February 23, 2012 Decision: PMPRB-2010-D3-Copaxone

IN THE MATTER OF the *Patent Act* R.S.C. 1985, c. P-4, as amended

AND IN THE MATTER OF Teva Neuroscience G.P.-S.E.N.C. (the "Respondent") and the medicine "Copaxone"
REDETERMINATION

Introduction

1. These reasons pertain to a decision of the Patented Medicine Prices Review Board ("the Board") following a hearing into whether Teva Neuroscience G.P. – S.E.N.C., now Teva Canada Innovation ("Teva"), under sections 83 and 85 of the *Patent Act* (the "*Act*"), is selling or has sold the medicine known as Copaxone Syringe, Drug Identification Number ("DIN") 02245619 ("Copaxone Syringe") in any market in Canada at a price that, in the opinion of the Board is, or was, excessive and, if so, what order, if any, should be made.

2. Section 83 of the *Act* provides discretion to the Board to make orders once it reaches the conclusion that a patentee of an invention pertaining to a medicine is selling or has sold the medicine in any market in Canada at a price that, in the Board's opinion, is excessive. Central to this Redetermination is section 85, which outlines the factors to be assessed in making such a finding. The relevant portion of that section provides as follows:

> **85.** (1) In determining under section 83 whether a medicine is being or has been sold at an excessive price in any market in Canada, the Board shall take into consideration the following factors, to the extent that information on the factors is available to the Board:
> (*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; and
> (*e*) such other factors as may be specified in any regulations made for the purposes of this subsection.
> (2) Where, after taking into consideration the factors referred to in subsection (1), the Board is unable to determine whether the medicine is being or has been sold in any market in Canada at an excessive price, the Board may take into consideration the following factors:
> (*a*) the costs of making and marketing the medicine; and
> (*b*) such other factors as may be specified in any regulations made for the purposes of this subsection or as are, in the opinion of the Board, relevant in the circumstances.

Procedural History

3. On May 8, 2006, the Board issued a Notice of Hearing into whether the price of the patented medicine Copaxone Syringe was excessive. Copaxone Syringe is distributed in Canada by Teva who holds a patent pertaining to Copaxone Syringe and is thus subject to the price regulation provisions of the *Act*. A public hearing was held before a panel of the Board (the "First Panel") during which evidence was presented by the Staff of the Board ("Board Staff") and by Teva. Final submissions of Board Staff were made on June 27, 2007, and final submissions by Teva followed on August 13, 2007.

4. On February 25, 2008, the price of Copaxone Syringe was found to be excessive in accordance with the reasons issued.[1] A Board Order was issued on May 12, 2008, establishing the amount of the excessive revenues to be $2,417,223.29.[2] Together, the reasons and the order constitute the decision of the First Panel (the "First Decision").

5. Teva applied for judicial review of the First Decision to the Federal Court. In the result, Justice Hughes ordered that the matter be returned to the Board for redetermination, providing the following guidance:

> [76] Both the decisions of February 25, 2008, and May 12, 2008, will be set aside. The matter will be returned to the Board for redetermination preferably by a different panel if sufficient members can be provided for that purpose. In redetermining the matter the Board must consider all factors in section 85(1) and provide intelligible, clear reasons as to the consideration and weight given to each factor. If the Board is unable to reach a conclusion having regard to all factors under section 85(1) it must say so and then consider section 85(2) and provide intelligible, clear reasoning as to its consideration. The Board should not simply give lip service to these matters and arrive at the same result. The Board should give a thorough reconsideration of the matter without considering that it is in any way bound to arrive at the same result.[3]

6. Accordingly, the current hearing panel (the “Panel”) was struck to reconsider the matter. The Respondent and Board Staff were so informed on February 4, 2010.

7. The Panel asked the parties to make submissions on the impact of Justice Hughes’ decision. In particular, the Panel sought submissions on the procedure to be followed and the extent to which additional evidence would be permitted.

[1] PMPRB-06-D2-Copaxone – Merits, February 25, 2008
[2] PMPRB-06-D3-Copaxone – Board Order, May 12, 2008
[3] *Teva Neuroscience G.P.-S.E.N.C. v. Canada (Attorney General)* (2009 FC 1155)

8. The parties agreed that the evidence led before the First Panel would form part of the evidentiary record before this Panel. On September 15, 2010, Board Staff brought a motion to file additional evidence to supplement the existing evidentiary record.

9. On October 4, 2010, the Panel granted Board Staff leave to file additional evidence relating to the time period following the hearing before the First Panel to the hearing before this Panel: 2008 to 2010. The Panel permitted this evidence to be led in keeping with Justice Hughes' direction that the Panel conduct a thorough reconsideration. The Panel accepted Board Staff's argument to the effect that admitting evidence relating to the time period from 2008 to 2010 was the most efficient and responsible approach. The alternative was to address this time period in a subsequent hearing. Given that Board Staff was permitted to lead evidence relating to the time period from 2008 to 2010, the Panel determined that it would be prejudicial to Teva to immediately proceed to the hearing in this matter and provided Teva time to file additional evidence relating to the same time period. Teva applied for judicial review of this decision. On November 29, 2010, Justice Hughes dismissed Teva's application. Teva then submitted a significant amount of evidence covering the time period from 2008 to 2010.

10. In addition to the record that was before the First Panel, this Panel received *viva voce* evidence on March 9, 2011, as well as additional documentary exhibits, followed by oral argument on March 10 and 11, 2011. The matter was then reserved.

11. On May 27 2011, while this decision was on reserve, the decision in *ratio-Salbutamol HFA*[4] was released. That decision addresses in detail the relationship between the Board's Guidelines and the provisions of the *Act* for purposes of determining if a particular medicine is excessively priced, as well as how the application of the Guidelines effectively weighs all of the factors set out in section 85 of the *Act*. Given the relevance of the ratio-Salbutamol decision to this case, on June 9, 2011, the Panel invited the parties to make submissions, if they wished, on the impact, if any, of the ratio-Salbutamol decision on their respective positions. Both parties filed submissions which have been reviewed by the Panel.

12. In considering this matter, the Panel has carefully reviewed and considered the entirety of the evidentiary record outlined above.

[4] PMPRB-08-D3-ratio-Salbutamol HFA – Merits, May 27, 2011

The Issue

13. The Panel, pursuant to the Notice of Hearing dated May 8, 2006, is to determine if Teva "is selling or has sold a medicine known as Copaxone Syringe in any market in Canada at a price that, in the Board's opinion, is or was excessive and if so, what order, if any, should be made."

14. As a result of this Panel's October 4, 2010, ruling, the relevant time period applicable to the excessive pricing allegation is from 2002 to 2010.[5]

The Evidence

15. Copaxone Syringe was introduced into the Canadian market in May 2002. Used in the treatment of patients with multiple sclerosis ("MS"), it is designed to reduce the frequency of relapses.

16. Copaxone Syringe was not the first drug product that Teva had introduced in Canada to manage MS. In 1995, Teva applied for and received a patent for Copaxone Vial (DIN 02233014). At the time that Copaxone Vial was introduced in Canada in 1997, it was only available in one other country, the United States, and few MS therapies existed.

17. During the hearing before the First Panel, Jon Congleton, Teva Canada's General Manager, testified about the beneficial nature of Copaxone Vial for MS patients as well as the creation of Teva's patient care program called Shared Solutions.

18. Mr. Congelton testified that MS is an autoimmune disease that attacks the myelin, a protective covering wrapped around the nerves of the central nervous system. Persons with MS have relapses when the disease attacks the myelin and periods of remission when the effects of the disease are not manifest. During a relapse, the disease can negatively affect a wide spectrum of a person's functions, be they physical (e.g. dizziness, dysphagia, bladder dysfunction, etc.) or emotional (e.g. mood disorders such as bi-polar affective disorder). Mr. Congelton testified that Copaxone Vial is "an immunomodulator" which alters the immune cells, slowing the progression of the disability caused by MS, and thereby reducing the frequency of relapses.

19. Shared Solutions is a program that is designed to give MS patients the tools they require to manage their individual needs. It was created in response to the negative impacts of MS on different aspects of patients' lives, namely employment, marriage,

[5] Panel ruling entered into transcript of October 4, 2010 proceedings.

or other relationships, which can have further negative psychological, emotional, economic, and social consequences. In addition to providing toll-free support service, Teva developed an outreach program that actively connects with patients in order to provide guidance and gather feedback. Shared Solutions is staffed by registered nurses who understand the challenges of using an injection therapy and are also trained in helping patients cope with the broader psychological, emotional, and social implications of living with MS.

20. Shared Solutions was expanded after its introduction in 1997 and, at the time of the First Panel, was making monthly outbound calls to MS patients. The evidence is that from 1997 to 2004, Teva did not increase the price of Copaxone Vial from the initial price at introduction which had an Average Transaction Price ("ATP") of $36.00.

21. As noted, in 2002, Teva introduced Copaxone Syringe into the market. Health Canada issued a Notice of Compliance ("NOC") for Copaxone Syringe on March 20, 2002. The patent for Copaxone Syringe was issued on September 28, 2004. Teva continued to market Copaxone Vial until July 2004.

22. While both Copaxone Vial and Copaxone Syringe remained on the market for a time, the evidence of Mr. Congleton was that Copaxone Syringe introduced a number of improvements over Copaxone Vial. For example, he testified that the number of steps that each patient needed to take in order to administer the medicine was reduced from 18 steps with Copaxone Vial to 5 with Copaxone Syringe. His evidence is that this reduced the risk of wastage due to error and provided for a greater ease of administration.

23. Dr. Jean Godin, General Manager of Teva Canada Innovation, also testified with respect to the improvements of the Copaxone Syringe. However, it is important to note that the Panel did not receive any scientific evidence demonstrating that there was a therapeutic difference between the Copaxone Syringe and the Copaxone Vial.

24. As indicated above, Copaxone Vial and Copaxone Syringe have an individual DIN issued pursuant to the *Food and Drug Regulations*. The *Patented Medicines Regulations* (the "Regulations") require each patentee to file information respecting a patented drug for purposes of regulation under sections 80(1)(*a*) and 80(2)(*a*) of the *Act*.[6] On October 27, 2004, Teva made the required filing individually for each of Copaxone Vial (covering the period 1997-2004) and Copaxone Syringe (covering the period 2002-2004).

[6] Ss. 3, 4 *Patented Medicines Regulations* (SOR/94-688)

25. At introduction, the ATP for Copaxone Syringe was the same as the price for Copaxone Vial, namely $36.00. After Copaxone Vial was taken off the market in July of 2004, the ATP price for Copaxone Syringe steadily increased from its introductory price of $36.00 to $43.20 by 2010, an increase of $7.20, or, 20% in total during a time period when the average annual increase in the Consumer Price Index was 1.8% per annum.

26. In support of the proposition that the Board should find that this increase did not result in selling Copaxone Syringe at an excessive price, Mr. Congelton provided evidence to the effect that Copaxone Syringe was and remains the lowest priced product in the relevant Canadian market. He also testified that the increase has to be understood with reference to the fact that Teva had absorbed significant costs both in developing various improvements to the delivery mechanism for Copaxone Vial which led to the introduction of Copaxone Syringe, and in providing the additional outreach programs described above. The Panel received no specific evidence as to the costs of the changes in the delivery mechanism or the outreach programs. Mr. Congleton testified that while the price of Copaxone Vial had remained the same since 1997 and Copaxone Syringe was introduced in 2002 at the same price as Copaxone Vial, it was determined that this was no longer sustainable and that, as a result, Teva was faced with a number of choices. The options he outlined were:
    a) to cut Teva's patient care programs;
    b) to reduce Teva's research; or,
    c) to increase the price of Copaxone Syringe.

    Teva chose to increase the price.

27. The evidence of the price increases and the dialogue between Teva and Board Staff is relatively straightforward and is not in dispute.

28. At the time of the introduction of Copaxone Syringe, Board Staff concluded that it was a new DIN of an existing or comparable dosage form of an existing drug, namely Copaxone Vial. Therefore, Copaxone Syringe was a Category 1 drug pursuant to the Board's Excessive Price Guidelines (the "Guidelines").[7] This determined that the appropriate price test to be applied to Copaxone Syringe was the Reasonable Relationship Test. The test for determining excessive pricing for a Category 1 drug is set out as follows:

> 8.3 In addition to the Guideline applicable to all patented drug products detailed in Section 7, the introductory price of a Category 1 new drug product will be presumed to be excessive if it does not bear a reasonable relationship to the average price of other DINs of the same

[7] For more information on the categories of drugs see the PMPRB Compendium of Guidelines, Policies and Procedures, 2004: Chapter 3 – Scientific Review Procedures, section 3 Categories.

> medicine in the same or comparable dosage forms (Schedule 1).
>
> When the above methodology is not considered adequate or appropriate, Board Staff may conduct a Therapeutic Class Comparison Test (Schedule 2) to determine if the introductory price of the new DIN is excessive. This could be relevant if, for example, the new DIN has a therapeutic use or dosage regimen that differs materially from the other DINs of the same or comparable dosage forms of the medicine.
>
> While the introductory price of a Category 1 DIN will normally be compared against DINs of the same patentee, Board Staff may consider it appropriate in some instances to include DINs of other patentees. (For example, another voluntary licensee of the same patent as that pertaining to the new drug product, or a patentee marketing a drug product containing the same active ingredient as the new drug product but for which a different patent pertains.)[8]

29. By the application of this test, the pricing of Copaxone Syringe at introduction was not excessive as it was sold at the same price as Copaxone Vial.

30. Ginette Tognet, Director of the Compliance and Enforcement Branch[9] of the PMPRB, testified that the introductory price for Copaxone Syringe became the benchmark price for the periods following 2002 for purposes of assessing excessive pricing.

31. On April 27, 2004, and June 2, 2004, the governments of Saskatchewan and British Columbia, respectively, advised Board Staff of an increase in the price of Copaxone Syringe.

32. By letter dated July 27, 2004, Board Staff advised Teva that it had received a complaint with respect to the price increase of Copaxone Syringe. On August 20, 2004, Teva responded confirming that no patent had issued, thus implying that it was premature for the Board to regulate the price of Copaxone Syringe.

33. On September 28, 2004, the patent for Copaxone Syringe was issued. By letter dated October 21, 2004, Board Staff requested of Teva that it make its mandatory filings under the *Act*.

34. As noted above, Teva filed with the PMPRB all price and sales data individually for Copaxone Vial and for Copaxone Syringe.

35. As also noted above, on August 20, 2004, Teva made note of the fact that a patent had not issued for Copaxone Syringe at the time of its price increase. The significance of this is that at the time of the investigation into the price of Copaxone Syringe and the hearing before the First Panel, the Federal Court of Canada was

[8] PMPRB Compendium of Guidelines, Policies and Procedures, 2004: Chapter 1 – Excessive Price Guidelines, section 8 New Drug Products

[9] Now the Regulatory Affairs and Outreach Branch

considering a challenge to the Board's jurisdiction to determine excessive pricing in the period during which a patent had been applied for but not yet granted. This period is referred to as the “laid open” period during which the application is available for public inspection. In the case before the First Panel, both Copaxone Syringe and Copaxone Vial were available and sold at the same price during the laid open period. Accordingly, if the Board had jurisdiction in that time period and, given the identical nature of the drugs, any excessive price calculation for Copaxone Syringe would be based upon a benchmark price determined by reference to the price of Copaxone Vial as a Category 1 drug in accordance with the Reasonable Relationship Test.[10] However, if the Board did not have jurisdiction during the laid open period, then Copaxone Vial would no longer be available as a comparator because by 28 September 2004, it had been taken off the market. As such, any excessive price calculation at the time the patent was issued would have to be based upon treating Copaxone Syringe as a Category 3 drug and would result in the application of the Therapeutic Class Comparison Test ("TCC") in accordance with the pricing measurements set out in Schedule 2 of the Guidelines. [11]

36. It was thus anticipated by Board Staff that Teva would make the argument that prior to the date on which the patent for Copaxone Syringe issued, the Board did not have jurisdiction under the *Act* and that Copaxone Vial was not the appropriate comparator. Board Staff thus filed evidence of a TCC Test for Copaxone Syringe. It is important to stress that in the time since the First Panel’s consideration of this matter, it has been resolved that once the patent issues the Board has the authority to regulate the price of the medicine back to the period in which the patent is laid open.[12] Thus, going forward, Board Staff would not conduct a TCC Test in similar circumstances; rather, the appropriate test would be the Reasonable Relationship Test.

37. Board Staff called Dr. Mitchell Levine to testify in respect of the TCC Test that was carried out. Dr. Levine was qualified as an expert, without objection, in the areas of clinical evaluation of drug products, evidence-based medicine and the evaluation of scientific literature.

38. Dr. Levine testified that the Human Drug Advisory Panel (HDAP) was asked in October 2006 to conduct a TCC Test in this case and provide the Board with advice and recommendations regarding the appropriate comparators and dosage regime for Copaxone Syringe. Dr. Levine testified that the HDAP was not asked to look at Copaxone Vial as it was no longer on the market.

[10] PMPRB Compendium of Guidelines, Policies and Procedures, 2004: Schedule 1 – Reasonable Relationship Test
[11] PMPRB Compendium of Guidelines, Policies and Procedures, 2004: Schedule 2 – Therapeutic Class Comparison Test
[12] See *Shire BioChem Inc. v Canada (Attorney General),* (2007 FC 1316)

39. He described the TCC Test as a methodology to determine which drugs are therapeutic comparators at the time the test is performed. The HDAP is not concerned with the pricing of drugs. Rather, it assesses which drugs have similar therapeutic purposes and characteristics such that they can be considered to be in the same therapeutic class. Dr. Levine testified that the assessment of which drugs would be in the same therapeutic class as Copaxone Syringe was undertaken in accordance with section 9 of the Guidelines:[13]

> 9.2 Comparable medicines are clinically equivalent in addressing the approved indication that is anticipated to be the primary use of the new drug product under review. The PMPRB refers to the World Health Organization (WHO) Drug Utilization Research Group's Anatomical Therapeutic Chemical Classification System (ATC) as the starting point for the selection of comparable medicines.
>
> 9.3 Comparable medicines will typically be those identified under the ATC classification system at the sub-class level above the single chemical substance. This will normally be the fourth sub-class level. If the appropriate comparable medicines are not identified at this level, then the PMPRB may choose from the next higher sub-class or another sub-class. In some instances, it may be appropriate to select from the fifth or single chemical substance level. Selection criteria will include the indication and therapeutic use, and could include other factors such as mode of action, spectrum of activity or chemical family.
>
> 9.4 The PMPRB may omit from the comparison a chemical substance or a drug product of the same ATC therapeutic class as the drug product under review if, in the panel's [HDAP] or Board Staff's opinion, it is not clinically equivalent or is unsuitable for comparison. For example, drug products with primary uses other than to address the indication anticipated to be the primary use of the drug product under review may be omitted from the comparison. Similarly, the PMPRB may choose to add products from other ATC classes if they are clinically equivalent for the appropriate indication to the drug product under review.

40. For the purposes of conducing a TCC Test, the HDAP's review determined that the following drugs were therapeutic comparators for Copaxone Syringe:[14]

Drug Product	Dosage
Copaxone Syringe	20ug SC Daily (28 doses)
Avonex (interferon beta – 1a)	30ug IM once weekly (4 doses)
Rebif (interferon beta – 1a)	44ug (12 MU) SC 3 times weekly (12 doses)
Betaseron (interferon beta – 1b)	0.25 (8 MU) SC q 2 days (14 doses)

41. Dr. Levine agreed with Board Staff's characterization of Copaxone Syringe as a Category 1 drug at introduction in 2002 for the following reasons:

[13] PMPRB Compendium of Guidelines, Policies and Procedures, 2004: Chapter 3 – Scientific Review Procedures, section 9 Selection of Comparable Drug Products

[14] These are not interchangeable products for Copaxone Syringe, that is to say they are not identical.

> Because at the time, both products were available, the vial and the syringe, when the syringe was being introduced. And when you have a new DIN of a drug that is already existing in a comparable dosage form then in fact it is a Category 1 drug and we would agree with that. And that would be our assessment that it was a category 1 at the time, it would have been, yes.[15]

42. We accept the evidence of Dr. Levine on this issue. Indeed, it was not challenged by Teva's counsel who asked no questions of Dr. Levine. As noted, Copaxone Vial remained on the market until July 2004.

43. The evidence established that the Average Transaction Price (ATP) for Copaxone Syringe was as follows over the years 2003 to 2010 (annual percentage increase in parentheses):[16]
    a) 2003 - $36.00
    b) 2004 - $38.6038 (7.23% increase)
    c) 2005 - $40.9029 (5.96% increase)
    d) 2006 - $41.0145 (0.27% increase)
    e) 2007 - $41.1977 (0.45% increase)
    f) 2008 - $42.076 (2.13% increase)
    g) 2009 - $43.1989 (2.67% increase)
    h) 2010 - $43.20 (0.003% increase)

44. The evidence also established that from 2002 to 2010, Copaxone Syringe was the lowest priced of the comparators identified by HDAP in the TCC. Furthermore, according to Board Staff's evidence, Copaxone Syringe was priced lower in Canada than in other countries excepting 2006.

45. Finally, the evidence establishes that the price increases of Copaxone Syringe were in excess of the amounts permitted with reference to the CPI-Adjustment Methodology as described in Schedule 4 of the Guidelines. The benchmark price for the calculation of the Maximum Non-Excessive price ("MNE") is the price at introduction, here, $36.00. The following table sets out, in dollars per unit, the extent to which the actual ATP of Copaxone Syringe exceeded the MNE as determined by the CPI-Adjustment Methodology set out in Schedule 4.[17]

YEAR	MNE (allowable % increase)	ATP (actual % increase)	Excess ATP
2002	36.00	36.00	0.00
2003	36.00 (0.0%)	36.00 (0.0%)	0.00

[15] Transcript of February 5, 2007 Proceedings, p. 224 – 225
[16] Board Staff Reply Productions, February 23, 2011, Tab 1
[17] Compendium of Guidelines, Policies and Procedures, 2004: Schedule 4 – CPI-Adjustment Methodology

YEAR	MNE (allowable % increase)	ATP (actual % increase)	Excess ATP
2004	37.008 (2.8%)	38.6038 (7.23%)	1.5958
2005	37.188 (0.49%)	40.9029 (5.96%)	3.7149
2006	38.1921 (2.7%)	41.0145 (0.27%)	2.8224
2007	38.232 (0.10%)	41.1977 (0.45%)	2.9657
2008	39.3752 (2.99%)	42.076 (2.13%)	2.7008
2009	40.7128 (3.4%)	43.1989 (2.67%)	2.4861
2010	41.2685 (1.36%)	43.2 (0.003%)	1.9315

The Position of the Parties

46. Board Staff's position was articulated by its counsel during submissions as follows:

> This case deals with an allegation by Board Staff regarding the price of Copaxone Syringe -- and I will give it to you the first time, because it's relevant to my argument. The medicine that we are talking about is Copaxone Syringe which has the DIN number 02245619. I will refer to it as Copaxone Syringe…

47. He continued:

> Let me start with my first area that I wanted to address, which was to provide an overview of how drugs are regulated at the DIN level, both under the Act and the Guidelines, because in this case, when we review the evidence, and particularly the evidence from the first set of hearings, the distinction was sometimes blurred between two different medicines, Copaxone Vial and Copaxone Syringe, and the price of each medicine.
>
> In my submission, the Board regulates at the DIN level, and it is very important to understand that distinction, because the Patentee's witnesses in this case, in my respectful submission, attempted to blur that distinction.

48. Board Staff argues that the pricing of Copaxone Vial is immaterial to this case except and insofar as that price formed the basis for the determination of the Reasonable Relationship Test at the time Copaxone Syringe was introduced. This test, Board Staff points out, establishes that the price of Copaxone Syringe at introduction was not excessive.

49. As for the evidence that Copaxone Syringe was the lowest priced drug relative to its competitors, Board Staff argues that is only the case if one is applying the TCC Test to determine the price for a Category 3 drug. Board Staff argues that the TCC Test is only applicable when the Reasonable Relationship Test cannot be used or is inappropriate. In this case, Board Staff submits that applying the TCC Test to determine the excessive pricing issue is incorrect because the uncontested medical opinion evidence from Dr. Levine is that Copaxone Syringe was a Category 1 drug at introduction. Thus, the Reasonable Relationship Test was applicable and was

applied. Board Staff argued that it therefore follows that the TCC Test is immaterial in determining the excessiveness allegation.

50. Board Staff emphasizes that the relevant inquiry is the pricing of Copaxone Syringe from the point of introduction in 2002 up until 2010, and further argues that the application of the CPI-Adjustment Methodology as set out in the Guidelines leads to the conclusion that Copaxone Syringe was excessively priced.

51. By contrast, Teva argues that the relevant consideration is the pricing of Copaxone Vial through to the introduction and continued sale of Copaxone Syringe. Their position is that the two products ought to be considered as one for purposes of determining excessive pricing. They argue that the pricing history of the two Copaxone products must be taken into account as a whole. They emphasize the fact that the price was maintained constant for many years and when the price was finally increased, Copaxone Syringe was the lowest priced amongst its therapeutic comparators. Teva essentially argues that Copaxone Syringe cannot be excessively priced as it is the lowest priced drug in the marketplace.

52. As well, Teva emphasizes that it is unfair to be penalized by an excessive price finding when considerable costs were expended to provide significant improvements to the delivery mechanism of Copaxone Vial. Teva argues that, in reality, Copaxone Vial and Copaxone Syringe are the same medicine and the determination of the excessive pricing allegation must take into account the pricing history of both.

53. As for the fact that they each have a different DIN, counsel argues that the *Act* makes no reference to the DIN. Indeed, the *Act* only references "the medicine". In its submission on this point, counsel urges us to take a broad view of the meaning of "the medicine", untethered from the notion that the Board regulates at the DIN level.

54. Teva also stresses that in this case, the evidence provided by the TCC Test cannot be ignored. It is argued that it must be given appropriate weight and will lead to the inescapable conclusion that Copaxone Syringe was not excessively priced as it was the lowest priced in the therapeutic class.

55. Both parties made submissions on the significance of the Guidelines. They both agree that the Guidelines are not binding. However, Board Staff argues that the Guidelines are important and do have an impact on the determination of excessive pricing allegations. They point out that the Guidelines are the product of extensive industry consultation and that their application provides for predictability and transparency.

56. Teva says that the *Act* is controlling and should be the sole basis for this review. It is argued that the Panel should not mechanically apply the Guidelines because they fail to provide sufficient flexibility.

Analysis

i) The Factors in Section 85

57. Subsection 85(1) of the *Act* sets out the factors that the Board must take into account in determining whether a particular medicine is being or has been sold at an excessive price in any market in Canada. Those factors are:

> (*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; and
> (*e*) such other factors as may be specified in any regulations made for the purposes of this subsection.

58. Only if the Panel is unable to arrive at a decision with reference to the foregoing factors is it to consider the following factors as set out in subsection 85(2) of the *Act* which provides:

> …the Board may take into consideration the following factors:
> (*a*) the costs of making and marketing the medicine; and
> (*b*) such other factors as may be specified in any regulations made for the purposes of this subsection or as are, in the opinion of the Board, relevant in the circumstances.

59. The Panel has determined that there is no need to resort to subsection 85(2) in this case as it was possible to decide this case with reference to the factors in subsection 85(1). Furthermore, the Panel has determined that it has insufficient evidence before it to draw conclusions as to the level of improvement between Copaxone Vial and Copaxone Syringe and the costs of those improvements.

60. Before turning directly to a review of the subsection 85(1) factors, it is important to address the relationship between those factors and the Guidelines.

ii) The Relationship Between the Factors in the Act and the Guidelines

61. As noted above, there is a dispute about the manner in which the Guidelines can be used to assist in determining the issues in this case. Recently, in *ratio-Salbumatol*

HFA[18], the Board set out a helpful articulation of the relationship between the Guidelines and the *Act* and, specifically, the manner in which the former provides for a weighing of all the factors in the *Act*. The Panel agrees with these statements:

> 128. Under subsection 85(1) of the *Act,* the price of a medicine can be excessive in two separate ways: (i) relative to the prices of comparable medicines; and (ii) relative to its own price in prior periods. The Board's Guidelines take the factor stipulated in paragraph 85(1)(*a*), the price of the medicine in Canada, and consider that price relative to the two comparative factors stipulated in paragraphs 85(1)(*b*) and (*c*), the prices of domestic comparators and the international prices of the medicine itself, and the temporal factor in paragraph 85(1)(*d*), changes in the CPI during the time that the medicine is marketed in Canada. The Guidelines as they existed during the relevant periods did not account for tests based on the international prices of comparators, but a panel of the Board in a hearing will weigh that factor in its consideration of whether or not the price of the medicine is or has been excessive, as was done in this case.
>
> 129. The Guidelines combine the three factors by which subsection 85(1) of the *Act* instructs the Board to assess the price of a medicine in Canada by (i) establishing an initial non-excessive price for a medicine by reference to the prices of comparable medicines; and (ii) establishing its non-excessive price in subsequent periods by reference to increases in the CPI. Accordingly, the application of the Guidelines results in all of the factors in subsection 85(1) being considered and weighed in the analysis of whether or not ratio HFA has been excessively priced.

62. As this passage demonstrates, the Guidelines incorporate the factors set out in subsection 85(1) of the *Act* and provide a useful framework by which the factors set out therein can be considered. The Guidelines serve to provide predictability and transparency to the regulation of prices of patented medicines. Moreover, they have the legitimacy of being the result of extensive consultations with all stakeholders.

63. Further, the Panel agrees with the following statements in *ratio-Salbumatol HFA*[19] outlining the purpose of the Guidelines in the normal course:

> 56. A decision of the Board under subsection 83(1) of the *Act* is discretionary in that the Board is required to formulate an opinion whether a medicine is sold or has been sold in any market in Canada at an excessive price. In formulating such an opinion, the Board is required to take into consideration the factors enumerated in subsection 85(1) and no others, unless the Board is unable to make a decision on those factors and thus needs to consider the factors set out in subsection 85(2) of the *Act.* Subsection 85(1), however, provides only basic factors and limited guidance to the Board in determining excessive pricing.
>
> 57. The Board's Guidelines are intended to implement subsection 85(1) of the *Act* by providing parameters and information on how the Board, in the normal course, will assess the factors in subsection 85(1) to make a determination of excessive pricing. The Guidelines were issued by the Board after consultation with its stakeholders and are periodically

[18] see *supra* note 2
[19] see *supra* note 2

> updated after further consultations. Pursuant to subsection 96(4) of the *Act,* the Guidelines are not binding on the Board or on any patentee. However, they provide detailed and comprehensive guidance and predictability to patentees, as well as transparency and consistency in the discharge of the Board's mandate.
>
> 58. As recently as December 21, 2009, in PMPRB-07-D5 Quadracel and Pentacel ("Quadracel"), a panel of the Board emphasized that it has been recognized by all prior panels of the Board, and by the Federal Court, that a panel, when considering whether a medicine is being sold or has been sold at an excessive price, can give due consideration to the Board's Guidelines.

64. Finally, it is important to stress that while the Guidelines are not binding, the rationale, approach, or methodology for the factors in subsection 85(1) may be derived from the Guidelines. Justice Rothstein[20] makes this point as follows:

> 6. The applicants say the Board could not have regard to its Guidelines under subsection 85(1) as the Guidelines are not an enumerated factor in the subsection. However, each factor listed in subsection 85(1) is not an abstract concept that would be useful in a vacuum. The Board is obviously required to consider the factors in subsection 85(1) according to some rationale, approach or methodology. The rationale, approach or methodology may be ad hoc or may be derived from the Board's Guidelines. That it had regard to the Guidelines for rationale, approach or methodology did not take the Board outside of the scope of subsection 85(1).

65. With this background, we turn to a consideration and weighing of the factors enumerated in subsection 85(1) of the *Act*.

iii) Paragraph 85(1)(a)

66. Paragraph 85(1)(*a*) requires the Board to consider the prices at which the medicine has been sold in the relevant market. The first point for the Panel to resolve is the difference between the parties as to what medicine is actually at issue in this case for purposes of this paragraph. The Panel is of the view that the submissions of Board Staff are correct on this point and that the medicine at issue is Copaxone Syringe.

67. The Board regulates medicines at the DIN level. The entire regulatory regime is premised upon that fact. It follows, then, that the pricing history of Copaxone Vial is immaterial to our assessment of the allegation of excessive pricing of Copaxone Syringe.

68. At introduction in 2002, the price of Copaxone Syringe was not excessive as it was sold at the same price as Copaxone Vial. This is the result of the application of the

[20] As he then was sitting in the Federal Court, *ICN Pharmaceuticals, Inc. v. Canada* (Patented Medicine Prices Review Board) (1996), 69 C.P.R. (3d) 129, [1996] F.C.J. No. 1112, at paragraph 6

Reasonable Relationship Test. The ATP was $36.00.

69. The ATP of Copaxone Syringe increased in subsequent years as follows:[21]

a) 2003 - $36.00
b) 2004 - $38.6038 (7.23% increase)
c) 2005 - $40.9029 (5.96% increase)
d) 2006 - $41.0145 (0.27% increase)
e) 2007 - $41.1977 (0.45% increase)
f) 2008 - $42.076 (2.13% increase)
g) 2009 - $43.1989 (2.67% increase)
h) 2010 - $43.20 (0.003% increase)

iv) Paragraph 85(1)(b)

70. Paragraph 85(1)(*b*) requires the Board to consider the price of Copaxone Syringe in relation to the prices of its domestic comparators.

71. In 2004, two significant events occurred. First, Copaxone Vial was removed from the market, thereby removing the closest comparator to Copaxone Syringe. Second, as indicated previously, at the time of the investigation and the First Panel, there was uncertainty as to whether the Board had jurisdiction over patents in the laid open period.[22] Because of this uncertainty and the removal of Copaxone Vial from the market, Board Staff, in preparation for the First Panel, conducted a TCC test. This test identified the comparators for Copaxone Syringe, all of which were higher in price.

72. As also mentioned previously, Board Staff does not typically conduct a new TCC Test subsequent to introduction. In this case, a decision was made to conduct a TCC Test solely because of the then unresolved jurisdictional issue. The Panel reiterates that there is no longer any uncertainty as to the Board's jurisdiction and that Board Staff would not apply the TCC in similar circumstances. Nothing in these reasons should be taken as stating otherwise. Indeed, any other conclusion would impose an excessive administrative burden given that Board Staff administers some 1,200 DINs.

73. However, the fact that the TCC Test was completed forms part of the record before the Panel and is something that the Panel is entitled to and does rely upon.

[21] Board Staff Reply Productions, February 23, 2011, Tab 1
[22] See paragraphs 35 and 36

The effect of the TCC test is to identify Copaxone Syringe as the lowest priced medicine in its class relative to its nearest comparators after 2004.

74. Teva relies upon the fact that Copaxone Syringe was the lowest priced medicine in its therapeutic class to argue that it was not excessively priced. In the Panel's view, the information that Copaxone Syringe was the lowest priced medicine is an important consideration though, in weighing this factor, it is important to state that the relevant period of time is the eight years from 2002 to 2010. Further, until 2004, the closest comparator was Copaxone Vial and would have remained as such had it not been taken off the market. It was the same price as Copaxone Syringe while both were on the market.

v) Paragraph 85(1)(c)

75. When information is available, the Panel is to consider the price of the medicine in two ways. First, the Panel is to compare the domestic price of the medicine with the price of the same or comparable medicines sold internationally. Second, the Panel is to compare the domestic price with the price of medicines that are in the same therapeutic class sold in the seven comparator countries listed in the Regulations.

76. According to Teva's data, Copaxone Syringe was priced lower in Canada than in other countries for the years 2004-2010. Board Staff's data is largely to the same effect, excepting 2006. According to Board Staff, the price in Canada was not the lowest in 2006. This seems to be an anomaly which does not detract from the fact that Copaxone Syringe in Canada was consistently the lowest priced medicine.

77. While the Panel has taken this factor into consideration, in our view, on the evidence before us, it is of limited application as compared to the other factors for determining whether the drug is excessively priced in Canada. This is because the evidence led on this factor suffers from a degree of imprecision relative to the evidence led in respect of the other factors. The comparator drugs' prices are not from Canada and as such might be affected by exogenous factors such as a different regulatory regime, different income levels, and different health and other socio-economic factors.

vi) Paragraph 85(1)(d)

78. This factor requires that the Panel consider changes in the Consumer Price Index. In the normal course, Schedule 4 to the Guidelines provides for the assessment of the actual increases in the ATP of the medicine relative to allowable increases as calculated by the CPI-Adjustment Methodology. Under this approach, the benchmark price at introduction becomes the MNE upon which increases in price

are calculated in accordance with the allowable increases provided for by the CPI-Adjustment Methodology formula.

79. In this case, the MNE of Copaxone Syringe at introduction was $36.00. Accordingly, it follows that on the evidence presented, the ATP increases for Copaxone Syringe exceeded the MNE. For convenience we reproduce the chart previously set out in these reasons:

YEAR	MNE (allowable % increase)	ATP (actual % increase)	Excess ATP
2002	36.00	36.00	0.00
2003	36.00 (0.0%)	36.00 (0.0%)	0.00
2004	37.008 (2.8%)	38.6038 (7.23%)	1.5958
2005	37.188 (0.49%)	40.9029 (5.96%)	3.7149
2006	38.1921 (2.7%)	41.0145 (0.27%)	2.8224
2007	38.232 (0.10%)	41.1977 (0.45%)	2.9657
2008	39.3752 (2.99%)	42.076 (2.13%)	2.7008
2009	40.7128 (3.4%)	43.1989 (2.67%)	2.4861
2010	41.2685 (1.36%)	43.2 (0.003%)	1.9315

80. The Panel accepts the submission that Copaxone Syringe was excessively priced, as the price increases exceeded the permissible increases as calculated by the CPI-Adjustment Methodology. The Panel considers that the Board's rationale for the CPI-Adjustment Methodology is relevant to our review of paragraph 85(1)(*d*). It constitutes an important protection from sudden and significant price increases and it should be given considerable weight in this case. The Panel considers the following statement in the *ratio-Salbutamol HFA* decision to apply equally to this case:

> 84. [The CPI-Adjustment Methodology] is intended to moderate the extent to which a patentee may increase the price of a medicine from year to year. The Panel concludes that it should be given considerable weight in this case, where the price of a widely-used patented medicine was increased suddenly and significantly in 2004 in circumstances that, in the Panel's view, did not warrant such an increase.

81. Furthermore, even if the Panel were to refer to the actual Consumer Price Index during this period (see paragraph 25), the same conclusion would follow. Thus, with reference to this factor, Copaxone Syringe is excessively priced.

vii) Summary

82. In the Panel's view, it is important to recognize that the determination of excessive pricing includes an analysis of both the relative price of the medicine within the market (domestically and internationally) and the price increases of the medicine relative to the introductory price. In the Panel's view, paragraph 85(1)(*d*) provides protection for the public which complements the limits that paragraphs 85(1)(*b*) and (*c*) place on relative pricing within the marketplace.

83. Here, the evidence establishes that following the removal of Copaxone Vial, Copaxone Syringe became the lowest priced medicine relative to its therapeutic comparators as identified by the TCC Test. However, in the period following 2004, the impact of the price increases that were imposed upon the consumer exceeded the protection that Parliament has provided. There is no evidentiary basis in this case to justify ignoring this impact on consumers that was both sudden and significant. Taking all the factors into account, the Panel concludes that Copaxone Syringe was excessively priced.

Remedy

84. The Panel has a broad discretion under subsection 83 of the *Act* to fashion a remedy for excessive pricing. For example, the Panel has discretion to depart from the CPI-Adjustment Methodology formula when calculating excessive revenues. The Panel specifically sought assistance from the parties as to the appropriate remedy should the Panel reach the conclusion outlined in paragraph 83 of this decision. Teva submitted that there ought to be no monetary payment in light of the history of Copaxone Vial and Copaxone Syringe. Board Staff argued for the application of the CPI-Adjustment Methodology.

85. The Panel is not prepared to decide that there ought to be no monetary payment nor is it prepared to make an order that offsets the total excess revenues over and above the allowable increase in accordance with the CPI-Adjustment Methodology as provided for in the Guidelines. Rather, it is our view that in the specific circumstances of this case, the correct result requires the Panel to depart from the Guidelines and to make an order based upon its consideration and weighing of the factors in subsection 85(1). As indicated, our conclusion is that after 2004, Copaxone Syringe became the lowest priced medicine relative to its therapeutic price comparators but also that the price increase was both sudden and significant. Thus, the remedy must seek a balance between both of these factors.

86. It is our view that the actual price increase of $7.20 per unit in the Copaxone Syringe should be spread equally over a four year period ($1.80/year added to the MNE

each year) rather than over the much longer time period that would result if we were to follow the CPI-Adjustment Methodology in the Guidelines (see paragraphs 45 and 79 of this decision). This approach has the impact of permitting larger percentage increases than would be allowed under either the actual Consumer Price Index or the CPI-Adjustment Methodology in the Guidelines (see paragraphs 25, 45, and 79 of this decision) for the years 2004 through 2007. The remedy, expressed in percentage terms, affords Teva a 5% increase (versus CPI-Adjustment Methodology increase of 2.8%) for 2004, a 4.76% increase (versus CPI-Adjustment Methodology increase of 0.49%) for 2005, a 4.55% increase (versus CPI-Adjustment Methodology increase of 2.7%) for 2006, and a 4.35% increase (versus CPI-Adjustment Methodology increase of 0.10%) for 2007.

87. Applying this approach, it is clear that Teva exceeded the allowable price increase in both 2004 and 2005 for Copaxone Syringe. For those two years, the CPI-Adjustment Methodology allowed for a total increase of 3.30%. The accelerated approach outlined in paragraph 86 provides for a total increase of 10.0%, while the actual increase in the ATP of Copaxone Syringe was 13.62%. The differences between Copaxone Syringe's ATPs and the new MNEs constitute excessive revenue due to sudden and significant increases in price. Copaxone Syringe's ATP was below the new MNE for 2006 and 2007 and thus there is no excessive revenue attributable to those years. The following chart outlines the outcome of this approach:

Year	New MNE (allowed annual % increase)	ATP (actual annual % increase)	Excess Price/Unit (Difference between the ATP and the New MNE)	Annual Quantities (units)	Annual Excess Revenues
2003	$36.00	$36.00	Nil		Nil
2004	$37.8 (5.0%)	$38.6038 (7.23%)	0.0804	1,280,367	$1,029,159
2005	$39.6 (4.76%)	$40.9029 (5.96%)	1.303	1,360,140	$1,772,126
2006	$41.4 (4.55%)	$41.0145 (0.27%)	0.0	1,464,102	0.0
2007	$43.20 (4.35%)	$41.1977 (0.45%)	0.0	1,575,555	0.0
Total					$2,801,285

On the facts before us, the ATP for 2010 was $43.20. The appropriateness of any subsequent price increase should be determined with reference to this price.

88. Accordingly, taking all the aforementioned factors into account, the total amount of excess revenues to be offset for the time period up to and including 2010 is $2,801,285.00.

Conclusion

89. In the Panel's view, Copaxone Syringe was excessively priced for the period 2004-2010 taking into account all the factors set out in section 85(1).

90. The Panel therefore orders that the MNE for Copaxone Syringe sold by Teva for the period 2002-2010, and the amount to be paid to the Crown by Teva to offset excess revenues derived from such sales, pursuant to paragraph 83(2)(*c*) of the *Act*, is as set out in this decision. The Panel requires that Teva reimburse the excess revenues on or before March 26, 2012. A corresponding Order accompanies these Reasons.

Board Members:	Anne Warner La Forest Anthony Boardman
Board Counsel:	Anil K. Kapoor

Appearances

Board Staff:	David Migicovsky, Counsel Christopher Morris, Counsel
For the Respondent:	Brad Elberg, Counsel Trevor Guy, Counsel

Original signed by

Sylvie Dupont
Secretary of the Board