

2013 Trends and Statistics for Prescription Medications in the United States: CNS Highest Ranked and Record Number of Prescriptions Dispensed

S ix months ago, we presented data on the top prescription drugs globally in 2013, and with a recent report from IMS Institute for Healthcare Informatics² we can now share the trends and statistics for prescription medications in the United States from 2013 (data from 2014 will be available in July 2015). Whereas sales in the United States decreased 1% in 2012,³ 2013 witnessed a 3.2% increase to \$329.2 billion. Interestingly global prescription drug sales in 2013 were \$874.6 billion, highlighting that the Unites States market accounts for ~38% of global sales, a number at odds with the Unites States percentage of the world's population.^{1,2} Clearly, pharmacoeconomics and price control measures outside the Unites States are playing key roles in this disparity. The top 20 prescription drugs in terms of sales in the Unites States (Table 1)² show a

Table 1. Top 20 Prescription Drugs in the United States in Terms of Sales/Nondiscounted Spending²

rank	product	sales (U.S. \$Bn)
1	Abilify	6.5
2	Nexium	6.2
3	Humira	5.6
4	Crestor	5.4
5	Cymbalta	5.3
6	Advair Diskus	5.3
7	Enbrel	4.7
8	Remicade	4.1
9	Copaxone	3.7
10	Neulasta	3.6
11	Rituxan	3.3
12	Lantus SoloSTAR	3.0
13	Spiriva Handihaler	3.0
14	Atripla	2.9
15	Januvia	2.9
16	Avastin	2.7
17	Lantus	2.6
18	OxyContin	2.6
19	Lyrica	2.5
20	Epogen	2.3

similar composition to the global data, but the rankings differ. In 2013, the top prescription drug in the Unites States was Abilify (\$6.5 billion (Bn) in sales, as compared to \$7.83 billion globally (and ranked seventh)). As in 2012, 5 of the top 10 prescription drugs are biologics (Humira, Enbrel, Remicade, Copaxone, and Neulasta) while the remaining five are small molecules. Excitingly, Abilify (ranked first) and Cymbalta (ranked fifth) are CNS agents, for schizophrenia and depression, respectively.2 Overall, Americans enabled "blockbuster" status (sales > \$1 Bn) for over 30 drugs in 2013.

The year 2013 also saw that one-third of all spending in the United States was focused in the top five therapy areas (Table 2), which did not correlate with the top prescription drugs in terms of either sales or prescriptions dispensed. In 2013, the

Table 2. Top 20 Therapy Areas in the United States in Terms of Sales/Nondiscounted Spending²

rank	therapy area	sales (U.S. \$Bn)	% growth
1	oncology	27.9	9.2
2	antidiabetes	24.3	12.1
3	mental health	23.8	-5.2
4	respiratory	20.4	-5.2
5	pain	18.7	4.1
6	autoimmune	17.9	18.0
7	lipid regulators	13.6	-17.5
8	antihypertensives	12.5	-5.3
9	HIV antivirals	12.5	9.9
10	multiple sclerosis	10.6	20.7
11	antiulcerants	10.1	2.7
12	ADHD	9.9	-3.9
13	dermatologics	8.9	15.0
14	antibacterials	8.6	9.3
15	nervous system disorders	8.1	16.0
16	anticoagulants	7.4	-22.2
17	vaccines	6.0	0.1
18	sex hormones	5.8	9.3
19	ophthalmology	5.6	12.0
20	hormonal contraceptives	5.6	2.1

top five therapy areas were oncology (\$27.9 Bn), antidiabetes (\$24.3 Bn), mental health (\$23.8 Bn), respiratory agents (\$20.4 Bn), and pain (\$18.7 Bn). The 9.2% increase in oncology sales was driven by specialty products with large price tags, and the largest spending growth was noted for multiple sclerosis (20.7%), autoimmune (18.0%), and nervous system disorders (16.0%).2 Overall, CNS was well represented, and other key areas witnessed notable declines in growth.

Prescriptions dispensed in the Unites States also increased from 4.13 billion in 2012 to an unprecedented 4.2 billion in 2013; however, almost 10% of prescriptions written by physicians were not dispensed due to a combination of patient abandonment (\sim 3%) or insurer rejection (\sim 6%).² Table 3 highlights the top therapeutic classes by number of prescriptions dispensed. Alarmingly, of the prescriptions dispensed, 86% are for generics (80%) and branded generics (6%); moreover, when a generic is available, it is dispensed ~95% of the time.2 These data further exemplify the health status of the United States population. As in 2012, antihypertensives, mental health, pain, antibacterials, and lipid regulators round out the top five. Furthermore, the number of treated patients (tp) across multiple therapies once again

Published: March 18, 2015



ACS Chemical Neuroscience Editorial

Table 3. Top 20 Therapeutic Classes in the United States by Prescriptions²

rank	therapeutic class	prescriptions dispensed (millions)
1	antihypertensives	698
2	mental health	519
3	pain	477
4	antibacterials	268
5	lipid regulators	263
6	antidiabetics	192
7	nervous system disorders	166
8	antiulcerants	164
9	respiratory	162
10	antithyroid	126
11	dermatologicals	105
12	hormonal contraception	95
13	ADHD	80
14	anticoagulants	76
15	vitamins and minerals	74
16	corticosteroids	61
17	GI products	58
18	nasal preps, topical	51
19	other cardiovascular	49
20	sex hormones	45

slightly increased: hypertension (45.7 million tp), cholesterol (24.4 million tp), antidepressants (22.3 million tp), antiulcerants (15.3 million tp), narcotics (14.9 million tp), and antidiabetes (14.0 million tp).² These data reflect on the American Lifestyle of unhealthy diet, stress, and poor work—life balance contributing to dependence on lipid regulators, antihypertensives, antidiabetics, antidepressants, and mood regulators. This dependence is markedly different from the global trends. Should we as a society reflect and modify our culture?

Despite the trend toward prescribing generics, spending on branded drugs in the United States in 2013 totaled \$232 Bn (71%), and generics (branded and unbranded) accounted for 29%, due in large part to patent expirations in 2011 and 2012.² Small molecules accounted for 72% of sales, while biologics made up 28% (a growth of 9.6% over 2012).2 As alluded to earlier, specialty drugs accounted for 29% of all sales in the United States in 2013 (a 9% increase over 2012 and 23% increase over 2008).2 Overall, 2013 was a strong year for the pharmaceutical industry in the United States. Sales are up (3.2% increase to \$329.2 Bn) as are the number of prescriptions dispensed to an unprecedented 4.2 Bn.² And 2013 was the year of Abilify, the top selling drug in the United States, and a CNS therapeutic. Hopefully the clear unmet medical need coupled with the financial performance will lure more pharmaceutical companies back into CNS discovery. The data for 2014, with more specialty drugs and the impact of increased NMEs (36 in 2013 and 41 in 2014), should be even more encouraging. As for the American people, watch your diets, exercise, and improve your work-life balance.

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.

REFERENCES

- (1) Lindsley, C. W. (2014) 2013 Statistics for Global Prescription Medications: CNS Therapeutics Maintain a Leading Position among Small Molecule Therapeutics. ACS Chem. Neurosci. 5, 250–251.
- (2) Aitken, M., Kleinrock, M., Lyle, J., and Caskey, L. (2014) Medicine use and the shifting cost of healthcare. A Review of the use of medicines in the United States in 2013, IMS Institute for Healthcare Informatics, Danbury, CT, www.theimsinstitute.org.
- (3) Lindsley, C. W. (2013) 2012 Trends and Statistics for Prescription Medications in the United States: CNS Therapeutics Continue to Hold Leading Positions. ACS Chem. Neurosci. 4, 1133–1135.
- (4) Lindsley, C. W. (2014) Pharmacoeconomics and the Medicinal Chemist. ACS Med. Chem. Lett. 5, 1066–1068.