ACS Chemical Neuroscience

Editorial

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The Top Prescription Drugs of 2011 in the United States: Antipsychotics and Antidepressants Once Again Lead CNS Therapeutics

Data for the top prescription drugs of 2011 in the Unites States was recently released by IMS Health,[1] and as we have done each year,[2,3] we will break down the key stats as they apply to CNS therapeutics. Total prescription drug sales in the United States increased from \$308.6 billion in 2010 to \$319.9 billion in 2011 (an ~3.5% increase despite pressure from generics), with a concomitant increase in prescriptions dispensed (3.99 billion in 2010 compared to 4.02 billion in 2011).[1] As discussed last year,[3] a combination of generic versus brand medications and a weak economy have negatively impacted prescription drug sales. In parallel, patients continuing on therapies for chronic disease shifted from brand name medications to generic equivalents; thus, the lists of the top 200 drugs in terms of sales and that of prescriptions dispensed share no overlap.[1−4] For example, in 2010, Lipitor was number 1 in terms of sales (\$7.3 billion) and number 4 in terms of prescriptions dispensed (~46 million). With the loss of patent protection in 2011, Lipitor still remained number 1 in terms of sales (\$7.7 billion) in 2011 (Table 1), but Lipitor dropped off the top 25 most prescribed medicines in 2011, while simvastatin, generic Zocor, increased to number 3, with ~97 million prescriptions dispensed.[1−4]

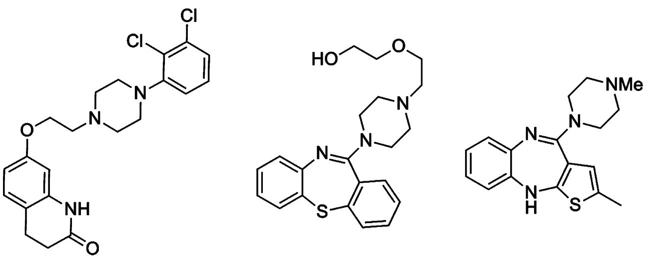
Table 1. Top Pharmaceutical Products by United States Sales[1]

2011 rank	drug name	2010 sales (in \$ billions)	2011 sales (in \$ billions)
1	Lipitor	7.3	7.7
2	Plavix	6.1	6.8
3	Nexium	6.3	6.2
4	Abilify	4.6	5.2
5	Advair Diskus	4.7	4.6
6	Seroquel	4.4	4.6
7	Singulair	4.1	4.6
8	Crestor	3.8	4.4
9	Cymbalta	3.2	3.7
10	Humira	2.9	3.5

Approximately one-third of the \$319.9 billion spent on prescription drugs was focused on only five therapeutic areas (Table 2): oncology, respiratory agents, lipid regulators, antidiabetics, and antipsychotics.[1] Despite a growing trend of big pharma leaving CNS drug discovery, antipsychotics continue to grow, with \$18.2 billion in sales in 2011, up \$2.1 billion over 2010. In 2011, 57 million prescriptions were filled for antipsychotic drugs, up 2.4%, and, importantly, ~60% were filled with branded drugs.[1] Three drugs, Abilify, **1** (\$5.2 billion in 2011 sales), Seroquel, **2** (\$4.6 billion in 2011 sales), and Zyprexa, **3** (\$3.0 billion in 2011 sales) account for >65% of the total \$18.2 billion spent on antipsychotics (Figure 1). These statistics are intriguing, as Zyprexa lost patent protection in October 2011, Seroquel follows in 2012, and Abilify falls to generic competition outside the United States in 2014 and within the United States in 2015.[1]

Table 2. Top Therapeutic Classes by United States Sales[1]

2011 rank	therapeutic area	2010 sales (in \$ billions)	2011 sales (in \$ billions)
1	oncology	22.3	23.2
2	respiratory agents	19.3	21.0
3	lipid regulators	18.8	20.1
4	antidiabetics	17.7	19.6
5	antipsychotics	16.2	18.2
6	autoimmune diseases	10.6	12.0
7	antidepressants	11.6	11.0
8	hiv antivirals	9.3	10.3
9	anit-ulcerants	11.9	10.1
10	narcotic analgesics	8.4	8.3



1, Abilify™ Aripiprazole No. 4

2, Seroquel™ Quetiapine No. 6

3, Zyprexa™ Olanzapine No. 16

Figure 1. Top CNS drugs of 2011 in terms of United States sales. Three drugs, Abilify (no. 4), Seroquel (no. 6), and Zyprexa (no. 16), accounted for >65% of the \$18.2 billion spent on antipsychotics in 2011.

Beyond antipsychotics, other CNS therapeutics demonstrated significant growth in 2011, with ADHD therapies increasing 17% (\$7.9 billion in sales) and treatments for multiple sclerosis increasing an impressive 22.5% to \$7.1 billion in sales.[1] While dropping in sales (\$11.0 billion in 2011, a 5.8% decrease over 2010), antidepressants were the most prescribed class of drugs in 2011 (Table 3), with 264 million prescriptions filled (many generics).[1]

Beyond individual medications and drug classes, which pharmaceutical companies dominated the United States prescription drug market in 2011 in terms of sales? Once again, Pfizer ranked number 1 with over \$25 billion in United States sales, while the biologics sales of Amgen landed the biotech at number 9 and the increasing sales of generics positioned Teva at number 5 (Table 4).[1]

Published: August 15, 2012

dx.doi.org/10.1021/cn3000923 | ACS Chem. Neurosci. 2012, 3, 630−631

Table 3. Top Psychiatric Medicines Prescribed in 2011

2011 rank	brand drug name (generic name)	prescribed/indicated for	2011 prescriptions (in millions)
1	Xanax (alprazolam)	anxiety	47.7
2	Celexa (citalopram)	depression, anxiety	37.8
3	Zoloft (sertraline)	depression, anxiety, OCD, PTSD, PMDD	37.2
4	Atvian (lorezepam)	anxiety, panic disorder	27.1
5	Prozac (fluoxetine HCl)	depression, anxiety	24.5
6	Lexapro (escitalopram)	depression, anxiety	23.7
7	Desyrel (trazodone HCl)	depression, anxiety	22.6
8	Cymbalta (duloxetine)	depression, anxiety, fibromyalgia	17.7
9	Valium (diazepam)	anxiety, panic disorder	14.6
10	Seroquel (quetiapine)	bipolar disorder, depression	14.2

Table 4. Top Pharmaceutical Companies Based on United States Prescription Drug Sales[1]

2011 rank	company	2010 US sales (in $ billions)	2011 US Sales (in $ billions)
1	Pfizer	27.2	25.1
2	AstraZeneca	19.5	19.9
3	Merck & Co.	18.6	19.3
4	Novartis	18.0	19.2
5	Teva	15.9	15.1
6	Lilly	14.3	1409
7	Roche	13.8	14.5
8	GlaxoSmithKline	15.2	14.2
9	Amgen	12.7	13.1
10	Johnson & Johnson	12.9	12.1

Overall, CNS drugs rank high in terms of both sales and prescriptions dispensed in the United States in 2011 (Tables 1–3). Beyond 2012, generic competition for antipsychotics, antidepressants, and other CNS therapeutics further underscores the need for the development of therapeutic agents with novel mechanisms of actions/novel molecular targets. When one looks at the trends and medications, the United States is suffering from poor lifestyle/diet choices (based on sales of lipid regulators and antidiabetic medications) and an unprecedented increase in patients taking antidepressants and antipsychotics. Importantly, increases in both sales and prescriptions dispensed are positive signs for a struggling pharmaceutical industry.

Craig W. Lindsley, Editor-in-Chief

AUTHOR INFORMATION

Notes

Views expressed in this editorial are those of the author and not necessarily the views of the ACS.

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dx.doi.org/10.1021/cn3000923 | *ACS Chem. Neurosci.* 2012, 3, 630–631