

MEMORANDUM

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
FOOD AND DRUG ADMINISTRATION
CENTER FOR DRUG EVALUATION AND RESEARCH**

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SUBJECT: REVISED* One Year Post-Pediatric Exclusivity Post-marketing Adverse Event Review:
Drug Use Data for Octreotide (Sandostatin[®]): NDA 21-008
Pediatric Exclusivity Grant Date: January 12, 2006

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EXECUTIVE SUMMARY

This consult examines drug utilization trends for octreotide acetate (including Sandostatin LAR[®] Depot) in the pediatric population (ages 0-16 years), with a primary focus on patterns of use 6 months before and 6 months following the granting of Pediatric Exclusivity for Sandostatin[®] on January 12, 2006.

IMS Health, IMS National Sales Perspective[™] data were used to determine the retail and non-retail channels of distribution. Total sales by channel of distribution showed that octreotide was mostly sold in

* These data have been revised to include only *unprojected* discharges. We are not able to use Premier[™] data to make reliable national estimates of drug use for the subpopulation of pediatric inpatients. Although Premier[™] network hospitals appear to be representative of all U.S. acute short-stay hospitals in general, it is not clear whether they are representative of pediatric inpatient care in the U.S.

the non-retail sector (about 75%), predominantly to non-federal hospitals. Non-federal hospitals accounted for approximately 59% of all octreotide injections sold during the 12-month period from January 2006 to December 2006, inclusive.

Hospital discharge data from the Premier™ network of approximately 450 acute care hospitals revealed that unprojected discharges associated with octreotide use for pediatric patients (0-16 years) accounted for approximately 0.9% of the total unprojected discharges in which octreotide was billed in the 6-month period from January through June 2006. A wide range of Principal Diagnosis ICD-9 codes were associated with the hospital admissions during which octreotide was administered.

In contrast with other forms of octreotide, most Sandostatin LAR® Depot (54%) was sold to clinics; non-federal hospitals purchased 18% of the Sandostatin LAR® Depot. Thus, this review likely reflects approximately 59% of all octreotide product use, but less than one-fifth of the total use of Sandostatin LAR® Depot, as FDA does not have access to data describing the use of drug products in clinics.

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 drug utilization patterns and adverse events associated with the use of the drug on a quarterly basis. This review is in addition to the routine post-marketing safety surveillance activities the FDA performs for all marketed drugs.

Octreotide is the acetate salt of a cyclic octapeptide. Octreotide is a long-acting octapeptide with pharmacologic properties mimicking those of the natural hormone somatostatin. Like somatostatin, octreotide inhibits growth hormone, glucagon, and insulin. It also suppresses LH response to GnRH, decreases splanchnic blood flow, and inhibits release of serotonin, gastrin, vasoactive intestinal peptide, secretin, motilin, and pancreatic polypeptide¹.

The first octreotide acetate product, Sandostatin® (NDA 19-667) was approved in the US on October 21, 1988². Sandostatin LAR® Depot (octreotide acetate for injectable suspension; NDA 21-008) is an octreotide acetate product administered once a month as an intragluteal injection. Sandostatin LAR® was first approved in the U.S. on November 25, 1998. It is supplied as sterile 10mg, 20mg, and 30mg vials, packaged with a specialized diluent.

The FDA-approved indications for Sandostatin LAR® (octreotide) include the following:³

- Acromegaly: Long-term maintenance therapy in acromegalic patients for whom medical treatment is appropriate and who have been shown to respond to and can tolerate octreotide acetate injection.
- Carcinoid Tumors: Long-term treatment of the severe diarrhea and flushing episodes associated with metastatic carcinoid tumors in patients in whom initial treatment with octreotide acetate has been shown to be effective and tolerated.
- Vasoactive Intestinal Peptide Tumors (VIPomas): Long-term treatment of the profuse watery diarrhea associated with VIP-secreting tumors in patients in whom initial treatment with octreotide acetate injection has been shown to be effective and tolerated.

The FDA Pediatric Exclusivity Board granted pediatric exclusivity for Sandostatin LAR® for Injection (NDA 21-008) on January 12, 2006. A study in pediatric patients with hypothalamic obesity was

completed in response to the pediatric written request issued by FDA.

The following language was added to the product labeling:

CLINICAL PHARMACOLOGY (*Pharmacokinetics*): “In pediatric patients with hypothalamic obesity, the mean octreotide concentration after 6 doses of 40mg Sandostatin LAR® Depot administered by IM injection every four weeks was approximately 3.0ng/mL. Steady-state concentration was achieved after 3 injections of 40mg dose.”

PRECAUTIONS (*Pediatric Use*): “The efficacy and safety of Sandostatin LAR® Depot were examined in a randomized, double-blind, placebo-controlled six-month study in 60 pediatric patients aged 6 – 17 years with hypothalamic obesity resulting from cranial insult. Mean BMI increased 0.1kg/m² in Sandostatin LAR Depot-treated subjects compared to 0.0 kg/m² in saline control-treated subjects. Diarrhea occurred in 11 of 30 (37%) patients treated with Sandostatin LAR Depot. No unexpected adverse events were observed. However, with Sandostatin LAR Depot 40mg once a month, the incidence of new cholelithiasis in this pediatric population (33%) was higher than that seen in other adult indications such as acromegaly (22%) or malignant carcinoid syndrome (24%), where Sandostatin LAR Depot dosing was 10 to 30mg once a month.”

This review describes sales trends and inpatient drug use patterns for octreotide acetate, including Sandostatin LAR® Depot in the pediatric population as compared with the adult population. Proprietary drug use databases licensed by FDA were used to conduct this analysis.

METHODS

Determining Setting of Use

IMS Health, IMS National Sales Perspectives™ data were used to determine the settings in which octreotide was sold.⁴ Sales of this product by number of vials sold from the manufacturer to various retail and non-retail channels of distribution were analyzed for three 12-month time periods from January 2004 through December 2006.

Review of these data revealed that the majority of octreotide products were sold to non-retail facilities; 75% of all injectable dosage forms were sold to non-retail pharmacies during the 12-month period from January 2006 through December 2006. Most of those units (59%) were sold to non-federal hospitals, such as those in the Premier® database currently licensed by FDA.

In 2006, 171,400 vials of Sandostatin LAR® Depot made up 5.6% of all octreotide products sold in the US. In contrast with other forms of octreotide, most Sandostatin LAR® Depot (54%) was sold to clinics. Retail pharmacies purchased 22% and non-federal hospitals purchased 18% of the Sandostatin LAR® Depot.

FDA does not have access to data describing the use of drug products in clinics. Therefore, we could only examine the utilization patterns for octreotide focusing on the inpatient setting. This likely only reflects 18% of the current total use of Sandostatin LAR® Depot forms of octreotide and 59% of octreotide as a whole.

Inpatient drug use data were derived from Premier's Rx Market Advisor and were examined for two six-month time periods before and after granting of pediatric exclusivity on January 12, 2006: July – December 2005 and January – June 2006. Detailed descriptions of all data resources used in this consult are included in Appendix A.

RESULTS

A. Acute Care, Short-stay Hospitals

Hospital discharge data from Premier's™ network of approximately 450 acute care hospitals revealed that pediatric (0-16 years) use of octreotide accounted for 68 (0.8%) of the total number of unprojected discharges in which octreotide was billed in the 6 months preceding the pediatric exclusivity grant date (July through December 2005) and 88 (0.9%) of the total number of unprojected discharges in the 6 months following the exclusivity grant (January through June 2006) in the U.S. (Tables 1 & 2).

Table 1: Total Number of Unprojected Discharges Associated with Octreotide by Age Groups in Premier Hospitals, July 2005 through June 2006, Rx Market Advisor™⁵

	TOTAL UNPROJECTED DISCHARGES		
	July - December 2005	January - June 2006	July 2005 - June 2006
OCTREOTIDE	8,228	9,371	17,599
Age 0 to 16	68	88	156
Age 17 and older	8,160	9,283	17,443

Octreotide was associated with a wide range of Principal Diagnosis ICD9 codes in the inpatient hospital setting. These data are displayed for children 0 to 16 years of age, by the ICD9 group names and Principle Diagnosis ICD9 codes in Table 2. For adults 17 years and older, the unprojected number of discharges are displayed by ICD9 group names in Table 4 in Appendix B.

Table 2: Total Number of Unprojected Discharges Associated with Octreotide by ICD9 Groups and Principal Diagnosis ICD9 codes for Ages 0 to 16 Years in Premier Hospitals, July 2005 through June 2006, Rx Market Advisor™⁶

Principal Dx ICD9 Group	Principal Dx ICD9 [sort]		July - December 2005	January - June 2006	July 2005 - June 2006
TOTAL PEDIATRIC UNPROJECTED DISCHARGES			68	88	156
INTESTINAL INFECTIOUS DISEASES	008.45	INTST INFS-CLOSTRIDIUM DIFFICI		2	2
	008.8	INTESTINAL INFECTION DUE TO OT		1	1
OTHER BACTERIAL DISEASES	038.19	OTHER STAPHYLOCOCCAL SEPTICEMI		1	1
	038.8	OTHER SPECIFIED SEPTICEMIA	1	1	2
	038.9	UNSPECIFIED SEPTICEMIA		1	1
MALIGNANT NEOPLASM OF OTHER AND UNSPECIFIED SITES	191.1	MALIGNANT NEOPLASM OF FRONTAL		1	1
	191.9	MALIGNANT NEOPLASM OF BRAIN UN		1	1
MALIGNANT NEOPLASM OF LYMPHATIC AND HEMATOPOIETIC TISSUE	200.20	BURKITT'S TUMOR/LYMPHOM UNS SITE	1		1
OTHER METABOLIC AND IMMUNITY DISORDERS	273.8	OTHER DISORDERS OF PLASMA PROT	1		1
	276.51	DEHYDRATION		4	4
	277.5	MUCOPOLYSACCHARIDOSIS		1	1

Principal Dx ICD9 Group	Principal Dx ICD9 [sort]	July - December 2005	January - June 2006	July 2005 - June 2006
	277.86 PEROXISOMAL DISORDERS	1		1
DISEASES OF BLOOD AND BLOOD-FORMING ORGANS	288.0 AGRANULOCYTOSIS		1	1
HEREDITARY AND DEGENERATIVE DISEASES OF THE CNS	330.0 LEUKODYSTROPHY		1	1
OTHER DISORDERS OF THE CENTRAL NERVOUS SYSTEM	346.90 UNSPEC MIGRAINE WITHOUT MENTIO	1		1
OTHER FORMS OF HEART DISEASE	428.0 CONGESTIVE HEART FAILURE UNSPE		1	1
DISEASES OF VEINS AND LYMPHATICS, AND OTHER DISEASES OF CIRC	456.0 ESOPHAGEAL VARICES WITH BLEEDI		2	2
	456.8 VARICES OF OTHER SITES	1		1
	457.8 OTHER NONINFECTIOUS DISORDERS	1	1	2
ACUTE RESPIRATORY INFECTIONS	461.0 ACUTE MAXILLARY SINUSITIS		1	1
	466.0 ACUTE BRONCHITIS	1		1
PNEUMONIA AND INFLUENZA	486 PNEUMONIA, ORGANISM UNSPECIFIE	1		1
CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND ALLIED CONDITIONS	493.91 UNSPECIFIED ASTHMA WITH STATUS	1		1
OTHER DISEASES OF THE UPPER RESPIRATORY TRACT	493.92 UNSPECIFIED ASTHMA WITH ACUTE	1		1
	511.9 UNSPECIFIED PLEURAL EFFUSION	1	1	2
	518.81 ACUTE RESPIRATORY FAILURE	1		1
	518.83 CHRONIC RESPIRATORY FAILURE	1	1	2
	519.1 OTHER DISEASES TRACHEA&BRONCHU	1		1
DISEASES OF ESOPHAGUS, STOMACH, AND DUODENUM	531.40 CHRON/UNS GASTR ULCR W/HEMORR	1		1
	532.00 ACUT DUOD ULCR W/HEM W/O OBST		1	1
	532.40 CHRON/UNSPEC DUOD ULCR W/HEMOR		1	1
	535.50 UNS GASTRITIS&GASTRODUODITIS W		1	1
	536.49 OTHER GASTROSTOMY COMPLICATION		1	1
APPENDICITIS	540.0 ACUTE APPENDICITIS WITH GENERA	1		1
NONINFECTIOUS ENTERITIS AND COLITIS	556.9 UNSPECIFIED ULCERATIVE COLITIS	1		1
OTHER DISEASES OF INTESTINES AND PERITONEUM	569.81 FISTULA OF INTESTINE EXCLUDING		1	1
	569.89 OTHER SPECIFIED DISORDER OF IN	1		1
OTHER DISEASES OF DIGESTIVE SYSTEM	571.2 ALCOHOLIC CIRRHOSIS OF LIVER		1	1
	571.5 CIRRHOSIS OF LIVER WITHOUT MEN	1		1
	571.6 BILIARY CIRRHOSIS		1	1
	572.3 PORTAL HYPERTENSION	3	2	5
	576.1 CHOLANGITIS		1	1
	576.8 OTHER SPECIFIED DISORDERS OF B	1	1	2
	577.0 ACUTE PANCREATITIS	1	3	4
	577.2 CYST AND PSEUDOCYST OF PANCREA		2	2
	578.1 BLOOD IN STOOL		2	2
	578.9 UNSPECIFIED HEMORRHAGE OF GAST	2	4	6
579.3 OTHER AND UNSPECIFIED POSTSURG		2	2	
NEPHRITIS, NEPHROTIC SYNDROME, AND NEPHROSIS	584.9 UNSPECIFIED ACUTE RENAL FAILUR		1	1
ARTHROPATHIES AND RELATED	710.0 SYSTEMIC LUPUS ERYTHEMATOSUS	1		1

Principal Dx ICD9 Group	Principal Dx ICD9 [sort]		July - December 2005	January - June 2006	July 2005 - June 2006
DISORDERS	710.3	DERMATOMYOSITIS		2	2
CONGENITAL ANOMALIES	745.2	TETRALOGY OF FALLOT		2	2
	745.5	OSTUM SECUND TYPE ATRIL SEPTL		1	1
	746.1	CONGENITAL TRICUSPID ATRESIA A		2	2
	746.7	HYPOPLASTIC LEFT HEART SYNDROM	2	3	5
	746.89	OTHER SPECIFIED CONGENITAL ANO	1		1
	751.0	MECKELS DIVERTICULUM		1	1
	751.1	CONGENITAL ATRESIA&STENOSIS OF	1		1
	751.4	CONGENITAL ANOMALIES OF INTEST		1	1
	751.5	OTHER CONGENITAL ANOMALIES OF	1		1
	751.61	CONGENITAL BILIARY ATRESIA	2	1	3
	758.6	GONADAL DYSGENESIS	1		1
	OTHER CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	765.17	OTHER PRETERM INFANTS 1750-199		1
765.18		OTHER PRETERM INFANTS 2000-249		1	1
765.19		OTHER PRETERM INFANTS 2500 OR	1		1
769		RESPIRATORY DISTRESS SYNDROME	1		1
770.89		OTHER RESPIRATORY PROBLEMS NEW	1	1	2
771.81		SEPTICEMIA OF NEWBORN	1		1
775.6		NEONATAL HYPOGLYCEMIA	1		1
779.89		OTHER SPEC CONDS ORIGINATING P		1	1
SYMPTOMS	780.39	OTHER CONVULSIONS	1		1
NONSPECIFIC ABNORMAL FINDINGS	796.4	OTHER ABNORMAL CLINICAL FINDIN		1	1
INTERNAL INJURY OF CHEST, ABDOMEN, AND PELVIS	863.82	PANC BODY INJURY W/O MENTION O	1	1	2
	863.83	PANC TAIL INJURY W/O MENTION O		1	1
	864.05	LIVER INJURY W/O MENTION OPN W		1	1
INJURY TO BLOOD VESSELS	902.34	SPLENIC VEIN INJURY		1	1
POISONING BY DRUGS, MEDICINAL AND BIOLOGICAL SUBSTANCES	962.3	POISONING BY INSULINS AND ANTI	2	2	4
COMPLICATIONS OF SURGICAL AND MEDICAL CARE, NEC	996.62	INF&INFLAM REACT TO VASC DEVIC	1	4	5
	996.87	COMPS TRANSPLANTED ORGAN INTES		2	2
	997.2	PERIPHERL VASCULR COMPLICATION	1		1
	997.3	RESPIRATORY COMPLICATIONS NEC	1		1
	997.4	DIGESTIVE SYSTEM COMPLICATION	1		1
	998.11	HEMORRHAGE COMPLICATING A PROC	1	1	2
	998.59	OTHER POSTOPERATIVE INFECTION	1		1
LIVEBORN INFANTS ACCORDING TO TYPE OF BIRTH	V30.00	SINGLE LIVEBORN HOSPITAL W/O C	7	2	9
	V30.01	SINGLE LIVEBORN HOSPITAL DELIV	5	4	9
	V31.01	LIVEBORN TWIN-MATE LIVEBORN HO	4	1	5
	V34.01	LIVEBORN OTH MX-MATES LIVEBORN		1	1
PERSONS ENCOUNTERING HEALTH SERVICES FOR SPECIFIC PROCEDURES	V58.11	ENCOUNTER FOR ANTINEOPLASTIC C		2	2
	V58.89	ENCOUNTER OTHER SPECIFIED AFTE	1		1

Table 3 provides details of a separate analysis that was conducted to determine the unprojected number of discharges, by specific octreotide dosage forms. Sandostatin LAR® Depot was associated with a total of 7 pediatric unprojected discharges for the entire 12 month period from July 2005 through June 2006, as compared with 511 adult unprojected discharges. For the entire 12 month period, there was a total of 23,818 unprojected discharges for all ages and octreotide dosage forms. Note that the unprojected discharge count is higher in this analysis, presumably since more than one type of octreotide dosage form was administered during the course of some hospital admissions.

Table 3: Product Detail for Total Number of Unprojected Discharges Associated with Octreotide in Premier Hospitals, July 2005 through June 2006, Rx Market Advisor™⁷

	Age 0 to 16		Age 17 and older		Total
	July - December 2005	January - June 2006	July - December 2005	January - June 2006	July 2005 - Jan 2006
TOTAL UNPROJECTED DISCHARGES	84	110	11,090	12,534	23,818
OCTREOTIDE MISC		10	369	507	886
OCTREOTIDE, SANDOSTATIN AMP 0.01MG/ML 1ML	1	1	520	583	1,105
OCTREOTIDE, SANDOSTATIN AMP 0.05MG/ML 1ML	24	38	2,853	3,314	6,229
OCTREOTIDE, SANDOSTATIN AMP 0.5MG/ML 1ML	30	44	2,838	3,077	5,989
OCTREOTIDE, SANDOSTATIN INJ 0.1MG/ML 1ML	23	12	3,153	3,384	6,572
OCTREOTIDE, SANDOSTATIN LAR INJ 10MG/5ML	2	3	37	28	70
OCTREOTIDE, SANDOSTATIN LAR INJ 20MG/5ML	2		130	140	272
OCTREOTIDE, SANDOSTATIN LAR INJ 30MG/5ML			84	92	176
OCTREOTIDE, SANDOSTATIN VL 0.2MG/ML 5ML		1	467	626	1,094
OCTREOTIDE, SANDOSTATIN VL 1MG/ML 5ML	2	1	639	783	1,425

B. Pediatric Hospitals

Among a subset of Premier's™ 37 pediatric hospitals, there were a total of 156 unprojected discharges associated with billing of octreotide in the pediatric population (ages 0 to 16 years) during the one-year time period⁸. As with the full set of 450 Premier™ hospitals, 68 of these discharges occurred during the 6-month period from July 2005 through December 2005 and 88 occurred during the 6-month period from January 2006 through June 2006. The frequency distribution of the cases by Principle Diagnosis ICD9 codes was the same as that of the full set of 450 Premier™ hospitals.

DISCUSSION

The IMS Health, IMS National Sales Perspectives™ does not provide a direct estimate of use but does provide a national estimate of units sold from the manufacturer to various channels of distribution. These data do not include demographic information for the patients receiving these products. The amount of product purchased by these retail and non-retail channels of distribution may be a possible surrogate for use, if we assume that facilities purchase drugs in quantities reflective of actual patient use.

A major limitation of the current analysis is that the data resources available to FDA do not capture use in the outpatient hospital clinic setting. Sales data from IMS Health, IMS National Sales Perspective™ suggest that the majority of octreotide is administered in non-federal hospitals. However, Sandostatin LAR® Depot was primarily sold to clinics in 2006.

Premier™ data are derived from hospital billing data, and therefore, may not reflect exactly which drugs are administered to patients. Also, there is no direct linkage between the drugs billed and the discharge diagnosis and procedure, so indications for use cannot be determined from this database. Finally, we are not able to use Premier™ data to make reliable national estimates of drug use for the subpopulation of pediatric inpatients. Although Premier™ network hospitals appear to be representative of all U.S. acute short-stay hospitals in general, it is not clear whether they are representative of pediatric inpatient care in the U.S.

CONCLUSIONS

Drug use data suggest that most octreotide injections (59%) were sold to non-federal hospitals, such as those which appear in the Premier™ data. For the purpose of this review, we examined utilization patterns for all octreotide products in the inpatient setting.

In contrast with other forms of octreotide, most Sandostatin LAR® Depot (54%) was sold to clinics; non-federal hospitals purchased 18% of the Sandostatin LAR® Depot. Thus, this review likely reflects approximately 59% of all octreotide product use, but less than one-fifth of the total use of Sandostatin LAR® Depot, as FDA does not have access to data describing the use of drug products in clinics.

An analysis of hospital discharge billing data in the period from January through June 2006 from a sample of 450 acute care hospitals revealed that a very low percentage of unprojected discharge data for octreotide (0.9%) was associated with pediatric (0-16 years) discharges. A wide range of Principal Diagnosis ICD-9 codes were associated with the hospital admissions during which octreotide was administered.

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APPENDIX A

IMS HEALTH, IMS NATIONAL SALES PERSPECTIVES™

IMS Health National Sales Perspectives™ 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. IMS Health, National Sales Perspectives™ measures the volume of drug products moving from manufacturer into retail and non-retail settings in terms of sales dollars, vials, and market share. These data are based on national projections.

PREMIER™

Premier maintains a large hospital drug utilization and financial database which contains billing information from over 450 acute care facilities and includes approximately 14 million inpatient records. Roughly one out of every seven inpatient discharges in the United States is represented in Premier's database.⁹ Data are available from January 2000 through the present, but have a lag time of approximately 6 months.

The hospitals that contribute information to this database are a select sample of both Premier and U.S. institutions, and do not necessarily represent all hospitals in the U.S. Data are collected from this sample of participating hospitals with diverse characteristics based upon geographic location, number of beds, population served, payers, and teaching status. The data collected include demographic and pharmacy-billing information, as well as all diagnoses and procedures for every patient discharge. Preliminary comparisons between participating Premier hospital and patient characteristics and those of the probability sample of hospitals and patients selected for the National Hospital Discharge Survey (NHDS) proved to be very similar with regard to patient age, gender, length of stay, mortality, primary discharge diagnosis and primary procedure groups.¹⁰ Based upon these analyses, we believe that overall estimates of national inpatient drug use using Premier data appear to be reasonable, but strongly recommend making this determination on a drug-specific and population-specific basis. We used only actual samples for octreotide, since we cannot use Premier data to make reliable national estimates of drug use for the subpopulation of pediatric inpatients.

PREMIER PEDIATRIC™

Premier's pediatric database is a subset of the larger database described above. Information is available from 37 pediatric hospitals. Data are also available from January 2000 through the present, but have a lag time of approximately six months.

APPENDIX B

Table 4: Total Number of Unprojected Discharges Associated with Octreotide by Principal Diagnosis ICD9 Groups for Patients Aged 17 Years and Older in Premier Hospitals, July 2005 through June 2006, Rx Market Advisor™¹¹

Principal Dx ICD9 Group [sort]	Age 17 and older		
	July - December 2005	January - June 2006	July 2005 - June 2006
TOTAL UNPROJECTED DISCHARGES	8,148	9,271	17,419
ACUTE RHEUMATIC FEVER	1		1
APPENDICITIS	4	15	19
BENIGN NEOPLASMS	48	51	99
BURNS		1	1
CARCINOMA IN SITU	5	5	10
CEREBROVASCULAR DISEASE	77	70	147
CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND ALLIED CONDITIONS	23	38	61
CHRONIC RHEUMATIC HEART DISEASE	1	4	5
COMPLICATIONS MAINLY RELATED TO PREGNANCY	4	3	7
COMPLICATIONS OCCURRING MAINLY IN THE COURSE OF LABOR AND DE		2	2
COMPLICATIONS OF SURGICAL AND MEDICAL CARE, NEC	332	400	732
COMPLICATIONS OF THE PUERPERIUM	2	3	5
CONGENITAL ANOMALIES	4	2	6
CONTUSIONS	2	2	4
CRUSHING INJURY		1	1
DISEASES OF ARTERIES, ARTERIOLES, AND CAPILLARIES	48	32	80
DISEASES OF BLOOD AND BLOOD-FORMING ORGANS	105	144	249
DISEASES OF OTHER ENDOCRINE GLANDS	87	149	236
DISEASES OF VEINS AND LYMPHATICS, AND OTHER DISEASES OF CIRC	415	433	848
DISLOCATION	1		1
DISORDERS OF BREAST		1	1
EAR AND MASTOID PROCESS DISORDERS	2	1	3
ECTOPIC AND MOLAR PREGNANCY AND OTHER PREGNANCY WITH ABORTIV		1	1
ESOPHAGUS, STOMACH, AND DUODENUM	967	1,121	2,088
EYE AND ADNEXA DISORDERS	1		1
FOREIGN BODY	1	4	5
FRACTURES	32	40	72
FRACTURES	14	26	40
FRACTURES	6	7	13
FRACTURES	3	3	6
HEREDITARY AND DEGENERATIVE DISEASES OF THE CNS	8	9	17
HERNIA OF ABDOMINAL CAVITY	32	31	63
HUMAN IMMUNODEFICIENCY VIRUS	28	28	56
HYPERTENSIVE DISEASE	18	29	47
ILL-DEFINED AND UNKNOWN CAUSES OF MORBIDITY AND MORTALITY	3		3
INFECTIONS	2	9	11
INFECTIONS OF SKIN AND SUBCUTANEOUS TISSUE	20	31	51
INFLAMMATORY DISEASE OF FEMALE PELVIC ORGANS		4	4
INFLAMMATORY DISEASES OF THE CENTRAL NERVOUS SYSTEM	6	2	8
INJURY TO BLOOD VESSELS	2	1	3
INTERNAL INJURY THORAX AND ABDOMEN AND PELVIS	33	25	58
INTESTINAL INFECTIOUS DISEASES	66	67	133
INTRACRANIAL INJURY, EXCLUDING THOSE WITH SKULL FRACTURE	14	16	30
ISCHEMIC HEART DISEASE	103	122	225
JOINT DISEASE AND RELATED EXCEPT SPINE	22	25	47
MALE GENITAL ORGANS	2	7	9
MALIGNANT NEOPLASM OF BONE, CONNECTIVE TISSUE, SKIN, BREAST	6	14	20
MALIGNANT NEOPLASM OF DIGESTIVE ORGANS AND PERITONEUM	339	389	728
MALIGNANT NEOPLASM OF GENITOURINARY ORGANS	44	39	83

Principal Dx ICD9 Group [sort]	Age 17 and older		
	July - December 2005	January - June 2006	July 2005 - June 2006
MALIGNANT NEOPLASM OF LIP, ORAL CAVITY AND PHARYNX	2	2	4
MALIGNANT NEOPLASM OF LYMPHATIC AND HEMATOPOIETIC TISSUE	64	82	146
MOUTH, SALIVARY GLANDS, AND JAW	8	16	24
NEOPLASMS OF UNSPECIFIED NATURE	1	1	2
NEPHRITIS, NEPHROTIC SYNDROME, AND NEPHROSIS	144	182	326
NERVE AND SPINAL CORD INJURIES	1	2	3
NEUROTIC, PERSONALITY, OTHER NONPSYCHOTIC MENTAL DISORDERS	12	15	27
NONINFECTIOUS ENTERITIS AND COLITIS	173	198	371
NONSPECIFIC ABNORMAL FINDINGS	11	10	21
NORMAL DELIVERY, AND OTHER INDICATIONS FOR CARE IN PREGNANCY	2	4	6
NUTRITIONAL DEFICIENCIES	12	9	21
OPEN WOUND OF HEAD, NECK, AND TRUNK		4	4
OPEN WOUND OF UPPER LIMB		1	1
OSTEOPATHIES, CHONDROPATHIES, AND ACQUIRED MUSCULOSKELETAL D	11	26	37
OTHER AND UNSPECIFIED EFFECTS OF EXTERNAL CAUSES	4	6	10
OTHER AND UNSPECIFIED SITES	206	196	402
OTHER BACTERIAL DISEASES	301	312	613
OTHER DISEASES OF DIGESTIVE SYSTEM	2,566	2,873	5,439
OTHER DISEASES OF INTESTINES AND PERITONEUM	472	517	989
OTHER DISEASES OF SKIN AND SUBCUTANEOUS TISSUE	8	9	17
OTHER DISEASES OF THE UPPER RESPIRATORY TRACT	132	169	301
OTHER DISEASES OF THE UPPER RESPIRATORY TRACT	4	11	15
OTHER DISEASES OF URINARY SYSTEM	60	57	117
OTHER DISORDERS OF FEMALE GENITAL TRACT	13	17	30
OTHER DISORDERS OF THE CENTRAL NERVOUS SYSTEM	18	17	35
OTHER FORMS OF HEART DISEASE	129	135	264
OTHER INFECTIOUS AND PARASITIC DISEASES	9	9	18
OTHER INFECTIOUS DISEASES	2	1	3
OTHER INFLAMMATORY CONDITIONS OF SKIN AND SUBCUTANEOUS TISS		1	1
OTHER METABOLIC AND IMMUNITY DISORDERS	216	203	419
PERIPHERAL NERVOUS SYSTEM	5	4	9
PERSONS ENCOUNTERING HEALTH SERVICES FOR SPECIFIC PROCEDURES	90	115	205
PERSONS ENCOUNTERING HEALTH SERVICES IN OTHER CIRCUMSTANCES	1	1	2
PNEUMOCONIOSES AND OTHER LUNG DISEASES DUE TO EXTERNAL AGENT	42	44	86
PNEUMONIA AND INFLUENZA	72	91	163
POISONING BY DRUGS, MEDICINAL AND BIOLOGICAL SUBSTANCES	26	31	57
POLIO AND OTHER VIRAL DISEASES	46	49	95
POLIO AND OTHER VIRAL DISEASES		1	1
POLIO AND OTHER VIRAL DISEASES	1		1
PSYCHOSES	14	19	33
PSYCHOSES	12	12	24
PULMONARY CIRCULATION	22	28	50
RESPIRATORY AND INTRATHORACIC ORGANS	30	31	61
RHEUMATISM, EXCLUDING THE BACK	3	8	11
SPINAL DISORDERS	24	41	65
SYMPTOMS	217	267	484
SYPHILIS AND OTHER VENEREAL DISEASES		1	1
THYROID DISORDER		2	2
TOXIC EFFECTS OF SUBSTANCES CHIEFLY NONMEDICINAL AS TO SOURC	2	1	3
TRAUMATIC COMPLICATIONS AND UNSPECIFIED INJURIES	3	2	5
TUBERCULOSIS	1		1
UNCERTAIN BEHAVIOUR	19	25	44
VIRAL DISEASES ACCOMPANIED BY EXANTHEM	2	6	8
ZOO NOTIC BACTERIAL DISEASES	2		2

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/s/

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