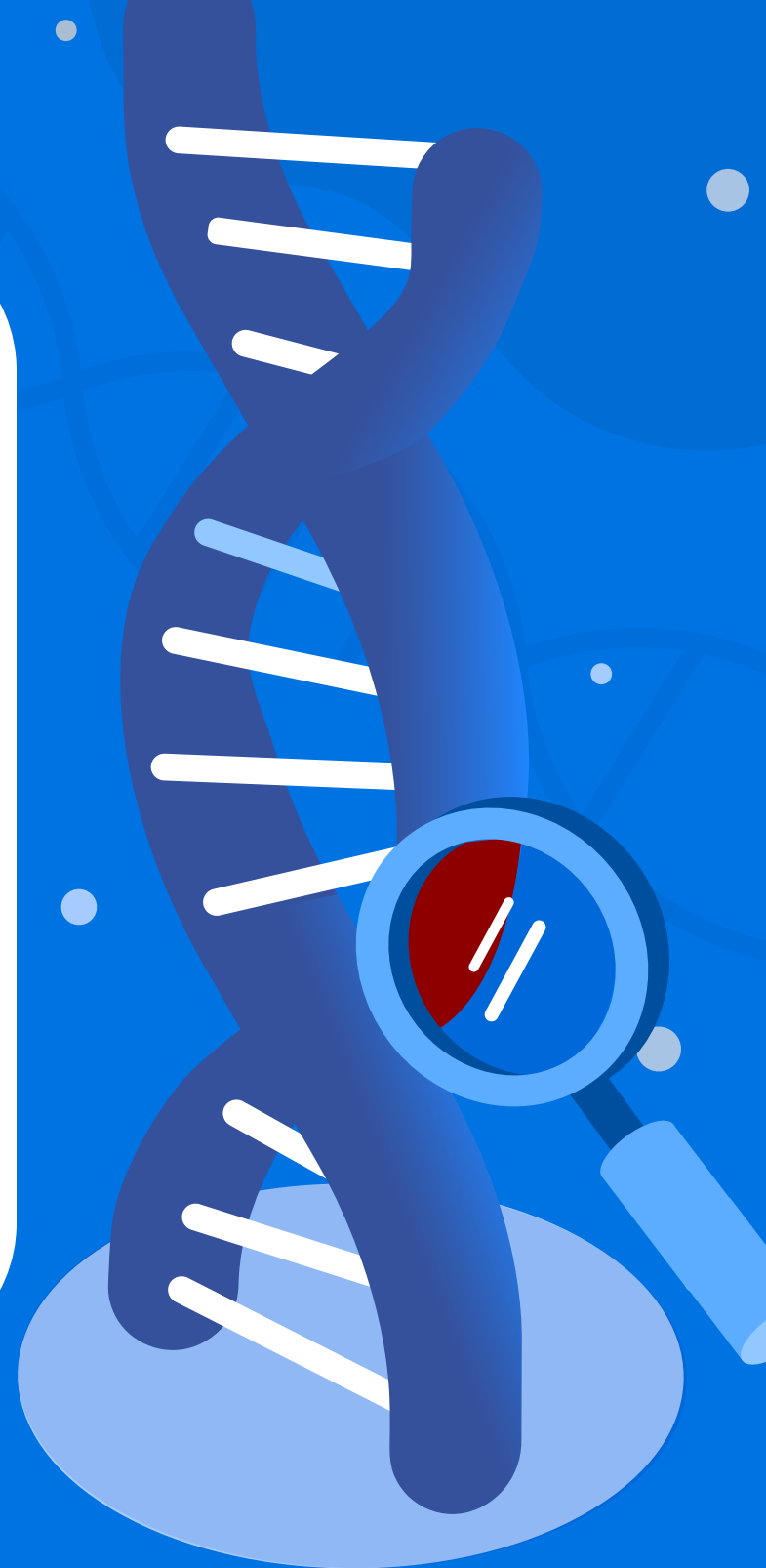


# Gene Therapy Report

**Q1 2025-Q4 2027**

Projected Treatments and Launch Timelines



## 2025 PROJECTED LAUNCHES

QUARTER	THERAPY NAME	MANUFACTURER	PHASE OF DEVELOPMENT	TYPE	BREAKTHROUGH THERAPY DESIGNATION	DRUG CLASS	INDICATION	ROUTE OF ADMINISTRATION & FREQUENCY	ESTIMATED POTENTIAL U.S. CANDIDATES
2Q	<b>prademagene zamikeracel</b> (fka EB101)	Abeona Therapeutics	Pending FDA approval 04/29/2025	New biologic	Yes	Gene therapy, ex vivo	The treatment of recessive dystrophic epidermolysis bullosa in patients ages 6 years and older	Surgical graft, one-time per wound	450 adult and pediatric patients
3Q	<b>Kresladi</b> (marnetegrane autotemcel)	Rocket Pharmaceuticals	Pending FDA approval	New biologic	No	Gene therapy, ex vivo	The treatment of severe leukocyte adhesion deficiency type 1 in patients ages 3 months and older	Injection-IV, one-time	150 pediatric patients
3Q	<b>rebisufligene etisparvovec</b> (fka UX111)	Ultragenyx Pharmaceutical	Pending FDA approval 08/18/2025	New biologic	No	Gene therapy, in vivo	The treatment of mucopolysaccharidosis type IIIA (also known as Sanfilippo syndrome type A)	Injection-IV, one-time	1,500 to 4,000 adult and pediatric patients
3Q	<b>vusolimogene oderparepvec</b>	Replimune Group Inc.	Pending FDA approval 7/22/2025	New biologic	No	Gene therapy, in vivo	The treatment of unresectable or metastatic cutaneous melanoma after progression on anti-PD1 therapy, in combination with nivolumab (e.g., Opdivo, Opdivo Qvantig)	Injection-Intratumoral, multi-dose	24,700 adult patients
3Q	<b>zopapogene imadenovec</b> (fka PRGN2012)	Precigen	Pending FDA approval 8/27/2025	New biologic	Yes	Gene therapy, in vivo	The treatment of recurrent respiratory papillomatosis in adults	Injection-SC, multi-dose	6,400–11,600 adult patients
4Q	<b>botaretigene sparoparvovec</b>	Johnson & Johnson/MeiraGTx	Phase III	New biologic	No	Gene therapy, in vivo	The treatment of X-linked retinitis pigmentosa due to RPGR mutations in patients ages 3 years and older	Injection-Intraocular, one-time per eye	5,500–13,000 adult and pediatric patients
4Q	<b>clemidsogene lanparvovec</b> (fka RGX121)	RegenxBio	Phase III	New biologic	No	Gene therapy, in vivo	The treatment of mucopolysaccharidosis type II, also known as Hunter syndrome, in patients ages 5 years and younger	Injection-Intracerebral, one-time	<25 pediatric patients
4Q	<b>mozafancogene autotemcel</b> (fka RPL102)	Rocket Pharmaceuticals	Phase II	New biologic	No	Gene therapy, ex vivo	The treatment of Fanconi anemia in patients ages 1–17 years	Injection-IV, one-time	<1,000 pediatric patients

## 2025 CONTINUED

QUARTER	THERAPY NAME	MANUFACTURER	PHASE OF DEVELOPMENT	TYPE	BREAKTHROUGH THERAPY DESIGNATION	DRUG CLASS	INDICATION	ROUTE OF ADMINISTRATION & FREQUENCY	ESTIMATED POTENTIAL U.S. CANDIDATES
4Q	<b>sonpirtigene isteparvovec</b>	Nanoscope Therapeutics	Phase II	New biologic	No	Gene therapy, in vivo	The treatment of retinitis pigmentosa in adults	Injection-Intraocular, one-time per eye	63,000–72,000 adult patients
4Q	<b>Zolgensma</b> (onasemnogene abeparvovec-xioi)	AveXis/Novartis	Phase III	New formulation	No	Gene therapy, in vivo	The treatment of spinal muscular atrophy type 2 in patients ages 2 to 17 years	Injection-Intrathecal, one-time	3,900 pediatric patients

## 2026 PROJECTED LAUNCHES

QUARTER	THERAPY NAME	MANUFACTURER	PHASE OF DEVELOPMENT	TYPE	BREAKTHROUGH THERAPY DESIGNATION	DRUG CLASS	INDICATION	ROUTE OF ADMINISTRATION & FREQUENCY	ESTIMATED POTENTIAL U.S. CANDIDATES
1H	<b>isargalgene civaparvovec</b>	Sangamo BioSciences	Phase I/II	New biologic	No	Gene therapy, in vivo	The treatment of Fabry disease in adults	Injection-IV, one-time	3,200 adult male patients
1Q	<b>anitocabtagene autoleucel</b> (fka CARTddBCMA)	Arcellx, Inc./ Gilead Sciences/ Kite	Phase II	New biologic	No	CAR T-cell therapy, ex vivo	The treatment of relapsed or refractory multiple myeloma after at least 3 prior systemic therapies in adults	Injection-IV, one-time	47,800 adult patients
1Q	<b>pariglasgene brecaparvovec</b>	Ultragenyx Pharmaceutical	Phase III	New biologic	No	Gene therapy, in vivo	The treatment of glycogen storage disease type 1a in patients ages 8 years and older	Injection-IV, one-time	3,000 adult and pediatric patients
2Q	<b>Breyanzi</b> (lisocabtagene maraleucel)	Bristol-Myers Squibb	Phase II	Supplemental indication	No	CAR T-cell therapy, ex vivo	The treatment of adults with relapsed or refractory marginal zone lymphoma	Injection-IV, one time	11,000 adult patients
2Q	<b>cretostimogene grenadenorepvec</b>	Cold Genesys	Phase III	New biologic	Yes	Gene therapy, in vivo	The treatment of high-risk, non-muscle invasive, Bacillus Calmette-Guérin-refractory bladder cancer with carcinoma in-situ with or without Ta or T1 papillary tumors	Injection-Intravesical, multi-dose	38,800 adult patients

QUARTER	THERAPY NAME	MANUFACTURER	PHASE OF DEVELOPMENT	TYPE	BREAKTHROUGH THERAPY DESIGNATION	DRUG CLASS	INDICATION	ROUTE OF ADMINISTRATION & FREQUENCY	ESTIMATED POTENTIAL U.S. CANDIDATES
2H	<b>Elevidys</b> (delandistrogene moxeparvovec-rokl)	Sarepta Therapeutics	Phase III	Supplemental indication	No	Gene therapy, in vivo	The treatment of patients ages 3 years and younger with Duchenne muscular dystrophy with a confirmed mutation in the DMD gene	Injection-IV, one-time	650 pediatric patients
2H	<b>RGX202</b>	RegenxBio	Phase I/II	New biologic	No	Gene therapy, in vivo	The treatment of Duchenne muscular dystrophy in ambulatory patients ages 1 year and older	Injection-IV, one-time	1,100 pediatric patients
3Q	<b>AMT130</b>	Uniqure	Phase I/II	New biologic	No	Gene therapy, in vivo	The treatment of early Huntington's disease in patients ages 25–60 years	Injection-Intracerebral, one-time	7,000 adult patients
4Q	<b>AAVAQP1</b>	MeiraGTx	Phase II	New biologic	No	Gene therapy, in vivo	The treatment of radiation-induced late xerostomia in adults	Injection-Intraparotid, one-time per gland	129,000 adult patients
4Q	<b>DBOTO</b>	Regeneron Pharmaceuticals	Phase I/II	New biologic	No	Gene therapy, in vivo	The treatment of congenital hearing loss due to mutations of the otoferlin gene, in patients ages 17 years and younger	Injection-Intracochlear, one-time per ear	810–6,500 pediatric patients
4Q	<b>Iaruparetigene zosaparvovec</b>	Beacon Therapeutics	Phase II/III	New biologic	No	Gene therapy, in vivo	The treatment of X-linked retinitis pigmentosa in males ages 8–50 years with a mutation in the RPGR gene	Injection-Intraocular, one-time per eye	3,100–7,100 adult and pediatric patients
4Q	<b>OCU400</b>	Ocugen	Phase III	New biologic	No	Gene therapy, in vivo	The treatment of retinitis pigmentosa in patients ages 8 years and older	Injection-Intraocular, one-time per eye	5,800–8,900 adult and pediatric patients
4Q	<b>RPA501</b>	Rocket Pharmaceuticals	Phase II	New biologic	No	Gene therapy, in vivo	The treatment of Danon disease in males ages 8 years and older	Injection-IV, one-time	7,500–15,000 adult and pediatric patients

## 2027 PROJECTED LAUNCHES

QUARTER	THERAPY NAME	MANUFACTURER	PHASE OF DEVELOPMENT	TYPE	BREAKTHROUGH THERAPY DESIGNATION	DRUG CLASS	INDICATION	ROUTE OF ADMINISTRATION & FREQUENCY	ESTIMATED POTENTIAL U.S. CANDIDATES
1H	<b>avalotcogene ontaparvovec</b>	Ultragenyx Pharmaceutical	Phase III	New biologic	No	Gene therapy, in vivo	The treatment of ornithine transcarbamylase deficiency in patients ages 12 years and older	Injection-IV, one-time	3,600–5,700 adult and pediatric patients
1H	<b>RGX314</b>	AbbVie/ RegenxBio	Phase III	New biologic	No	Gene therapy, in vivo	The treatment of neovascular (wet) age-related macular degeneration	Injection-Intraocular, one-time per eye	2 million adult patients
1Q	<b>detalimogene voraplasmid</b>	enGene Holdings	Phase I/II	New biologic	No	Gene therapy, in vivo	The treatment of high-risk, non-muscle invasive Bacillus Calmette-Guérin-refractory bladder cancer with carcinoma in-situ with or without Ta or T1 papillary tumors	Injection-Intravesical, multi-dose	38,800 adult patients
1Q	<b>UX701</b>	Ultragenyx Pharmaceutical	Phase I/II	New biologic	No	Gene therapy, in vivo	The treatment of Wilson's disease in adults	Injection-IV, one-time	6,300–8,400 adult patients
2Q	<b>NTLA2002</b>	Intellia Therapeutics	Phase III	New biologic	No	Gene therapy, in vivo	The treatment of hereditary angioedema in adults	Injection-IV, one-time	5,000 adult patients
3Q	<b>ProstAtak</b> (aglatimagene besadenovec)	Candel Therapeutics	Phase III	New biologic	No	Gene therapy, in vivo	The first-line treatment of adults with intermediate-to high-risk, localized prostate cancer, in combination with external beam radiation therapy and valacyclovir	Injection-Intratumoral, multi-dose	105,000 adult patients
3Q	<b>Tecartus</b> (brexucabtagene autoleucel)	Gilead Sciences/ Kite	Phase I/II	Supplemental indication	No	CAR T-cell therapy, ex vivo	The treatment of relapsed or refractory B-cell precursor acute lymphoblastic leukemia in patients ages 2–21 years	Injection-IV, one-time	2,800 pediatric and adult patients
4Q	<b>cemacabtagene ansegedleucel</b>	Allogene Therapeutics	Phase II	New biologic	No	CAR T-cell therapy, in vivo	Consolidation therapy in adults with minimal residual disease after response to first-line treatment of large B-cell lymphoma	Injection-IV, one-time	10,200 adult patients



Proactive surveillance of the drug pipeline can help inform your pharmacy benefits strategy. Learn more and access our latest pipeline reports on our website at [Business.Caremark.com](https://www.Business.Caremark.com)

FDA (U.S. Food and Drug Administration), SC (subcutaneous), IM (intramuscular), IV (intravenous).

This document contains references to brand-name prescription drugs that are trademarks or registered trademarks of pharmaceutical manufacturers not affiliated with CVS Health. The information contained herein is compiled from independent clinical sources and is provided for informational purposes only. Due to circumstances beyond CVS Health's control, prospective drug launch dates are subject to change without notice. This information should not be solely relied upon for decision-making purposes. This email includes products that may fall under a general specialty drug benefit. All products contained herein may not be provided by CVS Specialty. Dates included in this email are reflective of likely FDA approval date (otherwise known as PDUFA date). Actual approval date may occur before or after the date shown. Some drugs may not gain FDA approval at all. Dates do not reflect a projection for actual market availability. Drug launch may in some cases occur several months after FDA approval.

Source: RxPipeline, CVS Health Clinical Affairs. Information current as of March 17, 2025.

©2025 CVS Health and/or one of its affiliates. All rights reserved. 4091216 031725 

