Patented Medicine Prices Review Board

Conseil d'examen du prix des médicaments brevetés

Compendium of Policies, Guidelines and Procedures, June 2009

Implementation: January 1, 2010

Regulatory Affairs and Outreach Branch

Montreal, Quebec
October 28, 2009

Toronto, Ontario
October 29, 2009

Canada

Overview

- Introduction
- Review of main issues from Guidelines and Procedures
  - Scientific review
  - Introductory Price Tests
  - HIPC test
  - Any market review
  - Offsetting excess revenues
  - DIP methodology

Scientific review

HDAP Process

- Patentee submission must be received by PMPRB 2 months prior to HDAP meeting
- HDAP meetings: Increased frequency (5 in 2011)
- HDAP members: 6 starting in February 2010
- HDAP report sent to patentee approx. 2 weeks after meeting

Scientific review

HDAP Report will provide recommendations on:

- level of therapeutic improvement
  - including explanation on application of primary and secondary factors and evidence relied upon
- drugs to be used for comparison purposes
- comparable dosage regimens

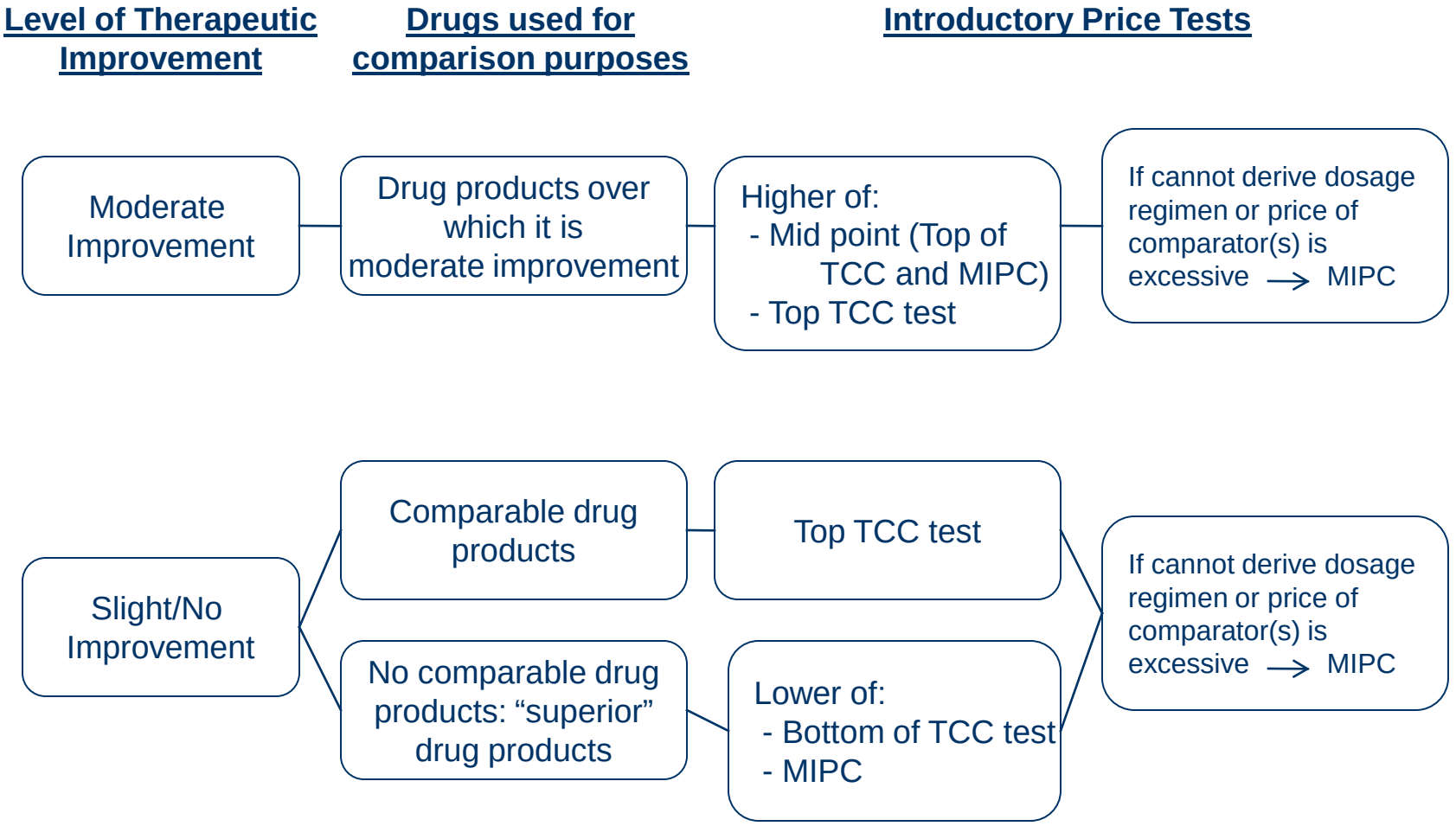
Scientific Review: Level of Therapeutic Improvement

- **Breakthrough**: A breakthrough drug product is the first one to be sold in Canada that treats effectively a particular illness or addresses effectively a particular indication.
- **Substantial Improvement**: A drug product offering substantial improvement is one that, relative to other drug products sold in Canada, provides substantial improvement in therapeutic effects.
- **Moderate Improvement**: A drug product offering moderate improvement is one that, relative to other drug products sold in Canada, provides moderate improvement in therapeutic effects.
- **Slight or No Improvement**: A drug product offering slight or no improvement is one that, relative to other drug products sold in Canada, provides slight or no improvement in therapeutic effects.

Introductory Price Tests

Level of Therapeutic Improvement	Drugs used for comparison purposes	Introductory Price Tests
Breakthrough	None	MIPC
Substantial Improvement	Drug products over which it is substantial improvement	Higher of: - Top TCC test - MIPC

Introductory Price Tests



Introductory Price Test

Slight or no Improvement	Drugs used for comparison purposes	Intro Price Test
New presentation of existing drug product(s)	-Same active ingredient -Same indication/use -Same or comparable dosage form - Regardless of dosage regimen	-RR test if same dosage regimen -TCC test if different dosage regimen
Combination Drug Products	Component parts	TCC test (sum of component parts)
Bioequivalent Generic Licensee Generic	Brand name drug product	TCC test

Public Price Sources

- Six price sources will be consulted:
  - Association québécoise des pharmaciens propriétaires (AQPP)
  - IMS Health: Drug Store and Hospital Purchases published in June and December every year (not the Regional Report)
  - McKesson Canada: 10 volumes (1 per province) published in January and July each year
  - Ontario Drug Benefit (ODB) Programs;
  - PPS Pharma; and,
  - Régie de l'assurance maladie du Québec (RAMQ)

- Prices taken for consideration are the ones published prior to the date of first sale

03000 ANALGESICS, PROPRIETARY

	DRUG STORES						HOSPITALS						YTD COMBINED				MAT COMBINED			
	JUNE 2008			ACCUMULATION			JUNE 2008			ACCUMULATION			YTD 2008		% VAR	08/07			% VAR	08/07
	UNITS	$000S	%	UNITS	$000S	%	UNITS	$000S	%	UNITS	$000S	%	$000S	%	VOL.	SHARE	$000S	%	VOL.	SHARE
03100 ANALG, PTY, INTERNAL																				
PENDOPHARM																				
ASAPHEN 05/95 CONT.																				
CHEW TAB 81MG 120		1	0.00	.3	3	0.00		-	0.00		-	0.00	3	0.00	-83.2		5	0.00	-95.1	
DR TAB 81MG 30 EC 07/00		-	0.00	.1	1	0.00		-	0.00		-	0.00	1	0.00	-91.6		1	0.00	-99.1	
ENTROPHEN 01/67		310	1.92		2,032	2.15		29	8.69		173	8.52	2,204	2.28	-13.1	-24.0	4,953	2.71	66.3	51.3
DR TAB 81MG 120 ENTERIC COAT	7	65	0.40	51.0	446	0.47	2	18	5.58	13.0	121	5.98	567	0.58	-8.5	-20.4	1,485	0.81	135.1	111.7
EC TAB 325MG 1000 01/67	3	80	0.50	17.6	522	0.55		-	0.12	.1	3	0.13	525	0.54	-.8	-12.8	1,066	0.58	66.1	51.9
DR TAB 81MG 180 ENTERIC COAT	9	98	0.60	41.7	472	0.50	1	8	2.51	3.0	34	1.69	506	0.52	-14.5	-25.5	1,234	0.67	101.8	84.9
DR TAB 81MG 225 (180+45) BNS	1	6	0.03	17.6	201	0.21		-	0.00	.6	6	0.31	208	0.21	36.2	16.2	244	0.13	60.1	42.1
EC TAB 325MG 100 01/67	5	28	0.17	33.9	178	0.18		-	0.00	.1	-	0.01	179	0.18	-42.6	-49.3	422	0.23	-21.5	-27.7
DR TAB 81MG 30 ENTERIC COATE	3	10	0.06	22.5	80	0.08		1	0.40	2.1	5	0.26	85	0.08	-28.8	-41.4	167	0.09	39.7	26.7
CHEW TAB 81MG 120 01/07	2	16	0.10	9.0	78	0.08		-	0.05	.2	2	0.10	80	0.08	-36.2	-41.4	220	0.12	75.6	66.7
EC CAPLET 325MG 100 10/94	1	6	0.03	7.9	44	0.04		-	0.00		-	0.00	44	0.04	-39.1	-47.1	94	0.05	-34.4	-35.3
CHEW TAB 81MG 30 01/07	1	2	0.01	4.1	11	0.01		-	0.00		-	0.00	11	0.01	-33.3		21	0.01	30.6	
ACET 160 04/94		18	0.11		134	0.14		-	0.14		4	0.20	138	0.14	21.1	7.4	243	0.13	10.9	
SUPP 160MG 12 04/94	2	17	0.10	17.4	125	0.13		-	0.13	.5	4	0.19	129	0.13	22.0	8.0	229	0.12	12.0	
SUPP 160MG 4 01/98		1	0.00	2.7	9	0.00		-	0.00	.1	-	0.00	9	0.00	9.4		15	0.00	-4.7	
ACET 325 04/94		8	0.04		76	0.08		7	2.18		42	2.08	118	0.12	10.0		218	0.11	7.3	-8.0
SUPP 325MG 12 04/94	1	7	0.04	8.7	68	0.07	1	7	2.18	6.6	42	2.07	110	0.11	10.1		204	0.11	7.9	
SUPP 325MG 4 01/98		1	0.00	2.6	8	0.00		-	0.00		-	0.00	8	0.00	9.3		13	0.00	-1.7	
ACET 120 04/94		13	0.08		87	0.09		5	1.50		30	1.48	117	0.12	12.2		220	0.12	9.3	
SUPP 120MG 12 04/94	2	12	0.07	12.8	79	0.08	1	5	1.50	5.7	30	1.48	109	0.11	13.6		205	0.11	10.3	
SUPP 120MG 4 01/98		1	0.00	2.8	9	0.00		-	0.00		-	0.00	9	0.00	-2.9		16	0.00	-2.3	
ABENOL 11/82		7	0.04		62	0.06		-	0.12		2	0.12	65	0.06	16.3		115	0.06	7.8	
SUPP 120MG 12 01/84	1	4	0.02	4.5	31	0.03		-	0.08	.3	2	0.08	33	0.03	33.0	40.0	57	0.03	12.9	
SUPP 325MG 12 10/85		3	0.02	3.7	31	0.03		-	0.04	.1	1	0.03	32	0.03	3.1		57	0.03	3.3	
PMS-ASA 03/93		1	0.00		3	0.00		2	0.66		51	2.49	53	0.05	19.3		95	0.05	-4.3	
TAB 325MG 500 11/94		1	0.00	.1	3	0.00		1	0.34	2.9	46	2.27	49	0.05	46.9	57.1	79	0.04	.7	
SUPP 150MG 10 03/93		-	0.00		-	0.00		1	0.31	.5	4	0.21	5	0.00	-38.9		11	0.00	-16.3	
MEAD JOHNSON		290	1.80		1,995	2.11		3	0.76		24	1.16	2,018	2.09	25.3	10.0	3,748	2.05	15.0	4.6
TEMPRA 01/57		290	1.80		1,995	2.11		3	0.76		24	1.16	2,018	2.09	25.3	10.0	3,748	2.05	15.0	4.6
DROPS 80MG/ML 24ML BAN 04/93	20	108	0.67	137.9	763	0.80		-	0.00	.3	2	0.07	765	0.79	44.3	27.2	1,341	0.73	26.8	15.7
DROPS 80MG/ML 24ML CHERRY 11	20	109	0.68	128.7	706	0.74		1	0.34	2.0	11	0.51	716	0.74	36.8	21.1	1,294	0.70	21.2	9.3
SYRUP 80MG/5ML 100ML CHERRY	6	23	0.14	36.0	148	0.15		-	0.00	.1	-	0.02	148	0.15	9.6	-6.1	289	0.15	4.2	-6.1
SYRUP 160MG/5ML 100ML CHERRY	5	19	0.11	33.1	136	0.14		-	0.00		-	0.00	136	0.14	6.0	-6.5	259	0.14	-2.1	-6.5
SYRUP 160MG/5ML 100ML BAN 02	3	13	0.08	25.6	105	0.11		1	0.35	1.9	8	0.39	113	0.11	16.8		209	0.11	11.1	
DROPS 80MG/ML 15ML CHERRY 01	5	16	0.10	25.6	89	0.09		-	0.04	.8	3	0.13	92	0.09	23.6	11.8	177	0.09	16.0	
CHEW TAB 160MG 20 01/95		1	0.00	13.7	45	0.04		-	0.00	.1	-	0.02	45	0.04	-21.4	-30.8	98	0.05	-21.1	-26.7
DROPS 80MG/ML 15ML BAN 04/93		-	0.00	.9	3	0.00		-	0.00		-	0.00	3	0.00	-95.3		81	0.04	-36.7	-40.0
NOVARTIS CONS HEALTH		114	0.70		1,383	1.46		-	0.00		-	0.00	1,383	1.43	73.4	51.9	2,393	1.31	68.2	53.8
BUCKLEYS COMPLETE 08/06		107	0.66		1,324	1.40		-	0.00		-	0.00	1,324	1.37	82.6	80.8	2,268	1.24	74.2	58.6
LIQ 325MG/5ML 150ML 08/06	8	55	0.34	103.0	699	0.74		-	0.00		-	0.00	699	0.72	-3.7	-15.2	1,366	0.74	4.9	-5.1
LIQ 325MG/5ML 250ML 08/07	6	51	0.32	74.2	626	0.66		-	0.00		-	0.00	626	0.64			902	0.49		
BUFFERIN 01/49		7	0.04		59	0.06		-	0.00		-	0.00	59	0.06	-18.5	-23.5	125	0.06	9.0	
CAPLET 325MG 100 02/87	1	7	0.04	12.8	59	0.06		-	0.00		-	0.00	59	0.06	-13.5	-23.5	125	0.06	28.5	18.2
RIVA		200	1.24		1,116	1.18		10	2.95		58	2.84	1,173	1.21	26.4	11.0	2,147	1.17	16.7	6.3
RIVASA 03/00		187	1.16		1,062	1.12		3	0.80		14	0.68	1,076	1.11	25.3	9.9	1,966	1.07	14.7	3.9
CHEW TAB 80MG 500 ORANGE 04/	5	141	0.87	30.6	848	0.89		2	0.57	.7	11	0.51	859	0.89	2.5	-10.1	1,710	0.93	2.4	-7.0
FC TAB 80MG 500 07/07	1	19	0.12	3.9	112	0.11		-	0.00		-	0.00	112	0.11			131	0.07		
FC TAB 80MG 1000 01/08		24	0.14	1.5	85	0.09		-	0.00		-	0.00	85	0.08			85	0.04		
CHEW TAB 80MG 100 ORANGE 03/	1	3	0.01	3.0	16	0.01		1	0.22	.7	3	0.16	20	0.02	-4.2		39	0.02	-11.3	
FC TAB 80MG 100 07/07		-	0.00	.1	1	0.00		-	0.00		-	0.00	1	0.00			1	0.00		

Public price sources - IMS

- Example 1: Weighted average price of Entrophen tablets
  - IMS June 2008, p.56
  - Same DIN for Entrophen tablet enteric coated on three lines
  - Calculate total number of units (in 000's) for drugs and hospitals

    120 (51.0+ 13.0) + 180(41.7 + 3.0) + 30(22.5+2.1) = 16,464 tabs
  - Calculate total revenue (in 000's)

    $446 + $121 + $472 + $34 + $80 + $5 = $1,158
  - Weighted average price: 1,158 / 16,464 = 0.0703 $/tab

Public price sources – IMS (cont'd)

- Example 2: Weighted average price of Tempra drops
  - IMS June 2008, p.56
  - Same DIN for Tempra drops on four lines
  - Calculate total number of units for drugs and hospitals

    24(137.9 + .3) + 24(128.7 + 2.0) + 15(25.5 +.8) + 15(.9)= 6,861.6 ML
  - Calculate total revenue

    $763 + $2 + $706 + $11 + $89 + $3 + $3 = $1,577
  - Weighted average price: 1,577 / 6,861.6 = 0.2298 $/ML

Calculation of Top of TCC for new patented drug product XYZ
Step 1: select lowest unit price for each comparator

	AQPP	IMS	McKesson	ODB	PPS	RAMQ
Comparator A $/tab	$2.00	$2.10			$2.50	$2.00
Comparator B $/tab		$3.50	$3.20	$3.00		
Comparator C $/tab		$0.80			$1.25	

Calculation of Top of TCC test for new patented drug product XYZ
Step 2: calculate price based on dosage regimen

	Public price per unit	Cost of Treatment
Drug used for comparison purposes: A (2 tabs)	$2.00 (RAMQ or AQPP)	$4.00
Drug used for comparison purposes: B (1 tab)	$3.00 (ODB)	$3.00
Drug used for comparison purposes: C (3 tabs)	$0.80 (IMS)	$2.40

- Assume dosage regimen of new drug product XYZ is 1 tablet
- In introductory period, national and market-specific ATPs cannot exceed MAPP.
- In this scenario, if TCC test establishes MAPP, no ATP can exceed $4.00 (assuming HIPC is higher than $4.00).

Publicly Available International Prices

- *Patented Medicines Regulations* direct patentees to provide publicly available ex-factory prices when completing Form 2, Block 5
- Commercially sensitive confidential prices are not to be reported

Any Market Price Review

- At introduction:
  - National and "market-specific" (Wholesalers, Pharmacy, Hospital, Province/Territory) ATPs cannot exceed MAPP
  - If MAPP set by HIPC test, Wholesaler constrained by domestic test (RR or TCC)
- After introduction:
  - Monitor National ATP
  - Review specific markets only if national ATP triggers investigation criteria
  - If trigger is HIPC test, Wholesaler constrained by CPI –Adjustment Methodology
- Excess revenue calculated at national level

Any Market Review (class of customer example)

Assume top of TCC test is $12.00 and HIPC test is $15.00 every year								
	N-ATP	N-MAPP	W-ATP	W-MAPP	P-ATP	P-MAPP	H-ATP	H-MAPP
1	$10.50	$12.00	$11.00	$12.00			$10.00	$12.00
	N-ATP	N-NEAP	W-ATP	W-NEAP	P-ATP	P-NEAP	H-ATP	H-NEAP
2	$10.70	$10.70	$11.20	$11.20			$10.20	$10.20
3	$11.15	$11.00	$11.50	$11.50	$11.50	$11.50	$10.50	$10.50
Sales begin in Pharmacy in Year 3. P-NEAP established by Year 3 W-NEAP.								

Any Market Review

Assume top of TCC test is $12.00 and HIPC test is $10.00 every year								
	N-ATP	N-MAPP	W-ATP	W-MAPP	P-ATP	P-MAPP	H-ATP	H-MAPP
1	$10.00	$10.00	$11.00	$12.00			$9.00	$10.00
	N-ATP	N-NEAP	W-ATP	W-NEAP	P-ATP	P-NEAP	H-ATP	H-NEAP
2	$10.00	$10.00	$11.00	$11.20			$9.00	$9.20
3	$9.95	$10.00	$11.30	$11.30	$9.30	$9.30	$9.30	$9.30
Sales begin in Pharmacy in Year 3. P-NEAP cannot be established by W-NEAP as it exceeds HIPC test, as a result P-NEAP established by Year 3 H-NEAP.								

Any Market Review

Assume top of TCC test is $12.00 and HIPC test is $10.00 every year								
	N-ATP	MAPP	W-ATP	MAPP	P-ATP	MAPP	H-ATP	MAPP
1	$10.00	$10.00	$11.00	$12.00			$9.00	$10.00
	N-ATP	N-NEAP	W-ATP	W-NEAP	P-ATP	P-NEAP	H-ATP	H-NEAP
2	$11.20	$10.00	$11.20	$11.20			$9.20	$9.20
N-ATP exceeds N-NEAP, patentee needs to reduce prices.								

Any Market Review

Assume top of TCC test is $12.00 and HIPC test is $10.00 every year								
	N-ATP	MAPP	W-ATP	MAPP	P-ATP	MAPP	H-ATP	MAPP
1	$11.00	$10.00	$11.00	$12.00				
	N-ATP	N-NEAP	W-ATP	W-NEAP	P-ATP	P-NEAP	H-ATP	H-NEAP
2	$11.20	$10.00	$11.20	$11.20				
N-ATP exceeds MAPP and N-NEAP, patentee needs to reduce Wholesaler price .								

Any Market Review

	N-ATP	MAPP	W-ATP	MAPP	P-ATP	MAPP	H-ATP	MAPP
Year 1	$10.00	$10.00	$11.00	$12.00	$10.00	$10.00	$9.00	$10.00
	N-ATP	N-NEAP	W-ATP	W-NEAP	P-ATP	P-NEAP	H-ATP	H-NEAP
Year 2	$10.20	$10.20	$11.22	$11.22	$10.38	$10.20	$9.00	$9.18
	N-ATP = N-NEAP, no review at level of markets							
Year 3	$10.47	$10.40	$11.44	$11.44	$10.80	$10.40	$9.18	$9.18
	N-ATP > N-NEAP, triggers investigation criteria, review at level of markets Price in Pharmacy appears to exceed Guidelines. Price must be reduced in Pharmacy. Excess Revenues calculated based on N-ATP and N-NEAP.							

Investigation Criteria

- N-ATP or any MS-ATP of a new patented drug product exceeds MAPP during introductory period by more than 5%
- N-ATP of an existing patented drug product exceeds N-NEAP by more than 5%
- Excess revenues (calculated at national level) for a new or existing patented drug product are $50,000 or more

Offsetting Excess Revenues (where investigation criteria not triggered)

After January 1, 2010:

- VCU required to resolve excess revenues below investigation criteria after 3 consecutive years (six reporting periods)
  - If already have 3 consecutive years of excess revenues at the end of the July to December 2009 reporting period, patentees will have one year to offset before VCU will be required
- Actual price reduction below previous year's NEAP
- Once excess revenues offset by price reduction, ATP may return to market-specific NEAP prior to price reduction

Example of offset below investigation criteria

- Assume top of TCC test $12.00, HIPC test $15.00 in every year

	N-ATP	N-MAPP	H-ATP	H-MAPP	P-ATP	P-MAPP	W-ATP	W-MAPP	Excess Revenue	Cumulative excess
1	$10.00	$12.00	$9.00	$12.00	$10.00	$12.00	$11.00	$12.00		
	N-ATP	**N-NEAP**	**H-ATP**	**H-NEAP**	**P-ATP**	**P-NEAP**	**W-ATP**	**W-NEAP**		
2	$10.43	$10.20	$9.20	$9.20	$11.00	$10.20	$11.10	$11.20	$6,900.00	$6,900.00
3	$10.17	$10.40	$9.40	$9.40	$9.90	$10.40	$11.20	$11.30	($900.00)	$6,000.00
4	$10.27	$10.37	$9.60	$9.60	$9.90	$10.10	$11.30	$11.40	($3,900.00)	$2,100.00
5	$10.47	$10.47	$9.80	$9.80	$10.20	$10.20	$11.40	$11.50		

Compliance Status Reports (existing drug products)

- Will continue to include the national NEAP only
- Are available in Excel format on request
- All amendments to Form 2 information (Block 4 and 5) need to be substantiated
  - Board Staff will verify and will advise on results of review.

"DIP Methodology"

- If price increase due solely to end or reduction of a benefit, patentee not held to allowable CPI increases
- Type of Benefit:
  - Must conform to ss. 4(4) or 4(5) of the Regulations – "price reduction given as a promotion or in the form of rebates, discounts, refunds, free goods, free services, gifts or any other benefits of a like nature"

"DIP Methodology"
Evidence of Benefit

- Form of evidence (e.g., agreement/contract, data requirements) not specified to allow flexibility
- However,
  - Need to demonstrate that recipient was aware that it was receiving a benefit not offered to all customers
  - Need to identify type and value of benefits and when/how it was offered
  - Provide evidence of termination/reduction of benefits
  - Need to identify whether recipient is still receiving other benefits

"DIP Methodology"

- Price
  - If evidence of benefit, ATP of market could increase to highest NEAP of another market
  - If evidence of benefit in introductory period and there is no other market, ATP of market could increase to MAPP (subject to HIPC test)
- Rationale
  - Remove disincentives to offering benefits

"DIP Methodology"

	N-ATP	MAPP	W-ATP	MAPP	P-ATP	MAPP
Year 1	$10.00	$12.00	$10.00	$12.00	$10.00	$12.00
	N-ATP	N-NEAP	W-ATP	W-NEAP	P-ATP	P-NEAP
Year 2	$8.10	$10.20	$10.20	$10.20	$6.00	$10.20
Year 3	$8.20	$8.35	$10.40	$10.45	$6.00	$6.25
Year 4	$10.60	$8.50	$10.60	$10.70	$10.60	$6.30
	N-ATP > N-NEAP, triggers investigation criteria, review at level of markets Price in Pharmacy appears to exceed Guidelines. Evidence required to invoke DIP Methodology provided. Price in Pharmacy not excessive as it is same as W-NEAP.					
Year 5		$10.90		$11.00		$10.90

Communication with Board Staff

- Query to PMPRB Staff
  - Guidelines: Ginette Tognet
    Tel: (613) 954-8297 E-mail: ginette.tognet@pmprb-cepmb.gc.ca
  - Scientific and Introductory price reviews: Catherine Lombardo
    Tel: (613) 952-7620 E-mail: catherine.lombardo@pmprb-cepmb.gc.ca
  - Filing Form 1 and 2: Beatrice Mullington
    Tel: (613) 952-2924 E-mail: beatrice.mullington@pmprb-cepmb.gc.ca
  - Investigation: Senior Regulatory Officer assigned to it
  - Form 3: Lokanadha Cheruvu
    Tel: (613) 954-9812 E-mail: lokanadha.cheruvu@pmprb-cepmb.gc.ca

- All other questions: 1-877-861-2350 pmprb@pmprb-cepmb.gc.ca