## Therapeutic Trends

4,700,000

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## Prescriptions for COX-2s & Other NSAIDs

9,000,000

A Monthly & Yearly Portrait

Insight and Outlook from IMS HEALTH

On September 30, 2004, the manufacturer of Vioxx<sup>®</sup> (rofecoxib) announced it would be withdrawing the popular pain reliever used by many arthritis sufferers, citing an increased risk of cardiovascular events (including heart attack and stroke) for long-term users. Vioxx belonged to a class of medications known as selective cyclooxygenase inhibitor (COX-2 inhibitor) non-steroidal anti-inflammatory drugs (NSAIDs). COX-2s, sometimes called the newer NSAIDs, were popular when first introduced in 1999 because they provided arthritis patients pain relief without some of side-effects associated with older NSAIDs.

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A few months after the Vioxx withdrawal, another popular COX-2, Celebrex<sup>®</sup> (celecoxib), was the subject of a drug advisory warning issued by its manufacturer on December 17. The warning also cited increased risk of heart problems.

A few days later, December 22, an Alzheimer's disease prevention trial was halted after it was found patients taking naproxen, one of the older NSAIDs, had a greater incidence of heart attack and stroke than the placebo group.

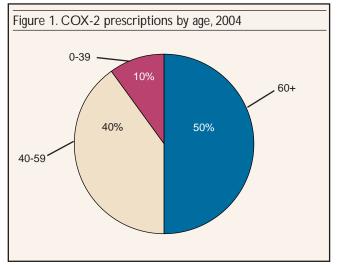
This series of announcements has had a significant effect on the prescribing of NSAIDs. The COX-2s, or newer NSAIDs, have experienced a considerable decline since the Vioxx announcement in September (Table 1). Total retail value of COX-2 inhibitors has fallen approximately 5% in 2004 compared to 2003 (Table 2).

Figures 1 and 2 show females filled just over 60% of prescriptions for COX-2s in 2004 and only 10% were filled by those aged below 40. Further, most Canadians received a COX-2 prescription written by a family physician (Figure 3).

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	COX-2 inhibitors (total)	Vioxx®	Celebrex®	Mobicox® (meloxicam & generics)	Bextra <sup>®</sup>	Other NSAIDs
January	637,175	278,407	232,003	85,124	41,641	471,937
February	601,354	263,003	216,670	80,063	41,618	448,647
March	676,214	296,352	242,947	90,736	46,179	503,168
April	653,505	282,799	235,533	88,594	46,579	476,874
Мау	662,067	285,634	238,506	89,312	48,615	485,363
<b>Jun</b> e	675,353	280,683	249,385	91,595	53,690	498,948
July	663,997	275,480	247,872	88,008	52,637	496,051
August	646,049	265,112	243,221	85,641	52,075	487,708
September	647,741	252,256	249,887	89,489	56,109	497,231
October	569,072	1,332	348,441	131,263	88,036	562,725
November	485,470	168	283,214	123,622	78,446	590,900
December	417,382	53	241,888	115,303	60,138	594,150

Source: IMS Health, Canada, CompuScript

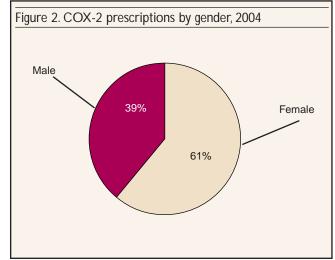


Source: IMS Health, Canada, Xponent.

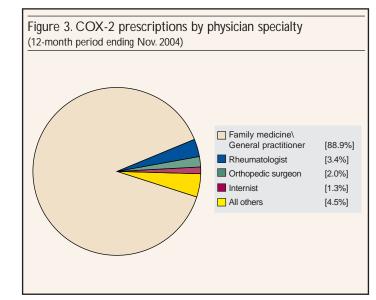
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Table 2						
Estimated cost of retail prescriptions (includes pharmacists' dispensing fees)						
	2004					
COX-2 inhibitors	\$453.1 million					
Celebrex <sup>®</sup>	\$219.8 million					
Vioxx®	\$144.7 million					
Mobicox® (meloxicam & generics)	\$46.4 million					
Bextra <sup>®</sup>	\$42.2 million					
Other NSAIDs	\$413.5 million					

Source: IMS Health, Canada, CompuScript.



Source: IMS Health, Canada, Xponent.



Source: IMS Health, Canada, Physician Specialty Report.

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