



## **Chapter 9 Canadian Drug Patent Laws and Regulations**

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## 9.1 Introduction

In Canada, two sets of regulations are of particular note with respect to intellectual property protection for pharmaceuticals: (i) the *Patented Medicines (Notice of Compliance) Regulations* (the “*PM(NOC) Regulations*”)<sup>1</sup>; and (ii) data protection under the *Food and Drug Regulations*.<sup>2</sup> Both instruments are an integral part of the Government's drug patent policy, which seeks to strike an appropriate balance between encouraging continued innovation in new drugs and promoting timely access to their generic equivalents.

The *PM(NOC) Regulations* and data protection provisions of the *Food and Drug Regulations* operate in tandem in an attempt to ensure that pharmaceutical companies sell safe and effective drugs, yet are also allowed to benefit from the fruits of their labour and receive adequate patent protection for their invention. As noted by the Government of Canada in the Regulatory Impact Analysis Statement (“RIAS”) which accompanied the amendments to the data protection provisions of the *Food and Drug Regulations*, the two sets of regulations “are intended to act as a balanced set of measures, designed to work together to stabilize Canada’s intellectual property protection for drugs by ensuring a minimum period of protection and maintaining a reasonable ceiling on the maximum protection available.”<sup>3</sup>

## 9.2 History of Drug Patents in Canada

See “*Patent Protection for Pharmaceutical Products in Canada – Chronology of Significant Events*”<sup>4</sup>

### 9.2.1 Compulsory Licensing of Drugs

Prior to 1993, Canada’s patent laws permitted the issuance of compulsory licenses for the manufacturing and importation of patented medicines. A compulsory license is a statutory license that gives a licensee, typically a generic manufacturer, the right to manufacture, use or sell a patented invention before the patent expires, in exchange for the payment of a fixed royalty to the patentee. Such licenses could be granted without the consent of the patentee.

In 1923, Canada’s *Patent Act*<sup>5</sup> was amended to provide for the issuance of compulsory licenses for the manufacture of food and drug patents if the medicine’s active ingredients were manufactured in Canada.

In 1969, the *Patent Act* was amended to allow compulsory licenses to be granted for the importation of medicines into Canada which, in turn, allowed generic manufacturers to import a

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<sup>1</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133 [“*PM(NOC) Regulations*”]

<sup>2</sup> *Food and Drug Regulations*, C.R.C., c. 870, C.08.004.1 [“*Data Protection Regulations*”]

<sup>3</sup> *Regulatory Impact Analysis Statement*, C. Gaz. II, vol. 140 no. 21 (*Regulations Amending the Food and Drug Regulations (Data Protection)*), October 18, 2006.

<sup>4</sup> Margaret Smith; Government of Canada; Law and Government Division; 30 March 2000 <http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/BP/prb9946-e.htm>

<sup>5</sup> *Patent Act*, R.S., 1985, c. P-4 [“*Patent Act*”]

medicine's active ingredients and to process them into final form for sale. Royalty rates payable to a patentee were set at 4% of the retail price of the drug.

As a result of the 1969 amendments, a significant number of compulsory licenses to import were granted, leading to the development of an exceptionally strong generic industry in Canada. However, the compulsory licensing regime created an environment that was widely perceived to be inhospitable to investment in the innovative pharmaceutical industry. As a result, Canada not only experienced a substantial decrease in the growth and investment of pharmaceutical research and development, but saw the exodus of a number of innovative companies to countries abroad, leading to a reduction in the number of jobs available in the pharmaceutical industry for high-level graduates from Canadian Universities.

Consequently, in 1983 the federal Minister of Consumer and Corporate Affairs called for a rebalancing of Canada's compulsory licensing regime in order to generate growth and strengthen Canada's innovative industry.

### 9.2.2 1987: Bill C-22

In late 1987, Bill C-22,<sup>6</sup> a bill to amend the *Patent Act*, came into force and made sweeping amendments to Canada's patent regime, including significant changes to the compulsory licensing regime. The Government's stated purpose in legislating Bill C-22 was to encourage multinational drug companies to invest in research and development in Canada.

With respect to patents generally, Bill C-22 changed the term of protection for patents, introducing a patent term of 20 years from the date on which a patent application was filed, rather than 17 years from the date the patent was issued. This change became effective in 1989.

With respect to pharmaceutical patents, Bill C-22 amended the Patent Act in three significant ways:

#### a) Deferred Compulsory Licenses

Bill C-22 granted drug patentees a minimum period of protection from compulsory licenses as follows:

NOC Date of Issue	Term of Protection
NOC issued after June 27, 1986	10 years protection against compulsory licenses to import  7 years of protection against compulsory licenses to manufacture.
On or before June 26, 1986 + generic NOC or compulsory license	7 years protection against compulsory license to import

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<sup>6</sup> R.S. 1985, c. 33 (3rd Supp.)

On or before June 26, 1986 (no generic NOC or compulsory license issued)	8 years protection against compulsory license to import
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In addition, drugs which were invented and developed in Canada were granted a further form of protection; no compulsory license to import could be granted and, moreover, a compulsory license to manufacture could be granted only if, after 7 years from the date of the NOC for the drug, the patentee failed to manufacture the drug in Canada for the purpose of substantially or completely supplying the Canadian market.

### **b) Pharmaceutical Compound Patents**

Prior to the passage of Bill C-22, patents were available only for the process used to manufacture a pharmaceutical - no patents were granted for the chemical compound or the medicine itself. Bill C-22 provided for the grant of product patents for pharmaceutical products and, consequently, protection could be sought for the product itself, regardless of the process used to manufacture it.

### **c) Establishment of the Patented Medicines Prices Review Board**

The Patented Medicines Prices Review Board (PMPRB) was established as a federal quasi-judicial agency with a mandate to ensure that the prices of patented medicines are not excessive. The PMPRB was also charged with the responsibility of monitoring and reporting on drug price trends in Canada, as well as R&D expenditures by the innovative drug industry.

The PMPRB was granted wide-ranging statutory authority in order to fulfill its mandate, including the ability to: (i) require an innovator to lower the price of its patented medicine (ii) revoke a compulsory license; or (iii) revoke the deferral period for a given patent.

## **9.2.3 1991-1992 NAFTA/TRIPS**

Subsequent to the passage of C-22, further developments with respect to patents took place on the international stage in the context of the negotiations of the World Trade Organization (WTO) *Agreement on Trade-Related Aspects of Intellectual Property Rights* (TRIPS)<sup>7</sup> and the *North American Free Trade Agreement* (NAFTA).<sup>8</sup>

The effect of NAFTA and TRIPS was and is the imposition of minimum standards of IP protection across Member States through the harmonization of domestic IP laws.

<sup>7</sup> *Agreement on Trade-Related Aspects of Intellectual Property Rights*, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C 1869 U.N.T.S. 299 [TRIPS]. TRIPS was negotiated during the Uruguay Round trade negotiations of the General Agreement on Tariffs and Trade (GATT) from 1986 to 1994. As an agreement of the World Trade Organization (WTO), TRIPS is legally binding for all WTO Member states. Also at the Uruguay Round, the Council for TRIPS was created to monitor the operation of the agreement and governments' compliance.

<sup>8</sup> *North American Free Trade Agreement*, 17 December 1992, Can. T.S. 1994 No. 2, 32 I.L.M. 289 (entered into force 1 January 1994) [NAFTA].

### **9.2.3.1 NAFTA**

NAFTA came into effect on January 1, 1994 as an agreement between the United States, Canada and Mexico. On December 10, 1994 it was announced that agreement had been reached in principle for Chile to be admitted to the Agreement.

Article 1709(5) of NAFTA provides a patentee with the exclusive rights to use and prevent others from making using or selling a patented product without the patentees consent. Article 1709(12) provides that the term of protection of a patent is to be at least 20 years from the date a patent application is filed or 17 years from the date of issue and ,moreover, provides that the term of a patent may be extended to compensate for delays incurred during the regulatory approval process.<sup>9</sup>

Article 1709(6) of NAFTA enables Member States to provide certain exceptions to the exclusive rights conferred by a patent, provided that the exceptions do not unreasonably conflict with the normal exploitation of the patent, and do not unreasonably prejudice the legitimate interests of the patent owner.

### **9.2.3.2 TRIPS**

TRIPS came into being in 1994 as part of the “package deal” that emerged from the Uruguay Round negotiations of the General Agreement on Tariffs and Trade in order to:

“...reduce distortions and impediments to international trade...to promote the effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become a barrier to legitimate trade...”<sup>10</sup>

Unlike other WTO treaties, TRIPS is the first WTO treaty to impose entirely positive obligations on member states; moreover, these positive obligations are subject to enforcement and further development through the WTO dispute settlement process.<sup>11</sup>

Article 28 grants a patent holder the exclusive right of “making, using, offering for sale, selling, or importing” the patented product, as well as the exclusive right to license the patented product.<sup>12</sup> Article 33 of TRIPS provides for a term of protection of at least 20 years from the date of a patent application.

Like Article 1709(6) of NAFTA, Article 30 of TRIPS confers a general right for members to provide limited exceptions to the exclusive rights conferred by a patent.

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<sup>9</sup> Unlike the United States, there is no patent term restoration or supplemental protection scheme in Canada.

<sup>10</sup> *Agreement on Trade-Related Aspects of Intellectual Property Rights*, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C 1869 U.N.T.S. 299, Preamble.

<sup>11</sup> Peter M. Gerhart, “Reflections: Beyond Compliance Theory – TRIPS as a Substantive Issue” (2000) 32 *Case W.Res.J.Int'l.L.* 357 at 358 [Gerhart].

<sup>12</sup> *Agreement on Trade-Related Aspects of Intellectual Property Rights*, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C 1869 U.N.T.S. 299, Article 28(1)(a) and (b)

### 9.2.4 1992: Bill C-91

Bill C-91, *The Patent Act Amendment Act, 1992*<sup>13</sup> was enacted in 1992 to enable Canada to meet its international obligations under NAFTA and WTO/TRIPS with respect to the protection of intellectual property. Bill C-91, which received Royal assent on February 4, 1993, provided for a number of substantial changes to Canada's patent regime:

#### a) Abolition of Compulsory Licenses

Bill C-91 abolished the compulsory license provisions of the *Patent Act* retroactive to December 20, 1991. Compulsory licences in existence before 20 December 1991, however, continued in effect and were subject to the seven- and ten-year limitation periods established under Bill C-22. Licences granted after 20 December 1991 but before the day the Act came into force were terminated when the Act became effective.

#### b) Early Working and Stockpiling Exceptions to Infringement

The abolishment of Canada's compulsory licensing regime caused the Government to adopt other methods of ensuring a fair balance between encouraging innovation and providing timely access to lower-cost pharmaceuticals. To do so, it created creating two exceptions to patent infringement under section 55.2 of the Patent Act. These exceptions provided that it was not an infringement to:

- (i) to use a patented invention in order to obtain regulatory approval to sell an equivalent product after the relevant patents have expired ("early working");<sup>14</sup> or
- (ii) stockpile a generic version of a patented medicine in the period preceding the expiry of the relevant innovator patent ("stockpiling").<sup>15</sup> The accompanying *Manufacturing and Storage of Patented Medicines Regulations* stipulated that the "stockpiling period" was six months prior to expiry of the innovator's patent.<sup>16</sup>

Both the "early working" and "stockpiling" exceptions were designed to facilitate the entry of generic products to the market by allowing a generic manufacturer to take the necessary steps during the term of the patent in order to be in a position to enter the market as soon as possible after patent expiry.

The "stockpiling" exception was subsequently repealed, along with the *Manufacturing and Storage of Patented Medicines Regulations*, following a decision of the World Trade

<sup>13</sup> *The Patent Act Amendment Act, 1992*, Statutes of Canada 1993, C. 2

<sup>14</sup> *Patent Act*, R.S., 1985, c. P-4, Section 55.2(1)

<sup>15</sup> *Patent Act*, R.S., 1985, c. P-4 Section 55.2(2), *repealed*

<sup>16</sup> *Manufacturing and Storage of Patented Medicines Regulations*, SOR/93-134

Organization which found that the exception was inconsistent with Canada's TRIPS obligations.<sup>17</sup>

The "early working" exception remains in force and allows generic manufacturers to apply to Health Canada for approval of their product prior to expiry of the relevant patent(s), in order to be in a position to enter the market as soon as possible after patent expiry.

**c) Strengthening of PMPRB**

Bill C-91 also strengthened the powers of the PMPRB by granting it additional powers to, *inter alia*, order an innovator to reduce the price of its medicine and/or refund excess revenues, as well as order payment of up to twice the amount of the excess revenues generated, enforceable by way of fine or imprisonment.

**9.2.5 1993: Patented Medicines (Notice of Compliance) Regulations (Linkage Regulations)**

At the same time that Bill C-91 was passed to amend the *Patent Act*, the Government enacted the *PM(NOC) Regulations*. The *PM(NOC) Regulations* were adopted to provide effective patent enforcement by ensuring that the early working (and, at the time, the stockpiling provision) provision did not result in the actual issuance of a generic NOC until patent expiry, or until such earlier time as a court of innovator considers justified. As stated in the Regulatory Impact Analysis Statement ("RIAS") which accompanied their passage in 1993, the creation of an early working (and, at the time, stockpiling) exception removed an exclusive right otherwise available to patentees and, therefore, the *PM(NOC) Regulations* were required to ensure that the exception is not abused by generic drug applicants seeking to sell their products during the term of a competitor's patent.<sup>18</sup> The *PM(NOC) Regulations* attempted to prevent such abuse by linking Health Canada's ability to approve a generic drug to the patent status of the equivalent innovative product that the generic seeks to copy.

The *PM(NOC) Regulations* were enacted pursuant to section 55.2(4) of the *Patent Act*. Section 55.2(4) of the *Patent Act* provides that:

*The Governor in Council may make such regulations as the Governor in Council considers necessary for preventing the infringement of a patent by any person who makes, constructs, uses or sells a patented invention in accordance with subsection (1), including, without limiting the generality of the foregoing, regulations*

*(a) Respecting the conditions that must be fulfilled before a notice, certificate, permit or other document concerning any product to which a patent may relate may be issued to a patentee or other person under any Act of Parliament that regulates the manufacture, construction, use or sale of that product, in addition to any conditions provided for by or under that Act;*

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<sup>17</sup> Canada – Patent Protection of Pharmaceutical Products, WT/DS114, 7 April 2000.

<sup>18</sup> Regulatory Impact Analysis Statement, (*Patented Medicines (Notice of Compliance) Regulations*), *Canada Gazette II*, vol. 127, No. 6, 1993, p. 1383



*(e) Generally governing the issue of a notice, certificate, permit or other document referred to in paragraph (a) in circumstances where the issue of that notice, certificate, permit or other document might result directly or indirectly in the infringement of a patent.<sup>19</sup>*

The operation of the *PM(NOC) Regulations* is discussed in greater detail below.

### **9.3 Overview of the Drug Approval Process in Canada**

All drugs sold in Canada (including pharmaceuticals, natural health products, biologicals and radiopharmaceuticals) – both those manufactured domestically and imported – must be authorized for sale by Health Canada.

#### **9.3.1 New Drug Submissions and Supplementary New Drug Submissions**

To gain Health Canada authorization for a new drug, a manufacturer, typically an innovator, submits a New Drug Submission (“NDS”) setting out all data (obtained through rigorous clinical testing) establishing the safety and efficacy of the drug. Such submissions typically require pre-clinical, clinical, chemistry and manufacturing data. Health Canada then reviews the submitted information and evaluates the drug’s safety, efficacy and quality to determine whether it is suitable to be marketed in Canada and whether a Notice of Compliance should, accordingly, be issued.

Once a drug has been approved, any changes to the approval (e.g., change of name, packaging, product monograph) requires the manufacturer to file a Supplementary New Drug Submission (“SNDS”). Changes requiring the submission of a SNDS are those made:

- (i) in the identifying name of the drug product or the brand name;
- (ii) in the dosage form or strength of the drug product;
- (iii) in the formulation, method of manufacture, equipment, or process control of the drug product that requires supporting clinical or bioequivalence data;
- (iv) in the case of Schedule C and D drugs, in the production site, method of manufacture, equipment and process control of the drug substance or in the formulation, method of manufacture, equipment, process control or production site of the drug product;
- (v) in the labelling, including package inserts, product brochures, file cards, and product monographs of the drug product respecting, either explicitly or implicitly:
  - (a) the recommended route of administration of the drug product;
  - (b) the dosage of the drug product, and
  - (c) the claims, including indications, made for the drug product; or

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<sup>19</sup> *Patent Act*, R.S., 1985, c. P-4, s. 55.2(4)

(vi) for sterile drug products, in the specifications to remove the sterility test and replace it with process parametric release.

### **9.3.2 Notice of Compliance**

At the completion of the review, if Health Canada has authorized the new drug and its manufacturing process under the regime provided for in the *Food and Drugs Act* and *Food and Drug Regulations*, the Minister of Health (the “Minister”) will grant the manufacturer a Notice of Compliance (“NOC”) which, in turn, permits the drug to be marketed in Canada. All drugs authorized for marketing will also receive a Drug Identification Number (“DIN”) which signals to a user that the product has undergone and passed a review of its formulation, labelling and instructions for use. A drug product may not be sold in Canada without a DIN.

If, on the other hand, there is insufficient evidence to support the manufacturer’s claims of safety, efficacy or quality, a marketing authorization for the drug will not be granted and a Notice of Deficiency or a Notice of Non-Compliance is issued. A manufacturer may then submit further information to support its claim and/or may appeal a decision which declines to grant regulatory approval for a drug.

### **9.3.3 Abbreviated New Drug Submissions**

Where a second or subsequent manufacturer, typically a generic manufacturer, seeks a Notice of Compliance on the basis of a direct or indirect comparison between its drug and the original innovative drug which has already received marketing approval (called the “Canadian Reference Product”), the generic manufacturer submits an Abbreviated New Drug Submission (ANDS) demonstrating that the generic formulation of the drug is *bioequivalent* to the brand formulation.<sup>20</sup>

The ANDS typically does not contain clinical data. By establishing bioequivalence, a generic manufacturer may demonstrate the safety and effectiveness of its drug by comparison, without having to complete costly and time-consuming clinical trials.

## **9.4 The PM(NOC) Regulations**

### **9.4.1 Introduction and Overview**

As noted above, the *PM(NOC) Regulations* create a mechanism to prevent the infringement of patents pertaining to medicines, by prohibiting the issuance of a NOC by the Minister of Health for a potentially infringing generic product. Since their adoption, the *PM(NOC) Regulations* have been the subject of a number of amendments.<sup>21</sup>

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<sup>20</sup> “Bioequivalence” is a Health Canada requirement that the active ingredient of a generic drug be absorbed into the body and metabolized in approximately the same amount over approximately the same period as the active ingredient of the innovator drug.

<sup>21</sup> *Regulations Amending the Patented Medicines (Notice of Compliance) Regulations, Canada Gazette II*, vol. 132; *Regulations Amending the Patented Medicines (Notice of Compliance) Regulations, Canada Gazette II*, vol. 133; *Regulations Amending the Patented Medicines (Notice of Compliance) Regulations, Canada Gazette II*, vol. 140.

The *PM(NOC) Regulations* provide a mechanism whereby the Minister may be prohibited from issuing a NOC on a submission for a generic drug for a period of up to 24 months pending a determination by a Court as to whether a second or subsequent entry drug will infringe one or more relevant patents (discussed in greater detail below).

It is important to note that a Court's decision in a PM(NOC) proceeding is not a determination of the ultimate infringement or validity of the patent(s) at issue; rather, it constitutes a determination of whether the generic's *allegations of non-infringement* were justified. Since the Court does not rule on the ultimate validity or infringement of the patent, infringement and impeachment proceedings under the *Patent Act* are still an option for an innovator where a Court does not rule in its favour.

## 9.4.2 Operation of the Current Regime

### 9.4.2.1 The Patent List (Section 4)

The *PM(NOC) Regulations* create the linkage, in part, by requiring the Minister of Health to maintain a register of patents pertaining to medicines for which NOCs have been issued (the "Patent Register").<sup>22</sup> The patentee or licensee who has filed a NDS or SNDS may file with the Minister a list of all the relevant patents pertaining to the submission or supplement, and these patents may then be entered on the Patent Register.

The patent register is updated by the innovator submitting a patent list when the innovator files an NDS or eligible SNDS. Once the NOC is issued, the patent register is updated so as to add the patents on the patent list.<sup>23</sup> The practice of listing patents on the Patent Register has been the subject of some controversy and questions have been raised regarding the appropriate timing, subject matter and relevance requirements for listed patents, resulting in a number of substantial amendments, discussed in greater detail below.

#### a) Timing Requirements for Listing

To be listed on the Patent Register, the patent must be filed with the Minister at the same time that the patentee files its NDS or a SNDS.<sup>24</sup> Where a patent has been applied for but not yet issued at the time of the submission, the patentee may list that patent within 30 days of the issuance of the patent.<sup>25</sup> For the purpose of the *PM(NOC) Regulations*, the date of issuance of the patent is considered to be the date of the grant of patent as indicated on the face of the patent.<sup>26</sup>

<sup>22</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, Section 3

<sup>23</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, s. 3(3).

<sup>24</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, s. 4(3).

<sup>25</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, s. 4(4).

<sup>26</sup> *Procter & Gamble Pharmaceuticals Canada Inc. v. Canada (Minister of Health)* (2003) 33 C.P.R. (4<sup>th</sup>) 193 (F.C.A.), reversing on this ground (2003), 26 C.P.R. (4<sup>th</sup>) 180 (F.C.).

**b) Patent List Eligibility Requirements**

In order to be listed on the Register, patents must satisfy the subject matter and relevance requirements set forth in the *Regulations*.

Subject Matter Requirement

As will be discussed in sections 9.4.2, below, a patent is eligible for listing against a NDS if it contains a claim to:

- (i) the approved medicinal ingredient (product or product-by-process);
- (ii) the approved formulation that contains the medicinal ingredient;
- (iii) the approved dosage form that contains the medicinal ingredient (delivery system for administering the drug); or
- (iv) the approved use of the medicinal ingredient.<sup>27</sup>

A patent may only be listed against an SNDS where that SNDS is:

- a supplement for a change in formulation (including a change in strength);
- a supplement for a change in dosage form; or
- a supplement for a change in the use of the medicinal ingredient.

In order to be eligible for listing, the patent must contain a claim for the change that is being sought in the SNDS – i.e. a claim to (i) the approved change in formulation; (ii) the approved change in dosage form; or (iii) the approved change in the use of the medicinal ingredient.<sup>28</sup> A patent which contains claims solely for the medicinal ingredient (including polymorphs) are not eligible for listing against an SNDS.<sup>29</sup>

Whether a particular SNDS supports a patent listing is determined on the basis of changes reflected in that SNDS, independent of any prior NOC.<sup>30</sup>

Relevance Requirement – The 2006 Amendments

Prior to 2006, the *PM(NOC) Regulations* permitted the listing of any patent that claimed the approved medicine, its formulation, or its use; however, the patent was not required to claim

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<sup>27</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, s. 4(2)

<sup>28</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, s. 4(3)

<sup>29</sup> Health Canada, *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*, available online: <[http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-ld/patmedbrev/pmreg3\\_mbreg3-eng.php](http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-ld/patmedbrev/pmreg3_mbreg3-eng.php)>, section 3.2.1

<sup>30</sup> *Ratiopharm Inc. v. Wyeth, Wyeth Canada and The Minister of Health*, 2007 FCA 264 per Sharlow J.A. at para. 24.

the identical use or formulation contained in the regulatory submission against which the patent was sought to be listed.

On June 17, 2006,<sup>31</sup> significant changes were made to these listing requirements to require patents to be relevant to the specific wording of the drug submission – that is, the patent must claim the medicinal ingredient, formulation dosage form or indication for which approval is sought – in order to be eligible for listing.<sup>32</sup>

As noted above, a patent may only be submitted for listing on the Patent Register in respect of an SNDS if it contains a claim for the change in formulation, dosage form or use of the medicinal ingredient that is being sought for approval in the SNDS and a NOC has been issued in respect of that SNDS.<sup>33</sup> A SNDS filed to reflect the following changes will not support a patent listing:

- change in name of the drug or the name of the drug manufacturer;<sup>34</sup>
- change in the indicated use of a drug that contains a particular medicine does support a listing of a patent that contains a claim for that use of the medicine;<sup>35</sup>
- process, quality control, label, safety profile changes; and
- changes to manufacturing cite.

### The 2008 Amendments

The 2006 amendments to the *PM(NOC) Regulations* were not intended to be retroactive. Rather, patents included on earlier filed patent lists were to be “grandfathered” and remain subject to the listing requirements as they existed prior to June 17, 2006.<sup>36</sup>

Shortly after the coming into force of the 2006 Amendments, the Supreme Court of Canada rendered its decision in *AstraZeneca Canada Inc. v. Canada (Minister of Health)* [“*Astrazeneca*”],<sup>37</sup> wherein the Court attempted to clarify the law as it related to the patents

<sup>31</sup> *Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*, SOR/2006-242 (entered into force October 5, 2006)

<sup>32</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, section 4(2).

<sup>33</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, section 4(3).

<sup>34</sup> *Ratiopharm Inc. v. Wyeth, Wyeth Canada and The Minister of Health*, 2007 FCA 264 per Sharlow J.A. at para. 25.

<sup>35</sup> *Ratiopharm Inc. v. Wyeth, Wyeth Canada and The Minister of Health*, 2007 FCA 264 per Sharlow J.A. at para. 25.

<sup>36</sup> *Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*, SOR/2006-242 (October 5, 2006), section 6. Section 6 provides as follows: “Section 4 of the *Patented Medicines (Notice of Compliance) Regulations*, as enacted by section 2 of these Regulations, does not apply to patents on a patent list submitted prior to June 17, 2006”.

<sup>37</sup> *AstraZeneca Canada Inc. v. Canada (Minister of Health)*, 2006 SCC 49 (per Binnie, J.) [“*Astrazeneca*”]

which much be addressed by a second person under section 5 of the *PM(NOC) Regulations*. In *AstraZeneca*, a patent was listed for a drug that was no longer marketed. Justice Binnie, writing for the Court, held that a second person “is only required to address the cluster of patents listed against submissions relevant to the NOC that gave rise to the comparator drug.”<sup>38</sup>

Following the reasoning of Justice Binnie in *Astrazeneca*, the Federal Court of Appeal, in *Ratiopharm v. Wyeth*,<sup>39</sup> held that, in order for a patent submitted with a SNDS to be eligible for listing, there “must be relevance between the invention claimed in the patent and the change to the drug effected by the SNDS.” This finding was intended to apply to patents “grandfathered” under the 2006 amendments.

As a result of this decision, many patents submitted in full compliance with the listing requirements, as they were interpreted and applied prior to June 17, 2006, could be deleted from, or not added to, the Register, leading to increased litigation and earlier than anticipated loss of market exclusivity for a number of innovative drugs – a result which the Government sought to avoid.<sup>40</sup> In an attempt to restore the original intent of the “grandfathering” provisions, the Government amended the *PM(NOC) Regulations* to clarify the specific circumstances in which a grandfathered patent may be delisted.<sup>41</sup> The Amended Regulations provide that a patent on a patent list that was submitted prior to June 17, 2006 may not be refused for listing solely on the basis that the patent is not relevant to the submission for a notice of compliance to which the patent list relates.<sup>42</sup>

### c) Specific Listing Requirements

#### Claim for Medicinal Ingredient

The *PM(NOC) Regulations* define “claim for the medicinal ingredient” as including “a claim in the patent for the medicinal ingredient, whether chemical or biological in nature, when prepared or produced by the methods or processes of manufacture particularly described and claimed in the patent, or by their obvious chemical equivalents, and also includes a claim for different polymorphs of the medicinal ingredient, but does not include different chemical forms of the medicinal ingredient.”<sup>43</sup> As specified in the RIAS which accompanied the 2006 amendments to the *PM(NOC) Regulations*, the term “medicinal ingredient” refers

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<sup>38</sup> *AstraZeneca Canada Inc. v. Canada (Minister of Health)*, 2006 SCC 4 (per Binnie, J.) at para. 39

<sup>39</sup> *Ratiopharm Inc. v. Wyeth, Wyeth Canada and The Minister of Health*, 2007 FCA 264 per Sharlow J.A. at para. 49.

<sup>40</sup> Regulatory Impact Analysis Statement, Canada Gazette Part II, Vol. 142, No. 13, p. 1589 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*), June 12, 2008.

<sup>41</sup> *Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*, SOR/2008-211

<sup>42</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, section 3.1(2)

<sup>43</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, section 2

to the substance in the formulation which, once administered, is responsible for the drug's desired effect on the body."<sup>44</sup>

Accordingly, patents with product claims as well as product-by-process claims to the approved medicinal ingredient – including polymorphs – are eligible for listing. The RIAS which accompanied the 2006 amendments clarifies that the term “polymorph” includes “different crystalline, amorphous, hydrated and solvated forms of the approved medicinal ingredient”; however, the courts have held that claimed polymorphs must have utility as a medicine in order to be eligible for listing.<sup>45</sup>

Conversely, claims to different chemical forms (such as salts or esters) or intermediate forms (such as active metabolites) are specifically excluded from the definition of “claim for medicinal ingredient” and therefore will not support a patent for listing on the Register. This is in line with jurisprudence pre-dating the 2006 Amendments that patents claiming intermediates or metabolites of the medicinal ingredient are ineligible for listing.<sup>46</sup>

#### Claim for the Formulation that Contains the Medicinal Ingredient

Under the *PM(NOC) Regulations*, a “claim for the formulation” means “a claim for a substance that is a mixture of medicinal and non-medicinal ingredients in a drug and that is administered to a patient in a particular dosage form.” In this regard, the term “formulation” refers to the combination of active drug and non-medicinal ingredients, such as excipients, in a final form that is administered to a patient.

With respect to formulation patents, the claimed formulation must include, as an element, the medicinal ingredient of the drug.<sup>47</sup> Therefore, a patent directed solely to a formulation, with no claim to the approved medicinal ingredient, is not eligible for listing on the Patent Register.<sup>48</sup> In addition, the formulation which is approved in the relevant NDS must be the one that is claimed in order to be able to support listing of the patent on the Register.<sup>49</sup>

#### Claim for the Dosage Form that Contains the Medicinal Ingredient

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<sup>44</sup> Regulatory Impact Analysis Statement, C. Gaz. II, vol. 140 no. 21 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*), October 18, 2006

<sup>45</sup> *Abbott v. Apotex* (2005), 45 C.P.R. (4<sup>th</sup>) 81 (F.C.); aff'd (2007), 361 N.R. 308 (F.C.A.); *Abbott v. Apotex* (2007), 54 C.P.R. (4<sup>th</sup>) 356 (F.C.); aff'd 2007 FCA 187; *Abbott v. Apotex* [2007] F.C.J. No. 1072; *Abbott v. Canada (Minister of Health)* (2005), 42 C.P.R. (4<sup>th</sup>) 121 (F.C.); aff'd (2006), 350 N.R. 242 (F.C.A.).

<sup>46</sup> See e.g., *Merck Frosst Canada & Co. v. Canada (Minister of Health)* (2000), 7 C.P.R. (4<sup>th</sup>) 522 (F.C.), aff'd (2001), 12 C.P.R. (4<sup>th</sup>) 383 (F.C.A.), wherein the court found that a patent claiming an active metabolite could not be included on the patent list as the metabolite was not contained in the approved tablets.

<sup>47</sup> Health Canada, *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*

<sup>48</sup> Health Canada, *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*

<sup>49</sup> Health Canada, *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*

Prior to the 2006 Amendments, patents containing claims directed to a delivery system for the administration of a medicinal ingredient – such as, for example, a transdermal patch – were held by the Courts to be ineligible for listing.

According to the RIAS which accompanied the 2006 amendments to the *PM(NOC) Regulations*, dosage form patents merit protection in light of the significant therapeutic advantages afforded by novel dosage forms – particularly for biologic molecules, as effective administration of the medicinal ingredient often depends on the development of new and innovative delivery systems.<sup>50</sup>

The *PM(NOC) Regulations* define a “claim for the dosage form” as meaning “a claim for a delivery system for administering a medicinal ingredient in a drug or a formulation of a drug that includes within its scope that medicinal ingredient or formulation.”<sup>51</sup> Examples of eligible dosage forms would include novel controlled-release tablets and capsules, implants and transdermal patches, which contain the approved medicinal ingredient or approved formulation containing the medicinal ingredient.<sup>52</sup> Patents claiming novel packaging which is directed at improving the drug which is delivered to a patient, as opposed to the dosage form itself, are not eligible for listing.<sup>53</sup>

As is the case with formulation patents, a dosage form patent must claim the specific approved dosage form described in the NDS and must contain a claim that includes the approved medicinal ingredient.<sup>54</sup>

#### Claim for the Use of the Medicinal Ingredient

Under the *PM(NOC) Regulations*, a “claim for the use of a medicinal ingredient” means “means a claim for the use of the medicinal ingredient for the diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or its symptoms.”<sup>55</sup>

In order to be eligible for listing, the patent must claim the approved method of using the medicinal ingredient, for an approved indication.<sup>56</sup> Accordingly, patents which contain a

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<sup>50</sup> Regulatory Impact Analysis Statement, C. Gaz. II, vol. 140 no. 21 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*), October 18, 2006

<sup>51</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, section 2.

<sup>52</sup> Regulatory Impact Analysis Statement, C. Gaz. II, vol. 140 no. 21 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*), October 18, 2006

<sup>53</sup> *Bayer Inc. v. Canada (Minister of Health)* (2008), 68 C.P.R. (4<sup>th</sup>) 1 (F.C.) at paras 55-56. In this case, the Court construed the patent claims to be directed to the product packaging, as opposed to the transdermal patch itself, which the court held to be merely incidental.

<sup>54</sup> Regulatory Impact Analysis Statement, C. Gaz. II, vol. 140 no. 21 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*), October 18, 2006

<sup>55</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, section 2

<sup>56</sup> Regulatory Impact Analysis Statement, C. Gaz. II, vol. 140 no. 21 (*Regulations Amending the Patented Medicines (Notice of Compliance) Regulations*), October 18, 2006



claim for the use of an intermediate the process of manufacturing a drug, formulation or dosage form are not eligible.<sup>57</sup>

When attempting to list a patent against an SNDS for a change in the use of a medicinal ingredient, the patent must claim that particular use.<sup>58</sup>

#### **9.4.2.2 Notice of Allegation (Section 5)**

When the generic drug manufacturer's ANDS names a Canadian reference product and a patent is listed in respect of that Canadian reference product, the generic drug manufacturer is required by s. 5 of the *PM(NOC) Regulations* to address that patent by providing certain information to the Minister. The generic drug manufacturer must state:

1. it is not seeking the issuance of the NOC until the patent expires;
2. the patent is not valid; or
3. the patent will not be infringed by the making using or selling of the generic product.

If the generic manufacturer alleges that the patent is not valid and/or not infringed, then the generic drug manufacturer must serve the innovator with a Notice of Allegation ("NOA") which is accompanied by a detailed statement of the factual and legal basis for the allegation.

#### **9.4.2.3 Prohibition Proceedings (Section 6)**

##### **a) Application for Prohibition Order**

If the innovator wishes to challenge the allegation of invalidity or non-infringement in the NOA, s. 6 of the *PM(NOC) Regulations* permit it to apply to the Federal Court within 45 days for an order prohibiting the Minister from issuing a NOC for the generic product prior to the expiry of the patent. Once such proceedings are commenced, the Minister is automatically precluded from issuing a NOC to the generic manufacturer for a period of 24 months, unless the time is extended by the Court or the proceedings terminated earlier. This is, in effect, like an interlocutory injunction obtained without proof of a prima facie case of infringement<sup>59</sup> or irreparable harm and becomes like a summary judgment proceeding based on affidavit evidence.

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<sup>57</sup> See e.g. *Abbott Laboratories v. Canada (Minister of Health)* (2007), 54 C.P.R. (4<sup>th</sup>) 356 (F.C.) and *Eli Lilly v. Apotex* (1995), 63 C.P.R. (3d) 245 (F.C.) affirmed 68 C.P.R. (3d) 126.

<sup>58</sup> *Abbott Laboratories Ltd. v. Canada (Attorney General)* (2008), 68 C.P.R. (4<sup>th</sup>) 445 (F.C.A.) at para. 47, reversing (2007), 61 C.P.R. (4<sup>th</sup>) 259 (F.C.).

<sup>59</sup> *Merck Frosst Canada Inc. v. Canada (Minister of National Health and Welfare)*, [10998] 2 S.C.R. 193, (per Iacobucci J.) at para. 33; cited in *Ratiopharm Inc. v. Wyeth, Wyeth Canada and The Minister of Health*, 2007 FCA 264 per Sharlow J.A. at para. 20.

On an application for a prohibition order, the innovator bears the burden of establishing that the allegations contained in the NOA are not justified and, accordingly, that an order should be granted prohibiting the Minister from granting the NOC to the generic manufacturer. However, where the generic manufacturer alleges that the process used to make the generic drug does not infringe the patented process, the generic manufacturer bears the burden of proof.<sup>60</sup>

With respect to allegations of non-infringement, the allegations contained in the NOA are presumed to be true.<sup>61</sup>

With respect to allegations of invalidity, there must be sufficient evidence to rebut the presumption of validity contained in subsection 43(2) of the *Patent Act*.<sup>62</sup> However, such evidence will be sufficient so long as it is "not clearly incapable of establishing [the] allegations of invalidity".<sup>63</sup> The Federal Court of Appeal has held that the presumption of validity cannot determine the outcome of a prohibition proceeding so long as there is "any evidence that is capable of rebutting the presumption."<sup>64</sup>

#### **b) Motion to Dismiss for non-eligible listing of a patent**

A generic drug manufacturer cannot, by means of judicial review, obtain an order requiring the Minister to remove a patent that has been improperly listed.<sup>65</sup>

A generic drug manufacturer may move under section 6(5)(a) of the *PM(NOC) Regulations* for an order dismissing the prohibition application in relation to improperly listed patents.<sup>66</sup> Such motions are heard prior to the hearing on the merits of the application.<sup>67</sup>

#### **9.4.2.4 Stay (Section 7)**

Once an application for an order of prohibition is commenced, the Minister is precluded, by section 7 of the *Regulations*, from issuing a NOC to the generic manufacturer for a period of 24 months unless or until the application is disposed of by: (i) the expiry of the patent; (ii) the court finds in favour of the generic manufacturer; or (iii) the innovator withdraws or

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<sup>60</sup> *Pfizer Canada Inc. v. Novopharm Ltd.* (2005), 42 C.P.R. (4<sup>th</sup>) 502 at para. 13.

<sup>61</sup> *GlaxoSmithKline Inc. v. Canada (Minister of Health)*, 2004 FC 116 at para. 15.

<sup>62</sup> *Pfizer Canada Inc. et al. v. Minister of Health*, 2006 FC 1471 at para. 28 – 31.

<sup>63</sup> *Pfizer Canada Inc. v. Canada (Health)*, 2007 FCA 209 at para. 109.

<sup>64</sup> *Abbott Laboratories v. Canada (Minister of Health)*, 2007 FCA 153 at para. 10.

<sup>65</sup> *Apotex Inc. v. Canada (minister of national Health and Welfare)* (2000), 3 C.P.R. (4<sup>th</sup>) 1 (F.C.A.); *Ratiopharm Inc. v. Wyeth, Wyeth Canada and The Minister of Health*, 2007 FCA 264 per Sharlow J.A. at para. 33.

<sup>66</sup> *Ratiopharm Inc. v. Wyeth, Wyeth Canada and The Minister of Health*, 2007 FCA 264 per Sharlow J.A. at para. 34.

<sup>67</sup> *Ratiopharm Inc. v. Wyeth, Wyeth Canada and The Minister of Health*, 2007 FCA 264 per Sharlow J.A. at para. 36.

discontinues the prohibition application. The 24 month period may be shortened or lengthened by the court in certain circumstances.<sup>68</sup>

In effect, the innovator receives what is tantamount to an interlocutory injunction. The Court has no discretion to lift the stay, nor to leave the contending parties to their remedies under the *Patent Act*.<sup>69</sup>

#### **9.4.2.5 Damages (Section 8)**

If an innovator commences a prohibition proceeding that is ultimately unsuccessful, discontinued, withdrawn or successfully appealed, section 8 provides that the innovator is liable to the generic manufacturer for “any loss suffered” by the generic manufacturer during the period between when an NOC would have issued to the second person and the date of the dismissal, withdrawal or discontinuance of the prohibition proceeding.<sup>70</sup>

In interpreting section 8, the Courts have held that such losses are limited to compensatory damages and do not extend to a disgorgement of the innovator’s profits.<sup>71</sup> Likewise, section 8 losses are limited to losses suffered by the generic during the period defined by section 8(1) and, accordingly, any losses suffered by the generic manufacturer in the period after having obtained its NOC are not compensable.<sup>72</sup>

The Federal Court of Appeal has upheld the constitutionality of section 8 being *intra vires* the *Patent Act*, and also within the authority of Parliament.<sup>73</sup>

In determining whether a generic manufacturer is entitled to compensation pursuant to section 8, a court must take into account “all matters it considers relevant... *including* any conduct of the first or second person which contributed to delay the disposition of the [prohibition proceeding]”.<sup>74</sup>

### **9.5 Canada’s Access to Medicines Regime (Bill C-9)**

On August 2, 2003, the General Council of the World Trade Organization set forth a decision allowing member countries to issue compulsory licenses for the production of generic versions of pharmaceutical products, for the sole purpose of export to nations which require the drug to combat public health crises.<sup>75</sup> Essentially, the decision allows a country

<sup>68</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, section 7(5).

<sup>69</sup> *Bristol-Myers Squibb Co. v. Canada (Attorney General)*, [2005] 1 S.C.R. 533, para. 24.

<sup>70</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, section 8(1)

<sup>71</sup> *Merck Frosst Canada Ltd. v. Apotex Inc.*, 2009 FCA 187 at paras. 89-90. See also *Apotex Inc. v. Eli Lilly Canada Inc.* 2009 FC 378 (Tabib, P.)

<sup>72</sup> *Merck Frosst Canada Ltd. v. Apotex Inc.*, 2009 FCA 187 at paras. 99-102, reversing on this ground (2008), 70 C.P.R. (4<sup>th</sup>) 297 (F.C.)

<sup>73</sup> *Merck Frosst Canada Ltd. v. Apotex Inc.*, 2009 FCA 187

<sup>74</sup> *Patented Medicines (Notice of Compliance Regulations)*, S.O.R./93-133, section 8(5)

<sup>75</sup> WTO, *Agreement on the Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health*, Decision of the General Council of 30 August 2003, WT/L/540

to waive its obligations under section 31(f) of TRIPS, which mandates that compulsory licenses are to be used “predominantly for the supply of the domestic market of the Member authorizing such use.”

On May 14, 2004, the Canadian Parliament approved Bill C-9, *An Act to amend the Patent Act and the Food and Drugs Act (The Jean Chretien Pledge to Africa Act)*.<sup>76</sup> In doing so, Canada became the first country to implement the WTO decision. Bill C-9 amended the *Patent Act* by adding a number of new sections that pertain to the use of patents for international humanitarian purposes in order to address public health concerns. The stated purpose of the regime is to facilitate

*...access to pharmaceutical products to address public health problems afflicting many developing and least-developed countries, especially those resulting from HIV/AIDS, tuberculosis, malaria and other epidemics.*<sup>77</sup>

The regime contemplated under section 21 of the *Patent Act*, known as the Canada Access to Medicines Regime (CAMR), permits the Commissioner of Patents to grant a compulsory license to an applicant who submits an application that meets a series of conditions set out section 21.01-21.2 of the *Patent Act* and in the corresponding regulations.<sup>78</sup> The scheme permits the export of fifty-six defined products<sup>79</sup> to all WTO countries<sup>80</sup> and all non-WTO least developed countries. The compulsory license or “authorization” will permit the licensee to “make, construct and use a patented invention solely for purposes directly related to the manufacture of the pharmaceutical product named in the application” and sell it for export to a country listed in Schedules 2, 3, or 4 of the *Patent Act* and named in the application.<sup>81</sup>

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<sup>76</sup> Bill C-9, *An Act to amend the Patent Act and the Food and Drugs Act*, 3d Sess., 37<sup>th</sup> Parl. 2004. The Bill added sections 21.01 – 21.2 to the Canadian *Patent Act*.

<sup>77</sup> *Patent Act*, R.S., 1985, c. P-4, s. 21.01.

<sup>78</sup> *Use of Patented Products for International Humanitarian Purposes Regulations*, SOR/2005-143

<sup>79</sup> Bill C-9, *An Act to amend the Patent Act and the Food and Drugs Act*, 3d Sess., 37<sup>th</sup> Parl., 2004. As enacted, Schedule 1 of Bill C-9 included a list of 56 defined products that are principally derived from the WHO's Model List of Essential Medicines, and, upon the recommendation of 2 federal Ministers and the final decision of the federal Cabinet, other pharmaceuticals may be added to the list. The list currently includes a number of HIV/AIDS drugs, antibiotics, as well as some older, off-patent drugs.

<sup>80</sup> WTO, *Agreement on the Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health*, Decision of the General Council of 30 August 2003, paragraph 1(b) provides that the Agreement is potentially open to all Member States, it being understood “that a Member may notify at any time that it will use the system in whole or in a limited way, for example only in the case of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use.

<sup>81</sup> Schedule 2 lists all countries that have been identified by the UN as “least-developed countries”. Schedule 4 lists WTO members that have agreed to use the system as importers only in the event of a national emergency or circumstances of extreme urgency. Schedule 3 lists WTO members that are not listed in Schedules 2 or 4, and that have not opted out of the system and includes some potentially large markets as China, India and Brazil.

Once a compulsory license is issued, it will remain valid for 2 years with a one-time opportunity for renewal.<sup>82</sup>

In addition to the requirements of the *Patent Act*, the applicant for a compulsory license must comply with the requirements of the *Food and Drugs Act* and the *Food and Drug Regulations*. In order to implement Bill C-9, the *Food and Drug Regulations* were amended by the addition of a new division (Division 7), entitled "Sale of Drugs for the Purposes of Implementing the General Council Decision."

In September 2007, Canada became the first WTO member to authorize export of a generic version of the antiretroviral TRIAVIR® to Rwanda, by Apotex Inc., under CAMR. The production and export of Apo-Triavir has been the only use of the CAMR legislation since its adoption.

## 9.6 Data Protection

In addition to the protection afforded by the *PM(NOC) Regulations*, section C.08.004.1 of the *Food and Drug Regulations* creates a regulatory framework to protect the clinical data submitted by an innovator in support of its drug regulatory submissions, by providing new drugs with a guaranteed minimum period of market exclusivity.

### 9.6.1 History of Data Protection in Canada

Canada first introduced data protection provisions into the *Food and Drug Regulations* on August 16, 1995.<sup>83</sup> Both NAFTA and TRIPS provide a scheme for protecting against unfair commercial use of what would otherwise be undisclosed data and oblige Health Canada to protect the use of undisclosed tests or other data submitted in order to obtain marketing approval for pharmaceutical products based on new chemical entities.<sup>84</sup> The intent of this

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<sup>82</sup> *Patent Act*, R.S., 1985, c. P-4, ss.21.09 and 21.12. Moreover Sections 21.1 and 21.11 provide that the use of a patented invention under an authorization is non-exclusive and generally non-transferable.

<sup>83</sup> SOR/95-411, s. C.08.004.1.

<sup>84</sup> Generally speaking, Canadian courts have held that, while Parliament is presumed not to intend to legislate contrary to international treaties or general principles of international law, where the legislation is clear, one need not and should not look to international law. See e.g., *Pfizer Canada Inc. v. Canada (Attorney General)*, 2003 FCA 138. More recently, the Federal Court has rejected arguments to the effect that Canadian laws, in particular the *PM(NOC) Regulations*, must be read in a manner so as to be interpreted as enforcing patent rights in light of TRIPS and, holding instead, that the legal effect of the *PM(NOC) Regulations* are to be determined in accordance with the ordinary principles established in Canadian law. See e.g., *Laboratoires Servier v. Apotex Inc.*, 2006 FC 1493 (per Snider, J.) and *Ferring Inc. v. Canada (Minister of Health)*, 2007 FC 300 (per Hughes, J.). Notwithstanding the foregoing, the Regulatory Impact Analysis Statements which accompanied the 2006 amendments to the data protection provisions of the *Food and Drug Regulations*, *supra*, note 3, are clear that the amendments are intended to clarify and effectively implement Canada's *North American Free Trade Agreement* ("NAFTA") and the *Trade-Related Aspects of Intellectual Property Rights* ("TRIPS") obligations with respect to the protection of undisclosed test or other data necessary to determine the safety and effectiveness of a pharmaceutical or agricultural product which utilizes a new chemical entity. It remains to be seen what impact the provisions of NAFTA and TRIPS will have on the judicial interpretation of the

protection was and is to allow the data innovator to protect the investments made in the development of the product by allowing a period of market exclusivity.

The data protection provisions of NAFTA and TRIPS relate broadly to what are generally known as *trade secrets*. More specifically, the provisions outline a member state's obligations in the particular instance where such trade secret data is submitted to a government agency as a precondition for obtaining marketing approval.

### 9.6.2 The Former Data Protection Regime

The former regulations, in theory, provided for a five-year period of market exclusivity (generic drug approval would be deferred by a corresponding period).<sup>85</sup> This protection was provided on the basis that data or information filed in the innovator's submission supported Health Canada's approval of the new drug submission.

However, former section C.08.004.1 was interpreted very narrowly by Canadian Courts such that it rarely, if ever, was triggered.

Under former section C.08.004.1, the data protection exclusivity period arose when the Minister of Health examined and relied on an innovator's undisclosed data in order to grant a NOC to a generic manufacturer. However, to receive a NOC in Canada, a generic manufacturer need only demonstrate bioequivalence by comparing its generic product to the innovator's product. Therefore, in actual practice, the Minister typically did not actually examine the data contained in the innovator's submission in order to grant a NOC for a generic product. This fact led the Federal Court of Appeal, in the 1998 case of *Bayer Inc. v. Canada (Attorney General)*,<sup>86</sup> to conclude that data protection did not arise where bioequivalence forms the basis of a generic submission and, as a result, the five-year term of data protection was rendered inapplicable (moreover, the Court saw the overall scheme and purpose of the regulatory regime was to reduce the cost of drugs by facilitating approval of generic drugs, and that the argument put forward by Bayer would undermine this purpose by imposing a delay on the issuance of NOCs to generic manufacturers). This narrow interpretation of the data protection provisions of the *Food and Drug Regulations* opened the door for generic drug manufacturers to seek marketing authorization for generic

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amended date protection provision of the *Food and Drug Regulations* in light of the Government's apparent, as expressed, intention in enacting the amendments.

<sup>85</sup> Section **C.08.004.1** of the *Food and Drug Regulations*, as it then was, read as follows: (1) *Where a manufacturer files a new drug submission, an abbreviated new drug submission, a supplement to a new drug submission or a supplement to an abbreviated new drug submission for the purpose of establishing the safety and effectiveness of the new drug for which the submission or supplement is filed, and the Minister examines any information of material filed with the Minister, in a new drug submission, by the innovator of a drug that contains a chemical or biological substance not previously approved for sale in Canada as a drug, and the Minister, in support of the manufacturer's submission or supplement, relies on data contained in the information or material filed by the innovator, the Minister shall not issue a notice of compliance in respect of that submission or supplement earlier than five years after the date of issuance to the innovator of the notice of compliance or approval to market that drug, as the case may be, issued on the basis of the information or material filed by the innovator for that drug.*

<sup>86</sup> *Bayer Inc. v. Canada (Attorney General)* (1998), 87 C.P.R. (3d) 293 (F.C.A.)

drugs that rely for their safety and efficacy on the previous filings and approvals of the innovative drug manufacturer.

### 9.6.3 2006 Amendments

On October 5, 2006, the Government of Canada enacted amendments to the data protection provisions of the *Food and Drug Regulations* to include more robust data protection provisions for innovative drugs.<sup>87</sup>

The 2006 amendments, which introduced the automatic prohibition approach to generic drug submissions implemented in similar jurisdictions such as the U.S. and Europe, provide new and “innovative” brand-name drugs with a guaranteed minimum period of market exclusivity of eight years, with a further six months of data exclusivity available for drugs that have been the subject of pediatric studies designed and conducted with the purpose of increasing knowledge about the drug in pediatric age groups in which it may be used.

Under the current Data Protection regime, generic manufacturers will be subject to a six-year period (within the eight-year exclusivity term) where the generic manufacturer, seeking to copy an innovative drug, is not permitted to file a new drug or abbreviated new drug submission with the Minister. This six-year period will then be followed by a “no-marketing period” of two years during which the Minister will not grant a NOC to that generic manufacturer. According to the RIAS which accompanied the 2006 amendments, this additional two-year period is generally reflective of the period of time required to approve a drug submission, as well as the time required for a generic manufacturer to meet its obligations under the *PM(NOC) Regulations*.<sup>88</sup>

### 9.6.4 The Current Regime - Details of Operation

#### 9.6.4.1 Scope of Protection: “Innovative” Drugs

The current Data Protection regime applies solely to so-called “innovative” drugs, which are defined by section C.08.00401(1) to be drugs that contain a medicinal ingredient not previously approved in Canada and that is not a variation of a previously approved medicinal ingredient such as a salt, ester, enantiomer, solvate or polymorph.

Therefore, under the definition of an “innovative” drug, pharmaceuticals containing a medicinal ingredient(s) that has been previously approved in Canada will not be afforded protection under the current regime.<sup>89</sup>

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<sup>87</sup> *Regulations Amending the Food and Drug Regulations (Data Protection)*, SOR/2006-241 (October 5, 2006)

<sup>88</sup> Regulatory Impact Analysis Statement, C. Gaz. II, vol. 140 no. 21 (*Regulations Amending the Food and Drug Regulations (Data Protection)*), October 18, 2006

<sup>89</sup> It should be noted that drugs containing medicinal ingredients previously approved for veterinary uses will not qualify for additional protection if submitted as human drugs since the protection is only available for the first approval. Biologics and radiopharmaceuticals are also included in these provisions. See Health Canada, Guidance Document: “*Data Protection under C.08.004.1 of the Food and Drug Regulations*”, 24 March 2009, available online: <[http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-ld/data\\_donnees\\_protection-eng.php](http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-ld/data_donnees_protection-eng.php)>.

The definition of "innovative drug" specifically prohibits innovators from obtaining additional terms of data protection for variations of medicinal ingredients. Health Canada has indicated that the list of variations is not exhaustive, but rather meant to give examples of the types of variations not considered for protection. For other arguable variations, such as metabolites or pro-drugs, an assessment will be made on a case-by-case basis as to whether or not approval is being sought primarily on the basis of previously submitted clinical data or not.<sup>90</sup>

With respect to combination drugs, the Guidance Document provides that a combination drug, having at least one ingredient which is an innovative drug and for which a data protection term is still in effect, will receive data protection for the innovative drug in the combination until the expiry of the original data protection period of that innovative drug. Combinations of previously approved medicinal ingredients are not eligible for an additional period of data protection.<sup>91</sup>

#### **9.6.4.2 Requirement for Marketing In Canada**

Data protection for innovative drugs under the current regime is available only where the innovative drug has received regulatory approval (i.e., received marketing authorization from Health Canada in the form of a NOC) and is actually marketed in Canada.<sup>92</sup>

Drugs that are withdrawn from the market by the innovator will no longer be eligible for data protection. According to the RIAS which accompanied the 2006 amendments, this rule has been 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.<sup>93</sup>

#### **9.6.4.3 Register of Innovative Drugs**

Pursuant to Section C.08.004.1(9), the Minister of Health maintains a "Register of Innovative Drugs" which contains information respecting innovative drugs that are eligible for data protection. Innovative drugs are added to the Register after they receive a NOC.<sup>94</sup>

The Register of Innovative Drugs may be accessed online at [http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/regist/reg\\_innov\\_dr-eng.php](http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/regist/reg_innov_dr-eng.php), and includes, *inter alia*, information respecting the name of the drug, the medicinal ingredient, and the date on which the data protection and, where applicable, the pediatric extension, will terminate.

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<sup>90</sup> Health Canada, Guidance Document: "Data Protection under C.08.004.1 of the Food and Drug Regulations", 24 March 2009

<sup>91</sup> Health Canada, Guidance Document: "Data Protection under C.08.004.1 of the Food and Drug Regulations", 24 March 2009

<sup>92</sup> *Food and Drug Regulations* (C.R.C., c. 870), section C.08.004.1(5).

<sup>93</sup> Regulatory Impact Analysis Statement, C. Gaz. II, vol. 140 no. 21 (*Regulations Amending the Food and Drug Regulations (Data Protection)*), October 18, 2006

<sup>94</sup> According to the RIAS which accompanied the amendments, the Register of Innovative Drugs was introduced as a "transparency measure" to provide both transparency and predictability for Canadian pharmaceutical companies.



#### 9.6.4.4 **Term of Protection**

Under section C.08.004.1(3)(b), a NOC may not be issued to a second or subsequent entry drug manufacturer which seeks a NOC on the basis of a direct or indirect comparison between the second or subsequent entry drug and an innovative drug, until the expiry of a period of eight years after the day on which the first NOC was issued to the innovator in respect of the innovative drug.

In addition to the eight-year term of data protection, a further six month extension is available under Section C.08.004.1(4) if an innovator includes, in its NDS, or any supplement to that NDS filed within the first five years of the eight-year data protection period, results of clinical trials which were designed and conducted with the purpose of increasing knowledge about the use of the innovative drug in pediatric populations.<sup>95</sup> The RIAS which accompanied the 2006 amendments to the Data Protection Regulations elaborates on the scope of data required to qualify for the pediatric extension. In particular, the data must meet the definition of "clinical trial" set out in the *Food and Drug Regulations*,<sup>96</sup> and the goal of such studies, as reflected in the study hypothesis, objectives, design and conduct, must be to "increase knowledge about the behaviour of the drug in pediatric populations that will assist health professionals, parents, caregivers, and patients in making informed choices about drug therapy."<sup>97</sup>

#### 9.6.4.5 **Six-Year "No File" Period**

As noted above, where a manufacturer seeks a NOC on the basis of a direct or indirect comparison between the new drug and an innovative drug, the manufacturer is prohibited under Section C.08.004.1(3)(a) from filing the submission for six years from the date of issuance of the NOC for the innovative drug.<sup>98</sup>

Generally, any such submissions received by the Minister within this six-year period will be rejected; however, the manufacturer will be provided with a preliminary decision by letter

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<sup>95</sup> Section C.08.004.1(1) of the *Food and Drug Regulations* (C.R.C., c. 870) defines "pediatric populations" as follows: 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.

<sup>96</sup> "Clinical trial" is defined in Division 5 of the *Food and Drug Regulations* as "an investigation in respect of the 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" (*Food and Drug Regulations* (C.R.C., c. 870), s. C.05.001).

<sup>97</sup> Regulatory Impact Analysis Statement, C. Gaz. II, vol. 140 no. 21 (*Regulations Amending the Food and Drug Regulations (Data Protection)*), October 18, 2006

<sup>98</sup> However, under Section C.08.004.1(8) of the *Food and Drug Regulations*, an innovator may consent to the submission of a drug manufacturer who seeks a Notice of Compliance on the basis of a direct or indirect comparison between the new drug and an innovative drug. A letter of consent signed by the innovator company must be submitted with the submission of the authorized manufacturer specifically providing authorization to file the submission within the protection period.

informing it of the intent to reject the submission and granting the manufacturer a 30-day period to make representations in response. If, following consideration of the representations, the Minister remains of the view that the submission cannot be filed, then the submission will be returned to the manufacturer at its expense.

A subsequent manufacturer seeking a NOC on the basis of a direct or indirect comparison to the innovative drug would include a manufacturer filing an ANDS. In that case, the innovative drug is typically the Canadian Reference Product. However, the provision is also intended to include New Drug Submissions that seek a NOC for a drug that contains the same medicinal ingredient as an innovative drug, on the basis of a comparison to the innovative drug, including subsequent entry biologics.<sup>99</sup>

#### **9.6.4.6 Exemption Under Canada's Access to Medicines Regime**

An exemption from the six-year "no file" period is available under Section C.08.004.1(7) to allow a subsequent manufacturer to file a drug submission under Canada's Access to Medicines Regime.<sup>100</sup>

Although such drug submissions can be submitted within the no-filing period, the NOC will not be issued until the expiry of the data protection term. For second person submissions filed within the six-year period, for the purposes of the *Patented Medicines (Notice of Compliance) Regulations*, the date of filing is deemed to be six years after the date of issuance of the first person's Notice of Compliance.<sup>101</sup>

#### **9.6.4.7 Transitional Provisions**

The current Data Protection Regulations apply only to marketed innovative drugs in respect of which a NOC issued on or after June 17, 2006. According to the transitional provisions of the Data Protection Regulations, any innovative drug which received a NOC prior to June 17, 2006 remains subject to Canada's former data protection regime described above.

### **9.6.5 Court Challenges to the Data Protection Regulations**

On November 14, 2006, the Canadian Generic Pharmaceutical Association (CGPA), an industry association representing Canadian manufacturers of generic drugs, filed a legal challenge to the current Data Protection regime, that sought a declaration that the amended

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<sup>99</sup> Health Canada, Guidance Document: "*Data Protection under C.08.004.1 of the Food and Drug Regulations*", 24 March 2009

<sup>100</sup> *Patent Act, supra*, note 7, ss. 21.01 to 21.2 on the Use of Patents for International Humanitarian Purposes to Address Public Health Problems.

<sup>101</sup> Health Canada, Guidance Document: "*Data Protection under C.08.004.1 of the Food and Drug Regulations*", 24 March 2009. See also, Health Canada, *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*, available online: <[http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide/ld/patmedbrev/pmreg3\\_mbre3-eng.php](http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide/ld/patmedbrev/pmreg3_mbre3-eng.php)>

Data Protection Regulations are *ultra vires* the Government to legislate, on the basis that they exceed the requirements of NAFTA and Canada's obligations under TRIPS.<sup>102</sup>

A second challenge was subsequently filed by the generic drug manufacturer Apotex Inc., who brought an application for judicial review attacking the provisions on the basis that they are designed to protect the unfair commercial use of trade secrets and undisclosed data and, therefore, surpass the limits of federal authority.<sup>103</sup>

Both challenges were heard together by the Federal Court on December 16, 2008. Eli Lilly Canada Inc. and Rx&D participated as interveners on behalf of Canada's research-based pharmaceutical industry. On July 17, 2009, the Federal Court rendered a decision upholding the *Data Protection Regulations* as being constitutionally valid and dismissed the challenges of the CGPA and Apotex, Inc.<sup>104</sup>

## 9.7 **Biologics**

A biologic is a type of drug derived from biological sources; more specifically, through the metabolic activity of living organisms.<sup>105</sup>

Biologics are large and complex molecules. Because they are made through biological processes, they tend to be heterogeneous, (varying in structure). Their structure is usually sensitive to changes in the manufacturing conditions, so care must be taken to maintain manufacturing conditions or a different product may result. It is said, "the process is the product".<sup>106</sup>

Biologics are regulated by Divisions [3](#), [4](#) and [8](#) of [Part C](#) of the [Canadian Food And Drugs Regulations](#) and are specifically listed in Schedule D to the [Canadian Food and Drugs Act](#). They include:

- Individual products
  - Snake venom
  - Anterior pituitary extracts
  - Urokinase
- Product classes
  - Immunizing agents

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<sup>102</sup> *Canadian Generic Pharmaceutical Association v. Governor in Council (The) et al.*, Federal Court file T-1976-06, filed November 14, 2006.

<sup>103</sup> *Apotex Inc. v. Governor in Council et al.*, Federal Court file T-2047-06, filed November 22, 2006.

<sup>104</sup> *Canadian Generic Pharmaceutical Association v. Canada (Health)*, 2009 FC 725 (per Mandamin, J.)

<sup>105</sup> [Health Canada Fact Sheet: Subsequent Entry Biologics in Canada](#), p. 1.

<sup>106</sup> [Health Canada Fact Sheet: Subsequent Entry Biologics in Canada](#), p. 1.

- Allergenic substances used for the treatment or diagnosis of allergic or immunological diseases
  - Monoclonal antibodies, their conjugates and derivatives
- Drugs obtained by recombinant DNA procedures
- Drugs, other than antibiotics, prepared from micro-organisms
- Blood components
  - Blood and blood derivatives, except cord blood and peripheral blood that are a source of lymphohematopoietic cells for transplantation
  - Human plasma collected by plasmapheresis
- [Cytokines](#)
  - Interferon
- Protein hormones
  - Insulin
  - [Glucagon](#)
  - [Gonadotrophins](#)
  - [Aprotinin](#) (bovine pancreatic trypsin inhibitor, BPTI)
  - [Secretin](#)
  - [Cholecystokinin](#)
- Gene therapy products

Biologics, due to their complex molecular nature, may be quite sensitive to manufacturing process changes or changes in the surrounding environment. Changes to manufacturing protocol, source materials, equipment or facilities can result in significant unexpected changes to the final product. Consequently, no two biologics are identical.

### **9.7.1 Regulatory Approval for Biologics**

In order to sell or distribute a biologic in Canada, a Notice of Compliance (“NOC”) and Drug Identification Number (“DIN”) must be issued to the biologic’s sponsor.

## 9.7.2 Subsequent Entry Biologics (SEBs)

### 9.7.2.1 Overview

A Subsequent Entry Biologic (SEB), is a biologic drug that enters the market subsequent to a version previously authorized in Canada and with demonstrated *similarity* to a reference biologic drug. A submission for marketing authorization of an SEB relies, in part, on available information about the reference biologic drug in order to present a reduced dossier of the clinical data required to obtain for marketing approval.<sup>107</sup> SEBs are not simply “generic biologics” and the authorization of an SEB is not a declaration of pharmaceutical or therapeutic equivalence with the reference biologic product.<sup>108</sup>

The concept of an SEB does not apply to a biologic drug submission which is based on independent clinical trials and where the basis of the submission does not seek marketing authorization based on comparisons to a previously approved biologic drug.

Health Canada has recently released a guidance document entitled *Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)* (hereinafter, the “*SEB Guidance*”),<sup>109</sup> which represents Health Canada’s position regarding a regulatory approval pathway for SEBs in Canada.<sup>110</sup>

### 9.7.2.2 Regulatory Approval

Health Canada has stated that SEBs, like all biologic drugs, are subject to the existing framework set out in section C.08.002 of *Food and Drug Regulations* and, therefore, will be approved through the existing New Drug Submission (NDS) pathway under the *Food and Drug Regulations*.<sup>111</sup>

#### a) Reference Product

According to the *SEB Guidance*, an SEB would only be authorized for sale based on a submission that makes a direct or indirect comparison to an innovator biologic authorized for sale in Canada for the purposes of demonstrating similarity. In the NDS, the SEB manufacturer must clearly identify the product that the SEB is subsequent to.<sup>112</sup> The SEB

<sup>107</sup> Health Canada, *Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)*, March 5, 2010, available online: < [http://www.hc-sc.gc.ca/dhp-mps/brgtherap/applic-demande/guides/seb-pbu/notice-avis\\_seb-pbu\\_2010-eng.php](http://www.hc-sc.gc.ca/dhp-mps/brgtherap/applic-demande/guides/seb-pbu/notice-avis_seb-pbu_2010-eng.php)>

<sup>108</sup> Health Canada, *Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)*., section 1.3

<sup>109</sup> Health Canada, *Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)*, March 5, 2010,

<sup>110</sup> Health Canada, *Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)*, section 1.1

<sup>111</sup> Health Canada, *Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)*, section 2.1.1

<sup>112</sup> Health Canada, *Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)*., section 2.1.2

manufacturer has the responsibility of demonstrating that the chosen reference product is suitable to support the SEB submission.

Although the reference product should be authorized for sale and marketed in Canada, the *SEB Guidance* provides that, in certain circumstances, a manufacturer may be permitted to use a foreign reference product to demonstrate similarity between an SEB and a product authorized for sale in Canada. If a non-Canadian reference product is used, the manufacturer must demonstrate that the foreign reference product is a suitable proxy and the submission should clearly explain the link between the reference product and the product authorized for sale in Canada. Other factors to be considered in determining whether a non-Canadian reference product may be used include, but are not limited to, whether the foreign reference product is associated with sufficient information and data to support the submission and whether it is from a jurisdiction that has a relationship with Health Canada.<sup>113</sup>

#### **b) Data Set**

As noted above, an SEB relies in part on prior information regarding safety and efficacy that is deemed relevant in light of a demonstration of similarity to the reference biologic drug. According to the *SEB Guidance*, a demonstration of similarity does not necessarily signify that the quality attributes of the two products being compared are identical, but that they are highly similar with two consequences: 1) that the existing knowledge of both products is sufficient to predict that any differences in quality attributes should have no adverse impact upon safety or efficacy of the SEB; and 2) that non-clinical and clinical data previously generated with the reference biologic drug is relevant to the SEB. The *SEB Guidance* provides that, in addition to the full chemistry and manufacturing data package required for all biologic drugs, an SEB application should also provide extensive data demonstrating similarity with the chosen reference product, including biological and analytical side-by-side characterization studies of the drug substance or, if appropriate, comparability studies using the formulated drug products. Final determination of similarity can include a combination of analytical testing, biological assays, as well as clinical and non-clinical data.<sup>114</sup>

If similarity can be established between the SEB and the reference product, then the SEB submission may be filed with a reduced dossier of clinical and pre-clinical data. Although a full clinical data set is not required, the *SEB Guidance* provides that comparative pre-clinical and clinical trials are required in order to establish pharmacokinetic and pharmacodynamics profiles as well as safety and efficacy.

If, however, similarity to the reference product cannot be established through chemistry and manufacturing bio-comparability exercises, then a reduced dossier of the clinical and pre-clinical data required to obtain marketing approval cannot be justified and, consequently, the product cannot be considered to be an SEB. For such products, the submission should presumably be filed as a standard New Drug Submission with a full set of independent clinical and pre-clinical data in support of the submission.

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<sup>113</sup> Health Canada, *Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)*, section 2.1.3

<sup>114</sup> Health Canada, *Guidance for Sponsors: Information and Submission Requirements for Subsequent Entry Biologics (SEBs)*, section 2.3

### 9.7.2.3 **Intellectual Property Protection**

Health Canada has stated that all SEBs are subject to existing laws and regulations as outlined in the *PM(NOC) Regulations*, the Data Protection Regulations and their related Health Canada guidance documents - *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*, and *Guidance Document: Data Protection under C. 08.004.1 of the Food and Drug Regulations*, (the “*PM(NOC) Regulations Guidance*” and “*Data Protection Guidance*”, respectively).<sup>115</sup>

The *SEB Guidance Document* was published concurrently with amendments to the Health Canada *Data Protection Guidance Document* and the *Health Canada PM(NOC) Regulations Guidance Document*, discussed in greater detail below.

As noted above, NDSs which are based on independent clinical trials, and which are not comparative in nature, do not fall within the purview of Health Canada’s SEB framework and, accordingly, do not trigger the relevant provisions of the *PM(NOC) Regulations* or *Data Protection Regulations*.

#### a) **Patent Protection**

Health Canada has amended its *PM(NOC) Regulations Guidance* to expressly provide that section 5 of the *PM(NOC) Regulations* is intended to capture all submissions approved on the basis of a direct or indirect comparison with, or reference to, another drug – including NDSs submitted in accordance with the *SEB Guidance* that demonstrate similarity with a biologic drug marketed in Canada – and in respect of which there are patents listed on the Patent Register.<sup>116</sup>

Accordingly, where an SEB manufacturer seeks an NOC on the basis of a comparison with an innovative biologic, the SEB manufacturer will be required to fulfill the requirements for second persons under the *PM(NOC) Regulations*.<sup>117</sup>

In addition, the *PM(NOC) Guidance* provides that SEB submissions based on a comparison to a non-Canadian reference product in order to justify a reduced clinical and non-clinical dossier - including supplemental submissions for a change in formulation, dosage form or use of the medicinal ingredient - will likewise fall within the purview of section 5 of the *PM(NOC) Regulations* and, consequently, will trigger their application.<sup>118</sup>

In determining whether or not there has been a comparison with a drug that would trigger application of the *PM(NOC) Regulations*, the Office of Patented Medicines and Liaison

<sup>115</sup> Health Canada, *Guidance Document: Data Protection under C. 08.004.1 of the Food and Drug Regulations*, and *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*, both of which are available online at Health Canada’s website <<http://www.hc-sc.gc.ca>>.

<sup>116</sup> Health Canada, *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*, available online: <[http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-id/patmedbrev/pmreg3\\_mbreg3-eng.php](http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-id/patmedbrev/pmreg3_mbreg3-eng.php)>, section 3.4.1

<sup>117</sup> Health Canada, *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*, section 3.4.1

<sup>118</sup> Health Canada, *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*, section 3.4.1.

(OPML) will look for a demonstration of similarity to the chosen reference biologic drug. If there is any uncertainty, the *PM(NOC) Guidance* directs the OPML to contact the relevant review bureau.<sup>119</sup>

#### **b) Data Protection**

Health Canada has amended its Data Protection Guidance to expressly provide that section C.08.004.1(3) of the *Food and Drug Regulations* applies to new drug submissions – including those for SEBs, seeking an NOC for a drug on the basis of a comparison to an innovative drug. The *Data Protection Guidance* further provides that a submission containing a demonstration of similarity to a reference biologic drug is considered to be a comparison within the meaning of section C.08.004.1(3). Accordingly, where an SEB manufacturer seeks an NOC on the basis of a comparison with an innovative biologic, the SEB manufacturer will not be permitted to file the submission for six (6) years from the date of issuance of the NOC for the innovative biologic.<sup>120</sup>

In addition, the *Data Protection Guidance* provides that SEB submissions based on a comparison to a non-Canadian reference product will likewise fall within the purview of section C.08.004.1(3) and, consequently, will be rejected for filing within the six-year period from the date of issuance of the NOC for the Canadian reference biologic drug.<sup>121</sup>

### **9.8 Conclusion**

In conclusion, pharmaceutical patents in Canada are subject to a number of complex statutory schemes and regulatory regimes not applicable to patents generally. These legislative and regulatory regimes reflect the Government's attempt at a balancing act – namely, the promotion of innovation, research and development by allowing innovators to benefit from a period of market exclusivity, while fostering early and effective competition to ensure that Canadians have access to drugs at reasonable prices.

To achieve this end, Canada's pharmaceutical patent laws and regulations have been subject to a number of sweeping amendments and interpretations. It will remain to be seen whether further steps will be required to enable this process from achieving its intended goals.

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<sup>119</sup> Health Canada, *Guidance Document: Patented Medicines (Notice of Compliance) Regulations*, section 3.5.1

<sup>120</sup> Health Canada, *Guidance Document: Data Protection under C. 08.004.1 of the Food and Drug Regulations*, section 3.1

<sup>121</sup> Health Canada, *Guidance Document: Data Protection under C. 08.004.1 of the Food and Drug Regulations*, section 3.1