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Guide to Canada's pharmaceutical intellectual property regime

May 2022

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Foreword

I am pleased to have been invited to write the foreword for the *Guide to Canada's pharmaceutical intellectual property regime*. The guide provides an understanding of this regime, particularly for the benefit of the innovative pharmaceutical industry.

I am proud to note that Norton Rose Fulbright Canada has been active for many years in promoting and defending the interests of innovators in the pharmaceutical arena. This guide is further testimony to our firm's commitment to that industry.

In the 1970s and early 1980s, the legislative climate in Canada was not conducive to investment in research and development in the pharmaceutical field. New therapeutic compounds could not be patented except as limited to their preparation by a specific process. Further, these patents were available for compulsory licensing from issue against an imposed royalty generally of 4 percent.

Early in my mandate as Prime Minister of Canada, my government resolved to encourage research and development in Canada. Full patent protection for innovative drugs was made available in 1987. The compulsory licensing regime was scaled back in 1987 and then ultimately abolished in 1993. To harmonize the protection for innovation offered by its principal trading partners, Canada entered into the North American Free Trade Agreement (**NAFTA**) and the Trade-Related Aspects of Intellectual Property Rights (**TRIPS**) under the World Trade Agreement. Under both NAFTA and TRIPS, Canada agreed to provide expeditious and effective remedies to prevent the infringement of intellectual property rights and recognize the value of the confidential data submitted by innovative pharmaceutical companies seeking approvals for new drugs. As such, the *Patented Medicines (Notice of Compliance) Regulations* came into force in March of 1993 followed by regulations on data protection exclusivity.

Subsequently, the Canada-European Union Comprehensive Economic and Trade Agreement (**CETA**) and the Canada-United States-Mexico Agreement (**CUSMA**) have reinforced these intellectual property rights, and introduced other rights concerning patent term restoration.

The COVID-19 pandemic has highlighted how crucial it is to continue to foster investment in research, development and manufacturing by the pharmaceutical industry in Canada. Norton Rose Fulbright Canada will continue to work with innovators to defend their rights and maintain the benefits they bring to all Canadians.

The innovative pharmaceutical industry provides a valuable service to all Canadians. I am honoured to have played a role in shaping the current legislative regime in Canada and am proud to be a senior partner of a firm that has been committed to protecting the interests of the innovative pharmaceutical industry for more than 50 years.

The Right Honourable
Brian Mulroney, P.C., C.C., LL.D.

Contents

Executive summary

This summary provides a brief overview of each pharmaceutical regime covered in this Guidebook. The purpose is to provide some understanding of each topic at a high level. For more information, please see the individual chapters.

1 Data protection – *Food and Drug Regulations*

Data protection under the *Food and Drug Regulations* [1] provides innovative drug manufacturers with a period of market exclusivity by prohibiting a generic drug manufacturer from relying on data submitted to Health Canada by the innovative drug manufacturer.

Data protection only applies to **Innovative Drugs**. An Innovative Drug is defined in the *Food and Drug Regulations* as a drug that (a) contains a medicinal ingredient not previously approved in a drug by the Minister of Health and (b) that is not a variation of a previously approved medicinal ingredient such as a salt, ester, enantiomer, solvate or polymorph.

The *Food and Drug Regulations* provide that a generic drug manufacturer seeking a Notice of Compliance (**NOC**) on the basis of a direct or indirect comparison between the generic drug and an innovative drug may not file a drug submission before the end of a period of six years after the day on which the first NOC issued for the innovative drug, unless consent is obtained from the innovator. An NOC may not be issued to a generic manufacturer that seeks an NOC on this basis before the end of an eight-year period after the day on which the first NOC was issued to the innovator. An additional six-month extension to this eight-year term is also available for eligible pediatric data.

2 *Patented Medicines (Notice of Compliance) Regulations*

The *Patented Medicines (Notice of Compliance) Regulations* [2] provide for litigation proceedings that determine patent rights prior to generic market entry.

Under the *PM(NOC) Regulations*, a **First Person** who has filed a new drug submission (**NDS**) will seek to have patents pertaining to the NDS listed on the Patent Register. The First Person is typically an innovative drug manufacturer. Generally, a generic drug manufacturer who files a drug submission for a generic version of the First Person's product is considered the **Second Person**. A Second Person cannot receive an NOC for its generic product until it complies with the *PM(NOC) Regulations*.

To comply with the *PM(NOC) Regulations*, the Second Person typically serves the First Person with a Notice of Allegation (**NOA**) stating various allegations including that the patents on the Patent Register are invalid or that the Second Person's product does not infringe those patents. After receiving an NOA, the First Person can commence an action under the *PM(NOC) Regulations* seeking a declaration that the Second Person's product infringes a listed patent. Commencing an action under the *PM(NOC) Regulations* triggers a statutory stay prohibiting the Minister of Health from issuing an NOC to the Second Person for up to 24 months while the Court adjudicates the merits of the allegations.

If the Court determines that the Second Person's product infringes a valid listed patent, it may order any legal remedy that is available in respect of the infringement of a patent. If the First Person or patent owner is unsuccessful in the infringement action, the Minister may issue an NOC for the Second Person's drug if all other requirements under the *Food and Drug Regulations* are met. Section 8 of the *PM(NOC) Regulations* enables generic manufacturers to seek recovery for any losses caused by the stay.

1 *Food and Drug Regulations*, CRC, c 870, s C.08.004.1.

2 *Patented Medicines (Notice of Compliance) Regulations*, SOR/93-103 *[PM(NOC) Regulations]*.

3 Certificates of Supplementary Protection

A Certificate of Supplementary Protection (**CSP**) provides patent holders with up to two years of additional patent protection for drugs containing a new medicinal ingredient, or a new combination of medicinal ingredients. It can be described as a form of patent term extension or restoration. This period of protection is intended to partly compensate patent holders for the time spent in research and obtaining marketing authorization for drugs. The CSP Regime was adopted to implement Canada's commitments under the Canada-European Union Comprehensive Economic and Trade Agreement.

A CSP takes effect upon the expiry of the patent set out in the CSP. The CSP term is generally calculated by determining the time between the patent filing date and the NOC issuance date, minus five years. If this calculation does not yield a positive number, no CSP is available. Any remaining positive term available on this calculation is capped at a maximum of two years.

There are several criteria that must be met in order for an applicant to be eligible for a CSP. First, the NOC must be the first authorization for sale issued with respect to the medicinal ingredient or combination of medicinal ingredients. Second, the patent must pertain to a medicinal ingredient, or combination of medicinal ingredients, contained in a drug for which an NOC was issued on or following September 21, 2017. Third, the CSP application must satisfy certain timing criteria.

Once a CSP is granted it provides to the holder the same "rights, privileges, and liberties" that are granted by the patent set out in the certificate. This right applies to the "making, constructing, using, and selling" of any drug that contains the medicinal ingredient, or combination of medicinal ingredients, set out in the certificate, by itself or in addition to any other medicinal ingredient.

4 Biologics

Biologics are large, complex molecules that are derived from living organisms using naturally occurring metabolic processes. There is no distinct legal framework for the regulation of biologics in Canada, separate from other categories of drugs. However, biologics are the subject of unique guidelines, terminology, and practical considerations that distinguish them from small-molecule drugs.

As with small-molecule drugs, the market for biologics includes both innovative and subsequent-entry products. Market authorization for subsequent-entry biologics, or "biosimilars", is sought by relying on a previously approved biologic identified as the Canadian Reference Product. A key difference is that biosimilars are not eligible to be approved using the abbreviated new drug submission (**ANDS**) pathway under the *Food and Drug Regulations*, which sets out criteria for market authorization based on bioequivalence to a Canadian Reference Product. Biosimilar sponsors are required to comply with all of the requirements for an NDS under the *Food and Drug Regulations*.

Pursuant to Health Canada's Biosimilar Guidance Document, biosimilar NDS sponsors are permitted to rely on a reduced clinical and non-clinical data package to support approval provided that certain criteria are met. These include demonstrated similarity to a suitable reference biologic. However, Health Canada has confirmed that approval of a biosimilar in this manner is not a declaration of pharmaceutical equivalence, bioequivalence or clinical equivalence to the reference biologic drug.

5 Price regulation of medicines

The regulation of drug prices in Canada is governed by a combination of institutions, including health technology assessment bodies (CADTH, INESSS), a public negotiation consortium (pCPA), and public and private drug plans.

Typically, after a drug has been approved by Health Canada, it is reviewed by a health technology assessment body to assess the drug's effectiveness. Following the assessment, the drug manufacturer may then engage in a negotiation process with the Pan-Canadian Pharmaceutical Alliance (**pCPA**). The pCPA facilitates multi-jurisdictional negotiations on pricing and reimbursement of brand name and generic drugs for listing on public formularies. Following a successful pCPA negotiation, a letter of intent between the participating pCPA members and the drug manufacturer is signed setting out the terms of the agreement on reimbursement. At this point, the drug manufacturer will enter into a product listing agreement (**PLA**) with each participating public drug plan. Since there is no universal drug plan in Canada, the drug manufacturer will try to enter into a PLA with each provincial public drug plan.

In addition, the ceiling price of patented medicines is regulated by the Patented Medicine Prices Control Board (**PMPRB**). The PMPRB regulates the "factory gate" (or ex-factory) prices of patented medicines sold in Canada by setting non-excessive ceiling prices. Ultimately, the PMPRB determines whether, by virtue of the patentee's monopoly position, the price of a patented medicine is excessive, based on the Board's statutory and regulatory authority and with regard to guidelines that it publishes.

Subsection 85(1) of the *Patent Act* [3] sets out the factors that the PMPRB must consider to determine if a patentee is charging an excessive price. These factors include comparing the price of the patented medicines to prices of the same medicine in designated countries and to the prices of similar medicines in Canada.

3 *Patent Act*, RSC 1985, c P-4, s 85 (1).

Overview of the data protection provisions of the *Food and Drug Regulations*

1 Introduction

1.1 Overview

On October 5, 2006, the Government of Canada adopted extensive amendments to the data protection provisions of the *Food and Drug Regulations* (the ***Regulations***).[1] These amendments gave innovative drug manufacturers an eight-year period of market exclusivity by prohibiting a generic drug manufacturer from relying upon data submitted to Health Canada by the innovative drug manufacturer. An additional six-month extension is also available for eligible pediatric data. Only new drugs issued a market authorization, known as a Notice of Compliance (**NOC**), on or after June 17, 2006 are eligible for data protection.

1.2 History

On August 16, 1995, the *Regulations* were amended to include data protection provisions. For the first time, section C.08.004.1 of the *Regulations* sought to recognize the significant risk and expense associated with establishing the safety and efficacy of new drugs by providing innovators with a period of market exclusivity. Such exclusivity would prevent generic drug manufacturers from making use of the innovator's undisclosed data submitted to Health Canada as part of the marketing approval process.

These initial data protection provisions were effectively abolished by the Federal Court of Canada.[2] The Federal Court of Appeal affirmed that since the Minister of Health does not need to physically review an innovator's confidential data when approving a generic drug submission on the basis of bioequivalence, the data protection provisions in the *Regulations* were inapplicable.

In response, on October 5, 2006, the Government of Canada amended the data protection provisions of the *Regulations* to ensure that innovators received a period of data protection for their undisclosed data. The revised data protection provisions only apply to "innovative drugs", defined below, and only to those drugs granted marketing approval by way of an NOC.

Apotex challenged the 2006 data protection provisions of the *Regulations* for being *ultra vires* the constitutional authority of the federal government and improperly enabled by the *Food and Drugs Act*. The validity of the new regime was upheld by the Federal Court of Appeal bringing clarity to the existence of data protection in Canada.[3]

1.3 Relevant treaty obligations: TRIPS, CETA, NAFTA, and CUSMA

Canada's data protection regime arises out of its obligations under four treaties: the North American Free Trade Agreement (**NAFTA**),[4] the Agreement on Trade-related Aspects of Intellectual Property rights (**TRIPS**),[5] the Canada-European Union Comprehensive Economic and Trade Agreement (**CETA**),[6] and the Canada-United States-Mexico Agreement (**CUSMA**).[7] These treaties require signatories to protect the data of innovative drug manufacturers that is required to establish the safety and efficacy of a drug containing a new chemical entity where the origination of the data required considerable effort.[8]

The original purpose of the data protection provisions was to implement Canada's obligations under TRIPS and NAFTA.[9] However, NAFTA was recently replaced by CUSMA on July 1, 2020. Accordingly, the text of the data protection provisions now recognizes that their purpose is to implement TRIPS and CUSMA. These international obligations are important

1 *Food and Drug Regulations*, CRC, c 870, s C.08.004.1 [***Regulations***].

2 *Bayer Inc v Canada (AG)*, 1998 CanLII 8866 (FC), [1999] 1 FC 553, aff'd 1999 CanLII 8099 (FCA), 87 CPR 3d 293 (FCA).

3 *Canadian Generic Pharmaceutical Assn v Canada (Minister of Health)*, 2010 FCA 334, leave to SCC refused, 34085 (14 July 2011).

4 *North American Free Trade Agreement Between the Government of Canada, the Government of Mexico and the Government of the United States*, 17 December 1992, Can TS 1994 No 2, 32 ILM 289 (entered into force 1 January 1994) at Art 1711 [**NAFTA**].

5 *Agreement on Trade-Related Aspects of Intellectual Property Rights*, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 UNTS 299, 33 ILM 1197 (1994) at Art 39 [**TRIPS**]

6 *Comprehensive Economic and Trade Agreement between Canada, of the One Part, and the European Union and Its Member States, of the Other Part*, 30 October 2016, at Art 20.29 [**CETA**]

7 *Canada-United States-Mexico Agreement*, 30 November 2018, Can TS 2020 No 5 (entered into force July 1, 2020) at Arts 20.48-20.51 [**CUSMA**].

8 *Janssen Inc v Attorney General of Canada and the Minister of Health*, 2020 FC 904 at para 5.

considerations for courts interpreting the data protection provisions. The Federal Court of Appeal has recognized this purpose by holding that "the very *raison d'être* of the data protection regulations is to implement the international obligations". [10]

A TRIPS member state is obliged to protect data generated for the purpose of receiving marketing approval for a drug. Section 7 of Article 39(3), Protection of Undisclosed Information, states that "members, when requiring, as a condition of approving the marketing of pharmaceutical or of agricultural chemical products which utilize new chemical entities, the submission of undisclosed test or other data, the origination of which involves a considerable effort, shall protect such data against unfair commercial use." [11] A member state must protect against any such disclosure except where it is necessary to protect the public. [12]

Articles 20.48 and 20.49 of CUSMA, specify the data protection obligations of parties to CUSMA. Section 1(a) of Article 20.48 states:

> 1. (a) If a Party requires, as a condition for granting marketing approval for a new pharmaceutical product, the submission of undisclosed test or other data concerning the safety and efficacy of the product, that Party shall not permit third persons, without the consent of the person that previously submitted that information, to market the same or a similar product on the basis of:
>
> (i) that information, or
>
> (ii) the marketing approval granted to the person that submitted that information,
>
> for at least five years from the date of marketing approval of the new pharmaceutical product in the territory of the Party;

Article 20.49 defines "New Pharmaceutical Product":

> For the purposes of Article 20.48.1 (Protection of Undisclosed Test or Other Data), a new pharmaceutical product means a pharmaceutical product that does not contain a chemical entity that has been previously approved in that Party.

Under CUSMA, a Party that requires the submission of data for the purpose of approving a new pharmaceutical product is required to protect that data. Notably, CUSMA no longer requires that the origination of the protected data involve "considerable effort" in order to receive protection. Article 1711, section 5 of NAFTA previously required that the party "protect against disclosure of the data of persons making such submissions, where the origination of such data involves considerable effort".

Article 20.29 of CETA sets out data protection requirements for Canada and the member states of the European Union. The requirements under CETA are largely similar to those of TRIPS and CUSMA. Under CETA, if a party requires, as a condition to receiving a marketing authorization for a pharmaceutical product, the submission of undisclosed test data to determine whether a product is safe and effective, the party must protect against the disclosure of that data if its origination involved "considerable effort." [13] Parties are not required to protect against data disclosure where it is "necessary to protect the public or unless steps are taken to ensure that the data are protected against unfair commercial use." [14] Contrary to CUSMA which requires a minimum of 5 years of data protection, CETA sets the floor at a minimum of 6 years. [15]

Unlike TRIPS and CUSMA, CETA is not mentioned in the purpose provision of the data protection provisions of the *Regulations*. However, the text of CETA may still be used in interpreting the data protection provisions based on the general principle that legislation is presumed to operate in conformity with Canada's international obligations. [16]

9 *Regulations*, s C.08.004.1(2).
10 *Takeda Canada Inc v Canada (Minister of Health)*, 2013 FCA 13 at para 90.
11 TRIPS, Art 39(3), s 7.
12 TRIPS, Art 39(3), s 7.
13 CETA, Art 20.29, s 1.
14 CETA, Art 20.29, s 1.
15 CETA, Art 20.29, s 2a.
16 *Canada (Minister of Citizenship and Immigration) v Vavilov*, 2019 SCC 65 at para 114.

2 Details of operation

2.1 Innovative drug

Data protection under the *Regulations* applies to "innovative drugs." An innovative drug is a drug that (a) contains a medicinal ingredient not previously approved in a drug by the Minister and (b) that is not a variation of a previously approved medicinal ingredient such as a salt, ester, enantiomer, solvate or polymorph. [17]

Health Canada's Guidance Document on the data protection provisions provides a two-step process for determining whether a new drug is an innovative drug. [18] In the first step, the Minister will determine whether the medicinal ingredient is a new chemical entity. In the second step, the Minister will determine whether the generation of the data that supports the approval of the medicinal ingredient required considerable effort.

The requirement that an innovative drug not be a "variation of a previously approved medicinal ingredient such as a salt, ester, enantiomer, solvate or polymorph" was designed to prevent the application of subsequent terms of data protection for "minor changes" to a drug. The applicability of data protection to other drug variations that are not included in the definition of innovative drug (for example, metabolites of a previously approved medicinal ingredient) is determined on a case-by-case basis according to the extent such submissions are supported by new and significant clinical data. [19]

2.1.1 Judicial interpretation of innovative drug

Jurisprudence has interpreted what is meant by "not previously approved" in the definition of innovative drug. At issue in *Canada (Health) v Celgene Inc* [20] was whether thalidomide, the morning sickness drug withdrawn from the market for causing birth defects, was "previously approved" when reintroduced as an anti-cancer drug. The Federal Court of Appeal held that thalidomide was previously approved, albeit for a markedly different use, and refused data protection. [21] The majority of the Federal Court of Appeal found that the meaning of previously approved in the definition of innovative drug does not mean "currently approved," and therefore, it was irrelevant that the previously approved drug was subsequently pulled from the market.[22]

On the other hand, in *Teva Canada Ltd v Canada (Minister of Health)*, the Federal Court of Appeal found that a drug available through Health Canada's Special Access Programme is not considered previously approved for the purposes of defining an innovative drug, and thus, would not prevent a later claim for data protection under the Regulations. [23]

Additionally, in *Epicept Corp v Canada (Minister of Health)*, the Federal Court found that prior approval of a drug, even where an applicant did not receive an NOC, such as an over-the-counter drug or natural health product, will preclude data protection of a new drug with the same medicinal ingredient.[24]

In regard to the second part of the definition of innovative drug, the Federal Court of Appeal has addressed the meaning of a "variation" of an innovative drug. At issue in *Takeda Canada Inc v Canada (Health)*,[25] was whether the enumerated categories (salt, ester, enantiomer, solvate, polymorph) were examples of what might be considered a variation. [26] Relying on the words "variation…such as a[n]…enantiomer" in the definition of innovative drug, Takeda argued that not all enantiomers are variations, and that its specific enantiomer ought to qualify for data protection. [27] Takeda urged the court to adopt a purposive construction of the definition requiring the Minister to assess the effort required to obtain the data for approval of the drug. [28] The Federal Court of Appeal disagreed with Takeda's submissions and held that the Governor in Council specifically found that the enumerated categories are all "variations" of previous approved drugs, and thus ineligible for data protection. [29]

17 *Regulations,* s C.08.004.1(1).

18 Health Canada, "Guidance Document: Data Protection under C.08.004.1 of the *Food and Drug Regulations*" (effective April 8, 2021) [April 2021 Guidance Document].

19 *Regulatory Impact Analysis Statement*, C Gaz II, Vol 140, No 21 at 1496 *(Regulations Amending the Food and Drug Regulations (Data Protection))* [RIAS].

20 *Canada (Health) v Celgene Inc*, 2013 FCA 43 [*Celgene*], rev'g 2012 FC 154.

21 *Celgene* at paras 55 and 67.

22 *Celgene* at para 44.

23 *Teva Canada Ltd v Canada (Minister of Health),* 2012 FCA 106 at para 42, aff'g 2011 FC 507.

24 *Epicept Corp v Canada (Minister of Health),* 2010 FC 956 at para 78.

25 *Takeda Canada Inc v Canada (Health),* 2013 FCA 13 [*Takeda*], leave to SCC refused, 35276 (June 13, 2013).

26 *Takeda* at paras 23-25.

27 *Takeda* at para 24.

28 *Takeda* at para 25.

29 *Takeda* at para 131.

This restrictive interpretation was affirmed in *Photocure ASA v Canada (Minister of Health)*, [30] in which the Federal Court dismissed Photocure's application for judicial review of the Minister's decision, which denied Photocure data protection on the basis that the medicinal ingredient in CYSVIEW, hexaminolevulinate hydrochloride (HAL HCl), was an ester of a previously approved medicinal ingredient, aminolevulinic acid hydrochloride (ALA HCl). [31] The Court disagreed with Photocure that the issue before the Court was whether HAL HCl was an innovative drug, and found the issue was a factual determination as to whether one drug is a variation of another. [32]

2.2 Six-year "no file" period

A generic drug manufacturer seeking an NOC on the basis of a direct or indirect comparison between the generic drug and an innovative drug may not file a drug submission before the end of a period of six years after the day on which the first NOC issued for the innovative drug, unless consent is obtained from the innovator. [33]

Generic drug submissions made under Canada's Access to Medicines Regime (which provides for compulsory licences to export certain patented medicines to least-developed and developing countries) are exempt from the six-year no file rule, pursuant to section C.08.004.1(7) of the *Regulations*. [34] However, the underlying data is still protected for the eight-year term.

2.3 Eight years of data protection

An NOC may not be issued to a subsequent entry drug manufacturer that seeks an NOC on the basis of a direct or indirect comparison between the second or subsequent entry drug and an innovative drug, before the end of an eight-year period after the day on which the first NOC was issued to the innovator. [35]

According to the Regulatory Impact Analysis Statement (**RIAS**) that accompanied the 2006 amendments to the *Regulations*, the two-year marketing prohibition after the six-year "no file" period is intended to mirror the period of time generally required by Health Canada to approve a drug submission, as well as the time required for a generic manufacturer to comply with the requirements of the *Patented Medicines (Notice of Compliance) Regulations*, SOR/93-133. [36]

An innovator may consent to the issuance of an NOC at any time during the eight-year term. [37]

2.4 Additional six months of data protection for pediatric studies

The eight-year term of data protection may be extended for a further six months where pediatric studies for an innovative drug are submitted either as part of the original drug submission, or within the first five years of the eight-year term. [38]

"Pediatric populations" are defined in the *Regulations* as "premature babies born before the 37th week of gestation; full-term babies from 0 to 27 days of age; and all children from 28 days to 2 years of age, 2 years plus 1 day to 11 years of age, and 11 years plus 1 day to 18 years of age." [39]

The RIAS elaborates on the type of data required to qualify for the pediatric extension. In particular, the data must meet the definition of "clinical trial" as set out in the *Regulations*. The goal of the trial, as reflected in the study hypothesis, objectives, design and conduct, must be to increase knowledge of the drug's effect in pediatric populations in a manner "that will assist health professionals, parents, caregivers, and patients in making informed choices about drug therapy." [41]

30 *Photocure ASA v Canada (Minister of Health),* 2015 FC 959 [*Photocure*].

31 *Photocure* at para 20.

32 *Photocure* at para 84.

33 *Regulations*, ss C.08.004.1(3)(a) and C.08.004.1(6).

34 *Regulations*, ss C.08.004.1(7) and C.07.003. See also the *Patent Act*, RSC 1985, c P-4, ss 21.01-21.2.

35 *Regulations*, s C.08.004.1(3)(b).

36 RIAS at 1496.

37 *Regulations*, s C.08.004.1(8).

38 *Regulations*, ss C.08.004.1(4)(a) and (b).

39 *Regulations*, s C.08.004.1(1).

40 *Regulations*, s C.05.001 ("Clinical Trial": "means an investigation in respect of a drug for use in humans that involves human subjects and that is intended to discover or verify the clinical, pharmacological or pharmacodynamic effects of the drug, identify any adverse events in respect of the drug, study the absorption, distribution, metabolism and excretion of the drug, or ascertain the safety or efficacy of the drug").

41 RIAS at 1497-98.

2.5 Marketing requirement

The innovative drug must be marketed in Canada in order to remain eligible for data protection. [42] According to the RIAS, this rule was implemented to ensure that a generic drug is not blocked from entering the market where an innovative drug has been withdrawn prior to the expiry of its term of data protection. [43]

2.6 Combination drugs

The RIAS specifies that combinations of previously approved medicinal ingredients are not eligible for additional data protection unless one of the medicinal ingredients qualifies as an innovative drug. [44] In that case, a generic drug manufacturer will be prevented from obtaining an NOC for the combination product until the term of data protection expires for the innovative drug. If more than one innovative drug forms part of the combination product, no NOC will be issued to a generic drug manufacturer until the last term of data protection expires. [45]

In some circumstances, a "non-innovative" combination drug may also benefit from data protection if the drug contains a new chemical entity. This situation was considered by the Federal Court in *Natco Pharma (Canada) Inc v Canada (Health)*. [46] Gilead's combination drug, GENVOYA contained four medicinal ingredients, including tenofovir alafenamide hemifumarate (**TAF**), which had never been in a previously approved drug. Accordingly, GENVOYA was designated as an innovative drug. Another Gilead combination product, DESCOVY was then subsequently approved. DESCOVY contained two previously approved medicinal ingredients, including TAF. Since DESCOVY did not contain a medicinal ingredient not previously approved in a drug, DESCOVY was not an innovative drug.

Natco submitted a drug submission for a generic version of DESCOVY, taking the position that since DESCOVY was not an innovative drug, data protection did not apply. The Minister of Health did not accept Natco's submission for filing because Natco's product contained TAF, which formed the basis for GENVOYA's data protection. On judicial review, the Federal Court found that the Minister's decision was reasonable. The Minister found that Natco made a direct or indirect comparison to GENVOYA and reasonably rejected Natco's submission.

2.7 Post-filing amendments trigger data protection

In *Hospira Healthcare Corporation v Canada (Health)*, [47] the Federal Court upheld a decision of the Minister to apply the data protection provisions to post-filing amendments made by Hospira to its new drug submission. In doing so, the Federal Court established that a direct or indirect reference made to an innovative drug subject to data protection will trigger the data protection provisions under subsection C.08.004.1(3) of the *Regulations* and consequently, a drug will be not be approved until the eight-year data protection term expires. [48]

2.8 No data protection for submissions relying on third-party data

In May 2015, Health Canada released a Guidance Document entitled: *Drug Submissions Relying on Third-Party Data*, which provides guidance to sponsors on Health Canada's expectations for filing new drug submissions or supplements to new drug submissions in the absence of clinical study reports of safety and efficacy. The Guidance Document sets out Health Canada's intention to allow sponsors, in eligible circumstances, to establish clinical safety and efficacy by relying on a reference product reported in the literature and its domestic and/or foreign market experience ("third-party data").

Health Canada has stated in its April 2021 Guidance Document: *Data Protection under C.08.004.1 of the Food and*

42 *Regulations*, s C.08.004.1(5).
43 RIAS at 1498.
44 RIAS at 1496-1497.
45 RIAS at 1496-1497.
46 *Natco Pharma (Canada) Inc v Canada (Health)*, 2020 FC 788 [*Natco Pharma*].
47 *Hospira Healthcare Corporation v Canada (Minister of Health)*, 2015 FC 1205 [*Hospira*].
48 *Hospira* at para 80.

Drug Regulations (**April 2021 Guidance Document**) that these submissions relying on third-party data will not be eligible for data protection.[49]

2.9 Biosimilars

The six-year "no file" period prescribed by the *Regulations* (applicable to manufacturers seeking an NOC on the basis of an indirect or direct comparison to an innovative drug) is intended to apply to biosimilar drugs.

However, the April 2021 Guidance Document states that that new drug submissions which are based on independent clinical trials and not on a comparison to an innovative drug are not captured by the six-year "no file" period. Submissions that do not result in a subsequent-entry version of the innovative drug are not captured by the six-year "no file" period. For example, a submission for a drug indicated for use in combination with an innovative drug will not be prevented from filing.[50]

2.10 Register of innovative drugs

Pursuant to section C.08.004.1(9) of the *Regulations*, the Minister of Health maintains a Register of Innovative Drugs, which contains the following information:

- drug submission number
- medicinal ingredient
- brand name
- manufacturer name
- notice of compliance date
- six-year "no file" date
- pediatric extension, if granted
- date data protection ends.

Every entry on the Register of Innovative Drugs also identifies the non-innovative drugs that contain the medicinal ingredient that provided the basis for data protection. These non-innovative drugs may qualify for "umbrella" data protection. This was the case in *Natco Pharma*, in which the Federal Court recognized that a non-innovative drug, DESCOVY benefited from the same data protection term as the innovative drug, GENVOYA. Accordingly, on the Register of Innovative Drugs, DESCOVY is listed for the medicinal ingredient, TAF.

The Register of Innovative Drugs is available for viewing on the Internet at:

https://www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/applications-submissions/register-innovative-drugs/register.html

2.11 Procedure for challenging the designation of an innovative drug

The Office of Patented Medicines and Liaison (the **OPML**), on behalf of the Minister of Health, accepts written inquiries challenging the designation of innovative drugs listed on the Register of Innovative Drugs. The procedure for submitting written inquiries is outlined in section 4 of Health Canada's April 2021 Guidance Document. The OPML endeavours to answer general inquiries within 30 days of receipt. While the OPML will respond to inquiries by providing relevant information in the public domain, confidential information will not be provided. Inquiries to the OPML should specify why a listed innovative drug is being challenged. When an inquiry is received, the innovative company that listed the drug will be notified.

3 Relevant legislation and guidance documents

- Section C.08.004.1 of the *Food and Drug Regulations*, CRC c 870.
- Regulatory Impact Analysis Statement respecting the 2006 Amendments to the *Food and Drug Regulations* (see p. 1493).
- Health Canada Guidance Document: Data Protection under C.08.004.1 of the *Food and Drug Regulations*" (effective April 8, 2021).

49 April 2021 Guidance Document.

50 April 2021 Guidance Document.

Overview of the *Patented Medicines (Notice of Compliance) Regulations*

1 Summary of operation

1.1 Purpose and history of the *PM(NOC) Regulations*

The *Patented Medicines (Notice of Compliance) Regulations* [1] provide litigation proceedings to determine patent rights prior to generic market entry.

The *PM(NOC) Regulations* first came into force on March 12, 1993 at a time when compulsory licenses for medicines were abolished and an "early-working" exception to patent infringement was added to the *Patent Act.* [2] The "early-working" exception permits generic drug manufacturers to engage in activities reasonably related to the development and submission of information required by the government for approval to market a drug while relevant patents are still in force. Approval is obtained through the issuance of a notice of compliance (**NOC**).

To balance this early-working exception, the *PM(NOC) Regulations* were created to prevent the infringement of patents pertaining to medicines by prohibiting the issuance of an NOC by the Minister of Health (the **Minister**) for a potentially infringing generic drug product. The *PM(NOC) Regulations* require generic drug manufacturers to first address relevant patents before they can be approved to come to market. It is through this mechanism that the *PM(NOC) Regulations* link an innovator's patents to the generic drug-approval process.

1.2 Major changes under the 2017 Amendments

The *PM(NOC) Regulations* were substantially amended on September 21, 2017 (**2017 Amendments**) to align with Canada's obligations under the Canada-European Union Comprehensive Economic and Trade Agreement (**CETA**). [3]

The 2017 Amendments changed the *PM(NOC) Regulations* by: (1) replacing summary applications with full infringement actions and creating a single track of litigation for issues relating to patent validity and infringement; and (2) including certificates of supplementary protection (**CSPs**) within the scope of the *PM(NOC) Regulations*.

1.3 Overview of litigation under the *PM(NOC) Regulations*

Under the *PM(NOC) Regulations*, the Minister is required to maintain a register of patents and CSPs pertaining to medicines for which NOCs have been issued (the **Patent Register**). The drug manufacturer who has filed a new drug submission (**NDS**) or a supplement to a new drug submission (**SNDS**), is considered the **First Person** under the *PM(NOC) Regulations*. The First Person may file with the Minister a list of all the relevant patents pertaining to the NDS or SNDS, and these patents may be entered on the Patent Register provided certain eligibility criteria are met.

A drug manufacturer who files a submission for approval of a drug and directly or indirectly compares the drug with, or makes reference to, a drug marketed in Canada under an NOC issued to a First Person (**Canadian Reference Product**) is considered the Second Person under the *PM(NOC) Regulations*. If there are patents or CSPs on the Patent Register listed in respect of a Canadian Reference Product, the **Second Person** cannot obtain an NOC unless it has received consent, the patents or CSPs listed on the Patent Register have expired, or the Second Person has addressed the listed patents or CSPs by filing a Notice of Allegation (**NOA**).

An NOA is a statement alleging that the First Person is not the patent owner (or acting with the owner's consent), or that the patent has either expired, is not valid, is ineligible for inclusion on the register, or is not infringed. This NOA is required to be served on the First Person, on or after the filing date of the Second Person's drug submission. [4]

1 *Patented Medicines (Notice of Compliance) Regulations*, SOR/93-103 [*PM(NOC) Regulations*].

2 *Patent Act*, RSC 1985, c P-4, s 28 [*Patent Act*].

3 The *PM(NOC) Regulations* were also amended on March 12, 1998, October 1, 1999, October 5, 2006, June 12, 2008, October 7, 2010, March 25, 2011, and June 19, 2015.

4 Health Canada, "Guidance Document: *Patented Medicines (Notice of Compliance) Regulations*" (effective May 11, 2018), s 5.6.1 [**Health Canada's May 2018 Guidance Document**].

Upon receipt of the NOA, the First Person must forward the NOA to the owner of any patent addressed in the NOA within five days. The First Person and patentee then have 45 days to bring an action against the Second Person in the Federal Court for a declaration that the Second Person's product infringes any of the patents that are the subject of the NOA.

If no action is brought in response to an NOA, the NOC may be issued on the 46th day after service of the NOA if all other requirements under the *Food and Drug Regulations*[5] are met. The First Person and patentee may be estopped from taking further action regarding listed patents if they do not commence an action in the 45-day window, unless they can show that they did not have a reasonable basis for bringing the action at that time. [6]

Commencing an action under the *PM(NOC) Regulations* triggers a statutory stay prohibiting the Minister from issuing an NOC to the Second Person for up to 24 months while the Court adjudicates the merits of the allegations. The 24-month period may be shortened or extended by the Court if the Court finds that one or both of the parties have not acted diligently in carrying out their obligations under the *PM(NOC) Regulations* or have failed to reasonably cooperate in expediting the action.

If the Court determines that the Second Person's product infringes a valid listed patent that is the subject of an NOA, it may order any legal remedy that is available in respect of the infringement of a patent. If the First Person or patent owner is unsuccessful in the infringement action, the Minister may issue an NOC for the Second Person's drug if all other requirements under the *Food and Drug Regulations* are met. If the Second Person counterclaimed for a declaration of invalidity, the Court may also declare the patents invalid or void if it so finds.

The current *PM(NOC) Regulations* interact with the rights that exist under the *Patent Act* to create a single track patent litigation process for final, *in rem* determinations of patent infringement and validity. Previously, proceedings under the *PM(NOC) Regulations* proceeded by way of application and only determined if an NOC could issue to the Second Person. As a result, independent of the outcome in an application under the former *PM(NOC) Regulations*, a separate infringement or impeachment action could be instituted. [7]

2 Details of operation

2.1 Patent Register

The Minister maintains the Patent Register, a public register of eligible patents based on patent lists submitted by First Persons (section 3). The Patent Register is publically accessible here.

2.2 Submission of a patent list (Form IV)

A First Person i.e., the person who files or has filed an NDS or an SNDS, may request that a patent be added to the Patent Register by submitting a patent list to the Minister (subsection 4(1)). A patent list for a drug is submitted using a Form IV. [8] If the First Person is not the patentee or an exclusive licensee, the consent of the patentee must be obtained in order to file the patent list (subparagraph 4(4)(d)(iii)).

The First Person must file a patent list at the same time as the NDS or SNDS submission is filed (subsection 4(5)). According to the Health Canada Guidance Document on the *Patented Medicines (Notice of Compliance) Regulations* (**Health Canada's May 2018 Guidance Document**), patent lists submitted separately from the drug submission will be refused as not meeting the timing requirement set out in subsection 4(5). [9] No information submitted on a patent list will be entered on the Patent Register until an NOC has been issued to the First Person (subsection 3(7)).

The First Person must include on the patent list, an address at which they can be served in Canada (paragraph 4(4)(e)). If an address in Canada is not available, then the name and address in Canada of another person upon whom service may be made must be included on the patent list.

5 *Food and Drug Regulations*, CRC, c 870 [***Food and Drug Regulations***].

6 *PM(NOC) Regulations*, s 6.01.

7 In situations where factual and legal issues on infringement were decided prior to the 2017 Amendments, the Federal Court has found those will be potentially persuasive and afforded respectful attention; however, this will not bar parties from alleging infringement under the current *PM(NOC) Regulations*. See *Amgen Inc v Pfizer Canada ULC*, 2020 FC 522.

8 For guidance on how to complete a Form IV, refer to Health Canada's May 2018 Guidance Document, Appendix A.

9 Health Canada's May 2018 Guidance Document, s 4.2.1.

2.2.1 Newly issued patents

A newly issued patent for a drug may be added to the Patent Register after the filing of an NDS or SNDS, if: 1) the Canadian filing date of the patent precedes the filing date of the submission; and 2) the patent list is submitted within 30 days of the patent's issue date (subsection 4(6)). The Minister has applied the 30-day window for filing strictly. [10]

The Federal Court of Appeal has held that "filing date" refers to the "filing date" of a Canadian patent application, not the priority date. [11]

2.2.2 Patent Register listing criteria

Failure to comply with listing-eligibility requirements may result in the Minister's refusal to list a patent on the Patent Register. Previously, noncompliance with listing-eligibility requirements could form the basis for a challenge by a Second Person to have a First Person's prohibition application dismissed prior to a hearing on the merits. However, as a result of the 2017 Amendments, infringement actions under the *PM(NOC) Regulations* may no longer be dismissed, in whole or in part, solely on this basis (subsection 6.07(3)).

Listing in respect of an NDS. Only an issued patent may be included on a patent list. The patent must contain at least one of the following types of claims (subsection 4(2)): [12]

- for the approved medicinal ingredient (paragraph 4(2)(a));
  - this includes product-by-process patents and patents claiming biological drugs as well as claims to different polymorphs of the medicinal ingredient (including different crystalline, amorphous, hydrated and solvated forms), but does not include different chemical forms of the medicinal ingredient (subsection 2(1)); [13]
  - a patent that contains a claim for the medicinal ingredient is eligible even if the submission includes, in addition to the medicinal ingredient claimed in the patent, other medicinal ingredients (paragraph 4(2.1)(a)); [14]
  - Health Canada has stated that patents claiming a combination of medicinal ingredients contained in a single formulation or dosage form are not eligible to be added to the Patent Register in respect of a drug that contains only one of the claimed medicinal ingredients. [15]
- for the approved formulation that contains the medicinal ingredient (paragraph 4(2)(b));
  - the claim for the formulation need not specify the non-medicinal ingredients contained in the drug (subsections 2(1) and 2(2));
  - a patent that contains a claim for the formulation is eligible if the submission includes the non-medicinal ingredients specified in the claim, if any are specified, even if the submission contains additional non-medicinal ingredients (paragraph 4(2.1)(b));
  - Health Canada may refuse to list patents where the claims for the formulation do not include all medicinal ingredients found in the approved drug. [16]
- for the approved dosage form that includes within its scope the medicinal ingredient or formulation (subsection 2(1) and paragraph 4(2)(c));
  - Health Canada has stated that patents directed solely towards a dispenser, a container or packaging (e.g. an inhaler, an intravenous stand, or a syringe) would not be considered to contain a claim for the dosage form. [17]
- for the approved use of the medicinal ingredient (paragraph 4(2)(d));
  - a patent that contains a claim for the use of the medicinal ingredient is eligible for listing if the submission includes the use claimed in the patent. This is true even if: (i) the submission includes additional medicinal ingredients, (ii) the submission includes other additional uses of the medicinal ingredient, or (iii) the use that is included in the submission requires the use of the medicinal ingredient in combination with another drug (paragraph 4(2.1)(c));

10 See e.g. *Eli Lilly Canada Inc v Canada (Attorney General)*, 2019 FC 5.
11 *Pfizer Canada Inc v Canada (Attorney General)*, 2003 FCA 138 at para 28.
12 Subsection 4(2) of the *PM(NOC) Regulations* replaced a broader relevance-based test for establishing listing eligibility that applied prior to October 2006.
13 Health Canada's May 2018 Guidance Document, s 4.5.1. Proposed amendments to the *PM(NOC) Regulations* would allow patents claiming different chemical forms of medicinal ingredients to be eligible for inclusion on the Patent Register. See Regulatory Impact Analysis Statement, C Gaz I, Vol 155, No 17 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*).
14 Prior to 2015, the Federal Court interpreted the listing requirement such that a patent claiming a single medicinal ingredient was not eligible for listing against a drug that contained additional medicinal ingredients. See *Purdue Pharma v Canada (Attorney General)*, 2011 FCA 132; *Gilead Sciences Canada Inc v Canada* (Minister of Health), 2012 FCA 254 [***Gilead***], leave to appeal to SCC refused, 35123 (21 March 2013); *ViiV Healthcare ULC v Teva Canada Limited*, 2014 FC 893 [***ViiV***], aff'd 2015 FCA 93. However, SOR/2015-169 reversed this body of cases. See Regulatory Impact Analysis Statement, C Gaz II, Vol 149, No 13 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*) [2015 RIAS].

— Health Canada has stated that patents claiming the use of a single medicinal ingredient are eligible for listing against a drug containing that medicinal ingredient in combination with other medicinal ingredients provided the drug is approved for the use claimed in the patent. However, a patent claiming the use of a combination of medicinal ingredients will generally not be eligible to be listed for a drug containing only one of the medicinal ingredients in the combination unless the combination use is approved in the drug's product monograph, and the patent claims are not limited to the use of the combination in a single formulation or dosage form.[18]

Listing in respect of an SNDS. In relation to an SNDS, a patent is eligible for listing if it contains a claim for the approved changed formulation, dosage form, or use (subsection 4(3)).

Listing in respect of a Certificate of Supplementary Protection. A CSP is eligible for listing in respect of an NDS or SNDS if:

- the patent to which the CSP relates is already included on the register in respect of the NDS or SNDS (paragraph 4(3.1)(a)); and
- The NDS or SNDS relates to a drug with respect to which the CSP grants protection under the *Patent Act* (paragraph 4(3.1)(b)). [19]

Health Canada automatically adds a CSP to the Patent Register when the CSP issues. No separate steps need to be taken by First Person to have a CSP added.

2.2.3 Ineligible patents

Health Canada's May 2018 Guidance Document advises that the following types of patents are considered ineligible for listing on the Patent Register (section 4.5.1):

- purely process patents;
- patents for a medical device;
- patents for an intermediate used in the manufacture of the medicinal ingredient;
- patents for a metabolite of the medicinal ingredient; and
- patents for an impurity present in the final drug product.

The Minister will refuse to add any patent that does not meet the requirements for addition to the register.

2.2.4 Removal of patents from Patent Register

In addition to refusing to add a patent to the Patent Register that does not meet requirements for listing, the Minister may remove a patent from the Patent Register where:

- The patent was added to the Patent Register due to an administrative error (subparagraph 3(2)(c)(i)).
- The First Person requests that it be removed (subparagraph 3(2)(c)(iv)).
- The patent is declared invalid or void (subparagraph 3(2)(c)(ii)). The patent will be added back to the Patent Register if that holding is reversed or set aside on appeal (subsection 3(2.2)).
- The patent is declared ineligible for listing on the Patent Register (subparagraph 3(2)(c)(iii)). However, the Minister may only remove the patent from the Patent Register following the determination or discontinuance of any appeal of the declaration to the Federal Court of Appeal (subsection 3(2.1)).
- The patent has expired and there is no CSP included on the Patent Register in respect of that NDS or SNDS (paragraph 3(2)(d)).
- A patented drug is withdrawn from the market, thereby resulting in a cancelled Drug Identification Number (**DIN**). 90 days after the cancellation of the DIN, the Minister will remove those patents from the Patent Register that were listed in relation to the NDS or the SNDS filed for the patented drug (subsections 3(3) and (4)). The patents may be re-listed upon reassignment of the DIN and resumption of marketing of the patented drug by the manufacturer (subsection 3(5)).

15 Health Canada's May 2018 Guidance Document, s 4.5.1.
16 See Regulatory Impact Analysis Statement, C Gaz II, Vol 151, No 1 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations, 2017*) [2017 RIAS].
17 Health Canada's May 2018 Guidance Document, s 4.5.1.
18 Health Canada's May 2018 Guidance Document, s 4.5.1.
19 For examples in which a CSP may be eligible, see Health Canada's May 2018 Guidance Document, s 4.7.

As a result of the 2017 Amendments, the Minister now has the discretion to review the Patent Register to determine whether any patents or CSPs do not meet eligibility requirements and to remove those patents or CSPs that do not meet the listing requirements (subsection 3(2.3)).

2.3 Obligations on Second Person filing a submission for a patented medicine

2.3.1 Consent, statement of acceptance, or notice of allegation

A Second Person who files a submission or a supplement to a submission which directly or indirectly compares the drug with a Canadian Reference Product, has certain obligations to meet under the *PM(NOC) Regulations*.

The Second Person must review the Patent Register and include in its submission, with respect to each patent referenced on the Patent Register in respect of the Canadian Reference Product:

- a statement that the owner of that patent has consented to the making, constructing, using or selling of the second or subsequent entry drug (paragraph 5(2.1)(a));
- a statement of acceptance that the NOC will not issue until the patent or CSP expires (paragraph 5(2.1)(b)); or
- an allegation that:
  - the person appearing on the patent list is not the patentee or a person claiming under the patentee (subparagraph 5(2.1)(c)(i));
  - the patent or CSP is invalid or void (subparagraph 5(2.1)(c)(ii));
  - the patent or CSP is ineligible for inclusion on the register (subparagraph 5(2.1)(c)(iii));
  - the patent or CSP is not infringed (subparagraph 5(2.1)(c)(iv));
  - the patent or CSP has expired (subparagraph 5(2.1)(c)(v)); or
  - in the case of a CSP, that CSP cannot take effect (subparagraph 5(2.1)(c)(vi)).

The statement of consent, acceptance or allegation is made by submitting a Form V. [20] A Form V must be submitted for each patent included on the Patent Register and for each strength of the Second Person's drug.

2.3.2 Patents not to be addressed

A Second Person is not required to address (i.e., file a Form V or serve an NOA in relation to) patents or CSPs that are added to the Patent Register on or after the date of filing of the Second Person's submission or supplement (subsection 5(4)).[21] In essence, the Patent Register is "frozen" upon filing of the Second Person's submission or supplement.

Health Canada's May 2018 Guidance Document states that "administrative" submissions pursuant to a licensing agreement do not trigger a Second Person's obligations under section 5 of the *PM(NOC) Regulations.* [22] Only an originating NDS or originating abbreviated NDS (**ANDS**) will trigger the application of section 5 of the *PM(NOC) Regulations*.

Accordingly, generic manufacturers submitting an administrative NDS or ANDS cross-referenced to an originating submission under a license may not need to address patents listed on the Patent Register prior to obtaining approval. However, the cross-referenced submission cannot be approved until the requirements of section 5 have been satisfied with respect to the originating submission. [23]

One implication of the above is that if consent is received from the patent owner under subsection 7(2) of the *PM(NOC) Regulations* and the NOC issues for the originating submission, the NOC for the administrative drug submission will also issue if it otherwise meets the requirements of the *Food and Drug Regulations*.

20 For guidance on how to complete a Form V, refer to Health Canada's May 2018 Guidance Document, Appendix B.
21 This provision was added to the *PM(NOC) Regulations* in 2006.
22 Health Canada's May 2018 Guidance Document, s 5.1.1.
23 Health Canada's May 2018 Guidance Document, s 5.1.1. See also *Teva Canada Limited v Pfizer Canada Inc*, 2016 FCA 248.

2.3.3 Notice of allegation

Where the Second Person makes an allegation set out in paragraph 5(2.1)(c), it must, on or after the date of filing of its submission, serve an NOA on the First Person (paragraph 5(3)(a)). The NOA shall contain (paragraphs 5(3)(b) and (c)):

- a description of the medicinal ingredient, dosage form, strength, route of administration and use of the drug in respect of which the submission or supplement was filed (subparagraph 5(3)(b)(i));
- a detailed statement of the legal and factual basis for the allegations (subparagraph 5(3)(b)(ii));
- a certification by the Minister of the date of filing of the submission or supplement (subparagraph 5(3)(c)(i));
- the Second Person's address for service, along with the names of and contact information for their solicitors (subparagraph 5(3)(c)(ii));
- a searchable electronic copy of the portions of the Second Person's submission that are relevant to determining if any patent referred to in the NOA has been infringed (subparagraph 5(3)(c)(iii)); and
- an electronic copy of any documents that are relied upon to support an allegation that a listed patent is invalid or void (subparagraph 5(3)(c)(iv)).

The Second Person must file proof of service of the NOA with the Minister (paragraph 5(3)(e)). Health Canada will review a copy of the NOA to ensure that the description of the medicinal ingredient, dosage form, strength, route of administration and use of the drug corresponds with the submission or supplement on file with Health Canada. [24]

If the NOA contains an allegation that a patent is invalid or void, the Second Person may request that the First Person provide the names and contact information of any inventor who might have information relevant to the allegation (paragraph 5(3.1)(a)).

Further, if the NOA contains a specific allegation that a particular property, advantage, or use that is part of the invention was not established as of the filing date, the Second Person may request any laboratory notebook, research report or other document relevant to making that determination (paragraph 5(3.1)(b)). In making the request, the Second Person must identify the specific allegation in the NOA that is relevant to the request and the portion of the patent that sets out the property, advantage, or use that the Second Person alleges was not established by the filing date.

If the Second Person's submission is either withdrawn by the Minister or cancelled by the manufacturer, the Second Person is required to retract the NOA and serve a notice of the retraction on the First Person within 90 days (subsection 5(6)). Health Canada also expects to be provided with a copy of the retraction. [25]

2.4 First Person or patent owner's obligations and possible responses to a notice of allegation

Within five days of being served with an NOA, the First Person must forward a copy of the NOA and all accompanying documents and requests to the owner of each patent that is the subject of the NOA (subsection 5(3.3)). The First Person must also notify the Second Person that the relevant patent owners have been served (subsection 5(3.4)).

A First Person or an owner of a patent who receives an NOA has 45 days from service of the NOA to commence an action in the Federal Court for a declaration that the making, constructing, using or selling of the Second Person's drug would infringe any patent or CSP that is the subject of the NOA (subsection 6(1)). If such declaration is made, the Court may order any remedy available under the *Patent Act* or otherwise available at law or in equity (subsection 6(4)).

The owner of any patent that is the subject of an action commenced in response to an NOA must be made a party to the action (subsection 6(2)). [26]

If the Second Person requested information and/or documents in their NOA pursuant to subsection 5(3.1), the person who brings the action must, at the time of service of the Statement of Claim on the Second Person:

24 Health Canada's May 2018 Guidance Document, s 5.6.2.
25 Health Canada's May 2018 Guidance Document, s 5.6.4.
26 Parties which have been made a party to the action have the right to participate in the proceeding by filing responding pleadings to address allegations of invalidity. See *Allergan Inc v Apotex Inc,* 2019 FC 1659 2019.

- provide the requested information and/or documents (paragraph 6.03(1)(a));
- provide a document explaining the steps that have been taken to find the information and/or documents and stating that the information and/or documents will be provided "as soon as feasible" (paragraph 6.03(1)(b)); or
- provide a document explaining why the information and/or documents are not being provided (paragraph 6.03(1)(c)).

The person bringing an action under the *PM(NOC) Regulations* has an ongoing obligation to, "as soon as feasible", provide the Minister with key documents pertaining to the action:

- the statement of claim, including any amendments to it (paragraph 6.13(a));
- any orders for document production and any orders extending or shortening the 24-month stay prohibiting the issuance of the NOC (paragraph 6.13(b)) as described in greater detail below;
- in respect of the patent(s) at issue, any declarations of infringement, noninfringement, invalidity, or ineligibility for inclusion on the patent register (paragraph 6.13(c));
- the notice of motion and motion record for any motions alleging that a patent is ineligible for inclusion on the patent register (paragraph 6.13(d));
- any document discontinuing or dismissing the action, in whole or in part (paragraph 6.13(e)); and
- any relevant document pertaining to an appeal of any aspect of the action (paragraphs 6.13(f) – (g)).

The information must be submitted to Health Canada electronically by email to: hc.opml-bmbl.sc@canada.ca, or by mailing electronic media.[27]

If an action is commenced in response to an NOA pursuant to subsection 6(1), the Second Person may bring a counterclaim for a declaration that:

- a patent that is the subject of the action is void or invalid; or
- the Second Person's drug does not infringe a patent in the action (subsection 6(3)).

In any event, the Second Person must, within 10 days of service of the statement of claim, serve and file a "Notice of Intention to Respond" and indicate whether it intends to defend by challenging the validity of any claims of the patent(s) asserted and further whether it intends to serve and file a counterclaim relating to the validity of any of claims of the patent(s). Where invalidity is intended to be asserted, the Second Person shall also indicate whether it intends to serve and file a counterclaim seeking a declaration of invalidity and impeachment or whether it will defend on the basis of invalidity only. [28]

2.4.1 Statutory stay

If an action is commenced in response to an NOA pursuant to subsection 6(1), the Minister may not issue an NOC to the Second Person in the absence of a decision from the Court in the action, for up to 24 months (paragraph 7(1)(d)). This is known as the "24-month statutory stay".

The 24-month statutory stay may be shortened or extended if the Court finds that the parties have not acted diligently in carrying out their obligations under the *PM(NOC) Regulations* or have not reasonably cooperated in expediting the action (subsection 7(8)).

Under subsection 7(1), the Minister may not issue an NOC to the Second person until the latest of the day:

- after the expiry of all of the patents and CSPs that the Second Person had to address pursuant to subsection 5(1) or (2) and that are not the subject of an allegation (paragraph 7(1)(a));
- on which the Second Person provides the Minister with proof of service of an NOA on the First Person (paragraph 7(1)(b));

27 For more information on sending documents to Health Canada, see Health Canada's May 2018 Guidance Document, s 3.4.1.

28 Federal Court, Notice to Parties and the Profession, Guidelines for Actions Under the Amended PMNOC Regulations (effective September 21, 2017) at 3 [FC Guidelines].

- the 46th day after the day the NOA is served (paragraph 7(1)(c));
- after 24 months has elapsed since an action was commenced under subsection 6(1));
- after the expiry of all of the patents and CSPs in respect of which a declaration of infringement has been made in an action brought under subsection 6(1) (paragraph 7(1)(e)); and
- after the expiry of all of the CSPs (paragraph 7(1)(f)) (other than any that were held not to be infringed in an action) that
  - set out a patent referred to in paragraph (a) or (e),
  - were not addressed by the Second Person, and
  - are included on the Patent Register in respect of the same submission or supplement as the patent.

The statutory stay will not prohibit the Minister from issuing an NOC to the Second Person if:

- the patentee consents to the making, constructing, using or selling of the drug in Canada by the Second Person (subsection 7(2));
- the patent or CSP is removed from the Patent Register (subsection 7(3));
- the patent or CSP is declared in the action to be ineligible for inclusion on the Patent Register (subsection 7(4));
- the action is discontinued or dismissed (paragraph 7(5)(a)); or
- each party who commenced the action provides notice to the Second Person and the Minister that they renounce the statutory stay when they commence the action (paragraph 7(5)(b)).

Renouncing the statutory stay will not affect the right to proceed with the action or impact any available remedies; however, the Minister will not be prohibited from issuing an NOC to the Second Person if the statutory stay is renounced (subsection 7(6)). Additionally, renouncing the stay avoids potential liability for damages pursuant to section 8(2) described in greater detail in section 2.5 below.

To renounce the stay, each of the parties who bring an action must provide to Health Canada, a notice that they renounce the application of the 24-month stay, at the time the action is brought. [29]

2.4.2 Limitation on other actions

2.4.2.1 Limitation on future actions by the first person

If the First Person does not commence an action under subsection 6(1) in response to an NOA within the 45-day timeframe, all other actions for infringement of the patent or CSP that is the subject of the NOA will be barred against that Second Person unless the First Person can show that they did not "have a reasonable basis for bringing an action" in accordance with the *PM(NOC) Regulations* (section 6.01). [30] Such reasonable bases may include for example, where the information provided by the Second Person in its NOA was false, materially misleading, or materially incomplete (including as a result of a subsequent change in the generic product). [31]

2.4.2.2 Actions in respect of patents not listed on the register

Infringement of patents not listed on the Patent Register are not permitted to be asserted in an action commenced under subsection 6(1). Actions for infringement of non-listed patents may still be commenced under the *Patent Act*, but such actions for non-listed patents will proceed separately from actions commenced under subsection 6(1). Section 8.2 allows a separate action for a non-listed patent to be commenced on a *quia timet* basis. Once the 24-month statutory stay expires, the Court may join actions for infringement of other patents where appropriate (section 6.02). [32] This limitation on joinder is intended to ensure that only a limited number of issues are in dispute to enable the action to be resolved within 24 months.[33]

29 Health Canada's May 2018 Guidance Document, s 6.6.

30 In *Teva Canada Innovation v Pharmascience Inc*, 2019 FC 595, the Court found that Teva would not be barred from bringing an independent infringement action outside of the *PM(NOC) Regulations* for past and current infringement in respect of a dosage strength for which the patent that was the subject of the NOA was not listed. In other words, there must be a link between the patent, the NOA, and the submission for the bar to apply.

31 For more details, see the 2017 RIAS, Right of action: Subsequent actions for infringement.

2.4.3 Federal Court procedural issues

In addition to the requirements imposed by the *PM(NOC) Regulations*, the Federal Court has established specific guidelines for the conduct of actions commenced under the *PM(NOC) Regulations*.

All actions brought under the *PM(NOC) Regulations* are specially managed proceedings (subsection 6.1(1)). At the time the First Person issues the statement of claim, it must also provide the Court with a letter:

- identifying the action as a proceeding under the *PM(NOC) Regulations*;
- requesting that the proceeding be specially managed; and
- identifying any other current proceeding before the Court involving the same drug. [34]

In order to ensure that PM(NOC) proceedings are concluded within a 24-month period, the Court will assign a case management judge who will conduct a case management conference "as soon as feasible" after the 10th day after proof of service of the statement of claim is filed with the Court (subsection 6.1(2)) and in any event, no later than 28 days after the issuance of the statement of claim.[35] The case-management judge, along with the parties, will fix a schedule of procedural steps. [36]

There are many obligations on a First Person early on in the action. If a Second Person files a Notice of Intention to Respond, the First Person must, within seven days of service of the Notice of Intention to Respond, requisition a case management conference by letter:

- with a joint proposed timetable to govern the steps leading to the trial, including the estimated duration, proposed venue and language of the trial;
- with dates of mutual availability of counsel for the parties for a trial to be completed no later than 21 months from the date of commencement of the action; and
- identifying any motions that may be contemplated by the parties, including any motions relating to protective or confidentiality orders, production pursuant to subsections 6.04(1) and 6.04(2) of the *Regulations*, and for relief pursuant to sections 6.07 or 6.08. [37]

2.4.3.1 Confidentiality obligations

Under the 2017 Amendments, both parties may impose reasonable rules for maintaining the confidentiality of the information and/or documents disclosed pursuant to their production obligations under the *PM(NOC) Regulations* (subsections 5(3.5) and 6.03(2)). These rules are binding and enforceable by the Federal Court (paragraphs 5(3.6) and 6.03(3)). If a party believes that the confidentiality rules imposed by the other party are unreasonable, it may bring a motion to the Federal Court to set aside or vary the rules. The Federal Court may also set aside or vary these rules on its own initiative (paragraphs 5(3.7) and 6.03(4)). However, the Court has stated that it only has jurisdiction to vary confidentiality rules once an action in response to the NOA has commenced. [38]

2.4.3.2 Appeal of interlocutory orders

If an interlocutory decision is appealed, the appeal must be made directly to the Federal Court of Appeal within 10 days of the order being made, and leave must be granted before the matter will be heard (subsections 6.11(1) and 6.11(2)). Motions for leave are governed by Rules 352 to 356 of the *Federal Courts Rules*. [39]

32 See the 2017 RIAS, Right of action: Subsequent actions for infringement.
33 This limitation on joinder imposed by section 6.02 of the *PM(NOC) Regulations* also prevents joinder of any action not tied to the same submission as the main action. For more details, see 2017 RIAS, Limitations on joinder and *Apotex Inc v Bayer Inc*, 2020 FCA 86.
34 FC Guidelines at 2-3.
35 FC Guidelines at 4.
36 FC Guidelines at 4.
37 FC Guidelines at 3. Relief pursuant to section 6.08 to dismiss an action brought under subsection 6(1) is "an extraordinary remedy and the threshold on such a motion is high." The moving party must show that there is no chance the claim(s) would succeed. For more details, see *Genentech, Inc v Amgen Canada Inc*, 2018 FC 694.
38 See *Genentech Inc v Pfizer Canada Inc*, 2018 FC 233.
39 *Federal Courts Rules*, SOR/98-106. For more details, see the FC Guidelines at 2.

2.5 Liability for delayed market entry ("Section 8 damages")

If an action for a declaration of infringement is discontinued or dismissed by the Federal Court, or a declaration for infringement is reversed on appeal by the Federal Court of Appeal, a Second Person may commence an action in the Federal Court or in one of the provincial superior courts against any former plaintiffs in the subsection 6(1) action (subsection 8(1)). Each of the former plaintiffs may be jointly, severally, and solidarily liable for any loss suffered by the Second Person for its delay in obtaining an NOC (subsection 8(2)).

The period over which liability may be found begins on the later of: (i) the date of service of the NOA which allowed the action to be brought under subsection 6(1); or (ii) the date that the Second Person's product would have received an NOC in the absence of the *PM(NOC) Regulations*, i.e., the "patent hold" date (subsection 8(2)).

The Court may order compensation as the circumstances require, but only by way of damages (subsection 8(5)). [40] In determining liability, the Court may also consider any relevant matter, including the conduct of the parties in contributing to any delay in the disposition of the action (subsection 8(6)).

Potential liability for damages under section 8 may be avoided by renouncing the 24-month stay when an action under subsection 6(1) is commenced (subsections 7(5) and 8(4)).

There have yet to be any section 8 actions decided under the 2017 Amendments.

3 Links to relevant legislation, guidance, and related resources

- *Patented Medicines (Notice of Compliance) Regulations*, SOR/93-103
- *Regulatory Impact Analysis Statement*, C Gaz II, Vol 151, No 1 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*, 2017)
- Health Canada, "*Guidance Document: Patented Medicines (Notice of Compliance) Regulations*" (effective May 11, 2018)
- Patent Register
- Form IV
- Form V
- Federal Court, Notice to Parties and the Profession, Guidelines for Actions Under the Amended PMNOC Regulations (effective September 21, 2017)

40 For section 8 cases commenced under the 1998 version of the *PM(NOC) Regulations* in force prior to October 5, 2006, a "second person" is entitled to seek damages, and not a disgorgement of the "first person's" profits. See *Apotex Inc v Merck & Co Inc*, 2009 FCA 187, leave to appeal to the SCC refused, 33312 (28 January 2010).

Overview of the *Canadian Certificate of Supplementary Protection Regime*

1 Introduction

1.1 Overview

On September 21, 2017, Canada implemented a system for the protection of new pharmaceutical products. This regime consists of the *Certificate of Supplementary Protection Regulations* (the ***CSP Regulations***) and related amendments to the *Patent Act* (collectively, the **CSP Regime**). [1]

A Certificate of Supplementary Protection (**CSP**) provides a patent holder with up to two years of additional patent protection for drugs containing a new medicinal ingredient, or a new combination of medicinal ingredients. It can be described as a form of patent term extension or restoration. This new period of protection is intended to partly compensate patent holders for the time spent in researching and obtaining marketing authorization for drugs. The CSP Regime was adopted to implement Canada's commitments under the Canada-European Union Comprehensive Economic and Trade Agreement (**CETA**).

1.2 History

Patent protection in Canada provides a 20-year term of statutory monopoly from the date of patent filing. This is irrespective of the time taken for the Patent Office to examine and grant the patent, or for regulatory agencies to approve a patented drug for market. A pharmaceutical patent owner is therefore generally unable to benefit from a patent's full 20-year term given the amount of time required to bring a drug product to market. Indeed, the average drug product receives only 8 to 10 years of patented market exclusivity following regulatory approval given the complexity of the drug research and development process. [2]

Canada is the last of the G7 nations to adopt a system of patent term restoration for pharmaceuticals. In 2015, Canada and the European Union negotiated pharmaceutical patent term extensions as part of CETA. Pursuant to this agreement, Canada agreed to restore, in part, the term of protection for patent rights pertaining to medicinal ingredients contained in drugs. Canada's CSP Regime originates from Chapter 20 of CETA, which addresses supplementary patent-like protection for certain pharmaceutical products. The CSP Regime came into effect on September 21, 2017. The accompanying *Regulatory Impact Analysis Statement* (**RIAS**) [3] states that the CSP Regime was implemented in order to meet Canada's CETA obligations, and provides an additional period of protection for drugs containing a new medicinal ingredient, or a new combination of medicinal ingredients, protected by an eligible patent. [4]

2 Eligibility criteria

2.1 Calculation of term

A CSP takes effect upon the expiry of the patent set out in the CSP. [5] Subsections 116(3) and (4) of the *Patent Act* provide details on calculating the term of a CSP. The CSP term is calculated by determining the time between the patent filing date and the market authorization (*i.e.*, Notice of Compliance (**NOC**)) date, minus 5 years. If this calculation does not yield a positive number, no CSP is available. Any remaining positive term available on this calculation is capped at a maximum of two years. [6]

There are other criteria that must be met in order for an applicant to be eligible for a CSP, including: (1) having eligible medicinal ingredient(s); (2) having an eligible patent claim; and (3) meeting specific timing requirements. These eligibility categories are discussed below.

1 The Canadian CSP Regime consists of sections 104-134 of the *Patent Act*, RSC 1985, c P-4 *[Patent Act] and the Certificate of Supplementary Protection Regulations*, SOR/2017-165 *[CSP Regulations]*.

2 Innovative Medicines Canada, Medicines, Drug Discovery Timeline.

3 *Regulatory Impact Analysis Statement*, C Gaz II, Vol 151, Extra No 1 at 6 (*Certificate of Supplementary Protection Regulations*) [RIAS].

4 RIAS at 6-7.

5 *Patent Act*, s 116(2).

6 The CSP term = [NOC date – patent filing date] – five years, with a cap of two years. See RIAS at 7.

2.2 Eligible medicinal ingredients

Specific eligibility requirements for medicinal ingredients can be found in sections 105 and 106(1)(c), (d), and (e) of the *Patent Act*.

2.2.1 First authorization

Under subsection 106(1)(d) of the *Patent Act*, the NOC must be the first authorization for sale issued with respect to the medicinal ingredient or combination of medicinal ingredients. A CSP is only available for drug products that were issued NOCs on or after September 21, 2017, which is the date the CSP Regime was brought into force.

Whether or not the medicinal ingredient has been previously authorized will be determined by a search of Health Canada's databases to look for previous authorizations of the medicinal ingredient or combination of medicinal ingredients under consideration. All known names and synonyms of the medicinal ingredient are input as search criteria into the various databases. [7]

Only certain types of previous authorizations can disqualify a CSP application from eligibility. For this purpose, an authorization for sale is defined in subsection 1(2) of the *CSP Regulations*, and is intended to capture not only NOCs, but also other authorizations that allowed the regular sale of a drug in Canada, including a Drug Identification Number (**DIN**) or Natural Health Product Number (**NPN**).

An authorization for sale under the *CSP Regulations* includes any authorization that permitted the regular sale of a drug in Canada. Accordingly, the following limited purpose authorizations are excluded by the definition of an authorization for sale in the CSP Regime:

(a) an interim order permitting the sale of a drug under section 30.1 of the *Food and Drugs Act*, RSC 1985, c F-27;

(b) the sale of a drug under a clinical trial application (*Food and Drug Regulations*, CRC, c 870, ss C.05.006 and C.05.008 (***FDR***));

(c) the authorization to sell a drug for emergency treatment (e.g., Special Access Program (*FDR*, s C.08.010);

(d) the authorization for limited sale of a new drug for use in animals (experimental studies certificate) (*FDR*, s C.08.015);

(e) the sale of a drug imported into Canada to address an urgent public health need (*FDR*, s C.10.002(1)); and

(f) the sale or import of a natural health product for the purposes of a clinical trial (*Natural Health Products Regulations*, SOR/2003-196, ss 67 and 71).

2.2.2 Exemptions for human versus veterinarian uses

CSPs are available to patentees with patents relating to both human and veterinary drugs. A medicinal ingredient(s) previously authorized for veterinary use does not preclude CSP eligibility of the same medicinal ingredient(s) once approved for human use, and vice versa. [8]

It is possible (but not required) for both human and veterinary CSPs to be based on the same patent. [9]

7 Health Canada, Guidance Document – Certificates of Supplementary Protection (effective January 6, 2021), s 2.2.7.2 [Guidance Document].

8 *Patent Act,* s 105.

9 Guidance Document, s 2.2.7.3; *Patent Act*, ss 105(3) to (6).

2.2.3 Ineligible variations of medicinal ingredients

The *CSP Regulations* prescribe that certain variations of previously approved medicinal ingredients are not eligible for CSPs. This was done to ensure that "relatively minor variations" in medicinal ingredients cannot be used to circumvent the scope of protection granted by an issued CSP, or the eligibility requirements relating to the first authorization or timely submission. [10]

Section 2 of the *CSP Regulations*, and subsections 105(3) and (4) of the *Patent Act* provide that medicinal ingredients are considered to be the "same" if they differ from each other only with respect to a variation in:

(a) any appendage [11] within the molecular structure of a medicinal ingredient that causes it to be an ester, salt, complex, chelate, clathrate or any non-covalent derivative;

(b) an enantiomer or mixture of enantiomers;

(c) a solvate or polymorph;

(d) an *in vivo* or *in vitro* post translational modification; or

(e) any combinations of the variations in (a) to (d). [12]

2.2.4 New combinations of medicinal ingredients

New combinations of medicinal ingredients are eligible to support a CSP, even if the individual medicinal ingredients were previously approved.

However, there are particular instances where combinations will be considered to be the ineligible. Specifically, where the individual medicinal ingredients in one combination are prescribed variations of those in another combination, they are considered to be the same combination. For example, if Combo 1 is made up of medicinal ingredients A+B, and Combo 2 is made up of medicinal ingredients A'+B', where A' and A are prescribed variations of one another, and B' and B are also prescribed variations of one another, then Combo 1 and Combo 2 will be treated as the "same" under the *CSP Regulations*. [13]

Where two combinations only differ in the proportion of two or more medicinal ingredients, the two combinations are also considered to be the same combination of medicinal ingredients. For example, if Combo 1, contains 0.5 g of medicinal ingredient A and 0.5 g of medicinal ingredient B, it would be considered the same combination as Combo 2, containing 0.4 g of medicinal ingredient A and 0.6 g of medicinal ingredient B. Therefore, changing the medicinal ingredient dose/strength in a combination does not make it a new medicinal ingredient or combination sufficient to support a new CSP. [14]

2.2.5 Absence of previous CSPs

Subsection 106(1)(e) of the *Patent Act* provides that no other CSP must be issued with respect to the medicinal ingredient or combination of medicinal ingredients for the medicinal ingredient to be eligible. This is subject to the exemptions applicable between veterinary and human approvals and new combinations, as described above. The online CSP Register can be consulted to determine if a previous CSP has been issued. [15]

A CSP is considered to have been previously issued even if the previous CSP is subsequently held to be invalid or void, or never takes effect or ceases to have an effect. [16]

10 RIAS at 8.

11 The word "appendage" refers to a portion of the molecule that is connected or joined to a larger or more important part. It signifies a part of the molecule that is not principally responsible for the mechanism of action of the medicinal ingredient.

12 *CSP Regulations*, s 2; RIAS at 8

13 RIAS at 8-9.

14 RIAS at 9.

15 Register of Certificates of Supplementary Protection and Applications.

16 *Patent Act*, s 106(2).

2.3 Eligible patents

A CSP can only be issued to eligible patents that fulfill the requirements found in subsection 106(1) of the *Patent Act*, and subsection 3(2) of the *CSP Regulations*. Only one eligible patent can be submitted in a CSP application.

The patent must pertain to a medicinal ingredient, or combination of medicinal ingredients, contained in a drug for which an NOC was issued on or following September 21, 2017. An eligible patent can claim the approved medicinal ingredient or a prescribed variation of the approved medicinal ingredient. [17]

Only one eligible claim within the patent is required to obtain a CSP. Eligible patents must contain at least one of the following claims:

(a) "a claim for the medicinal ingredient or combination of all the medicinal ingredients contained in a drug" that is authorized for sale;

(b) "a claim for the medicinal ingredient or combination of all the medicinal ingredients as obtained by a specified process and contained in a drug" that is authorized for sale (product-by-process claim); or

(c) "a claim for a use of the medicinal ingredient or combination of all the medicinal ingredients contained in a drug" that is authorized for sale. [18]

The use of the medicinal ingredient or combination of all medicinal ingredients does not need to match the use approved in the NOC for the CSP application, as long as the claimed use is in humans or animals. [19]

Finally, in order for a patent to be eligible for a CSP, it must not be void, and the filing date for the patent application must be on or after October 1, 1989. [20]

2.3.2 Reissuance of a patent

In the event that there is a reissuance of a patent set out in the CSP application, the CSP applicant must notify Health Canada of the new patent number within 30 days from the issuance of the new patent. [21]

2.4 Timing criteria

A CSP application must satisfy two types of timing criteria based on: (1) the date of patent issuance; and (2) in certain circumstances, the date of the market authorization regulatory filing in Canada.

2.4.1 Date of patent issuance

The date of patent issuance dictates the CSP application filing deadline:

- If the CSP application lists a patent granted on or before the day on which the relevant NOC was issued, the CSP application is due before the end of the 120-day period that begins on the day on which the NOC is issued, or
- If the CSP application lists a patent granted after the day on which the relevant NOC was issued, the CSP application is due before the end of the 120-day period that begins on the day on which the patent is granted. [22]

2.4.2 Timely Submission Requirement

To incentivize the early introduction of innovative drugs into the Canadian market relative to other foreign markets, the *Patent Act* establishes a **Timely Submission Requirement** for CSP applications. [23]

The Timely Submission Requirement applies if an application for marketing approval for the medicinal ingredient(s) listed in the CSP application was first filed in any of: the European Union and any country that is a member of the European Union, the United Kingdom, the United States of America, Australia, Switzerland, or Japan. [24]

17 RIAS at 10.

18 *CSP Regulations*, s 3(2); See *Minister of Health v. GlaxoSmithKline Biologicals S.A.*, 2021 FCA 71.

19 Guidance Document, s 2.2.8.

20 *Patent Act,* ss 106(1)(a) and 106(1)(b).

21 *Patent Act*, s 122; *CSP Regulations*, s 14.

22 Guidance Document, s 2.5.

23 RIAS at 11; *Patent Act,* s 106(1)(f).

24 *CSP Regulations*, s 6(1)(a).

In this case, subsection 106(1)(f) of the *Patent Act* requires that the Canadian application for marketing approval of the same medicinal ingredient(s) must be filed before the end of 12 months that begins on the day on which the first such foreign application for marketing approval was filed.

If the Timely Submission Requirement applies and the Canadian application for marketing approval was filed beyond this 12-month period, the CSP application will not be eligible.

3 Filing a CSP application

3.1 Filing logistics

To file a CSP application, the applicant must:

1. complete the CSP application form online and submit the information in .xml format;
2. complete and submit the "Advance Payment Details for Drug Submissions and Master Files for Human and Disinfectant Drugs, and Certificate of Supplementary Protection Applications" form; and
3. pay the required fee ($9,756 as of April 1, 2021). This fee is subject to an annual increase.

The required forms can be found here. All information, including the completed forms and other CSP related correspondence, must be sent electronically to the email: hc.opml-bmbl.sc@canada.ca. [25]

Once the application is submitted, Health Canada will assign a CSP application number and a CSP Company Code. If the application is incomplete or additional information is required, Health Canada may request additional information from the applicant that it considers necessary. [26]

The onus is on the applicant to ensure that all information entered into the CSP application is up-to-date. If there are any changes, the applicant should submit a request to Health Canada to change the contact information. [27]

3.2 When to apply

As set out above in the section under timing criteria, subsection 106(3) of the *Patent Act* states that an application for a CSP must be filed with the Minister before the end of the prescribed period that begins on either:

(a) the day the authorization for sale is used, if the patent is granted on or before that day; or

(b) the day the patent is granted, if the patent is granted after the day on which authorization for sale is issued.

Subsection 6(2) of the *CSP Regulations* outlines that the prescribed period for filing a CSP application is 120 days.

The filing date of the CSP is the date on which the Minister receives the information set out by *Patent Act* and the *CSP Regulations*.

3.3 Conflicting CSP applications

The *Patent Act* states that only one CSP will be granted for a given medicinal ingredient or combination of medicinal ingredients. It is possible, however, that multiple patentees could seek a CSP on the same approved drug product. This is because any patentee can file a CSP application, even if the patentee is not the market authorization holder for the drug. In order to address this possible situation, sections 108 to 111 of the *Patent Act* address CSP application priority and provide for conflict proceedings.

25 See Guidance Document, s 2.1 for more details on submission requirements via email.

26 *Patent Act*, s 107(1); refer to s 2.2.9 of the Guidance Document for correction of obvious errors and omissions in the CSP application.

27 *Patent Act*, s 107(1); refer to s 2.2.9 of the Guidance Document for correction of obvious errors and omissions in the CSP application.

3.3.1 Conflict priority

CSP applications based on patents issued before the NOC will have the same priority provided they are filed on a timely basis within the 120-day period.

CSP applications based on patents issued before the NOC take automatic priority over CSP applications based on patents issued after the NOC.

The priority of CSP applications based on patents issued after the NOC is based on the date the patent was granted. In this case, earlier patent grant dates have priority over later patent grant dates.

3.3.2 Same priority resolution

A conflict arises when two or more CSP applications have the same priority. In accordance with section 109 of the *Patent Act*, Health Canada will send a written notice to the conflicting applicants.

Conflicts may then be resolved if one of the applicants successfully seeks a declaration in Federal Court under section 110 of the *Patent Act*. Such a declaration would have to establish that the competing CSP application is invalid or void for failing to comply with section 106 of the *Patent Act*. [28]

Otherwise, the conflicting CSP applicants must negotiate a mutual resolution.

If there are CSP applications that remain in conflict and pending at the end of the 90-day period beginning on the day specified in the written notice from the Health Canada, they will all expire unless conflict proceedings under section 110 of the *Patent Act* are commenced. If a conflict proceeding is pending in Federal Court, the parties have until 30 days from the final disposition of that proceeding to resolve the conflict.

3.4 Withdrawal of CSP application

An applicant can withdraw a CSP application by providing the Minister with notice of the withdrawal. [29] Health Canada will then make a note of the withdrawal and update the Register to remove the CSP application.

A withdrawal of a CSP application can be used to resolve conflicts.

3.5 When a CSP is issued and in effect

The Minister of Health shall issue the CSP once all of the criteria are met, subject to any conflict proceedings.

The CSP sets out various information including the patent number, the medicinal ingredient(s) and the date on which the CSP term begins.

Subsection 116(2) of the *Patent Act* states that a CSP takes effect on the expiry of the regular patent term as long as the patent remains valid before the expiry of the term.

In addition to being listed on the Health Canada CSP Register, the Minister of Health will also add any applicable CSPs to the Patent Register if the subject-matter patent is also listed on the Patent Register. [30] No action is required on the part of the CSP applicant to have the CSP included on the Patent Register.

28 Guidance Document, s 2.2.4.

29 *CSP Regulations*, s 12.

30 *Patented Medicines (Notice of Compliance) Regulations*, SOR/93-133 *[PM(NOC) Regulations]*, s 4(3.1).

4 CSP Scope of protection

4.1 Scope of protection

Subsection 115(1) of the *Patent Act* defines the scope of protection of a CSP. Because CSPs provide "patent-like rights", they are subject to the "same limitations and exceptions" as the corresponding patent. [31]

A CSP grants the certificate's holder and their legal representatives the same "rights, privileges, and liberties" that are granted by the patent set out in the certificate. This right applies to the "making, constructing, using, and selling" of any drug that contains the medicinal ingredient, or combination of medicinal ingredients, set out in the certificate, by itself or in addition to any other medicinal ingredient. [32]

As a result, other marketed drugs can fall within the scope of a CSP if the drug contains the same medicinal ingredient(s) covered by the CSP. The scope extends to those prescribed variations of medicinal ingredients that are considered to be the same medicinal ingredient(s).

4.2 Generic export exemption to infringement

The scope of CSP protection is subject to a generic export exemption under subsection 115(2) of the *Patent Act*. It is not an infringement of a CSP for any person to make, construct, use or sell the medicinal ingredient(s) covered by the CSP for the purpose of export from Canada.

4.3 Infringement and impeachment

An action for infringement or impeachment of a CSP may be brought in the same manner as a patent, including under the *PM(NOC) Regulations*. [33]

5 Relevant legislation and guidance documents

- *Patent Act*, RSC 1985, c P-4.
- *Certificate of Supplementary Protection Regulations*, SOR/2017-165.
- Regulatory Impact Analysis Statement, C Gaz II, Vol 151, Extra No 1 at 6 (*Certificate of Supplementary Protection Regulations*).
- Health Canada, Guidance Document – Certificates of Supplementary Protection (effective January 6, 2021).
- Register of Certificates of Supplementary Protection and Applications.

31 RIAS at 7

32 *Patent Act*, s 115(1).

33 *Patent Act*, ss 124 and 125; *PM(NOC) Regulations*, ss 5(2.1), 6(1) and 6(3).

Biologics overview

1 Overview

Biologics are large, complex molecules that are derived from living organisms using naturally occurring metabolic processes. The manufacture of biologics is subject to more variability than the manufacture of traditional medicines comprising chemically synthesized small molecules. Some examples of biologics include insulin, antibodies, cytokines, protein hormones, and gene therapy products.

There is no distinct legal framework for the regulation of biologics in Canada, separate from other categories of drugs. However, biologics are the subject of unique guidelines, terminology, and practical considerations that distinguish them from small-molecule drugs.

As with small-molecule drugs, the market for biologics includes both innovative ("brand") and subsequent-entry products. Market authorization for subsequent-entry biologics, or "biosimilars", is sought by relying on a previously approved biologic identified as the Canadian reference product.

The relationship between biologics and biosimilars is similar to the relationship between innovative and generic small-molecule drugs, but with some important differences. For example, Health Canada does not determine whether a biosimilar is "bioequivalent" to the reference biologic but rather, determines whether it is "similar" enough that there are no clinically significant differences in terms of safety and/or efficacy.

This chapter canvasses Canadian regulatory and intellectual property considerations for biologics and biosimilars.

2 Regulatory approval

Canada does not have a specific legislative framework for either biologics or biosimilars. Biologics are subject to the same regulatory provisions under the Canadian *Food and Drugs Act and Food and Drug Regulations* as other medicines sold in Canada. [1]

However, Health Canada does have a special unit responsible for biologics called the Biologic and Radiopharmaceutical Drugs Directorate (**BRDD**). [2] Health Canada has also issued a number of guidance documents and other publications specific to biologics.

2.1 Biologics generally

Biologics fall under Schedule D of the *Food and Drugs Act* and are regulated as "new drugs" under the *Food and Drug Regulations*. A sponsor seeks market authorization by filing a new drug submission (**NDS**); each approved biologic is issued both a notice of compliance (**NOC**) and a drug identification number (**DIN**).

Health Canada has determined that "[b]iologics are more variable than chemically synthesized drugs and require additional regulatory oversight." [3] Health Canada's Regulatory Roadmap sets out the key aspects of its regulatory programme for biologics and provides links to detailed guidance documents concerning clinical trial applications, new drug submissions, good manufacturing practices and establishment licensing, post-marketing requirement and post-approval changes, and fees.

Examples of increased regulatory scrutiny for biologics include a lot release programme for approved biologics, as well as a requirement to file a Yearly Biologic Product Report. [4]

1 *Food and Drugs Act*, RSC 1985, c F-27 [***Food and Drugs Act***]; *Food and Drug Regulations*, CRC, c 870 [***Food and Drug Regulations***].

2 Health Canada, "Biologic and Radiopharmaceutical Drugs Directorate" (last modified 23 June 2021); Health Canada, "Regulatory roadmap for biologic (Schedule D) drugs in Canada" (last modified 11 August 2021) [**Regulatory Roadmap**]. See also Health Canada, "Biologics, radiopharmaceuticals and genetic therapies" (last modified 4 April 2020). The BRDD was formerly known as the Biologics and Genetic Therapies Directorate (**BGTD**).

3 Regulatory Roadmap.

4 Regulatory Roadmap; Health Canada, "Guidance for Sponsors: Lot Release Program for Schedule D (Biologic) Drugs" (last modified 4 July 2005).

Biologics in Canada are identified by a combination of a unique brand name and a non-proprietary (common name), both of which should be used in order to distinguish different biologics with the same non-proprietary name. Canada has not adopted the practice of assigning a product-specific suffix to the non-proprietary names of biologics. [5]

2.2 Biosimilars

Once a biologic has been approved in Canada, it can serve as a reference product for "highly similar" subsequent-entry biologics known as "biosimilars". Although frequently analogised to generic versions of small-molecule drugs, biosimilars are not "generic biologics". [6]

A key difference is that biosimilars are not eligible to be approved using the abbreviated new drug submission (**ANDS**) pathway under the *Food and Drug Regulations*, which sets out criteria for market authorization based on bioequivalence to a Canadian reference product. [7] Biosimilar sponsors are required to comply with all of the requirements for an NDS under the *Food and Drug Regulations*. [8]

Pursuant to Health Canada's Biosimilar Guidance Document, biosimilar NDS sponsors are permitted to rely on a reduced clinical and non-clinical data package to support approval provided that certain criteria are met. These include demonstrated similarity to a suitable reference biologic, as explained in greater detail below. Health Canada has confirmed that approval of a biosimilar in this manner "is not a declaration of pharmaceutical equivalence, bioequivalence or clinical equivalence to the reference biologic drug." [9]

Health Canada encourages biosimilar manufacturers to consult early in the development of their submission package and provides that consultation can occur at any stage of the development of a biosimilar. [10]

In some cases, an approved biologic can also serve as the reference product for a subsequent-entry product that is produced using chemical synthesis, rather than in a living organism. Where this occurs, the subsequent-entry product may be classified as a pharmaceutical drug, rather than a biologic, and can be approved using the ANDS pathway for generics. [11]

2.2.1 Choice of reference product

Pursuant to the Biosimilar Guidance Document, the sponsor of a biosimilar NDS must identify a reference biologic and satisfy Health Canada that it is appropriate to support the biosimilar submission. The reference biologic must already be approved in Canada and should not be another biosimilar. In choosing a reference product, the biosimilar sponsor should consider a range of factors including:

- Whether the active substance (medicinal ingredient) is shown to be similar;
- Whether the dosage form, strength, and route of administration are the same; and
- Whether the reference biologic has adequate post-market safety, efficacy, and effectiveness data associated with it. [12]

Provided that the reference biologic is approved in Canada, the sponsor may be permitted to use a non-Canadian version of that drug for the purpose of demonstrating similarity. Among other requirements, the non-Canadian biologic should have the same medicinal ingredient(s), dosage form, and route of administration as the one approved in Canada. [13] Under some circumstances, it may also be possible to use more than one reference biologic drug (e.g., versions sourced from more than one jurisdiction) in clinical studies. [14]

5 Health Canada, "Notice to Stakeholders - Policy Statement on the Naming of Biologic Drugs" (last modified 14 February 2019).

6 Health Canada requires that "[i]n order to clearly distinguish between the regulatory process and product characteristics for biosimilars and those for generic pharmaceutical drugs, the terms "biogeneric" or "generic biologic" are not used": see Health Canada, "Guidance Document: Information and Submission Requirements for Biosimilar Biologic Drugs" at ss 1.3.5 and 1.5 (last modified 14 November 2016) [Biosimilar Guidance Document]. The 2016 Biosimilar Guidelines replace the "Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)" released on March 5, 2010. In addition, see generally Health Canada, "Biosimilar biologic drugs" (last modified: 27 August 2019) and Health Canada, "Biosimilar biologic drugs in Canada: Fact Sheet" (last modified 27 August 2019).

7 *Food and Drug Regulations*, s C.08.002.1.

8 Biosimilar Guidance Document, s 2.1.1.

9 Biosimilar Guidance Document, ss 1.3, 1.5, and 2.3.3.

10 Biosimilar Guidance Document, s 3.

11 *See e.g.*, Health Canada, "Regulatory Decision Summary for Teva-Teriparatide Injection" (date of decision: 6 August 2019). In this instance, the Canadian reference product was a biologic that is produced using recombinant DNA. However, the subsequent-entry product was chemically synthesized.

12 Biosimilar Guidance Document, ss 1.3 and 2.1.3.

13 Biosimilar Guidance Document, s 2.1.3.1.

14 Biosimilar Guidance Document, s 2.1.3.

Health Canada recommends that a biosimilar sponsor consult with the BRDD about the suitability of the intended reference product early in the drug approval process. [15]

2.2.2 Biosimilar submission requirements

Under section C.08.002(2) of the *Food and Drug Regulations*, sponsors must include enough information to allow for assessment of safety and efficacy. In order to comply with this requirement for a biosimilar, the Biosimilar Guidance Document provides that its submission must include:

- **Quality information**. This includes data on the biosimilar's chemistry, manufacturing, and its similarity to the reference product, as well as the rationale for the selection of the reference biologic drug. This should include extensive data to demonstrate similarity between the biosimilar and the reference product, and should account for any differences in the dosage, formulation, and manufacture of the two medicines. [16]
- **Clinical and non-clinical information**. Depending on the strength of data generated from *in vitro* studies, a biosimilar NDS may not be required to include *in vivo* non-clinical study data. Specialized non-clinical toxicological studies are not generally required. The purpose of a clinical programme supporting a biosimilar NDS is to show that there are no clinically meaningful differences between the biosimilar and the reference biologic; it should include at least comparative pharmacokinetic and pharmacodynamic studies. Comparative clinical efficacy trials are usually, but not always, required. [17]
- **Indications**. A biosimilar NDS sponsor is permitted (but not required) to seek approval for all of the same indications held by the reference biologic. However, approval for each indication sought will be based on the data in the NDS. The Biosimilar Guidance Document does not address situations where the biosimilar NDS includes a request for approval of an indication not held by the reference biologic. [18]
- **Product monograph**. The product monograph for a biosimilar is required to include a statement that is it a biosimilar to the reference biologic. It must also state that indications have been granted based on similarity to the reference biologic and provide comparative data, as well as relevant safety and efficacy information from the reference biologic's product monograph. Health Canada specifies that "[t]here should be no claims for bioequivalence or clinical equivalence between the biosimilar and the reference biologic drug." [19]
- **Risk management plan (RMP)**. The biosimilar NDS sponsor must develop an RMP with Health Canada to monitor and detect inherent safety concerns and unknown safety signals. [20]
- **Post-market requirements**. Like other new drugs, once a biosimilar is approved and on the market, the sponsor must comply with sections C.01.016 to C.01.019 of the *Food and Drug Regulations*, including adverse event reporting and preparation (and/or submission) of periodic safety update reports (**PSURs**) or periodic benefit-risk evaluation reports (**PBRERs**). [21]

The biosimilar NDS is reviewed by Health Canada's BRDD and, like other new drugs, a notice of compliance (**NOC**) and a drug identification number (**DIN**) issue upon approval.

15 Biosimilar Guidance Document, s 2.1.3.
16 Biosimilar Guidance Document, s 2.3.2.
17 Biosimilar Guidance Document, s 2.3.3.
18 Biosimilar Guidance Document, s 2.3.4.
19 Biosimilar Guidance Document, s 2.3.5.
20 Biosimilar Guidance Document, s 2.3.6.
21 Biosimilar Guidance Document, s 2.4.1.

3 Intellectual property

3.1 Data protection

Data protection under section C.08.004.1 of the *Food and Drug Regulations* provides up to 8 ½ years of market exclusivity for eligible new drugs. Canada's data protection regime applies to any new drug that meets the definition of innovative drug in the *Food and Drug Regulations*, including biologics. [22] Biosimilars are not eligible for data protection. [23]

A biosimilar manufacturer is prohibited from filing a submission based on a direct or indirect comparison to an innovative drug until six years after the first NOC for the innovative drug. The Minister of Health may not approve such a submission until eight years after the first NOC for the innovative drug. This period may be extended by six months where certain criteria are met regarding treatment of paediatric populations. [24]

3.2 Patent protection

Biologics are patentable in Canada and subject to the same legislative and regulatory provisions as other patented products. In addition to the general provisions applicable to all patentees under the *Patent Act*, these include:

- The *Patented Medicines (Notice of Compliance) Regulations*, which create a linkage regime that ties approval of subsequent-entry products to the resolution of disputes concerning eligible patents listed on the patent register against the reference product. [25] For the purpose of determining eligibility for listing on the patent register, a "claim for the medicinal ingredient" has been defined to include product-by-process patents and patents for biologic drugs. [26] There are no other special rules for biologics under these regulations. [27]
- The Certificate of Supplementary Protection (**CSP**) regime, which provides eligible patentees up to two years of additional patent-like protection to compensate for time spent on the development and approval process for innovative products. [28]
- The Patented Medicine Prices Review Board (**PMPRB**), which has jurisdiction to ensure that patented medicines are not sold at excessive prices in Canada pursuant to the *Patent Act* and the *Patented Medicines Regulations*.

4 Litigation trends

4.1 Litigation under the *Patent Act*

Canadian courts have heard three notable biologic patent disputes outside the *PM(NOC) Regulations:* (i) *Kirin-Amgen Inc v Hoffman-La Roche Ltd* (***Kirin-Amgen v Hoffmann-La Roche***); [29] (ii) *AbbVie Corporation v Janssen Inc.* (***AbbVie v Janssen***); [30] and (iii) *Hospira Healthcare Corporation v Kennedy Trust for Rheumatology Research* (***Hospira v Kennedy Trust***). [31] All of these were actions for patent infringement.

Kirin-Amgen v Hoffmann-La Roche: EPO. *Kirin-Amgen v Hoffmann-La Roche*, the first Canadian biologics decision, was rendered by the Federal Court in 1999. Kirin-Amgen Inc. and Janssen-Ortho Inc. alleged that Hoffmann-La Roche's RECORMON® infringed a patent for recombinant human erythropoietin (**EPO**). Hoffmann-La Roche challenged the validity of the asserted claim of the patent on the basis of ambiguity and insufficiency; the Federal Court ultimately held that the claim was valid and infringed. The plaintiffs were granted a permanent injunction, which prevented Hoffmann-La Roche from marketing, selling, or using RECORMON® until the patent expired. At the time, RECORMON® was not yet on the market.

22 *Food and Drug Regulations*, s C.08.004.1; Biosimilar Guidance Document, s 2.1.2; Health Canada, "Guidance Document: Data Protection under C.08.004.1 of the Food and Drug Regulations" (last modified 16 May 2017), s 2.1 [**Data Protection Guidance Document**].

23 Data Protection Guidance Document, s 2.1.

24 *Food and Drug Regulations*, s. C.08.004.1; Data Protection Guidance Document, ss 3.1-3.2.

25 *Patented Medicines (Notice of Compliance) Regulations*, SOR/93-133 [*PM(NOC) Regulations*].

26 *PM(NOC) Regulations*, s 2(1); Health Canada, "Guidance Document: Patented Medicines (Notice of Compliance) Regulations", s 4.5.1 (last modified 8 April 2021).

27 In contrast to the United States, where there is a separate patent dispute resolution procedure for biological products.

28 *Patent Act*, RSC, 1985, c P-4, ss 104-134 [*Patent Act*]; *Certificates of Supplementary Protection Regulations*, SOR/2017-165; Health Canada Guidance Document, "Guidance Document: Certificates of Supplementary Protection" (last modified 6 January 2021).

29 *Kirin-Amgen Inc v Hoffman-La Roche Ltd,* 1999 CanLII 7613 (FC), 87 CPR (3d) 1 (FC), aff'd 2000 CanLII 16728 (FCA), 11 CPR (4th) 78 (FCA).

30 *AbbVie Corporation v Janssen Inc*, 2014 FC 55, rev'd 2014 FCA 242 (infringement & validity); 2014 FC 489, rev'd 2014 FCA 241 (injunction).

31 *Hospira Healthcare Corporation v Kennedy Trust for Rheumatology Research*, 2018 FC 259, rev'd in part 2020 FCA 30 leave to appeal to SCC ref'd 2020 CanLII 102984 (SCC).

AbbVie v Janssen: ustekinumab & adalimumab. In 2009, several AbbVie companies sued Janssen Inc. for infringement of a patent entitled "Human Antibodies that Bind Human IL-12 and Methods for Producing" on the basis of Janssen's STELARA® (ustekinumab) product. Ustekinumab is a monoclonal antibody used to treat psoriasis.

The Court decided the case in 2014. Hughes J. rejected Janssen's arguments that the asserted claims were obvious, overbroad, and ambiguous. He also found that the asserted claims were infringed by STELARA®, which was already marketed in Canada.

Subsequently, a separate trial was held to determine the appropriate remedy. AbbVie marketed a competing product to STELARA®, known as HUMIRA® (adalimumab), also used to treat psoriasis. However, the Court found that the two products were therapeutically distinct because only STELARA® binds to IL-12 as claimed in AbbVie's patent. AbbVie's product, HUMIRA®, acts by inhibiting TNF-a.

The Court refused to grant a traditional injunction that would have prevented Janssen from selling STELARA® until the expiry of AbbVie's patent. Because Janssen and AbbVie's products were therapeutically distinct, the Court held that such an injunction would prevent patients from accessing a medical alternative. Instead, Hughes J. granted AbbVie an injunction on terms designed to curtail Janssen's STELARA® marketing efforts while ensuring access to the relevant medical information. The injunction included the following conditions:

- Existing patients may continue to use STELARA®;
- New patients may use STELARA® if a physician determines it is a necessary treatment;
- Janssen may disseminate scientific and medical information, but not marketing information;
- Janssen may respond to Health Canada requests in respect of STELARA®; and
- Janssen is prohibited from conducting Phase IV clinical trials unless required by law, since such a trial would undermine the restrictions on new patients.

Although the liability decision was eventually remitted to for a new trial based on a pleadings issue [32] and the injunction was set aside, [33] the *AbbVie v Janssen* case highlights some of the considerations that may be relevant in Canadian biologics patent litigation, specifically when complex biologic drugs compete in the same market but do not contain identical medicinal ingredients.

Hospira v Kennedy Trust: infliximab. In 2013, Hospira Healthcare Corporation sued the Kennedy Trust for Rheumatology Research to invalidate a patent concerning infliximab. The Kennedy Trust, together with Janssen Inc. and others, counterclaimed for infringement damages against Hospira and its commercial partner, Celltrion Healthcare Co., Ltd.

Infliximab is an anti-TNF-a monoclonal antibody marketed in Canada by Janssen as REMICADE®. Hospira marketed a biosimilar version of infliximab known as INFLECTRA®. Notably, Celltrion, which filed the NDS for INFLECTRA®, was not required to address the patent in suit under the *PM(NOC) Regulations* before obtaining an NOC because it had filed its NDS before the patent had issued and then been listed on the patent register.

The 2018 trial decision rejected all of the invalidity allegations against the patent, which included anticipation, obviousness, double-patenting, insufficiency, overbreadth, inutility, and arguments that the patent claimed unpatentable methods of medical treatment. The Court agreed that Hospira infringed certain claims of the patent, both directly and by inducement.

32 *Janssen Inc v AbbVie Corporation*, 2014 FCA 242, rev'g 2014 FC 55.

33 *Janssen Inc v AbbVie Corporation*, 2014 FCA 241, rev'g 2014 FC 489.

The Court also found Celltrion liable for infringement for activities relating to the supply of INFLECTRA conducted outside Canada.

In a 2020 appeal judgment, the infringement findings against Celltrion were reversed on the basis that it could not be held liable for infringement of Canadian patent without having conducted any activities in Canada. The Court of Appeal also found that the trial judge erred in analysing the issues of anticipation and obviousness, which were remitted to the Federal Court for re-determination. [34] The trial judge maintained his original findings on re-determination. [35]

4.2 Litigation under the "old" *PM(NOC) Regulations*

The *PM(NOC) Regulations* provide a distinct procedural system for resolving infringement and validity disputes concerning generic and biosimilar products from the one available under the *Patent Act*. Prior to 2017, these disputes were settled by a summary "application" procedure that was binding only between the parties to the dispute. In September 2017, that system was replaced by a modified version of the procedure for normal patent infringement–impeachment actions, including final determinations of patent validity.

Only two biosimilar cases were decided under the pre-2017 version of the *PM(NOC) Regulations*.

Amgen v Apotex: filgrastim. In 2013, two Amgen companies sought an order under the *PM(NOC) Regulations* prohibiting the Minister of Health from issuing an NOC to Apotex Inc. for a biosimilar version of Amgen's NEUPOGEN® (filgrastim) product until the expiry of a patent listed against NEUPOGEN®. NEUPOGEN® is a recombinant version of the human G-CSF protein.

In 2015, the Federal Court dismissed Amgen's application. The Court agreed that Apotex's allegation that the NEUPOGEN® patent was invalid was justified. [36] Amgen's appeal from this decision was dismissed as moot, as the Minister had already issued an NOC for Apotex's biosimilar. [37] Amgen's application for leave to appeal to the Supreme Court of Canada was dismissed. [38]

Although the Court's decision was based on a finding of invalidity, the unique procedural mechanism under the old *PM(NOC) Regulations* meant that this finding was effective only as between the parties. As a result, the patent was not formally invalidated and remained listed on the patent register against NEUPOGEN®.

Janssen v Celltrion: infliximab. In 2015, Janssen Inc. sought an order under the *PM(NOC) Regulations* prohibiting the Minister from issuing an NOC to Celltrion Healthcare Co., Ltd. for new indications for INFLECTRA® (infliximab), its biosimilar version of REMICADE®. At the time, INFLECTRA® was already on the market in Canada for a group of rheumatoid arthritis indications, which formed the basis for the *Hospira v Janssen* action described in the preceding section. Both cases concerned the same patent.

Celltrion had not been required to address the patent at issue in this case under the *PM(NOC) Regulations* before obtaining its original NOC for INFLECTRA® because the patent had not yet issued at the time of Celltrion's NDS. However, the patent was engaged when Celltrion filed a supplement seeking to add indications related to inflammatory bowel disease in 2015.

This patent claimed treatment indications for rheumatoid arthritis, but not for inflammatory bowel indications. On that basis, the Federal Court held that there was no chance of infringement and dismissed Janssen's application in 2016. [39] The decision was upheld on appeal. [40]

34 *Hospira Healthcare Corporation v Kennedy Trust for Rheumatology Research*, 2020 FCA 30.

35 *Hospira Healthcare Corporation v Kennedy Trust for Rheumatology Research*, 2021 FC 42.

36 *Amgen Canada Inc v Apotex Inc*, 2015 FC 1261.

37 *Amgen Canada Inc v Apotex Inc*, 2016 FCA 196.

38 *Amgen Canada Inc v Apotex Inc*, 2016 FCA 196, leave to appeal to SCC refused, 37124 (27 October 2016).

39 *Janssen Inc v Celltrion Healthcare Co, Ltd*, 2016 FC 525.

40 *Janssen Inc v Celltrion Healthcare Co, Ltd*, 2016 FC 651. For a more detailed summary of the cases see our Pharma in brief – "Federal Court strikes biologic PM(NOC) application on account of non-infringement of use claims".

4.3 Litigation under the *PM(NOC) Regulations*

Amgen v Pfizer. In 2018, two Amgen companies started an action for infringement of a patent covering NEUPOGEN® (filgrastim) against Pfizer Canada ULC, which had filed an NDS for a biosimilar version of filgrastim known as NIVESTYM®. This was the same patent previously asserted by Amgen in its 2013 proceeding against Apotex under the old *PM(NOC) Regulations*, discussed above. Pfizer counterclaimed for a declaration of invalidity in respect of the asserted claims.

The Court's 2020 trial decision—the first rendered under the new *PM(NOC) Regulations*—dismissed Amgen's action and granted the declaration of invalidity sought by Pfizer. The Court agreed that the asserted claims were obvious. [41] This decision was upheld by the Federal Court of Appeal. [42]

In addition to *Amgen v Pfizer*, a number of other cases concerning biologics have been commenced under the new *PM(NOC) Regulations* since they came into force in September 2017.

5 Relevant legislation and guidance documents

- *Food and Drugs Act*, RSC 1985, c F-27
- *Food and Drug Regulations*, CRC, c 870
- Health Canada, "Regulatory roadmap for biologic (Schedule D) drugs in Canada" (last modified 21 June 2021).
- Health Canada, "Guidance for Sponsors: Lot Release Program for Schedule D (Biologic) Drugs" (last modified 4 July 2005).
- Health Canada, "Guidance Document: Information and Submission Requirements for Biosimilar Biologic Drugs" (last modified 3 December 2021).

41 *Amgen Inc v Pfizer Canada ULC*, 2020 FC 522. Norton Rose Fulbright Canada LLP was counsel to Pfizer in this proceeding.

42 *Amgen Inc v Pfizer Canada ULC*, 2020 FCA 188 leave to appeal to SCC ref'd 2021 CanLII 58906 (SCC).

Drug pricing and market access

1 Overview

The regulation of drug prices in Canada is governed by a combination of institutions, including health technology assessment bodies (CADTH, INESSS), a public negotiation consortium (pCPA), and public and private drug plans. In addition, the ceiling price of patented medicines is also regulated by the Patented Medicine Prices Control Board (**PMPRB**).

There is no universal drug benefit plan in Canada. The government of each province or territory provides coverage to specific subgroups of the population. Each drug plan maintains its own formulary, which sets out a list of drugs that are eligible for coverage and the conditions for reimbursement.

This chapter will focus primarily on the public reimbursement pathway of drugs in Canada.

2 Public reimbursement pathway

Public drug reimbursement in Canada is a multi-stage process that typically begins after regulatory approval from Health Canada.

- First, there is an assessment from a health technology assessment (**HTA**) body, who reviews the drug to assess its clinical value and cost-effectiveness. There are two HTA bodies in Canada: the Canadian Agency for Drugs and Technology in Health (**CADTH**) and l'Institut national d'excellence en santé et en services sociaux (**INESSS**), which operates in Québec. These bodies provide a non-binding recommendation to public drug plans on whether or not to reimburse a drug.
- Second, the drug manufacturer may be engaged in a negotiation process with the Pan-Canadian Pharmaceutical Alliance (**pCPA**). All Canadian provinces, territories, and the federal government participate in the pCPA. The pCPA facilitates multi-jurisdictional negotiations on pricing and reimbursement of brand name and generic drugs for listing on the public formularies. A successful pCPA negotiation results in a Letter of Intent (**LOI**) between the participating pCPA members and the drug manufacturer, setting out the terms of the agreement on reimbursement.
- Third, taking into account any LOI from the pCPA process, the drug manufacturer will enter into a Product Listing Agreement (**PLA**) with each of the participating public drug plans. Each public drug plan makes its own final decision on drug reimbursement, including whether to list the drug on its formulary.

This process is summarized in the diagram below:

Although the diagram suggests that these steps occur in sequential order, some of these steps may move in parallel to ensure that the drug is brought to market as quickly as possible following Health Canada approval. For example, drug manufacturers have the option of participating in an aligned review between Health Canada and the HTA bodies for greater coordination of the review process and to provide more timely access to drugs. [1]

Below, we provide further detail on the HTA bodies as well as the pCPA.

2.1 Health technology assessment (HTA) bodies

HTA bodies review drugs to assess their clinical and cost effectiveness. As discussed above, there are two HTA bodies in Canada: INESSS, for Québec, and CADTH, for the remaining provincial and territorial drug plans, as well as certain federal drug plans. [2]

2.1.1 Canadian Agency for Drugs and Technology in Health (CADTH)

CADTH is the independent non-profit organization established by the federal, provincial and territorial governments to evaluate and make recommendations regarding the optimal use of drugs and health technologies in our public healthcare system. [3] CADTH's scope of work includes evaluating drugs and making recommendations as to whether or not they should be covered by the public drug plans. [4]

CADTH uses two pathways for its review depending on the drug. The Common Drug Review (**CDR**) is the default review pathway. The Pan-Canadian Oncology Drug Review (**pCODR**) pathway is used to review drugs used in the active treatment of cancer.

When biosimilars were first introduced in Canada, they were subject to CADTH review. However, as of June 1, 2019, CADTH no longer reviews biosimilars. Instead, biosimilars immediately enter the pCPA process. [5]

2.1.1.1 Common Drug Review (CDR)

CADTH, through the CDR, undertakes reviews of drug submissions, resubmissions and requests for advice, and provides formulary listing recommendations to the participating publicly funded drug plans in Canada, except in Québec. [6]

The listing recommendations for drugs reviewed through the CDR are made by the Canadian Drug Expert Committee (**CDEC**), an appointed, national expert advisory committee comprised of individuals with expertise in disease management, drug evaluation and utilization, and health economics. The expert committee also includes public members. [7]

The CDEC conducts reviews of the clinical effectiveness, safety and cost effectiveness of drugs, including a comparison of the drug under review to currently accepted therapies to determine the therapeutic advantages and the cost-effectiveness of the new drug. The CDEC also considers input from patients, drug manufacturers and physicians. [8]

The final reimbursement and coverage decision is ultimately made by the participating drug plans based on the CDR recommendation, and other factors such as drug plan mandates, budget and jurisdictional priorities.

1 See Health Canada, *Notice to industry: Aligned reviews between Health Canada and health technology assessment organizations*.

2 The participating drug plans in CADTH are: Alberta, British Columbia, Citizenship and Immigration Canada, Correctional Service Canada, Manitoba, National Defence, New Brunswick, Newfoundland and Labrador, Non-Insured Health Benefits, Northwest Territories, Nova Scotia, Nunavut, Ontario, Price Edward Island, RCMP, Saskatchewan, Veterans Affairs Canada and Yukon. See CADTH, Participating Drug Programs.

3 CADTH, About CADTH (3 October 2016).

4 CADTH, CADTH Reimbursement Reviews (29 October 2020).

5 CADTH, CADTH Pharmaceutical Reviews Update – Issue 8 (23 May 2019).

6 For more information about the CDR process, see CADTH, Procedures for the CADTH Common Drug Review and Interim Plasma Protein Product Review (June 2020).

7 CADTH, Canadian Drug Expert Committee (CDEC) (11 October 2017).

8 CADTH, CADTH Canadian Drug Expert Committee Terms of Reference (June 2020).

2.1.1.2 Pan-Canadian Oncology Drug Review (pCODR)

CADTH also maintains the pCODR, which reviews drug submissions for cancer drugs to be used in Canada.

Similar to the CDR process, pCODR conducts an assessment of clinical, economic and patient evidence on cancer drugs, and uses this assessment to provide reimbursement recommendations to the publicly funded drug plans and provincial cancer agencies, except in Québec. [9]

Drug submissions are reviewed by the pCODR Expert Review Committee (**pERC**), which is made up of medical oncologists, physicians, pharmacists, economists, an ethicist, and patient members. [10]

Again, the final reimbursement and coverage decision is ultimately made by the participating drug plans based on the pCODR recommendation, and other factors such as drug plan mandates, budget and jurisdictional priorities.

2.1.2 Institut national d'excellence en santé et en services sociaux (INESSS)

INESSS is a Québec-specific HTA body that was created in 2011 with the mandate of evaluating drugs for listing purposes in Québec. [11] Like CADTH, INESSS evaluates the clinical and cost effectiveness of drugs to make recommendations about formulary listing.

The review by INESSS proceeds in two steps: (1) assessment of therapeutic value; and (2) assessment of other key parameters.

Step (1) Therapeutic value: First, INESSS determines the therapeutic value of a drug. If the therapeutic value is not established, then INESSS may complete its review at this step. To determine whether a drug has therapeutic value, INESSS considers: whether there is an unmet health need in the intended patient population, the level of need, and the drug's ability to confer a clinical benefit. [12]

Step (2) Additional Key Parameters: If INESSS determines that the drug has therapeutic value, it must next assess additional parameters to make its recommendation, including:

- the cost-effectiveness ratio of the drug; and
- the impact of adding the drug to Québec's List of Medications (i.e., formulary) on the health of the population and on the other components of the health and social services system. [13]

2.2 Pan-Canadian Pharmaceutical Alliance (pCPA)

The pCPA, formerly known as the pan-Canadian Pricing Alliance, was established as a collaborative effort between the provinces and territories to combine negotiating power of the provincial drug programs. The pCPA conducts joint negotiations for the product listing of drugs in Canada. Since 2016, the pCPA has included all Canadian provinces and territories, as well as certain federal public drug plans. [14]

All drugs that are recommended for reimbursement through CADTH or INESSS are considered for negotiation through the pCPA. The goals of the pCPA are to increase access to drug treatment options, achieve lower costs and consistent pricing, reduce duplication of effort among member jurisdictions, and improve consistency of coverage across Canada. [15]

As of May 2020, the joint negotiation efforts of the pCPA have resulted in 369 completed negotiations on brand name drugs. [16]

2.2.1 pCPA process

The pCPA negotiation process proceeds through four phases: (1) initiation, (2) consideration, (3) negotiation, and (4) completion.

9 CADTH, CADTH Pan-Canadian Oncology Drug Review Expert Review Committee Terms of Reference (June 2020).

10 CADTH, The pCODR Expert Review Committee (pERC) (18 October 2021).

11 *Act Respecting the Institut National D'Excellence en Santé et en Services Sociaux*, CQLR c I-13.03, ss 4-5.

12 *Act Respecting the Institut National D'Excellence en Santé et en Services Sociaux*, CQLR c I-13.03, s 6.

13 *Act Respecting the Institut National D'Excellence en Santé et en Services Sociaux*, CQLR c I-13.03, *s 7.*

15 See pCPA, About pCPA, Mandate and Objectives.

16 See pCPA, pCPA Activity Overview.

Phase (1) Initiation: The initiation phase depends on whether the drug at issue is a new drug, an existing drug, or a line extension (i.e., when a manufacturer introduces a new product that is a new version or an enhancement of an existing drug).

- For a new drug, the pCPA issues an acknowledgement letter to the manufacturer once a recommendation has been published by CADTH and/or INESSS, advising that the drug is now under consideration for a negotiation by the pCPA.
- For an existing drug, the pCPA may initiate the pCPA process for a number of reasons including:
  - changes in the clinical landscape resulting from new drugs entering the same therapeutic area as the existing drug;
  - a line extension of the existing drug;
  - a therapeutic review involving the existing drug;
  - a review of the product listing agreement within any jurisdiction;
  - a review of the formulary;
  - the needs of a jurisdiction; or
  - any unforeseen circumstances warranting negotiations.
- For a line extension, the pCPA process may be triggered if the drug manufacturer contacts the pCPA.

Phase (2) Consideration: Once CADTH or INESSS reviews the drug submission and provides a listing recommendation, the pCPA determines whether joint pan-Canadian negotiations will occur for the drug, or whether listing will be negotiated on an individual provincial/territorial basis. Generally, the pCPA does not consider drugs that have received a negative HTA listing recommendation.

Phase (3) Negotiation: If the pCPA decides to move forward with joint negotiations, one jurisdiction will take the lead on the negotiation and confirm this with the manufacturer. Negotiation format varies depending on the drug, manufacturer, and lead jurisdiction. Negotiations typically take place in person or via videoconference.

Phase (4) Completion: If an agreement is reached between the participating jurisdictions and the manufacturer, an LOI is issued by the lead jurisdiction. The LOI is then shared with all participating jurisdictions. This concludes the pCPA process. Each participating jurisdiction will then make its final decision to reimburse the drug through its respective drug plan, and the manufacturer will enter into individual PLAs with each jurisdiction. [17]

If an agreement is not reached, the pCPA issues a close letter to the manufacturer, indicating that the negotiation has closed.

2.2.2 Generic tiered pricing framework

In addition to its efforts to negotiate product listing of brand name drugs, the pCPA also use its joint negotiating power to obtain the lowest prices for generic drugs through the Generic Tiered Pricing Framework. [18] The Generic Tiered Pricing Framework also sets out the following price points for generic drugs: [19]

17 An example PLA is available on the Manitoba Health, Seniors and Active Living website.

18 Previously known as the Generic Price Initiative.

19 See pCPA, Generic Drugs, pan-Canadian Tiered Pricing Framework.

Number of market players	% of brand price
Tier 1: New single source (i.e., only one manufacturer of a generic drug)	75% of brand price if product listing agreement or pricing agreement for brand exists in any jurisdiction 85% of brand price if no product listing agreement or pricing agreement for brand product Product reassessed after 2 years
Tier 2: Two generic drugs	50% of brand price
Tier 3: Three or more generic drugs	25% of brand price for oral solid dosage forms and 35% of brand price for all dosage forms other than oral solids.

Effective April 1, 2018, the pCPA introduced an additional five-year initiative that reduced the prices of 67 of the most commonly prescribed drugs, referred to as the pan-Canadian Select Molecules. [20] These drugs are not part of the Generic Tiered Pricing Framework and are instead reimbursed at fixed prices.

2.2.3 Biologics and biosimilars

The pCPA has developed a series of policies concerning negotiations on biosimilars.

The *First Principles* policy, [21] published in April 2016, aims to facilitate consistent negotiations on biosimilars and reference biologics. In summary, the *First Principles* provides:

- preference for a pan-Canadian negotiation process over individual and selected jurisdictions;
- decisions informed by evidence (i.e., Health Canada review, no clinically meaningful differences, HTA assessment and/or other considerations);
- fostering a competitive market with the introduction of biosimilars to facilitate long-term cost reductions and sustainability for public drug plans;
- biosimilars must provide a reduction in the reference biologic's transparent list price; and
- acceptance of innovator biologic proposals that provide national value to the public drug plans and include a similar or better transparent price reduction if equivalent listing status is sought.

20 The list can be accessed here.

21 pCPA, Subsequent Entry Biologics (SEBs) First Principles (1 April 2016).

In September 2018, the pCPA published the Biologics Policy Directions & pCPA Negotiations, a further set of directions to be applied to pCPA negotiations for biologic and biosimilar drugs with the goal of developing and piloting a clear and consistent Canadian approach that encourages appropriate use of biologics in support of the pCPA mandate to enhance patient access to clinically relevant and cost-effective drug treatment options. [22]

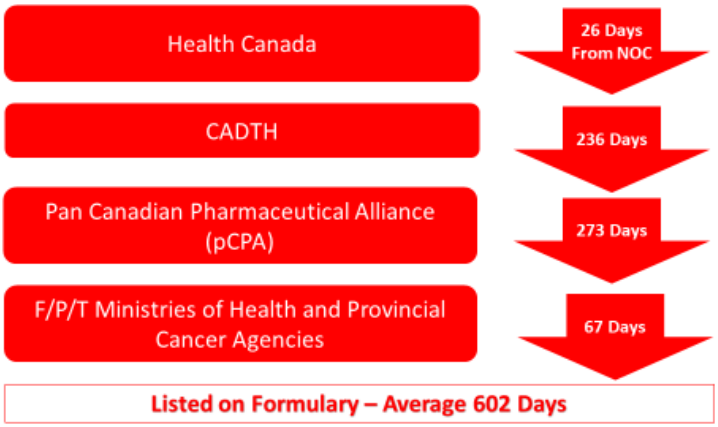
In summary, the *pCPA Biologics Policy* provides:

- biologic drugs will be considered on an individual basis, in their market context;
- negotiations for biologic drugs will begin in parallel with the HTA process;
- offers for biologic drugs may be accepted at any time, but offers for a currently reimbursed biologic drug will not be discussed when a corresponding biosimilar is under consideration by the HTA and pCPA processes;
- offers for biologic drugs seeking to restrict or exclude biosimilar drugs will not be considered;
- offers for new biologic drugs or biologic drugs for which biosimilars are reimbursed will not be considered unless the offer includes a transparent price reduction to the lowest public list price;
- tiered listings for biologic drugs may be implemented in certain therapeutic areas; and
- switching of patients from a reference biologic drug product to a biosimilar may be implemented.

For biosimilar drugs, the pCPA published the *Biosimilars Review Process & pCPA Negotiations Update* in 2019 in response to CADTH's decision to cease review of biosimilars. [23] The update clarifies that biosimilars will continue to follow the *pCPA Biologics Policy* directions but the process may be triggered by submission of a Manufacturer Notification of Intent to Negotiate a Biosimilar by the manufacturer up to six months before receiving marketing authorization from Health Canada. Where INESSS reviews and makes a recommendation regarding a biosimilar, the pCPA process proceeds in parallel, as with biologic drugs under the *pCPA Biologics Policy*.

2.3 Duration of process: from NOC to listing

According to one source, it takes an average of 602 days from receiving an NOC to be listed on at least one provincial formulary. [24] A breakdown for each step in the process is shown in the below figure:



22 pCPA, Biologics Policy Directions & pCPA Negotiations (September 2018) [*pCPA Biologics Policy*].

23 pCPA, Biosimilars Review Process & pCPA Negotiations Update (September 2019).

24 Sam Salek et al, "Factors Influencing Delays in Patient Access to New Medicines in Canada: A Retrospective Study of Reimbursement Processes in Public Drug Plans", online: (2019) 10 Frontiers in Pharmacology, p. 6, Figure 3 www.frontiersin.org/articles/10.3389/fphar.2019.00196/full. Note that average times to listing in Québec are excluded from this analysis.

3 Private drug plans

In addition to public reimbursement, drugs are also paid for by private insurance companies, usually through an employee's work plan, or in cash if an individual does not have private insurance and does not qualify for public reimbursement. The price of patented medicines for private insurers is still subject to price regulation in Canada by the PMPRB. However, increasingly, private insurers are entering into confidential PLAs with manufacturers similar to those entered into with the provinces.

4 Judicial review of reimbursement and market access decisions

4.1 HTA review

In *Boehringer Ingelheim (Canada) Ltd v Canadian Agency for Drugs and Technologies in Health*, Boehringer Ingelheim brought an application for judicial review in the Ontario Superior Court of Justice (Divisional Court) for a review of CADTH's recommendations about its drug, PRADOX. [25]

Boehringer Ingelheim alleged that CADTH had breached a duty of procedural fairness owed to it by failing to publish and follow draft rules on its own pilot project, which allowed for the Health Canada NOC and the CADTH procedures to occur concurrently. [26]

In this case, Bayer, an intervener, volunteered for the pilot project, which caused its drug to be the first of the two drugs available on the market.

The court dismissed Boehringer Ingelheim's application, finding that the pilot project was widely known in the industry and CADTH was not under any obligation to publish the draft rules on its website. [27]

The court also established that CADTH is part of the machinery of both the federal and provincial governments, and hence its conduct, including recommendations, are subject to judicial review. [28] While CADTH has no legislated decision-making power, it is subject to a duty of procedural fairness. [29]

4.2 Listing decisions

In *Janssen inc. c Ministre de la Santé et des Services sociaux*, 2019 QCCA 39, the Québec Court of Appeal declared a decision of the Minister to delist REMICADE from Québec's List of Medications (i.e., equivalent to a formulary) invalid. The Court ordered the Minister to reinstate REMICADE onto the List of Medications as the Minister had not satisfied the requirements of procedural fairness in making the decision.

B. Patented medicine prices review board overview

5 Summary of operation

5.1 PMPRB role and mandate

The Patented Medicine Prices Review Board (**PMPRB** or **Board**) is an independent quasi-judicial body that was established by the federal government in 1987 under the *Patent Act*. [30] The PMPRB has a dual mandate:

- to review the prices of patented medicines to ensure that patentees do not abuse their patent rights by charging an "excessive price"; and
- to report to Parliament on the trends in pharmaceutical sales and pricing, and spending on research and development by patentees.

25 *Boehringer Ingelheim (Canada) Ltd v Canadian Agency for Drugs and Technologies in Health*, [2008] OJ No 4331 [*Boehringer Ingleheim*].

26 *Boehringer Ingelheim* at para 9.

27 *Boehringer Ingelheim* at paras 32 and 34.

28 *Boehringer Ingelheim* at para 3.

29 *Boehringer Ingelheim* at para 3.

30 *Patent Act*, RSC 1985, c P-4 [*Patent Act*.]

6 Details of operation

6.1 Jurisdiction of the PMPRB

6.1.1 Authorizing act and *Regulations*

The PMPRB operates separately and distinctly from other drug regulatory bodies, such as Health Canada or the provincial public drug plans.

The statutory powers of the PMPRB are governed by sections 79 to 103 of the *Patent Act*. [31] Regulations made under the *Patent Act*, including the *Patented Medicines Regulations* [32] and the *Patented Medicine Prices Review Board Rules of Practice and Procedure,* [33] detail the data reporting requirements of patentees and the rules respecting any proceeding before the Board, respectively.

Subsection 96(4) of the *Patent Act* authorizes the Board to issue non-binding guidelines with respect to matters within its jurisdiction. [34]

6.1.2 Jurisdiction pertaining to price regulation

The PMPRB has price review and remedial jurisdiction tied to the sale of a patented medicine in any market in Canada at an "excessive price". Subsection 85(1) of the *Patent Act* sets out the factors that the PMPRB must consider to determine if a patentee is charging an excessive price. These factors include comparing the price of the patented medicines to prices of the same medicine in designated countries and to the prices of similar medicines in Canada. The Federal Court of Appeal has confirmed that "the excessive price provisions in the *Patent Act* are directed at controlling patent abuse, not reasonable pricing, price-regulation or consumer protection at large". Were this not the case, the PMPRB's role "would be constitutionally suspect". [35]

The Board has jurisdiction over ex-factory sales (i.e., the price at which the patentee sells the patented medicine to wholesalers and other first purchasers). The PMPRB does not have jurisdiction to regulate the prices charged in turn by those wholesalers or retailers, nor does it have authority over pharmacists' professional fees. [36]

The following terms and phrases have been defined in the *Patent Act* or judicially considered and clarify the scope of the PMPRB's jurisdiction.

6.1.3 "patentee"

A "*patentee*" is defined in section 79(1) of the *Patent Act* as:

"the person for the time being entitled to the benefit of the patent for that invention and includes, where any other person is entitled to exercise any rights in relation to that patent other than under a licence continued by subsection 11(1) of the *Patent Act Amendment Act*, 1992, that other person in respect of those rights."

The phrase "*benefit of the patent*" within this definition includes the exclusive right to make, construct, use and sell the medicine, [37] as well as a number of enforcement mechanisms. [38] This definition includes the owners or holders of patents, and any person entitled to the benefit of the patent or to exercise any rights in relation to that patent (other than by compulsory license). The PMPRB has held that generic manufacturers who have either an express or implicit license can fall within the definition of "*patentee*" and may therefore be subject to the PMPRB's jurisdiction, despite not owning the patents. [39] The patentee has the "*benefit of the patent*" from the date it is laid open for public inspection, provided the patent has subsequently issued. [40]

Amendments to the *Patent Act* in 2021 also use the terminology of "rights holder", to reflect that persons entitled to the benefit of Certificates of Supplementary Protection (**CSPs**) are also subject to PMPRB jurisdiction.

31 *Patent Act*, ss 79-103.

32 *Patented Medicines Regulations*, SOR/94-688 [*Patented Medicines Regulations*].

33 *Patented Medicine Prices Review Board Rules of Practice and Procedure,* SOR/2012-247.

34 Patented Medicines Prices Review Board, "Compendium of Policies, Guidelines and Procedures" (updated February 2017) [PMPRB Compendium].

35 *Alexion Pharmaceuticals Inc, v. Attorney General (Canada)*, 2021 FCA 157 at para 49, leave to appeal to SCC ref'd 2022 CanLII 21677 (SCC).

36 PMPRB Compendium, s A.4.1.3; *Pfizer Canada Inc v Canada (AG)*, 2009 FC 719 at paras 85–90.

37 *Patent Act*, s 42.

38 *Biochem Inc v Canada (Attorney General)*, 2007 FC 1316 at para 26 [*Shire*]; *Patent Act*, ss 54-59.

39 *Canada (Attorney General) v Sandoz Canada Inc,* 2015 FCA 249, rev'g 2014 FC 501. Leave to appeal the decision in 2015 FCA 249 to the Supreme Court of Canada was sought, but subsequently discontinued, Court File No. 36798. See also PMPRB-10-D2-SANDOZ (1 August 2012), online: PMPRB <http://www.pmprb-cepmb.gc.ca/view.asp?ccid=875>; PMPRB-08-D3-ratiopharm (30 June 2011), online: PMRPB <http://www.pmprb-cepmb.gc.ca/view.asp?ccid=861>.

40 *Shire* at paras 27-31.

6.1.4 "pertaining"

The PMPRB will assume jurisdiction over any patent that discloses "an invention pertaining to a medicine." [41] An invention "pertains to a medicine" if the invention is "intended or capable of being used for medicine or for the preparation or production of medicine." [42]

The term "pertaining" is not specifically defined in the *Patent Act*; however, the term has been judicially considered in a number of cases, the earliest of which is *ICN Pharmaceuticals Inc v Canada (PMPRB)*.[43]

The Federal Court of Appeal has confirmed that determining whether a patent pertains to the medicine requires reading the patent as a whole, including the claims to identify the invention. At the same time, the Board is not required to construe the patent and the claims like a court would. The Board is entitled to take the patent at face value, and is not expected to arrive at the "correct" interpretation of the patent. [44]

6.1.5 "medicine"

The PMPRB's jurisdiction is tied to medicines. The Federal Court of Appeal in *Galderma FCA* found that it was not unreasonable for the Board to conclude that the relevant medicine was DIFFERIN given that DIFFERIN was the medicine sold on the market, while adapalene *per se* was not. [45]

The PMPRB *Compendium of Policies, Guidelines* and Procedures [46] defines a medicine as:

> "any substance or mixture of substances made by any means – whether produced biologically, chemically or otherwise – that is applied or administered *in vivo* in humans or in animals to aid in the diagnosis, treatment, mitigation or prevention of disease, symptoms, disorders, abnormal physical states, or in modifying organic functions in humans or animals, however administered."

This definition excludes medical devices, *in vitro* diagnostic products and disinfectants that are not used *in vivo*.

6.1.6 "sold in any market in Canada"

The PMPRB's jurisdiction is limited to medicines sold in Canada. The PMPRB Guide to Reporting defines a "sale" as:

> "the transfer of property rights from one person to another for money, money's worth, or other consideration." [47]

In December 2019, the PMPRB issued a bulletin on "zero-dollar sales" stating that all zero-dollar sales should be reported, including "when a medicine's first sale is itself a zero-dollar sale" and medicines "exclusively provided to patients free of charge". [48] To date, no jurisprudence has addressed the applicability of this policy.

7 Filing requirements for price regulation

In order for the PMPRB to monitor the prices of patented medicines, patentees must identify relevant patents and file certain pricing and sales information about their patented drugs. This is done by submitting a series of online forms, known as Form 1 and Form 2. The *Patent Act* mandates that patentees file pricing information when their drug is introduced in the Canadian market and twice a year thereafter. Patentees are also required to file an annual Form 3 on revenue and research and development expenditures. [49]

8 Enforcement of price regulation

8.1 Penalties for failure to file

The penalties for failing to report to the PMPRB are set out in section 76.1 of the *Patent Act*, which states:

> "Every person who contravenes or fails to comply with section 80, 81, 82 or 88 or any order made thereunder is guilty of an indictable offence punishable on summary conviction and liable

41 *Patent Act*, s 79(1).

42 *Patent Act*, s 79(2).

43 *ICN Pharmaceuticals Inc v Canada (Patented Medicine Prices Review Board)* (1996), 108 FTR 190 at para 24, aff'd [1997] 1 FC 32 (FCA) [*ICN Pharmaceuticals FCA*]; *Canada (Attorney General) v Galderma Canada Inc,* 2019 FCA 196 at paras 63-67 [*Galderma FCA*].

44 *Galderma FCA* at paras 36-38.

45 *Galderma FCA* at para 61.

46 PMPRB Compendium, s B.3.1.

47 Patented Medicines Prices Review Board, "Patentee's Guide to Reporting" (updated July 2015), s 7 Glossary.

48 Patented Medicines Prices Review Board, "PMPRB NEWSletter - December 2019, Volume 23, Issue 2".

49 Patented Medicines Prices Review Board, "Patentee's Guide to Reporting Forms".

(a) in the case of an individual, to a fine not exceeding five thousand dollars or to imprisonment for a term not exceeding six months or to both; and

(b) in the case of a corporation, to a fine not exceeding twenty-five thousand dollars." [50]

Where the offence is continued on more than one day, the person who committed the offence is liable to be convicted for a separate offence for each day on which the offence continued. [51] There is currently no jurisprudence where a company has been charged with an offence under these provisions of the *Patent Act*.

Failures to report and failures to file are also disclosed by the PMPRB in the annual report that is presented to Parliament and made available to the public on the PMPRB website. [52]

8.2 Investigations & voluntary compliance undertakings

The Board may commence an investigation to determine if the price of a patented medicine is excessive.

The patentee may submit a Voluntary Compliance Undertaking, a written undertaking by the patentee to reduce the price of the patented medicine and/or offset any excess revenues. The Board may refer the investigation to the chairperson and recommend a public hearing to determine whether the price of the drug is excessive.

On the other hand, if the investigation concludes that the price does not appear to be excessive, the investigation file will be closed.

8.2.1 Public hearing and penalties for non-compliance

The Board can hold a public hearing to determine whether the price of the patented medicine is excessive.

Where the PMPRB finds the price of a patented medicine to be excessive, the PMPRB can:

- Order prospective price reduction;
- Order payment of excess revenues;
- Reduce the price of another patented medicine;
- Impose double damages (two times excess revenues) if the manufacturer is found to have had a policy of excessive pricing. [53]

The PMPRB may not commence proceedings against former patentees if it has been more than three years since the patentee ceased to be entitled to benefits under the patent.

A decision of the Board is subject to judicial review by the Federal Court of Canada.

9 Proposed PMPRB reforms

In August of 2019, the *Patented Medicines Regulations* that govern the PMPRB were amended (**Amendments**). These Amendments included:

1. Three new economic factors were added as part of determining excessive price under section 85 of the *Patent Act*: (1) pharmacoeconomic value of the drug; (2) market size of the drug; and (3) Canada's Gross Domestic Product (**GDP**) and GDP per capita. Additional reporting requirements accompany these reforms on pharmacoeconomic value and market size.

2. An updated schedule of comparator countries, that removed the highest price countries (the US and Switzerland), and added only lower priced countries (Australia, Belgium, Japan, Netherlands, Norway, Spain). [54]

50 *Patent Act*, s 76.1.

51 *Patent Act*, s 76.1(4).

52 PMPRB's Reports to Parliament are available here.

53 PMPRB Compendium, s A.6.

54 The new schedule of comparator countries includes Australia, Belgium, France, Germany, Italy, Japan, Netherlands, Norway, Spain, Sweden and the UK.

3. Requiring patentees to report price and revenue net of all price adjustments, including third-party transactions concluded with public drug plans. [55]

4. Reducing patentee reporting obligations for veterinary, over-the-counter and certain eligible generic medicines.

The Amendments were originally scheduled to come into force on July 1, 2020, but have been delayed on several occasions.

On October 23, 2020, the PMPRB also issued new Guidelines [56] to implement the Amendments once they come into force.

10 Relevant legislation and guidance documents

- *Act Respecting the Institut National D'Excellence en Santé et en Services Sociaux*, CQLR c I-13.03
- pCPA, Biologics Policy Directions & pCPA Negotiations (September 2018)
- *Patent Act*, RSC 1985, c P-4, ss 79-103
- *Patented Medicines Regulations*, SOR/94-688
- *Patented Medicine Prices Review Board Rules of Practice and Procedure*, SOR/2012-247
- Patented Medicines Prices Review Board, "Compendium of Policies, Guidelines and Procedures" (updated February 2017)

55 The majority of the Amendments and the new Guidelines are subject to a series of ongoing legal challenges. The Amendment requiring patentees to report price net of third party transactions concluded with public drug plans has been struck down. See *Innovative Medicines Canada v Canada (AG)*, 2020 FC 725 at paras 217-218 (under appeal); *Merck Canada inc. c Procureur général du Canada*, 2020 QCCS 4541 at paras 420-421, 433-434, The Amendment on the new economic factors was also struck down in *Merck Canada Inc, c. Procureur general du Canada*, 2022 QCCA 240. See also Federal Court File No. T-1419-20 on the Guidelines dated October 23, 2020.

56 Patented Medicines Prices Review Board, "PMPRB Guidelines".

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