



Patented
Medicine Prices
Review Board

Conseil d'examen
du prix des médicaments
brevetés

Canadian oncology drug market: a high-growth, high-price therapeutic area



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Conflict of interest disclosure

➤ No conflicts of interest to declare.

Patented Medicine Prices Review Board has a dual role in the Canadian healthcare system

Independent, quasi-judicial agency that regulates ceiling prices of all patented drugs sold in Canada. Created in 1987 as part of a major overhaul of Canada's drug patent regime, with a dual role:

- 1) **Regulatory:** To ensure that prices charged by patentees for patented medicines sold in Canada are not excessive.
- 2) **Reporting:** To report on pharmaceutical trends of all medicines and on R&D spending by pharmaceutical patentees.

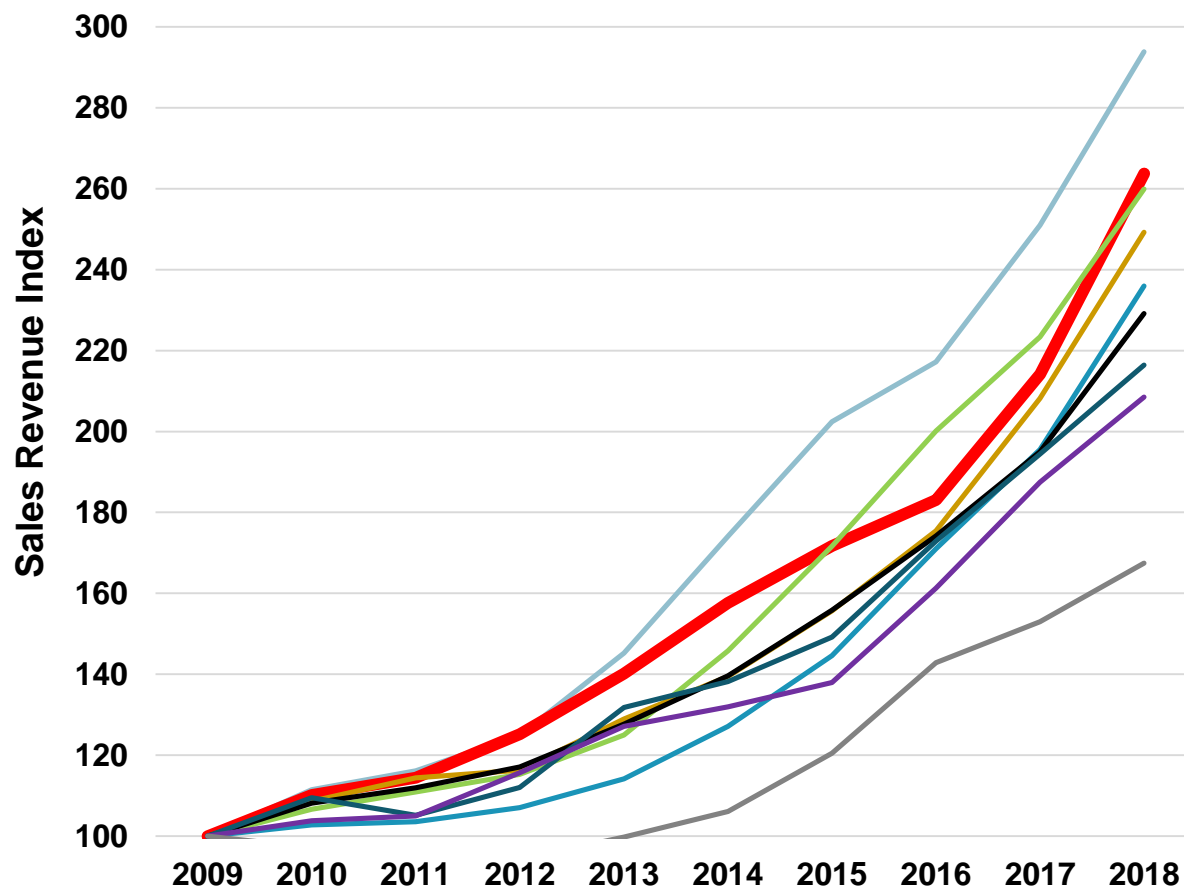
The PMPRB assesses new drugs for level of therapeutic benefit relative to existing therapies, and assigns a ceiling price that is based on either:

- The median international price of the **PMPRB7 comparator countries**: Germany, France, Italy, Sweden, Switzerland, UK, US;
- The highest price in the domestic therapeutic class, or;
- A combination of the two.

PMPRB allows price increases linked to CPI, but never to the point of becoming highest in the PMPRB7.

Canada has had one of the fastest-growing oncology markets over the past decade, with a compound annual growth rate of 11.4%

Oncology Sales Revenue Index, Canada, the PMPRB7, and OECD median, 2009 to 2018



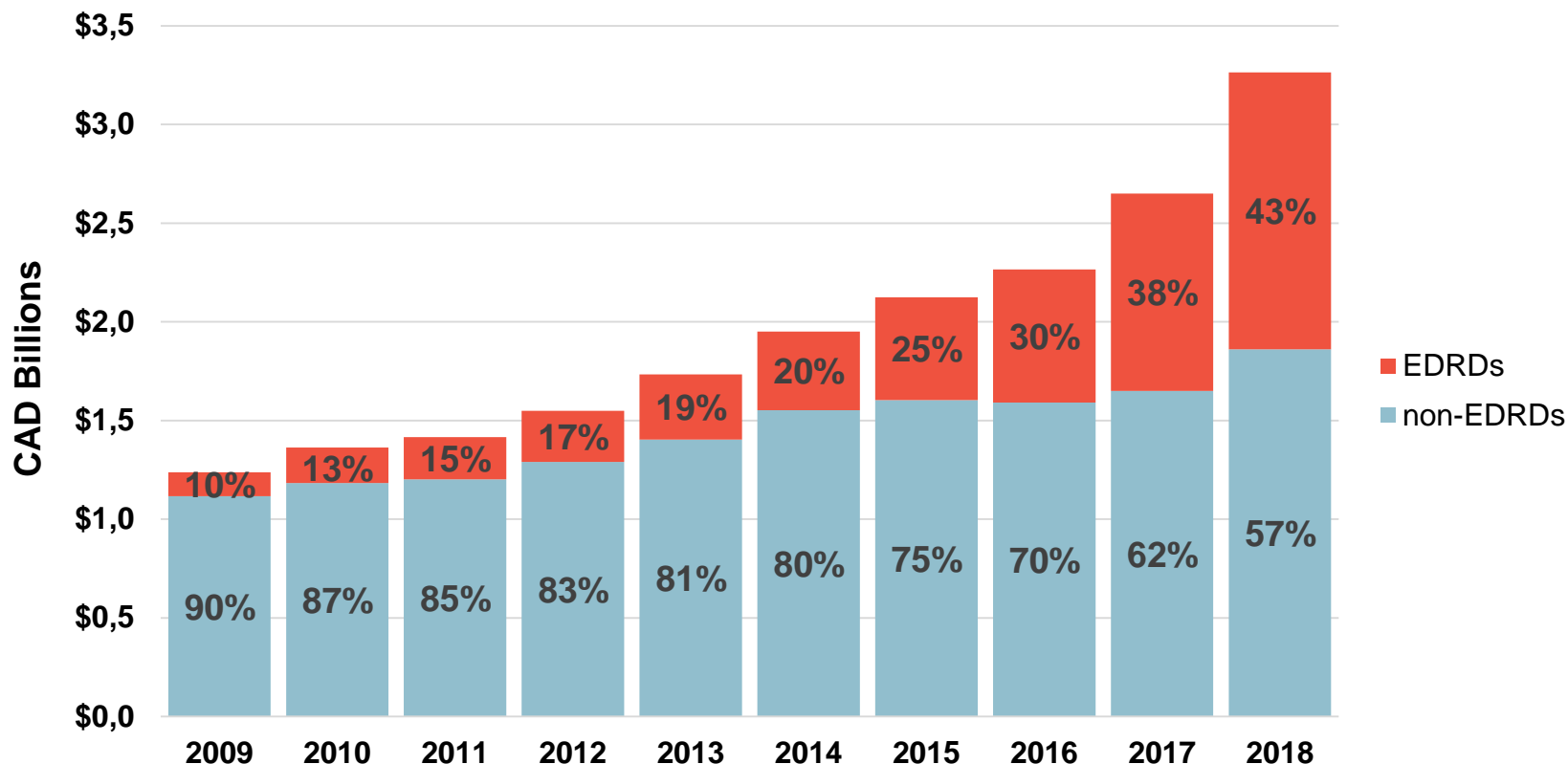
2018 oncology sales index (base year 2009)	
UK	294
Canada	264
US	260
Italy	249
Sweden	236
OECD median	229
Germany	216
Switzerland	209
France	167

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Canada \$B	\$1.24	\$1.36	\$1.42	\$1.55	\$1.73	\$1.95	\$2.12	\$2.27	\$2.65	\$3.26
Growth %	-	10%	4%	9%	12%	13%	9%	7%	17%	23%

Data Source: Sales: IQVIA MIDAS™ Database, prescription retail and hospital markets, 2009 to 2018. All rights reserved.

“Expensive Drugs for Rare Diseases” have grown to become a substantial proportion of the oncology market

Sales revenue of oncology medicines, EDRDs and non-EDRDs, Canada, 2009 to 2018

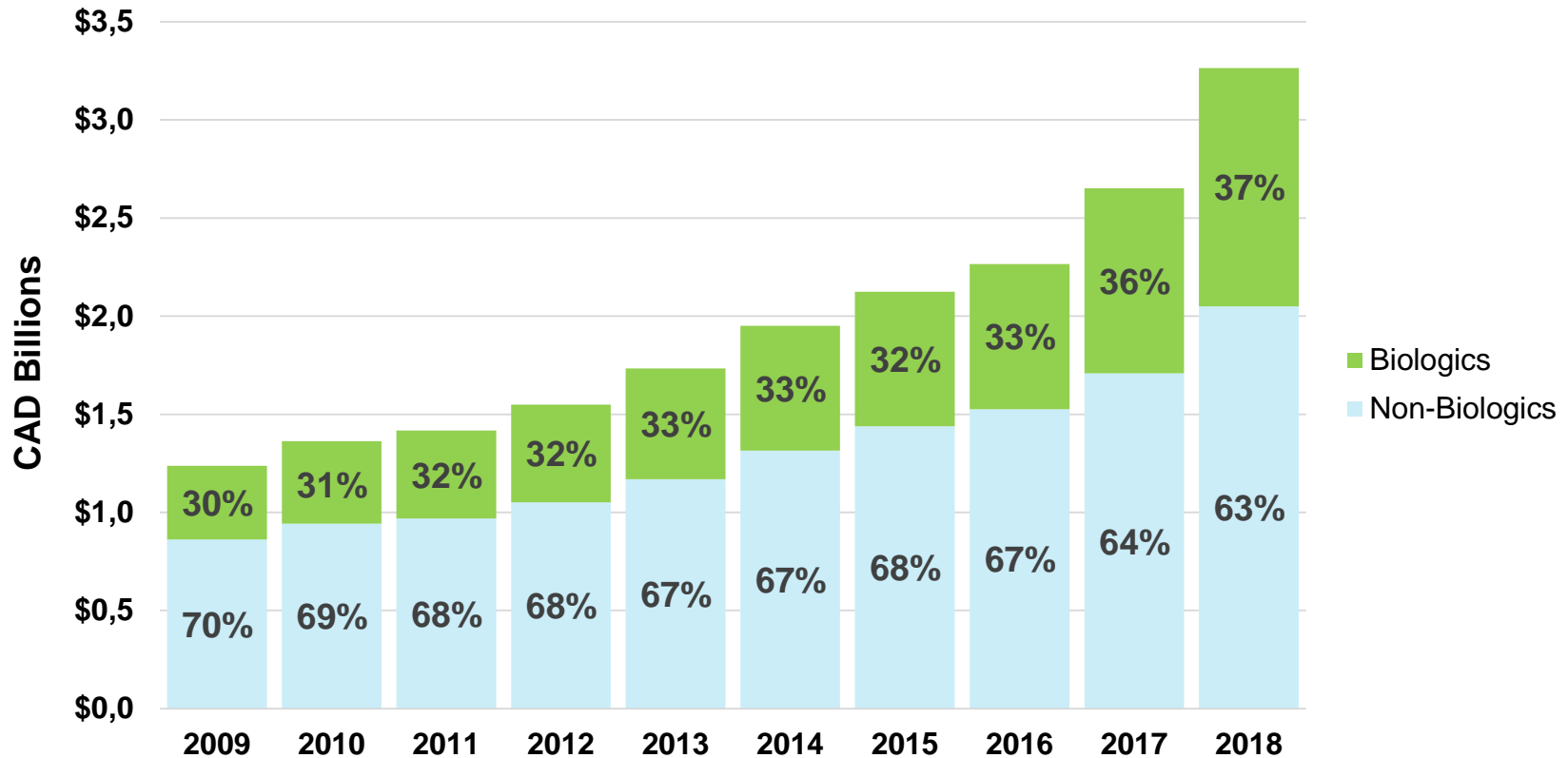


EDRD definition for oncology medicines: orphan designation and >\$7,500 CAD for 28-day course of treatment

Data Source: Sales: IQVIA MIDAS™ Database, prescription retail and hospital markets, 2009 to 2018. All rights reserved.

Biologics are gradually increasing as a share of oncology sales revenue

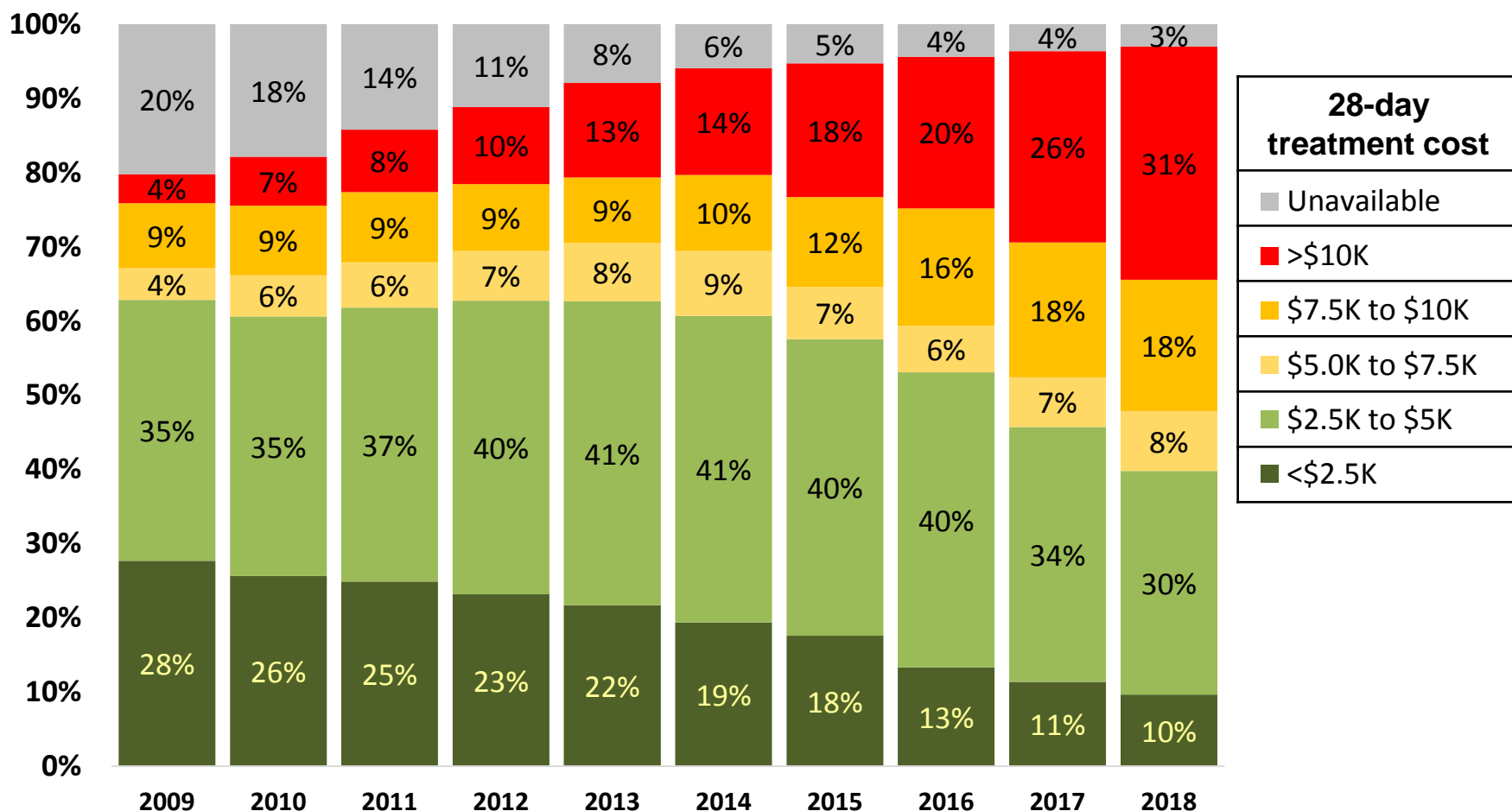
Sales of oncology medicines, biologics and non-biologics, Canada, 2009 to 2018



Data Source: Sales: IQVIA MIDAS™ Database, prescription retail and hospital markets, 2009 to 2018. All rights reserved.

Drugs with 28-day treatment costs over \$7,500 (CAD) now make up 49% of Canadian oncology sales, up from 13% in 2009

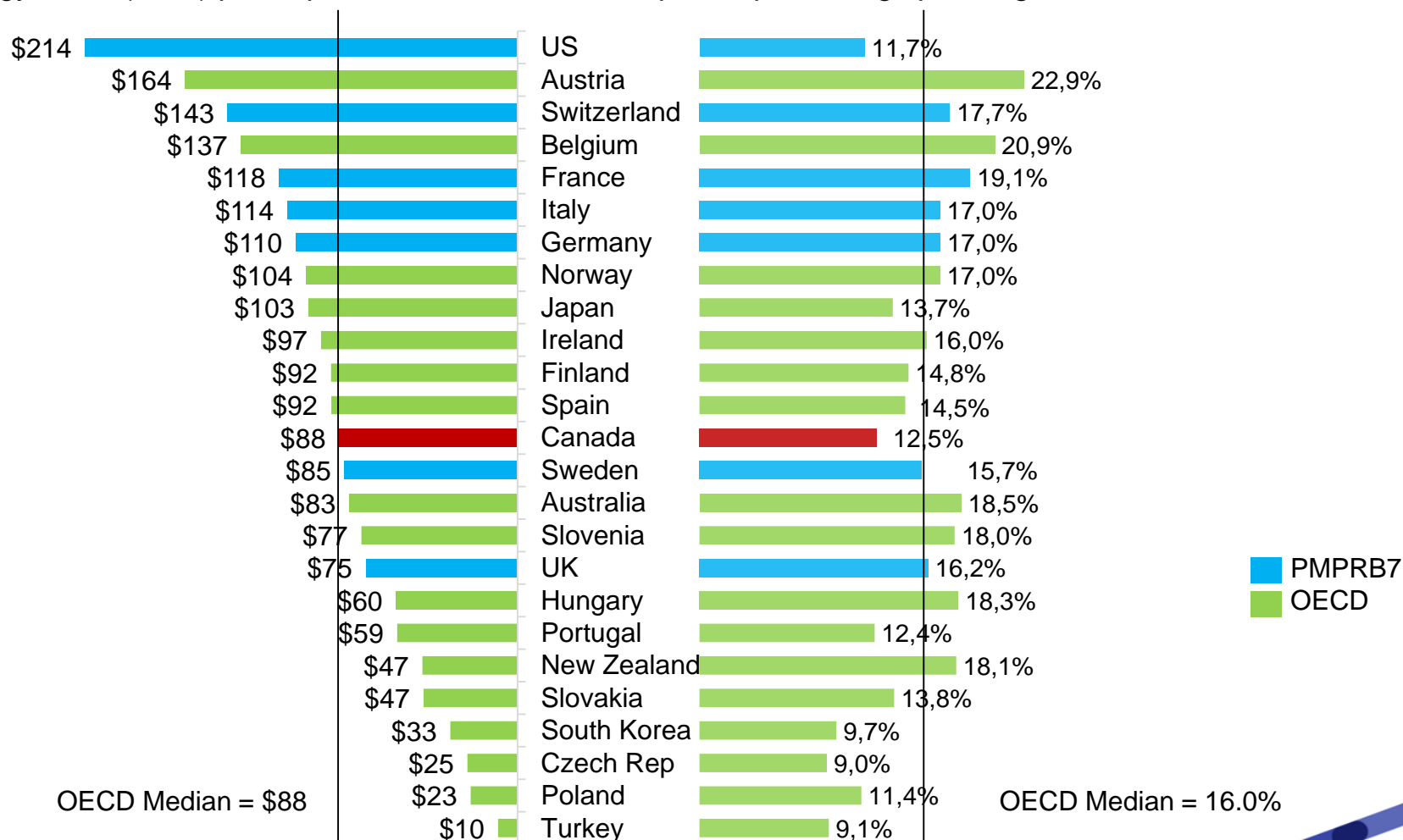
Sales revenue share by 28-day treatment cost (CAD) of oncology medicines, Canada, 2009 to 2018



Data Source: Sales: IQVIA MIDAS™ Database, prescription retail and hospital markets, 2009 to 2018. All rights reserved.

Canada is near the middle of the OECD in per capita oncology sales and sales revenue as a share of the total prescription market

Oncology sales (CAD) per capita and as a share of all prescription drug spending, OECD, 2018

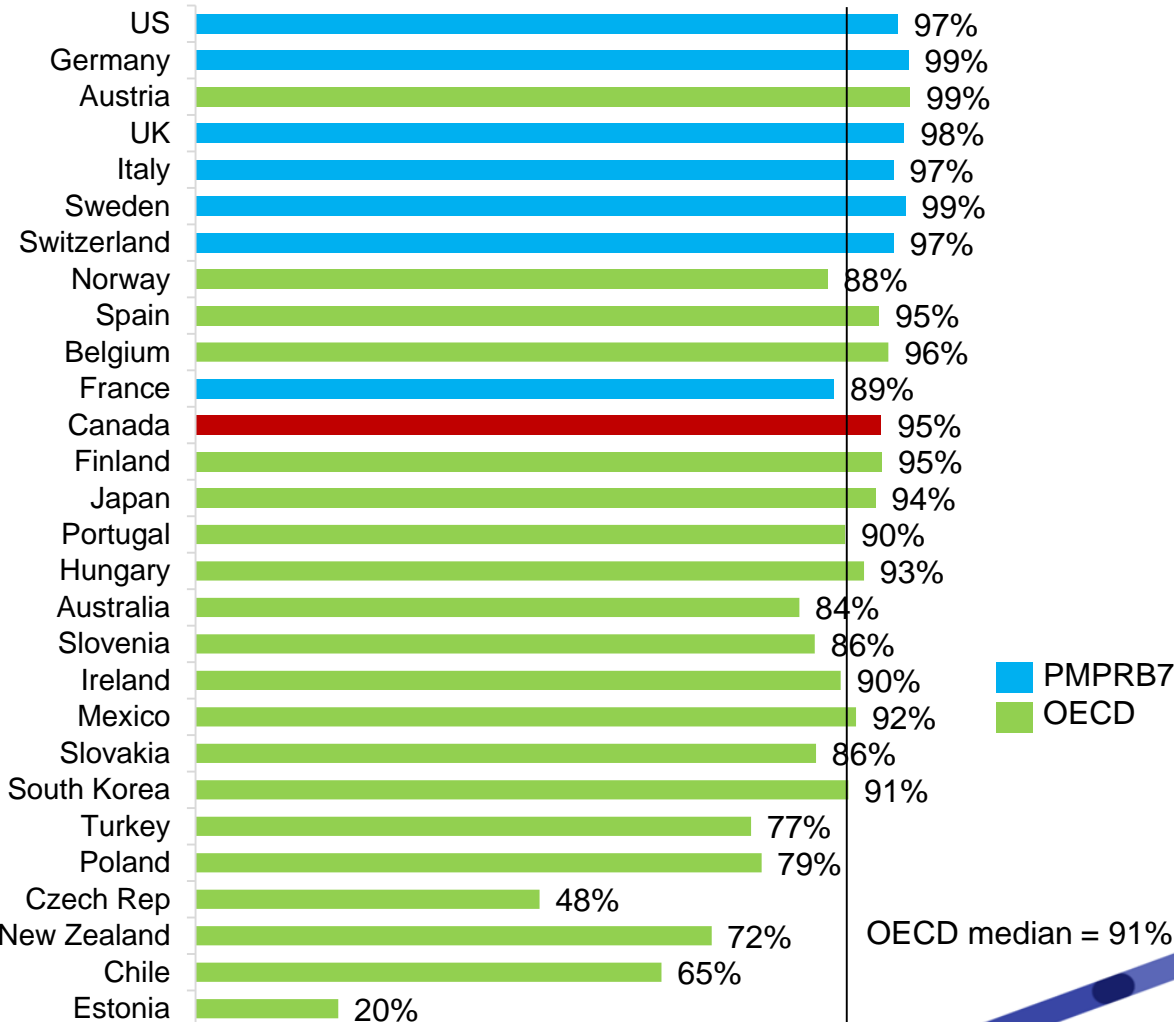
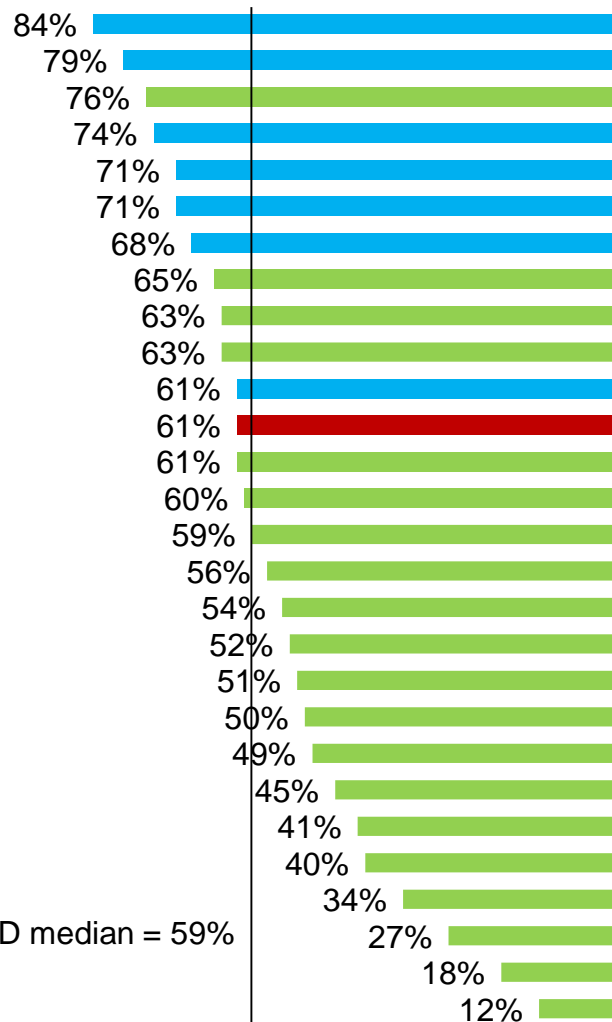


Data Source: Sales: IQVIA MIDAS™ Database, prescription retail and hospital markets, 2018. All rights reserved. Population: World Bank. Note: Median is calculated based on the countries for which data is available.

Of 82 new oncology medicines launched in the OECD from 2009-2017, 50 had sales in Canada in 2018, representing 95% of sales revenue

Share of 82 new oncology medicines with sales

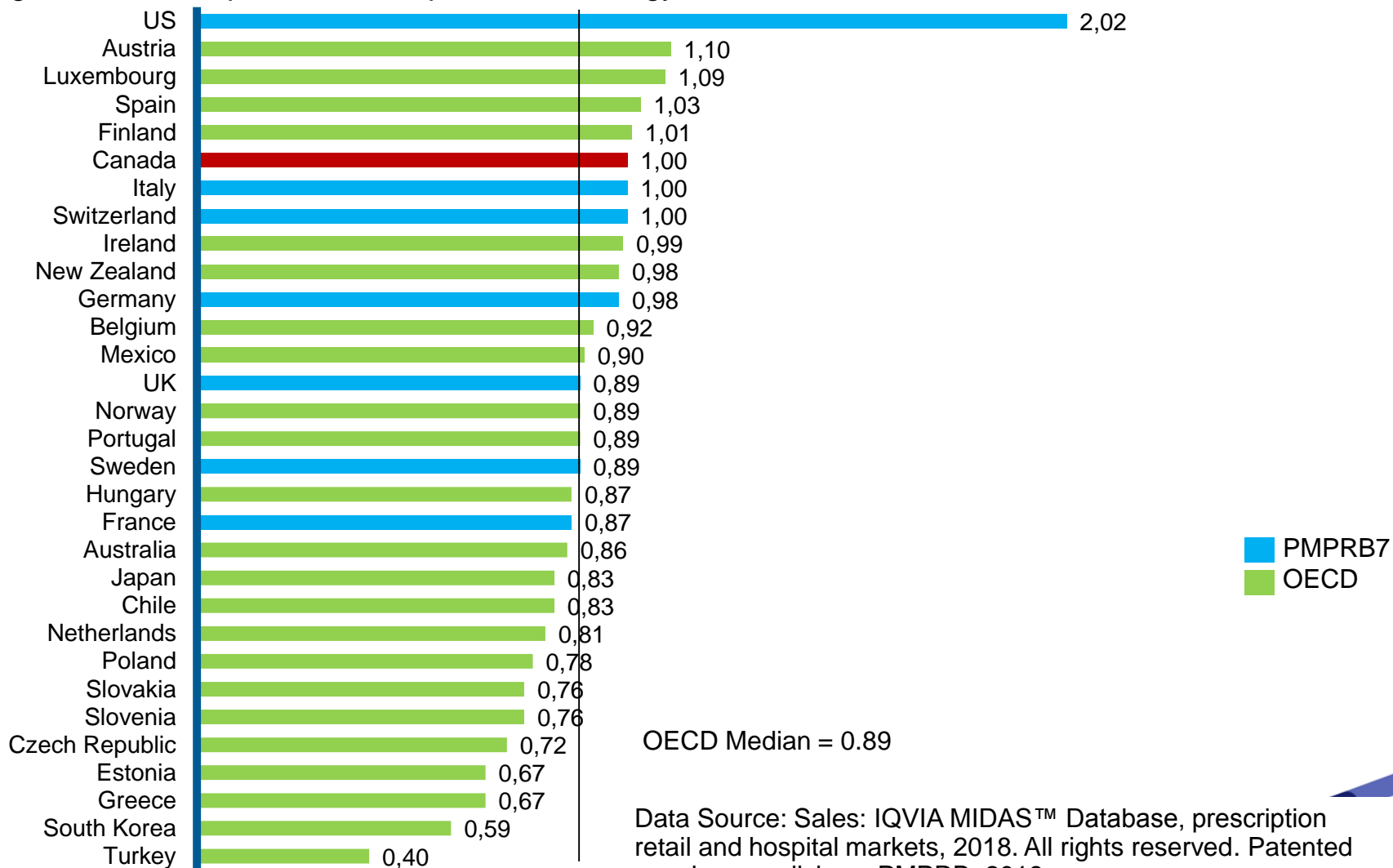
Share of total OECD sales revenue for new oncology medicines, Q4-2018



■ PMPRB7
■ OECD

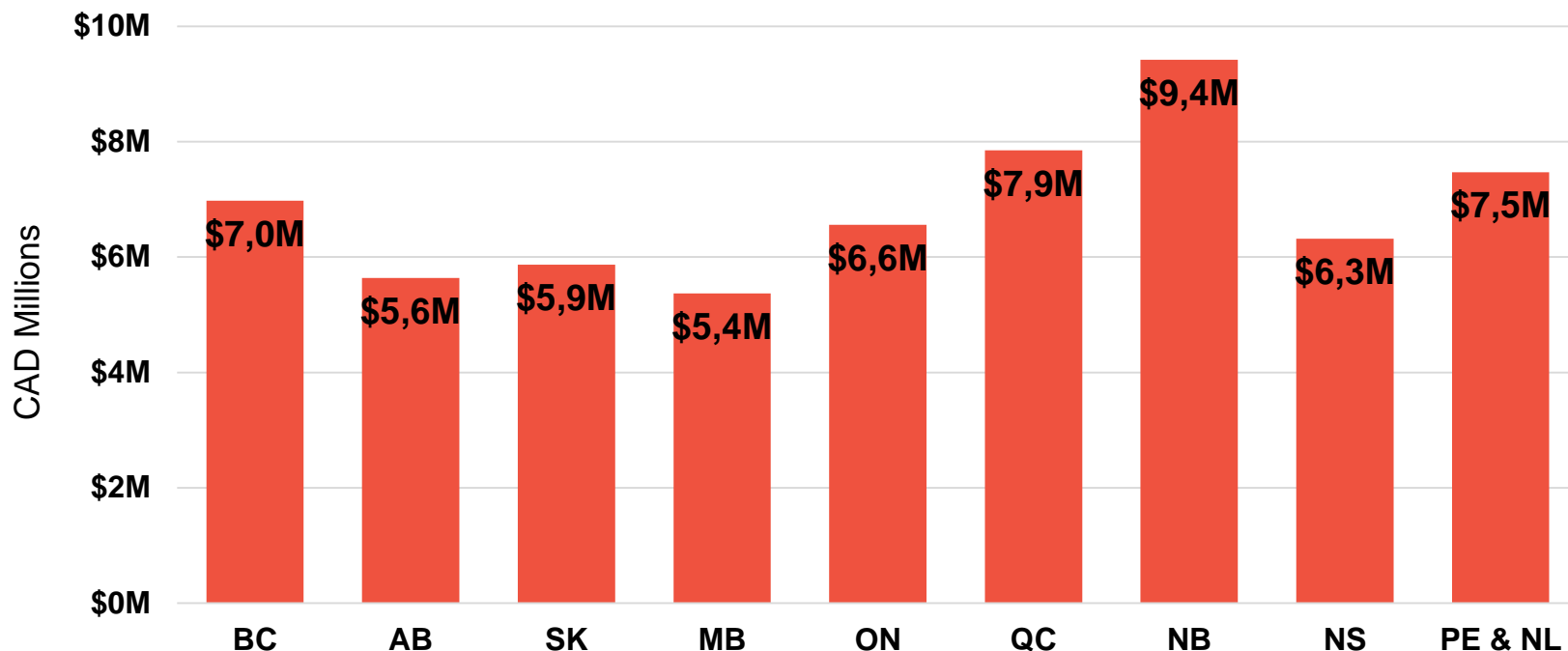
Canada pays some of the highest prices for oncology medicines, though the PMPRB7 and other major markets have greater availability

Foreign-to-Canadian price ratios for patented oncology medicines, 2018



Healthcare delivery in Canada is mostly a provincial/territorial responsibility, with oncology spending varying across provinces

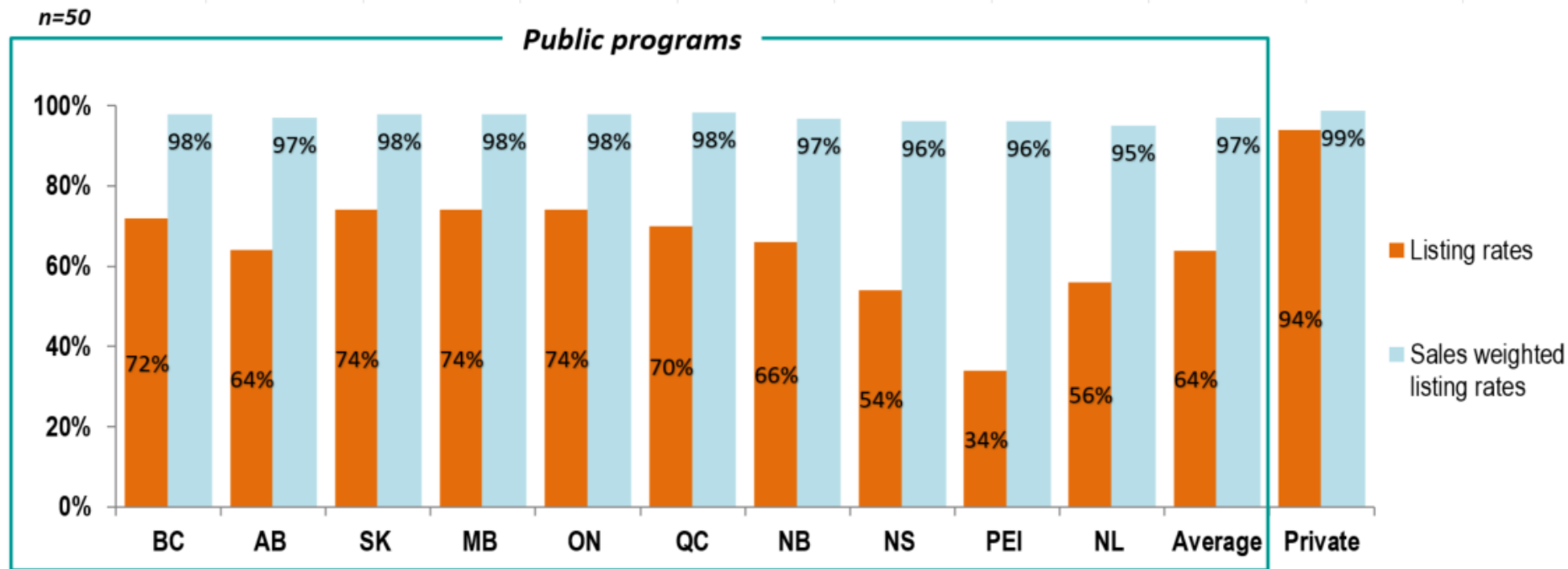
Public and private sales per 100,000 population for select oncology medicines, Canada, 2018



Data Source: Sales: IQVIA Canadian Drug Store and Hospital Purchases Audit (CDH), 2018. Population: Statistics Canada, 2018.

Public plan coverage varies for oncology medicines, though sales-weighted listing rates are similar and near-total

Listing rates as of Dec 31, 2018 for Canadian provincial public drug programs, and availability in private drug plans for select new oncology medicines



Listing rates for 50 oncology medicines launched in the OECD from 2009 to 2017.

Conclusions

- **Canada has had one of the fastest-growing oncology markets since 2009, outpacing the US and most other OECD countries**
- **As the market grows, an increasing share is captured by more expensive therapies**
 - EDRDs and biologics are growing as a share of oncology spending
 - Nearly half the oncology market is made up of medicines with 28-day treatment costs over CAD \$7,500
 - Over 30% of spending goes toward medicines > CAD \$10,000
- **Canada pays some of the highest prices for oncology medicines in the OECD, though the PMPRB7 and other major markets have greater availability**
- **Levels of oncology spending and public plan coverage vary by province, however the oncology drugs making up the vast majority of sales revenue are reimbursed**

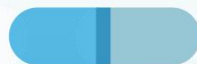


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THANK YOU

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