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EXECUTIVE SUMMARY

In response to a September 12, 2000 FDA Pediatric Written Request for studies in pediatric patients, Novartis conducted studies of and gained approval for the use of Gleevec® (imatinib mesylate) in the treatment of pediatric patients with newly-diagnosed Philadelphia-positive chronic myeloid leukemia (CML) on September 27, 2006, under NDA 21-588/S-016. Pediatric Exclusivity was granted on June 9, 2006.

This review describes the U.S. outpatient drug use patterns for imatinib mesylate in the pediatric and adult populations in the years prior to and following the granting of pediatric exclusivity for Gleevec®. Proprietary drug use databases licensed by FDA were used to conduct this analysis.

Using IMS Health, IMS National Sales Perspectives™ data, we determined that retail pharmacies accounted for 44.9% to 45.9% and mail order pharmacies for 40.1% to 41.8% of the imatinib tablets and capsules sold during the three 12-month study periods.

The Verispan, LLC: Vector One®, Prescription Services database was queried to obtain counts of retail and mail order pharmacy imatinib prescriptions dispensed, as well as stratification of those prescriptions by patient age and prescriber specialty type. The total number of imatinib prescriptions dispensed by retail and mail order pharmacies increased by approximately 4% from the pre-exclusivity period to the post-exclusivity period. A total of 164,156 retail and mail order imatinib prescriptions were dispensed during the post-exclusivity 12-month period of July 1, 2006 through June 30, 2007. Most patients (98% – 99%) who received retail and mail order prescriptions for imatinib were adults over 17 years of age. Hematologists and Oncologists wrote most of those prescriptions.

The Verispan, LLC: Total Patient Tracker (TPT) database was queried to obtain counts of patients who received at least one retail pharmacy prescription for imatinib during the three-year study period. Most of these patients (98%) were adults 17 years of age and older.

The Verispan, LLC: Physician Drug and Diagnosis Audit (PDDA) survey was queried to obtain counts of office-based physician visits for imatinib, stratified by 4-digit diagnosis codes. Adults aged 17 years and older accounted for the majority (96% – 98%) of these office-based physician visits during the three 12-month study periods. All of the office visits by pediatric patients were associated with the 4-digit diagnosis code “2387 Lymphoproliferative Disorders, Not Otherwise Specified”.

1 BACKGROUND

1.1 INTRODUCTION

On January 4, 2002, Congress enacted the Best Pharmaceuticals for Children Act (BPCA) to improve the safety and efficacy of pharmaceuticals for children. Section 17 of that Act requires the reporting of adverse events associated with the use of a drug in children during the one year following the date on which the drug received marketing exclusivity. In support of this mandate, the FDA is required to provide a report to the Pediatric Advisory Committee on the drug utilization patterns and adverse events associated with the use of the drug soon after the one-year anniversary of granting exclusivity. This review is in addition to the routine post-marketing safety surveillance activities the FDA performs for all marketed drugs.

1.2 REGULATORY HISTORY

In response to a September 12, 2000 FDA Pediatric Written Request for studies in pediatric patients, Novartis conducted the requested studies and was granted Pediatric Exclusivity on June 9, 2006. On September 9, 2006, Novartis gained approval for the use of Gleevec® (imatinib mesylate) in the treatment of pediatric patients with newly-diagnosed Philadelphia-positive CML under NDA 21-588/S-016.

Imatinib is a protein-tyrosine kinase inhibitor that inhibits the bcr-abl tyrosine kinase, the constitutive abnormal tyrosine kinase created by the Philadelphia chromosome abnormality in chronic myeloid leukemia (CML). Imatinib is also an inhibitor of the receptor tyrosine kinases for platelet-derived growth factor (PDGF) and stem cell factor (SCF), c-kit, and inhibits PDGF- and SCF-mediated cellular events. Imatinib was first approved for use in the U.S. in May 10, 2001.

1.3 PRODUCT LABELING

The following text relevant to pediatrics appears in the Gleevec® prescribing information[1]:

INDICATIONS AND USAGE

Gleevec® (imatinib mesylate) is indicated for the treatment of pediatric patients for the following conditions:

- Newly diagnosed adult and pediatric patients with Philadelphia chromosome positive chronic myeloid leukemia (Ph+ CML) in chronic phase. Follow-up is limited.
- Patients with Philadelphia chromosome positive chronic myeloid leukemia (Ph+ CML) in blast crisis, accelerated phase, or in chronic phase after failure of interferon-alpha therapy. Gleevec is also indicated for the treatment of pediatric patients with Ph+ chronic phase CML whose disease has recurred after stem cell transplant or who are resistant to interferon-alpha therapy. There are no controlled trials in pediatric patients demonstrating a clinical benefit, such as improvement in disease-related symptoms or increased survival.

PRECAUTIONS

Pediatric Use

Gleevec® safety and efficacy have been demonstrated in children with newly diagnosed Ph+ chronic phase CML and in children with Ph+ chronic phase CML with recurrence after stem cell transplantation or resistance to interferon-alpha therapy. There are no data in children under 2 years of age. Follow-up in children with newly diagnosed Ph+ chronic phase CML is limited.

ADVERSE REACTIONS

Adverse Reactions in Pediatric Population

The overall safety profile of pediatric patients treated with Gleevec in 93 children studied was similar to that found in studies with adult patients, except that musculoskeletal pain was less frequent (20.5%) and peripheral edema was not reported. Nausea and vomiting were the most commonly reported individual AEs with an incidence similar to that seen in adult patients. Although most patients experienced AEs at some time during the study, the incidence of Grade 3/4 AEs was low.

DOSAGE AND ADMINISTRATION

The recommended dosage of Gleevec® for children with newly diagnosed Ph+ CML is 340mg/m^2/day (not to exceed 600mg). The recommended dosage for children with Ph+ chronic phase CML recurrent after stem cell transplant or who are resistant to interferon-alpha therapy is 260mg/m^2/day.

Gleevec is currently supplied as 100-mg and 400-mg (base) oral film-coated tablets.

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[1] Novartis website. Gleevec® (imatinib mesylate) complete prescribing information. Revised November 2006. http://www.pharma.us.novartis.com/product/pi/pdf/gleevec_tabs.pdf. Accessed August 17, 2007.

1.4 EPIDEMIOLOGY

Surveillance Epidemiology and End Results (SEER) data from 1990 – 1995 indicate that the age-adjusted incidence rate for CML among children ranges from 0.7 to 1.1 cases per million in the age group 0-14 years old. It is notably higher for children aged 15-19 years old at 2.2 cases per million[2]. The cases in the younger age groups largely represent juvenile myelomonocytic leukemia, which occurs predominately in males.

2 METHODS AND MATERIALS

2.1 INTRODUCTION

Using the currently available data resources, this review describes the outpatient drug use patterns for imatinib mesylate in the pediatric and adult populations in the years prior to and following the granting of pediatric exclusivity for Gleevec® on June 9, 2006. Proprietary drug use databases licensed by FDA were used to conduct this analysis.

2.2 DETERMINING SETTING OF CARE

IMS Health, IMS National Sales Perspectives™ data were used to determine the primary settings in which imatinib mesylate is sold. Cumulative sales of these products by number of oral dosage forms (i.e., "extended units" or EUs) sold from the manufacturer into the various retail and non-retail channels of distribution were analyzed for three 12-month periods from July 2004 through June 2007. A complete description of this IMS Health database is provided in Appendix One.

Table 1 provides a summary of IMS Health sales data for imatinib, by channels of distribution, for the three 12-month periods of study. Retail pharmacies (i.e., chain, independent and food store) accounted for 44.9% to 45.9% of the imatinib tablets and capsules sold during the three 12-month time periods. Mail order pharmacies accounted for 40.1% to 41.8% of imatinib tablets and capsules sold.

Table 1: Imatinib Sales of Number of Oral Dosage Forms (in Thousands) by Channel of Distribution, for three 12-month Periods—July 1, 2004 through June 30, 2007

	July 1, 2004 – June 30, 2005		July 1, 2005 – June 30, 2006		July 1, 2006 – June 30, 2007	
	Total EU* (000s)	**Percent of Total**	**Total EU (000s)**	**Percent of Total**	**Total EU (000s)**	**Percent of Total**
GRAND TOTAL	**18,103**	**100.0%**	**17,679**	**100.0%**	**16,718**	**100.0%**
Retail	8,303	45.9%	7,978	45.1%	7,517	44.9%
Mail Order	7,266	40.1%	7,384	41.8%	6,978	41.7%
Retail + Mail Order	15,569	86.0%	15,362	86.9%	14,495	86.6%
All Others	2,533	14.0%	2,318	13.1%	3,341	13.2%

*EU = Extended Units, which are individual oral tablets or capsules of imatinib mesylate.
Source: IMS *Health*, IMS National Sales Perspectives™. Source File: 0708GLV1.dvr. Data extracted August 20, 2007.

Because most imatinib sold during this time period went to retail and mail order pharmacies, we examined utilization patterns focusing on the outpatient setting. Sales data indicate that the

[2] National Cancer Institute, Cancer Statistics Branch, Cancer Incidence and Survival among Children and Adolescents: United States SEER Program, 1975-199, published 1999. Accessed at http://seer.cancer.gov/publications/childhood/ on August 28, 2007.

Verispan databases VONA (i.e., retail pharmacy prescriptions) and VOMA (i.e., mail order pharmacy prescriptions) are the most appropriate data sources to measure the use of these products among the databases licensed by FDA.

Verispan VOMA mail order prescription data are available from January 2005 through the present, so mail order prescription data were not available or retrieved for the year prior to the granting of pediatric exclusivity for Gleevec. For the 12-month period from July 2004 through June 2005, the analyses in this review represent roughly 45.9% of imatinib use. For the two 12-month periods from July 2005 through June 2007, the analyses represent roughly 86.9% and 86.6% of imatinib use, respectively.

2.3 DATA SOURCES USED

Outpatient use and patient demographics were measured with three data sources from Verispan, LLC: Vector One®: National (VONA), Vector One®: Mail Order (VOMA) and Total Patient Tracker (TPT). From these sources, nationally projected estimates of the number of prescriptions dispensed by retail and mail order pharmacies and the number of patients who received a prescription dispensed by retail pharmacies for Gleevec® (imatinib mesylate) were obtained. Indications for use were obtained from the Verispan, Physician Drug and Diagnosis Audit (PDDA). Outpatient drug utilization patterns were examined for three 12-month periods from July 1, 2004 through June 30, 2007. Complete descriptions of the databases are provided in Appendix One.

3 RESULTS

3.1 DISPENSED PRESCRIPTIONS

The total number of imatinib prescriptions dispensed by retail and mail order pharmacies increased by approximately 4% from the pre-exclusivity period to the post-exclusivity period. A total of 158,317 retail and mail order imatinib prescriptions were dispensed during the pre-exclusivity 12-month period of July 1, 2005 through June 30, 2006. A total of 164,156 retail and mail order imatinib prescriptions were dispensed during the post-exclusivity 12-month period of July 1, 2006 through June 30, 2007. Table 2 provides the complete data for imatinib prescriptions dispensed by retail and mail order pharmacies.

Table 2: Total Number of Imatinib Prescriptions Dispensed by Retail and Mail Order Pharmacies for Three 12-month Periods—July 1, 2004 through June 30, 2007

	July 1, 2004 - June 30, 2005			July 1, 2005 - June 30, 2006			July 1, 2006 - June 30, 2007		
	Total Rxs	**Retail Rxs**	**Mail Rxs**	**Total Rxs**	**Retail Rxs**	**Mail Rxs**	**Total Rxs**	**Retail Rxs**	**Mail Rxs**
GRAND TOTAL	*	92,472	*	**158,317**	105,742	52,575	**164,156**	116,879	47,277

*Mail order prescription data are available only from January 2005 to present.
Source: Verispan, LLC: Vector One®, Prescription Services. File name: VONA VOMA BPCA Gleevec Age.qry.
Data extracted August 20, 2007.

3.2 PATIENT DEMOGRAPHICS

3.2.1 PRESCRIPTIONS DISPENSED

Verispan, LLC: Vector One®, Prescription Services database was queried to obtain counts of imatinib retail and mail order pharmacy prescriptions dispensed.

Most patients (i.e., 98% – 99%) who received retail and mail order prescriptions for imatinib were adults over 17 years of age. A total of 1,272 retail and mail order imatinib prescriptions were dispensed to children from 0 to 16 years of age during the pre-exclusivity 12-month period of July 1, 2005 through June 30, 2006. A total of 1,748 retail and mail order imatinib prescriptions were dispensed to children from 0 to 16 years of age during the post-exclusivity 12-month period of July 1, 2006 through June 30, 2007.

Table 3 provides the complete data for imatinib prescriptions dispensed by retail and mail order pharmacies by patient age.

Table 3: Total Number of Imatinib Prescriptions (Rxs) Dispensed by Retail and Mail Order Pharmacies by Patient Age for Three 12-month Periods—July 1, 2004 through June 30, 2007

	July 1, 2004 - June 30, 2005				July 1, 2005 - June 30, 2006				July 1, 2006 - June 30, 2007			
	Total Rxs	**Retail Rxs**	***Share %***	**Mail Rxs**	**Total Rxs**	***Share %***	**Retail Rxs**	**Mail Rxs**	**Total Rxs**	***Share %***	**Retail Rxs**	**Mail Rxs**
GRAND TOTAL	Not available	92,472	***100.0%***	Not available	**158,317**	***100.0%***	105,742	52,575	**164,156**	***100.0%***	116,879	47,277
0-16 y.o.		915	***1.0%***		**1,272**	***0.8%***	1,012	260	**1,748**	***1.1%***	1,271	477
17+ y.o.		90,911	***98.3%***		**156,390**	***98.8%***	104,075	52,315	**162,168**	***98.8%***	115,368	46,800
Unk		646	***0.7%***		**655**	***0.4%***	655	0	**240**	***0.2%***	240	0

Source: Verispan, LLC: Vector One®, Prescription Services. File name: VONA VOMA BPCA Gleevec Age.qry. Data extracted August 20, 2007.

3.2.2 PATIENT COUNTS FOR DISPENSED PRESCRIPTIONS

Verispan, LLC: Total Patient Tracker (TPT) was queried to obtain counts of patients who received at least one retail pharmacy prescription for imatinib. Note that patient counts for mail order prescriptions are not available.

Most patients (i.e., 98%) who received imatinib retail pharmacy prescriptions were adults 17 years of age and older.

Table 4 provides the complete data for counts of patients who received imatinib prescriptions dispensed by retail pharmacies by patient age.

Table 4: Total Number of Patients Receiving Imatinib Prescriptions Dispensed by Retail Pharmacies by Patient Age for Three 12-month Periods—July 1, 2004 through June 30, 2007

	July 1, 2004 - June 30, 2005		July 1, 2005 - June 30, 2006		July 1, 2006 - June 30, 2007	
	Projected Patient Count	***Total Patient Share***	**Projected Patient Count**	***Total Patient Share***	**Projected Patient Count**	***Total Patient Share***
Grand Total	**15,473**	***100.0%***	**17,930**	**100.0%**	**19,381**	***100.00%***
0 – 16 y.o.	207	*1.3%*	225	1.3%	265	*1.4%*
17+ y.o.	15,146	*97.9%*	17,577	98.0%	19,063	*98.4%*
Age unknown	400	*2.6%*	389	2.2%	314	*1.6%*

Source: Verispan, LLC: Total Patient Tracker (TPT). File name: TPT BPCA Gleevec.xls. Data extracted August 2007.

3.3 PRESCRIBER SPECIALTY

Verispan, LLC: Vector One®, Prescription Services database was queried to obtain counts of retail and mail order pharmacy imatinib prescriptions dispensed, stratified by the prescriber's medical specialty.

Most retail and mail order prescriptions for imatinib were written by Hematologists and Oncologists. These two medical specialties accounted for approximately 76% of the retail and mail order imatinib prescriptions dispensed during the pre-exclusivity 12-month period of July 1, 2005 through June 30, 2006 and the post-exclusivity 12-month period of July 1, 2006 through June 30, 2007.

Pediatricians accounted for approximately 1% of imatinib prescriptions for both pre- and post-exclusivity periods.

Table 5 provides the complete data for imatinib prescriptions dispensed by retail and mail order pharmacies by prescriber specialty.

Table 5: Total Number of Imatinib Prescriptions (Rxs) Dispensed by Retail and Mail Order Pharmacies by Prescriber Specialty for Three 12-month Periods—July 1, 2004 through June 30, 2007

	July 1, 2004 - June 30, 2005				July 1, 2005 - June 30, 2006				July 1, 2006 - June 30, 2007			
	Total TRxs	**Retail TRxs**	***Share %***	**Mail TRxs**	**Total TRxs**	***Share %***	**Retail TRxs**	**Mail TRxs**	**Total TRxs**	***Share %***	**Retail TRxs**	**Mail TRxs**
GRAND TOTAL	Not available	92,492	***100.0%***	Not available	**158,309**	***100.0%***	105,743	52,566	**164,131**	***100.0%***	116,855	47,276
HEM		32,514	***35.2%***		**60,393**	***38.2%***	39,595	20,798	**64,883**	***39.5%***	44,492	20,391
ONCOLOGY		33,262	***36.0%***		**59,118**	***37.3%***	37,415	21,703	**59,684**	***36.4%***	41,453	18,231
IM		8,286	***9.0%***		**13,948**	***8.8%***	9,513	4,435	**14,682**	***9.0%***	11,038	3,644
UNSPEC		10,105	***10.9%***		**10,776**	***6.8%***	8,299	2,477	**8,179**	***5.0%***	6,292	1,887
PED		1,005	***1.1%***		**1,863**	***1.2%***	1,342	521	**2,258**	***1.4%***	1,604	654
NP		1,179	***1.3%***		**2,186**	***1.4%***	1,764	422	**3,095**	***1.9%***	2,561	534
GP/FM/DO		1,026	***1.1%***		**2,108**	***1.3%***	1,491	617	**2,430**	***1.5%***	2,025	405
PA		360	***0.4%***		**733**	***0.5%***	568	165	**1,082**	***0.7%***	867	215
HOSP		2,097	***2.3%***		**2,813**	***1.8%***	2,746	67	**2,969**	***1.8%***	2,778	191
OTHER		196	**0.2%**		**358**	**0.2%**	253	105	**570**	**0.4%**	383	187
All Others		2,462	**2.7%**		**4,013**	**2.5%**	2,757	1,256	**4,299**	**2.6%**	3,362	937

Source: Verispan, LLC: Vector One®, Prescription Services. File name: VONA VOMA BPCA Gleevec Spec.qry. Data extracted August 22, 2007.

3.4 INDICATION FOR USE

Verispan, LLC: Physician Drug and Diagnosis Audit (PDDA) survey was queried to obtain counts of office-based physician visits for imatinib, stratified by 4-digit diagnosis codes associated with the visits[3].

Adults aged 17 years and older accounted for the majority (i.e., 96% – 98%) of office-based physician visits during the three 12-month study periods with which imatinib was associated. The majority (72% - 81%) of the adult visits were associated with the 4-digit diagnosis code “2051 Chronic Myeloid Leukemia”. Pediatric patients accounted for less than 1% of use encountered in the surveyed office visits associated with imatinib for the two pre-exclusivity 12-month periods (i.e., July 1, 2004 to June 30, 2006). All of the pediatric visits were associated with the 4-digit diagnosis code “2387 Lymphoproliferative Disorders, Not Otherwise Specified”. There were no

[3] Source: Verispan, LLC: Physician Drug and Diagnosis Audit (PDDA). File name: PDDA BPCA Gleevec Dx4.qry. Data extracted: August 22, 2007.

pediatric visits recorded in this survey for the post-exclusivity period (i.e., July 1, 2006 – June 30, 2007).

4 DISCUSSION

This analysis of the outpatient use of imatinib (Gleevec®) indicates that a minority of its use is in pediatric patients. Hematologists and Oncologists were the most frequent prescribers of imatinib. The only 4 digit diagnosis code associated with office visits by pediatric patients was "2387: Lymphoproliferative Disorders, Not Otherwise Specified".

Findings from this consult should be interpreted in the context of the known limitations of the databases used. We estimated that the use of imatinib was primarily in the outpatient settings based on the IMS Health, IMS National Sales Perspectives™. These data do not provide a direct estimate of use but do provide a national estimate of units sold from the manufacturer to various channels of distribution. The amount of product purchased by these retail and non-retail channels of distribution may be a possible surrogate for use, if we assume the facilities purchase drugs in quantities reflective of actual patient use.

The Verispan Physician Drug and Diagnosis Audit (PDDA) data provide estimates of patient demographics and indications for use of medicinal products in the U.S. Due to the sampling and data collection methodologies, the small sample size can make these data unstable, particularly when use is not common in the pediatric population, as in the case of imatinib.

While we conducted a comprehensive analysis of the use of this product in the outpatient settings, in which the majority of use occurred, use outside of the retail and mail order pharmacy settings was not captured in our analysis.

5 CONCLUSIONS

The clinical trial data submitted for approval of Pediatric Exclusivity for Gleevec® (imatinib) resulted in a labeling change that permits marketing of a new pediatric indication. Based on the databases licensed by FDA, a small proportion of the total number of patients treated with imatinib and total numbers of prescriptions for this drug are pediatric. This may be a reflection of the specificity of the indication for use of the drug, its mechanism of action, and the prevalence of the disease for which imatinib is indicated.

APPENDICES

APPENDIX ONE: Database Descriptions

Verispan, LLC: Vector One®: Mail Order (VOMA)

Verispan's VOMA measures mail order dispensing of prescriptions or the frequency with which drugs move out of mail order pharmacies into the hands of consumers via formal prescriptions. Information on the number of prescriptions, extended units, patient age and gender, acquisition cost, prescription size and prescriptions per physician is available.

The Vector One® Mail Order data are collected directly from contracted mail order pharmacies which provide data for every prescription dispensed. Verispan's Mail Order sample contains approximately 25% of all mail order prescriptions dispensed in the U.S. Data are received from approximately 140 mail order stores out of a 250 store universe, and are obtained from both Medco and non-Medco sources.

Verispan captures roughly 5 million raw scripts which are projected to a national total of mail order activity of 20 million prescriptions.

Verispan, LLC: Vector One®: National (VONA)

Verispan's VONA measures retail dispensing of prescriptions or the frequency with which drugs move out of retail pharmacies into the hands of consumers via formal prescriptions. Information on the physician specialty, the patient's age and gender, and estimates for the numbers of patients that are continuing or new to therapy are available.

The Vector One database integrates prescription activity from a variety of sources including national retail chains, mass merchandisers, mail order pharmacies, pharmacy benefits managers and their data systems, and provider groups. Vector One receives over 2 billion prescription claims, representing over 160 million unique patients.

Prescriptions are captured from a sample of approximately 54,000 pharmacies throughout the US. The pharmacies in the data base account for nearly all retail pharmacies and represent approximately 50% of retail prescriptions dispensed nationwide. Verispan receives all prescriptions from approximately one-third of the stores and a significant sample of prescriptions from the remaining stores.

Verispan, LLC: Vector One®: Total Patient Tracker (TPT)

Verispan's Total Patient Tracker is a national-level projected audit designed to estimate the total number of unique patients across all drugs and therapeutic classes in the retail outpatient setting.

TPT derives its data from the Vector One database which integrates prescription activity from a variety of sources including national retail chains, mail order pharmacies*, mass merchandisers, pharmacy benefits managers and their data systems. Vector one receives over 2 billion prescription claims per year, which represents over 160 million patients tracked across time.

Verispan, LLC: Physician Drug & Diagnosis Audit® (PDDA)

Verispan's Physician Drug & Diagnosis Audit (PDDA) is a monthly survey designed to provide descriptive information on the patterns and treatment of diseases encountered in office-based physician practices in the U.S. The survey consists of data collected from approximately 3,100 office-based physicians representing 29 specialties across the United States that report on all patient activity during one typical workday per month. These data may include profiles and trends of diagnoses, patients, drug products mentioned during the office visit and treatment patterns. The data are then projected nationally by physician specialty and region to reflect national prescribing patterns.

Verispan uses the term "drug uses" to refer to mentions of a drug in association with a diagnosis during an office-based patient visit. This term may be duplicated by the number of diagnoses for which the drug is mentioned. It is important to note that a "drug use" does not necessarily result in prescription being generated. Rather, the term indicates that a given drug was mentioned during an office visit.

IMS Health, IMS National Sales Perspectives™, Retail and Non-Retail

The IMS Health, IMS National Sales Perspective™ measures the volume of drug products (both prescription and over-the-counter) and selected diagnostic products moving from manufacturers into various outlets within the retail and non-retail markets. Outlets within the retail market include the following pharmacy settings: chain drug stores, independent drug stores, mass merchandisers, food stores, and mail service. Outlets within the non-retail market include clinics, non-federal hospitals, federal facilities, HMOs, long-term care facilities, home health care, and other miscellaneous settings. The IMS Health, IMS National Sales Perspectives™ measures the volume of drug products moving from manufacturer into retail and non-retail settings in terms of sales dollars, eaches, extended units, and share of market. These data are based on national projections.

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/s/

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