Roctavian is a one-time gene therapy, administered as a single IV infusion, and resides on the medical benefit. Roctavian is listed at $2.9 million. Given the extremely high cost and specific patient population, prior authorization is recommended.

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, administer once per RSV season. Beyfortus will cost approximately $495 for one season and $990 for children who require Beyfortus in their second season.

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. Now that Leqembi has received full FDA approval, it will be covered by Medicare for all indicated populations.

Payor Impact

Leqembi is an IV infusion that is administered over about 1 hour, every 2 weeks. 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. Given the high cost and specific patient population, prior authorization is recommended.

Impactful Industry News

Semaglutide Demonstrates 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.

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	1st 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 lovotibeglogene 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	3rd 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 do I need to 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

Anticipated Biosimilars Expected by End of Year 2023

2023
- Humira (2)
- Remicade (1)
- Novolog (3)
- Neulasta (3)
- Neupogen (1)

2024
- Simponi (2)
- Actemra (3)
- Lantus (3)
- Soliris (2)
- Herceptin (1)
- Eylea* (7)
- Lucentis (1)

2025
- Stelara (8)
- Xolair (2)
- Prolia/Xgeva (7)
- Eylea* (1)

2026
- Xolair (2)
- Prolia/Xgeva (2)

2027+
- Enbrel (3)
- Cimzia (1)
- Entyvio (2)
- Ocrevus (1)

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

Currently Approved Biologics with Available Biosimilars

Neupogen	Remicade	Enbrel	Humira	Avastin	Herceptin
3	4	2	9	4	5

Epogen	Neulasta	Rituxan	Lantus	Lucentis
1	6	3	2	2

What do I need to 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

Lifileucel (cell therapy)
Iovance
Melanoma
11/25/2023

Lovo-cel (gene therapy)
bluebird bio
Sickle Cell Disease
12/20/2023

ATA129 (cell therapy)
Atara
Lymphoproliferative Disorder, Nasopharyngeal Cancer
1H 2024

NurOwn (cell therapy)
BrainStorm Cell
ALS
12/8/2023

OLT-200 (cell therapy)
Orchard
Metachromatic Leukodystrophy
1H 2024

Fidanacogene (cell therapy)
Pfizer & Roche
Hemophilia B
Q2 2024

Exa-cel (gene therapy)
CRISPR & Vertex
Sickle Cell Disease
12/8/2023

RP-L102 (cell therapy)
Rocket Pharma
Fanconi Anemia
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 severe vaso-occlusive crises (VOCs) and vaso-occlusive events (VOEs) in patients with SCD.

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

What do I need to 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, health plans must prepare to manage the extremely high price tag associated with treatment.

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