Alexion Pharma Canada Corp.

E-mail: PMPRB.Consultations.CEPMB@pmprb-cepmb.gc.ca

October 24, 2016

Patented Medicine Prices Review Board
(Rethinking the Guidelines)
Box L40, 333 Laurier Avenue West, Suite 1400
Ottawa, ON K1P 1C1
Fax: 613-952-7626

Response to "Rethinking the Guidelines"

Alexion Canada Pharma Corp. ("Alexion") is providing input into the Patented Medicine Pricing Review Board's "Guidelines Modernization" discussion process to share with the Board and Canadian stakeholders the unique perspective of a company wholly dedicated to researching and developing life-transforming therapies for patients with devastating ultra-rare diseases.

Executive Summary

The Board's *Guidelines Modernization Discussion Paper* ("Discussion Paper") states that the purpose of the current discussion is to bring "… the PMPRB's overall legal framework in line with today's pharmaceutical environment and overall best practices". Unfortunately, the proposals actually made in the Discussion Paper go well beyond the "legal framework" imposed by the *Patent Act*. The *Patent Act* currently requires as its legal framework that the determination of whether the price of a medicine is "excessive" be made on a *comparative* basis, comparing the price of a medicine to the price of the same medicine in other countries or to the price of comparable medicines in the same therapeutic class. Whether a treatment is "high cost" has no bearing, under the *Patent Act*, on whether that price is "excessive".

The proposals in the Discussion Paper, described in detail below, attempt in various ways to change the comparative process and make absolute cost a significant factor in the Board's determination of whether the price of a medicine is "excessive". Introducing such "economic considerations" into the process would transform the Board's mandate into a new form of regulation that could discourage innovation. As the manufacturer of medicines for patients

address 3100 Rutherford Road, Suite 300, Vaughan, Ontario, L4K 0G6, Canada tel +1.866.393.1188 fax +905.761.5289

alexion.com

with ultra-rare diseases, Alexion views such an approach as both inconsistent with federal statute and misguided as a matter of policy.

Understanding the Complexities of Ultra-rare Disease R&D

The Discussion Paper focuses on "high cost" treatments, which often include therapies for patients with ultra-rare diseases. It is important that Board staff, Board members, healthcare providers, policy makers, clinicians, patients and the general public understand the complexity of making rare disease treatments available.

The impact of ultra-rare diseases on patients, their families, and society is profound. Many of these diseases are severe, chronic and progressive, with high mortality rates. Ultra-rare diseases often present unique public health challenges. Typically, few researchers or companies explore such diseases, and when developing treatments, often there are no pre-existing regulatory pathways or prior controlled studies.

By definition, ultra-rare diseases affect fewer than 20 people per million in the general population. As such, a correspondingly small number of clinical trial participants are generally available. Setting up clinical trials for ultra-rare diseases is costly, complex and time-consuming. Substantial resources are required to establish a sufficient number of clinical trial sites around the world given the very few patients eligible for enrollment, without certainty that each site will, in fact, be able to contribute to the trial.

Alexion alone is currently conducting clinical trial programs that involve establishing many clinical trial sites around the world. In comparison, clinical trial patients with more common diseases like diabetes, which affects 49,000 people per million in the general population, can generally be recruited through a small number of readily available sites.

Treatments for ultra-rare diseases are subject to exactly the same regulatory and clinical evaluation process and requirements as treatments for more common diseases, and bear the associated costs. Further, it entails extraordinary risk to develop life-transforming treatments for the very few patients suffering from ultra-rare diseases about which little is known and for which no effective treatments have been developed.

As a result, it is important that any changes in current policy do not discriminate against patients with rare and ultra-rare diseases by imposing requirements that de facto discriminate against high cost treatments. In Alexion's view, many of the changes proposed in the current Guidelines modernization process will have a negative impact on patients living with ultra-rare diseases. These changes are described in detail below.

Supporting Innovation for Rare Diseases

It is important to keep the actual impact of treating patients with ultra-rare diseases on the Canadian healthcare system at the centre of the discussion. In reality, there are very few treatments available in Canada for patients with ultra-rare diseases. Spending by public drug plans on rare disease treatments currently accounts for less than two percent of drug budgets. If Canadian jurisdictions were to cover all available ultra-rare disease treatments (excluding treatments for rare cancers) between now and 2018, the *total* cost of covering all rare disease patients across the country would not exceed four percent of provincial and territorial drug plan spending [1]. Spending on all prescription drugs—including those for ultra-rare conditions—accounts for approximately 9 percent of provincial and territorial healthcare budgets; thus, the total cost of covering all available ultra-rare disease treatments would account for only 0.4% of total healthcare budgets.[2]

Patients with ultra-rare diseases do not choose their condition, but they do depend on our healthcare system to provide treatment if available. Patients should not be penalized or discriminated against simply because their disease is not "common." Providing equitable access to ultra-rare disease treatments accounts for a very small proportion of overall spending on drugs in Canada.[3]

Other jurisdictions – most notably the United States and the European Union – have embraced the importance of helping ultra-rare disease patients by specifically incentivizing innovation in these diseases. The US *Orphan Drug Act* (1983) encourages research and development in rare diseases by providing orphan drug exclusivity to companies willing to assume the financial risk of pursuing treatments for life-threatening, ultra-rare conditions. Government and private payers support and facilitate this research and development by paying for treatments and supporting the small patient populations. In the European Union, the sponsors responsible for these medicines benefit from incentives such as fee waivers for regulatory procedures or a 10 year market exclusivity.

Notably, Canada has no such legislation, and an attempt by Health Canada to develop an Orphan Drug Regulatory Framework has been put on hold. At present, Canada is missing an opportunity to link innovation and support for patients with ultra-rare disease. Alexion shares the concern of its industry organization, BIOTECanada, that the Board's "modernization" efforts are not at all aligned with the Government of Canada's Innovation Agenda. Canada's

---

[1] The Budget Impact of Drugs Treating Rare Diseases in Canada: A 2007-2013 MIDAS Sales Data Analysis. Victoria Divino et al. Oral Presentation at the 2015 CADTH Symposium.
[2] Canadian Institute For Health Information Report on Prescribed Drug Spending in Canada, March 2014.
[3] .Devino et al, 2015.

Innovation Agenda is being led by the federal Ministry of Industry, Science and Economic Development.

In the Discussion Paper, the Board raises the concern that it has not achieved its goal of encouraging research and development spending by patented medicine companies in Canada. In fact, the Board attributes the need for modernization to industry not meeting its promised goal of investing 10 percent of sales into R&D annually. The method the Board uses to quantify R&D spending – limited to SR&ED eligible expenses – captures only a portion of investments by companies with products on the market. The Board's approach completely ignores significant investment that is not SR&ED eligible, and does not include any of the R&D that is being done by start-up companies working to bring innovation to the Canadian market. These R&D investments are the backbone of Canada's innovation ecosystem.

In that regard, Alexion's 2011 acquisition of Enobia, the largest biotech acquisition in recent Canadian history at $1.1B, had a tremendous impact on the biotechnology ecosystem. Specifically, Alexion assumed and supported a significant Canadian clinical trial program for asfotase alfa, an enzyme replacement therapy to treat an ultra-rare and life-threatening condition called hypophosphatasia (HPP), in which patients are not able to properly mineralize and grow bone. The incidence rate of HPP is approximately 1 in 100,000, but increases to 1 in 2500 live births in the Mennonite population. HPP is therefore a rare disease of particular significance in the Canadian context, and resulted in a therapy being developed in Canada. Yet, none of the investment made by Alexion to bring a Canadian-invented therapy to the global market was counted by the PMPRB as R&D.

Putting patients first

It is Alexion's hope that the Board will have the opportunity to engage patients living with ultra-rare diseases through the ongoing consultation process. If the Board's goal is to create a pricing environment that ignores the economic factors involved in bringing ultra-rare disease treatments to market and focuses solely on achieving the lowest possible price, it will not be feasible for companies over the long-term to offer rare disease treatments in Canada. As a result, these small and often overlooked patient populations will have limited or no access to life-saving medicines.

Furthermore, a process for keeping in check the maximum price that can be charged for rare disease treatments already exists. This maximum allowable price serves as a backstop from which Canadian payers – private and public – have developed sophisticated and robust mechanisms for achieving price reductions through negotiations, and in the case of the provincial, territorial and federal governments, have formed a buying group through the pan-Canadian Pharmaceutical Alliance (pCPA). Private payers also achieve price reductions through the implementation of co-pay plans which are often supported by the manufacturers.

Canada represents a challenging market for companies seeking to deliver first-in-class treatments for patients with life-threatening, ultra-rare diseases. These treatments are put through the "common" drug review at the Canadian Agency for Drugs and Technologies in Health (CADTH), a process which does not always take into account why ultra-rare disease treatments have small clinical trial sizes, or that randomized double-blind studies cannot be conducted on life-threatening conditions. Only 34% of drugs for rare diseases[4] receive positive recommendations by CADTH, and a positive recommendation is required to enter negotiations with the pCPA.

If an ultra-rare disease treatment does receive a positive recommendation, there is no special pathway through the pCPA to achieve funding or timely access for patients. In fact, ultra-rare files often take longer than non-innovator, "me-too" drug negotiations, which means patients must wait even longer for access to the only approved therapy to treat their condition.

Alexion's Experience with the Board

Alexion entered the Canadian market in 2009 with the introduction of Soliris, a Health Canada-approved treatment of an ultra-rare disease, Paroxysmal Nocturnal Hemoglobinuria (PNH). Alexion carefully and dutifully followed the Board's existing Guidelines. Despite the company's diligence, Alexion has been required by the Board to defend its price in a hearing because international exchange rate fluctuations changed the relative cost of Alexion's medicine Soliris (eculizumab) in other countries. These exchange rate fluctuations were beyond the company's control and have no impact on the price being charged for Soliris in or outside Canada.

The Board has taken the additional step of attempting to retroactively change the allowable price of Soliris, which the Board approved in 2009 when it categorized Soliris as a breakthrough innovative product. This approach, combined with the extensive attention paid to "high cost" drugs in the Discussion Paper, sends a signal that the Board actively seeks to discourage innovation in Canada, particularly as it relates to ultra-rare diseases.

In the interest of supporting rare disease patients and Canada's Innovation Agenda, the Board should give careful consideration to how it addresses treatments for small patient populations during the modernization outreach process.

It is our hope that the critique of the specific elements of the current Guidelines Modernization proposals in the Discussion Paper, as described below, will demonstrate that

[4] Reimbursement of Drugs for Rare Diseases through the Public Healthcare System in Canada. Where Are We Now? Devidas Menon, Derek Clark and Tania Stafinski. Healthcare Policy. 11(1) August 2015. 15-32.

these particular proposals will not promote or encourage innovation in Canada for ultra-rare disease treatments.

Feedback to Guidelines Modernization Proposals

Therapeutic Benefit

The essential exercise for the Board under s. 85(1) of the *Act* is to measure the price of the medicine in the relevant market, against the prices of other medicines "in the same therapeutic class" in Canada or other countries.

"Therapeutic benefit" is not one of the criteria found in section 85 of the *Patent Act*, which contains the statutory criteria the Board must use for determining whether the price of a patented medicine is "excessive".

The current Guidelines place different emphasis on these factors depending on the degree of therapeutic benefit. This is an extrapolation of the section 85 criteria that is logically *required* by those criteria.

This can be illustrated by considering treatment of "breakthrough" drugs. A breakthrough drug, by definition, does not have comparators in the same "therapeutic class". At introduction, section 85(1)(c) (the price of the same medicine in other countries) provides the statutory criterion for regulating the price of a breakthrough drug.

In contrast with the current Guidelines approach to "therapeutic benefit", the suggestions made by the Board in its proposals are not extrapolations that logically follow from the section 85 criteria. Rather, the proposals are an attempt to introduce wholly new factors into the analysis that are not found in the *Patent Act*.

The Board's proposed policy is to characterize "therapeutic benefit" contrary to the rational flow of the section 85 factors. In effect, the greater the "therapeutic benefit", the more the Board will presume that the actual market price for the drug is "excessive", and the greater efforts the Board will make to limit the price. As stated in the Proposal:

> "For example, a drug with an introductory price in Canada in excess of a pre-established threshold or that is likely to cause rationing by public and private drug plans based on cost or projected usage, could attract greater regulatory scrutiny in terms of the setting of a ceiling price. The same approach could apply to a drug with few, if any, competitors in its therapeutic class, however that class may be defined. Therapeutic benefit could still be taken into account in this context, but as an indicator that greater regulatory oversight may be warranted, as opposed to licence to

charge a premium price."

This approach is incompatible with the section 85 factors. A "breakthrough" drug is only limited, under the *Act*, by international comparisons. Under this proposal, the price of a "breakthrough drug" would be limited by other factors not recognized or contemplated by the *Act*.

The Board goes on to identify those other factors:

> "Despite the Supreme Court's reasoning and the changes in the pharmaceutical marketplace described previously, the PMPRB's current approach to categorizing medicines by therapeutic benefit is not geared to questions of market dynamics, high prices or affordability."

These factors have no bearing on the exercise required by the *Patent Act*, which is to regulate "excessive" prices by comparison with the prices of the same drug in other countries or the price of other drugs in the same therapeutic class. The *Patent Act* says nothing about a drug "likely to cause rationing", or questions of "market dynamics, high prices or affordability". These are not factors found in the *Act*, and they are not reasonable implementations of those factors.

In summary, the Board is attempting to substantially revise its mandate in a manner that bears no resemblance to the statutory framework established by Parliament.

The proposed revision risks significant harm to Canada and Canadians. A principal policy objective of Parliament expressed in the *Act* is to reward and attract innovations that enhance medical treatment and health care for Canadians. Creating a pricing regulatory mechanism that deters innovation, or precludes patient access to life-saving medicines by using "therapeutic benefit" as a basis for justifying more restrictive price controls runs contrary to that purpose. The result will be less innovation in Canada, and fewer choices for Canadian consumers, because innovation could well be pointless if introduction of innovative breakthrough products in Canada will attract more restrictive controls.

International price comparisons

The statutory framework is not followed in the section of the proposal concerning "international price comparisons."

The proposals contemplate changing the composition of the "PMPRB7" countries currently used for the purposes of international comparisons. The Board cannot achieve this outcome through an amendment to the Guidelines; rather, a change in the basket of countries used for

comparison purposes requires an amendment to the *Patented Medicines Regulations*.

The Board states in its proposals that international prices are "unreliable" due to widespread use of confidential discounts and rebates. They state that this unreliability is to the detriment of Canadians:

> "Most developed countries engage in some form of international price comparison to limit drug costs, although increasingly as an adjunct to other forms of cost containment because of the worldwide practice of confidential discounts and rebates and the concomitant unreliability of public list prices."
>
> ...
>
> "However, the current reality is that the actual prices being paid in European countries are below the public prices that the PMPRB is constrained to use for international comparison purposes."

This position does not take into consideration the other half of the comparison equation. Just as other countries extract "confidential discounts and rebates", so too do Canadian provincial public and private insurers. Yet, the Board has taken the position that rebates given in Canada are not to be factored into the "ex factory" price of the medicine in Canada used for comparison purposes because only the wholesaler, and not insurers, is the "customer". The reality is that the majority of drug sales in Canada are insured, and therefore subject to "discounts and rebates" *in Canada*.

Even if international "public" prices do not factor in rebates, the same holds true for Canadian "public" prices. In other words, the comparisons of publicly available ex factory prices among Canadian and foreign country prices are still reliable.

Another factor of considerable significance is that Canada borders the US. In its proposal, the Board laments the impact that US prices have on Canadian median prices. It is logical to require, as the current *Patented Medicine Regulations* do, that US prices be taken into consideration. However, should the Board set the ceiling for price comparison too low, the obvious danger is that companies will cease to sell their medicines in Canada, relying instead on cross-border trade. Once again, by imposing too great a regulatory burden, the Board risks obtaining the result that some medicines may become unavailable in Canada.

Domestic price comparisons

The Board points to uncertainties created by the use of rebates and discounts. As in the case of international price comparisons, the Board takes the position that use of rebates and discounts should be countered by increased price regulation:

> "However, potential changes to the Guidelines may assist in mitigating the impact of the lack of price transparency by lowering price ceilings as a proxy for the true price net of rebates and discounts."

Lowering the price ceiling will likely have the outcome of decreasing the amount of rebates and discounts a manufacturer will be willing to offer public insurers.

Currently, the price differential between the amount of the list price for drugs and the amount actually paid by public insurers allows public insurers to in effect subsidize themselves. To the extent that the Board lowers the "… price ceilings as a proxy for the true price net of rebates and discounts", public insurers' ability to achieve this outcome in future will be reduced or eliminated.

Price increases based on changes in the Consumer Price Index

The Board proposes two measures in this section: (1) reversing the current allowance for price increases based on the CPI; and (2) periodic price reviews:

> "Although the Act clearly contemplates that CPI should be considered by the PMPRB in seeking to determine whether a patented drug has become excessively priced, this does not preclude the PMPRB from considering it in a different manner than currently prescribed under the Guidelines, provided it is equally reasonable, or providing for the periodic reassessment of drug prices to determine, based on other section 85 factors, whether a decrease may be warranted. This could be the case where, for example, following the PMPRB's review of a new drug's introductory price, it is approved or prescribed for additional indications, such that the class of drugs it should be compared to for pricing purposes has changed or its affordability profile for payers is significantly impacted."

The Board is proposing a change contrary to the *Patent Act*. Section 85(1)(d) has always been interpreted as allowing for *increases* based on the CPI. The Board should not interpret the legislation as having the exact *opposite* meaning to that which the Board and patentees alike have relied for decades, and which is inherent in the nature of the CPI itself. According to Statistics Canada, the Consumer Price Index (CPI) is an indicator of changes in consumer prices experienced by Canadians. It is obtained by comparing, over time, the cost of a fixed

basket of goods and services purchased by consumers; since the introduction of the Board, those changes have always been increases.[5] In its current guidelines, the Board employed the CPI figures published by Statistics Canada for its CPI Adjustment Methodology.[6] The Board currently allows price increases that track the changes to consumer prices expressed by the CPI. Thus, as the price of Canadian consumer goods increases, the maximum allowable price of drugs also increases. This is the only reasonable interpretation of the CPI factor. It is unreasonable to interpret the requirement for taking into consideration the CPI in any other manner.

Moreover, if a medicine approved for new indications triggers a price review to determine whether a price *decrease* is warranted, manufacturers will rationally review whether taking the expensive step of seeking Canadian market approval for a new indication is economically worth the risk of a price decrease. In many cases, particularly where the market for a new indication is small, the rational response will be to not seek market approval in Canada. The losers in this scenario will be the Canadian public, who will be left unprotected by the formal approval mechanism for new indications, and the Canadian research community, as manufacturers will have less incentive to innovate, or sell, in Canada.

Any market price review

The *Patent Act* states that the Board has jurisdiction to determine whether the price of a medicine is excessive "in any market" in Canada. This does not mean that the Board should ensure that prices in "every" market are exactly the same.

The assumption in the proposal is that, if prices were forced to be exactly the same, the *lowest* price in Canada could be imposed, leading to savings:

> "According to the data that patentees file with the PMPRB (in which they must provide average price data at the provincial level), if consumers in all provinces had access to the price that consumers in the lowest priced province pay, total Canadian spending on patented pharmaceuticals would decrease by more than $600 million – an overall reduction of almost 5%."

What is missing from this analysis is any recognition that there may be valid reasons for price differentials among the provinces, including different public reimbursement criteria.

---

[5] See Statistics Canada, "definitions and methods", at:

http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&db=imdb&adm=8&dis=2&SDDS=2301&lang=en

[6] See the Guidelines, Schedule 9 – CPI-Adjustment Methodology.

Provinces in Canada choose independently of one another which drugs to reimburse, and at which price, and for which indications. Changes in public reimbursement, such as the introduction of the pan-Canadian Pharmaceutical Alliance (pCPA) increasingly result in common reimbursement amounts being negotiated across Canada. It is not the role of the Board to ensure price consistency in the face of existing Canadian provincial mechanisms that both create substantial differences in drug utilization patterns and, at the same time, are moving to arrive at a common reimbursement strategy; the Board should not interfere with provincial responsibilities, or require a unity that does not exist for any other class of product.

Questions Posted for Discussion

1. What does the word "excessive" mean to you when you think about drug pricing in Canada today? For example:

The determination whether a price of a medicine is "excessive" for the Board's purposes cannot be a merely subjective exercise; nor should such a determination be a mere synonym for "expensive". Rather, the determination of whether the price of a medicine is "excessive" must logically be a *comparative* exercise; that is, a comparison must be made to the price of medicines in the same therapeutic class, and that are similar in efficacy.

Under existing Canadian law, "excessive" means what it has always meant: prices that are "excessive" based on the factors found in section 85 of the *Patent Act,* which are the factors the Board *must* consider under this legislation.

Existing Canadian law is preferable from a policy perspective to the changes proposed by the Board, as evidenced in the Discussion Paper and in these questions. Introducing the notion that absolute cost ought to be a consideration in determining whether the price of a drug is "excessive" will actively discourage innovation in Canada.

a. Should a drug that costs more annually than a certain agreed upon economic metric be considered potentially excessively priced?

No. Imposing an arbitrary economic metric is contrary to the legislation, as well as being a bad policy choice for the reasons stated above.

b. Should a drug that costs exponentially more than other drugs that treat the same disease be considered potentially excessive?

Under existing Canadian law, any drug that is in the same "therapeutic class" should be compared for price purposes. If the two drugs are indeed "therapeutically equivalent", as

defined by similarity in therapeutic value,[7] then one being priced "exponentially" more than the other could be an indication that the price of the first may be potentially excessive. However, if the two drugs are not "therapeutically equivalent" (e.g, the first worked by a wholly different mechanism such that it was of considerably greater efficacy), then the two drugs should not be compared and it could be completely irrelevant whether one drug is more expensive than the other.

c. In considering the above two questions, does it matter to you if a very costly drug only treats a small group of patients such that it accounts for a very small proportion of overall spending on drugs in Canada?

Orphan drugs necessarily require a higher price than those treating significantly larger patient populations; otherwise there is no incentive to invent or market such medicines, particularly given the high fixed costs and significant risk involved in their development, and the life-transforming benefit such treatments provide to patients. As stated previously, patients with ultra-rare diseases depend on our health care system to provide treatment if it is available, and a relatively small proportion of the total Canadian healthcare budget would be required in order to fund all *potentially* available orphan drugs (it is reasonably estimated that the total cost of covering all available ultra-rare disease treatments would account for only 0.4% of total healthcare budgets). The graph included as "Figure 1" to the Discussion Paper is misleading, as it lists only the absolute number of high-cost drugs entering the Canadian market, but does not make any mention of how many of those "high cost" drugs are therapies for ultra-rare diseases.

The Board has stated in the therapeutic benefit section of its discussion paper that its regulatory goal is to prioritize its enforcement resources on cases where payers are most in need of regulatory relief. Focusing on therapies for ultra-rare diseases, which account for such a small percentage of healthcare budgets, is contrary to this stated regulatory goal.

d. Conversely, if a drug's price is below an agreed upon metric and in line with other drugs that treat the same disease, should it be considered potentially excessive if it accounts for a disproportionate amount of overall spending on drugs in Canada?

---

[7] As the Board has previously noted in Decision: PMPRB-06-D3-ADDERALL XR, a drug that is a "breakthrough" or even a "substantial improvement" cannot, by definition, be "therapeutically equivalent" to other drugs:
"A therapeutic class comparison is undertaken by reference to therapeutic equivalence. By definition, if a medicine is a breakthrough, or even if it represents a substantial improvement over existing medicines, it could be unreasonable to attempt to establish a therapeutic class based on therapeutic equivalence".

The total amount of spending on a drug is not a factor in the analysis of whether a drug's price is "excessive" under current Canadian law, and ought not to be a factor should the law be changed.

e. What economic considerations should inform a determination of whether a drug is potentially excessively priced?

None. The considerations of "excessive price" are not based on "economic considerations" but on comparisons of the prices of medicines, either the same medicine in other countries or medicines in the same therapeutic class, as stated in the *Patent Act*. Introducing "economic considerations" would transform the Board's mandate into a new form of pure price regulation, which is incorrect in law and bad policy.

2. Given that it is standard industry practice worldwide to insist that public prices not reflect discounts and rebates, should the PMPRB generally place less weight on international public list prices when determining the non-excessive price ceiling for a drug?

No. The Board does not allow discounts and rebates paid to public insurers to be factored into the "ex factory" price of a drug for comparison purposes. Therefore, the comparison with foreign prices is a direct, appropriate and equitable comparison.

3. In your view, given today's pharmaceutical operating environment, is there a particular s. 85 factor that the Guidelines should prioritize or weigh more heavily in examining whether a drug is potentially excessively priced?

No. The factors should be applied flexibly and reasonably in the particular circumstances of each case. The Board cannot reasonably insist on applying a certain priority or criterion in all cases.

4. Should the PMPRB set its excessive price ceilings at the low, medium or high end of the PMPRB7 countries (i.e., the US, the UK, Sweden, Switzerland, Germany, France and Italy)?

There is no need to change the current method of establishing an excessive price ceiling.

5. Does the amount of research and development that the pharmaceutical industry conducts in Canada relative to these other countries impact your answer to the above question and if so, why?

No.

The extremely limited range of what is considered "research costs" for the purposes of the Board's determination makes any such comparison meaningless. As noted above, much meaningful research conducted in Canada is not considered "research costs" by the Board currently. To make "research costs" into a criterion for deciding how to approach these issues is an exercise that is not likely to be rooted in a realistic comparison of actual relative research and development.

Even assuming that an accurate and direct comparison could be made, the answers to the above questions are based on the *Patent Act* as it currently exists. Under that legislation, "research costs" may only be used in a very limited manner in determining whether the price of a medicine is "excessive", as stated in section 85(3). The Board is precluded from taking research costs into account in any other manner.

6. What alternatives to the current approach to categorizing new patented medicines (based on degree of therapeutic benefit) could be used to apply the statutory factors from the outset and address questions of high relative prices, market dynamics and affordability?

The "questions of high relative prices, market dynamics and affordability" are not factors relevant to the statutory exercise contemplated by the *Patent Act*, and taking the factors into consideration would transform the PMPRB from a body regulating "excessive" prices, to a body regulating prices generally.

As well as being contrary to the legislation as it currently exists, these criteria are particularly inappropriate for determining the prices of orphan drugs, which are by definition drugs used to treat ultra-rare and devastating diseases, and which, due to the rarity of the diseases in question and the extraordinary risks incurred in the creation of such therapies, require development costs that far outweigh the development costs of other medicines on a per-unit basis. If the prices of orphan drugs are judged on the basis of "high relative prices, market dynamics and affordability", it is likely that none would be found "affordable" in comparison with non-orphan medicines.

7. Should the PMPRB consider different levels of regulatory oversight for patented drugs based on indicators of risk of potential for excessive pricing?

No. Given that the "indicators for risk" under discussion in the proposal are cases in which a particular medicine has some therapeutic benefit, placing increased "regulatory oversight" over such drugs leads to perverse outcomes—it actively uses regulation to discourage innovation.

8. Should the price ceiling of a patented drug be revised with the passage of time and, if so, how often, in what circumstances and how much?

No. The current method of allowing CPI increases is adequate.

9. Should price discrimination between provinces/territories and payer types be considered a form of excessive pricing and, if so, in what circumstances?

Price "discrimination" (or, more accurately, "differentiation") is a function of the current Canadian system composed of multiple payers playing different roles in the Canadian healthcare system. Using the Board's price control mechanism to discourage or prohibit price differentiation will seriously impact that system, with policy effects that are difficult to predict and that go beyond the jurisdiction of the Board. The statutory jurisdiction of the Board is limited to control over excessive pricing, and does not include overall management of the Canadian healthcare system.

10. Are there other aspects of the Guidelines not mentioned in this paper that warrant reform in light of changes in the PMPRB's operating environment?

In general, the Guidelines should not interpret the legislation so as to find the price of a medicine "excessive" for reasons beyond a patentee's control. For example, a patentee ought not to be found to have sold a medicine for an "excessive" price because of foreign exchange rate fluctuations.

11. Should the changes that are made to the Guidelines as a result of this consultation process apply to all patented drugs or just ones that are introduced subsequent to the changes?

It would be wholly contrary to the basic principles of administrative law to apply a completely new regulatory regime retroactively. Companies have entered the Canadian market in good faith reliance on the existing regulatory system. To impose an entirely new system, which would result in the Board finding prices it has already approved to be "excessive" and seizing revenues already made as "excess revenues", would be purely confiscatory.

address 3100 Rutherford Road, Suite 300, Vaughan, Ontario, L4K 0G6, Canada tel +1.866.393.1188 fax +905.761.5289

alexion.com

12. Should one or more of the issues identified in this paper also or alternatively be addressed through change at the level of regulation or legislation?

Most of the proposals in the Discussion Paper are directly contrary to the existing legislation and *cannot* be enacted through modifying the *Guidelines*. Moreover, the proposals outlined are misguided, particularly in light of the specific considerations associated with the development of products for ultra-rare diseases.

…

Alexion would be pleased to elaborate on issues raised in this submission, and would be willing to make a representative available during the consultation process.

Yours very truly,

John Haslam
President and General Manager
Alexion Pharma Canada Corp.

address 3100 Rutherford Road, Suite 300, Vaughan, Ontario, L4K 0G6, Canada tel +1.866.393.1188 fax +905.761.5289

alexion.com