BIOTECanada

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Patented Medicine Prices Review Board
1400 - 333 Laurier Avenue West
Ottawa ON, K1P 1C1
Sent by email to:

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On behalf of the member companies of BIOTECanada I am writing to provide the industry's perspectives regarding the PMPRB's Discussion Paper on Guidelines Modernization.

The industry recognizes the significant challenges provincial governments are facing with respect to providing healthcare for their respective populations. Indeed, healthcare now accounts for 50% of most provincial budgets. Importantly, Canadian governments are not alone in facing these fiscal challenges in relation to healthcare. Governments in other OECD jurisdictions are facing similar challenges as they address aging population cohorts and non-healthcare related budget constraints. The industry has worked closely with other governments facing these challenges and offers its experience in the context of the consultation being undertaken by the PMPRB.

Medicines are an important but singular element of the healthcare system's overall ability to provide healthcare solutions for Canadian patients. As a result of significant advancements in science, including the ability to map the human genome, new medicines and therapies are being brought forward for patients that are significantly changing how healthcare is delivered. Importantly, these new innovations are allowing many Canadians to live longer and more productive lives. Moreover, many of the new therapies are delivering significant savings to other parts of the healthcare system by reducing and even eliminating traditional, expensive healthcare treatments including transplants and lengthy hospital stays. Correspondingly, governments recognize that medicines are a vital cornerstone within the healthcare system.

To ensure Canadians can continue to access new medicines and therapies and governments can budget for the innovation being brought forward, federal, provincial and territorial governments have moved to establish measures and mechanisms to inform their healthcare decisions and strengthen their purchasing power. The Canadian Agency for Drugs and Technologies in Health and L'Institut national d'excellence en santé et en service sociaux (INESSS) provide health technology assessments (HTA) of the value of a new drug. The information and data provided by these HTA agencies helps to inform and strengthen the ensuing negotiation process for federal, provincial and territorial drug plans. Importantly, in 2013 the provinces established the pan Canadian Pharmaceutical Alliance (pCPA) which leverages the collective purchasing power of participating jurisdictions to improve their negotiation position when purchasing medicines.

Individual federal, provincial and territorial drug plans further negotiate discounts with companies when establishing their respective listing and reimbursement criteria. While still early for some of these mechanisms, they are proving effective at providing governments with improved healthcare outcomes at affordable prices.

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Recognizing these significant developments, the PMPRB is understandably seeking to establish its role within the evolving health care system. In this context, the industry is providing its perspectives with respect to the consultation paper on Guidelines Modernization for the PMPRB.

Sincerely,

Andrew Casey
President and CEO
BIOTECanada

Enclosure:
BIOTECanada Submission to PMPRB Discussion Paper on Guideline Modernization

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BIOTECanada Submission to the Patented Medicine Prices Review Board Guidelines Modernization - Discussion Paper June 2016

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EXECUTIVE SUMMARY

As per the Patent Act of 1987, the PMPRB's primary mandate is to ensure "prices of patented medicines are not excessive". The Discussion Paper developed for this consultation envisions a significantly broader mandate for the organization. The industry submission to the consultation offers the following main points with respect to the proposed new mandate for the PMPRB:

- As Canada's population demographic ages, provincial governments are finding it increasingly challenging to provide access to affordable healthcare for its citizens;
- The industry is developing and bringing forward innovative medicines and therapies that are significantly improving healthcare outcomes for patients while in many cases reducing healthcare expenses in other areas;
- Medicines and vaccines represent an important, but not the only, component of the overall healthcare system;
- Federal and provincial governments are seeking ways to improve healthcare while controlling healthcare costs;
- Governments have developed mechanisms including CADTH, INESSS, pCPA, Product Listing Agreements (PLAs) to provide greater cost certainty for drugs in the healthcare system;
- These organizations have had an impact as Canadian drug prices have tracked below international median prices;
- Globally, the industry's partnership and investment support for small and medium biotechnology enterprises is the new form of drug development and commercialization which has replaced the traditional 'in-house' research and development (R&D) business model. This new discovery and commercialization approach is delivering significant economic and social value to Canada;
- PMPRB's mandate should reflect realities of the new industry;
- Using its international experience, the industry is already working with governments at all levels and stands prepared to work with PMPRB to ensure sustainability of healthcare system; and,
- The PMPRB must work with the industry to support federal, provincial and territorial payers in their efforts to deliver access to the best possible healthcare treatments for patients.

PART I - CONTEXT AND CURRENT ENVIRONMENT

I. Overview of Canada's Biotechnology Ecosystem

a. The Economic Value of Biotechnology Innovation

BIOTECanada is the national industry association for Canada's health, industrial and agricultural biotechnology sectors. The Association's 230 members are reflective of Canada's biotechnology ecosystem which is located in every province of the country and includes emerging research-focused small and medium sized enterprises (SME's), universities, investors, incubator and accelerator organizations and multi-national corporations.

The past century has seen remarkable achievements by Canada's biotechnology sector in developing new health technologies and improving the lives of Canadians and people throughout the world, achievements such as:

- The discovery of insulin in 1922;
- Discovery of diphtheria vaccine;
- The licensing of the first polio vaccine in 1955; and
- More recently, significant contributions to the development of an Ebola vaccine.[1]

The benefits from biotechnology in contributing to improved health outcomes are well known. In the past generation, diseases such as HIV/AIDS, Hepatitis C, certain cancers and several rare diseases have shifted from being fatal diseases to being treatable and in some cases to being preventable and even curable. Advances in vaccines development have included the HPV vaccine which has reduced the incidence of cervical cancer by 50% in the past decade.[2] Many Canadians are living longer, more productive and higher quality lives today because of drug therapy advances over the past 30 years.

Biotechnology is a foundation for continuing advances in therapeutics, from stem cell treatments, to vaccines to prevent existing and new illnesses, to new biologics to treat diseases that are not adequately treated.

BIOTECanada's Ecosystem Report provides a comprehensive overview of the sector and its potential to address the significant emerging health, environmental, industrial and agricultural challenges that are emerging as the world's population rapidly approaches 9 billion. In addressing these global challenges Canada's biotechnology sector will also help drive Canada's future economic development and prosperity. Canada is well-positioned to become one of the top three bioeconomies in the world by 2025 and BIOTECanada is

[1] http://ottawacitizen.com/news/national/the-canadian-vaccine-how-scientists-in-a-country-without-a-single-case-of-ebola-wrestle-the-deadly-disease-to-the-gorund

[2] http://www.stuff.co.nz/world/australia/83779246/10-years-on-hpv-vaccine-halves-cervical-cancer-rates

committed to supporting and working with provincial, territorial and federal governments to achieve this goal.

Many of BIOTECanada's member companies are principal stakeholders of the PMPRB. A total of 26 member companies sell patented pharmaceuticals in Canada, representing 35% of the companies who report to the PMPRB. In this context, BIOTECanada members look forward to working with the PMPRB and other stakeholders in these consultations to review policies and guidelines.

b. Improving Healthcare Outcomes Through Innovation

Today's biotechnology ecosystem is much more than a research lab in an established pharmaceutical company. It includes early stage catalysts and incubators, investment capital, over 500 early stage biotechnology companies, and partnerships with global companies. These investments and partnerships comprise the new economic model for the development of novel therapies and treatments for patients. Of note, the investments and partnerships led by the multinational corporations are not captured by the traditional reporting mechanisms used by the PMPRB as the industry's investments do not fit within the metrics developed in 1987.

In fact, much of the research investments of BIOTECanada member companies are not captured by the PMPRB in its Annual Report. Research spending by anyone other than a company currently selling a patented medicine is not reported by the PMPRB; in other words, years of research by start-up companies may not be reported at all. Similarly, spending that does not meet definitions in the Income Tax Act of 1987 does not qualify.

The pharmaceutical research model has changed dramatically in Canada and throughout the world over the past 30 years. The traditional drug discovery and development model, largely based on internal research and development conducted by pharmaceutical companies, has been replaced over recent years by one whereby multinational companies invest in and partner with pre-commercial SME's. A leading example of the new pharmaceutical and biotechnology research model of today is Johnson & Johnson's JLABS which opened in Toronto's MaRS Discovery District earlier this year.

JLABS is a 40,000 square foot life sciences incubator. It supports emerging companies in transforming scientific discoveries into commercial applications to bring healthcare advances to patients. It offers a wide range of educational and funding programs, facilities and a network of collaborations. Through JLABS, start-ups have access to physical and human resources including modular and scalable lab space, offices and access to external scientific, industry and capital funding experts, as well as internal Johnson & Johnson therapeutic area experts. Importantly, the JLABS model does not provide Johnson & Johnson with any proprietal rights over the companies within JLABS so these companies maintain complete entrepreneurial freedom.

JLABS is just one example that demonstrates the innovative approaches of pharmaceutical research and development in Canada that are not reported by the PMPRB. Indeed, the multi-national companies are also vital partners and investors in other Canadian

organizations such as MaRS, Institute NEOMED, Centre for Drug Research and Development (CDRD), Accel-Rx, and Institute for Research in Immunology and Cancer – Commercialization of Research (IRICoR). Today, these partnerships and investments are central to supporting the early stage development and growth of Canadian innovation. Indeed, these partnerships and investments are now underpinning a vibrant biotech ecosystem which is arguably providing significantly greater economic and societal benefits for Canada than did the traditional 'in-house' drug discovery and development model.

Importantly, the government recognizes the important economic value the biotechnology industry represents to Canada. Accordingly, the Prime Minister's mandate letter to the Minister of Innovation, Science and Economic Development, the Honourable Navdeep Bains, asks the Minister to:

> *Develop an Innovation Agenda that includes:*
> - *Expanding effective support for incubators, accelerators, the emerging national network for business innovation and cluster support, and the Industrial Research Assistance Program.*

BIOTECanada fully supports this goal and looks forward to working with Minister Bains and the government to achieve this objective. The Innovation Agenda provides an opportunity to develop a forward-looking strategy for establishing appropriate goals and metrics for biotechnology and pharmaceutical innovation as an alternative to the traditional reporting of R&D spending.

II. Supporting a Sustainable Healthcare System

The Prime Minister's Mandate Letter to Health Minister Dr. Jane Philpott in November 2015 sets out the federal priorities to "improve access to necessary prescription medications" and "making them more affordable for Canadians." In January 2016, the federal/provincial/territorial (FPT) health ministers issued a joint commitment stating:

> *Ministers agree that improving the affordability and accessibility of prescription drugs is a shared priority. Provincial and territorial ministers welcome the Government of Canada's decision to join, at the invitation of the provinces and territories, the pan-Canadian Pharmaceutical Alliance, which negotiates lower drug prices on behalf of public drug plans.*
>
> *Our governments will also consider a range of other measures to reduce pharmaceutical prices and improve prescribing and appropriate use of drugs, while striving to improve health outcomes. We also agree to explore approaches to improving coverage and access to prescription drugs for Canadians.*

Given its international experience the biotechnology industry can play a role in meeting these objectives and is therefore working with federal, provincial and territorial governments to improve affordability and access to innovative medicines.

a. Global Experience

All societies are addressing challenges associated with aging populations, the emergence of new diseases and the objective of providing their citizens with optimal access to health care. It is not surprising that different jurisdictions have pursued different solutions to address their domestic challenges. It is helpful to make comparisons with other countries but those comparisons are only meaningful when taking account of differences in culture and tradition, the state of economic development and societal values. Even in Canada where the health system is based on common principles, real differences arise from jurisdiction to jurisdiction in policy priorities and how services are delivered.

Not surprisingly, one can find many similarities – and many differences – in the approach to pharmaceutical policy in Canada in comparison with other countries. Like the U.S., Canada has a mixed public-private approach to pharmaceutical coverage. Like the UK, Germany and France, the public, and increasingly the private sector, rely heavily on health technology assessments to help inform reimbursement decisions. In contrast to Canada, pharmaceutical pricing and reimbursement policies in Europe are ordinarily delivered at the national level and by the same ministry. It is believed that in most countries, large payers negotiate agreements with manufacturers on listing and coverage conditions including confidential rebates or prices.

Most public and private payers exercise some form of cost control to manage their pharmaceutical budgets. Cost control measures typically include the use of generic substitution, health technology assessment, plan designs that include cost sharing with patients (e.g., tiered reimbursement system in France) and risk-sharing agreements – as well as price controls.

The PMPRB model is unique in this global context. Unlike other countries it does not operate as part of public drug reimbursement policy, nor even at the same level of government. Its mandate may be complementary to public and private drug programs in Canada, but it is very separate and distinct from them.

The PMPRB is also unique in that it is structured as an administrative tribunal and its jurisdiction is limited to drugs with patents. Unlike other countries, the PMPRB cannot simply apply its pricing policies by making administrative decisions to fund or not fund; in order to make and ultimately enforce its decisions if it cannot obtain voluntary compliance, the PMPRB is required to follow an adversarial administrative law process that can lead to significant delays in reaching a final conclusion.

The PMPRB program has been primarily effective when: (a) it has respected its statutory mandate and not sought to duplicate or interfere with the responsibilities and decisions of drug plans; and (b) it has applied clear guidelines based on the statutory factors with a high rate of voluntary compliance by the pharmaceutical industry.

b. Canadian Experience

Canada has in place a rigorous and effective system for delivering affordable medicines to Canadians. This system includes the Canadian Agency for Drugs and Technologies in Health (CADTH), the Institut national d'excellence en santé et en services sociaux (INESSS), the pan-Canadian Pharmaceutical Alliance (pCPA), and individual negotiations and contracts with public and private payers.
It is widely acknowledged that there have been significant changes in the drug pricing and reimbursement system in Canada over the past 30 years since the PMPRB first introduced drug price controls, namely:

- Health technology assessment (HTA) has grown as a discipline and has become fully integrated into the drug pricing and reimbursement system through CADTH, INESSS, and private sector insurers;
- Provincial policy decisions to use the purchasing power of public drug plans to obtain negotiated rebates through Product Listing Agreements (PLAs);
- Joint negotiation of PLAs through the pCPA in which all public jurisdictions now participate,[3] and the pCPA's Value Price Initiative to lower the price of many generic medicines;
- Specific policy approaches such as federally administered tendering for vaccines and procurement of blood products by Canadian Blood Services and **Héma-Québec;**
- Widespread use of restricted coverage and exceptional access policies in both the public and HTA recommendations generally recommend coverage only with restricted criteria or conditions based on clinical and cost-effectiveness; PLA negotiations take those recommendations into account but go further and also consider affordability and budget impact for the respective drug plan;
- Private insurers in Canada have implemented a variety of cost control mechanisms that they recommend to their plan sponsors; among specific programs are ManuLife's DrugWatch program and Great-West Life's DrugSolutions program;
- Most private insurers also establish confidential arrangements with pharmaceutical manufacturers (similarly, in the U.S. private insurers have negotiated confidential rebates with manufacturers for many years.)

These changes have largely been initiated by the provincial and territorial governments who have the constitutional authority for health care, to meet objectives of cost-effectiveness and affordability.

[3] According to the Council of the Federation, as of July 31, 2016 a total of 195 drug indications have been considered through the pCPA process for brand name drugs (including 38 rejected for negotiations) and total annual savings as a result of the brand and generic initiatives are estimated at $712 million.

In summary, over the past thirty years, public and private payers have become more selective in what they will reimburse for their beneficiary populations and apply scientific and economic analysis that is arguably not employed to the same degree to assess many other components of health care spending.

c. Establishing Value and Price Through CADTH, INESSS, pCPA and Product Listing Agreements

Pharmaceuticals are developed and marketed in a global environment. To make research investments worthwhile, Canadian biotechnology companies developing new breakthroughs do so for international markets. Similarly, innovators everywhere look to Canada as an important market for new technologies and therapies. Importantly, Canadian patients want to ensure that they and their health care providers have access to the most appropriate and optimal therapies, especially for life-threatening and untreated illnesses and conditions.

Within this global context, numerous factors influence manufacturers as they determine drug prices in Canada, including:

1. PMPRB Guidelines: Pharmaceutical patentees have demonstrated a high degree of compliance with PMPRB rules. In most cases, the guidelines provide a clear upper threshold and manufacturers recognize that the PMPRB will use its powers to enforce them.

2. Existing clinical practice: Patentees must take into account the specific therapeutic market and where a new product will fit based on its value relative to existing therapies. The PMPRB, CADTH, INESSS and pCPA all apply respective assessments on therapeutic alternatives to establish their purpose and role in the system.

3. Health technology assessment: All new drugs must undergo a rigorous clinical and cost-effectiveness review processes by the Common Drug Review (CDR), pan-Canadian Oncology Drug Review (pCODR), and INESSS in order to be considered for funding under public programs. Private payers also often rely on HTA in making coverage decisions and this practice is growing.

4. pCPA: Manufacturers understand the HTA reviews will serve to inform price and coverage negotiations under pCPA. In setting prices, manufacturers must take into account their ultimate ability to negotiate a satisfactory agreement through pCPA. Similar factors apply in the case of private drug plans.

5. Other market forces: Not all patented products are single-source and even those that are may face therapeutic competition within their class of products. Many patented products compete in markets with non-patented products and generic products and therefore market competition will put downward pressure on pricing.

d. Mandated Role of the PMPRB

Before considering what changes might be required to the PMPRB Guidelines, it is essential that all stakeholders have a common understanding of what the Guidelines currently provide.

Full details appear in the PMPRB's Compendium of Policies, Guidelines and Procedures. Section 85 of the *Patent Act* sets out the specific factors that the PMPRB is required to take into consideration in determining if a price is excessive:

> *(a) the prices at which the medicine has been sold in the relevant market;*
> *(b) the prices at which other medicines in the same therapeutic class have been sold in the relevant market;*
> *(c) the prices at which the medicine and other medicines in the same therapeutic class have been sold in countries other than Canada;*
> *(d) changes in the Consumer Price Index;*

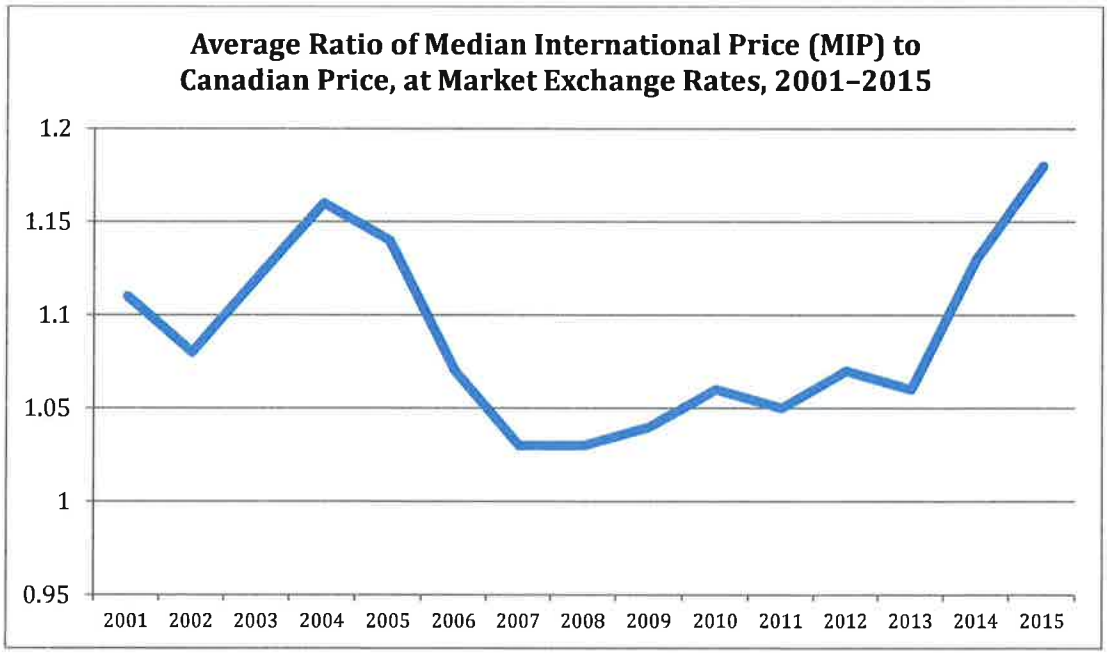
The PMPRB has purposefully established its Guidelines based on these factors, to give clear guidance to patentees on how to conduct their affairs so to be in compliance with the Act. However, the PMPRB has not developed the guidelines unilaterally; it has done so in consultation with stakeholders including the Ministers of Health, patients and the pharmaceutical industry so as to minimize unnecessary regulation and unintended consequences in the pharmaceutical market.

The current Guidelines ensure prices of new drugs:

- Cannot exceed the price of the highest-cost drug in the same therapeutic class (Therapeutic Class Comparison, or TCC);
- Provide a moderate improvement in therapeutic effect cannot exceed the higher of the TCC or the mid-point between the TCC and the median of international prices (MIP) for that drug;
- Provide a substantial improvement in therapeutic effect, cannot exceed the higher of the TCC or MIP;
- Cannot exceed the median international price (MIP) for breakthrough drugs;
- Cannot increase by more than the Consumer Price Index (CPI) once the drug is on the market;
- Can never exceed the highest of the international prices regardless of how its initial price was reviewed- a measure to provide safeguard in the event prices decline in other countries.

For over two decades, the PMPRB has stated the goal of the Guidelines is to ensure Canadians do not pay more, on average, than the median of the international prices for patented drugs. The evidence as reported annually by the PMPRB shows the Canadian marketplace, including the PMPRB, CADTH, pCPA, private insurers and market competition has demonstrated constrained pricing for prescription drugs. Indeed, since 1992, prices for patented medicines have not increased by more than inflation. In fact, prices have essentially not increased at all over that time, a span of almost twenty-five years.

In addition, Canadian prices have consistently tracked ***below*** median foreign prices. The ratio of the median international price (MIP) i.e., the median of the prices in the PMPRB7, to the Canadian price is an important element of the PMPRB guidelines. In its Annual Reports, the PMPRB tracks the average ratio of the MIPs for patented drugs to Canadian prices. These ratios are calculated using sales-weighted averages of the MIP-to-Canadian price for each patented drug for which data are available. For more than two decades, Canadian prices on average have been consistently well below the international median. In fact, in 2015, the PMPRB reports that on average ***the international median prices were 18% higher than Canadian prices***, the greatest difference over the period 2001-2015. The graph below, using data from Figure 11 in the PMPRB Annual Report for 2015, shows the trends in the ratios of MIP-to-Canadian prices over the past 15 years.



PART II – DETERMINING THE VALUE OF A PHARMACEUTICAL THERAPY

I. PMPRB Discussion Paper Questions

As stated by FPT health ministers, affordability and accessibility of prescription medicines for Canadians are important public policy goals. As part of the broad pharmaceutical system, the PMPRB mandate can contribute to meeting these goals, but is not intended to, or capable of, achieving them alone. In view of the wide range of factors that affect not only pricing, but also access to medicines in Canada, the PMPRB must also exercise care to ensure that its actions do not disrupt the market or impinge on other policy levers and objectives.

a. Affordability

In its Strategic Plan, the PMPRB provided a Vision Statement that states as an objective: "A sustainable pharmaceutical system where ... Canadians have access to patented drugs at *affordable* prices." The evaluation of 'affordable' is clearly a subjective measurement and represents a significant departure from the mandate of the PMPRB. In the industry's view, the proposed use of 'affordability' as a metric is not supported by the PMPRB's enabling legislation.

Previously, the PMPRB has clearly stated its mandate in the language of its statutory responsibilities under the *Patent Act*, namely: to ensure "prices of patented medicines are not excessive."[4] Not only does the new Vision Statement go beyond the PMPRB's statutory mandate, but it will also create confusion amongst stakeholders, including the public. "Non-excessive" and "affordable" are not synonymous. In fact, they carry very different meanings. "Excessive" carries connotations of "inordinate" or "beyond what is necessary; whereas" "affordable" is a more relative concept referring to the ability or willingness of a specific buyer to pay.

The questions in the Discussion Paper imply "affordable" is synonymous with "excessive" in the PMPRB's statutory authority. Not only does this assumption exceed the PMPRB's mandate, it duplicates the mandate and roles of other governments and agencies (ie: CADTH, INESSS, pCPA).

BIOTECanada does not wish to minimize the importance of access by Canadians to health care including pharmaceutical therapy. BIOTECanada's position is quite the opposite. Issues of access to therapy are critical to BIOTECanada's members. Correspondingly, the industry is committed to working with policymakers, payers, health care providers and patients to increase affordability and access to innovative medicines. However affordability and access challenges are complex and cannot be addressed by a simplistic approach that focuses uniquely the price of patented drugs.

b. Access to Innovative Medicines

The industry recognizes public payers are facing fiscal challenges in providing health care for Canadians. Innovative medicines are an important, but single, component of Canada's complex health care system.

Drug plan expenditures fluctuate from year-to-year based on a variety of factors, including the needs of the covered patient population and the availability of cost-effective treatments. As compared to some historic periods, drug expenditures have grown more slowly than other major components of health care in recent years and annual spending actually decreased in some public plans. Factors affecting these changes include the introduction of innovative

[4] PMPRB Annual Report 2007

therapies; the impact of the patent cliff; cost containment programs and other important market forces.

By focussing discussion on only expenditures, the positive health outcomes and associated savings to the healthcare system more broadly are often overlooked. It is not difficult to measure spending change from one year to the next, but it is much more valuable to take into account the changes in health benefits obtained for those expenditures. Many new drug therapies provide savings in other parts of the health care system through reduced need for hospital stays and other interventions. Even greater societal benefits are achieved through a more productive workforce and healthier population. The investments in these new innovative medicines also fund research and development of future medicines. The availability of a new life-saving treatment or vaccine may be well worth the investment even if it means an increase in expenditures. Moreover, personalized and targeted medicines offer innovative ways to treat patients more effectively and avoiding unnecessary treatments.

These issues are directly related to the responsibilities of health ministries and do not fall within the ambit of the PMPRB. The PMPRB's mandate is to establish an appropriate maximum price threshold; it is not responsible for determining the appropriate allocation of resources within a health ministry or in an employee benefits plan, nor is it responsible for public policy of how best to ensure that Canadians have access to necessary medical therapies. Many of the questions raised in the Discussion Paper about alternate "economic" factors - such as higher than anticipated total expenditures or higher proportion of total drug spending - are not related to "excessive" price, but rather are related to the management of government budgets.

c. Treatments for Rare Diseases

The costs of the research and development of innovative therapies for rare and ultra-rare diseases are very high but the potential market is very small. Drug candidates for rare diseases have unique challenges in conducting clinical trials and have a high rate of failure in later stages of development. For this reason, the United States, the European Union, and many other countries have specific orphan drug legislation and policies to provide incentives to manufacturers to develop these therapies and bring them to market. Canada has not yet adopted a rare disease policy but some orphan drugs still come to Canada with Health Canada regulatory approval or under the Special Access Programme.

Because of the small patient population, it is not always possible to collect the same level of clinical and economic evidence traditionally used for health technology assessments of drugs for larger populations. Although total expenditure on a rare disease drug may not represent a significant proportion of a drug budget, the price tag per unit or per patient is often high. Globally, all health care systems are grappling with the challenge of how to determine the appropriate allocation of resources for these drugs. In Canada, the PMPRB guidelines provide guidance to manufacturers and payers but ultimately, coverage is determined through a more detailed assessment of the impact on patients, the input of physicians and

specialists, and negotiations with the supplier. Coverage with evidence development can provide an effective, ongoing tool to help balance the competing factors.

Once again, decisions about appropriate coverage for patients and allocation of budgets are not the responsibility of the PMPRB and should not be addressed through its guidelines.

d. Therapeutic Benefit

As noted above, the Guidelines are based, in part, on an assessment of the relative therapeutic value of a new drug. The Discussion Paper suggests that this approach is based on industrial and intellectual property.

This is a narrow and incomplete view. By taking into account the therapeutic benefit of a new medicine, the guidelines consider its incremental ***value*** to patients and health care. This approach is consistent with the views and objectives of most participants in the health care system – principally that the cost of a given therapy be aligned with the value it brings. It is also consistent with HTA and the approaches to price controls in other countries. If, in the opinion of the Board and its therapeutic advisors, the product offers little or no added therapeutic benefit relative to drugs already available, its price cannot exceed those drugs. If it does provide demonstrated added value, it can be priced higher, but is still limited by other factors. There have been many cases where a patentee believes that a product provides more value than "little or no" improvement, but nonetheless complies with the PMPRB's more narrow assessment and sets its price accordingly.

The Discussion Paper introduces for consideration the concept of categorizing new medicines based on "indicators of potential abuse of statutory monopoly." The PMPRB assertion is based on the premise that, by itself, the existence of a patent is an indicator of potential abuse of a statutory monopoly. This is a false conclusion which fails to recognize the fundamental economic model and "raison d'être" of patent regimes which have existed throughout the world for many years: to stimulate and reward innovation. All OECD countries issue patents for pharmaceutical innovations; Canada is the only country that has added on a specific program to protect against potential "exploitative" pricing by the patent holder, i.e. the PMPRB program which regulates the patentee's prices to ensure they are not excessive. This protection against exploitative pricing applies only to pharmaceutical patentees and not to any other industry sector.

Importantly, the Act does not require or invite the PMPRB to take additional steps to establish the presumption of market power. There are many arguments as to why the PMPRB should not do so, including the fact that the complex economic analysis required would lead to contentious legal disputes in the courts. Market uncertainty and lengthy delays in establishing prices do not serve the interests of patients or anyone in the health care system.

The Discussion Paper also proposes that consideration be given to taking a "more relaxed" approach to monitoring patented multiple-source drugs in future in recognition of the

competitive nature of the market. A good example is the market for vaccines. In Canada, vaccines are purchased through a joint FPT tendering and contract process that ensures Canadians obtain the best prices and adequate and timely supply. The public and consumer interest is effectively protected through this process and the PMPRB should consider eliminating or substantially reducing its oversight over the vaccines segment of the market.

In addition, many drugs only fall under the PMPRB jurisdiction for technical reasons, because of an ancillary patent that meets the "merest slender thread" test but that provides no market exclusivity. Many "patented" drugs are in fact branded multiple source drugs and face substantial competition in the market from generic versions of the same drug as well as other drugs (patented or not) in the same therapeutic class. PMPRB price review creates a regulatory burden in these cases, but it is difficult to see the added benefit that review provides.

It is recommended that the PMPRB conduct and share a more complete study of this issue. BIOTECanada is not aware of any evidence to suggest that the current guidelines allow "excessive" prices. Specific examples and data would be helpful to support this claim. From the PMPRB's own experience of investigations and hearings, it would also be helpful to stakeholders to understand the Board's assessment of the indicators of risk of excessive pricing.

BIOTECanada encourages the use of a Working Group of stakeholders to define the issues, identify and consider options and make recommendations to the Board.

e. International Price Comparisons

In addition to measuring the relationship of prices in Canada on average to median international prices, the PMPRB reports annually on the ratio of prices in each of the PMPRB7 countries to Canada. While these ratios fluctuate from year to year, Canada has never been the highest nor lowest among the countries during the history of the PMPRB.

In the Strategic Plan, the PMPRB argued that Canadian prices "have been steadily rising relative to prices in the PMPRB7." In 2005, Canada had been third lowest, but in 2013 was third highest. Canada's ranking among the seven countries has frequently changed over time, due to a number of factors, including changes in exchange rates. It is important to note that it has changed again within the past two years.

According to the latest PMPRB Annual Report, prices in all seven of the other countries increased relative to the Canadian prices in 2014 and 2015 (or to put it another way, Canadian prices declined relative to all seven countries in both years).

Presently, Canadian prices are at par with the third highest country while four countries rank lower. This data is consistent with the trend noted earlier that Canadian prices on average are now 18% below median international prices.

There are many challenges to conducting international price comparisons, including the impact of fluctuations in exchange rates; differences in medical practice, dosages and approved indications; reimbursement policies; and restricted or conditions on coverage, etc. The current PMPRB approach has proved relatively flexible and able to adjust to changing conditions such as exchange rates. The annual application of the HIPC Guideline helps to ensure appropriate adjustments in Canada if prices abroad change markedly. And the PMPRB also has the ability to make modifications when necessary based on changing international factors, e.g., the recent change of the German price source.

The available evidence does not support any policy changes by the PMPRB to amend its Guidelines for the purpose of lowering overall patented drug prices in Canada relative to other countries.

Importantly, the evidence demonstrates a wide discrepancy in patented drug prices between the U.S. and Canada. Canadian prices are more aligned with prices in the European countries included in the PMPRB7 and overall are less than half the reported prices in the U.S.

Over the years, the PMPRB has noted some of the challenges in studying U.S. prices and that has led some stakeholders to propose removing the U.S. from the PMPRB7. In BIOTECanada's view, such a step is neither necessary nor good public policy.

The PMPRB guidelines have been designed to ensure that U.S. prices do not have a disproportionate weight within its analysis. The use of the ***median*** of international prices rather than the ***mean*** or ***average***, ensures the U.S. price, if the highest, is discounted relative to the other comparators. By comparison, European countries recognize the importance of comparing prices with their geographic and economic neighbours. In this context, it remains appropriate for Canada to do the same.

f. Confidential Agreements

The Discussion Paper references the challenges in comparing prices in Canada to other countries because of the existence of confidential rebate agreements other jurisdictions have with manufacturers. While these arrangements do exist in other jurisdictions, it must be noted that similar confidential rebates are provided to public payers in Canada. Indeed, this is yet one more way in which public payers have been able to provide affordable access to medicines for their patient populations.

These confidential rebates may reflect a variety of considerations such as volume discounts; the nature of the patient population covered by the plan; outcomes; agreements on limits or conditions of coverage; limits on expenditures, etc. Clearly, these arrangements serve a valuable public policy purpose in Canada, particularly when combined with the pCPA which represents all jurisdictions:

By capitalizing on the combined negotiating power of drug plans across multiple provinces and territories, the pCPA aims to:

- *Increase access to drug treatment options;*
- *Achieve lower drug costs and consistent pricing, and*
- *Improve consistency of coverage criteria across Canada.*

All countries that reference prices in other countries face the same issue of confidential rebates. In Canada, CADTH has recently changed its policies to ensure it is assessing products on the basis of publicly available prices.

g. Domestic Price Comparisons

The Discussion Paper presents conflicting analysis and potential approaches to the issue of guidelines for new patented drugs identified as offering little or no improvement. In many cases, these drugs are line extensions of existing drugs or subsequent entries into an existing therapeutic class. Sometimes, there may be generic versions of the comparator drugs. In essence, the Guidelines limit the prices of such new drugs so they cannot be higher than the existing comparator drugs.

It is important to reiterate that all drugs will not necessarily be priced at the maximum allowable price. As discussed above, prices may be set at lower levels based on the range of factors considered in establishing prices. Furthermore, these markets tend to be competitive markets with several therapeutic alternatives, including generic products. Drug plans and HTA bodies already take these factors into consideration. HTA analysis for example routinely compares cost-effectiveness to other drugs in the class.

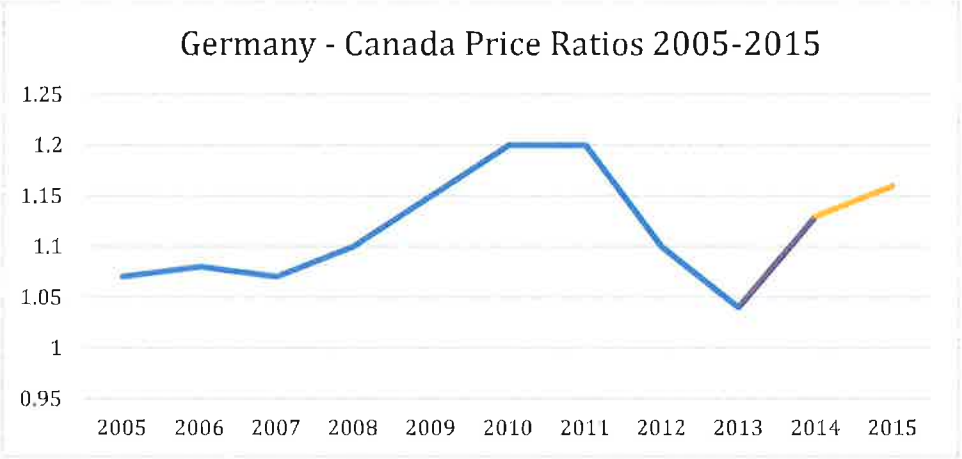
Given the availability of choices to patients and payers, and the current limit of the range of prices in the therapeutic class, it may be that the challenge the PMPRB seeks to address is a theoretical one only. The alternative presented in the Discussion Paper of reducing the regulatory burden and oversight for this class of drugs appears to be a reasonable one and deserving of further consideration by the Board.

However, should the PMPRB wish to pursue this issue, it is imperative that it provide more complete data analysis as a means of properly informing the policy discussion for all stakeholders. For example, it would be helpful to understand how often "me-too" drugs are introduced at prices equal to the maximum non-excessive price under the Guidelines. Have there been any changes in this relationship over time? How many comparator drugs are identified in the therapeutic class? How often are generic versions of comparator drugs available?

The *Patent Act* requires the PMPRB to take into consideration changes in the Consumer Price Index (CPI) in determining if a price is excessive. This provision was intended to address the fact that drug prices in Canada were increasing at much higher rates at the time the PMPRB was created.

The limit on price increases to changes in the CPI has been a key feature of the PMPRB throughout its history. Over time, other market forces and payer policies have also constrained price increases and as a result, prices have never risen by more than CPI since 1993. According to the PMPRB's own reports, prices have shown essentially no increases, and sometimes even declined, since that time.

Although the Discussion Paper refers to some policies in European countries to require price reductions from time to time, it does not provide evidence to show how these reductions were applied or sustained. Instead, as noted above, price levels in the PMPRB7 appear to fluctuate within a relatively small band from year to year and in comparison to Canada have actually risen in all comparator countries between 2013 and 2015.
To illustrate only one example, consider Germany. In the Strategic Plan, using data up to 2013, the PMPRB used this graph to show German prices had declined relative to Canada in 2012 and 2013. However, when the graph includes the ratios for 2014 and 2015 as reported in PMPRB Annual Report, German prices increased again, close to levels seen five years before. In 2015 German prices were 16% higher than Canadian prices.



In summary, apart from the "optics" of the comparison of price control regimes, it is difficult to identify any evidence with respect to the CPI limit that would warrant reopening this long-established and successful element of the PMPRB program.

h. Re-benchmarking

The Discussion Paper asks if prices of a patented drug should be re-benchmarked from time to time and points to some practices in other countries to reassess the prices of some drugs. Reassessment of drugs is already a practice in Canada. CADTH and INESSS conduct Therapeutic Reviews of classes of drugs for various policy reasons, and payers must revisit PLAs at set times when they terminate or when a new indication for the medicine comes to market. In the private sector, private plans are also able to implement similar reviews. Both

private and public drug plans will systematically review the price being reimbursed with each new indication. The PMPRB itself currently provides for re-benchmarking under certain scenarios.

Key questions must be addressed:

- How often has the PMPRB exercised its current rules to conduct a re-benchmarking?
- How often has it believed a re-benchmarking was warranted but concluded it did not have the authority to do so?
- Given the fact that public drug plans currently conduct their own therapeutic reviews and price renegotiations from time to time, what would be the added value of a subsequent PMPRB review?
- What is the risk that a PMPRB review would impinge on or duplicate the work of payers?

i. Any Market Price Review

This is another issue PMPRB has consulted on in the past.[5] The current policies were adopted in 2009 following lengthy consultations, as the operational implications are complex. The Discussion Paper has not provided any analysis to support why this issue should be re-opened at this time.

It is to be expected that small differences in price may occur between classes of customers and regions. Differences could result from a variety of innocuous factors including:

- Different dates in negotiation of new hospital contracts;
- Different prices based on quantity;
- Differences in the effective dates of a formulary;
- Differences in the evolution of price through time depending on the pricing policies in place in each jurisdiction; and,
- Differences in reimbursement conditions and criteria.

The calculation of an "average" price by the PMPRB means that there will inevitably be some instances above and below the average. The only concern for the PMPRB should be if the result is that the price to a specific class of customer or region is "excessive."

The PMPRB has full legal authority under the existing Act and Regulations to take action if it were to find that a class of customer or region was paying an excessive price. It is not clear whether the Board has had cause to use that authority. In addition, it would be helpful to understand whether the PMPRB has performed data analysis to show that there may be a problem of potential excessive prices in certain markets.

[5] See Results of the March 2009 Consultation and the Board's Revised Excessive Price Guidelines.