



Health Newsflash

Top 100 Therapy Classes of 2003: The First Six Months (January-June)



ESI Canada is pleased to provide our customers with the mid-year Top 100 Therapy Classes report. While we do not have data for a full year to assess the full impact of new drugs and changes in the pharmaceutical landscape, we think that it is important to monitor the impact of new drugs on an ongoing basis. We hope you find this Health Newsflash informative, timely and useful.

The report looks at therapy classes and their common indications or disease states. Rather than focusing on specific drugs where each DIN (Drug Identification Number) represents a drug with a different dosage or strength, therapy classes capture all forms of a drug.

Our Top 100 Therapy Classes report ranks therapy classes by allowable ingredient cost, including markup, and reflects pricing and utilization for the drugs. Ingredient cost and utilization are two important drivers in determining the overall drug costs to private drug plans.

The report also includes rankings by number of prescriptions and net cost. The number of prescriptions does not account for varied number of days' supply per prescription, but we assumed that the number of days' supply generally remains consistent from year to year. Net cost includes allowable professional fees and ingredient costs, less member payments. We also look at the average net cost per prescription (ANCP) and the percentage change in the ANCP between the first six months of 2003 versus all of 2002.

Top Five Therapy Classes

The top five therapy classes remain unchanged since 2000. They include:

1. high cholesterol
2. ulcers and reflux disease
3. depression
4. high blood pressure and heart failure
5. arthritis and pain

Although the top two therapy classes have not changed in ranking, their average net cost per prescription (ANCP) has decreased from last year, 2.3% and 1.4%, respectively. For high cholesterol, the utilization of simvastatin, which is a generic equivalent of the brand Zocor, has increased in 2003. The generic version is priced lower, resulting in a reduced ANCP of approximately \$10 per prescription or 9.7%. For ulcers and reflux, an increased utilization of Nexium and Pariet, two new drugs which both had a lower ANCP than Losec, has reduced the overall ANCP for this category.

Utilization of Combination Products

In previous Top 100 Therapy Class reports, we have highlighted the trend towards increasing use of combination products (products containing more than one drug). These offer patient convenience and professional fee savings when used in appropriate patients. Two classes of combination products have continued to grow (by ingredient cost rank):

- Combination inhalers for asthma now rank 10, up from 14 in 2002 and 27 in 2001.
- Combination therapies for high blood pressure. More than one drug is often required to maintain adequate blood pressure control, therefore it is not surprising to see an increased use in these combination products. Specifically, two drug classes used to treat high blood pressure has changed in ranking:
 - 1) angiotensin II receptor antagonists/thiazides (e.g. Hyzaar) jumped from 71 in 2001 to 51 in 2002, then 43 in 2003;
 - 2) angiotensin converting enzyme inhibitors/thiazides (e.g., Prinzide) moved from 78 in 2002 to 70 in 2003.

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Change in Utilization for Other Therapy Classes

Anti-obesity agents have had a decrease in the number of prescriptions written for 2003, resulting in these agents moving down the ingredient cost rank. Xenical decreased in rank from 25 in 2002 to 27 in 2003, while Meridia ranks 82 (down from 66 in 2002). Together, they still account for approximately 1% of total net costs.

Therapy for rheumatoid arthritis agents continues to increase. Remicade ranks at 24 compared to 30 in 2002 and Enbrel now ranks 28, compared to 38 from last year. The price of Remicade was reduced by 18% on April 1, 2003, therefore, its overall net cost decreased by 6.6%. Nevertheless, the combined total net cost for both agents still increased from 1.3% in 2002 to 1.6% this year.

Therapy for Alzheimers disease entered the Top 100 in 2002. We continue to see an increase in ranking from 84 last year to 62 this year. Drugs in this therapy class include Reminyl, Aricept and Exelon.

Use of hormone replacement therapy (HRT), used to alleviate symptoms of menopause and prevention of osteoporosis, has decreased. Findings in recent clinical trials revealed women using long-term combined estrogen and progesterone HRT had higher than expected rates of breast cancer, heart disease, stroke and blood clots. Estrogen now ranks 38 (down from 27 in 2002) and progesterone ranks 53 (down from 41 in 2002). The ranking for Evista, another type of drug for osteoporosis, has also declined (from 69 in 2002 to 78 in 2003). Other therapy classes used in osteoporosis have shown a modest jump in ranking. Fosamax and Actonel now rank 18 versus 21 in 2002.

Therapy Classes that have Entered the Top 100 in 2003

Two drugs for schizophrenia have taken a significant leap into the Top 100 this year, due to changes in how they are used. Zyprexa ranks 41 (up from 112 in 2002) and Seroquel ranks 94 (up from 194 in 2002). Zyprexa received approval for acute bipolar mania. Of note, Risperdal, also for schizophrenia has moved up in ranking from 73 to 65 compared to last year. It can now be given for long term maintenance treatment of schizophrenia and related psychotic disorders. These three drugs account for 1% of the net costs in the first 6 months of 2003.

A new therapy class for Multiple Sclerosis agents was created and now ranks 22 in 2003. Drugs in this class were previously classified under the Antineoplastics Miscellaneous (for cancer, hepatitis and multiple sclerosis). This change resulted in the Antineoplastic Miscellaneous class to decrease in ranking from 11 in 2002 to 40 in 2003.

Combination therapy for Hepatitis C infection has jumped from 101 in 2002 to 50 in 2003. Pegatron was launched in the fall of 2002, which may account for the change in ranking.

Therapy classes used to treat skin disorders have also entered the Top 100. These include topical steroid combinations (rank 86 compared to 110 in 2002) and topical immunosuppressants, Protopic and Elidel (rank 87 from 105 in 2002). Of note, Elidel was launched on the market early this year.

Increase in Cost per Prescription

For the Top 100 therapy classes, there was a 5.16% increase in the average net cost per prescription in the first 6 months of 2003 compared to the average cost for the full 12 months of 2002. The 2003 Top 100 therapy classes account for 87% of the 2003 total net costs.

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A greater than 10% increase in average net cost per prescription was seen for the following therapy classes:

- Progestins (used with estrogen replacement to prevent endometrial cancer) 12.15%
- Growth hormones (for use in children with retarded growth) 12.39%
- Nucleoside analog & Interferon combinations (for Hepatitis C) 16.56%
- Topical steroid combinations (for skin inflammation) 21.57%

Key Message

Combination products, older drugs finding new uses, new drugs, and increasing utilization, continue to be the most significant developments driving the increase in drug plan costs.

Plan design changes emphasizing more cost-effective therapy, such as tiering and therapeutic formularies, can offer plan sponsors a number of options to manage the increases in drug plan costs.

We invite you to review our mid-year report on the Top 100 Therapy Classes for 2003 to see how the Canadian prescription drug landscape continues to change.

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Therapy Class Ranking (Top 100 Ranked by Ingredient Cost)
Prescriptions Filled from 01/2002 through 12/2002 compared to 01/2003 through 06/2003

GPI	Therapy Class Name	Common Indications	# Rxs Rank		Ing Cost Rank		Net Cost Rank		% of Total Net		Avg Net Cost/Rx		% Change in Avg Net Cost/Rx
			2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	
394000	HMG COA REDUCTASE INHIBITORS	High cholesterol	2	2	1	1	1	1	7.38	7.32	90.57	\$92.72	-2.32%
492700	PROTON PUMP INHIBITORS	Ulcers, reflux	4	10	2	2	2	2	6.44	5.94	99.38	100.79	-1.40%
581600	SELECTIVE SEROTONIN REUPTAKE INHIBITORS	Depression	1	1	3	3	3	3	5.3	5.33	65.05	64.72	0.51%
361000	ACE INHIBITORS	High blood pressure, heart failure	3	4	4	5	4	5	3.64	3.71	53.33	53.18	0.28%
661005	CYCLOOXYGENASE 2 (COX-2) INHIBITORS	Arthritis, pain, and inflammation	11	12	5	6	5	6	3.09	3.27	58.76	59.15	-0.66%
999000	NOT CLASSIFIED	Diabetic supplies, compounding chemicals	5	3	6	4	6	4	3.04	3.87	48.52	51.40	-5.60%
340000	CALCIUM BLOCKERS	High blood pressure, angina	17	17	7	7	7	7	2.69	2.74	62.65	63.02	-0.59%
583000	MISC. ANTIDEPRESSANTS	Depression	19	20	8	8	8	8	2.55	2.2	63.08	61.05	3.33%
674060	SELECTIVE SEROTONIN AGONISTS 5-HT(1)	Migraines	43	42	9	9	9	9	1.9	1.94	129.46	126.07	2.69%
442099	ADRENERGIC COMBINATIONS	Asthma	32	41	10	14	10	15	1.71	1.35	88.52	86.95	1.81%
444000	STEROID INHALANTS	Asthma	22	21	11	10	11	10	1.57	1.79	52.32	53.01	-1.30%
361500	ANGIOTENSIN II RECEPTOR ANTAGONIST	High blood pressure	24	28	12	13	13	14	1.47	1.44	59.55	59.89	-0.57%
259900	COMBINATIONS OC'S	Prevention of pregnancy	7	6	13	12	12	11	1.52	1.56	26.01	25.77	0.93%
651000	NARCOTIC AGONISTS	Pain	29	32	14	18	14	18	1.45	1.23	61.59	58.99	4.41%
276070	THIAZOLIDINEDIONES	Diabetes	67	69	15	17	17	20	1.22	1.14	150.66	146.25	3.02%
422000	NASAL STEROIDS	Allergies	16	19	16	19	16	16	1.37	1.32	31.07	30.94	0.42%
661000	NSAIA'S	Pain and inflammation	10	9	17	15	15	13	1.37	1.5	25.37	25.30	0.28%
300420	BISPHOSPHONATES	Osteoporosis	33	38	18	21	20	23	1.17	1.08	62.84	66.50	-5.50%
259920	TRIPHASIC OC'S	Prevention of pregnancy	15	15	19	16	18	17	1.21	1.28	26.19	25.41	3.07%
050000	FLUOROQUINOLONES	Antibiotic-treatment of infection	25	25	20	20	19	19	1.17	1.19	47.33	47.77	-0.92%
035000	CLARITHROMYCIN	Antibiotic-treatment of infection	27	24	21	22	21	22	1.05	1.08	43.73	42.81	2.15%
624030	MULTIPLE SCLEROSIS AGENTS	Multiple sclerosis	203	NA	22	NA	24	NA	0.97	NA	1340.49	NA	NA
726000	MISC. ANTICONVULSANTS	Epilepsy	45	47	23	23	23	27	0.99	0.91	74.65	73.57	1.47%
525050	TUMOUR NECROSIS FACTOR INHIBITOR (Infliximab)	Rheumatoid arthritis, crohn's disease	278	303	24	30	28	33	0.83	0.7	3523.69	3773.56	-6.62%
034000	AZITHROMYCIN	Antibiotic-treatment of infection	23	27	25	29	25	29	0.93	0.86	35.37	35.72	-0.98%
332000	BETA BLOCKERS CARDIO-SELECTIVE	High blood pressure, angina	18	18	26	24	26	26	0.93	0.96	21.79	22.46	-2.98%
612535	FAT ABSORPTION DECREASING AGENTS (ORLISTAT)	Obesity	91	88	27	25	30	30	0.75	0.82	150.44	150.72	-0.19%
662900	ETANERCEPT (ANTI-TNF AGENT)	Rheumatoid arthritis	214	231	28	38	31	41	0.72	0.6	1193.86	1250.66	-4.54%
905500	CORTICOSTEROIDS - TOPICAL	Itchy, inflamed skin	8	7	29	28	22	21	1.03	1.11	18.03	18.35	-1.74%
445050	LEUKOTRIENE RECEPTOR ANTAGONISTS	Asthma	70	70	30	34	35	36	0.7	0.69	90.21	88.24	2.23%
271040	HUMAN INSULIN	Diabetes	38	33	31	33	32	31	0.72	0.74	43.16	41.05	5.14%
492000	H-2 ANTAGONISTS	Ulcers, reflux, heartburn	31	29	32	26	29	28	0.78	0.9	38.21	38.81	-1.55%
900500	ACNE PRODUCTS	Acne	42	39	33	35	34	32	0.7	0.72	47.34	45.85	3.25%
525000	INFLAMMATORY BOWEL AGENTS	Crohn's disease and inflammatory bowel disease	76	74	34	36	38	39	0.65	0.67	107.00	101.67	5.24%
392000	FIBRIC ACID DERIVATIVES	High cholesterol	54	55	35	37	39	38	0.64	0.67	65.49	65.76	-0.41%
172000	BACTERIAL VACCINES	Prevention of bacterial infection	71	75	36	39	40	44	0.62	0.56	86.64	87.76	-1.28%
442010	BETA ADRENERGICS	Asthma	13	11	37	31	27	24	0.86	0.99	17.00	17.78	-4.39%
240000	ESTROGENS	Menopausal symptoms, osteoporosis	20	13	38	27	33	25	0.7	0.97	18.55	17.94	3.40%
621000	SMOKING DETERRENTS	For smoking cessation	46	44	39	32	45	37	0.55	0.67	46.13	47.17	-2.20%
217000	ANTINEOPLASTICS MISC.	Cancer, hepatitis, multiple sclerosis	201	171	40	11	43	12	0.55	1.53	704.98	976.49	-27.80%
591570	THIENBENZODIAZEPINES	Schizophrenia	107	188	41	112	48	119	0.52	0.14	130.34	130.61	-0.21%
851500	PLATELET AGGREGATION INHIBITORS	Prevention of harmful blood clots	80	93	42	48	47	53	0.53	0.45	91.91	92.50	-0.64%
369940	ANGIOTENSIN II RECEPTOR ANTAGONISTS & THIAZIDES	High blood pressure	57	71	43	51	49	55	0.52	0.39	54.81	53.86	1.76%
403040	SELECTIVE CGMP PHOSPHODIESTERASE TYPE 5 INHIBITORS	Erectile dysfunction	74	76	44	44	46	46	0.55	0.5	80.73	79.87	1.08%

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022000	CEPHALOSPORINS - 2ND GENERATION	Antibiotic-treatment of infection	39	37	45	42	41	43	0.58	0.58	35.07	34.73	0.98%
040000	TETRACYCLINES	Antibiotic-treatment of infection	44	43	46	40	44	42	0.55	0.58	39.94	39.75	0.48%
272500	BIGUANIDES	Diabetes	26	30	47	46	42	45	0.57	0.53	23.65	23.45	0.85%
124050	HERPES AGENTS - PURINE ANALOGUES	Genital herpes, shingles, chickenpox	83	87	48	45	51	51	0.48	0.47	86.76	85.50	1.47%
300620	OVULATION STIMULANTS-GONADOTROPINS	Infertility	188	197	49	49	55	54	0.45	0.4	444.82	427.88	3.96%
129950	NUCLEOSIDE ANALOG & INTERFERON COMBINATIONS	Hepatitis C infection	260	318	50	101	54	110	0.45	0.17	1447.74	1,242.02	16.56%
624000	MULTIPLE SCLEROSIS AGENTS	Multiple sclerosis	232	250	51	52	57	58	0.42	0.36	945.73	927.71	1.94%
602040	NON-BENZODIAZEPINE - GABA-RECEPTOR MODULATORS	Insomnia	34	36	52	50	50	50	0.5	0.48	27.53	27.58	-0.18%
260000	PROGESTINS	With estrogen replacement to prevent endometrial cancer	35	23	53	41	56	40	0.45	0.61	24.65	21.98	12.15%
249915	ESTROGENS & ANTI-ANDROGENS	Acne, hirsutism	58	52	54	47	58	52	0.41	0.47	42.86	42.97	-0.26%
121099	ANTIRETROVIRAL COMBINATIONS	HIV, AIDS	224	234	55	55	60	60	0.36	0.34	724.28	727.16	-0.40%
824010	ERYTHROPOIETINS	Anemia	235	240	56	53	61	59	0.36	0.36	844.97	842.34	0.31%
214050	LHRH ANALOGS	Prostate cancer, endometriosis	186	190	57	57	63	61	0.34	0.33	328.59	308.82	6.40%
824015	GRANULOCYTE COLONY-STIMULATING FACTOR (G-CSF)	Low white blood cells	271	285	58	67	66	77	0.33	0.26	1278.67	1180.09	8.35%
012000	AMPICILLINS	Antibiotic-treatment of infection	6	5	59	54	36	34	0.67	0.7	11.13	11.30	-1.50%
659910	CODEINE COMBINATIONS	Pain	9	8	60	56	37	35	0.65	0.7	11.77	11.65	1.03%
231000	ANDROGENS	Low testosterone levels, osteoporosis, breast cancer	115	115	61	61	67	70	0.33	0.29	89.18	81.86	8.94%
620510	CHOLINOMIMETICS - ACHE INHIBITORS	Alzheimer's disease	112	148	62	84	64	92	0.33	0.21	88.16	94.89	-7.09%
272000	SULFONYLUREAS	Diabetes	36	34	63	59	59	56	0.38	0.37	21.91	20.86	5.03%
389000	ANAPHYLAXIS THERAPY AGENTS	Severe allergic reactions	140	136	64	58	68	64	0.3	0.31	122.73	119.09	3.06%
590700	BENZISOXAZOLES	Schizophrenia	82	90	65	73	70	74	0.3	0.27	53.17	52.25	1.76%
540000	URINARY ANTISPASMODICS	Urinary spasms	94	96	66	75	73	78	0.28	0.26	57.60	54.34	6.00%
614000	MISC. STIMULANTS	Attention deficit disorder	56	59	67	71	69	68	0.3	0.29	30.96	31.78	-2.58%
331000	BETA BLOCKERS NON-SELECTIVE	High blood pressure, angina	64	58	68	64	71	66	0.29	0.31	33.96	33.59	1.10%
110000	ANTIFUNGALS	Fungal infections	137	130	69	63	77	71	0.26	0.28	99.57	98.58	1.00%
369918	ACE INHIBITORS & THIAZIDES	High blood pressure, heart failure	93	104	70	78	76	81	0.27	0.24	53.51	52.63	1.67%
114070	TRIAZOLES	Fungal infections	65	62	71	62	74	62	0.28	0.32	33.61	35.27	-4.71%
281000	THYROID HORMONES	Thyroid replacement	12	14	72	70	52	49	0.47	0.49	9.11	9.15	-0.44%
124080	HERPES AGENTS - THYMIDINE ANALOGUES	Genital herpes, shingles, chickenpox	145	141	73	68	80	75	0.25	0.27	105.38	106.99	-1.50%
994030	INOSINE MONOPHOSPHATE DEHYDROGENASE INHIBITORS	Immunosuppressant, transplant	217	228	74	79	82	85	0.24	0.22	425.89	460.84	-7.58%
751000	CENTRAL MUSCLE RELAXANTS	Muscle spasticity	48	50	75	76	72	69	0.29	0.29	25.04	25.00	0.16%
582000	TRICYCLIC AGENTS	Depression	30	26	76	74	62	57	0.35	0.36	15.10	15.09	0.07%
941000	DIAGNOSTIC REAGENTS	Diagnosis of diseases	123	109	77	60	83	67	0.24	0.3	70.09	70.18	-0.13%
300530	SELECTIVE ESTROGEN RECEPTOR MODULATORS (SERMS)	Osteoporosis, cancer	135	127	78	69	84	73	0.23	0.27	88.18	87.14	1.19%
581200	MODIFIED CYCLICS	Depression	52	53	79	65	75	65	0.27	0.31	26.04	28.74	-9.39%
171000	VIRAL VACCINES	Prevention of viruses	97	98	80	77	81	79	0.24	0.24	51.67	51.89	-0.42%
571000	BENZODIAZEPINES	Epilepsy, sedation	14	16	81	72	53	47	0.47	0.50	9.88	10.00	-1.20%
612540	MONOAMINE REUPTAKE INHIBITOR (SIBUTRAMINE)	Obesity	158	149	82	66	86	72	0.23	0.27	126.62	126.44	0.14%
900599	ACNE COMBINATIONS	Acne	63	67	83	87	78	83	0.26	0.23	29.68	27.73	7.03%
301000	GROWTH HORMONE	Growth in children	337	337	84	81	90	87	0.22	0.21	2151.75	1914.52	12.39%
213000	ANTIMETABOLITES	Cancer, rheumatoid arthritis	100	107	85	83	89	89	0.22	0.21	50.14	48.27	3.87%
905599	TOPICAL STEROID COMBINATIONS	Skin inflammation	106	116	86	110	88	115	0.22	0.16	54.67	44.97	21.57%
907840	MACROLIDE IMMUNOSUPPRESSANTS - TOPICAL	Skin disorders	149	172	87	105	94	114	0.21	0.16	99.27	105.18	-5.62%
502500	5-HT3 RECEPTOR ANTAGONISTS	Nausea and vomiting	180	183	88	90	95	101	0.2	0.19	162.95	153.35	6.26%

