

Peer-Reviewed Article

Canadian Trends in Estimated Drug Purchases and Projections: 2024 and 2025

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Abstract

Background: Data on trends in the pharmaceutical market remain limited. We offer an annual update on estimated drug purchases in Canada and highlight key factors that could impact future spending. This information aims to assist public and private decision-makers in forecasting the growth of national drug purchases.

Methods: We conducted a retrospective time-series analysis of annual estimated drug purchases across Canada between 2001 and 2023 using IQVIA's Canadian Drugstore and Hospital Purchases Audit. We calculated total estimated drug purchases and relative percentage change annually, stratified by sector (retail and hospital), and forecast annual spending to 2025. We also assessed recent drug approvals, policies, or legislation that may influence drug spending.

Results: Total estimated drug purchases for 2023 were approximately \$43.5 billion, 13.7% higher than in 2022 (retail purchases: 12.9% growth; hospital purchases: 17.7% growth). Overall, expenditure on the top 25 high-cost drugs accounted for 32.5% and 53.3% of total spending in the retail and hospital sectors, respectively. Pharmaceutical spending has grown over the past 2 decades, with an annual average growth of 5.8% and 8.2% in the retail and hospital sectors, respectively. Drug expenditure in the retail sector is expected to increase annually by 10.9% to 10.1% and spending within the hospital sector is expected to increase by 14.6% to 12.9% for 2024 and 2025, respectively.

Interpretation: This study indicates evidence of accelerated growth in overall estimated drug purchases, likely driven by the increasing use of new diabetes and obesity treatments. Continued growth in drug purchases is projected across the Canadian market, which will be influenced by new approvals of specialty and oncology drugs as well as generic and biosimilar versions of the top 25 drugs. Without measures to address this ongoing increase in pharmaceutical spending, there may be a need to reallocate funds from other public sectors or shift costs to private industry and patients. The potential opportunity costs of rising pharmaceutical spending warrant careful consideration.

For author information, refer to [Appendix 1](#).

Introduction

Total health care spending in Canada was forecasted by the Canadian Institute for Health Information (CIHI) to reach more than \$344 billion in 2023, representing 12.1% of the country's gross domestic product.¹ Spending on prescription drugs was expected to account for 13.9% of national health care purchases, which was an increase of 3.0% from the previous year's projections.¹

In 2022, our group published a second update highlighting spending on drugs in Canada.² Briefly, we found that drug spending increased on average by 5.4% annually in the retail sector and by 7.4% annually in the hospital sector between 2001 and 2021.² We projected that spending was likely to continue increasing until at least 2023.² Although drug spending was historically driven by simple, small molecule medications, our results highlighted that complex therapies, such as biologics and biosimilars, were now the key contributors to drug spending.² Furthermore, we projected that drug spending for the years 2022 and 2023 would increase annually by 5.6% and 5.3%, respectively, in the retail sector and by 9.4% and 8.8%, respectively, in the hospital sector.² These projections were based on the information available at the time regarding novel treatments being approved by Health Canada and the US FDA combined with historical growth in spending.

Budget planning is an annual process that requires forecasting potential growth; therefore, this analysis aims to assist decision-makers and formulary managers in shaping their yearly budgets and strategies. Approvals of novel pharmaceutical technologies are likely to impact future budgets, so an annual update on spending forecasts and horizon scanning is essential. Independent assessments of drug spending across the country can help public and private decision-makers better anticipate how various factors, including new technologies, may affect spending trends. In this updated report, we present current trends and forecasts for retail and in-hospital estimated drug purchases across Canada as well as a horizon scan of upcoming drugs that could influence future spending trajectories.

Methods

Drug Purchases and Projection

We conducted a retrospective time-series analysis of annual estimated drug purchases (i.e., drug purchases) across Canada between January 1, 2001, and December 31, 2023, using IQVIA's Canadian Drugstore and Hospital Purchases Audit. These data estimates purchasing costs and unit volumes of all pharmaceutical products purchased by the Canadian retail and hospital sectors.³ This audit is derived from a sample of outlets within these sectors (more than 33% of retail and 86% of hospital sectors) in each province and territory, which are projected to represent total pharmaceutical purchasing at the national level using proprietary methods. We included all pharmaceutical purchasing of all dosage forms and formulations over the study period. Purchasing may be made through a wholesaler or directly from the manufacturer, and therefore may include mark-ups, but does not capture discounts and rebates. Although the Canadian Drugstore and Hospital projections will not capture any subsequent rebates or volume discounts credited to

the outlets afterward, it does not reflect all up-front discounts for each specific invoice. Due to the aggregated nature of the data provided, research ethics board approval was not required.

We describe total estimated drug purchases across Canada annually (using calendar years) over the study period, stratified by sector (retail versus hospital). We calculated the annual growth in purchases as the relative percentage change from the previous year. We used exponential smoothing models and applied Holt's linear method to forecast annual estimated pharmaceutical purchases in 2024 and 2025. Costs were reported as nominal annual costs, and nominal costs were used for the projection models. In a sensitivity analysis, we inflated annual costs before 2023 to the 2023 values using all-items consumer price indexes.⁴ Finally, we identified the 25 medications with the highest total purchases in calendar year 2023 within the retail and hospital sectors separately.

Horizon Scan

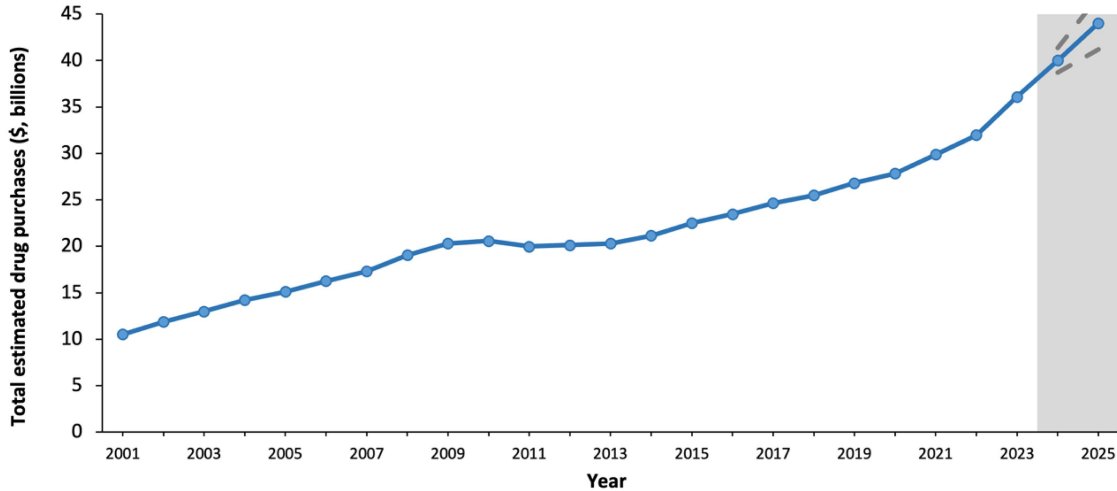
An environmental scan of global and national drug spending and pipeline reports was conducted to identify therapeutic classes with potentially major impacts on pharmaceutical spending.⁵⁻¹³ All medications approved by Health Canada in 2023 and the first quarter of 2024, as well as generic drugs and biosimilars currently under review, were assessed for anticipated impacts.¹⁴ New drug approvals by the US FDA in 2023 and the first quarter of 2024 were also reviewed to identify drugs that may soon enter the Canadian market.¹⁵

Drugs with a potential for high impact on future spending (via upward pressure or downward pressure) were flagged based on the following criteria: disease prevalence, current medication use and availability in the therapeutic area, and anticipated cost. Our approach was consistent with earlier work we conducted.^{2,23,25,26} Based on the list of drugs with the highest potential for impact on the Canadian market, the authors used this information to highlight some drugs that are likely to impact forecasted spending.

Results

Trends in Canadian drug purchases from 2001 to 2023 in the retail and hospital sectors are presented in [Figure 1](#) and [Figure 2](#), respectively. Graphs that include values accounting for inflation can be found in [Appendix 2](#) ([Figure 4](#) and [Figure 5](#)).

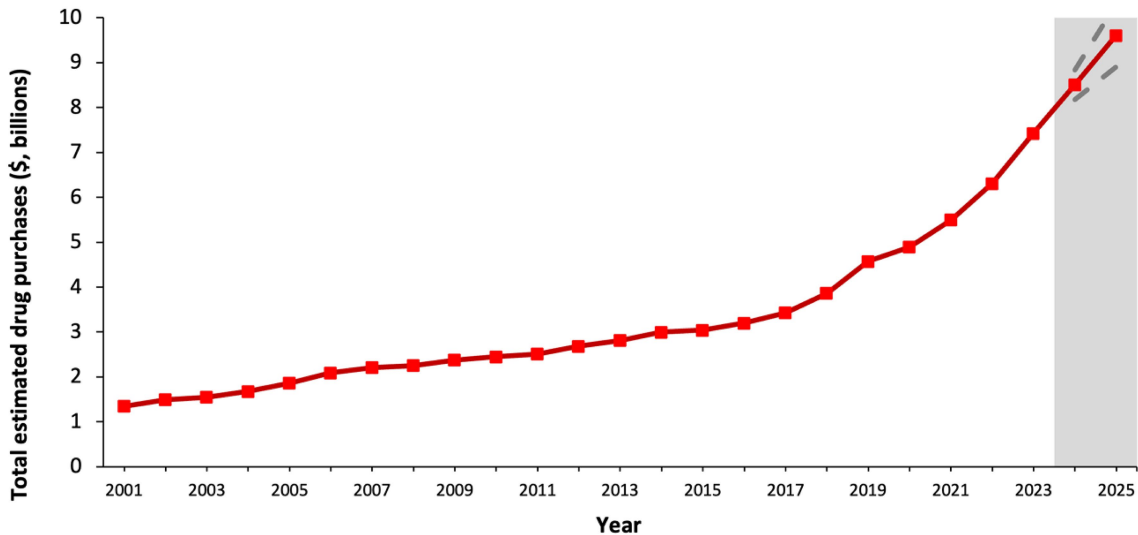
Figure 1: Total Medication Purchases in Canada for the Retail Sector From 2001 to 2023 and Projected to 2024 and 2025



Note: The grey zone illustrates forecasted purchases in the retail sector (solid line) with 95% confidence interval estimates (dashed lines) for 2024 and 2025

Source: This figure is based on information licensed from IQVIA: Canadian Drugstore and Hospital Purchase Audit for 2001 to 2023 estimates of real-world activity. All rights reserved.

Figure 2: Total Medication Purchases in Canada for the Hospital Sector From 2001 to 2023 and Projected to 2024 and 2025



Note: The grey zone illustrates forecasted purchases in the hospital sector (solid line) with 95% confidence interval estimates (dashed lines) for 2024 and 2025.

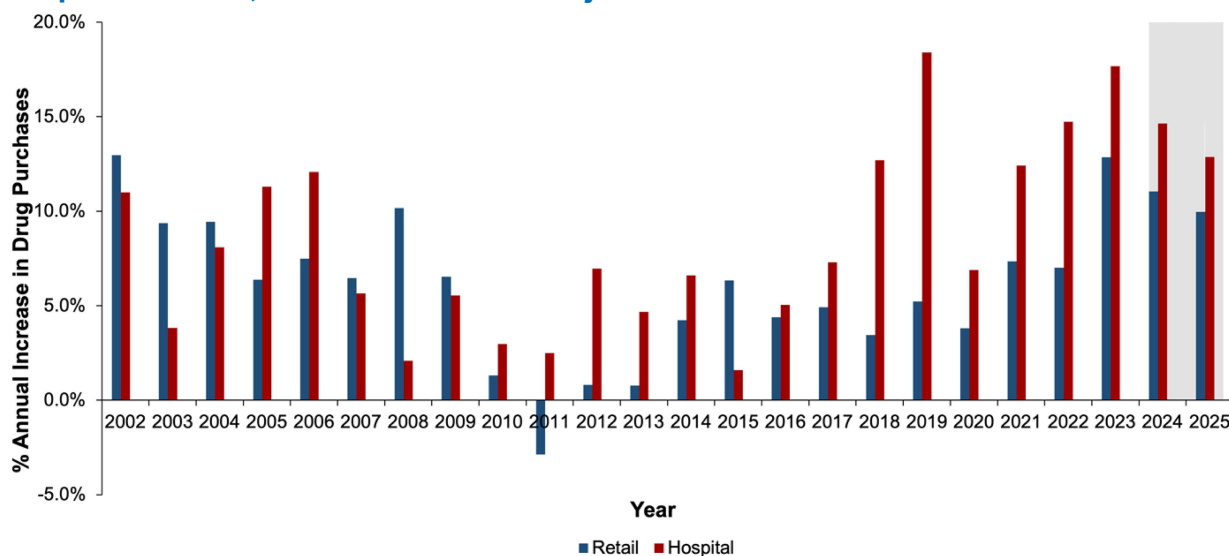
Source: This figure is based on information licensed from IQVIA: Canadian Drugstore and Hospital Purchase Audit for 2001 to 2023 estimates of real-world activity. All rights reserved.

Overall Spending

In 2023, total annual estimated drug purchases in Canada grew 13.7%, reaching \$43.5 billion (versus \$38.3 billion in 2022). This growth far exceeded the previously forecasted rate of 5.9%.² The retail sector accounted

for 82.9% of estimated drug purchases in 2023 (\$36.1 billion), and the hospital sector accounted for 17.1% (\$7.4 billion). Retail and hospital purchases in 2023 increased from 2022 by 12.9% and 17.7%, respectively, with both rates exceeding our previously forecasted 2023 rates of 5.3% and 8.8%, respectively. [Figure 3](#) illustrates the trends in annual change in purchases across both sectors.

Figure 3: Annual Growth (%) in Drug Purchases From the Previous Year for the Retail and Hospital Sectors, 2002 to 2023 and Projected Growth for 2024 and 2025



Note: The grey zone illustrates forecasted annual growth for 2024 and 2025.

Retail and Hospital Spending

Over the entire study period (2001 to 2023), average annual estimated drug purchase growth was 5.8% in the retail sector and 8.2% in the hospital sector. Total estimated drug purchases in the retail sector increased by 243%, increasing from \$10.5 billion in 2001 to \$36.1 billion in 2023. Drug purchases grew even more sharply in the hospital sector, by 452%, from \$1.3 billion in 2001 to \$7.4 billion in 2023.

In the retail sector, growth was stronger in the earlier years, with an average annual increase of 6.7% between 2001 and 2011 compared to 5.1% from 2012 to 2023. Notably, 2011 was the only year with a decline in retail drug purchases (-2.9%). In contrast, in the hospital sector, estimated drug purchases grew consistently, with an average annual increase of 6.5% between 2001 and 2011, which increased to 9.6% from 2012 to 2023, without any year of decline.

In recent years, drug purchases in both sectors have shown significant growth. In the retail sector, estimated drug purchases rose by 3.8%, 7.3%, 7.0%, and 12.9% in 2020, 2021, 2022, and 2023, respectively. Hospital-administered drug purchases saw even larger increases, with growth rates of 6.9%, 12.4%, 14.7%, and 17.7% in 2020, 2021, 2022, and 2023, respectively. These recent trends indicate a substantial acceleration in spending, particularly in the hospital sector, reflecting the growing demand for newer and more expensive treatments.

Drug Expenditure Forecast for 2024 and 2025

We forecast a yearly increase (all sectors combined) in estimated drug purchases of 11.5% (95% confidence interval [CI], 7.7% to 15.3%) in 2024 and 10.5% (95% CI, 3.3% to 17.8%) in 2025 (Figure 3). We project that purchases in the retail setting will increase by 10.9% (95% CI, 7.2% to 14.5%) and 10.1% (95% CI, 3.0% to 17.1%) annually for 2024 and 2025, respectively. We project that hospital-administered drugs will increase annually by 14.6% (95% CI, 10.2% to 19.0%) and 12.9% (95% CI, 4.7% to 21.1%) for 2024 and 2025, respectively. In absolute costs, we forecast the total spending will increase to \$44 billion (95% CI, \$41.2 billion to \$46.9 billion) for retail purchases and \$9.6 billion (95% CI, \$8.9 billion to \$10.3 billion) for hospital purchases by 2025 (Figure 1 and Figure 2).

Top 25 Drugs by Overall Purchases in 2023

Table 1 lists the top 25 drugs by estimated drug purchases in retail and hospital settings across the country for the year 2023. Semaglutide (\$1.9 billion), infliximab (\$1.2 billion), and ustekinumab (\$912 million) were the top 3 highest expenditure drugs in the retail setting, whereas pembrolizumab (\$797 million), daratumumab (\$548 million), and nivolumab (\$328 million) were the top 3 drugs in the hospital setting. Only 3 drugs were in the top 25 of both lists: aflibercept (a vascular endothelial growth factor-A antagonist) at number 5 in retail spending and number 22 in hospital spending, ibrutinib (a small molecule inhibitor of Bruton tyrosine kinase) at number 19 in retail spending and number 17 in hospital spending, and bictegravir-emtricitabine-tenofovir-alafenamide (a complete regimen for the treatment of HIV-1 infection) at number 22 in retail spending and number 18 in hospital spending. Overall, total purchases for the top 25 drugs in both markets in 2023 accounted for \$15.7 billion (\$11.7 billion and \$4.0 billion in retail and hospital sectors, respectively), which accounted for 32.5% and 53.3% of total spending in each sector, respectively.

Table 1: Top 25 Drugs by Spending in Retail and Hospital Settings for the Calendar Year 2023 and the Trend (Upward or Downward) Compared to 2022

Rank	Retail			Hospital		
	Drug	Total	Trend	Drug	Total	Trend
1	Semaglutide	\$1,943,826,972	↑	Pembrolizumab	\$797,330,603	↑
2	Infliximab	\$1,220,620,565	↑	Daratumumab	\$548,362,800	↑
3	Ustekinumab	\$911,623,762	↑	Nivolumab	\$328,229,269	↑
4	Adalimumab	\$910,774,341	↑	Durvalumab	\$233,128,120	↑
5	Aflibercept	\$809,989,780	↑	Hemagglutinin (nonspecific)	\$159,388,313	—
6	Lisdexamfetamine	\$500,293,173	↑	Rituximab	\$157,456,996	↑
7	Empagliflozin	\$482,576,566	↑	Trastuzumab	\$143,118,079	↓
8	Methylphenidate	\$475,924,758	↑	Vaccine, HPV, type-6, 11, 16, 18, 3	\$127,130,442	↑
9	Risankizumab	\$379,876,952	—	Ipilimumab	\$117,598,712	↑

Rank	Retail			Hospital		
	Drug	Total	Trend	Drug	Total	Trend
10	Vedolizumab	\$354,293,254	↑	Axicabtagene ciloleucel	\$113,451,433	↑
11	Budesonide-formoterol	\$310,778,564	↓	Osimertinib	\$111,948,035	↑
12	Rivaroxaban	\$300,840,969	↑	Remdesivir	\$110,329,682	↓
13	Golimumab	\$292,710,108	↑	Pertuzumab	\$101,301,685	↓
14	Paliperidone palmitate	\$259,288,605	↑	Bevacizumab	\$96,632,333	↑
15	Dupilumab	\$253,907,387	—	Palbociclib	\$93,978,366	↓
16	Ocrelizumab	\$252,864,488	—	Vaccine, pneumococcal conjugate	\$87,337,707	↓
17	Rosuvastatin	\$250,035,747	—	Ibrutinib	\$84,318,408	↓
18	Etanercept	\$237,193,968	↓	Bictegravir-emtricitabine-tenofovir-alafenamide	\$82,398,301	↓
19	Ibrutinib	\$234,951,456	↓	Darbepoetin alfa	\$75,559,363	↑
20	Upadacitinib	\$234,445,844	—	Lenalidomide	\$72,793,391	—
21	Denosumab	\$227,669,589	—	Apalutamide	\$67,014,664	—
22	Bictegravir-emtricitabine-tenofovir-alafenamide	\$221,362,467	↓	Aflibercept	\$64,480,865	—
23	Sacubitril-valsartan	\$218,419,431	—	Measles virus, mumps virus, rubella vaccine live: varicella zoster	\$63,680,919	↓
24	Guselkumab	\$217,796,935	—	Trastuzumab emtansine	\$61,400,260	↓
25	Ranibizumab	\$215,180,402	↓	Oseltamivir	\$61,286,075	—
Total of top 25	\$11,717,246,083			\$3,959,654,821		
Total 2023 spending	\$36,083,388,476			\$7,422,483,251		
Proportion of spending on top 25 drugs	32.47%			53.35%		

Note: The dashes indicate new entries to the top 25 drugs in 2023.

Horizon Scan

Global reports were reviewed to determine trends for drug spending in Canada ([Appendix 2, Table 3](#)). Here, we summarize major themes for new and upcoming therapies in Canada. We first highlight treatments we believe will have impact on increased spending (“upward pressure”) then discuss potential mitigating factors (“downward pressure”). A list of drug approvals for Health Canada and the US FDA in 2023 and the first quarter of 2024 are presented in [Appendix 2, Table 4](#) and [Table 5](#), respectively. Health Canada approved 81 drugs in 2023, compared to 73 in 2022.¹⁴ The FDA approved 55 novel drugs in 2023, compared to 37 in 2022.¹⁵

Potential for Upward Pressure

The drug pipeline remains dominated by oncology drugs. A novel drug, capivasertib (Truqap), was recently approved by Health Canada and the FDA for use in combination with fulvestrant for human epidermal growth factor 2–negative, hormone receptor–positive locally advanced or metastatic breast cancer. The drug is also undergoing late-stage trials for triple-negative breast cancer.⁹ Another breast cancer drug, abemaciclib (Verzenio), was initially indicated for advanced and metastatic breast cancer but has since been expanded for use in early breast cancer in 2022. This led to 1 of the highest growths in spending for oncology drugs.⁹ Vaccines to treat cancer have the potential to impact spending in the coming years, following the successes of the COVID-19 mRNA vaccines. These drugs may be on the horizon, and include V940/mRNA-4157 (indicated for high-risk melanoma), autogene cevumeran (a personalized vaccine for pancreatic ductal adrenal cancer), TG4050 (indicated for ovarian cancer and HPV-negative head and neck cancer), Tedopi (indicated for advanced non–small cell lung cancer), and VB10.16 (indicated for advanced cervical cancer).¹³

Certain therapeutic areas are likely to increase spending due to the prevalence of these conditions in the Canadian population. Drugs for type 2 diabetes mellitus (T2DM), notably semaglutide, were the top drugs in terms of spending in 2023. Ozempic (semaglutide injection) has a 95% market share of all glucagon-like peptide 1 (GLP-1) analogues, and expenditures increased from \$13.5 million in 2019 to \$434 million in 2022.¹ Ozempic is 1 of 2 GLP-1 receptor agonists that are reimbursed by public drug plans in Canada. Despite having specific criteria limiting its use to T2DM for most payers, there has been increased non-T2DM use of Ozempic due to its effect on weight management.¹⁶ A new related drug, tirzepatide (Mounjaro), was recently approved and shown in early studies to be more efficacious than Ozempic for diabetes.^{21,22} Although this could lead to a shift toward prescribers favouring this drug, it is anticipated that spending on this class would remain similar.⁹ In terms of inflammatory conditions, there is potential for increased spending due to risankizumab and upadacitinib receiving additional indication approvals after initial market release. Risankizumab (Skyrizi) received new approval for Crohn disease and psoriatic arthritis in late 2022, whereas upadacitinib (Rinvoq) received approval for Crohn’s disease and ulcerative colitis in 2024.⁹ Dupilumab (Dupixent) was previously approved for atopic dermatitis and severe asthma, and received new indications in 2023 for atopic dermatitis in pediatric patients as young as 6 months old, and for prurigo nodularis and eosinophilic esophagitis.⁹ Regarding rare diseases — especially in cases in which there are no or few treatment options available — there are more therapies with high prices expected to increase overall spending. Although a single rare disease drug may not significantly impact total spending, the growing number of such drugs and their high price tags collectively contribute to a rising trend in overall expenditures.

Notable examples include trofinetide (Daybue, indicated for Rett syndrome), iptacopan (Fabhalta, indicated for paroxysmal nocturnal hemoglobinuria), zilucoplan (Zilbrysq, indicated for myasthenia gravis), eplontersen (Wainua, indicated for hereditary transthyretin), metretreptin (Myalepta, indicated for lipodystrophy), and pozelimab (Veopoz, indicated for CHAPLE disease), which have estimated average costs upwards of US\$2 million per patient per year.^{11,12}

Potential for Downward Pressure

Newly approved or upcoming biosimilar drugs have the potential to exert downward pressure on drug spending. Biosimilar market share increased from 23.5% in 2022 to 35.8% in 2023.⁹ Ontario's biosimilar transition policy mandated that Ontario Drug Benefit beneficiaries transition to biosimilars for glatiramer, etanercept, insulin lispro, adalimumab, insulin glargine, insulin aspart, infliximab, rituximab, and ranibizumab (Byooviz).^{9,17} This policy transition brings the largest payer in line with most other public payers in the country. The transition period ended in late December 2023, and we expect an impact in 2024 and upcoming years as biosimilar alternatives become more readily available.^{9,17} For T2DM, insulin glargine, lispro, and aspart have had new biosimilars introduced in recent years that could lead to reduced spending on insulin.⁹ Insulin lispro had the lowest penetration rates, which is likely due to a shortage that delayed the transition policies; in the coming years, the impact could be more evident.⁹ In the biosimilar drug pipeline, there are 2 biosimilars for ustekinumab (Wezlana and Janteki), 2 biosimilars for aflibercept (Yesafili and Opuviz), and 2 biosimilars for eculizumab (Bkemv), all of which are expected to be approved in 2024.¹³ Also, there are biosimilars in development for mepolizumab (Nucala), which could result in reduced spending in the coming years once approved.⁹ Generic drugs are expected to continue reducing spending, with a number of new generics expected in 2024.

Interpretation

Spending on pharmaceuticals has grown considerably over the past 2 decades in Canada, leading to a total market size of more than \$40 billion in 2023. The annual growth in spending reached 12.9% for retail estimated drug purchases and 17.7% for hospital estimated drug purchases in 2023, surpassing growth rates seen in the prior year (7% and 14.7%, respectively) and our forecasted growth rates (5.3% and 8.8%, respectively²). This trend was apparent in both the retail and hospital sectors. The single annual decrease in retail spending in 2011 has been attributed to many brand name drugs losing exclusivity in that time period; however, trends in spending did not recede in the following years, likely due to the subsequent entry of many new "blockbuster" drugs, such as direct oral anticoagulants, various diabetes medications, and biologics.²⁴ In the retail sector, growth in annual spending reached the highest level in the past 2 decades. In the hospital sector, the growth was nearly as high as the record growth seen in 2019 due to expansion in the use of novel oncology treatments. This expansion in hospital spending is likely driven by new product approvals, higher market entry prices for new drugs, and growing utilization. For example, GLP-1 receptor agonists accounted for \$1.4 billion in drug expenditures in 2023. Thus, we anticipate continued increases in the retail sector combined with accelerated growth in the hospital sector, leading to total annual estimated drug purchases nearing \$54 billion by 2025. Importantly, the anticipated growth in the number of new therapies

and associated costs will continue to put pressure on constrained government budgets across the country, leading to a need for strategies that balance access to novel therapeutics against limited resources.

It is expected that there will likely be pressure from growth of already-marketed drugs and other therapies identified in the pipeline to continue to impact the degree of change in spending in the coming years. Overall, we believe the growth in spending will be on the higher end of the predicted range in the outpatient retail setting. There has been a significant increase in the use of the blockbuster drugs for T2DM and obesity (Ozempic and Wegovy semaglutide injections). We believe the use of these drugs has not yet peaked and was curbed by the global shortage that occurred between October 2022 and April 2024. Specifically, concerns about off-label prescribing of semaglutide for weight loss in individuals without T2DM resulted in worldwide shortages spanning this period. As Ozempic supply became stable, other GLP-1 receptor agonists and related drugs, such as dulaglutide and tirzepatide, faced a shortage. These shortages indicate semaglutide drug spending did not reach its peak in 2023. Because semaglutide was the drug with the highest spending in retail environments in 2023 even with shortages, it will likely be the single largest driver in terms of increased retail spending on medications in the coming years. Therefore, it is important to continue monitoring the use of GLP-1 receptor agonists, dulaglutide, and tirzepatide to ensure appropriate use and manage spending.

The adoption of biosimilar formulations has the greatest potential for reducing drug spending, but the degree of reduced spending depends on their uptake in Canada. Many public drug plans in Canada require patients who have not previously used biologics to be initiated on a biosimilar formulation. These plans have introduced mandatory nonmedical biosimilar switching policies over the past several years for select originator biologics.^{17,18} In Ontario, Ontario Drug Benefit recipients who were on an originator biologic drug were required to transition to a Health Canada–approved biosimilar between March 31 and December 29, 2023, to maintain their medication coverage through the public drug program for the biologic drug.¹⁷ Some of the highest drug spending in retail and hospital settings in 2023 was on biologics; given Ontario's large population (38% of the population in Canada), this policy is expected to influence national spending in the coming years.

Our analysis has limitations that warrant discussion. First, we do not have information on the confidential rebates that manufacturers provide to public and private drug plans or to hospital purchasers because these contracts are kept confidential. These discounts can be sizable; for example, pan-Canadian Pharmaceutical Alliance (pCPA) negotiations yielded \$1.24 billion in savings in 2017–2018.¹⁹ However, our results represent the total spending in the current drug system, and we do not anticipate major differences in the proportion of rebates to total spending in recent years. The purchase prices do account for up-front discounts. Rebates may be re-invested in paying for future drug spending and thus are paid forward in spending. Additionally, rising prices have important consequences on patient co-pays depending on payment method and plan structure.²⁰ Second, our data had no information on payers (i.e., public insurance, private insurance, or out-of-pocket) and thus only characterizes global spending and future impacts among all payers.

Conclusion

In 2023, overall estimated drug purchases in Canada rose more than anticipated, with similar trends observed in both the hospital and retail sectors. This growth was driven by increased utilization and the high costs of new therapies. These upward trends have persisted for several years, following the relatively flat growth experienced between 2009 and 2014. The rising costs, particularly for new treatments, underscore the ongoing need for rigorous assessment and price negotiation by public payers to ensure these expenditures provide good value for money. Additionally, the burden on uninsured individuals highlights the importance of addressing affordability and access for everyone living in Canada.

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Appendix 1: Author Information

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Appendix 2: Additional Figures and Tables

Note that this appendix has not been copy edited.

Figure 4: Total Medication Purchases in Canada for the Retail Sector From 2001 to 2023

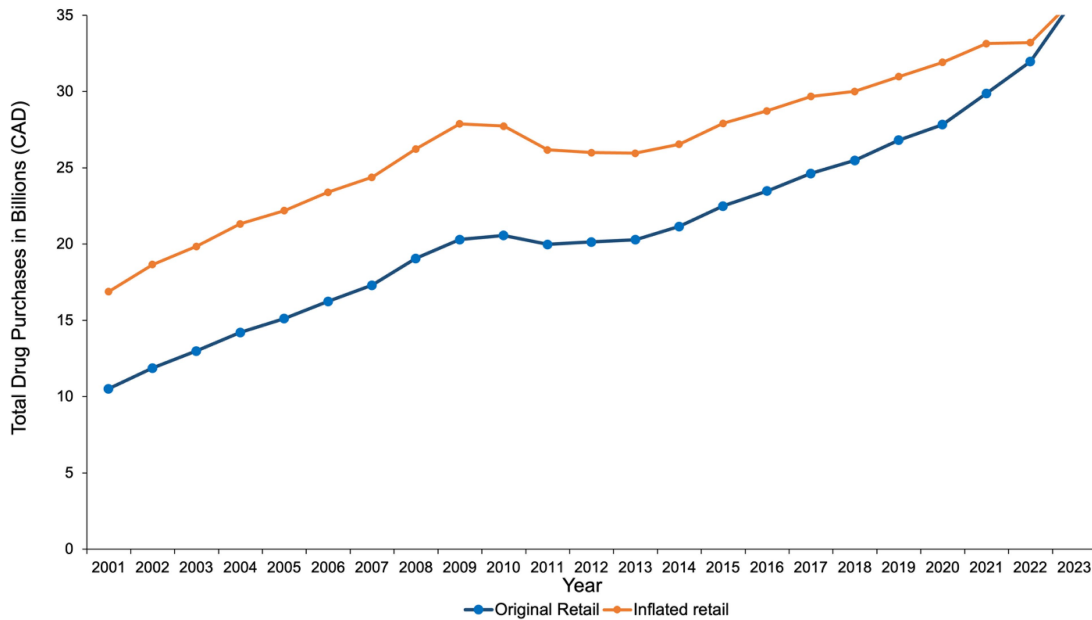


Figure 5: Total Medication Purchases in Canada for the Hospital Sector From 2001 to 2023

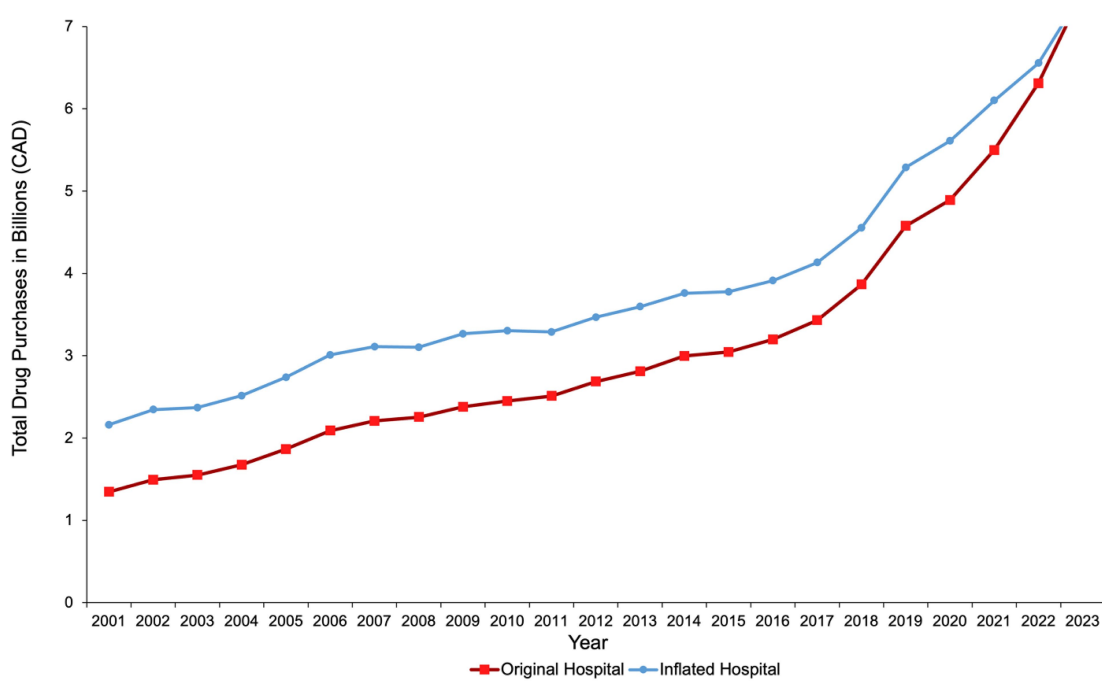


Table 2: Selected Drugs and Biologics That Have Received Health Canada and/or FDA Approval in 2023 and Early 2024 and Are Expected to Impact Drug Spending in the Near Future

Category	Drug	Brand name or reference product	Indication	Health Canada approval date	FDA approved
Oncology	Capivasertib	Truqap	Human epidermal growth factor 2 (HER2)-negative, hormone receptor (HR)-positive locally advanced or metastatic breast cancer	Jan 2024	Nov 2023
	Abemaciclib	Verzenio	Advanced and metastatic breast cancer, but was expanded for use in early breast cancer	Jan 2022	Mar 2023
	V940/mRNA-4157	—	High-risk melanoma	Phase III trial	No
	Autogene cevumeran	—	A personalized vaccine for pancreatic ductal adrenal cancer	Phase II trial	No
	TG4050	—	Ovarian cancer and HPV-negative head and neck cancer	Phase I trial	No
	Tedopi	—	Advanced non–small cell lung cancer	Phase II trial	No
	VB10.16	—	Advanced cervical cancer	Phase II trial	No
Atopic dermatitis	Dupilumab	Dupixent	Atopic dermatitis and severe asthma	Nov 2017	Jan 2024
Neuromuscular	Trofinetide	Daybue	Rett syndrome	Oct 2024	Mar 2023
	Zilucoplan	Zilbrysq	Myasthenia gravis	Jul 2024	Oct 2023
	Eplontersen	Wainua	Hereditary transthyretin amyloidosis-associated polyneuropathy	Jun 2024	Dec 2023
Other	Metreleptin	Myalepta	Lipodystrophy	Aug 2024	Feb 2014
Immune Disease	Pozelimab	Veopoz	CHAPLE disease	—	Aug 2023
Macular degeneration	Ranibizumab	Byooviz	Age-related macular degeneration, diabetic macular edema, diabetic retinopathy	Mar 2023	Sep 2021
Diabetes	Tirzepatide	Mounjaro	Type 2 diabetes management	Nov 2023	May 2022
Crohn disease	Risankizumab	Skyrizi	Crohn disease and psoriatic arthritis	Mar 2022	Jun 2024
	Upadacitinib	Rinvoq	Crohn disease and psoriatic arthritis	Jul 2023	Jan 2022

Category	Drug	Brand name or reference product	Indication	Health Canada approval date	FDA approved
Immuno-suppressants	Ustekinumab	Wezlana Jamteki	Inflammatory bowel disease, psoriasis, psoriatic arthritis	Under review	Oct 2023 No
	Iptacopan	Fabhalta	Paroxysmal nocturnal hemoglobinuria	Under review	Dec 2023
	Aflibercept	Yesfili Opuviz	Macular degeneration	Under review	May 2024
	Eculizumab	Bkemv	Rare blood disorder	Under review	May 2024
Asthma and COPD	Mepolizumab	Nucala	Severe eosinophilic asthma	Feb 2023	Nov 2015

Table 3: Global Reports Reviewed to Determine Trends for Drug Spending in Canada

Report	Link
Advancing Health Through Innovation: New Drug Therapy Approvals 2023	Advancing Health Through Innovation: New Drug Therapy Approvals 2023 (fda.gov)
2023 Drug Plan Trends Report: How the repercussions of the pandemic are trickling down to drug plans	2023 Drug Plan Trends Report: How the repercussions of the pandemic are trickling down to drug plans Benefits Canada.com
Biosimilars approved in Canada Mar 2024	Biosimilars approved in Canada (smartbiggar.ca)
2024 Biosimilars Report: Insights on a pivotal year of evolution and expansion	2024 Biosimilars Report (cardinalhealth.com)
2024 Prescription Drug Trend Report	Express Scripts Canada 2024 Drug Trend Report.pdf (express-scripts.ca)
Global Trends in R&D 2024: Activity, productivity, and enablers	Global Trends in R&D 2024: Activity, productivity, and enablers - IQVIA
2023 Category watch: A closer look at disruption. Trends in drug utilization for diabetes, ADHD and cystic fibrosis	https://resources.telushealth.com/en-ca/2023-category-watch-a-closer-look-at-disruption
2024 TELUS Health Drug Data Trends and National Benchmarks	https://go.telushealth.com/hubfs/telus-health-drug-trends-report-2024-en.pdf?hsLang=en-ca
2024 Drug Pipeline: What private plans need to know	https://go.telushealth.com/hubfs/drug-pipeline-2024-what-private-plans-need-to-know.pdf?hsLang=en-ca

Table 4: Health Canada Drug Approvals Between January 1, 2023, and March 31, 2024

Generic name	Sponsor	Therapeutic area	Approval date	Submission outcome
Abaloparatide	Endo Ventures Ltd	Calcium Homeostasis	January 2023	Cancelled by sponsor
Abiraterone Acetate, Niraparib	Janssen Inc	Endocrine Therapy	June 2023	Issued NOC under the NOC/c Guidance
Acalabrutinib	Astrazeneca Canada Inc	Antineoplastic Agents	February 2023	Issued NOC
Acetaminophen	B. Braun Melsungen Ag	Analgesics	February 2023	Issued NOC
Acetaminophen, Ibuprofen Sodium Dihydrate	Biosyent Pharma Inc	Analgesics	February 2024	Issued NOC
Alpha1-Proteinase Inhibitor (Human)	Grifols Therapeutics Llc	Antihemorrhagics	November 2023	Issued NOC
Amifampridine	Medunik Canada	Other Nervous System Drugs	January 2023	Issued NOC
Andexanet Alfa	Astrazeneca Canada Inc	All Other Therapeutic Products	June 2023	Issued NOC under the NOC/c Guidance
Andusomeran	Moderna Biopharma Canada Corporation	Vaccines	September 2023	Issued NOC
Avatrombopag Maleate	Swedish Orphan Biovitrum Ab (Publ)	Antihemorrhagics	November 2023	Issued NOC
Bamlanivimab	Eli Lilly Canada Inc	Immune Sera and Immunoglobulins	February 2023	Cancelled by sponsor
Bevacizumab	Celltrion Healthcare Co Ltd	Antineoplastic Agents	January 2023	Issued NOC
Brincidofovir	Emergent Biodefense Operations Lansing Llc	Antivirals for Systemic Use	December 2023	Issued NOC
Calaspargase Pegol	Servier Canada Inc	Antineoplastic Agents	November 2023	Issued NOC
Calcium Oxybate, Magnesium Oxybate, Potassium Oxybate, Sodium Oxybate	Jazz Pharmaceuticals Ireland Limited	Other Nervous System Drugs	May 2023	Issued NOC
Cangrelor Tetrasodium	Chiesi Farmaceutici S.P.A.	Antithrombotic Agents	January 2023	Issued NOC
Cannabidiol	Gw Research Limited	Antiepileptics	November 2023	Issued NOC
Capivasertib	Astrazeneca Canada Inc	Antineoplastic Agents	January 2024	Issued NOC

Generic name	Sponsor	Therapeutic area	Approval date	Submission outcome
Captopril	Ethypharm Inc	Agents Acting on the Renin-Angiotensin System	December 2023	Issued NOC
Cefditoren Pivoxil	Orimed Pharma Inc	Antibacterials for Systemic Use	March 2024	Cancelled by sponsor
Cenobamate	Endo Ventures Ltd	Antiepileptics	June 2023	Issued NOC
Ciltacabtagene Autoleucel	Janssen Inc	Antineoplastic Agents	February 2023	Issued NOC under the NOC/c Guidance
Clascoterone	Sun Pharmaceutical Industries Limited	Anti-Acne Preparations	June 2023	Issued NOC
Concizumab	Novo Nordisk Canada Inc	Antihemorrhagics	March 2023	Issued NOC
Concizumab	Novo Nordisk Canada Inc	Antihemorrhagics	July 2023	Issued NOC
Copper, Manganese Sulfate, Selenious Acid, Sodium Iodide, Zinc Sulfate	Sandoz Canada Incorporated	Blood Substitutes and Perfusion Solutions	March 2023	Issued NOC
Daprodustat	GlaxoSmithKline Inc	Antianemic Preparations	July 2023	Cancelled by sponsor
Daridorexant Hydrochloride	Idorsia Pharmaceuticals Ltd	Other Nervous System Drugs	April 2023	Issued NOC
Denosumab	Sandoz Canada Incorporated	Drugs For Treatment of Bone Diseases	February 2024	Issued NOC
Denosumab	Sandoz Canada Incorporated	Drugs For Treatment of Bone Diseases	March 2024	Issued NOC
Dexamethasone, Levofloxacin	Xediton Pharmaceuticals Inc	Ophthalmologicals	December 2023	Issued NOC
Diroximel Fumarate	Biogen Canada Inc	Immunosuppressants	February 2023	Cancelled by sponsor
Dronabinol	Tetra Bio-Pharma Inc	Antiemetics and Antinauseants	May 2023	Cancelled by sponsor
Efgartigimod Alfa	Argenx Bv	Immunosuppressants	September 2023	Issued NOC
Elranatamab	Pfizer Canada Ulc	Antineoplastic Agents	December 2023	Issued NOC under the NOC/c Guidance
Enoxaparin Sodium	Baxter Corporation	Antithrombotic Agents	July 2023	Issued NOC

Generic name	Sponsor	Therapeutic area	Approval date	Submission outcome
<i>Enterococcus faecalis</i> Inactivated, <i>Escherichia coli</i> Inactivated, <i>Klebsiella pneumoniae</i> Inactivated, <i>Proteus Vulgaris</i> Inactivated	Red Leaf Medical Inc	Vaccines	May 2023	Cancelled by sponsor
Epcoritamab	Abbvie Corporation	Antineoplastic Agents	October 2023	Issued NOC under the NOC/c Guidance
Erwinia L-Asparaginase	Porton Biopharma Limited	Antineoplastic Agents	July 2023	Cancelled by sponsor
Estradiol, Norethindrone Acetate, Relugolix	Myovant Sciences Gmbh	Pituitary and Hypothalamic Hormones and Analogues	September 2023	Issued NOC
Estradiol, Norethindrone Acetate, Relugolix	Myovant Sciences Gmbh	Pituitary and Hypothalamic Hormones and Analogues	October 2023	Issued NOC
Etesevimab	Eli Lilly Canada Inc	Immune Sera and Immunoglobulins	February 2023	Cancelled by sponsor
Etranacogene Dezaparovec	Csl Behring Canada Inc	Other Hematological Agents	October 2023	Issued NOC
Etrasimod L-Arginine	Pfizer Canada Ulc	Antidiarrheals, Intestinal Anti-Inflammatory/Anti-Infective Agents	January 2024	Issued NOC
Evinacumab	Ultragenyx Pharmaceutical Inc	Lipid Modifying Agents	September 2023	Issued NOC
Ferric Carboxymaltose	Vifor (International) Inc	Anti-anemic Preparations	March 2024	Issued NOC
Ferumoxytol	Covis Pharma Gmbh	Anti-anemic Preparations	February 2023	Cancelled by sponsor
Fidanacogene Elaparovec	Pfizer Canada Ulc	Antihemorrhagics	December 2023	Issued NOC
Foscarbidopa, Foslevodopa	Abbvie Corporation	Anti-Parkinson Drugs	May 2023	Issued NOC
Gallium (68ga) Gozetotide	Advanced Accelerator Applications Usa, Inc	Diagnostic Radiopharmaceuticals	April 2023	Issued NOC
Glofitamab	Hoffmann-La Roche Limited	Antineoplastic Agents	March 2023	Issued NOC under the NOC/c Guidance
Inebilizumab	Horizon Therapeutics Ireland Dac	Immunosuppressants	December 2023	Issued NOC
Influenza Virus Type A (H1n1)	Sanofi Pasteur Limited	Vaccines	October 2023	Issued NOC
Insulin Icodec	Novo Nordisk Canada Inc	Drugs Used in Diabetes	March 2024	Issued NOC

Generic name	Sponsor	Therapeutic area	Approval date	Submission outcome
Isotretinoin	Sun Pharmaceutical Industries Limited	Anti-Acne Preparations	June 2023	Issued NOC
Landiolol Hydrochloride	Trimedic Therapeutics Inc.	Beta Blocking Agents	November 2023	Issued NOC
Maralixibat Chloride	Mirum Pharmaceuticals, Inc.	Bile and Liver Therapy	July 2023	Issued NOC
Masitinib Mesylate	Ab Science S.A.	Antineoplastic Agents	February 2024	Issued Notice of Deficiency - Withdrawal
Meropenem Trihydrate	B.Braun Medical Inc	Antibacterials for Systemic Use	January 2024	Issued NOC
Metformin Hydrochloride	Pharmaris Canada Inc	Drugs Used in Diabetes	January 2023	Issued NOC
Methotrexate	Nordic Group B.V.	Immunosuppressants	March 2024	Issued NOC
Methylphenidate Hydrochloride	Kye Pharmaceuticals Inc	Psychoanaleptics	September 2023	Issued NOC
Metreleptin	Amryt Pharmaceuticals Dac	Other Alimentary Tract and Metabolism Products	January 2024	Issued NOC
Mirikizumab	Eli Lilly Canada Inc	Immunosuppressants	July 2023	Issued NOC
Molnupiravir	Merck Canada Inc	Antivirals for Systemic Use	April 2023	Cancelled by sponsor
Nirsevimab	Astrazeneca Canada Inc	Immune Sera and Immunoglobulins	April 2023	Issued NOC
Nivolumab, Relatlimab	Bristol-Myers Squibb Canada	Antineoplastic Agents	September 2023	Issued NOC
Odevixibat	Medison Pharma Canada Inc	Bile and Liver Therapy	October 2023	Issued NOC
Olipudase Alfa	Sanofi-Aventis Canada Inc	Other Alimentary Tract and Metabolism Products	February 2024	Issued NOC
Ranibizumab	Teva Canada Limited	Ophthalmologicals	October 2023	Issued NOC
Raxtozinameran	Biontech Manufacturing GmbH	Vaccines	September 2023	Issued NOC
Relabotulinumtoxina	Galderma Sa	Muscle Relaxants	January 2024	Cancelled by sponsor
Relugolix	Sumitomo Pharma Switzerland GmbH	Endocrine Therapy	October 2023	Issued NOC
Respiratory Syncytial Virus Prefusion F Protein (Rsvpref3)	GlaxoSmithKline Inc	Vaccines	August 2023	Issued NOC
Rimegepant	Pfizer Canada Ulc	Analgesics	December 2023	Issued NOC

Generic name	Sponsor	Therapeutic area	Approval date	Submission outcome
Risperidone	Laboratorios Farmaceuticos Rovi, S.A.	Psycholeptics	March 2024	Issued NOC
Ritlecitinib	Pfizer Canada Ulc	Immunosuppressants	November 2023	Issued NOC
Roflumilast	Arcutis Biotherapeutics Inc	Other Dermatological Preparations	April 2023	Issued NOC
Rsv F Antigen 847a, Recombinant, Rsv F Antigen 847b, Recombinant	Pfizer Canada Ulc	Vaccines	December 2023	Issued NOC
Sabizabulin	Veru Inc	Antivirals for Systemic Use	June 2023	Cancelled by sponsor
Sars-Cov-2 Prefusion Spike Delta Tm Protein, Recombinant	Sanofi Pasteur Limited	Vaccines	February 2023	Cancelled by sponsor
Sars-Cov-2 Prefusion Spike Delta Tm Protein, Recombinant	Sanofi Pasteur Limited	Vaccines	February 2023	Cancelled by sponsor
Sars-Cov-2 Recombinant Spike Protein (Omicron Xbb.1.5)	Novavax Inc	Vaccines	December 2023	Issued NOC
Setmelanotide Acetate	Rhythm Pharmaceuticals Inc	Antiobesity Preparations, Excluding Diet Products	May 2023	Issued NOC
Smallpox Vaccine Dried	Emergent Product Development Gaithersburg Inc	Vaccines	December 2023	Issued NOC
Somapacitan	Novo Nordisk Canada Inc	Pituitary and Hypothalamic Hormones and Analogues	July 2023	Issued NOC
Spesolimab	Boehringer Ingelheim Canada Ltd Ltee	Immunosuppressants	March 2023	Issued NOC
Teclistamab	Janssen Inc	Antineoplastic Agents	July 2023	Issued NOC under the NOC/c Guidance
Tirbanibulin	Avir Pharma Inc	Antibiotics and Chemotherapy for Dermatological Use	May 2023	Issued NOC
Trastuzumab	Prestige Biopharma Ltd	Antineoplastic Agents	June 2023	Cancelled by sponsor
Tremelimumab	Astrazeneca Canada Inc	Antineoplastic Agents	August 2023	Issued NOC
Ustekinumab	Jamp Pharma Corporation	Immunosuppressants	November 2023	Issued NOC

Generic name	Sponsor	Therapeutic area	Approval date	Submission outcome
Ustekinumab	Amgen Canada Inc	Immunosuppressants	December 2023	Issued NOC
Vericiguat	Bayer Inc	Cardiac Therapy	April 2023	Issued NOC
Vibrio Cholerae, Strain Cvd 103-Hgr, Live	Emergent Travel Health Inc	Vaccines	May 2023	Issued NOC
Vutrisiran	Alnylam Netherlands B.V.	Other Nervous System Drugs	October 2023	Issued NOC

NOC = Notice of Compliance, NOC/c = Notice of Compliance with conditions

Table 5: FDA Drug Approvals Between January 1, 2023, and March 31, 2024

Generic name	Brand name	Indication	Sponsor	Approval date
Abacavir Sulfate; Lamivudine	Abacavir Sulfate and Lamivudine	HIV-1	Mylan Pharmaceuticals, Inc.	December 22, 2023
Abacavir; Dolutegravir; Lamivudine	Abacavir; Dolutegravir; Lamivudine	HIV-1	Aurobindo Pharma US, Inc.	August 14, 2023
Abacavir; Dolutegravir; Lamivudine	Abacavir; Dolutegravir; Lamivudine	HIV-1	Mylan Pharmaceuticals, Inc.	August 16, 2023
Abiraterone Acetate; Niraparib Tosylate	Akeega	<i>BRCA</i> -mutated metastatic castration-resistant prostate cancer (mCRPC)	Janssen Biotech, Inc.	August 11, 2023
Acetaminophen; Ibuprofen	Combogesic	Acute pain	AFT Pharmaceuticals, Inc.	March 1, 2023
Acetaminophen; Ibuprofen Sodium	Combogesic IV	Acute pain	AFT Pharmaceuticals Ltd.	October 17, 2023
Acetylcysteine Lysine	Legubeti	Antidote to prevent or lessen hepatic injury following ingestion of hepatotoxic quantities of acetaminophen	Galephar Pharmaceutical Research, Inc.	February 13, 2024
Adalimumab-aaty	Yuflyma	Rheumatoid arthritis, juvenile idiopathic arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn disease, ulcerative colitis, plaque psoriasis, Hidradenitis suppurativa	Celltrion, Inc.	May 23, 2023
Adalimumab-ryvk	Simlandi	Rheumatoid arthritis, juvenile idiopathic arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn disease, ulcerative colitis, plaque psoriasis, hidradenitis suppurativa, uveitis	Alvotect USA, Inc.	February 23, 2024

Generic name	Brand name	Indication	Sponsor	Approval date
Adapalene; Benzoyl Peroxide; Clindamycin Phosphate	Cabtreo	Acne vulgaris	Bausch Health US, LLC	October 20, 2023
Aflibercept	Eylea HD	Neovascular age-related macular degeneration, diabetic macular edema, diabetic retinopathy	Regeneron Pharmaceuticals, Inc.	August 18, 2023
Albuterol Sulfate; Budesonide	Airsupra	Asthma	Bond Avillion 2 Development LP	January 10, 2023
Aprocitentan	Tryvio	Hypertension	Idorsia Pharmaceuticals Ltd.	March 19, 2024
Aripiprazole	Abilify Asimtufii	Schizophrenia, Bipolar I Disorder	Otsuka Pharmaceutical Company, Ltd.	April 27, 2023
Atorvastatin Calcium	Atorvaliq	Hyperlipidemia, hypercholesterolemia	CMP Development LLC	February 1, 2023
Avacincaptad Pegol Sodium	Izervay	Geographic atrophy secondary to age-related macular degeneration	IVERIC bio, Inc.	August 4, 2023
Berdazimer Sodium	Zelsuvmi	Molluscum contagiosum	LNHC, Inc.	January 5, 2024
Bevacizumab-tjnj	Avzivi	Metastatic colorectal cancer	Bio-Thera Solutions Ltd.	December 6, 2023
Bexagliflozin	Brenzavvy	Type 2 diabetes mellitus	TheracosBio, LLC	January 20, 2023
Bimekizumab-bkzx	Bimzelx	Plaque psoriasis	UCB, Inc.	October 17, 2023
Birch Triterpenes	Filsuvez	Wounds associated with dystrophic and junctional epidermolysis bullosa	Amryt Pharmaceuticals DAC	December 18, 2023
Bosutinib Monohydrate	Bosulif	Philadelphia chromosome-positive chronic myelogenous leukemia	PF Prism C.V.	September 26, 2023
Budesonide	Eohilia	Eosinophilic esophagitis	Takeda Pharmaceuticals USA, Inc.	February 9, 2024
Budesonide; Formoterol Fumarate	Symbicort Aerosphere	Chronic obstructive pulmonary disease (COPD)	AstraZeneca Pharmaceuticals LP	April 28, 2023
Buprenorphine	Brixadi	Opioid use disorder	Braeburn Inc.	May 23, 2023
Cabazitaxel	Cabazitaxel	Metastatic castration-resistant prostate cancer	Sandoz, Inc.	October 27, 2023
Cabazitaxel	Cabazitaxel	Metastatic castration-resistant prostate cancer	Actavis LLC	March 14, 2024
Cantharidin	Ycanth	Molluscum contagiosum	Verrica Pharmaceuticals, Inc.	July 21, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Capivasertib	Truqap	HR-positive, HER2-negative locally advanced or metastatic breast cancer	AstraZeneca Pharmaceuticals LP	November 16, 2023
Carbon Dioxide	Carbon Dioxide	Insufflation gas during laparoscopic surgery	Haun Specialty Gases, Inc.	February 17, 2024
Cefazolin Sodium	Cefazolin Sodium	Perioperative prophylaxis	HQ Speciality Pharma Corp.	May 8, 2023
Cefepime Hydrochloride; Enmetazobactam	Exblifep	Complicated urinary tract infections	Allegra Therapeutics SAS	February 22, 2024
Cipaglucosidase alfa-atga	Pombilitibla	Pompe disease	Amicus Therapeutics US, LLC	September 28, 2023
Clobetasol Propionate	Clobetasol Propionate	Post-operative inflammation and pain following ocular surgery	Formosa Pharmaceuticals, Inc.	March 4, 2024
Colchicine	Lodoco	Reduce risk of myocardial infarction, stroke, coronary revascularization, and cardiovascular death associated with established atherosclerotic disease	Agepha Pharma FZ LLC	June 16, 2023
Crizotinib	Xalkori	Metastatic non-small cell lung cancer (NSCLC), systemic anaplastic large cell lymphoma (ALCL), inflammatory myofibroblastic tumour (IMT)	PF Prism C.V.	September 7, 2023
Cyclophosphamide	Cyclophosphamide	Malignant lymphomas: Hodgkin's disease, lymphocytic lymphoma, mixed-cell type lymphoma, histiocytic lymphoma, Burkitt's lymphoma; multiple myeloma, leukemias, mycosis fungoides, neuroblastoma, adenocarcinoma	Dr. Reddy's Laboratories Inc.	June 7, 2023
Cyclophosphamide	Cyclophosphamide	Malignant lymphomas: Hodgkin's disease, lymphocytic lymphoma, mixed-cell type lymphoma, histiocytic lymphoma, Burkitt's lymphoma; multiple myeloma, leukemias, mycosis fungoides, neuroblastoma, adenocarcinoma	Nevakar Injectables, Inc.	June 27, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Cyclophosphamide	Cyclophosphamide	Malignant lymphomas: Hodgkin's disease, lymphocytic lymphoma, mixed-cell type lymphoma, histiocytic lymphoma, Burkitt's lymphoma; multiple myeloma, leukemias, mycosis fungoides, neuroblastoma, adenocarcinoma	Sandoz, Inc.	September 12, 2023
Cyclosporine	Veveye	Dry eye disease	Novaliq GmbH	May 30, 2023
Dabrafenib Mesylate	Tafinlar	Low-grade glioma with <i>BRAF</i> V600E mutation	Novartis Pharmaceuticals Corp.	March 16, 2023
Danicopan	Voydeya	Extravascular hemolysis associated with paroxysmal nocturnal hemoglobinuria	Alexion Pharmaceuticals, Inc.	March 29, 2024
Daprodustat	Jesduvroq	Anemia due to chronic kidney disease	GlaxoSmithKline LLC	February 1, 2023
Daptomycin	Daptomycin	Antibiotic (multiple indications)	Xellia Pharmaceuticals ApS	January 30, 2023
Darunavir and Ritonavir	Darunavir and Ritonavir	HIV-1	Mylan Pharmaceuticals, Inc.	December 22, 2023
Dasatinib	Phyrago	Philadelphia chromosome-positive chronic myeloid leukemia	Nanocopoeia LLC	December 5, 2023
Denosumab-bbdz	Jubbonti	Osteoporosis	Sandoz, Inc.	March 5, 2024
Denosumab-bbdz	Wyost	Osteoporosis	Sandoz, Inc.	March 5, 2024
Deutetrabenazine	Austedo XR	Huntington's disease and tardive dyskinesia	Teva Neuroscience, Inc.	February 17, 2023
Dolutegravir	Dolutegravir	HIV-1	Laurus Generics, Inc.	April 28, 2023
Dolutegravir, Emtricitabine, Tenofovir Alafenamide	Dolutegravir, Emtricitabine, Tenofovir Alafenamide	HIV-1	Aurobindo Pharma USA, Inc.	May 26, 2023
Dolutegravir; Lamivudine; Tenofovir Disoproxil Fumarate	Dolutegravir; Lamivudine; Tenofovir Disoproxil Fumarate	HIV-1	Emcure Pharmaceuticals Ltd	July 12, 2023
Dolutegravir; Tenofovir Disoproxil Fumarate; Lamivudine	Dolutegravir; Tenofovir Disoproxil Fumarate; Lamivudine	HIV-1	Strides Pharma, Inc.	September 14, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Dolutegravir; Emtricitabine; Tenofovir Alafenamide	Dolutegravir; Emtricitabine; Tenofovir Alafenamide	HIV-1	Lupin Pharmaceuticals, Inc.	January 19, 2023
Dolutegravir; Emtricitabine; Tenofovir Alafenamide	Dolutegravir; Emtricitabine; Tenofovir Alafenamide	HIV-1	Laurus Generics, Inc.	October 12, 2023
Dolutegravir; Emtricitabine; Tenofovir Alafenamide	Dolutegravir; Emtricitabine; Tenofovir Alafenamide	HIV-1	Hetero Labs Limited, Unit-III, India	January 18, 2024
Dolutegravir; Lamivudine; Tenofovir Alafenamide	Dolutegravir; Lamivudine; Tenofovir Alafenamide	HIV-1	Lupin Pharmaceuticals, Inc.	July 18, 2023
Durlobactam Sodium; Sulbactam Sodium	Xacduro	Hospital-acquired bacterial pneumonia (HABP), ventilator-associated bacterial pneumonia (VABP)	Entasis Therapeutics, Inc.	May 23, 2023
Efavirenz, Emtricitabine, Tenofovir Alafenamide	Efavirenz, Emtricitabine, Tenofovir Alafenamide	HIV-1	Mylan Pharmaceuticals, Inc.	March 22, 2024
Efbemalenograstim alfa-vuxw	Ryzneuta	Decrease incidence of infection as manifested by febrile neutropenia	Evive Biotechnology Singapore PTE Ltd.	November 16, 2023
Efgartigimod alfa and Hyaluronidase-qvfc	Vyvgart Hytrulo	Generalized myasthenia gravis (gMG)	Argenx BV	June 20, 2023
Eflornithine Hydrochloride	Iwilfin	Reduce risk of relapse of high-risk neuroblastoma	USWM, LLC	December 13, 2023
Elacestrant Dihydrochloride	Orserdu	ER-positive, HER-2 negative, or <i>ESR-1</i> mutated advanced, or metastatic breast cancer	Stemline Therapeutics, Inc.	January 27, 2023
Elexacaftor, Ivacaftor, Tezacaftor; Ivacaftor	Trikafta	Cystic fibrosis (CF) with at least 1 F508del mutation in the CFTR gene or a mutation in the CFTR gene that is responsive	Vertex Pharmaceuticals Inc.	April 26, 2023
Elranatamab	Elrexfio	Relapsed or refractory multiple myeloma	Pfizer, Inc.	August 14, 2023
Eltrombopag Choline	Alvaiz	Thrombocytopenia, severe aplastic anemia	Teva Pharmaceuticals, Inc.	November 29, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Entrectinib	Rozlytrek	Solid tumours with neurotrophic tyrosine receptor kinase (NTRK) gene fusion	Genentech, Inc.	October 20, 2023
Epcoritamab-bysp	Epkinly	Relapsed or refractory diffuse large B-cell lymphoma, not otherwise specified (DLBCL, NOS)	Genmab US, Inc.	May 19, 2023
Epinephrine	Adrenalin	Hypotension associated with septic shock	Par Sterile Products, LLC	April 21, 2023
Eplontersen Sodium	Wainua (Autoinjector)	Polyneuropathy of hereditary transthyretin-mediated amyloidosis	Ionis Pharmaceuticals, Inc.	December 21, 2023
Etrasimod Arginine	Velsipity	Ulcerative colitis	Pfizer, Inc.	October 12, 2023
Fentanyl Citrate	Fentanyl Citrate	Opioid analgesic supplement in general anesthesia	Exela Pharma Sciences, LLC	February 8, 2023
Fezolinetant	Veozah	Vasomotor symptoms due to menopause	Astellas Pharma US, Inc.	May 12, 2023
Flotufolastat F 18 Gallium	Posluma	Diagnostic aid in PET of prostate-specific membrane antigen (PSMA) positive lesions in prostate cancer	Blue Earth Diagnostics Ltd.	May 25, 2023
Fosaprepitant Dimeglumine	Focinvez	Prevention of acute and delayed nausea and vomiting associated with cancer chemotherapy	Spes Pharmaceuticals, Inc.	August 22, 2023
Fruquintinib	Fruzaqla	Metastatic colorectal cancer	Takeda Pharmaceuticals USA, Inc.	November 8, 2023
Gepirone Hydrochloride	Exxua	Major depressive disorder	Fabre-Kramer Pharmaceuticals, Inc.	September 22, 2023
Givinostat Hydrochloride	Duvyzat	Duchenne muscular dystrophy	Italfarmaco S.p.A.	March 21, 2024
Glofitamab-gxbm	Columvi	Relapsed or refractory diffuse large B-cell lymphoma not otherwise specified (DLBCL, NOS), large B-cell lymphoma (LBCL) arising from follicular lymphoma	Genentech, Inc.	June 15, 2023
Glycopyrrolate; Neostigmine Methylsulfate	Prevduo	Reversal of effects of non-depolarizing neuromuscular blocking agents after surgery	Slayback Pharma LLC	February 23, 2023
Heparin Sodium; Taurolidine	Defencath	Prevention of catheter-related bloodstream infections in kidney failure	CorMedix, Inc.	November 15, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Hyaluronidase Human Recombinant for Further Manufacturing Use	Hyaluronidase Human Recombinant for Further Manufacturing Use	Used for further manufacture of the final product Vyvgart Hytrulo	Halozyme Therapeutics, Inc.	June 20, 2023
Hydromorphone Hydrochloride	Hydromorphone Hydrochloride	Acute pain	Hikma Pharmaceuticals USA, Inc.	December 14, 2023
Iloprost	Aurlumyn	Severe frostbite to reduce risk of digit amputation	Eicos Sciences, Inc.	February 13, 2024
Infliximab-dyyb	Zymfentra	Ulcerative colitis, Crohn disease	Celltrion, Inc.	October 20, 2023
Iptacopan Hydrochloride	Fabhalta	Paroxysmal nocturnal hemoglobinuria	Novartis Pharmaceuticals Corp.	December 5, 2023
Lacosamide	Motpoly XR	Partial-onset seizures	Aucta Pharmaceuticals, Inc.	May 4, 2023
Lecanemab-irmb	Leqembi	Alzheimer disease	Eisai Inc.	January 6, 2023
Leniolisib Phosphate	Joenja	Activated phosphoinositide 3-kinase delta (PI3K δ) syndrome (APDS)	Pharming Technologies B.V.	March 24, 2023
Letibotulinumtoxina-wlbg	Letybo	Temporary improvement in appearance of glabellar lines	Hugel, Inc.	February 29, 2024
Lotilaner	Xdemvy	Demodex blepharitis	Tarsus Pharmaceuticals, Inc.	July 24, 2023
Macitentan; Tadalafil	Opsynvi	Pulmonary arterial hypertension	Actelion Pharmaceuticals US, Inc.	March 22, 2024
Magnesium Sulfate; Polyethylene Glycol 3350; Potassium Chloride; Sodium Chloride; Sodium Sulfate	Suflave	Cleansing of the colon in preparation for colonoscopy	Braintree Laboratories, Inc.	June 15, 2023
Melphalan Hydrochloride	Hepzato	Uveal melanoma	Delcath Systems, Inc.	August 14, 2023
Melphalan Hydrochloride	Melphalan Hydrochloride	Multiple myeloma	Apotex, Inc.	August 18, 2023
Meropenem	Meropenem	Bacterial meningitis	HQ Speciality Pharma Corp.	July 26, 2023
Metformin Hydrochloride; Sitagliptin	Zituvimet	Type 2 diabetes mellitus	Zydus Worldwide DMCC	November 3, 2023
Metronidazole	Likmez	Trichomoniasis, amebiasis, anaerobic bacterial infections	Saptalis Pharmaceuticals LLC	September 22, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Micafungin Sodium	Micafungin in Sodium Chloride 0.9%	Candidemia, acute disseminated candidiasis, <i>Candida</i> peritonitis and abscesses, esophageal candidiasis	Baxter Healthcare Corp.	September 29, 2023
Miglustat	Opfolda	Pompe disease	Amicus Therapeutics US, LLC	September 28, 2023
Mirikizumab-mrkz	OmvoH	Ulcerative colitis	Eli Lilly and Company	October 26, 2023
Momelotinib Dihydrochloride	Ojjaara	Intermediate or high-risk myelofibrosis	GlaxoSmithKline LLC	September 15, 2023
Motixafortide Acetate	Aphexda	Preparation for autologous transplantation in multiple myeloma	BioLineRx Ltd.	September 8, 2023
Nalmefene Hydrochloride	Opvee	Opioid overdose	Opiant Pharmaceuticals, Inc.	May 22, 2023
Naloxone Hydrochloride	Rextovy	Opioid overdose	Amphastar Pharmaceuticals Inc.	March 7, 2023
Naloxone Hydrochloride	Rivive	Opioid overdose	Harm Reduction Therapeutics, Inc.	July 28, 2023
Natalizumab-sztn	Tyruko	Multiple sclerosis, Crohn disease	Sandoz, Inc.	August 24, 2023
Nedosiran Sodium	Rivfloza	Primary hyperoxaluria type 1 (PH1)	Novo Nordisk, Inc.	September 29, 2023
Niraparib Tosylate	Zejula	Advanced or germline <i>BRCA</i> -mutated epithelial ovarian, fallopian tube, or primary peritoneal cancer	GlaxoSmithKline LLC	April 26, 2023
Nirmatrelvir; Ritonavir	Paxlovid	Coronavirus disease 2019 (COVID-19)	Pfizer, Inc.	May 25, 2023
Nirogacestat Hydrobromide	Ogsiveo	Desmoid tumours	SpringWorks Therapeutics, Inc.	November 27, 2023
Nirsevimab-alip	Beyfortus	Prevention of respiratory syncytial virus (RSV)	AstraZeneca AB	July 17, 2023
OmaVeloxolone	Skyclarys	Friedreich's ataxia	Reata Pharmaceuticals, Inc.	February 28, 2023
Oxaprozin	Coxanto	Osteoarthritis, rheumatoid arthritis, juvenile rheumatoid arthritis	Solubiomix, LLC	October 20, 2023
Paclitaxel	Paclitaxel	Advanced or metastatic breast, non-small cell lung, or adenocarcinoma of the pancreas cancers	Teva Pharmaceuticals, Inc.	May 11, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Palovarotene	Sohonos	Reduction in volume of new heterotopic ossification associated with fibrodysplasia ossificans progressive	Ipsen Biopharmaceuticals, Inc.	August 16, 2023
Pantoprazole Sodium	Pantoprazole Sodium in 0.9% Sodium Chloride	Gastroesophageal reflux disease associated with erosive esophagitis, pathological hypersecretory conditions such as Zollinger-Ellison syndrome	Baxter Healthcare Corp.	February 14, 2024
Pegcetacoplan	Syfovre	Geographical atrophy secondary to age-related macular degeneration	Apellis Pharmaceuticals, Inc.	February 17, 2023
Pegunigalsidase alfa-iwxj	Elfabrio	Fabry disease	Chiesi Farmaceutici S.p.A.	May 9, 2023
Pemetrexed Disodium	Pemetrexed	Metastatic non-squamous non-small cell lung cancer (NSCLC), malignant pleural mesothelioma	Shilpa Medicare Limited	May 22, 2023
Perfluorohexyloctane	Miebo	Dry eye disease	Bausch & Lomb Inc.	May 18, 2023
Phentolamine Mesylate	Ryzumvi	Pharmacologically induced mydriasis	Ocuphire Pharma, Inc.	September 25, 2023
Phenylephrine Hydrochloride; Tropicamide	Mydcombi	Diagnostic aid to induce mydriasis	Eyenovia, Inc.	May 5, 2023
Pilocarpine Hydrochloride	Qlosi	Presbyopia	Orasis Pharmaceuticals, Ltd.	October 17, 2023
Pirtobrutinib	Jaypirca	Relapsed or refractory mantle cell lymphoma	Loxo Oncology, Inc.	January 27, 2023
Pozelimab-bbfg	Veopoz	CD55-deficient protein-losing enteropathy (CHAPLE disease)	Regeneron Pharmaceuticals, Inc.	August 18, 2023
Quizartinib Dihydrochloride	Vanflyta	Acute myeloid leukemia (AML) that is FLT3 internal tandem duplication (ITD)-positive	Daiichi Sankyo, Inc.	July 20, 2023
Repotrectinib	Augtyro	Locally advanced or metastatic ROS1-positive non-small cell lung cancer	Bristol-Myers Squibb Company	November 15, 2023
Resmetirom	Rezdiffra	Noncirrhotic non-alcoholic steatohepatitis	Madrigal Pharmaceuticals, Inc.	March 14, 2024
Retifanlimab-dlwr	Zynyz	Metastatic or recurrent locally advanced Merkel cell carcinoma	Incyte Corp.	March 22, 2023
Rezafungin Acetate	Rezzayo	Candidemia and invasive candidiasis	Cidara Therapeutics, Inc.	March 22, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Rilpivirine Hydrochloride	Edurant Ped	HIV-1	Janssen Products LP	March 15, 2024
Risperidone	Risvan	Schizophrenia	Laboratorios Farmacéuticos ROVI, S.A.	March 29, 2024
Risperidone	Rykindo	Schizophrenia, Bipolar I Disorder	Shandong Luye Pharmaceutical Co., Ltd.	January 13, 2023
Risperidone	Uzedy	Schizophrenia	Teva Neuroscience	April 28, 2023
Ritlecitinib Tosylate	Litfulo	Alopecia areata	Pfizer, Inc.	June 23, 2023
Rizatriptan Benzoate	Rizafilm	Migraines, with or without aura	IntelGenx Corp.	April 14, 2023
Roflumilast	Zoryve	Seborrheic dermatitis	Arcutis Biotherapeutics, Inc.	December 15, 2023
Rozanolixizumab-noli	Rystiggo	Generalized myasthenia gravis (gMG)	UCB, Inc.	June 26, 2023
Secukinumab	Cosentyx	Active psoriatic arthritis, active ankylosing spondylitis, active non-radiographic axial spondylarthritis	Novartis Pharmaceutical Corp.	October 6, 2023
Sildenafil Citrate	Liqrev	Pulmonary arterial hypertension	CMP Development LLC	April 28, 2023
Sitagliptin	Zituvio	Type 2 diabetes mellitus	Zydus Worldwide DMCC	October 18, 2023
Sodium Oxybate	Lumryz	Cataplexy or excessive daytime sleepiness (EDS) associated with narcolepsy	Avadel CNS Pharmaceuticals, LLC	May 1, 2023
Somatrogon-ghla	Ngenla	Growth failure due to inadequate secretion of endogenous growth hormone	Pfizer Ireland Pharmaceuticals	June 27, 2023
Sotagliflozin	Inpefa	Prevention of heart failure and cardiovascular death associated with heart failure, type 2 diabetes, and chronic kidney disease	Lexicon Pharmaceuticals, Inc.	May 26, 2023
Sotatercept-csrk	Winrevair	Pulmonary arterial hypertension	Merck Sharp & Dohme LLC	March 26, 2024
Sparsentan	Filspari	Reduce proteinuria in primary immunoglobulin A nephropathy	Traverse Therapeutics, Inc.	February 17, 2023
Talazoparib Tosylate	Talzenna	BRCA-mutated HER2-negative locally advanced or metastatic breast cancer	Pfizer, Inc.	March 7, 2024
Talquetamab-tgvs	Talvey	Relapsed or refractory multiple myeloma	Janssen Biotech, Inc.	August 9, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Technetium Tc-99m Labelled Carbon	Technegas Kit	Diagnostic aid for visualization of pulmonary ventilation and evaluation of pulmonary embolism	Cyclomedica Australia Pty Ltd.	September 29, 2023
Technetium Tc-99m Mertiatide Injection Kit	Technetium Tc-99m Mertiatide Injection Kit	Diagnostic aid to assess renal function for whole kidney and renal cortex	Jubilant Draximage Inc.	January 30, 2023
Tenapanor Hydrochloride	Xphozah	Chronic kidney disease	Ardelyx, Inc.	October 17, 2023
Tirzepatide	Zepbound (Autoinjector)	Chronic weight management	Eli Lilly and Company	November 8, 2023
Tirzepatide	Zepbound	Chronic weight management	Eli Lilly and Company	November 8, 2023
Tislelizumab-jsgr	Tevimbra	Unresectable or metastatic esophageal squamous cell carcinoma	BeiGene USA, Inc.	March 13, 2024
Tocilizumab-aazg	Tyennebla	Rheumatoid arthritis, giant cell arteritis, polyarticular juvenile idiopathic arthritis, systemic juvenile idiopathic arthritis	Fresenius Kabi USA, LLC	March 5, 2024
Tocilizumab-bavi	Tofidence	Rheumatoid arthritis, polyarticular juvenile idiopathic arthritis, systemic juvenile idiopathic arthritis	Biogen MA, Inc.	September 29, 2023
Tofersen	Qalsody	Amyotrophic lateral sclerosis (ALS) with mutation in the superoxide dismutase 1 (SOD1) gene	Biogen Inc.	April 25, 2023
Toripalimab-tpzi	Loqtorzi	Metastatic or recurrent locally advanced nasopharyngeal carcinoma	Coherus BioSciences, Inc.	October 27, 2023
Trametinib	Mekinist	Low-grade glioma with <i>BRAF</i> V600E mutation	Novartis Pharmaceuticals Corp.	March 16, 2023
Trametinib Dimethyl Sulfoxide	Mekinist	Low-grade glioma with <i>BRAF</i> V600E mutation	Novartis Pharmaceuticals Corp.	March 16, 2023
Travoprost	iDose TR	Reduction of elevated intraocular pressure in open-angle glaucoma or ocular hypertension	Glaukos Corp.	December 13, 2023
Trofinetide	Daybue	Rett syndrome	Acadia Pharmaceuticals, Inc.	March 10, 2023
Ustekinumab-auub	Wezlana	Plaque psoriasis, psoriatic arthritis, Crohn disease, ulcerative colitis	Amgen, Inc.	October 31, 2023

Generic name	Brand name	Indication	Sponsor	Approval date
Ustekinumab-auub	Wezlana	Plaque psoriasis, psoriatic arthritis, Crohn disease, ulcerative colitis	Amgen, Inc.	October 31, 2023
Vadadustat	Vafseo	Anemia due to chronic kidney disease	Akebia Therapeutics, Inc.	March 27, 2024
Vamorolone	Agamree	Duchenne muscular dystrophy	Santhera Pharmaceuticals Ltd.	October 26, 2023
Vancomycin Hydrochloride	Vancomycin Hydrochloride	Antibiotic (multiple indications)	Zhejiang Novus Pharmaceuticals Co. Ltd.	January 20, 2023
Vasopressin	Vasopressin In Sodium Chloride 0.9%	Hypotension associated with vasodilatory shock	Baxter Healthcare Corp.	September 29, 2023
Vedolizumab	Entyvio	Ulcerative colitis	Takeda Pharmaceuticals US, Inc.	September 27, 2023
Velmanase alfa-tycv	Lamzede	Alpha-mannosidosis	Chiesi Farmaceutici SpA	February 16, 2023
Vonoprazan Fumarate	Voquezna	Erosive esophagitis, <i>Helicobacter pylori</i> (<i>H. pylori</i>) infection	Phathom Pharmaceuticals, Inc.	November 1, 2023
Vortioxetine	Sehippy	Major depressive disorder	Seasons Biotechnology (Taizhou) Co., Ltd	February 16, 2024
Zavegepant Hydrochloride	Zavzpret	Migraines, with or without aura	Pfizer Inc.	March 9, 2023
Zilucoplan Sodium	Zilbrysq	Generalized myasthenia gravis (gMG)	UCB, Inc.	October 17, 2023
Zolpidem Tartrate	Zolpidem Tartrate	Transient insomnia	Almatica Pharma, LLC	May 9, 2023



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