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National Consultation on the Use and Implementation of Biosimilars

IN-PERSON CONSULTATION SUMMARY REPORT

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Abbreviations and Glossary[1]

Biologic: A complex protein molecule created inside living cells with biotechnology. Biologics are used to treat diseases and medical conditions.

Biosimilar: A drug demonstrated to be highly similar to a biologic drug that was already authorized for sale (known as the reference biologic). Biosimilars are approved based on a thorough comparison to a reference drug and may enter the market after the expiry of reference drug patents and data protection.

Extrapolation: Often used to refer to the authorization of a biosimilar for indications where clinical studies were not done. Other terms that may be used to refer to the same concept include generalizability, authorization of indications, or extension.

Interchangeability: Products that are so alike that the drug is expected to have the same clinical result as the reference drug in any given patient. Decisions about interchangeability are made by provinces and territories.

Jurisdictions: Refers to public drug plans from British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, Yukon, Northwest Territory, Nunavut, and federal drug plans.

Reference Biologic: The original biologic product to which a biosimilar refers to in its application for marketing approval. It can also be referred to as the innovator biologic or reference product.

Switching: Generally refers to a one-time change from a reference biologic to a biosimilar, but can also refer to a change from a biosimilar to a reference biologic or another biosimilar.

CCO: Cancer Care Ontario, the principal cancer advisor for the Ontario government.

HC: Health Canada, the federal regulator of drugs and health products in Canada.

pCPA: pan-Canadian Pharmaceutical Alliance — the entity established in August 2010 to conduct joint provincial, territorial, federal negotiations for brand name and generic drugs in Canada to achieve greater value for publicly funded drug programs and patients through the use of the combined negotiating power of participating jurisdictions. The pCPA member jurisdictions include public drug plan and/or cancer agency participation from British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, Yukon, Northwest Territories, Nunavut, Non-Insured Health Benefits (NIHB), Correctional Service Canada (CSC), and Veterans Affairs Canada (VAC).

[1] With permission, abbreviations and common term descriptions provided in this report have been adapted or copied directly from the *pan-Canadian Oncology Biosimilars Summit: Proceedings Report*.

National Consultation on the Use and Implementation of Biosimilars

In-Person Meeting Summary

Context

Since their arrival in Canada, biologic medicines have had a transformative impact on a wide range of diseases, from cancer and colitis to diabetes and rheumatoid arthritis. Driven by their enormous therapeutic value, the use of these products has grown by 13% a year over the past decade and, in 2018, sales of biologic medicines in Canada surpassed $7.7 billion.[2] As a result, biologic medicines now account for a significant portion of overall provincial drug budgets.

Biosimilars are biologic medicines that have been shown to be highly similar to another biologic that is already available in the Canadian marketplace and is no longer protected by a patent. Biosimilars are shown to be as safe and have the same therapeutic effect as their reference biologic. While Health Canada has affirmed that biosimilars have no significant difference in safety or efficacy, with the exception of filgrastim and somatropin, update of biosimilar products in Canada is typically about one-tenth of the reference biologic, which is well below other Organisation for Economic Co-operation and Development, or OECD, countries.

For biosimilars to be approved in Canada, Health Canada evaluates whether the evidence provided by the manufacturer "shows that the biosimilar and the reference biologic drug are highly similar" and that "there are no clinically meaningful differences in efficacy and safety between the biosimilar and the reference biologic drug".[3] Biosimilar medicines are not new: they have been used for more than a decade in Europe and 18 biosimilars have now been authorized for sale.

With a wide range of innovative new treatments coming to the Canadian market — from chimeric antigen receptor T-cell (CAR T) therapy to applications of precision medicine — provinces and territories across Canada are looking for new ways to secure the savings required to pay for these transformative but expensive medicines. Biosimilars represent a total future savings potential of up to $1.8 billion per year. However, actualizing these savings will require adoption at a much higher rate than we have seen to date in Canada, which is why biosimilars are one of the options being seriously considered to not only extend or expand access to existing therapies, but also to secure the savings required to provide access to new medicines.

The pan-Canadian Pharmaceutical Alliance (pCPA) — a collective of the provincial, territorial, and federal drug plans — initiated several pieces of work to address biosimilar implementation. In September 2018, pCPA published the *Biologics Policy Directions & pCPA Negotiations* document with the goal of developing a clear and consistent pan-

[2] Patented Medicine Prices Review Board (PMPRB). Biosimilars in Canada: current environment and future opportunity. 2019 Apr; http://www.pmprb-cepmb.gc.ca/CMFiles/News%20and%20Events/Speeches/biosimilars-april2019-en.pdf. Accessed 2019 Dec 3.

[3] Health Canada. Biosimilar biologic drugs in Canada: fact sheet. 2019 Aug 27; https://www.canada.ca/en/health-canada/services/drugs-health-products/biologics-radiopharmaceuticals-genetic-therapies/applications-submissions/guidance-documents/fact-sheet-biosimilars.html. Accessed 2019 Dec 3.

Canadian approach to the negotiation of biologic medicines across Canada — both originator and biosimilar products. Informed by consultation of industry stakeholders, the pCPA defined eight policy directions to guide negotiations of biosimilar and biologic drugs.

Following the release of that document, the pCPA engaged Cancer Care Ontario to lead a pan-Canadian Oncology Biosimilars Initiative — a stakeholder engagement process with the goal of ensuring that the implementation and use of oncology biosimilars is appropriate and cost-effective across Canada. Based on the progress and success of this document — and on a desire to seek input from a range of stakeholders outside the cancer community — the pCPA worked with CADTH to lead a similar engagement process. This engagement process was designed to give stakeholders the opportunity to provide input to jurisdictions that may be considering policy options to:

- increase the appropriate use of biosimilar treatments
- ensure a competitive and sustainable market for both biosimilar and reference biologics
- reduce overall expenditure and redirect savings into the health care system.

Consultation Research Design and Structure

The research design for this consultation included three phases:

1. More than 25 **key informant interviews** designed to help understand the perspectives of of key organizations on the issue of biosimilar use and implementation. Organizations representing each of the five therapeutic areas the consultation was targeting (gastroenterology, rheumatology, endocrinology, dermatology, and ophthalmology) and key stakeholder groups were identified and asked to participate in a 45- to 60-minute interview and were free to invite, from their organization, whoever they wished to participate in the discussion.

2. An **in-person consultation** on November 18, 2019 in Toronto that brought together more than 100 people for a full-day session divided into two components: a morning session of presentations and open discussions followed by an afternoon of small breakout discussions. (For the complete agenda, see Appendix A.) Stakeholders for the morning session included patient and clinical associations from each of the five target therapeutic areas, public and private payers, group purchasing organizations, and the biosimilar and reference biologic pharmaceutical industry. Representatives of the pharmaceutical industry did not participate in the afternoon session.

3. An **online Survey feedback mechanism** that will give organizations, only (not individuals) an opportunity to share their thoughts on the November 18, 2019 consultation summary report, as well as optimal strategies to promote appropriate use of biosimilars.

This summary report from the November 18th event includes:

- a high-level overview of each of the presentations delivered in the morning
- an overview of the core themes and insights that emerged from the afternoon breakout discussions
- an overview of next steps.

Overview of Agenda Presentations

Moderator, Heather Logan, CADTH's Senior Advisor of Pharmaceutical Review, launched the event by welcoming the invited attendees and outlined the fundamental goal of the day: to advance and expand stakeholder knowledge of biosimilar options and opportunities, and to gather feedback on how best to leverage a range of policy instruments to help accelerate the appropriate use of biosimilars.

Ms. Logan also emphasized a series of important principles that would guide the day and help ensure the discussions would be as productive and as inclusive as possible — including the fact that the entire meeting was being governed by the Chatham House Rule, meaning that no comments, questions, or answers would be attributed to any individual speaker (save the presenters). She also situated the event in the context of the broader three-phase engagement process, noting that the in-person consultation followed more than 25 interviews with a wide range of experts and would be followed by a comprehensive online survey. As a result, attendees should view the consultation event as an opportunity to engage with each other, to talk about and understand different organizational perspectives, and to expand their knowledge base knowing that a final opportunity for feedback was still to come.

Graham Statt, Vice-Chair of the Governing Council of the pan-Canadian Pharmaceutical Alliance (pCPA), then thanked attendees on behalf of the pCPA and shared the Alliance's views on the importance of developing a multi-faceted strategy to encourage the responsible uptake of biosimilars. Noting that the market share of biosimilars in Canada lagged well behind the uptake rates seen across comparator countries in the OECD, he pointed to Europe, where more than 40 biosimilars have been approved, amounting to more than 1 billion days of patient experience. He closed by emphasizing the importance of improving biosimilar uptake, system savings, and patient outcomes, and expressed his confidence in the ability of the group assembled for today's consultation to work together on key success factors.

Kelly Robinson, Director, Health Canada's Biologics and Genetic Therapies Directorate, then presented on behalf of Canada's national medicines regulator. Ms. Robinson provided a foundational overview of the science behind biosimilar medicines, highlighted the robustness of Canada's regulatory review process for biosimilars, and noted that 18 biosimilars have been approved by Health Canada since 2009. She also explained why biosimilars should not be seen as "generic biologics," as all biologic drugs are made using living organisms and are therefore naturally variable, including biosimilars, as well as the reference biologic.

Although biosimilars cannot be deemed identical to their reference biologic, Health Canada consistently states that its "rigorous standards for authorization mean that Canadians can have the same confidence in the quality, efficacy, and safety of a biosimilar as in any other biologic drug." She then went on to outline the specific steps a biosimilar medicine must go through before receiving Health Canada approval, noting that the authorization of a biosimilar is based on the totality of evidence from structural, functional, non-clinical, and clinical studies:

Ms. Robinson emphasized the importance of structural and functional studies in demonstrating that the biosimilar is highly similar to the reference biologic. These studies incorporate side-by-side comparisons of product stability, biological activities, physicochemical properties, immunochemical properties, and purity and impurity profiles, and are considered more sensitive than clinical studies when it comes to detecting differences between a biosimilar and its reference biologic.

In the authorization of the same indications for the biosimilar as for the reference biologic, Ms. Robinson made clear that authorization of each indication is supported by a thorough, rigorous, and detailed review of the scientific data and knowledge of the biosimilar, the reference biologic, and the mechanism(s) of action of the drug in the specific indications. On this issue, she concluded that "Stakeholders can have confidence in the use of a biosimilar in each indication authorized by Health Canada."

On the important question of switching, she stated that Health Canada expects no differences in efficacy and safety following a change in routine use between a biosimilar and its reference biologic drug in an authorized indication. Reflecting on the extensive and lengthy experience of biosimilars in Europe, Ms. Robinson pointed out that Health Canada and the European Medicines Agency (EMA) have similar pharmacovigilance requirements, and that no unexpected safety signals or differences in clinical efficacy have been identified with over more than 10 years of biosimilars usage by patients (including the use for new starts and when switched to a biosimilar from a reference biologic).

Mitch Moneo, Assistant Deputy Minister, Pharmaceutical Services Division, British Columbia Ministry of Health, began by recognizing the transformative impact that biologic medicines have had on patients suffering from a variety of diseases, including Crohn disease, diabetes, rheumatoid arthritis, and cancer. He then shared data on the significant financial impact of paying for these products, noting that three biologics rank among BC Pharmacare's top five products on a total cost basis.

The need to secure savings to pay for not only a current group of biologic treatments but also a new wave of innovative medicines was the main impetus behind province's Biosimilars Initiative — the controlled switching policy framework that was launched in May of 2019 after extensive and lengthy stakeholder consultation. The initiative gives patients in British Columbia six months to transition to a biosimilar and is anchored by:

- significant patient and provider support
- careful evaluation and monitoring
- a tailored coverage policy that will allow exceptional coverage after requests to remain on the reference biologic in select circumstances.

He also pointed out that biosimilars can only come to market after the patent's reference biologic has expired and that biosimilars are priced at up to a 50% discount.

Mr. Moneo closed by emphasizing the importance of maximizing the savings from biosimilars, not only to support system sustainability, but also to both expand access to existing medicines and accelerate access to new ones — both steps British Columbia has already taken.

Dr. Patricia Caetano, Executive Director, Non-Insured Benefits with Manitoba Health, Seniors and Active Living, then provided an overview of an alternative approach to reimbursing biosimilars. In the summer of 2018, Manitoba introduced a tiering framework for

biologics that prioritized access to the biosimilar versions of several high-use, high-cost biologics.

Manitoba established a tiering strategy to the reimbursement of biologics and biosimilars: Tier 1 is composed of biosimilars and reference biologics that had already completed a pCPA negotiation or were covered by an existing agreement. Tier 2 is composed of products with expired agreements or no agreement, but where a clear, clinical need exists in specific or exceptional circumstances.

Driving Manitoba's decision was a concern about equity, as the province was observing a marketplace where patients on multiple "low cost drugs" received minimal financial support to meet their deductible payments, while patients on one "high-cost biologic" had access to far more significant financial supports. Focused on addressing this inconsistency, Manitoba rolled out a policy framework that was designed to secure new savings through increased biosimilar uptake.

Dr. Sasha Bernatsky, Co-Principal Investigator, CAN-AIM (the Canadian Network for Advanced Interdisciplinary Methods for Comparative Effectiveness Research). Founded in 2011 by the Canadian Institutes of Health Research through the Drug Safety and Effectiveness Network, or DSEN, CAN-AIM uses real-world (RW) evidence to perform comparable analyses of drug effects.

Dr. Bernatsky provided an overview of CAN-AIM's biosimilars registry — a five-year project that started in 2018 with the goal of demonstrating the feasibility of capturing RW information on the comparative effectiveness and safety of biosimilar and reference biologics using a network of clinical cohorts drawn from both rheumatology and gastroenterology patients. More specifically, the project has three primary aims when it comes to comparing patients initiating biosimilars versus reference biologics:

- frequency of discontinuation/time to discontinuation of the initial therapy
- frequency of — and time to — clinical remission/induction of response
- frequency of patients starting or increasing prednisone, or other immunosuppressive products.

Although the registry will run for another three years, early results show no significant difference between biosimilars and reference biologics across a wide range of indicators, from adherence criteria to the percentage of patients who missed one or more infusion visits, to the percentage of patients who discontinued treatment.

After hearing from three Canadians, the agenda next featured two speakers from outside the country. **Dr. Elena Wolff-Holz, Chair of the EMA Biosimilars Working Party** and **Dr. Sameer Awsare, the Associate Executive Director of The Permanente Medical Group.** Dr. Wolff-Holz spoke first, offering some key insights from Europe's extensive experience with biosimilars. The work of the EMA, the regulator, is being guided by its Regulatory Science to 2025 strategy, which explicitly calls out the need to "promote biosimilars in healthcare systems."

There are now 53 biosimilars for 15 different reference biologics currently on the market in Europe, and Dr. Wolff-Holz noted that the arrival of biosimilars (and their impact on reducing prices) has significantly increased access to biologic medicines across the continent. She also expanded on the extensive monitoring and pharmacovigilance regime that exists in Europe, and emphasized the importance of countering misleading information designed to question the safety, quality, and efficacy of biosimilars. Focusing on improving

understanding to increase trust, the EMA recently finished translating its biosimilars guide for clinicians into all 23 official languages of the European Union.

Dr. Awsare then offered an important complementary perspective by providing an overview of the experience of biosimilars in the US, and how Kaiser Permanente has charted its own path. With more than 12 million members, almost US$80 billion in annual revenues and more than US$12 billion in annual expenditures on drugs, Kaiser Permanente is one of the largest and most integrated health care delivery organizations operating in the US.

Dr. Awsare began his presentation by referencing data suggesting that one in four Americans have a hard time affording their medicines — a problem that will only be exacerbated by the arrival of CAR T-cell therapy and gene therapy treatments. Against this backdrop of cost challenges, he returned to the European experience and argued that the arrival of biosimilar medicines leads to increased competition, which in turn leads to lower prices, which in turn leads to increased patient access.

By linking physician and patient education with nursing support, Kaiser has achieved biosimilar usage rates of more than 80% in two targeted products. Noting that these market shares are both far higher than the national average, Dr. Awsare closed his remarks by calling for additional policies to help drive the uptake of biosimilars across the US.

The final presentation of the morning came from **Tanya Potashnik, Director of Policy and Economic Analysis at the Patented Medicine Prices Review Board**, or PMPRB. Ms. Potashnik built her presentation around five key points:

- biologics are a large and important part of the Canadian pharmaceutical market
- Canada is behind Europe when it comes to biosimilar uptake
- higher prices of reference biologics in Canada likely lead to higher biosimilar prices than comparator jurisdictions where the reference biologic pricing is lower
- public policy instruments play an essential role in accelerating the use of biosimilar
- Canada has realized far lower savings from biosimilars than many of its global peers.

Focusing on the importance of the last two points, Ms. Potashnik noted the importance of effective policy instruments in driving the uptake of biosimilars around the world, from biosimilar substitution at the pharmacy level to physician-led switching. Identifying six biosimilar molecules that were granted market authorization in Canada or that can be expected to file for market authorization and be available by 2020, she also argued that if Canada could increase uptake of these products to the level of its international counterparts, the country could expect to save up to 40% in the annual cost of these medicines by 2023 — more than C$440 million per year.

Breakout Session Overview

Attendees were pre-assigned into breakout groups to ensure a diversity of opinion, stakeholder type, and indications, with the intent of fostering a robust dialogue. Each group was instructed to discuss two of five distinct potential policy frameworks that could facilitate the increased use of biosimilars. Policy options were chosen based on existing experience in Canada, the US, and Europe. While elements of each could be implemented together, attendees were asked to consider them as discrete options. Ranked from most gradual to most assertive, the five potential biosimilar reimbursement policy options were, as follows:

1. New-starts, only
2. Tiering
3. Quotas
4. Controlled switching
5. Tendering.

Participants in each of the six breakout groups were asked to consider four core questions for two of the aforementioned options (as well as a separate set of questions customized for each option):

- What are the implications for clinicians of this policy? What are the implications for patients?
- What do you see as the main barriers to the implementation of this policy? How would you address those barriers?
- Should there be exceptions to this policy? How should these be determined, and by whom?
- How would you gauge the success or failure of this policy?

The second breakout session for the six groups considered three questions, so two groups were each tasked with examining one of the three core issues that need to be unpacked, explored, and improved for Canada's biosimilars market to move beyond its current nascent phase:

- education and information
- policy monitoring and RW evidence
- funding and reinvestment.

Following each of the two breakouts, session facilitators reported back to the broader group the essential takeaways gathered from their set of discussions, with a goal of identifying crosscutting areas of consensus or disconnect.

A Note on the Consultation's Core Question

Before laying out the four key themes that emerged across the afternoon sessions, it is important to call out one of the challenging aspects of the November 18th event. In designing the agenda for the day, CADTH was working to answer an important question: How can policy-makers work with key stakeholders to best increase the appropriate use of biosimilars across Canada?

However, a few attendees did not agree with the basis of the consultation or wanted to propose methods of addressing the cost associated with biologic use other than policies designed to specifically increase the use of lower-cost biosimilar alternatives. For example, if the problem being addressed is the high cost of biologics, several participants expressed the view that jurisdictions should focus their efforts on negotiating lower prices with the manufacturers of reference biologics. The alternate perspective was that, while securing lower prices from reference biologic manufacturers may lead to short-term cost savings, it might also delay or prevent the entry of biosimilars, not result in market competition or long-term savings, or provide expanded treatment options for patients and clinicians.

As a result of this difference in the set of solutions to be considered, some of the afternoon discussions did not address the consultation question as fully as had been intended. This reality illustrates not only the breadth of stakeholder perspectives on biosimilars, but also the need for more engagement and more education across multiple communities, from payers and policy-makers to clinicians and patient group representatives.

Key Themes and Insights

In reviewing the summaries of the 12 breakout sessions that defined an afternoon of insightful and animated conversation, four key themes emerged:

1. Biosimilars are safe and effective treatments for new starts — but Views on other policy options remain divided
2. Biosimilar reimbursement decisions should be harmonized, and savings should be reinvested in patient care
3. Ongoing and transparent monitoring of biosimilar outcomes by a neutral third party is important
4. Standardized and wide-reaching patient and clinician education is key, and should be built on consistent and clear messaging.

1. Biosimilars are Safe and Effective Treatments for New Starts — But Views on Other Policy Options Remain Divided

New Starts

Most attendees acknowledged that a biosimilar policy focused on new starts would be acceptable and that new starts were seen as a potential for long-term savings, given rising disease prevalence. Because of the latter, there was acknowledgement to increase the use of biosimilars in newly diagnosed patients. However, for some attendees, their support for this policy would be conditional upon the inclusion of an exemption policy. As well, there was no consensus on the rules for exemptions to the policy, nor time during the breakout session to explore whether it would be feasible or desirable for policy-makers to move beyond a case-by-case approach for dealing with exemption requests. As a result, there is a clear opportunity for additional discussion on these topics. Beyond this, attendees expressed divergent views on other policy options under consideration.

Tiering

A significant part of the conversation on tiering focused on the question of whether the reference biologic should be included in the first tier, how many tiers there should be, and what the composition of each tier should include. To many participants, the question of how to populate the tiers came down to the efficacy of a given product, regardless of whether the product in question was a biosimilar or a reference biologic. Several clinicians commented on the importance of having different options available in each tier (i.e., tier 1 should include products with different mechanisms of action). The discussion became more complicated when considering the question of whether the reference biologic and its biosimilars should both be allowed in the first tier. Patient groups generally felt that if the cost of the originator

drug was reduced to the same level as the biosimilar, then the originator should be allowed to remain in tier 1. The alternate perspective raised was that pricing parity will remove any incentive for prescribing the biosimilar, thus weakening Canada's fledgling biosimilars market. The effect of a weakened biosimilar market would subsequently result in fewer or no Canadian biosimilars coming to the Canadian market, leading to a market dynamic that ultimately mirrors the largely originator biologic monopoly that exists today.

Quotas

While attendees understood the impact that Quotas could have on increasing the uptake of biosimilars, some of the clinicians in attendance objected to any policy framework that would restrict their ability to select a given treatment for a specific patient. Two conclusions from this view: first, that a quota system should leave the choice of therapy to the clinician and patient, as long as the overall objective of the quota is achieved; and second, that the process of determining the appropriate quota is a difficult one and would benefit from the input of both clinicians and patients. Opponents of controlled switching suggested that a quota policy might effectively lead to switching most patients. Participants who were uncertain or opposed to quotas expressed a number of more specific concerns including discomfort comfort extrapolating data from one indication to another, uncertainty about the availability of evidence in a specific disease site, and concern about the use of surrogate end points. However, other participants countered by noting that quotas give clinicians significant flexibility when considering the totality of their patients.

Controlled Switching

Was the policy option attracting the most attention — and opposition — and the discussion of this policy option highlighted the complexity of the subject and the firmly-held views of disparate groups. Some patient group and clinician representatives raised concerns that generally clustered into three themes. First, any controlled switching policy removes the prescribing decision from the patient-provider relationship. Second, that it introduces significant stresses for physicians working to balance the care of existing patients with a new framework requiring additional visits and increased monitoring. Third, that it creates anxiety in stable patients who now face the possibility of receiving treatment in a new facility and coverage from a new patient support program (PSP). Some patients were also concerned that switching to a biosimilar could impact the method of delivery of their biologic (i.e., subcutaneous injection versus intravenous infusion). This concern demonstrated an educational gap, as a given biosimilar is required to have the same administration route as its reference biologic. Other participants responded by emphasizing the importance of providing focused and tailored education materials to clinicians and patients, and that biosimilar PSPs offer the same level of care as those offered by the reference biologic manufacturers. Some attendees recommended that pCPA require continuity of its PSP program as a condition of a negotiated agreement, while others called for the elimination of single-product infusion clinics that require patients change the infusion clinic to accommodate a change in medicine.

Attendees did highlight five key success factors that would strengthen any controlled switching framework:

1. Attendees were broadly in agreement that the implementation of a biosimilars policy framework must be accompanied by an exception policy that would allow patients to continue their treatment on a reference biologic in select clinical circumstances (although the groups generally struggled to define what a clear and consistent set of

exception criteria would look like). Participants from the gastrointestinal community emphasized this point, suggesting that there are fewer medicines available to treat gastrointestinal patients and that the clinicians treating them should therefore receive greater prescribing flexibility under any new policy framework.

2. Participants also commented that a sufficient transition time frame needs to be embedded in any controlled switching framework, and with a six-month period identified as a minimum threshold, especially since some patients go longer than six months between physician visits.
3. Compensating health care practitioners (physicians, pharmacists, nurses, and other allied health care professionals) for the time required to counsel and support patients would help ensure that providers set aside the additional time required to ensure both parties have all of the information they require. Although recognizing that switching patients adds an additional burden onto clinicians is important, a number of attendees discouraged incentivizing health care providers.
4. The language chosen to describe the policy problem and the selected policy framework should be done carefully. For many attendees, “non-medical switching” elicited a negative reaction, just as describing patient “failure” on a therapeutic treatment as a precondition of moving to the next tier in a tiered policy framework.
5. The clinician level of buy-in and engagement in supporting the switch impacts a clinician’s attitude toward switching a patient, which will ultimately have an impact on the patient’s perceptions. The tone and manner in which the switch information is conveyed to patients was identified as a key area for success, as it will impact the patients experience. It is important that health care professionals have the education and support required to counsel patients so that balanced, evidence-based messaging regarding the switch is conveyed to the patient.

Tendering

The core concern raised with tendering related to supply, as some participants felt that this policy put too much reliance on one manufacturer. While lower prices are likely to ensue, in the eyes of many attendees, implementing any policy that increased the likelihood of a supply shortage was simply too much of a risk to take. One way to mitigate these concerns is to build obligations for supply security directly into the tender contracting process — and to make the penalties for non-performance extremely prohibitive.

Tendering was also seen by many attendees as a policy instrument that would lead to reduced clinician and patient choice if a single manufacturer ended up with a monopoly on the market. Notwithstanding those concerns, a tendering process can easily be designed to create more than one winner, and shared service organizations can effectively divide a market between two or more manufacturers, which would also address some of the concerns expressed around potential supply shortages.

Cross-Cutting Themes

Examining the discussion from each of the policy breakout sessions, a number of crosscutting themes emerged that are worthy of reflection and consideration:

- Policy-makers are encouraged to be clear and precise about the problem jurisdictions are trying to resolve and the objective of the chosen policy. Many attendees suggested that this approach would facilitate a more fulsome, productive, and transparent discussion about barriers and solutions with stakeholders.

- Policy-makers should incorporate a flexible exception policy in any biosimilar policy framework and be willing to review and modify the policy based on ongoing evidence collection and assessment.
- Policy-makers should ensure that any biosimilar policy framework is designed to mitigate the risk of supply shortages. Several attendees voiced their concern that a single-product market, whether biologic only or biosimilar only, introduces uncertainty and risk, and may limit the stable availability of a given product over time.

2. Biosimilar Reimbursement Decisions Should Be Harmonized, and Savings Should Be Reinvested in Patient Care

A number of attendees supported the value of pan-Canadian procurement to ensure that all payers benefit from the same discounts and to reduce any differences between the price negotiated by pCPA and those secured by group purchasing organizations or individual hospitals.

Both patient groups and payers also talked about the importance of PSPs and that any biosimilars policy framework should not only create the smallest possible disruption in patient care as possible, but also require that biosimilar PSPs be as robust as those offered by manufacturers of reference biologics. Ensuring a reasonably seamless transition could involve some kind of bridging policy from one PSP to another, or ideally an infusion clinic infrastructure that allows biosimilars to be dispensed in the same clinics and by the same nurses as the reference biologics. (Another option is to create an integrated PSP that extends across multiple biosimilar manufacturers, as is already being done by a group of biosimilar manufacturers through an industry association.) Payers also expressed conditions of their own, the main one being that any decisions on public funding for biosimilars come with a guarantee from industry that adequate supply levels of the biosimilar product will be maintained.

On the question of reinvestment, there was a clear consensus that any savings that resulted from switching to biosimilars should be invested back into patient care — an approach that is likely among the strongest incentives to prescribing biosimilar products. Some attendees felt strongly that reinvestment should be targeted back into the same therapeutic areas from which the savings were derived, while others questioned whether reinvestment in areas that support health (e.g., good housing) would also be worth considering. Other attendees noted that the siloed nature of provincial drug budgets can make it difficult to direct savings outside pharmaceuticals (although British Columbia's biosimilars initiative did just that by increasing access to nursing care for gastrointestinal patients). And some expressed skepticism that savings would be reinvested or that the systems are in place to monitor and ensure that reinvestment happens, particularly if that reinvestment is destined to support a specific therapeutic area. An alternative approach would be to publicly track savings and commit to annually reinvesting the same amount back into individual therapeutic areas.

3. Ongoing and Transparent Monitoring of Biosimilar Outcomes By a Neutral Third Party is Important

Attendees were in clear agreement that monitoring and tracking patient outcomes was a critical component of any policy framework focused on expanding the uptake of biosimilars. Most felt that any metrics or reporting should be publicly available and updated on a regular

basis, implying that the ability to collect frequent and up-to-date information was key. Furthermore, there was also broad view that monitoring should be conducted over an adequate length of time and should include the ability to re-evaluate the choice of therapy over the course of treatment. With some regions and institutions potentially reporting data differently and at different intervals, it is important not only to reduce barriers to accessing data, but also to capture and convey it in a standardized and consistent format.

Many participants felt that a proper monitoring program must be able to both evaluate the entire experience a patient has in using a biosimilar and also incorporate both qualitative and quantitative data. Some attendees raised questions about the process of including subjective patient self-assessments and suggested that provisions should be made to make it as easy as possible for patients to record and submit this kind of data in a standardized way.

There was also a strongly held view that the monitoring itself should be led by a neutral and independent third party, outside either government or industry, such as an existing health quality organization or an academic institution. The expectation among most participants was that agreements should be set up to allow ongoing data reporting to be sent directly to the neutral third-party institution, where analysis would be conducted and publicly reported and that an Advisory Committee oversee the analysis and interpretation of the data, functioning somewhat like a Data Safety Monitoring Commit. Finally, most participants felt that all of the indicators and measures being reported should be captured and conveyed in simple and accessible language, and that the findings from monitoring should be used to inform and update education materials on biosimilars.

4. Standardized and Wide-Reaching Patient and Clinician Education is Key, Built on Consistent and Clear Messaging

Participants universally agreed that consulting with patients is critical for the successful implementation of any biosimilar framework, especially with respect to a controlled switching policy. They also agreed that a considerable amount of educational material already exists, but that variation in content and quality of those materials was considerable and could be contributing to confusion about the degree of similarity between reference biologics and biosimilars, and what a transitioning or other policy framework actually means. On this point, some discussants felt that the creation of a multi-disciplinary, multi-therapeutic group could be established to provide advice about both development and dissemination of educational and information support materials.

Many participants felt that there is currently a lack of standardized education available, both to patients and clinicians, and that both groups need to be receiving consistent, concise, and clear education materials from a trusted and credible external source. Payers particularly felt that unless clinician knowledge and awareness of biosimilars increased, the current reluctance to prescribe them will continue to present a barrier to significant uptake.

Some discussants believed that a poor use of terminology may be creating confusion regarding the use of biosimilars and should be specifically addressed through education materials. Furthermore, some payers and patient groups argued that terms such as “non-medical switch” should not be used at all, as they imply that the use of biosimilars is somehow not supported by medical or scientific evidence — which would appear to contradict the view of Health Canada and many other regulators, researchers, clinicians, and patient organizations. Ultimately, most groups expressed the view that better, and

simpler, terminology should be developed, especially for any education materials that patients are accessing.

Finally, most attendees felt that any education and communications strategy should include multiple media beyond just print materials distributed in hospitals or through primary care, and that development of criteria and standards for educational materials would help to avoid some of the misinformation and improve consistency and quality. Online and digital tools and resources are becoming increasingly important, and alternative distribution channels — such as retail pharmacies, for example — could be much better leveraged.

Conclusion and Next Steps

Four key conclusions emerged from the robust and wide-ranging discussion that took place on November 18, 2019.

First, the goal of increasing biosimilar prescribing and the need for supportive policies to facilitate reimbursement access to biosimilars across Canada is far from simple. As well, identifying and assembling the right mix of policy options will require intensive ongoing engagement and collaboration from a wide range of communities, from researchers and regulators to patients and clinicians. Fortunately, attendees at the consultation brought their passion, ideas, and energy into the room and demonstrated their willingness to learn from the assembled speakers and from each other.

Second, despite the topics covered over the course of the day, a number of key questions remain:

- *On Interchangeability:* How are individual provinces supposed to determine whether a given biosimilar is interchangeable when comparator jurisdictions such as Australia and the US make those decisions at the national level?
- *On the Sufficiency of Evidence:* How much RW evidence is “enough” to address any lingering concerns about the use of biosimilars? What is the threshold for sufficiency that would overcome the majority of their concerns?
- *On Supporting Health Care Professionals:* What is the most effective mechanism to recognize and support health care professionals striving to educate and inform their patients about the use of biosimilars?

Third, how an issue or opportunity is framed is extremely important. With this in mind, payers and policy-makers should be clear about the rationale for advocating for the expanded uptake of biosimilars beyond the importance of biosimilars as a vehicle for cost containment. Jurisdictions could also emphasize the connection between what the savings from biosimilars can *do* — namely, expand access to existing treatments and accelerate access to new ones.

Fourth, this consultation process neither started nor ended on November 18, 2019. Instead, phase I of the consultation began in late summer of 2019 with more than 25 key informant interviews that helped to inform and support the creation of the in-person consultation agenda. With November 18, 2019 representing phase II of the process, the online survey that anchors phase III will launch in early December 2019, giving event attendees and other key stakeholders another opportunity to share their insights, ideas, and recommendations. Jurisdictions could use the information generated by this consultation as a platform to engage stakeholders within the province, thereby extending the depth and breadth of discussion about an important and complex issue.

Appendix A: CADTH Consultation on Biosimilars Implementation — November 18, 2019

Time	Topic	Speaker
07:00–08:25	**Registration**	
08:00–08:30	**Continental Breakfast**	
08:30–8:45	**Welcome Remarks and Framing the Day**	Graham Statt, Vice-Chair of pCPA Governing Council; Heather Logan, CADTH
08:45–09:20	**Regulating Biosimilars in Canada** • The Robustness of Health Canada's Biosimilars Regulatory Regime and Pharmacovigilance Considerations	Kelly Robinson, Director, Biologics and Genetic Therapies Directorate (BGTD); Liz Anne Gillham-Eisen, Director, BGTD
09:20–10:10	**Canadian Policy Framework Experience** • BC — Controlled Switch • MB — Tiering	Mitch Moneo, Assistant DM, Pharmaceutical Services Division, BC Ministry of Health; Patricia Caetano, Executive Director, Non-Insured Health Benefits Branch, Manitoba Health, Seniors and Active Living
10:10–10:30	**Canadian Biologic and Biosimilar Outcomes** • Study Design and Preliminary Results From the DSEN CAN-AIM Research Project	Dr. Sasha Bernatsky, Co-PI, Canadian Network for Advanced Interdisciplinary Methods for Comparative Effectiveness Research (CAN-AIM)
10:30–10:45	***Refreshment Break***	
10:45–12:00	**Insights From Abroad** • The European Medicines Agency Biosimilars Working Party: Current State and Lessons Learned • Kaiser Permanente's Approach to Building a US Biosimilars Market	Dr. Elena Wolff-Holz, Chair, European Medicines Agency Biosimilars Working Party; Dr. Sameer Awsare, Associate Executive Director, Permanente Medical Group
12:00–12:20	**Biosimilar Utilization — Canadian and International Experience** • Biosimilar Uptake in Canada and International Policy Approaches	Tanya Potashnik, Patented Medicines Prices Review Board
12:20–1:00	***Lunch***	
1:00–2:05	**Small Group Breakout #1: Weighing Opportunities & Impacts of Potential Policy Options** • New-Starts Only, Tiering, Quotas, Non-Medical Switching, and Tendering	
2:05–2:35	**Report Back**	Breakout session facilitators
2:35–2:50	***Refreshment Break***	
2:50–3:50	**Small Group Breakout #2: Getting Implementation Right** • Education and Information • Policy Monitoring and Real-World Evidence • Funding and Reinvestment	
3:50–4:20	**Report Back**	Breakout session facilitators
4:20–4:30	**Summary and Next Steps**	Heather Logan

BC = British Columbia; BGTD = Biologics and genetic Therapies Directorate; CAN-AIM = Canadian Network for Advanced Interdisciplinary Methods; DM = Deputy Minister; DSEN = Drug Safety and Effectiveness Network; MB = Manitoba; pCPA = pan-Canadian Pharmaceutical Alliance.