

Disclaimer

The following report(s) provides findings from an FDA-initiated query using Sentinel. While Sentinel queries may be undertaken to assess potential medical product safety risks, they may also be initiated for various other reasons. Some examples include determining a rate or count of an identified health outcome of interest, examining medical product use, exploring the feasibility of future, more detailed analyses within Sentinel, and seeking to better understand Sentinel capabilities.

Data obtained through Sentinel are intended to complement other types of evidence such as preclinical studies, clinical trials, postmarket studies, and adverse event reports, all of which are used by FDA to inform regulatory decisions regarding medical product safety. The information contained in this report is provided as part of FDA's commitment to place knowledge acquired from Sentinel in the public domain as soon as possible. Any public health actions taken by FDA regarding products involved in Sentinel queries will continue to be communicated through existing channels.

FDA wants to emphasize that the fact that FDA has initiated a query involving a medical product and is reporting findings related to that query does not mean that FDA is suggesting health care practitioners should change their prescribing practices for the medical product or that patients taking the medical product should stop using it. Patients who have questions about the use of an identified medical product should contact their health care practitioners.

The following report contains a description of the request, request specifications, and results from the modular program run(s).

If you are using a web page screen reader and are unable to access this document, please contact the Sentinel Operations Center for assistance at info@sentinelssystem.org.

Overview for Request acei_mpl3r_wp002

Request ID: acei_mpl3r_wp002_nsdv_v01

Report Description: In this report we assessed the ability of prospective surveillance tools to reproduce the known association between angiotensin converting enzyme (ACE) inhibitors and angioedema, with beta blockers as the comparison exposure. This is look two of a sequential analysis.

Data Source: We included data in this report from January 1, 2015 to November 30, 2016 from eight Data Partners contributing to the Sentinel Distributed Database (SDD). We distributed the request package to three Data Partners on February 23, 2017 and to five Data Partners on April 6, 2017. See Appendix A for a list of dates of available data for each Data Partner.

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) module, version 3.3.2

Study Design: This study used a retrospective new-user cohort design.

Exposures of Interest: We classified the exposures of interest as new ACE inhibitor use in the exposure group and new beta blocker use in the comparator group. We defined the exposures and comparators using National Drug Codes (NDCs). See Appendix B for a list of generic and brand names of medical products used to define the exposures of interest in this request. We only included the first valid exposure episode that occurred during the study period per patient; cohort re-entry was not allowed.

Cohort Eligibility Criteria: We required members to have continuous enrollment in health plans with both medical and drug coverage for at least 183 days before exposure initiation (index), allowing gaps in coverage of up to 45 days, in order to be included in the cohorts. Additionally, we required members to be 18 years of age or older. We defined new use of ACE inhibitor or beta blockers as no use of ACE inhibitors, beta blockers, aliskiren hemifumarate, or angiotensin receptor blockers (ARBs) in the 183 days prior to index exposure.

Inclusion Criteria: We evaluated four cohorts of interest in total. We restricted two of these cohorts to individuals with evidence of heart failure within 183 days of their exposure, as defined using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) codes. See Appendix C for a list of ICD-9-CM and ICD-10-CM codes used to define the inclusion criteria.

Follow-up: We determined follow-up time by the length of the exposure episodes, and defined exposure episode lengths using outpatient pharmacy dispensing days supplied to create a sequence of continuous exposure. If we observed gaps of 14 days or fewer in the days supplied, we considered exposure episodes continuous. We extended the end date of each exposure episode by 14 additional days and applied a maximum episode duration of 60 days to all exposure episodes. Follow-up began on the first day of exposure initiation and continued until the first occurrence of any of the following: 1) an outcome diagnosis; 2) a dispensing of the other study drug, ARBs, or aliskiren hemifumarate; 3) disenrollment; 4) disenrollment due to death; 5) cessation of study drug use (defined as when the days supply was exhausted for longer than 14 days without a subsequent dispensing); or 6) end of data availability (varies by Data Partner).

Outcomes of Interest: The primary outcome of interest was an angioedema diagnosis that occurred in the inpatient, outpatient, or emergency department care setting. We defined angioedema using ICD-9-CM and ICD-10-CM diagnosis codes. The secondary outcome of interest was serious angioedema, defined as an angioedema diagnosis in the inpatient or emergency department care setting that occurred within two days of an intensive care unit admission, intubation, tracheostomy, or laryngoscopy. We defined intensive care unit admission, intubation, tracheostomy, and laryngoscopy using ICD-9-CM, ICD-10-CM, and Current Procedural Terminology, Fourth Edition (CPT-4) procedure codes. We included an outcome of interest if the individual had no evidence of the outcome in the 183 days prior to exposure initiation. Please see Appendices D and E for specific codes used to define outcomes in this request.

Propensity Score (PS): We assessed the following characteristics during the baseline period: age, sex, Charles/Elixhauser combined comorbidity score¹, health service utilization, ambulatory allergies, diabetes, everolimus use, heart failure, ischemic heart disease, nonsteroidal anti-inflammatory drugs (NSAIDs) use, serious allergies, or sirolimus use. Please see Appendices F and G for a list of codes used to define baseline characteristics. The PS model included age, sex, comorbidity score, health service utilization, ambulatory allergies, diabetes, heart failure, ischemic heart disease, NSAIDs use, and serious allergies. We evaluated the occurrence of these characteristics in the 183 days prior to the date of exposure initiation.

Overview for Request acei_mpl3r_wp002

Matching: The matching ratio for the PS was 1:1 and the matching caliper was 0.025. We used nearest neighbor matching without replacement for patients in the exposed and comparator cohorts, meaning we matched each comparator patient one time, at most, to an exposed patient. To estimate the adjusted hazard ratio and 95% confidence interval, we used a Cox regression model.

See Appendix H for the specifications to define the parameters used in this analysis.

Limitations: Algorithms used to define the exposures, outcomes, exclusions, and characteristics are imperfect; thus, misclassification is possible. Therefore, data should be interpreted with this limitation in mind.

Notes: Please contact the Sentinel Operations Center (info@sentinel-system.org) for questions and to provide comments/suggestions for future enhancements to this document. For more information on Sentinel's routine querying modules, please refer to the documentation (<https://dev.sentinel-system.org/projects/SENTINEL/repos/sentinel-routine-querying-tool-documentation/browse>).

¹Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759

Table of Contents

CIDA Glossary List of Terms and Their Definitions Found in this Report Pertaining to Sentinel's Cohort Identification and Descriptive Analysis (CIDA) Tool used to Conduct this Request

PSM Glossary List of Terms and Their Definitions Found in this Report Pertaining to Sentinel's Propensity Score Matching (PSM) Module used to Conduct this Request

Sequential Glossary List of Terms and Their Definitions Found in this Report Pertaining to Sentinel's Sequential Analysis Tool used to Conduct this Request

Table 1a Baseline Characteristics for an Unmatched Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors or Beta Blockers at Risk for Angioedema in the Sentinel Distributed Database in Monitoring Period 1 (January 1, 2015 to July 31, 2016)

Table 1b Baseline Characteristics for a Matched Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Angioedema in the Sentinel Distributed Database in Monitoring Period 1 (January 1, 2015 to July 31, 2016) (Matched 1:1 Propensity Score, Caliper = .025)

Table 1c Baseline Characteristics for an Unmatched Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Angioedema in the Sentinel Distributed Database in Monitoring Period 2 (January 1, 2015 to July 31, 2016) (Unmatched)

Table 1d Baseline Characteristics for a Matched Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Angioedema in the Sentinel Distributed Database in Monitoring Period 2 (January 1, 2015 to July 31, 2016) (Matched 1:1 Propensity Score, Caliper = .025)

Table 2a Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Serious Angioedema (Unmatched)

Table 2b Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Serious Angioedema (Matched 1:1 Unconditional Propensity Score, Caliper = .025)

Table 2c Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Serious Angioedema (Unmatched)

Table 2d Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Serious Angioedema (Matched 1:1 Unconditional Propensity Score, Caliper = .025)

Table 3a Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Angioedema (Unmatched)

Table 3b Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Angioedema (Matched 1:1 Unconditional Propensity Score, Caliper = .025)

Table of Contents

Table 3c Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Angioedema (Unmatched)

Table 3d Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Angioedema (Matched 1:1 Unconditional Propensity Score, Caliper = .025)

Table 4a Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Serious Angioedema (Unmatched)

Table 4b Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Serious Angioedema (Matched 1:1 Unconditional Propensity Score, Caliper = .025)

Table 4c Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Serious Angioedema (Unmatched)

Table 4d Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Serious Angioedema (Matched 1:1 Unconditional Propensity Score, Caliper = .025)

Table 5 Patient Level Effect Estimates for Angioedema and Serious Angioedema in the Sentinel Distributed Database by Exposure Cohort, Analysis Type, and Monitoring Period

Table 6 Risk Set Level Effect Estimates for Angioedema and Serious Angioedema in the Sentinel Distributed Database by Exposure Cohort, Analysis Type, and Monitoring Period

Appendix A Monitoring Period Key (Request Start Date to Date of Latest Available Data for Each Data Partner in this Request)

Appendix B Generic and Brand Names Used to Define Exposures and Incidence Criteria in this Request

Appendix C List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Appendix D List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Angioedema in this Request

Appendix E List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), Current Procedural Terminology (CPT), and Healthcare Common Procedure Coding System (HCPCS) Diagnosis and Procedure Codes Used to Define Serious Angioedema in this Request

Table of Contents	
<u>Appendix F</u>	International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM) Codes Used to Define Covariates in this Request
<u>Appendix G</u>	Generic and Brand Names of Medical Products Used to Define Covariates in this Request
<u>Appendix H</u>	Specifications Defining Parameters Used in this Request

**Glossary of Terms for Analyses Using
Cohort Identification and Descriptive Analysis (CIDA) Module***

Amount Supplied - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing.

Blackout Period - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.

Care Setting - type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency Department (E), Home (H), Inpatient (I), Outpatient (O), or Unknown or Missing (U). The Care Setting, along with the Principal Diagnosis Indicator (PDX), forms the Care Setting/PDX parameter.

Ambulatory Visit (AV) - includes visits at outpatient clinics, same-day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.

Emergency Department (ED) - includes ED encounters that become inpatient stays (in which case inpatient stays would be a separate encounter). Excludes urgent care visits.

Inpatient Hospital Stay (IP) - includes all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.

Non-Acute Institutional Stay (IS) - includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.

Other Ambulatory Visit (OA) - includes other non overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, telephone and email consultations.

Charlson/Elixhauser Combined Comorbidity Score - calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (e.g., in the 183 days prior to index).

Code Days - the minimum number of times the diagnosis must be found during the evaluation period in order to fulfill the algorithm to identify the corresponding patient characteristic.

Cohort Definition (drug/exposure) - indicates how the cohort will be defined: 01: Cohort includes only the first valid treatment episode during the query period; 02: Cohort includes all valid treatment episodes during the query period; 03: Cohort includes all valid treatment episodes during the query period until an event occurs.

Computed Start Marketing Date - represents the first observed dispensing date among all valid users within a GROUP (scenario) within each Data Partner site.

Days Supplied - number of days supplied for all dispensings in qualifying treatment episodes.

Eligible Members - number of members eligible for an incident treatment episode (defined by the drug/exposure and event washout periods) with drug and medical coverage during the query period.

Enrollment Gap - number of days allowed between two consecutive enrollment periods without breaking a "continuously enrolled" sequence.

Episodes - treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by the episode gap.

Episode Gap - number of days allowed between two (or more) consecutive exposures (dispensings/procedures) to be considered the same treatment episode.

Event Deduplication - specifies how events are counted by the Modular Program (MP) algorithm: 0: Counts all occurrences of a health outcome of interest (HOI) during an exposure episode; 1: de-duplicates occurrences of the same HOI code and code type on the same day; 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level).

Exposure Episode Length - number of days after exposure initiation that is considered "exposed time."

Exposure Extension Period - number of days post treatment period in which the outcomes/events are counted for a treatment episode. Extensions are added after any episode gaps have been bridged.

Lookback Period - number of days wherein a member is required to have evidence of pre-existing condition (diagnosis/procedure/drug dispensing).

Maximum Episode Duration - truncates exposure episodes after a requester-specified number of exposed days. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Member-Years - sum of all days of enrollment with medical and drug coverage in the query period preceded by an exposure washout period all divided by 365.25.

**Glossary of Terms for Analyses Using
Cohort Identification and Descriptive Analysis (CIDA) Module***

Minimum Days Supplied - specifies a minimum number of days in length of the days supplied for the episode to be considered.

Minimum Episode Duration - specifies a minimum number of days in length of the episode for it to be considered. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Monitoring Period - used to define time periods of interest for both sequential analysis and simple cohort characterization requests.

Principal Diagnosis (PDX) - diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the Caresetting/PDX parameter.

Query Period - period in which the modular program looks for exposures and outcomes of interest.

Switch Evaluation Step Value - value used to differentiate evaluation step. Each switch pattern can support up to 2 evaluation steps (0 = switch pattern evaluation start; 1 = first evaluation; 2 = second evaluation).

Switch Gap Inclusion Indicator - indicator for whether gaps in treatment episodes that are included in a switch episode will be counted as part of the switch episode duration.

Switch Pattern Cohort Inclusion Date - indicates which date to use for inclusion into the switch pattern cohort of interest as well as optionally as the index date of the treatment episode initiating the switch pattern. Valid options are the product approval date, product marketing date, other requester defined date, or computed start marketing date.

Switch Pattern Cohort Inclusion Strategy - indicates how the switch pattern cohort inclusion date will be used: 01: used only as a switch cohort entry date. First treatment episode dispensing date is used as index for computing time to first switch; 02: used as switch cohort entry date and as initial switch step index date for computing time to first switch.

Treatment Episode Truncation Indicator - indicates whether the exposure episode will be truncated at the occurrence of a requester-specified code.

Washout Period (drug/exposure) - number of days a user is required to have no evidence of prior exposure (drug dispensing/procedure) and continuous drug and medical coverage prior to an incident treatment episode.

Washout Period (event/outcome) - number of days a user is required to have no evidence of a prior event (procedure/diagnosis) and continuous drug and medical coverage prior to an incident treatment episode.

Years at Risk - number of days supplied plus any episode gaps and exposure extension periods all divided by 365.25.

*All terms may not be used in this report

**Glossary of Terms for Analyses Using
Propensity Score Matching (PSM) Module***

Covariate - requester defined binary variable to include in the propensity score estimation model (e.g., diabetes, heart failure, etc.) during requester-defined lookback period. Requester may also choose to add any of the following categorical, continuous, or count metrics to the propensity score estimation model:

1. Age (continuous)
2. Sex
3. Time period (i.e., monitoring period for sequential analyses)
4. Year of exposure
5. Comorbidity score
6. Medical utilization – number of inpatient stays
7. Medical utilization – number of institutional stays
8. Medical utilization – number of emergency department visits
9. Medical utilization – number of outpatient visits
10. Health care utilization – number of other ambulatory encounters (e.g., telemedicine, email consults)
11. Drug utilization – number of dispensings
12. Drug utilization – number of unique generics dispensed
13. Drug Utilization – number of unique drug classes dispensed

Covariate Evaluation Window - specified number of days relative to index date to evaluate the occurrence of covariates of interest. Note: members are required to have continuous enrollment during the covariate evaluation window, regardless of the value included in the "Continuous enrollment before exposure" field.

Individual Level Data Return - program may return individual-level, de-identified datasets to the Sentinel Operations Center (SOC). While the datasets contain a single row per patient for each specified analysis, patient identifiers such as a patient ID are not included in the output. Individual-level datasets are returned to the SOC, aggregated, and used to calculate effect estimates via Cox (proportional hazards) regression.

Mahalanobis Distance - provides a measure of balance across all variables while accounting for their correlation.

Matching Caliper - maximum allowed difference in propensity scores between treatment and control patients. Requester may select any caliper (e.g., 0.01, 0.025, and 0.05).

Matching Ratio - patients in exposed and comparator groups are nearest neighbor matched by a 1:1 or 1:n (up to 10) matching ratio.

Matched Conditional and Unconditional Analysis - in a conditional matched analysis, a Cox model, stratified by Data Partner site and matched set, is run on the matched population. This can be done for both the both 1:1 and 1:n matched cohorts. In an unconditional analysis, a Cox model, stratified by Data Partner site only, is run on the matched population. This can be done for the 1:1 matched cohort only.

Propensity Score Stratification - option to stratify propensity scores based on requester-defined percentiles in the unmatched population. In a stratified analysis, a Cox model, stratified by Data Partner site, is run on the stratified population. Note that all patients identified in exposure and comparator cohorts are used in the analysis.

PSM Tool - performs effect estimation by comparing exposure propensity-score matched parallel new user cohorts. Propensity score estimation and matching are conducted within each Sentinel Data Partner site via distributed programming code; data are returned to the SOC, aggregated, and used to calculate effect estimates.

Risk-set Level Data Return - alternative to the patient-level data return approach. In this approach, the PSM tool will produce de-identified, risk-set level datasets instead of or in addition to individual-level output. Whereas each observation in the patient-level datasets represents one patient in the cohort, each observation in the risk set dataset represents one event. Risk sets are created at the Data Partner site, returned to the SOC, aggregated, and used to calculate effect estimates via case-centered logistic regression.

Subgroup Analysis - may be conducted using any requester-defined covariates. Subgroup analyses may be performed in the unmatched and the matched population.

Glossary of Terms for Analyses Using
Propensity Score Matching (PSM) Module*

Zero Cell Correction - indicator for whether to screen variables with a zero correction added to each cell in the confounder/outcome 2x2 table. Recommended when the number of exposed outcomes is fewer than 150.

*All terms may not be used in this report

**Glossary of Terms for Propensity Score Matching (PSM) Analyses Using
Prospective Surveillance***

Look - Prospective surveillance requires multiple executions of the CIDA and PSM tools over the course of a surveillance activity. A "look" is when the program package is executed each time a Data Partner updates, or refreshes, their database.

Surveillance Mode - option for conducting prospective surveillance with the propensity score matched design, which differ on how underlying data changes and matches are handled during the course of the activity. There are three options:

1) **Full Lock**: Once a time interval is evaluated during a surveillance activity, it is never evaluated again. If the index date or post-index at-risk time changes from one look to another, the information from the earlier look is retained and no new information is considered for the patient. If covariate information extracted from the pre-index period changes from one look to another, changes in covariate information are ignored and the patient continues to be followed.

With this option, once patients are matched the match and propensity score are retained for the duration of the surveillance activity.

2) **Partial Lock**: Once a time interval is evaluated during a surveillance activity, only information in the post-index at-risk period may be updated in subsequent looks. If the index date changes from one look to another, the information from the earlier look is retained and the patient is lost to follow-up. If post-index at-risk time changes from one look to another, information is updated and the patient continues to be followed. With this option, once patients are matched the match and propensity score are retained for the duration of the surveillance activity.

3) **No Lock**: As underlying data change across looks, information is updated and used in analyses. Any changes in index date, pre-index period covariates and post-index period at-risk time are updated at each look. Because the pre-index period and index date information are allowed to change, matches may not be retained for the duration of a surveillance activity. Note that even minimal underlying data changes can lead to significant cohort re-matching.

*All terms may not be used in this report

Table 1a. Baseline Characteristics for an Unmatched Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors or Beta Blockers at Risk for Angioedema in the Sentinel Distributed Database in Monitoring Period 1 (January 1, 2015 to July 31, 2016)

Characteristic	ACE Inhibitors		Beta Blockers		Covariate Balance	
	Number	Percent	Number	Percent	Absolute Difference	Standardized Difference
Number of patients	498,360	100.0%	381,633	100.0%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	55.7	12.2	55.4	15.8	0.328	0.023
	Number	Percent	Number	Percent		
Age (years)						
18-44	103,427	20.8%	107,734	28.2%	-7.476	-0.175
45-54	135,586	27.2%	73,938	19.4%	7.832	0.186
55-64	145,738	29.2%	87,592	23.0%	6.292	0.144
65+	113,609	22.8%	112,369	29.4%	-6.648	-0.152
Sex						
Ambiguous	1	0.0%	1	0.0%	-	-
Female	214,179	43.0%	212,124	55.6%	-12.606	-0.254
Male	284,157	57.0%	169,491	44.4%	12.606	0.254
Unknown	23	0.0%	17	0.0%	-	-
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	0.1	1.2	0.7	1.8	-0.569	-0.374
	Number	Percent	Number	Percent		
Ambulatory Allergies	111,058	22.3%	102,178	26.8%	-4.489	-0.104
Diabetes	115,813	23.2%	48,197	12.6%	10.610	0.279
Heart Failure	9,136	1.8%	23,983	6.3%	-4.451	-0.227
Ischemic Heart Disease	22,391	4.5%	55,140	14.4%	-9.955	-0.345
Serious Allergies	7,023	1.4%	11,173	2.9%	-1.518	-0.104
History of Use:						
Everolimus ¹	41	0.0%	75	0.0%	-0.011	-0.010
Nonsteroidal anti-inflammatory drugs	60,593	12.2%	48,519	12.7%	-0.555	-0.017
Sirolimus ¹	60	0.0%	111	0.0%	-0.017	-0.012
Health Service Utilization Intensity:						
Mean number of generic drugs	3.2	3.4	4.2	4.1	-1.002	-0.265
Mean number of unique drug classes	3.0	3.1	4.0	3.8	-0.970	-0.281
Mean number of filled prescriptions	7.0	9.3	9.3	11.2	-2.241	-0.217
Mean number of inpatient hospital encounters (IP)	0.1	0.3	0.2	0.6	-0.151	-0.311
Mean number of non-acute institutional encounters (IS)	0.0	0.4	0.1	0.7	-0.065	-0.112
Mean number of emergency room encounters (ED)	0.2	0.7	0.4	1.1	-0.176	-0.188
Mean number of ambulatory encounters (AV)	4.6	6.4	7.3	9.6	-2.700	-0.331
Mean number of other ambulatory encounters (OA)	1.3	3.5	2.1	5.0	-0.729	-0.170

¹Covariate not included in propensity score model

Table 1b. Baseline Characteristics for a Matched Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Angioedema in the Sentinel Distributed Database in Monitoring Period 1 (January 1, 2015 to July 31, 2016) (Matched 1:1 Propensity Score, Caliper = .025)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	288,908	58.0%	288,908	75.7%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	55.6	12.6	55.9	15.1	-0.244	-0.018
	Number	Percent	Number	Percent		
Age (years)						
18-44	65,564	22.7%	73,783	25.5%	-2.845	-0.067
45-54	75,605	26.2%	60,525	20.9%	5.220	0.123
55-64	77,226	26.7%	71,649	24.8%	1.930	0.044
65+	70,513	24.4%	82,951	28.7%	-4.305	-0.098
Sex						
Ambiguous	0	0.0%	0	0.0%	-	-
Female	156,849	54.3%	148,299	51.3%	2.959	0.059
Male	132,048	45.7%	140,600	48.7%	-2.960	-0.059
Unknown	11	0.0%	9	0.0%	0.001	0.001
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	0.3	1.4	0.4	1.3	-0.047	-0.034
	Number	Percent	Number	Percent		
Ambulatory Allergies	72,770	25.2%	70,888	24.5%	0.651	0.015
Diabetes	38,897	13.5%	39,188	13.6%	-0.101	-0.003
Heart Failure	8,458	2.9%	10,029	3.5%	-0.544	-0.031
Ischemic Heart Disease	21,377	7.4%	22,800	7.9%	-0.493	-0.019
Serious Allergies	5,510	1.9%	5,605	1.9%	-0.033	-0.002
History of Use:						
Everolimus ¹	38	0.0%	23	0.0%	0.005	0.005
Nonsteroidal anti-inflammatory drugs	35,655	12.3%	35,302	12.2%	0.122	0.004
Sirolimus ¹	49	0.0%	59	0.0%	-0.003	-0.003
Health Service Utilization Intensity:						
Mean number of generic drugs	3.7	3.7	3.6	3.6	0.063	0.017
Mean number of unique drug classes	3.5	3.4	3.4	3.3	0.023	0.007
Mean number of filled prescriptions	8.0	10.3	7.9	9.9	0.124	0.012
Mean number of inpatient hospital encounters (IP)	0.1	0.4	0.1	0.4	-0.014	-0.035
Mean number of non-acute institutional encounters (IS)	0.1	0.5	0.1	0.6	-0.006	-0.011
Mean number of emergency room encounters (ED)	0.3	0.8	0.3	0.8	-0.011	-0.013
Mean number of ambulatory encounters (AV)	5.6	7.6	5.7	7.1	-0.034	-0.005
Mean number of other ambulatory encounters (OA)	1.5	3.8	1.6	4.1	-0.038	-0.010

¹Covariate not included in propensity score model

Table 1c. Baseline Characteristics for an Unmatched Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Angioedema in the Sentinel Distributed Database in Monitoring Period 2 (January 1, 2015 to July 31, 2016) (Unmatched)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	620,604	100.0%	479,025	100.0%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age	55.8	12.3	55.4	16	0.42	0.03
Age (years)	Number	Percent	Number	Percent		
18-44	128,643	20.7%	136,905	28.6%	-7.851	-0.183
45-54	168,044	27.1%	91,519	19.1%	7.972	0.190
55-64	180,275	29.0%	108,085	22.6%	6.485	0.149
65+	143,642	23.1%	142,516	29.8%	-6.606	-0.150
Sex						
Ambiguous	2	0.0%	1	0.0%	-	0.001
Female	267,715	43.1%	267,880	55.9%	-12.784	-0.258
Male	352,861	56.9%	211,122	44.1%	12.784	0.258
Unknown	26	0.0%	22	0.0%	-	-0.001
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	0.1	1.1	0.6	1.6	-0.456	-0.329
	Number	Percent	Number	Percent		
Ambulatory Allergies	137,977	22.2%	127,941	26.7%	-4.476	-0.104
Diabetes	143,965	23.2%	59,920	12.5%	10.689	0.282
Heart Failure	11,526	1.9%	30,311	6.3%	-4.470	-0.227
Ischemic Heart Disease	27,591	4.4%	68,400	14.3%	-9.833	-0.342
Serious Allergies	9,205	1.5%	15,342	3.2%	-1.720	-0.114
History of Use:						
Everolimus ¹	56	0.0%	96	0.0%	-0.011	-0.009
Nonsteroidal anti-inflammatory drugs	75,671	12.2%	61,581	12.9%	-0.662	-0.020
Sirolimus ¹	79	0.0%	129	0.0%	-0.014	-0.010
Health Service Utilization Intensity:						
Mean number of generic drugs	3.2	3.4	4.2	4.1	-1.015	-0.268
Mean number of unique drug classes	3.0	3.1	4.0	3.8	-0.981	-0.284
Mean number of filled prescriptions	6.9	9.2	9.1	11.2	-2.241	-0.219
Mean number of inpatient hospital encounters (IP)	0.1	0.3	0.2	0.6	-0.151	-0.315
Mean number of non-acute institutional encounters (IS)	0.0	0.4	0.1	0.7	-0.065	-0.114
Mean number of emergency room encounters (ED)	0.2	0.7	0.4	1.1	-0.183	-0.192
Mean number of ambulatory encounters (AV)	4.6	6.4	7.2	9.5	-2.687	-0.333
Mean number of other ambulatory encounters (OA)	1.4	3.5	2.2	5.1	-0.789	-0.180

¹Covariate not included in propensity score model

Table 1d. Baseline Characteristics for a Matched Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Angioedema in the Sentinel Distributed Database in Monitoring Period 2 (January 1, 2015 to July 31, 2016) (Matched 1:1 Propensity Score, Caliper = .025)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	362,038	58.3%	362,038	75.6%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	55.7	12.7	55.9	15.2	-0.168	-0.012
	Number	Percent	Number	Percent		
Age (years)						
18-44	81,947	22.6%	93,285	25.8%	-3.132	-0.073
45-54	93,966	26.0%	74,847	20.7%	5.281	0.125
55-64	96,032	26.5%	88,393	24.4%	2.110	0.048
65+	90,093	24.9%	105,513	29.1%	-4.259	-0.096
Sex						
Ambiguous	1	0.0%	-	0.0%	-	-
Female	196,757	54.3%	186,710	51.6%	2.775	0.056
Male	165,269	45.6%	175,316	48.4%	-2.775	-0.056
Unknown	11	0.0%	12	0.0%	-	-
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	0.3	1.2	0.3	1.2	-0.035	-0.028
	Number	Percent	Number	Percent		
Ambulatory Allergies	91,177	25.2%	88,491	24.4%	0.742	0.017
Diabetes	48,185	13.3%	48,732	13.5%	-0.151	-0.004
Heart Failure	10,697	3.0%	12,503	3.5%	-0.499	-0.028
Ischemic Heart Disease	26,390	7.3%	27,884	7.7%	-0.413	-0.016
Serious Allergies	7,328	2.0%	7,378	2.0%	-0.014	-0.001
History of Use:						
Everolimus ¹	52	0.0%	31	0.0%	0.006	0.005
Nonsteroidal anti-inflammatory drugs	45,245	12.5%	44,573	12.3%	0.186	0.006
Sirolimus ¹	61	0.00%	67	0.00%	-0.002	-0.001
Health Service Utilization Intensity:						
Mean number of generic drugs	3.6	3.7	3.6	3.6	0.021	0.006
Mean number of unique drug classes	3.4	3.4	3.4	3.3	-0.015	-0.004
Mean number of filled prescriptions	7.8	10.1	7.8	9.8	0.026	0.003
Mean number of inpatient hospital encounters (IP)	0.1	0.4	0.1	0.4	-0.014	-0.033
Mean number of non-acute institutional encounters (IS)	0.1	0.5	0.1	0.6	-0.007	-0.013
Mean number of emergency room encounters (ED)	0.3	0.8	0.3	0.8	-0.012	-0.014
Mean number of ambulatory encounters (AV)	5.5	7.5	5.6	7.0	-0.068	-0.009
Mean number of other ambulatory encounters (OA)	1.6	3.9	1.7	4.2	-0.070	-0.017

¹Covariate not included in propensity score model

Table 2a. Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Serious Angioedema (Unmatched)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	498,633	100.0%	382,166	100.0%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	55.7	12.2	55.4	15.8	0.326	0.023
	Number	Percent	Number	Percent		
Age						
18-44	103,492	20.8%	107,869	28.2%	-7.471	-0.174
45-54	135,672	27.2%	74,046	19.4%	7.833	0.186
55-64	145,807	29.2%	87,719	23.0%	6.288	0.144
65+	113,662	22.8%	112,532	29.4%	-6.651	-0.152
Sex						
Ambiguous	1	0.0%	1	0.0%	0	-
Female	214,322	43.0%	212,470	55.6%	-12.614	-0.254
Male	284,287	57.0%	169,678	44.4%	12.614	0.254
Unknown	23	0.0%	17	0.0%	0	-
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	0.1	1.2	0.7	1.8	-0.569	-0.374
	Number	Percent	Number	Percent		
Ambulatory Allergies	111,226	22.3%	102,510	26.8%	-4.517	-0.105
Diabetes	115,878	23.2%	48,297	12.6%	10.601	0.279
Heart Failure	9,139	1.8%	24,023	6.3%	-4.453	-0.227
Ischemic Heart Disease	22,407	4.5%	55,215	14.4%	-9.954	-0.345
Serious Allergies	7,088	1.4%	11,284	3.0%	-1.531	-0.105
History of Use:						
Everolimus ¹	41	0.0%	75	0.0%	-0.011	-0.010
Nonsteroidal anti-inflammatory drugs	60,637	12.2%	48,612	12.7%	-0.559	-0.017
Sirolimus ¹	60	0.0%	112	0.0%	-0.017	-0.012
Health Service Utilization Intensity:						
Mean number of generic drugs	3.2	3.4	4.2	4.1	-1.004	-0.265
Mean number of unique drug classes	3	3.1	4	3.8	-0.972	-0.282
Mean number of filled prescriptions	7	9.3	9.3	11.2	-2.245	-0.218
Mean number of inpatient hospital encounters (IP)	0.1	0.3	0.2	0.6	-0.151	-0.311
Mean number of non-acute institutional encounters (IS)	0	0.4	0.1	0.7	-0.065	-0.112
Mean number of emergency room encounters (ED)	0.2	0.7	0.4	1.1	-0.177	-0.188
Mean number of ambulatory encounters (AV)	4.6	6.4	7.3	9.6	-2.705	-0.331
Mean number of other ambulatory encounters (OA)	1.3	3.5	2.1	5	-0.73	-0.17

¹Covariate not included in propensity score model

Table 2b. Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Serious Angioedema (Matched 1:1 Propensity Score, Caliper = .025)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	289,220	58.0%	289,220	75.7%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	55.6	12.6	55.9	15.1	-0.244	-0.018
	Number	Percent	Number	Percent		
Age (years)						
18-44	65,619	22.7%	73,796	25.5%	-2.827	-0.066
45-54	75,745	26.2%	60,594	21.0%	5.239	0.124
55-64	77,186	26.7%	71,686	24.8%	1.902	0.044
65+	70,670	24.4%	83,144	28.7%	-4.313	-0.098
Sex						
Ambiguous	1	0.0%	1	0.0%	0	-
Female	156,931	54.3%	148,467	51.3%	2.926	0.059
Male	132,280	45.7%	140,745	48.7%	-2.927	-0.059
Unknown	8	0.0%	7	0.0%	0	0.001
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	0.3	1.4	0.4	1.3	-0.046	-0.034
	Number	Percent	Number	Percent		
Ambulatory Allergies	73,015	25.2%	71,151	24.6%	0.644	0.015
Diabetes	38,900	13.4%	39,139	13.5%	-0.083	-0.002
Heart Failure	8,503	2.9%	10,020	3.5%	-0.525	-0.030
Ischemic Heart Disease	21,414	7.4%	22,734	7.9%	-0.456	-0.017
Serious Allergies	5,587	1.9%	5,628	1.9%	-0.014	-0.001
History of Use:						
Everolimus ¹	40	0.0%	30	0.0%	0.003	0.003
Nonsteroidal Anti-inflammatory Drugs	35,865	12.4%	35,345	12.2%	0.180	0.005
Sirolimus ¹	44	0.0%	62	0.0%	-0.006	-0.005
Health Service Utilization Intensity:						
Mean number of generic drugs	3.7	3.7	3.6	3.6	0.055	0.015
Mean number of unique drug classes	3.5	3.4	3.4	3.3	0.015	0.005
Mean number of filled prescriptions	8.0	10.2	7.9	9.8	0.104	0.010
Mean number of inpatient hospital encounters (IP)	0.1	0.4	0.1	0.4	-0.014	-0.033
Mean number of non-acute institutional encounters (IS)	0.1	0.5	0.1	0.6	-0.007	-0.013
Mean number of emergency room encounters (ED)	0.3	0.8	0.3	0.9	-0.012	-0.014
Mean number of ambulatory encounters (AV)	5.6	7.6	5.7	7.0	-0.030	-0.004

¹Covariate not included in propensity score model

Table 2c. Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Serious Angioedema (Unmatched)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	620,903	100.0%	479,627	100.0%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	55.8	12.3	55.4	16	0.419	0.029
	Number	Percent	Number	Percent		
Age (years)						
18-44	128,716	20.7%	137,060	28.6%	-7.846	-0.183
45-54	168,134	27.1%	91,644	19.1%	7.972	0.190
55-64	180,351	29.0%	108,225	22.6%	6.482	0.149
65+	143,702	23.1%	142,698	29.8%	-6.608	-0.150
Sex						
Ambiguous	2	0.0%	1	0.0%	0	0.001
Female	267,878	43.1%	268,273	55.9%	-12.790	-0.258
Male	352,997	56.9%	211,331	44.1%	12.791	0.258
Unknown	26	0.0%	22	0.0%	0	-0.001
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	0.1	1.1	0.6	1.6	-0.456	-0.329
	Number	Percent	Number	Percent		
Ambulatory Allergies	138,169	22.3%	128,324	26.8%	-4.502	-0.105
Diabetes	144,044	23.2%	60,034	12.5%	10.682	0.282
Heart Failure	11,528	1.9%	30,362	6.3%	-4.474	-0.227
Ischemic Heart Disease	27,609	4.4%	68,482	14.3%	-9.832	-0.342
Serious Allergies	9,276	1.5%	15,463	3.2%	-1.730	-0.114
History of Use:						
Everolimus ¹	56	0.0%	96	0.0%	-0.011	-0.009
Nonsteroidal anti-inflammatory drugs	75,720	12.2%	61,680	12.9%	-0.665	-0.020
Sirolimus ¹	79	0.0%	130	0.0%	-0.014	-0.010
Health Service Utilization Intensity:						
Mean number of generic drugs	3.2	3.4	4.2	4.1	-1.017	-0.268
Mean number of unique drug classes	3.0	3.1	4.0	3.8	-0.983	-0.284
Mean number of filled prescriptions	6.9	9.2	9.2	11.2	-2.245	-0.220
Mean number of inpatient hospital encounters (IP)	0.1	0.3	0.2	0.6	-0.151	-0.315
Mean number of non-acute institutional encounters (IS)	0.0	0.4	0.1	0.7	-0.065	-0.114
Mean number of emergency room encounters (ED)	0.2	0.7	0.4	1.1	-0.183	-0.192
Mean number of ambulatory encounters (AV)	4.6	6.4	7.2	9.5	-2.692	-0.333
Mean number of other ambulatory encounters (OA)	1.4	3.5	2.2	5.1	-0.791	-0.181

¹Covariate not included in propensity score model

Table 2d. Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers at Risk for Serious Angioedema (Matched 1:1 Propensity Score, Caliper = .025)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	362,381	58.4%	362,381	75.6%	-	-
Patient Characteristics						
	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	55.7	12.7	55.9	15.2	-0.172	-0.012
	Number	Percent	Number	Percent		
Age (years)						
18-44	81,982	22.6%	93,291	25.7%	-3.121	-0.073
45-54	94,097	26.0%	74,943	20.7%	5.286	0.125
55-64	96,180	26.5%	88,430	24.4%	2.139	0.049
65+	90,122	24.9%	105,717	29.2%	-4.303	-0.097
Sex						
Ambiguous	1	0.0%	1	0.0%	0.000	-
Female	196,806	54.3%	186,915	51.6%	2.729	0.055
Male	165,564	45.7%	175,455	48.4%	-2.729	-0.055
Unknown	10	0.0%	10	0.0%	0.000	-
Recorded History of:						
	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	0.3	1.2	0.3	1.2	-0.034	-0.028
	Number	Percent	Number	Percent		
Ambulatory Allergies	91,478	25.2%	88,628	24.5%	0.786	0.018
Diabetes	48,125	13.3%	48,716	13.4%	-0.163	-0.005
Heart Failure	10,727	3.0%	12,492	3.4%	-0.487	-0.028
Ischemic Heart Disease	26,411	7.3%	27,888	7.7%	-0.408	-0.015
Serious Allergies	7,402	2.0%	7,450	2.1%	-0.013	-0.001
History of Use:						
Everolimus ¹	51	0.0%	39	0.0%	0.003	0.003
Nonsteroidal Anti-inflammatory Drugs	45,248	12.5%	44,586	12.3%	0.183	0.006
Sirolimus ¹	58	0.0%	69	0.0%	-0.003	-0.002
Health Service Utilization Intensity:						
Mean number of generic drugs	3.6	3.7	3.6	3.6	0.011	0.003
Mean number of unique drug classes	3.4	3.4	3.4	3.3	-0.024	-0.007
Mean number of filled prescriptions	7.8	10.1	7.8	9.8	0.002	0.000
Mean number of inpatient hospital encounters (IP)	0.1	0.4	0.1	0.4	-0.013	-0.032
Mean number of non-acute institutional encounters (IS)	0.1	0.5	0.1	0.6	-0.008	-0.015
Mean number of emergency room encounters (ED)	0.3	0.9	0.3	0.8	-0.012	-0.014
Mean number of ambulatory encounters (AV)	5.5	7.5	5.6	7.0	-0.065	-0.009
Mean number of other ambulatory encounters (OA)	1.6	3.9	1.7	4.2	-0.071	-0.018

¹Covariate not included in propensity score model

Table 3a. Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Angioedema (Unmatched)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	9,191	100.0%	24,120	100.0%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	69.3	13.4	70.8	13.7	-1.522	-0.112
	Number	Percent	Number	Percent		
Age (years)						
18-44	447	4.9%	1,222	5.1%	-0.203	-0.009
45-54	1,023	11.1%	2,172	9.0%	2.125	0.071
55-64	1,948	21.2%	4,579	19.0%	2.210	0.055
65+	5,773	62.8%	16,147	66.9%	-4.133	-0.087
Sex						
Ambiguous	0	0.0%	1	0.0%	-0.004	-
Female	4,225	46.0%	10,932	45.3%	0.645	0.013
Male	4,964	54.0%	13,184	54.7%	-0.651	-0.013
Other	2	0.0%	3	0.0%	0.009	0.007
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	3.5	2.6	4.1	3	-0.619	-0.221
	Number	Percent	Number	Percent		
Ambulatory Allergies	2,922	31.8%	7,432	30.8%	0.979	0.021
Diabetes	3,830	41.7%	8,968	37.2%	4.490	0.092
Ischemic Heart Disease	3,986	43.4%	13,454	55.8%	-12.411	-0.250
Serious Allergies	503	5.5%	1,756	7.3%	-1.808	-0.074
History of Use:						
Everolimus ¹	2	0.0%	16	0.1%	-0.045	-0.021
Nonsteroidal Anti-inflammatory Drugs	1,221	13.3%	2,702	11.2%	2.082	0.064
Sirolimus ¹	6	0.1%	24	0.1%	-0.034	-0.012
Health Service Utilization Intensity:						
Mean number of generic drugs	6.7	5.4	6.8	5.4	-0.067	-0.012
Mean number of unique drug classes	6.3	4.8	6.4	4.9	-0.107	-0.022
Mean number of filled prescriptions	15.5	16.6	15.2	15.8	0.337	0.021
Mean number of inpatient hospital encounters (IP)	0.7	1.0	1.0	1.1	-0.283	-0.265
Mean number of non-acute institutional encounters (IS)	0.5	1.4	0.6	1.7	-0.133	-0.085
Mean number of emergency room encounters (ED)	0.9	2.0	1.0	1.9	-0.106	-0.054
Mean number of ambulatory encounters (AV)	12.2	12.8	14.4	15.3	-2.192	-0.155
Mean number of other ambulatory encounters (OA)	5.2	9.1	5.8	9.7	-0.530	-0.056

¹Covariate not included in propensity score model

Table 3b. Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Angioedema (Matched 1:1 Propensity Score, Caliper = .025)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	9,045	98.4%	9,045	37.5%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	69.4	13.4	69.2	13.8	0.256	0.019
	Number	Percent	Number	Percent		
Age (years)						
18-44	436	4.8%	538	5.9%	-1.128	-0.050
45-54	996	11.0%	920	10.2%	0.840	0.027
55-64	1,912	21.1%	1,886	20.9%	0.287	0.007
65+	5,701	63.0%	5,701	63.0%	-	-
Sex						
Ambiguous	0	0.0%	0	0.0%	-	-
Female	4,148	45.9%	4,181	46.2%	-0.365	-0.007
Male	4,896	54.1%	4,862	53.8%	0.376	0.008
Other	1	0.0%	2	0.0%	-0.011	-0.009
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	3.5	2.6	3.6	2.7	-0.034	-0.013
	Number	Percent	Number	Percent		
Ambulatory Allergies	2,867	31.7%	2,848	31.5%	0.210	0.005
Diabetes	3,712	41.0%	3,763	41.6%	-0.564	-0.011
Ischemic Heart Disease	3,985	44.1%	3,886	43.0%	1.095	0.022
Serious Allergies	499	5.5%	484	5.4%	0.166	0.007
History of Use:						
Everolimus ¹	2	0.0%	6	0.1%	-0.044	-0.021
Nonsteroidal Anti-inflammatory Drugs	1,171	12.9%	1,168	12.9%	0.033	0.001
Sirolimus ¹	5	0.1%	3	0.0%	0.022	0.011
Health Service Utilization Intensity:						
Mean number of generic drugs	6.7	5.4	6.7	5.5	-0.036	-0.007
Mean number of unique drug classes	6.3	4.8	6.3	5.0	-0.068	-0.014
Mean number of filled prescriptions	15.4	16.4	15.5	16.6	-0.129	-0.008
Mean number of inpatient hospital encounters (IP)	0.7	1.0	0.8	0.9	-0.030	-0.030
Mean number of non-acute institutional encounters (IS)	0.5	1.5	0.5	1.6	-0.032	-0.021
Mean number of emergency room encounters (ED)	0.9	2.0	0.9	1.8	-0.004	-0.002
Mean number of ambulatory encounters (AV)	12.3	12.8	12.6	13.1	-0.338	-0.026
Mean number of other ambulatory encounters (OA)	5.2	8.7	5.5	10.5	-0.321	-0.033

¹Covariate not included in propensity score model

Table 3c. Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Angioedema (Unmatched)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	11,668	100.0%	30,654	100.0%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age	69.4	13.5	71.0	13.7	-1.545	-0.114
	Number	Percent	Number	Percent		
Age (years)						
18-44	581	5.0%	1,512	4.9%	0.047	0.002
45-54	1,291	11.1%	2,763	9.0%	2.051	0.068
55-64	2,458	21.1%	5,773	18.8%	2.233	0.056
65+	7,338	62.9%	20,606	67.2%	-4.331	-0.091
Sex						
Ambiguous	0	0.0%	1	0.0%	-0.003	-
Female	5,390	46.2%	13,962	45.5%	0.648	0.013
Male	6,276	53.8%	16,688	54.4%	-0.652	-0.013
Other	2	0.0%	3	0.0%	0.007	0.006
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	2.8	2.7	3.3	3.1	-0.480	-0.164
	Number	Percent	Number	Percent		
Ambulatory Allergies	3,657	31.3%	9,380	30.6%	0.743	0.016
Diabetes	4,848	41.5%	11,399	37.2%	4.364	0.089
Ischemic Heart Disease	4,945	42.4%	17,038	55.6%	-13.201	-0.266
Serious Allergies	743	6.4%	2,569	8.4%	-2.013	-0.077
History of Use:						
Everolimus ¹	2	0.0%	19	0.1%	-0.045	-0.023
Nonsteroidal anti-inflammatory drugs	1,562	13.4%	3,492	11.4%	1.995	0.061
Sirolimus ¹	6	0.1%	27	0.1%	-0.037	-0.014
Health Service Utilization Intensity:						
Mean number of generic drugs	6.7	5.4	6.8	5.4	-0.124	-0.023
Mean number of unique drug classes	6.3	4.9	6.4	5.0	-0.149	-0.030
Mean number of filled prescriptions	15.3	16.4	15.1	15.8	0.172	0.011
Mean number of inpatient hospital encounters (IP)	0.7	1.0	1.0	1.1	-0.282	-0.269
Mean number of non-acute institutional encounters (IS)	0.5	1.4	0.6	1.6	-0.125	-0.082
Mean number of emergency room encounters (ED)	0.9	1.9	1.0	2.0	-0.126	-0.065
Mean number of ambulatory encounters (AV)	12.0	12.5	14.2	15.1	-2.265	-0.163
Mean number of other ambulatory encounters (OA)	5.3	8.8	6.0	9.9	-0.713	-0.076

¹Covariate not included in propensity score model

Table 3d. Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Angioedema (Matched 1:1 Propensity Score, Caliper = .025)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	11,490	98.5%	11,490	37.5%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean age	69.5	13.5	69.3	13.9	0.215	0.016
	Number	Percent	Number	Percent		
Age (years)						
18-44	568	4.9%	682	5.9%	-0.992	-0.044
45-54	1,258	10.9%	1,172	10.2%	0.748	0.024
55-64	2,415	21.0%	2,391	20.8%	0.209	0.005
65+	7,249	63.1%	7,245	63.1%	0.035	0.001
Sex						
Ambiguous	0	0.0%	0	0.0%	-	-
Female	5,298	46.1%	5,374	46.8%	-0.661	-0.013
Male	6,191	53.9%	6,114	53.2%	0.670	0.013
Other	1	0.0%	2	0.0%	-0.009	-0.008
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	2.8	2.7	2.9	2.8	-0.036	-0.013
	Number	Percent	Number	Percent		
Ambulatory Allergies	3,589	31.2%	3,607	31.4%	-0.157	-0.003
Diabetes	4,706	41.0%	4,759	41.4%	-0.461	-0.009
Ischemic Heart Disease	4,942	43.0%	4,841	42.1%	0.879	0.018
Serious Allergies	736	6.4%	719	6.3%	0.148	0.006
History of Use:						
Everolimus ¹	2	0.0%	8	0.1%	-0.052	-0.025
Nonsteroidal anti-inflammatory drugs	1,502	13.1%	1,487	12.9%	0.131	0.004
Sirolimus ¹	5	0.0%	3	0.0%	0.017	0.009
Health Service Utilization Intensity:						
Mean number of generic drugs	6.7	5.4	6.8	5.5	-0.119	-0.022
Mean number of unique drug classes	6.3	4.9	6.4	5.0	-0.138	-0.028
Mean number of filled prescriptions	15.2	16.2	15.6	16.6	-0.391	-0.024
Mean number of inpatient hospital encounters (IP)	0.7	1.0	0.7	0.9	-0.024	-0.025
Mean number of non-acute institutional encounters (IS)	0.5	1.5	0.5	1.5	-0.028	-0.019
Mean number of emergency room encounters (ED)	0.9	1.9	0.9	1.9	-0.016	-0.009
Mean number of ambulatory encounters (AV)	12.0	12.5	12.5	12.9	-0.449	-0.035
Mean number of other ambulatory encounters (OA)	5.2	8.4	5.6	10.6	-0.439	-0.046

¹Covariate not included in propensity score model

Table 4a. Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Serious Angioedema (Unmatched)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	9,195	100.0%	24,160	100.0%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	69.3	13.4	70.8	13.6	-1.519	-0.112
	Number	Percent	Number	Percent		
Age (years)						
18-44	447	4.9%	1,225	5.1%	-0.209	-0.010
45-54	1,023	11.1%	2,175	9.0%	2.123	0.071
55-64	1,950	21.2%	4,584	19.0%	2.234	0.056
65+	5,775	62.8%	16,176	67.0%	-4.148	-0.087
Sex						
Ambiguous	0	0.0%	1	0.0%	-0.004	-
Female	4,227	46.0%	10,956	45.3%	0.623	0.013
Male	4,966	54.0%	13,200	54.6%	-0.628	-0.013
Unknown	2	0.0%	3	0.0%	0.009	0.007
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	3.5	2.6	4.1	3	-0.621	-0.222
	Number	Percent	Number	Percent		
Ambulatory Allergies	2,925	31.8%	7,449	30.8%	0.979	0.021
Diabetes	3,832	41.7%	8,991	37.2%	4.460	0.091
Ischemic Heart Disease	3,987	43.4%	13,475	55.8%	-12.413	-0.250
Serious Allergies	504	5.5%	1,767	7.3%	-1.833	-0.075
History of Use:						
Everolimus ¹	2	0.0%	16	0.1%	-0.044	-0.021
Nonsteroidal anti-inflammatory drugs	1,221	13.3%	2,711	11.2%	2.058	0.063
Sirolimus ¹	6	0.1%	24	0.1%	-0.034	-0.012
Health Service Utilization Intensity:						
Mean number of generic drugs	6.7	5.4	6.8	5.4	-0.068	-0.013
Mean number of unique drug classes	6.3	4.8	6.4	4.9	-0.108	-0.022
Mean number of filled prescriptions	15.5	16.6	15.2	15.8	0.337	0.021
Mean number of inpatient hospital encounters (IP)	0.7	1.0	1.0	1.1	-0.285	-0.266
Mean number of non-acute institutional encounters (IS)	0.5	1.4	0.6	1.7	-0.134	-0.085
Mean number of emergency room encounters (ED)	0.9	2.0	1.0	1.9	-0.106	-0.054
Mean number of ambulatory encounters (AV)	12.2	12.8	14.4	15.3	-2.211	-0.156
Mean number of other ambulatory encounters (OA)	5.2	9.1	5.8	9.7	-0.529	-0.056

¹Covariate not included in propensity score model

Table 4b. Monitoring Period 1: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Serious Angioedema (Matched 1:1 Propensity Score, Caliper = .025)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	9,051	98.4%	9,051	37.5%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	69.4	13.4	69.3	13.9	0.092	0.007
	Number	Percent	Number	Percent		
Age (years)						
18-44	436	4.8%	533	5.9%	-1.072	-0.048
45-54	997	11.0%	945	10.4%	0.575	0.019
55-64	1,917	21.2%	1,836	20.3%	0.895	0.022
65+	5,701	63.0%	5,737	63.4%	-0.398	-0.008
Sex						
Ambiguous	0	0.0%	0	0.0%	-	-
Female	4,152	45.9%	4,226	46.7%	-0.818	-0.016
Male	4,898	54.1%	4,823	53.3%	0.829	0.017
Unknown	1	0.0%	2	0.0%	-0.011	-0.009
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	3.5	2.6	3.6	2.8	-0.033	-0.012
	Number	Percent	Number	Percent		
Ambulatory Allergies	2,877	31.8%	2,898	32.0%	-0.232	-0.005
Diabetes	3,713	41.0%	3,739	41.3%	-0.287	-0.006
Ischemic Heart Disease	3,986	44.0%	3,844	42.5%	1.569	0.032
Serious Allergies	498	5.5%	483	5.3%	0.166	0.007
History of Use:						
Everolimus ¹	2	0.0%	5	0.1%	-0.033	-0.017
Nonsteroidal anti-inflammatory drugs	1,178	13.0%	1,215	13.4%	-0.409	-0.012
Sirolimus ¹	5	0.1%	7	0.1%	-0.022	-0.009
Health Service Utilization Intensity:						
Mean number of generic drugs	6.7	5.4	6.8	5.4	-0.059	-0.011
Mean number of unique drug classes	6.3	4.8	6.3	4.9	-0.096	-0.020
Mean number of filled prescriptions	15.4	16.4	15.6	16.6	-0.218	-0.013
Mean number of inpatient hospital encounters (IP)	0.7	1.0	0.8	0.9	-0.031	-0.032
Mean number of non-acute institutional encounters (IS)	0.5	1.4	0.5	1.7	-0.016	-0.010
Mean number of emergency room encounters (ED)	0.9	2.0	0.9	1.9	-0.015	-0.008
Mean number of ambulatory encounters (AV)	12.3	12.8	12.7	13.3	-0.396	-0.030
Mean number of other ambulatory encounters (OA)	5.2	8.8	5.3	9.9	-0.093	-0.010

¹Covariate not included in propensity score model

Table 4c. Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Serious Angioedema (Unmatched)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	11,672	100.0%	30,705	100.0%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	69.4	13.5	70.9	13.7	-1.542	-0.114
Age (years)	Number	Percent	Number	Percent		
18-44	581	5.0%	1,515	4.9%	0.044	0.002
45-54	1,291	11.1%	2,768	9.0%	2.046	0.068
55-64	2,460	21.1%	5,779	18.8%	2.255	0.056
65+	7,340	62.9%	20,643	67.2%	-4.345	-0.091
Sex						
Ambiguous	0	0.0%	1	0.0%	-0.003	-
Female	5,392	46.2%	13,992	45.6%	0.627	0.013
Male	6,278	53.8%	16,709	54.4%	-0.631	-0.013
Unknown	2	0.0%	3	0.0%	0.007	0.006
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	2.8	2.7	3.3	3.1	-0.482	-0.165
	Number	Percent	Number	Percent		
Ambulatory Allergies	3,660	31.4%	9,405	30.6%	0.727	0.016
Diabetes	4,850	41.6%	11,427	37.2%	4.337	0.089
Ischemic Heart Disease	4,946	42.4%	17,062	55.6%	-13.193	-0.266
Serious Allergies	744	6.4%	2,581	8.4%	-2.032	-0.078
History of Use:						
Everolimus ¹	2	0.0%	19	0.1%	-0.045	-0.023
Nonsteroidal anti-inflammatory drugs	1,562	13.4%	3,501	11.4%	1.980	0.060
Sirolimus ¹	6	0.1%	27	0.1%	-0.037	-0.014
Health Service Utilization Intensity:						
Mean number of generic drugs	6.7	5.4	6.8	5.4	-0.126	-0.023
Mean number of unique drug classes	6.3	4.9	6.4	5.0	-0.150	-0.031
Mean number of filled prescriptions	15.3	16.4	15.1	15.8	0.172	0.011
Mean number of inpatient hospital encounters (IP)	0.7	1.0	1.0	1.1	-0.283	-0.269
Mean number of non-acute institutional encounters (IS)	0.5	1.4	0.6	1.6	-0.126	-0.082
Mean number of emergency room encounters (ED)	0.9	1.9	1.0	2.0	-0.125	-0.065
Mean number of ambulatory encounters (AV)	12.0	12.5	14.3	15.2	-2.284	-0.165
Mean number of other ambulatory encounters (OA)	5.3	8.8	6.0	9.9	-0.714	-0.076

¹Covariate not included in propensity score model

Table 4d. Monitoring Period 2: Cohort of New Initiators of Angiotensin Converting Enzyme (ACE) Inhibitors and Beta Blockers with Evidence of Heart Failure at Risk for Serious Angioedema (Matched 1:1 Propensity Score, Caliper = .025)

Characteristic	ACE Inhibitors		Beta Blockers		Absolute Difference	Standardized Difference
	Number	Percent	Number	Percent		
Number of patients	11,495	98.5%	11,495	37.4%	-	-
Patient Characteristics	Mean	Standard Deviation	Mean	Standard Deviation		
Mean Age	69.5	13.5	69.4	13.9	0.128	0.009
	Number	Percent	Number	Percent		
Age (years)						
18-44	568	4.9%	684	6.0%	-1.009	-0.044
45-54	1,258	10.9%	1,200	10.4%	0.505	0.016
55-64	2,419	21.0%	2,325	20.2%	0.818	0.020
65+	7,250	63.1%	7,286	63.4%	-0.313	-0.006
Sex						
Ambiguous	-	0.0%	-	0.0%	0.000	-
Female	5,301	46.1%	5,411	47.1%	-0.957	-0.019
Male	6,193	53.9%	6,082	52.9%	0.966	0.019
Unknown	1	0.0%	2	0.0%	-0.009	-0.008
Recorded History of:	Mean	Standard Deviation	Mean	Standard Deviation		
Charlson/Elixhauser Combined Comorbidity Score	2.9	2.7	2.9	2.8	-0.030	-0.011
	Number	Percent	Number	Percent		
Ambulatory Allergies	3,599	31.3%	3,656	31.8%	-0.496	-0.011
Diabetes	4,707	40.9%	4,741	41.2%	-0.296	-0.006
Ischemic Heart Disease	4,943	43.0%	4,800	41.8%	1.244	0.025
Serious Allergies	734	6.4%	716	6.2%	0.157	0.006
History of Use:						
Everolimus ¹	2	0.0%	6	0.1%	-0.035	-0.019
Nonsteroidal anti-inflammatory drugs	1,510	13.1%	1,549	13.5%	-0.339	-0.010
Sirolimus ¹	5	0.0%	9	0.1%	-0.035	-0.014
Health Service Utilization Intensity:						
Mean number of generic drugs	6.7	5.4	6.8	5.4	-0.137	-0.025
Mean number of unique drug classes	6.3	4.9	6.4	4.9	-0.156	-0.032
Mean number of filled prescriptions	15.1	16.2	15.6	16.6	-0.447	-0.027
Mean number of inpatient hospital encounters (IP)	0.7	1.0	0.7	0.9	-0.028	-0.030
Mean number of non-acute institutional encounters (IS)	0.5	1.4	0.5	1.6	-0.024	-0.016
Mean number of emergency room encounters (ED)	0.9	1.9	0.9	1.9	-0.021	-0.011
Mean number of ambulatory encounters (AV)	12.0	12.5	12.6	13.0	-0.537	-0.042
Mean number of other ambulatory encounters (OA)	5.2	8.5	5.5	10.0	-0.257	-0.028

¹Covariate not included in propensity score model

Table 5. Patient Level Effect Estimates for Angioedema and Serious Angioedema in the Sentinel Distributed Database by Exposure Cohort, Analysis Type, and Monitoring Period

Exposure Definition	Monitoring Period	New Users	Person-Years at Risk	Average Person-Days at Risk	Number of Events	Incidence Rate per 1,000 Person-Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person-Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI) ^{1,2}
Angioedema										
Unmatched Analysis (Site-adjusted only)										
ACE Inhibitors ³	1	498,360	67,665.43	49.59	530	7.83	1.06	5.08	0.72	2.90 (2.40, 3.52)
Beta Blockers		381,633	47,898.43	45.84	132	2.76	0.35			
ACE Inhibitors	2	620,568	85,787.13	50.49	674	7.86	1.09	5.14	0.74	2.96 (2.50, 3.51)
Beta Blockers		478,986	61,191.84	46.66	166	2.71	0.35			
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	1	288,908	38,989.41	49.29	349	8.95	1.21	6.08	0.85	3.17 (2.54, 3.94)
Beta Blockers		288,908	36,195.30	45.76	104	2.87	0.36			
ACE Inhibitors	2	362,012	49,774.25	50.22	444	8.92	1.23	6.21	0.88	3.35 (2.75, 4.09)
Beta Blockers		362,008	46,197.77	46.61	125	2.71	0.35			
Predefined Deciles Analysis										
ACE Inhibitors	1	498,360	67,665.43	49.59	530	7.83	1.06	5.08	0.72	3.41 (2.79, 4.17)
Beta Blockers		381,633	47,898.43	45.84	132	2.76	0.35			
ACE Inhibitors	2	620,568	85,787.13	50.49	674	7.86	1.09	5.14	0.74	3.59 (3.00, 4.30)
Beta Blockers		478,986	61,191.84	46.66	166	2.71	0.35			
Serious Angioedema										
Unmatched Analysis (Site-adjusted only)										
ACE Inhibitors	1	498,633	67,731.92	49.61	51	0.75	0.10	0.44	0.06	2.48 (1.39, 4.42)
Beta Blockers		382,166	47,977.64	45.85	15	0.31	0.04			
ACE Inhibitors	2	620,867	85,869.05	50.52	57	0.66	0.09	0.40	0.06	2.61 (1.50, 4.54)
Beta Blockers		479,588	61,285.31	46.67	16	0.26	0.03			
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	1	289,220	39,050.01	49.32	26	0.67	0.09	0.39	0.06	2.44 (1.18, 5.06)
Beta Blockers		289,220	36,257.38	45.79	10	0.28	0.03			

Table 5. Patient Level Effect Estimates for Angioedema and Serious Angioedema in the Sentinel Distributed Database by Exposure Cohort, Analysis Type, and Monitoring Period

Exposure Definition	Monitoring Period	New Users	Person-Years at Risk	Average Person-Days at Risk	Number of Events	Incidence Rate per 1,000 Person-Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person-Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI) ^{1,2}
Serious Angioedema										
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	2	362,358	49,842.14	50.24	34	0.68	0.09	0.44	0.06	2.91 (1.47, 5.74)
Beta Blockers		362,352	46,265.99	46.64	11	0.24	0.03			
Predefined Deciles Analysis										
ACE Inhibitors	1	498,633	67,731.92	49.61	51	0.75	0.10	0.44	0.06	3.11 (1.68, 5.76)
Beta Blockers		382,166	47,977.64	45.85	15	0.31	0.04			
ACE Inhibitors	2	620,867	85,869.05	50.52	57	0.66	0.09	0.40	0.06	3.22 (1.78, 5.82)
Beta Blockers		479,588	61,285.31	46.67	16	0.26	0.03			
Angioedema, Heart Failure Cohort										
Unmatched Analysis (Site-adjusted only)										
ACE Inhibitors	1	9,191	1,131.28	44.96	16	14.14	1.74	10.31	1.28	3.51 (1.63, 7.57)
Beta Blockers		24,120	2,872.72	43.50	11	3.83	0.46			
ACE Inhibitors	2	11,668	1,454.58	45.53	20	13.75	1.71	9.17	1.16	2.91 (1.53, 5.57)
Beta Blockers		30,654	3,708.68	44.19	17	4.58	0.55			
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	1	9,045	1,111.53	44.89	16	14.39	1.77	10.64	1.33	3.83 (1.28, 11.46)
Beta Blockers		9,045	1,065.62	43.03	4	3.75	0.44			
ACE Inhibitors	2	11,490	1,430.00	45.46	20	13.99	1.74	8.89	1.13	2.74 (1.16, 6.48)
Beta Blockers		11,490	1,373.78	43.67	7	5.1	0.61			
Predefined Quintiles Analysis										
ACE Inhibitors	1	9,191	1,131.28	44.96	16	14.14	1.74	10.31	1.28	3.32 (1.50, 7.35)
Beta Blockers		24,120	2,872.72	43.50	11	3.83	0.46			

Table 5. Patient Level Effect Estimates for Angioedema and Serious Angioedema in the Sentinel Distributed Database by Exposure Cohort, Analysis Type, and Monitoring Period

Exposure Definition	Monitoring Period	New Users	Person-Years at Risk	Average Person-Days at Risk	Number of Events	Incidence Rate per 1,000 Person-Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person-Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI) ^{1,2}
Angioedema, Heart Failure Cohort										
Predefined Quintiles Analysis										
ACE Inhibitors	2	11,668	1,454.58	45.53	20	13.75	1.71	9.17	1.16	2.59 (1.33, 5.06)
Beta Blockers		30,654	3,708.68	44.19	17	4.58	0.55			
Serious Angioedema, Heart Failure Cohort										
Unmatched Analysis (Site-adjusted only)										
ACE Inhibitors	1	9,195	1,132.99	45.01	1	0.88	0.11	0.19	0.03	1.33 (0.12, 14.69)
Beta Blockers		24,160	2,878.53	43.52	2	0.69	0.08			
ACE Inhibitors	2	11,672	1,456.74	45.59	1	0.69	0.09	0.15	0.02	1.33 (0.12, 14.70)
Beta Blockers		30,705	3,716.37	44.21	2	0.54	0.07			
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	1	9,051	1,114.27	44.97	1	0.90	0.11	0.90	0.11	-
Beta Blockers		9,051	1,067.26	43.07	0	0.00	0.00			
ACE Inhibitors	2	11,495	1,432.70	45.52	1	0.70	0.09	0.70	0.09	-
Beta Blockers		11,495	1,377.91	43.78	0	0.00	0.00			
Predefined Quintiles Analysis										
ACE Inhibitors	1	9,195	1,132.99	45.01	1	0.88	0.11	0.19	0.03	1.35 (0.11, 15.93)
Beta Blockers		24,160	2,878.53	43.52	2	0.69	0.08			
ACE Inhibitors	2	11,672	1,456.74	45.59	1	0.69	0.09	0.15	0.02	1.37 (0.11, 16.33)
Beta Blockers		30,705	3,716.37	44.21	2	0.54	0.07			

¹These are calculated taking into account asymptotic assumptions

²Confidence Interval (CI)

³Angiotension converting enzyme (ACE) inhibitors

Table 6. Risk Set Level Effect Estimates for Angioedema and Serious Angioedema in the Sentinel Distributed Database by Exposure Cohort, Analysis Type, and Monitoring Period

Exposure Definition	Monitoring Period	New Users	Person-Years at Risk	Average Person-Days at Risk	Number of Events	Incidence Rate per 1,000 Person-Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person-Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI) ^{1,3}
Angioedema										
Unmatched Analysis (Site-adjusted only)										
ACE Inhibitors ²	1	498,360	67,665.43	49.59	530	7.83	1.06	5.08	0.72	2.90 (2.40, 3.52)
Beta Blockers		381,633	47,898.43	45.84	132	2.76	0.35			
ACE Inhibitors	2	620,604	85,792.13	50.49	674	7.86	1.09	5.14	0.74	2.96 (2.50, 3.51)
Beta Blockers		479,025	61,196.84	46.66	166	2.71	0.35			
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	1	288,908	38,989.41	49.29	349	8.95	1.21	6.08	0.85	3.17 (2.54, 3.94)
Beta Blockers		288,908	36,195.30	45.76	104	2.87	0.36			
ACE Inhibitors	2	362,038	49,777.84	50.22	444	8.92	1.23	6.21	0.88	3.35 (2.75, 4.09)
Beta Blockers		362,038	46,201.77	46.61	125	2.71	0.35			
Predefined Deciles Analysis										
ACE Inhibitors	1	498,360	67,665.43	49.59	530	7.83	1.06	5.08	0.72	3.41 (2.79, 4.17)
Beta Blockers		381,633	47,898.43	45.84	132	2.76	0.35			
ACE Inhibitors	2	620,604	85,792.13	50.49	674	7.86	1.09	5.14	0.74	3.59 (3.00, 4.30)
Beta Blockers		479,025	61,196.84	46.66	166	2.71	0.35			
Serious Angioedema										
Unmatched Analysis (Site-adjusted only)										
ACE Inhibitors	1	498,633	67,731.92	49.61	51	0.75	0.10	0.44	0.06	2.48 (1.39, 4.42)
Beta Blockers		382,166	47,977.64	45.85	15	0.31	0.04			
ACE Inhibitors	2	620,903	85,874.05	50.52	57	0.66	0.09	0.4	0.06	2.61 (1.50, 4.54)
Beta Blockers		479,627	61,290.32	46.67	16	0.26	0.03			
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	1	289,220	39,050.01	49.32	26	0.67	0.09	0.39	0.06	2.44 (1.18, 5.06)
Beta Blockers		289,220	36,257.38	45.79	10	0.28	0.03			

Table 6. Risk Set Level Effect Estimates for Angioedema and Serious Angioedema in the Sentinel Distributed Database by Exposure Cohort, Analysis Type, and Monitoring Period

Exposure Definition	Monitoring Period	New Users	Person-Years at Risk	Average Person-Days at Risk	Number of Events	Incidence Rate per 1,000 Person-Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person-Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI) ^{1,3}
Serious Angioedema										
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	2	362,381	49,845.14	50.24	34	0.68	0.09	0.44	0.06	2.91 (1.47, 5.74)
Beta Blockers		362,381	46,269.74	46.64	11	0.24	0.03			
Predefined Deciles Analysis										
ACE Inhibitors	1	498,633	67,731.92	49.61	51	0.75	0.10	0.44	0.06	3.11 (1.68, 5.76)
Beta Blockers		382,166	47,977.64	45.85	15	0.31	0.04			
ACE Inhibitors	2	620,903	85,874.05	50.52	57	0.66	0.09	0.40	0.06	3.22 (1.78, 5.82)
Beta Blockers		479,627	61,290.32	46.67	16	0.26	0.03			
Angioedema, Heart Failure Cohort										
Unmatched Analysis (Site-adjusted only)										
ACE Inhibitors	1	9,191	1,131.28	44.96	16	14.14	1.74	10.31	1.28	3.51 (1.63, 7.57)
Beta Blockers		24,120	2,872.72	43.50	11	3.83	0.46			
ACE Inhibitors	2	11,668	1,454.58	45.53	20	13.75	1.71	9.17	1.16	2.91 (1.53, 5.57)
Beta Blockers		30,654	3,708.68	44.19	17	4.58	0.55			
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	1	9,045	1,111.53	44.89	16	14.39	1.77	10.64	1.33	3.83 (1.28, 11.46)
Beta Blockers		9,045	1,065.62	43.03	4	3.75	0.44			
ACE Inhibitors	2	11,490	1,430.00	45.46	20	13.99	1.74	8.89	1.13	2.74 (1.16, 6.48)
Beta Blockers		11,490	1,373.78	43.67	7	5.10	0.61			
Predefined Quintiles Analysis										
ACE Inhibitors	1	9,191	1,131.28	44.96	16	14.14	1.74	10.31	1.28	3.32 (1.50, 7.35)
Beta Blockers		24,120	2,872.72	43.50	11	3.83	0.46			
ACE Inhibitors	2	11,668	1,454.58	45.53	20	13.75	1.71	9.17	1.16	2.60 (1.33, 5.07)
Beta Blockers		30,654	3,708.68	44.19	17	4.58	0.55			

Table 6. Risk Set Level Effect Estimates for Angioedema and Serious Angioedema in the Sentinel Distributed Database by Exposure Cohort, Analysis Type, and Monitoring Period

Exposure Definition	Monitoring Period	New Users	Person-Years at Risk	Average Person-Days at Risk	Number of Events	Incidence Rate per 1,000 Person-Years	Risk per 1,000 New Users	Incidence Rate Difference per 1,000 Person-Years	Difference in Risk per 1,000 New Users	Hazard Ratio (95% CI) ^{1,3}
Serious Angioedema, Heart Failure Cohort										
Unmatched Analysis (Site-adjusted only)										
ACE Inhibitors	1	9,195	1,132.99	45.01	1	0.88	0.11	0.19	0.03	1.33 (0.12, 14.69)
Beta Blockers		24,160	2,878.53	43.52	2	0.69	0.08			
ACE Inhibitors	2	11,672	1,456.74	45.59	1	0.69	0.09	0.15	0.02	1.33 (0.12, 14.70)
Beta Blockers		30,705	3,716.37	44.21	2	0.54	0.07			
1:1 Matched Unconditional Analysis; Caliper=0.025										
ACE Inhibitors	1	9,051	1,114.27	44.97	1	0.90	0.11	0.90	0.11	-
Beta Blockers		9,051	1,067.26	43.07	0	0.00	0.00			
ACE Inhibitors	2	11,495	1,432.70	45.52	1	0.70	0.09	0.70	0.09	-
Beta Blockers		11,495	1,377.91	43.78	0	0.00	0.00			
Predefined Quintiles Analysis										
ACE Inhibitors	1	9,195	1,132.99	45.01	1	0.88	0.11	0.19	0.03	1.35 (0.11, 15.93)
Beta Blockers		24,160	2,878.53	43.52	2	0.69	0.08			
ACE Inhibitors	2	11,672	1,456.74	45.59	1	0.69	0.09	0.15	0.02	1.37 (0.11, 16.32)
Beta Blockers		30,705	3,716.37	44.21	2	0.54	0.07			

¹These are calculated taking into account asymptotic assumptions

²Angiotensin Converting Enzyme (ACE) inhibitors

³Confidence Interval (CI)

Appendix A. Monitoring Period Key (Request Start Date to Date of Latest Available Data for Each Data Partner in this Request)

Monitoring Period #	Number of DPs	Available Timeframes
1	3	January 1, 2015 - June 30, 2016
	1	January 1, 2015 - April 30, 2016
	1	January 1, 2015 - January 31, 2016
	3	January 1, 2015 - July 31, 2016
	1	January 1, 2015 - December 31, 2015
2	1	January 1, 2015 - July 31, 2016
	1	January 1, 2015 - April 30, 2016
	1	January 1, 2015 - March 31, 2016
	2	January 1, 2015 - August 31, 2016
	3	January 1, 2015 - November 30, 2016

Appendix B. Generic and Brand Names Used to Define Exposures and Incidence Criteria in this Request

Brand Name	Generic Name
Angiotensin Converting Enzyme (ACE) Inhibitors	
Accupril	quinapril HCl
Accuretic	quinapril HCl/hydrochlorothiazide
Aceon	perindopril erbumine
Altace	ramipril
Amlodipine-benazepril	amlodipine besylate/benazepril HCl
Benazepril	benazepril HCl
Benazepril-hydrochlorothiazide	benazepril HCl/hydrochlorothiazide
Captopril	captopril
Captopril-hydrochlorothiazide	captopril/hydrochlorothiazide
Enalapril maleate	enalapril maleate
Enalapril-hydrochlorothiazide	enalapril maleate/hydrochlorothiazide
Epaned	enalapril maleate
Fosinopril	fosinopril sodium
Fosinopril-hydrochlorothiazide	fosinopril sodium/hydrochlorothiazide
Lisinopril	lisinopril
Lisinopril-hydrochlorothiazide	lisinopril/hydrochlorothiazide
Lotensin	benazepril HCl
Lotensin HCT	benazepril HCl/hydrochlorothiazide
Lotrel	amlodipine besylate/benazepril HCl
Mavik	trandolapril
Moexipril	moexipril HCl
Moexipril-hydrochlorothiazide	moexipril HCl/hydrochlorothiazide
Perindopril erbumine	perindopril erbumine
Prestalia	perindopril arginine/amlodipine besylate
Prinivil	lisinopril
Quinapril	quinapril HCl
Quinapril-hydrochlorothiazide	quinapril HCl/hydrochlorothiazide
Ramipril	ramipril
Tarka	trandolapril/verapamil HCl
Trandolapril	trandolapril
Trandolapril-verapamil	trandolapril/verapamil HCl
Uniretic	moexipril HCl/hydrochlorothiazide
Univasc	moexipril HCl
Vaseretic	enalapril maleate/hydrochlorothiazide
Vasotec	enalapril maleate
Zestoretic	lisinopril/hydrochlorothiazide
Zestril	lisinopril
Beta Blockers	
Acebutolol	acebutolol HCl
Atenolol	atenolol
Atenolol-chlorthalidone	atenolol/chlorthalidone
Betimol	timolol
Bisoprolol fumarate	bisoprolol fumarate
Bisoprolol-hydrochlorothiazide	bisoprolol fumarate/hydrochlorothiazide
Beta Blockers	
Bystolic	nebivolol HCl
Carvedilol	carvedilol
Coreg	carvedilol
Coreg CR	carvedilol phosphate
Dutoprol	metoprolol succinate/hydrochlorothiazide

Appendix B. Generic and Brand Names Used to Define Exposures and Incidence Criteria in this Request

Brand Name	Generic Name
Hemangeol	propranolol HCl
Inderal LA	propranolol HCl
Inderal XL	propranolol HCl
Innopran XL	propranolol HCl
Istalol	timolol maleate
Labetalol	labetalol HCl
Lopressor	metoprolol tartrate
Lopressor HCT	metoprolol tartrate/hydrochlorothiazide
Metoprolol succinate	metoprolol succinate
Metoprolol ta-hydrochlorothiaz	metoprolol tartrate/hydrochlorothiazide
Metoprolol tartrate	metoprolol tartrate
Pindolol	pindolol
Propranolol	propranolol HCl
Propranolol-hydrochlorothiazid	propranolol HCl/hydrochlorothiazide
Sectral	acebutolol HCl
Tenoretic 100	atenolol/chlorthalidone
Tenoretic 50	atenolol/chlorthalidone
Tenormin	atenolol
Timolol maleate	timolol maleate
Timoptic	timolol maleate
Timoptic ocudose (pf)	timolol maleate/pf
Timoptic-XE	timolol maleate
Toprol XL	metoprolol succinate
Trandate	labetalol HCl
Zebeta	bisoprolol fumarate
Ziac	bisoprolol fumarate/hydrochlorothiazide
Aliskiren Hemifumarate	
Amturnide	aliskiren hemifumarate/amlodipine/hydrochlorothiazide
Tekamlo	aliskiren hemifumarate/amlodipine besylate
Tekturna	aliskiren hemifumarate
Tekturna HCT	aliskiren hemifumarate/hydrochlorothiazide
Angiotensin Receptor Blockers	
Amlodipine-valsartan	amlodipine besylate/valsartan
Amlodipine-valsartan-hcthiiazid	amlodipine besylate/valsartan/hydrochlorothiazide
Atacand	candesartan cilexetil
Atacand HCT	candesartan cilexetil/hydrochlorothiazide
Avalide	irbesartan/hydrochlorothiazide
Avapro	irbesartan
Benicar	olmesartan medoxomil
Angiotensin Receptor Blockers	
Benicar HCT	olmesartan medoxomil/hydrochlorothiazide
Candesartan	candesartan cilexetil
Candesartan-hydrochlorothiazid	candesartan cilexetil/hydrochlorothiazide
Cozaar	losartan potassium
Diovan	valsartan
Diovan HCT	valsartan/hydrochlorothiazide
Entresto	sacubitril/valsartan
Eprosartan	eprosartan mesylate
Exforge	amlodipine besylate/valsartan
Exforge HCT	amlodipine besylate/valsartan/hydrochlorothiazide
Hyzaar	losartan potassium/hydrochlorothiazide

Appendix B. Generic and Brand Names Used to Define Exposures and Incidence Criteria in this Request

Brand Name	Generic Name
Irbesartan	irbesartan
Irbesartan-hydrochlorothiazide	irbesartan/hydrochlorothiazide
Losartan	losartan potassium
Losartan-hydrochlorothiazide	losartan potassium/hydrochlorothiazide
Micardis	telmisartan
Micardis HCT	telmisartan/hydrochlorothiazide
Telmisartan	telmisartan
Telmisartan-amlodipine	telmisartan/amlodipine besylate
Telmisartan-hydrochlorothiazide	telmisartan/hydrochlorothiazide
Teveten	eprosartan mesylate
Teveten HCT	eprosartan mesylate/hydrochlorothiazide
Tribenzor	olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide
Twynsta	telmisartan/amlodipine besylate
Valsartan	valsartan
Valsartan-hydrochlorothiazide	valsartan/hydrochlorothiazide

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Description	Code Type	Code Category
402.01	Malignant hypertensive heart disease with heart failure	ICD-9-CM	Diagnosis
402.11	Benign hypertensive heart disease with heart failure	ICD-9-CM	Diagnosis
402.91	Hypertensive heart disease, unspecified, with heart failure	ICD-9-CM	Diagnosis
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	ICD-9-CM	Diagnosis
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	ICD-9-CM	Diagnosis
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	ICD-9-CM	Diagnosis
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	ICD-9-CM	Diagnosis
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	ICD-9-CM	Diagnosis
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	ICD-9-CM	Diagnosis
428	Heart failure	ICD-9-CM	Diagnosis
428*	Heart failure	ICD-9-CM	Diagnosis
428**	Heart failure	ICD-9-CM	Diagnosis
I11.0	Hypertensive heart disease with heart failure	ICD-10-CM	Diagnosis
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	ICD-10-CM	Diagnosis
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	ICD-10-CM	Diagnosis
I50.9	Heart failure, unspecified	ICD-10-CM	Diagnosis
I50.1	Left ventricular failure	ICD-10-CM	Diagnosis
I50.20	Unspecified systolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.21	Acute systolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.22	Chronic systolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.23	Acute on chronic systolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.30	Unspecified diastolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.31	Acute diastolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.32	Chronic diastolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.33	Acute on chronic diastolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	ICD-10-CM	Diagnosis
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	ICD-10-CM	Diagnosis

Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Angioedema in this Request

Code	Description	Code Type	Code Category
995.1	Angioneurotic edema not elsewhere classified	ICD-9-CM	Diagnosis
T783XXA	Angioneurotic edema, initial encounter	ICD-10-CM	Diagnosis

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), Current Procedural Terminology (CPT), and Healthcare Common Procedure Coding System (HCPCS) Diagnosis and Procedure Codes Used to Define Serious Angioedema in this Request

Code	Description	Code Type	Code Category
995.1	Angioneurotic edema not elsewhere classified	ICD-9-CM	Diagnosis
T783XXA	Angioneurotic edema, initial encounter	ICD-10-CM	Diagnosis
99220	ICU Admission	CPT-4	Procedure
99224	ICU Admission	CPT-4	Procedure
99225	ICU Admission	CPT-4	Procedure
99226	ICU Admission	CPT-4	Procedure
99221	ICU Admission	CPT-4	Procedure
99222	ICU Admission	CPT-4	Procedure
99223	ICU Admission	CPT-4	Procedure
99291	ICU Admission	CPT-4	Procedure
99292	ICU Admission	CPT-4	Procedure
31502	Intubation	CPT-4	Procedure
91000	Intubation	CPT-4	Procedure
31.99	Intubation	ICD-9-CM	Procedure
96	Intubation	ICD-9-CM	Procedure
96.0	Intubation	ICD-9-CM	Procedure
96.01	Intubation	ICD-9-CM	Procedure
96.02	Intubation	ICD-9-CM	Procedure
96.03	Intubation	ICD-9-CM	Procedure
96.04	Intubation	ICD-9-CM	Procedure
96.05	Intubation	ICD-9-CM	Procedure
96.06	Intubation	ICD-9-CM	Procedure
96.56	Intubation	ICD-9-CM	Procedure
96.7	Intubation	ICD-9-CM	Procedure
96.70	Intubation	ICD-9-CM	Procedure
96.71	Intubation	ICD-9-CM	Procedure
96.72	Intubation	ICD-9-CM	Procedure
A0396	Intubation	HCPCS	Procedure
31231	Laryngoscopy	CPT-4	Procedure
31505	Laryngoscopy	CPT-4	Procedure
31525	Laryngoscopy	CPT-4	Procedure
31526	Laryngoscopy	CPT-4	Procedure
31527	Laryngoscopy	CPT-4	Procedure
31528	Laryngoscopy	CPT-4	Procedure
31529	Laryngoscopy	CPT-4	Procedure
31560	Laryngoscopy	CPT-4	Procedure
31561	Laryngoscopy	CPT-4	Procedure
31.42	Laryngoscopy	ICD-9-CM	Procedure
31615	Tracheostomy	CPT-4	Procedure
31603	Tracheostomy	CPT-4	Procedure
31605	Tracheostomy	CPT-4	Procedure
31610	Tracheostomy	CPT-4	Procedure
31612	Tracheostomy	CPT-4	Procedure
31.1	Tracheostomy	ICD-9-CM	Procedure
31.2	Tracheostomy	ICD-9-CM	Procedure
31.21	Tracheostomy	ICD-9-CM	Procedure
31.29	Tracheostomy	ICD-9-CM	Procedure
V44.0	Tracheostomy	ICD-9-CM	Diagnosis

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), Current Procedural Terminology (CPT), and Healthcare Common Procedure Coding System (HCPCS) Diagnosis and Procedure Codes Used to Define Serious Angioedema in this Request

Code	Description	Code Type	Code Category
V55.0	Tracheostomy	ICD-9-CM	Diagnosis
31502	Intubation	CPT-4	Procedure
91000	Intubation	CPT-4	Procedure
0B710DZ	Dilation of Trachea with Intraluminal Device, Open Approach	ICD-10-CM	Procedure
0B710ZZ	Dilation of Trachea, Open Approach	ICD-10-CM	Procedure
0B713DZ	Dilation of Trachea with Intraluminal Device, Percutaneous Approach	ICD-10-CM	Procedure
0B713ZZ	Dilation of Trachea, Percutaneous Approach	ICD-10-CM	Procedure
0B714DZ	Dilation of Trachea with Intraluminal Device, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
0B714ZZ	Dilation of Trachea, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
0B717DZ	Dilation of Trachea with Intraluminal Device, Via Natural or Artificial Opening	ICD-10-CM	Procedure
0B717ZZ	Dilation of Trachea, Via Natural or Artificial Opening	ICD-10-CM	Procedure
0B718DZ	Dilation of Trachea with Intraluminal Device, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
0B718ZZ	Dilation of Trachea, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
0B720DZ	Dilation of Carina with Intraluminal Device, Open Approach	ICD-10-CM	Procedure
0B720ZZ	Dilation of Carina, Open Approach	ICD-10-CM	Procedure
0B723DZ	Dilation of Carina with Intraluminal Device, Percutaneous Approach	ICD-10-CM	Procedure
0B723ZZ	Dilation of Carina, Percutaneous Approach	ICD-10-CM	Procedure
0B724DZ	Dilation of Carina with Intraluminal Device, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
0B724ZZ	Dilation of Carina, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
0B727DZ	Dilation of Carina with Intraluminal Device, Via Natural or Artificial Opening	ICD-10-CM	Procedure
0B727ZZ	Dilation of Carina, Via Natural or Artificial Opening	ICD-10-CM	Procedure
0B728DZ	Dilation of Carina with Intraluminal Device, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
0B728ZZ	Dilation of Carina, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
0BQ10ZZ	Repair Trachea, Open Approach	ICD-10-CM	Procedure
0BQ13ZZ	Repair Trachea, Percutaneous Approach	ICD-10-CM	Procedure
0BQ14ZZ	Repair Trachea, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
0BQ17ZZ	Repair Trachea, Via Natural or Artificial Opening	ICD-10-CM	Procedure
0BQ18ZZ	Repair Trachea, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
0BQ20ZZ	Repair Carina, Open Approach	ICD-10-CM	Procedure
0BQ23ZZ	Repair Carina, Percutaneous Approach	ICD-10-CM	Procedure
0BQ24ZZ	Repair Carina, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
0BQ27ZZ	Repair Carina, Via Natural or Artificial Opening	ICD-10-CM	Procedure
0BQ28ZZ	Repair Carina, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
OCHY7BZ	Insertion of Airway into Mouth and Throat, Via Natural or Artificial Opening	ICD-10-CM	Procedure
OCHY8BZ	Insertion of Airway into Mouth and Throat, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
09HN7BZ	Insertion of Airway into Nasopharynx, Via Natural or Artificial Opening	ICD-10-CM	Procedure
09HN8BZ	Insertion of Airway into Nasopharynx, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
0DH57BZ	Insertion of Airway into Esophagus, Via Natural or Artificial Opening	ICD-10-CM	Procedure
0DH58BZ	Insertion of Airway into Esophagus, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
0BH17EZ	Insertion of Endotracheal Airway into Trachea, Via Natural or Artificial Opening	ICD-10-CM	Procedure
0BH18EZ	Insertion of Endotracheal Airway into Trachea, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
0BH07DZ	Insertion of Intraluminal Device into Tracheobronchial Tree, Via Natural or Artificial Opening	ICD-10-CM	Procedure

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), Current Procedural Terminology (CPT), and Healthcare Common Procedure Coding System (HCPCS) Diagnosis and Procedure Codes Used to Define Serious Angioedema in this Request

Code	Description	Code Type	Code Category
0WHQ7YZ	Insertion of Other Device into Respiratory Tract, Via Natural or Artificial Opening	ICD-10-CM	Procedure
ODL57DZ	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening	ICD-10-CM	Procedure
ODL58DZ	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
3E1F78Z	Irrigation of Respiratory Tract using Irrigating Substance, Via Natural or Artificial Opening	ICD-10-CM	Procedure
3E1F88Z	Irrigation of Respiratory Tract using Irrigating Substance, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
5A1935Z	Respiratory Ventilation, Less than 24 Consecutive Hours	ICD-10-CM	Procedure
5A1945Z	Respiratory Ventilation, 24-96 Consecutive Hours	ICD-10-CM	Procedure
5A1955Z	Respiratory Ventilation, Greater than 96 Consecutive Hours	ICD-10-CM	Procedure
5A1935Z	Respiratory Ventilation, Less than 24 Consecutive Hours	ICD-10-CM	Procedure
5A1955Z	Respiratory Ventilation, Greater than 96 Consecutive Hours	ICD-10-CM	Procedure
31231	Laryngoscopy	CPT-4	Procedure
31505	Laryngoscopy	CPT-4	Procedure
31525	Laryngoscopy	CPT-4	Procedure
31526	Laryngoscopy	CPT-4	Procedure
31527	Laryngoscopy	CPT-4	Procedure
31528	Laryngoscopy	CPT-4	Procedure
31529	Laryngoscopy	CPT-4	Procedure
31560	Laryngoscopy	CPT-4	Procedure
31561	Laryngoscopy	CPT-4	Procedure
0BJ14ZZ	Inspection of Trachea, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
0BJ18ZZ	Inspection of Trachea, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
0CJS4ZZ	Inspection of Larynx, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
0CJS8ZZ	Inspection of Larynx, Via Natural or Artificial Opening Endoscopic	ICD-10-CM	Procedure
31605	Tracheostomy	CPT-4	Procedure
31612	Tracheostomy	CPT-4	Procedure
0B110F4	Bypass Trachea to Cutaneous with Tracheostomy Device, Open Approach	ICD-10-CM	Procedure
0B110Z4	Bypass Trachea to Cutaneous, Open Approach	ICD-10-CM	Procedure
0B113F4	Bypass Trachea to Cutaneous with Tracheostomy Device, Percutaneous Approach	ICD-10-CM	Procedure
0B113Z4	Bypass Trachea to Cutaneous, Percutaneous Approach	ICD-10-CM	Procedure
0B114F4	Bypass Trachea to Cutaneous with Tracheostomy Device, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
0B114Z4	Bypass Trachea to Cutaneous, Percutaneous Endoscopic Approach	ICD-10-CM	Procedure
Z93.0	Tracheostomy Status	ICD-10-CM	Diagnosis
Z43.0	Encounter for Attention to Tracheostomy	ICD-10-CM	Diagnosis

Appendix F. International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM) Codes Used to Define Covariates in this Request

Code	Description	Code Type	Code Category
Ambulatory Allergies			
477.0	Allergic rhinitis due to pollen	ICD-9-CM	Diagnosis
477.1	Allergic rhinitis, due to food	ICD-9-CM	Diagnosis
477.2	Allergic rhinitis due to animal (cat) (dog) hair and dander	ICD-9-CM	Diagnosis
477.8	Allergic rhinitis due to other allergen	ICD-9-CM	Diagnosis
477.9	Allergic rhinitis, cause unspecified	ICD-9-CM	Diagnosis
558.3	Gastroenteritis and colitis, allergic	ICD-9-CM	Diagnosis
691.0	Diaper or napkin rash	ICD-9-CM	Diagnosis
691.8	Other atopic dermatitis and related conditions	ICD-9-CM	Diagnosis
692.0	Contact dermatitis and other eczema due to detergents	ICD-9-CM	Diagnosis
692.1	Contact dermatitis and other eczema due to oils and greases	ICD-9-CM	Diagnosis
692.2	Contact dermatitis and other eczema due to solvents	ICD-9-CM	Diagnosis
692.3	Contact dermatitis and other eczema due to drugs and medicines in contact with	ICD-9-CM	Diagnosis
692.4	Contact dermatitis and other eczema due to other chemical products	ICD-9-CM	Diagnosis
692.5	Contact dermatitis and other eczema due to food in contact with skin	ICD-9-CM	Diagnosis
692.6	Contact dermatitis and other eczema due to plants (except food)	ICD-9-CM	Diagnosis
692.70	Unspecified dermatitis due to sun	ICD-9-CM	Diagnosis
692.71	Contact dermatitis and other eczema due to sunburn	ICD-9-CM	Diagnosis
692.72	Acute dermatitis due to solar radiation	ICD-9-CM	Diagnosis
692.73	Actinic reticuloid and actinic granuloma	ICD-9-CM	Diagnosis
692.74	Other chronic dermatitis due to solar radiation	ICD-9-CM	Diagnosis
692.75	Disseminated superficial actinic porokeratosis (DSAP)	ICD-9-CM	Diagnosis
692.76	Sunburn of second degree	ICD-9-CM	Diagnosis
692.77	Sunburn of third degree	ICD-9-CM	Diagnosis
692.79	Other dermatitis due to solar radiation	ICD-9-CM	Diagnosis
692.81	Dermatitis due to cosmetics	ICD-9-CM	Diagnosis
692.82	Dermatitis due to other radiation	ICD-9-CM	Diagnosis
692.83	Dermatitis due to metals	ICD-9-CM	Diagnosis
692.84	Contact dermatitis and other eczema due to animal (cat) (dog) dander	ICD-9-CM	Diagnosis
692.89	Contact dermatitis and other eczema due to other specified agent	ICD-9-CM	Diagnosis
692.9	Contact dermatitis and other eczema, due to unspecified cause	ICD-9-CM	Diagnosis
693.0	Dermatitis due to drugs and medicines taken internally	ICD-9-CM	Diagnosis
693.1	Dermatitis due to food taken internally	ICD-9-CM	Diagnosis
693.8	Dermatitis due to other specified substances taken internally	ICD-9-CM	Diagnosis
693.9	Dermatitis due to unspecified substance taken internally	ICD-9-CM	Diagnosis
708.0	Allergic urticaria	ICD-9-CM	Diagnosis
708.1	Idiopathic urticaria	ICD-9-CM	Diagnosis
708.2	Urticaria due to cold and heat	ICD-9-CM	Diagnosis
708.3	Dermatographic urticaria	ICD-9-CM	Diagnosis
708.4	Vibratory urticaria	ICD-9-CM	Diagnosis
708.5	Cholinergic urticaria	ICD-9-CM	Diagnosis
708.8	Other specified urticaria	ICD-9-CM	Diagnosis
708.9	Unspecified urticaria	ICD-9-CM	Diagnosis
995.0	Other anaphylactic reaction	ICD-9-CM	Diagnosis
995.27	Other drug allergy	ICD-9-CM	Diagnosis
995.3	Allergy, unspecified not elsewhere classified	ICD-9-CM	Diagnosis
995.7	Other adverse food reactions, not elsewhere classified	ICD-9-CM	Diagnosis
V07.1	Need for desensitization to allergens	ICD-9-CM	Diagnosis
V13.81	Personal history of anaphylaxis	ICD-9-CM	Diagnosis

Appendix F. International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM) Codes Used to Define Covariates in this Request

Code	Description	Code Type	Code Category
V14.0	Personal history of allergy to penicillin	ICD-9-CM	Diagnosis
V14.1	Personal history of allergy to other antibiotic agent	ICD-9-CM	Diagnosis
V14.2	Personal history of allergy to sulfonamides	ICD-9-CM	Diagnosis
V14.3	Personal history of allergy to other anti-infective agent	ICD-9-CM	Diagnosis
V14.4	Personal history of allergy to anesthetic agent	ICD-9-CM	Diagnosis
V14.5	Personal history of allergy to narcotic agent	ICD-9-CM	Diagnosis
V14.6	Personal history of allergy to analgesic agent	ICD-9-CM	Diagnosis
V14.7	Personal history of allergy to serum or vaccine	ICD-9-CM	Diagnosis
V14.8	Personal history of allergy to other specified medicinal agents	ICD-9-CM	Diagnosis
V14.9	Personal history of allergy to unspecified medicinal agent	ICD-9-CM	Diagnosis
V72.7	Diagnostic skin and sensitization tests	ICD-9-CM	Diagnosis
J30.0	Vasomotor rhinitis	ICD-10-CM	Diagnosis
J30.1	Allergic rhinitis due to pollen	ICD-10-CM	Diagnosis
J30.2	Other seasonal allergic rhinitis	ICD-10-CM	Diagnosis
J30.5	Allergic rhinitis due to food	ICD-10-CM	Diagnosis
J30.81	Allergic rhinitis due to animal (cat) (dog) hair and dander	ICD-10-CM	Diagnosis
J30.89	Other allergic rhinitis	ICD-10-CM	Diagnosis
J30.9	Allergic rhinitis, unspecified	ICD-10-CM	Diagnosis
J31.0	Chronic rhinitis	ICD-10-CM	Diagnosis
J39.3	Upper respiratory tract hypersensitivity reaction, site unspecified	ICD-10-CM	Diagnosis
K52.21	Food protein-induced enterocolitis syndrome	ICD-10-CM	Diagnosis
K52.22	Food protein-induced enteropathy	ICD-10-CM	Diagnosis
K52.29	Other allergic and dietetic gastroenteritis and colitis	ICD-10-CM	Diagnosis
L20.0	Besnier's prurigo	ICD-10-CM	Diagnosis
L20.81	Atopic neurodermatitis	ICD-10-CM	Diagnosis
L20.82	Flexural eczema	ICD-10-CM	Diagnosis
L20.84	Intrinsic (allergic) eczema	ICD-10-CM	Diagnosis
L20.89	Other atopic dermatitis	ICD-10-CM	Diagnosis
L22	Diaper dermatitis	ICD-10-CM	Diagnosis
L23.0	Allergic contact dermatitis due to metals	ICD-10-CM	Diagnosis
L23.81	Allergic contact dermatitis due to animal (cat) (dog) dander	ICD-10-CM	Diagnosis
L24.0	Irritant contact dermatitis due to detergents	ICD-10-CM	Diagnosis
L24.1	Irritant contact dermatitis due to oils and greases	ICD-10-CM	Diagnosis
L24.2	Irritant contact dermatitis due to solvents	ICD-10-CM	Diagnosis
L24.81	Irritant contact dermatitis due to metals	ICD-10-CM	Diagnosis
L25.0	Unspecified contact dermatitis due to cosmetics	ICD-10-CM	Diagnosis
L25.1	Unspecified contact dermatitis due to drugs in contact with skin	ICD-10-CM	Diagnosis
L25.2	Unspecified contact dermatitis due to dyes	ICD-10-CM	Diagnosis
L25.3	Unspecified contact dermatitis due to other chemical products	ICD-10-CM	Diagnosis
L25.4	Unspecified contact dermatitis due to food in contact with skin	ICD-10-CM	Diagnosis
L25.5	Unspecified contact dermatitis due to plants, except food	ICD-10-CM	Diagnosis
L25.8	Unspecified contact dermatitis due to other agents	ICD-10-CM	Diagnosis
L25.9	Unspecified contact dermatitis, unspecified cause	ICD-10-CM	Diagnosis
L27.0	Generalized skin eruption due to drugs and medicaments taken internally	ICD-10-CM	Diagnosis
L27.1	Localized skin eruption due to drugs and medicaments taken internally	ICD-10-CM	Diagnosis
L27.2	Dermatitis due to ingested food	ICD-10-CM	Diagnosis
L27.8	Dermatitis due to other substances taken internally	ICD-10-CM	Diagnosis
L27.9	Dermatitis due to unspecified substance taken internally	ICD-10-CM	Diagnosis
L50.0	Allergic urticaria	ICD-10-CM	Diagnosis

Appendix F. International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM) Codes Used to Define Covariates in this Request

Code	Description	Code Type	Code Category
L50.1	Idiopathic urticaria	ICD-10-CM	Diagnosis
L50.2	Urticaria due to cold and heat	ICD-10-CM	Diagnosis
L50.3	Dermatographic urticaria	ICD-10-CM	Diagnosis
L50.4	Vibratory urticaria	ICD-10-CM	Diagnosis
L50.5	Cholinergic urticaria	ICD-10-CM	Diagnosis
L50.6	Contact urticaria	ICD-10-CM	Diagnosis
L50.8	Other urticaria	ICD-10-CM	Diagnosis
L50.9	Urticaria, unspecified	ICD-10-CM	Diagnosis
L55.0	Sunburn of first degree	ICD-10-CM	Diagnosis
L55.1	Sunburn of second degree	ICD-10-CM	Diagnosis
L55.2	Sunburn of third degree	ICD-10-CM	Diagnosis
L55.9	Sunburn, unspecified	ICD-10-CM	Diagnosis
L56.0	Drug phototoxic response	ICD-10-CM	Diagnosis
L56.1	Drug photoallergic response	ICD-10-CM	Diagnosis
L56.2	Photocontact dermatitis [berloque dermatitis]	ICD-10-CM	Diagnosis
L56.5	Disseminated superficial actinic porokeratosis (DSAP)	ICD-10-CM	Diagnosis
L56.8	Other specified acute skin changes due to ultraviolet radiation	ICD-10-CM	Diagnosis
L57.1	Actinic reticuloid	ICD-10-CM	Diagnosis
L57.5	Actinic granuloma	ICD-10-CM	Diagnosis
L57.8	Other skin changes due to chronic exposure to nonionizing radiation	ICD-10-CM	Diagnosis
L57.9	Skin changes due to chronic exposure to nonionizing radiation, unspecified	ICD-10-CM	Diagnosis
L58.9	Radiodermatitis, unspecified	ICD-10-CM	Diagnosis
T50.995A	Adverse effect of other drugs, medicaments and biological substances, initial encounter	ICD-10-CM	Diagnosis
T78.1XXA	Other adverse food reactions, not elsewhere classified, initial encounter	ICD-10-CM	Diagnosis
T78.2XXA	Anaphylactic shock, unspecified, initial encounter	ICD-10-CM	Diagnosis
T78.40XA	Allergy, unspecified, initial encounter	ICD-10-CM	Diagnosis
Z01.89	Encounter for other specified special examinations	ICD-10-CM	Diagnosis
Z51.6	Encounter for desensitization to allergens	ICD-10-CM	Diagnosis
Z87.892	Personal history of anaphylaxis	ICD-10-CM	Diagnosis
Z88.0	Allergy status to penicillin	ICD-10-CM	Diagnosis
Z88.1	Allergy status to other antibiotic agents status	ICD-10-CM	Diagnosis
Z88.2	Allergy status to sulfonamides status	ICD-10-CM	Diagnosis
Z88.3	Allergy status to other anti-infective agents status	ICD-10-CM	Diagnosis
Z88.4	Allergy status to anesthetic agent status	ICD-10-CM	Diagnosis
Z88.5	Allergy status to narcotic agent status	ICD-10-CM	Diagnosis
Z88.6	Allergy status to analgesic agent status	ICD-10-CM	Diagnosis
Z88.7	Allergy status to serum and vaccine status	ICD-10-CM	Diagnosis
Z88.8	Allergy status to other drugs, medicaments and biological substances status	ICD-10-CM	Diagnosis
Z88.9	Allergy status to unspecified drugs, medicaments and biological substances status	ICD-10-CM	Diagnosis
Z91.048	Other nonmedicinal substance allergy status	ICD-10-CM	Diagnosis
Serious Allergies			
V72.7	Diagnostic skin and sensitization tests	ICD-9-CM	Diagnosis
V14.9	Personal history of allergy to unspecified medicinal agent	ICD-9-CM	Diagnosis
V14.8	Personal history of allergy to other specified medicinal agents	ICD-9-CM	Diagnosis
V14.7	Personal history of allergy to serum or vaccine	ICD-9-CM	Diagnosis
V14.6	Personal history of allergy to analgesic agent	ICD-9-CM	Diagnosis
V14.5	Personal history of allergy to narcotic agent	ICD-9-CM	Diagnosis
V14.4	Personal history of allergy to anesthetic agent	ICD-9-CM	Diagnosis

Appendix F. International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM) Codes Used to Define Covariates in this Request

Code	Description	Code Type	Code Category
V14.3	Personal history of allergy to other anti-infective agent	ICD-9-CM	Diagnosis
V14.2	Personal history of allergy to sulfonamides	ICD-9-CM	Diagnosis
V14.1	Personal history of allergy to other antibiotic agent	ICD-9-CM	Diagnosis
V14.0	Personal history of allergy to penicillin	ICD-9-CM	Diagnosis
V13.81	Personal history of anaphylaxis	ICD-9-CM	Diagnosis
V07.1	Need for desensitization to allergens	ICD-9-CM	Diagnosis
995.7	Other adverse food reactions, not elsewhere classified	ICD-9-CM	Diagnosis
995.3	Allergy, unspecified not elsewhere classified	ICD-9-CM	Diagnosis
995.27	Other drug allergy	ICD-9-CM	Diagnosis
995.0	Other anaphylactic reaction	ICD-9-CM	Diagnosis
708.9	Unspecified urticaria	ICD-9-CM	Diagnosis
708.8	Other specified urticaria	ICD-9-CM	Diagnosis
708.5	Cholinergic urticaria	ICD-9-CM	Diagnosis
708.4	Vibratory urticaria	ICD-9-CM	Diagnosis
708.3	Dermatographic urticaria	ICD-9-CM	Diagnosis
708.2	Urticaria due to cold and heat	ICD-9-CM	Diagnosis
708.1	Idiopathic urticaria	ICD-9-CM	Diagnosis
708.0	Allergic urticaria	ICD-9-CM	Diagnosis
693.9	Dermatitis due to unspecified substance taken internally	ICD-9-CM	Diagnosis
693.8	Dermatitis due to other specified substances taken internally	ICD-9-CM	Diagnosis
693.1	Dermatitis due to food taken internally	ICD-9-CM	Diagnosis
693.0	Dermatitis due to drugs and medicines taken internally	ICD-9-CM	Diagnosis
692.9	Contact dermatitis and other eczema, due to unspecified cause	ICD-9-CM	Diagnosis
692.89	Contact dermatitis and other eczema due to other specified agent	ICD-9-CM	Diagnosis
692.84	Contact dermatitis and other eczema due to animal (cat) (dog) dander	ICD-9-CM	Diagnosis
692.83	Dermatitis due to metals	ICD-9-CM	Diagnosis
692.82	Dermatitis due to other radiation	ICD-9-CM	Diagnosis
692.81	Dermatitis due to cosmetics	ICD-9-CM	Diagnosis
692.79	Other dermatitis due to solar radiation	ICD-9-CM	Diagnosis
692.77	Sunburn of third degree	ICD-9-CM	Diagnosis
692.76	Sunburn of second degree	ICD-9-CM	Diagnosis
692.75	Disseminated superficial actinic porokeratosis (DSAP)	ICD-9-CM	Diagnosis
692.74	Other chronic dermatitis due to solar radiation	ICD-9-CM	Diagnosis
692.73	Actinic reticuloid and actinic granuloma	ICD-9-CM	Diagnosis
692.72	Acute dermatitis due to solar radiation	ICD-9-CM	Diagnosis
692.71	Contact dermatitis and other eczema due to sunburn	ICD-9-CM	Diagnosis
692.70	Unspecified dermatitis due to sun	ICD-9-CM	Diagnosis
692.6	Contact dermatitis and other eczema due to plants (except food)	ICD-9-CM	Diagnosis
692.5	Contact dermatitis and other eczema due to food in contact with skin	ICD-9-CM	Diagnosis
692.4	Contact dermatitis and other eczema due to other chemical products	ICD-9-CM	Diagnosis
692.3	Contact dermatitis and other eczema due to drugs and medicines in contact with skin	ICD-9-CM	Diagnosis
692.2	Contact dermatitis and other eczema due to solvents	ICD-9-CM	Diagnosis
692.1	Contact dermatitis and other eczema due to oils and greases	ICD-9-CM	Diagnosis
692.0	Contact dermatitis and other eczema due to detergents	ICD-9-CM	Diagnosis
691.8	Other atopic dermatitis and related conditions	ICD-9-CM	Diagnosis
691.0	Diaper or napkin rash	ICD-9-CM	Diagnosis

Appendix F. International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM) Codes Used to Define Covariates in this Request

Code	Description	Code Type	Code Category
558.3	Gastroenteritis and colitis, allergic	ICD-9-CM	Diagnosis
477.9	Allergic rhinitis, cause unspecified	ICD-9-CM	Diagnosis
477.8	Allergic rhinitis due to other allergen	ICD-9-CM	Diagnosis
477.2	Allergic rhinitis due to animal (cat) (dog) hair and dander	ICD-9-CM	Diagnosis
477.1	Allergic rhinitis, due to food	ICD-9-CM	Diagnosis
477.0	Allergic rhinitis due to pollen	ICD-9-CM	Diagnosis
L57.5	Actinic granuloma	ICD-10-CM	Diagnosis
L57.1	Actinic reticuloid	ICD-10-CM	Diagnosis
T50.995A	Adverse effect of other drugs, medicaments and biological substances, initial encounter	ICD-10-CM	Diagnosis
L23.81	Allergic contact dermatitis due to animal (cat) (dog) dander	ICD-10-CM	Diagnosis
L23.0	Allergic contact dermatitis due to metals	ICD-10-CM	Diagnosis
J30.81	Allergic rhinitis due to animal (cat) (dog) hair and dander	ICD-10-CM	Diagnosis
J30.5	Allergic rhinitis due to food	ICD-10-CM	Diagnosis
J30.1	Allergic rhinitis due to pollen	ICD-10-CM	Diagnosis
J30.9	Allergic rhinitis, unspecified	ICD-10-CM	Diagnosis
L50.0	Allergic urticaria	ICD-10-CM	Diagnosis
Z88.6	Allergy status to analgesic agent status	ICD-10-CM	Diagnosis
Z88.4	Allergy status to anesthetic agent status	ICD-10-CM	Diagnosis
Z88.5	Allergy status to narcotic agent status	ICD-10-CM	Diagnosis
Z88.3	Allergy status to other anti-infective agents status	ICD-10-CM	Diagnosis
Z88.1	Allergy status to other antibiotic agents status	ICD-10-CM	Diagnosis
Z88.8	Allergy status to other drugs, medicaments and biological substances status	ICD-10-CM	Diagnosis
Z88.0	Allergy status to penicillin	ICD-10-CM	Diagnosis
Z88.7	Allergy status to serum and vaccine status	ICD-10-CM	Diagnosis
Z88.2	Allergy status to sulfonamides status	ICD-10-CM	Diagnosis
Z88.9	Allergy status to unspecified drugs, medicaments and biological substances status	ICD-10-CM	Diagnosis
T78.40XA	Allergy, unspecified, initial encounter	ICD-10-CM	Diagnosis
T78.2XXA	Anaphylactic shock, unspecified, initial encounter	ICD-10-CM	Diagnosis
L20.81	Atopic neurodermatitis	ICD-10-CM	Diagnosis
L20.0	Besnier's prurigo	ICD-10-CM	Diagnosis
L50.5	Cholinergic urticaria	ICD-10-CM	Diagnosis
J31.0	Chronic rhinitis	ICD-10-CM	Diagnosis
L50.6	Contact urticaria	ICD-10-CM	Diagnosis
L27.2	Dermatitis due to ingested food	ICD-10-CM	Diagnosis
L27.8	Dermatitis due to other substances taken internally	ICD-10-CM	Diagnosis
L27.9	Dermatitis due to unspecified substance taken internally	ICD-10-CM	Diagnosis
L50.3	Dermatographic urticaria	ICD-10-CM	Diagnosis
L22	Diaper dermatitis	ICD-10-CM	Diagnosis
L56.5	Disseminated superficial actinic porokeratosis (DSAP)	ICD-10-CM	Diagnosis
L56.1	Drug photoallergic response	ICD-10-CM	Diagnosis
L56.0	Drug phototoxic response	ICD-10-CM	Diagnosis
Z51.6	Encounter for desensitization to allergens	ICD-10-CM	Diagnosis
Z01.89	Encounter for other specified special examinations	ICD-10-CM	Diagnosis
L20.82	Flexural eczema	ICD-10-CM	Diagnosis
K52.21	Food protein-induced enterocolitis syndrome	ICD-10-CM	Diagnosis
K52.22	Food protein-induced enteropathy	ICD-10-CM	Diagnosis
L27.0	Generalized skin eruption due to drugs and medicaments taken internally	ICD-10-CM	Diagnosis

Appendix F. International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM) Codes Used to Define Covariates in this Request

Code	Description	Code Type	Code Category
L50.1	Idiopathic urticaria	ICD-10-CM	Diagnosis
L20.84	Intrinsic (allergic) eczema	ICD-10-CM	Diagnosis
L24.0	Irritant contact dermatitis due to detergents	ICD-10-CM	Diagnosis
L24.81	Irritant contact dermatitis due to metals	ICD-10-CM	Diagnosis
L24.1	Irritant contact dermatitis due to oils and greases	ICD-10-CM	Diagnosis
L24.2	Irritant contact dermatitis due to solvents	ICD-10-CM	Diagnosis
L27.1	Localized skin eruption due to drugs and medicaments taken internally	ICD-10-CM	Diagnosis
T78.1XXA	Other adverse food reactions, not elsewhere classified, initial encounter	ICD-10-CM	Diagnosis
K52.29	Other allergic and dietetic gastroenteritis and colitis	ICD-10-CM	Diagnosis
J30.89	Other allergic rhinitis	ICD-10-CM	Diagnosis
L20.89	Other atopic dermatitis	ICD-10-CM	Diagnosis
Z91.048	Other nonmedicinal substance allergy status	ICD-10-CM	Diagnosis
J30.2	Other seasonal allergic rhinitis	ICD-10-CM	Diagnosis
L57.8	Other skin changes due to chronic exposure to nonionizing radiation	ICD-10-CM	Diagnosis
L56.8	Other specified acute skin changes due to ultraviolet radiation	ICD-10-CM	Diagnosis
L50.8	Other urticaria	ICD-10-CM	Diagnosis
Z87.892	Personal history of anaphylaxis	ICD-10-CM	Diagnosis
L56.2	Photocontact dermatitis [berloque dermatitis]	ICD-10-CM	Diagnosis
L58.9	Radiodermatitis, unspecified	ICD-10-CM	Diagnosis
L57.9	Skin changes due to chronic exposure to nonionizing radiation, unspecified	ICD-10-CM	Diagnosis
L55.0	Sunburn of first degree	ICD-10-CM	Diagnosis
L55.1	Sunburn of second degree	ICD-10-CM	Diagnosis
L55.2	Sunburn of third degree	ICD-10-CM	Diagnosis
L55.9	Sunburn, unspecified	ICD-10-CM	Diagnosis
L25.0	Unspecified contact dermatitis due to cosmetics	ICD-10-CM	Diagnosis
L25.1	Unspecified contact dermatitis due to drugs in contact with skin	ICD-10-CM	Diagnosis
L25.2	Unspecified contact dermatitis due to dyes	ICD-10-CM	Diagnosis
L25.4	Unspecified contact dermatitis due to food in contact with skin	ICD-10-CM	Diagnosis
L25.8	Unspecified contact dermatitis due to other agents	ICD-10-CM	Diagnosis
L25.3	Unspecified contact dermatitis due to other chemical products	ICD-10-CM	Diagnosis
L25.5	Unspecified contact dermatitis due to plants, except food	ICD-10-CM	Diagnosis
L25.9	Unspecified contact dermatitis, unspecified cause	ICD-10-CM	Diagnosis
J39.3	Upper respiratory tract hypersensitivity reaction, site unspecified	ICD-10-CM	Diagnosis
L50.2	Urticaria due to cold and heat	ICD-10-CM	Diagnosis
L50.9	Urticaria, unspecified	ICD-10-CM	Diagnosis
J30.0	Vasomotor rhinitis	ICD-10-CM	Diagnosis
L50.4	Vibratory urticaria	ICD-10-CM	Diagnosis

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Ambulatory Allergies	
12 Hour Relief	dexbrompheniramine maleate/pseudoephedrine sulfate
24 Hour Allergy Relief	fluticasone propionate
24Hour Allergy	cetirizine HCl
30Pse-150Gfn-15Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
30Pse-3Brm-15Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
40Pse-4Brm	brompheniramine maleate/pseudoephedrine HCl
40Pse-4Brm-20Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
50Pse-3Brm-30Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
7.5Peh-4Brm-15Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Abanatuss Ped	dexchlorpheniramine maleate/pseudoephedrine HCl/chlophed HCl
Abatuss Dmx	dexchlorpheniramine maleate/p-ephed HCl/dextromethorphan hbr
Accuhist	chlorpheniramine maleate/pseudoephedrine HCl
Accuhist Dm Pediatric	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Accuhist Pdx	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Acetadryl	acetaminophen/diphenhydramine HCl
Aceta-Gesic	acetaminophen/diphenhydramine HCl
Aceta-Gesic (With Phenyltolox)	acetaminophen/phenyltoloxamine citrate
Acetaminophen Pm	acetaminophen/diphenhydramine HCl
Acetaminophen Pm Extra Str	acetaminophen/diphenhydramine HCl
Aclovate	alclometasone dipropionate
Acta-Tabs Pe	chlorpheniramine maleate/phenylephrine HCl
Acticon (Dexbromph-Pse)	dexbrompheniramine maleate/pseudoephedrine HCl
Actidom Dmx	guaifenesin/dextromethorphan hbr/phenylephrine
Actifed Cold-Allergy	chlorpheniramine maleate/phenylephrine HCl
Actinel	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Actinel Pediatric	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Active Injection Kit D	dexamethasone sodium phosphate/pf
Acuflex	acetaminophen/phenyltoloxamine citrate
Adlt Robitussin Cough-Cold-Flu	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Adrenaclick	epinephrine
Adrenalin	epinephrine
Adt Robitussin Cough-Cold-Flu	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Adt Robitussin Night Nasal Rlf	phenylephrine HCl/acetaminophen/chlorpheniramine
Adt Robitussin Peak Cld Dm Max	guaifenesin/dextromethorphan hbr
Adult Cough Formula Dm Max	guaifenesin/dextromethorphan hbr
Adult Robitussin Cough-Cold D	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Adult Robitussin M-S Cold	guaifenesin/dextromethorphan hbr/phenylephrine
Adult Robitussin Nasal Relief	phenylephrine HCl/acetaminophen
Adult Robitussin Night M-S Cld	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Adult Robitussin Peak Cold Dm	guaifenesin/dextromethorphan hbr
Adult Robitussin Peak Cold M-S	guaifenesin/dextromethorphan hbr/phenylephrine

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Adult Tussin Cough Congest Dm	guaifenesin/dextromethorphan hbr
Adult Tussin Dm	guaifenesin/dextromethorphan hbr
Adult Tussin Multi-Symp Cold	guaifenesin/dextromethorphan hbr/phenylephrine
Adult Wal-Tussin Dm Max	guaifenesin/dextromethorphan hbr
Advanced Allergy Collect Kit	hydrocortisone
Advil Allergy Sinus	chlorpheniramine maleate/pseudoephedrine HCl/ibuprofen
Advil Allergy-Congestion Rlf	chlorpheniramine maleate/phenylephrine HCl/ibuprofen
Advil Cold And Sinus	ibuprofen/pseudoephedrine HCl
Advil Congestion Relief	ibuprofen/phenylephrine HCl
Aerohist	chlorpheniramine maleate/methscopolamine nitrate
Aerohist Plus	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Aerokid	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Ah-Chew	chlorpheniramin tan/phenylephrine tan/methylscopolamine nit
Ah-Chew li	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Ah-Chew Ultra	chlorpheniramin tan/phenylephrine tan/methylscopolamine nit
Ahist (Chlorcyclizine)	chlorcyclizine HCl
Ahist (Chlorpheniramine)	chlorpheniramine tannate
A-Hydrocort	hydrocortisone sod succinate
Airacof	diphenhydramine HCl/phenylephrine HCl/codeine phosphate
Alacol Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Ala-Cort	hydrocortisone
Ala-Hist Ac	phenylephrine HCl/codeine phosphate
Ala-Hist Dhc	phenylephrine HCl/dihydrocodeine bitartrate
Ala-Hist Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Ala-Hist Ir	dexbrompheniramine maleate
Ala-Hist Lq	phenylephrine HCl/diphenhydramine HCl
Ala-Hist Pe	dexbrompheniramine maleate/phenylephrine HCl
Alamast	pemirolast potassium
Ala-Scalp	hydrocortisone
Alavert	loratadine
Alavert D-12 Allergy-Sinus	loratadine/pseudoephedrine sulfate
Alaway	ketotifen fumarate
Albatussin	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Albatussin Cf	dextromethorphan hbr/phenylephrine HCl/sodium citrate
Albatussin Nn	potassium guaiacolsulfonate/d-methorphan hb/phenyleph/pyril
Albatussin Pediatric Drops	dextromethorphan hbr/phenylephrine HCl
Albatussin Sr	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Alclometasone	alclometasone dipropionate
Aldex An	doxylamine succinate
Aldex D	phenylephrine HCl/pyrilamine maleate
Aldex Dm	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Aldex Gs	guaifenesin/pseudoephedrine HCl
Aldex Gs Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Aldex-Ct	phenylephrine HCl/diphenhydramine HCl
Aldosterone (Bulk)	aldosterone
Aler-Cap	diphenhydramine HCl
Alersule	chlorpheniramine maleate/phenylephrine HCl
Aler-Tab	diphenhydramine HCl
Aleve Cold And Sinus	naproxen sodium/pseudoephedrine HCl
Aleve Sinus And Headache	naproxen sodium/pseudoephedrine HCl
Aleve-D Sinus And Cold	naproxen sodium/pseudoephedrine HCl
Aleve-D Sinus And Headache	naproxen sodium/pseudoephedrine HCl
Ali-Flex	acetaminophen/phenyltoloxamine citrate
Alka-Seltzer Plus Allergy	diphenhydramine HCl
Alka-Seltzer Plus C/C(Pe,Dm)	chlorpheniramine mal/phenylephrine/d-methorphan hb/aspirin
Alka-Seltzer Plus Cold (Pe)	chlorpheniramine maleate/phenylephrine bitartrate/aspirin
Alka-Seltzer Plus Cold/Coughfm	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Alka-Seltzer Plus Cold+Flu	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
Alka-Seltzer Plus Day	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Alka-Seltzer Plus Day-Night	doxylamine succinate/phenylephrine/dextromethorphan hbr/asa
Alka-Seltzer Plus D-N (Acetam)	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Alka-Seltzer Plus Flu	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Alka-Seltzer Plus Mucus-Conges	guaifenesin/dextromethorphan hbr
Alka-Seltzer Plus Night	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Alka-Seltzer Plus Night (Asa)	doxylamine succinate/phenylephrine/dextromethorphan hbr/asa
Alka-Seltzer Plus Sin-Allg-Cgh	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Alka-Seltzer Plus Sinus-Cough	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Alka-Seltzer Plus-D Sinus-Cold	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
All Day Allergy (Cetirizine)	cetirizine HCl
All Day Allergy Relief(Cetir)	cetirizine HCl
All Day Allergy-D	cetirizine HCl/pseudoephedrine HCl
All Day Pain Relief Sinus,Cold	naproxen sodium/pseudoephedrine HCl
Allanhist Pdx	guaifenesin/dextromethorphan hbr/phenylephrine/br-phenir
Allanhist Pdx Infant	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Allantan	phenylephrine tannate/chlorpheniramine tannate
Allanvan-Dm	dextromethorphan tannate/phenylephrine tannate/pyril tan
Allanvan-S	phenylephrine tannate/pyrilamine tannate
Allegra	fexofenadine HCl
Allegra Allergy	fexofenadine HCl
Allegra Odt	fexofenadine HCl
Allegra-D 12 Hour	fexofenadine HCl/pseudoephedrine HCl
Allegra-D 24 Hour	fexofenadine HCl/pseudoephedrine HCl
Aller-Chlor	chlorpheniramine maleate
Allerclear	loratadine
Allerclear D-12Hr	loratadine/pseudoephedrine sulfate
Allerclear D-24Hr	loratadine/pseudoephedrine sulfate
Aller-Ease	fexofenadine HCl
Allerfed Cold And Allergy	chlorpheniramine maleate/phenylephrine HCl
Aller-Fex	fexofenadine HCl
Aller-Flo	fluticasone propionate
Allerfrim	triprolidine HCl/pseudoephedrine HCl
Aller-G-Time	diphenhydramine HCl
Allergy	diphenhydramine HCl
Allergy & Congest Relief	pseudoephedrine HCl/diphenhydramine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Allergy (Chlorpheniramine)	chlorpheniramine maleate
Allergy (Diphenhydramine)	diphenhydramine HCl
Allergy 4-Hour	chlorpheniramine maleate
Allergy And Cold Pe	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Allergy And Congestion Relief	loratadine/pseudoephedrine sulfate
Allergy And Sinus Relief	phenylephrine HCl/diphenhydramine HCl
Allergy Complete-D	cetirizine HCl/pseudoephedrine HCl
Allergy D-12	cetirizine HCl/pseudoephedrine HCl
Allergy Eye (Ketotifen)	ketotifen fumarate
Allergy Medication	diphenhydramine HCl
Allergy Medicine	diphenhydramine HCl
Allergy M-S Nighttime	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Allergy Multi-Symptom	phenylephrine HCl/acetaminophen/chlorpheniramine
Allergy Plus Severe Sinus Ha	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Allergy Relief (Cetirizine)	cetirizine HCl
Allergy Relief (Clemastine)	clemastine fumarate
Allergy Relief (Fexofenadine)	fexofenadine HCl
Allergy Relief (Fluticasone)	fluticasone propionate
Allergy Relief (Loratadine)	loratadine
Allergy Relief D	fexofenadine HCl/pseudoephedrine HCl
Allergy Relief D12	loratadine/pseudoephedrine sulfate
Allergy Relief D-24	loratadine/pseudoephedrine sulfate
Allergy Relief Multi-Symptom	phenylephrine HCl/acetaminophen/chlorpheniramine
Allergy Relief(Chlorphen-Acet)	phenylephrine HCl/acetaminophen/chlorpheniramine
Allergy Relief(Chlorpheniramn)	chlorpheniramine maleate
Allergy Relief(Diphenhydramin)	diphenhydramine HCl
Allergy Relief,Nasal Decongest	loratadine/pseudoephedrine sulfate
Allergy Relief-D (Cetirizine)	cetirizine HCl/pseudoephedrine HCl
Allergy Relief-D (Loratadine)	loratadine/pseudoephedrine sulfate
Allergy Relief-D(Fexofenadine)	fexofenadine HCl/pseudoephedrine HCl
Allergy Relief-Sinus Headache	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Allergy Severe	acetaminophen/diphenhydramine HCl
Allergy Sinus Headache (Pe)	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Allergy Sinus Pe	phenylephrine HCl/acetaminophen/chlorpheniramine
Allergy Sinus-D	pseudoephedrine HCl/acetaminophen/chlorpheniramine
Allergy-Congest Relief-D (Cet)	cetirizine HCl/pseudoephedrine HCl
Allergy-Congest Relief-D(Fexo)	fexofenadine HCl/pseudoephedrine HCl
Allergy-Congestion Relief-D	loratadine/pseudoephedrine sulfate
Allergy-D	phenylephrine HCl/diphenhydramine HCl
Allergy-D (Cetirizine)	cetirizine HCl/pseudoephedrine HCl
Allergy-Sinus	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Allergy-Time	chlorpheniramine maleate
Allerhist-1	clemastine fumarate
Aller-Tec	cetirizine HCl
Aller-Tec D	cetirizine HCl/pseudoephedrine HCl
Allerx 10	pseudoephedrine/methscopolamn/chlorpheniramine/phenylephrine
Allerx 30	pseudoephedrine/methscopolamn/chlorpheniramine/phenylephrine
Allerx Df	chlorpheniramine maleate/methscopolamine nitrate
Allerx Df 30	chlorpheniramine maleate/methscopolamine nitrate
Allerx Pe	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Allerx-D	pseudoephedrine HCl/methylscopolamine nitrate

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Allfen Cd	guaifenesin/codeine phosphate
Allfen Cdx	guaifenesin/codeine phosphate
Allfen Dm	guaifenesin/dextromethorphan hbr
All-Nite Cold Formula	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
All-Nite Cold-Flu	dextromethorphan hbr/acetaminophen/doxylamine
Alocril	nedocromil sodium
Alomide	lodoxamide tromethamine
Altafed	triprolidine HCl/pseudoephedrine HCl
Altarusin Dm	guaifenesin/dextromethorphan hbr
Altarusin Pe	guaifenesin/pseudoephedrine HCl
Altaryl	diphenhydramine HCl
Altipres	guaifenesin/dextromethorphan hbr/phenylephrine
Altipres Pediatric	guaifenesin/dextromethorphan hbr/phenylephrine
Altipres-B	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Ambi 10Peh-400Gfn	guaifenesin/phenylephrine HCl
Ambi 10Peh-400Gfn-20Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Ambi 10Peh-4Cpm	chlorpheniramine maleate/phenylephrine HCl
Ambi 10Peh-4Cpm-20Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Ambi 20Dm-4Cpm	chlorpheniramine maleate/dextromethorphan hbr
Ambi 40Pse-400Gfn	guaifenesin/pseudoephedrine HCl
Ambi 40Pse-400Gfn-20Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Ambi 60Pse-400Gfn	guaifenesin/pseudoephedrine HCl
Ambi 60Pse-400Gfn-20Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Ambi 60Pse-4Cpm	chlorpheniramine maleate/pseudoephedrine HCl
Ambi 60Pse-4Cpm-20Dm	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Ambifed	guaifenesin/pseudoephedrine HCl
Ambifed Cd	pseudoephedrine HCl/codeine phosphate/guaifenesin
Ambifed Cdx	pseudoephedrine HCl/codeine phosphate/guaifenesin
Ambifed Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Ambifed-G (Ir)	guaifenesin/pseudoephedrine HCl
Ambifed-G Cd	pseudoephedrine HCl/codeine phosphate/guaifenesin
Ambifed-G Cdx	pseudoephedrine HCl/codeine phosphate/guaifenesin
Ambifed-G Dm (Ir)	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Ambitussin Ac	guaifenesin/codeine phosphate
Amcinonide	amcinonide
A-Methapred	methylprednisolone sodium succinate
Analpram-Hc	hydrocortisone acetate/pramoxine HCl
Anaplex Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Andehist Dm Nr	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Andehist Nr	brompheniramine maleate/pseudoephedrine HCl
Antihist	diphenhydramine HCl
Antihistamine	diphenhydramine HCl
Antihistamine Eye Drops	ketotifen fumarate
Anti-Itch (Hc)	hydrocortisone
Anti-Itch (Hc) With Aloe-Vit E	hydrocortisone/aloe vera/vitamin e acetate/vitamins a and d
Anti-Itch (Hc) With Oatmeal	hydrocortisone/colloidal oatmeal/aloe/vitamin e
Anti-Itch Plus	hydrocortisone/aloe vera/vitamin e acetate/vitamins a and d
Antitussive Dm	guaifenesin/dextromethorphan hbr
Apexicon	diflorasone diacetate
Apexicon E	diflorasone diacetate/emollient base
Ap-Hist Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Aprodine	triprolidine HCl/pseudoephedrine HCl
Aqua Glycolic Hc	hydrocortisone/skin cleanser combination no.25
Aquanaz	guaifenesin/dextromethorphan hbr/phenylephrine
Aquanil Hc	hydrocortisone
Aquatab C	phenylephrine HCl/carbetapentane citrate/guaifenesin
Arbinoxa	carbinoxamine maleate
Aristospan Intra-Articular	triamcinolone hexacetonide
Aristospan Intralesional	triamcinolone hexacetonide
Asmalpred	prednisolone sodium phosphate/peak flow meter
Asmalpred Plus	prednisolone sodium phosphate/peak flow meter
Astelin	azelastine HCl
Astepro	azelastine HCl
Atuss Ds	chlorpheniramine/ppseudoephedrine/dextromethorphan tannates
Auvi-Q	epinephrine
Aveeno Anti-Itch (Hydrocortsn)	hydrocortisone/colloidal oatmeal/aloe/vitamin e
Azelastine	azelastine HCl
Balacall Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Balamine Dm (Chlor-Pe)	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Baltussin	phenylephrine HCl/dihydrocodeine bitartrate/chlorpheniramine
Banophen	diphenhydramine HCl
Banophen Allergy	diphenhydramine HCl
Baycadron	dexamethasone
Bayer Pm	aspirin/diphenhydramine citrate
Beconase Aq	beclomethasone dipropionate
Benadryl	diphenhydramine HCl
Benadryl Allergy	diphenhydramine HCl
Benadryl Allergy Quick Dissolv	diphenhydramine HCl
Benadryl Allergy/Cold	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Benadryl Allergy-Sinus-Headach	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Benadryl Dye-Free Allergy	diphenhydramine HCl
Benadryl Severe Allergy-Sinus	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Benadryl-D Allergy-Sinus	phenylephrine HCl/diphenhydramine HCl
Bepreve	bepotastine besilate
Beta-1	betamethasone acetate/betamethasone sodium phosphate
Beta-Hc	hydrocortisone
Betamethasone Acet, Micro(Bulk)	betamethasone acetate, micronized
Betamethasone Acet, Sod Phos	betamethasone acetate/betamethasone sodium phosphate
Betamethasone Dipropionate	betamethasone dipropionate
Betamethasone Valerate	betamethasone valerate
Betamethasone, Augmented	betamethasone dipropionate/propylene glycol
Beta-Val	betamethasone valerate
Biclora	chlorcyclizine hydrochloride/chlophedianol hydrochloride
Biclora-D	chlorcyclizine HCl/pseudoephedrine HCl/chlophedianol HCl
Bio T Pres	guaifenesin/dextromethorphan hbr/phenylephrine
Bio T Pres Pediatric	guaifenesin/dextromethorphan hbr/phenylephrine
Bio T Pres-B	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Bio-B Kids	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Biobron Dx	guaifenesin/dextromethorphan hbr/phenylephrine
Biobron Sf	guaifenesin/dextromethorphan hbr/phenylephrine
Biocotron	guaifenesin/dextromethorphan hbr
Biocotron-D	guaifenesin/dextromethorphan hbr/phenylephrine

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Biodesp Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Bio-Dtuss Dmx	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Biogesic	acetaminophen/phenyltoloxamine citrate
Biogil	guaifenesin/dextromethorphan hbr/phenylephrine
Biogtuss Nf	guaifenesin/dextromethorphan hbr/phenylephrine
Bionatuss Dxp	dextromethorphan hbr/phenylephrine HCl/dexbrompheniramine
Bionel	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Bionel Pediatric	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Bioregesic	acetaminophen/phenyltoloxamine citrate
Biospec Dmx	guaifenesin/dextromethorphan hbr
Bio-S-Pres Dx	guaifenesin/dextromethorphan hbr/phenylephrine
Biotuss	guaifenesin/dextromethorphan hbr/phenylephrine
Biotuss Pediatric	guaifenesin/dextromethorphan hbr/phenylephrine
Biphenox Tension Headache	acetaminophen/phenyltoloxamine citrate
Bp 8 Cough	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Bpm	brompheniramine maleate
Bpm Pe	brompheniramine maleate/phenylephrine HCl
Bpm Pe Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Bpm Pseudo	brompheniramine maleate/pseudoephedrine HCl
Brohist D	brompheniramine maleate/phenylephrine HCl
Bromaline	brompheniramine maleate/pseudoephedrine HCl
Bromaline Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Bromax	brompheniramine maleate
Bromax D	brompheniramine maleate/phenylephrine HCl
Bromaxefed Dm Rf	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Bromaxefed Rf	brompheniramine maleate/pseudoephedrine HCl
Bromdex D	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Bromfed Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Bromfenex	brompheniramine maleate/pseudoephedrine HCl
Bromhist	brompheniramine maleate/pseudoephedrine HCl
Bromhist-Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine/br-phenir
Bromhist-Pdx	guaifenesin/dextromethorphan hbr/phenylephrine/br-phenir
Bromphenex Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Brompheniramine Maleate	brompheniramine maleate
Brompheniramine Maleate (Bulk)	brompheniramine maleate
Brompheniramine Tannate	brompheniramine tannate
Brompheniramine-Pe Tannates	brompheniramine tannate/phenylephrine tannate
Brompheniramine-Pseudoeph-Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Brompheniramine-Pseudoephedrin	brompheniramine maleate/pseudoephedrine HCl
Brompheniramin-Phenylephrin-Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Brompheniram-Pe-Dihydrocodeine	brompheniramine maleate/phenylephrine HCl/dihydrocodeine bt
Bromplex Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Bromspiro	brompheniramine maleate
Bronchial Asthma Relief	guaifenesin/ephedrine HCl
Broncotron	guaifenesin/dextromethorphan hbr
Broncotron Ped	guaifenesin/dextromethorphan hbr/phenylephrine
Broncotron-D	guaifenesin/dextromethorphan hbr/phenylephrine
Broncotron-S	guaifenesin/dextromethorphan hbr
Bronkids	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Brontuss Dx	guaifenesin/dextromethorphan hbr/phenylephrine
Brontuss Sf	guaifenesin/dextromethorphan hbr/phenylephrine

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Brotapp	brompheniramine maleate/pseudoephedrine HCl
Brotapp Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Brovex	brompheniramine tannate
Brovex Adt	brompheniramine tannate/phenylephrine tannate
Brovex Cb	brompheniramine maleate/codeine phosphate
Brovex Cbx	brompheniramine maleate/codeine phosphate
Brovex Ct	brompheniramine tannate
Brovex Pb	brompheniramine maleate/phenylephrine HCl
Brovex Pb C	brompheniramine maleate/phenylephrine HCl/codeine phosphate
Brovex Pb Cx	brompheniramine maleate/phenylephrine HCl/codeine phosphate
Brovex Pb Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Brovex Pd	pseudoephedrine tannate/brompheniramine tannate
Brovex Peb	brompheniramine maleate/phenylephrine HCl
Brovex Peb Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Brovex Psb	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Brovex Pse	brompheniramine maleate/pseudoephedrine HCl
Brovex Pse Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Brovex Sr	brompheniramine maleate/pseudoephedrine HCl
Budesonide	budesonide
Budesonide, Micronized (Bulk)	budesonide, micronized
Cafgesic Forte	magnesium salicylate/acetaminophen/phenyltoloxamine/caffeine
Capcof	chlorpheniramine maleate/phenylephrine HCl/codeine phosphate
Capex	fluocinolone acetonide
Capmist Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Capron Dm	pyrilamine maleate/dextromethorphan hbr
Carbaphen 12	chlorpheniramine mal/phenylephrine HCl/carbetapentane citr
Carbaphen 12 Ped	chlorpheniramine mal/phenylephrine HCl/carbetapentane citr
Carbaphen Ch	chlorpheniramine maleate/phenylephrine HCl/chlophedianol HCl
Carbaphen Ped Ch	chlorpheniramine maleate/phenylephrine HCl/chlophedianol HCl
Carbatuss	phenylephrine HCl/carbetapentane citrate/guaifenesin
Carbatuss-Cl	potassium guaiacolsulfonate/carbetapentane cit/phenylephrine
Carba-Xp	guaifenesin/carbetapentane cit
Carbinoxamine Maleate	carbinoxamine maleate
Cardec (Phenylephrin-Chlorphn)	chlorpheniramine maleate/phenylephrine HCl
Cardec Dm (Phenyleph-Chlorphn)	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Carmol Hc	hydrocortisone acetate/urea
Ccp Caffeine Free	guaifenesin/phenylephrine HCl/acetaminophen
Celestone	betamethasone
Celestone Soluspan	betamethasone acetate/betamethasone sodium phosphate
Cenhist	brompheniramine maleate/phenylephrine HCl
Centergy	chlorpheniramine maleate/phenylephrine HCl
Centergy Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Centuss Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Centussin Dhc	brompheniramine maleate/phenylephrine HCl/dihydrocodeine bt
Ceron	chlorpheniramine maleate/phenylephrine HCl
Ceron Infant	chlorpheniramine maleate/phenylephrine HCl
Ceron-Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Ceron-Dm Infant	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Certuss-D	pseudoephedrine HCl/chlophedianol HCl/guaifenesin
Cetiri-D	cetirizine HCl/pseudoephedrine HCl
Cetirizine	cetirizine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Cetirizine-Pseudoephedrine	cetirizine HCl/pseudoephedrine HCl
Cgu Wc	guaifenesin/codeine phosphate
Cheracol D	guaifenesin/dextromethorphan hbr
Cheratussin Ac	guaifenesin/codeine phosphate
Cheratussin Dac	pseudoephedrine HCl/codeine phosphate/guaifenesin
Chest Congestion	guaifenesin/acetaminophen
Chest Congestion Relief + Dm	guaifenesin/dextromethorphan hbr
Chest Congestion Relief D	guaifenesin/pseudoephedrine HCl
Chest Congestion Relief Pe	guaifenesin/phenylephrine HCl
Chest Congestion-Cough Relief	guaifenesin/dextromethorphan hbr
Chest Congestion-Pain Relief	guaifenesin/acetaminophen
Chest Congestion-Pain Rlf Pe	guaifenesin/phenylephrine HCl/acetaminophen
Chest-Sinus Congestion Relief	guaifenesin/phenylephrine HCl
Child Allergy & Sinus D	phenylephrine HCl/diphenhydramine HCl
Child Allergy Relf(Cetirizine)	cetirizine HCl
Child Allergy Relief (Diphen)	diphenhydramine HCl
Child Chest Congestion + Cough	guaifenesin/dextromethorphan hbr
Child Cold-Cough Day-Night	diphenhydramine HCl/phenylephrine HCl/dextromethorphan hbr
Child Cough And Sore Throat	acetaminophen/dextromethorphan hbr
Child Delsym Cough+Chest Dm	guaifenesin/dextromethorphan hbr
Child Delsym Cough+Cold	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Child Delsym Cough-Cold Night	phenylephrine HCl/diphenhydramine HCl
Child Delsym Nighttime C-C	phenylephrine HCl/diphenhydramine HCl
Child Dometuss-Da	chlorpheniramine maleate/phenylephrine HCl
Child Mucinex Congestion-Cough	guaifenesin/dextromethorphan hbr/phenylephrine
Child Mucinex M-S Cold Day-Nte	diphenhydramine/phenylephrin/dextromethorph/acetaminophen/gg
Child Mucinex Stuffy Nose-Cold	guaifenesin/phenylephrine HCl
Child Mucus Relief Cough	guaifenesin/dextromethorphan hbr
Child Multi-Symptom Cold/Cough	guaifenesin/dextromethorphan hbr/phenylephrine
Child Multi-Symptom Cold-Fever	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Child Plus Cough And Runnynose	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Child Triaminic Cold-Allergy	brompheniramine maleate/phenylephrine HCl
Child Triaminic Cold-Cough D/N	diphenhydramine HCl/phenylephrine HCl/dextromethorphan hbr
Child Triaminic Cough-Congest	guaifenesin/dextromethorphan hbr
Child Triaminic Cough-Sore Thr	acetaminophen/dextromethorphan hbr
Child Triaminic Ms Fever-Cold	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Child Tylenol Plus Cold-Allerg	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Child Wal-Tap Cold-Allergy	brompheniramine maleate/phenylephrine HCl
Children Night Time Cold-Cough	phenylephrine HCl/diphenhydramine HCl
Children'S Alaway	ketotifen fumarate
Children'S Allegra Allergy	fexofenadine HCl
Children'S Allergy (Diphenhyd)	diphenhydramine HCl
Children'S Allergy Complete	cetirizine HCl
Children'S Allergy Medicine	diphenhydramine HCl
Children'S Allergy Relief(Fex)	fexofenadine HCl
Children'S Allergy Relief(Lor)	loratadine
Children'S Allergy(Cetirizine)	cetirizine HCl
Children'S Aller-Tec	cetirizine HCl
Children'S Benadryl Allergy	diphenhydramine HCl
Children'S Cetirizine	cetirizine HCl
Children'S Claritin	loratadine

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Children'S Cold And Cough (Pe)	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Children'S Cold And Cough Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Children'S Cold-Allergy (Pe)	brompheniramine maleate/phenylephrine HCl
Childrens Cold-Alrgy (P-Ephed)	brompheniramine maleate/pseudoephedrine HCl
Children'S Cold-Cough Daytime	dextromethorphan hbr/phenylephrine HCl
Children'S Cold-Cough-Sore	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Children'S Complete Allergy	diphenhydramine HCl
Children'S Cough	guaifenesin/dextromethorphan hbr
Children'S Cough And Runnynose	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Children'S Cough-Cold Relief	chlorpheniramine maleate/dextromethorphan hbr
Children'S Dibromm Cold-Allerg	brompheniramine maleate/phenylephrine HCl
Children'S Dibromm Dm Cold-Cou	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Children'S Dimetapp Cold-Flu	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Children'S Flonase Allergy Rlf	fluticasone propionate
Children'S Flu Relief	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Children'S Mapap Cough-Sinus	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Children'S Motrin Cold	ibuprofen/pseudoephedrine HCl
Children'S M-S Cold Day-Night	diphenhydramine/phenylephrin/dextromethorph/acetaminophen/gg
Children'S Mucinex Cold-Fever	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Children'S Mucinex Cough	guaifenesin/dextromethorphan hbr
Children'S Mucinex Multi-Symp	guaifenesin/dextromethorphan hbr/phenylephrine
Children'S Mucinex Night Time	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Children'S Nasacort	triamcinolone acetonide
Childrens Plus Cold	phenylephrine HCl/acetaminophen/chlorpheniramine
Children'S Plus Flu	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Childrens Plus Multi-Symp Cold	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Children'S Stuffy Nose-Cold	guaifenesin/phenylephrine HCl
Children'S Sudafed Pe Cough	dextromethorphan hbr/phenylephrine HCl
Children'S Triaminic-D Ms Cold	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Children'S Tylenol Plus	phenylephrine HCl/acetaminophen
Children'S Tylenol Plus Cold	phenylephrine HCl/acetaminophen/chlorpheniramine
Children'S Tylenol Plus Flu	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Childrens Tylenol Plus Ms Cold	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Children'S Wal-Dryl Allergy	diphenhydramine HCl
Children'S Wal-Fex	fexofenadine HCl
Children'S Wal-Zyr	cetirizine HCl
Children'S Zyrtec Allergy	cetirizine HCl
Child'S All Day Allergy(Cetir)	cetirizine HCl
Child'S Benadryl Allergy	diphenhydramine HCl
Child'S Benadryl-D Allergy-Sin	phenylephrine HCl/diphenhydramine HCl
Child'S Mucus Relief M-S Cold	guaifenesin/dextromethorphan hbr/phenylephrine
Child'S Non-Asa Cough & R.Nose	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Child'S Non-Asa Multi-Sx Cold	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Childs Plus Cold And Allergy	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Childs Triacting Cold-Cough	phenylephrine HCl/diphenhydramine HCl
Childs Tylenol Plus Cold-Cough	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Child'S Tylenol Plus Cough,St	acetaminophen/dextromethorphan hbr
Child'S Tylenol Pluscough,Rnos	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Chlo Hist	dexbrompheniramine maleate/chlophedianol HCl
Chlo Tuss	dexbrompheniramine maleate/pseudoephedrine HCl/chlophed HCl
Chlo Tuss (With Phenylephrine)	dexbrompheniramine maleate/phenylephrine HCl/chlophed HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Chlo Tuss Ex	chlrophedianol HCl/guaifenesin
Chlophedianol-Guaifenesin	chlrophedianol HCl/guaifenesin
Chlordex Gp	chlorpheniramine/phenylephrine/dextromethorphan/guaifenesin
Chlorfed Sr	chlorpheniramine maleate/pseudoephedrine HCl
Chlorhist	chlorpheniramine maleate
Chlor-Mes D	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Chlorped D	phenylephrine tannate/chlorpheniramine tannate
Chlorphen Sr	chlorpheniramine maleate
Chlorpheniramine Maleate	chlorpheniramine maleate
Chlorpheniramine-Codeine	chlorpheniramine maleate/codeine phosphate
Chlorpheniramine-Dm-Methscop	chlorpheniramine maleate/dextromethorphan/methylscopolamine
Chlorpheniramine-Pe Tannates	phenylephrine tannate/chlorpheniramine tannate
Chlorpheniramine-Pe-Dm-Gg	chlorpheniramine/phenylephrine/dextromethorphan/guaifenesin
Chlorpheniramine-Phenyleph-Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Chlorpheniramine-Phenylephrine	chlorpheniramine maleate/phenylephrine HCl
Chlorpheniramine-Pseudoeph-Dm	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Chlorpheniramine-Pseudoephed	chlorpheniramine maleate/pseudoephedrine HCl
Chlorphen-Phenyltoloxamine-Pe	chlorpheniramine mal/phenyltoloxamine cit/phenylephrine HCl
Chlorphen-Pseudoeph-Dm Tannate	chlorpheniramine/ppseudoephedrine/dextromethorphan tannates
Chlorphen-Pyrimilamine-Phenyleph	phenylephrine HCl/pyrilamine maleate/chlorpheniramine
Chlortabs	chlorpheniramine maleate
Chlor-Trimeton	chlorpheniramine maleate
Chlor-Trimeton Repetabs	chlorpheniramine maleate
Clarinex	desloratadine
Clarinex-D 12 Hour	desloratadine/pseudoephedrine sulfate
Clarinex-D 24 Hour	desloratadine/pseudoephedrine sulfate
Clarispray	fluticasone propionate
Claritin	loratadine
Claritin Liqui-Gel	loratadine
Claritin Reditabs	loratadine
Claritin-D 12 Hour	loratadine/pseudoephedrine sulfate
Claritin-D 24 Hour	loratadine/pseudoephedrine sulfate
Clemastine	clemastine fumarate
Clemizole HCl (Bulk)	clemizole HCl
Clobeta+Plus	clobetasol propionate/coal tar
Clobetasol	clobetasol propionate
Clobetasol-Coal Tar	clobetasol propionate/coal tar
Clobetasol-Emollient	clobetasol propionate/emollient base
Clobex	clobetasol propionate
Clocortolone Pivalate	clocortolone pivalate
Clodan	clobetasol propionate
Clodan Kit	clobetasol propionate/skin cleanser comb no.28
Cloderm	clocortolone pivalate
Clofera	pseudoephedrine HCl/chlophedianol HCl
Co-Apap	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Codal-Dm	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Codar Ar	chlorpheniramine maleate/codeine phosphate
Codar D	pseudoephedrine HCl/codeine phosphate
Codar Gf	guaifenesin/codeine phosphate
Codeine-Guaifenesin	guaifenesin/codeine phosphate
Codimal L.A.	chlorpheniramine maleate/pseudoephedrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Codituss Dm	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Cold And Allergy	chlorpheniramine maleate/phenylephrine HCl
Cold And Allergy (Bpm-Pse)	brompheniramine maleate/pseudoephedrine HCl
Cold And Allergy (Bromphen-Pe)	brompheniramine maleate/phenylephrine HCl
Cold And Allergy Pe	chlorpheniramine maleate/phenylephrine HCl
Cold And Allergy Relief (Cpm)	chlorpheniramine maleate/phenylephrine HCl
Cold And Allergy(Tripolidine)	triprolidine HCl/pseudoephedrine HCl
Cold And Cough	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Cold And Cough (Diphenhydr-Pe)	phenylephrine HCl/diphenhydramine HCl
Cold And Cough (Pe-Dm)	dextromethorphan hbr/phenylephrine HCl
Cold And Cough (Pe-Dm-Gg-Acet)	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Cold And Cough Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Cold And Cough Elixir	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Cold And Flu Bp	acetaminophen/chlorpheniramine maleate
Cold And Flu Relief Plus (D/N)	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Cold And Flu Relief(Diphen-Pe)	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Cold And Flu Severe	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Cold And Sinus Multi-Symptom	guaifenesin/phenylephrine HCl/acetaminophen
Cold And Sinus Pain Relief	ibuprofen/pseudoephedrine HCl
Cold Head Congest(Gg-Pe-Acetm)	guaifenesin/phenylephrine HCl/acetaminophen
Cold Head Congestion Day/Nite	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Cold Head Congestion Daytime	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Cold Head Congestion Nighttime	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Cold Head Congestion Sever Day	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Cold Multi-Symptom	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Cold Multi-Symptom (Chlorphen)	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Cold Multi-Symptom Day/Night	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Cold Multi-Symptom Daytime	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Cold Multi-Symptom Nighttime	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Cold Relief	chlorpheniramine maleate/phenylephrine bitartrate/aspirin
Cold Relief M/S Day/Night	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Cold Relief Plus	chlorpheniramine maleate/phenylephrine bitartrate/aspirin
Cold Reliever	phenylephrine HCl/acetaminophen/chlorpheniramine
Cold Severe Congestion	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Coldcough	dihydrocodeine bitart/chlorpheniramine mal/pseudoephedrine
Coldcough Pd	phenylephrine HCl/dihydrocodeine bitartrate/chlorpheniramine
Cold-Cough Sinus Relief Pe	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Cold-Flu M-Symptom Day-Night	chlorpheniram/phenyleph/dextromethorphan/acetaminophen/guaifn
Cold-Flu Relief	dextromethorphan hbr/acetaminophen/doxylamine
Cold-Flu Relief, Day/Night	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Coldonyl	guaifenesin/phenylephrine HCl/acetaminophen
Cold-Sinus Relief	ibuprofen/pseudoephedrine HCl
Complete Allergy	diphenhydramine HCl
Complete Allergy Medicine	diphenhydramine HCl
Complete Sinus Relief	phenylephrine HCl/acetaminophen/dexbrompheniramine maleate
Compoz	diphenhydramine HCl
Comtrex Cold-Cough	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Comtrex Day/Ni Sev Cold-Sinus	phenylephrine HCl/acetaminophen/chlorpheniramine
Comtrex Day/Night Cold-Cough	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Comtrex Deep Chest Cold	guaifenesin/acetaminophen
Comtrex Flu Therapy	phenylephrine HCl/acetaminophen/chlorpheniramine

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Comtrex Nighttime Cold-Cough	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Conex	dexbrompheniramine maleate/pseudoephedrine HCl
Congestac	guaifenesin/pseudoephedrine HCl
Congest-Eze	guaifenesin/pseudoephedrine HCl
Congest-Eze Pe	guaifenesin/phenylephrine HCl
Congestion Relief (Ibuprof-Pe)	ibuprofen/phenylephrine HCl
Contact Cold-Flu Day	phenylephrine HCl/acetaminophen
Contact Cold-Flu Day And Night	phenylephrine HCl/acetaminophen/chlorpheniramine
Contact Cold-Flu Max Strength	phenylephrine HCl/acetaminophen/chlorpheniramine
Contact Cold-Flu Night	dextromethorphan hbr/acetaminophen/doxylamine
Contact Day/Night Allergy/Sinus	dextromethorphan hbr/p-ephed HCl/acetaminophen/dp-hydramine
Contragestic	acetaminophen/phenyltoloxamine citrate
Cordran	flurandrenolide
Cordran Sp	flurandrenolide
Cordran Tape Large Roll	flurandrenolide
Cordran Tape Small Roll	flurandrenolide
Corfen-Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Coricidin	acetaminophen/chlorpheniramine maleate
Coricidin Hbp	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Coricidin Hbp Cold And Flu	acetaminophen/chlorpheniramine maleate
Coricidin Hbp Cold-Multi Sympt	dextromethorphan hbr/acetaminophen/doxylamine
Coricidin Hbp Cough And Cold	chlorpheniramine maleate/dextromethorphan hbr
Coricidin Hbp Day-Night	chlorpheniramine/dextromethorphan/acetaminophen/guaifenesin
Cormax	clobetasol propionate
Cortaid	hydrocortisone
Cortalo	hydrocortisone acetate/aloe vera
Cortef	hydrocortisone
Corticool	hydrocortisone
Cortisone	cortisone acetate
Cortisone (Hydrocortisone)	hydrocortisone
Cortisone + Cooling Relief	hydrocortisone
Cortisone With Aloe	hydrocortisone/aloe vera
Cortizone-10	hydrocortisone
Cortizone-10 Plus	hydrocortisone
Coryza-Dm	dextromethorphan/phenylephrine/pyrilamine/dexchlorpheniramin
Corzall	carbetapentane citrate/pseudoephedrine HCl
Corzall Plus	pyrilamine maleate/pseudoephedrine HCl/carbetapentane citrat
Corzall-Pe	dexchlorpheniramine maleate/phenylephrine HCl/car-b-pentane
Cotab A	chlorpheniramine maleate/codeine phosphate
Cotab Ax	chlorpheniramine maleate/codeine phosphate
Cotabflu	chlorpheniramine maleate/codeine phosphate/acetaminophen
Cough & Cold Pe	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Cough And Cold	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Cough And Cold Bp	chlorpheniramine maleate/dextromethorphan hbr
Cough And Cold Mucus Relief Cf	guaifenesin/dextromethorphan hbr/phenylephrine
Cough And Runny Nose	chlorpheniramine maleate/dextromethorphan hbr
Cough And Severe Cold	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Cough And Sore Throat	acetaminophen/dextromethorphan hbr
Cough Control Cf (Pe)	guaifenesin/dextromethorphan hbr/phenylephrine
Cough Control Dm	guaifenesin/dextromethorphan hbr
Cough Control Dm Max	guaifenesin/dextromethorphan hbr

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Cough Formula Dm	guaifenesin/dextromethorphan hbr
Cough Suppressant-Expectorant	guaifenesin/dextromethorphan hbr
Cough Syrup Dm	guaifenesin/dextromethorphan hbr
Cough-Chest Congestion Dm	guaifenesin/dextromethorphan hbr
Cough-Cold Relief Hbp	chlorpheniramine maleate/dextromethorphan hbr
Cough-Sore Throat Night	dextromethorphan hbr/acetaminophen/doxylamine
Cpb Wc	brompheniramine maleate/pseudoephedrine HCl/codeine
C-Phen	chlorpheniramine maleate/phenylephrine HCl
C-Phen Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Cpm 8-Pe 20-Msc 1.25	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Cpm Pse	chlorpheniramine maleate/pseudoephedrine HCl
Cpm-Pe	chlorpheniramine maleate/phenylephrine HCl
Cpm-Pe-Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Cpm-Pse	chlorpheniramine maleate/pseudoephedrine HCl
Cpm-Pse Dm	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Crantex	guaifenesin/phenylephrine HCl
Creo-Terpin (Dm-Guaifenesin)	guaifenesin/dextromethorphan hbr
Crolom	cromolyn sodium
Cromolyn	cromolyn sodium
C-Tan D	brompheniramine tannate/phenylephrine tannate
C-Tanna 12	chlorpheniramine tannate/carbetapentane tannate
Cutivate	fluticasone propionate
Cyproheptadine	cyproheptadine HCl
Cyproheptadine (Bulk)	cyproheptadine HCl
Dacex-Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Dailyhist-1	clemastine fumarate
Dallergy	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Dallergy (Chlorcyclizine-Pe)	chlorcyclizine HCl/phenylephrine HCl
Dallergy (Chlorpheniramine-Pe)	chlorpheniramine maleate/phenylephrine HCl
Dallergy (Dexbrompheniramn-Pe)	dexbrompheniramine maleate/phenylephrine HCl
Dallergy Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Dallergy Pe	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Dallergy Pse	pseudoephedrine HCl/chlorpheniramine maleate/methylscopolam
Dallergy-Jr	phenylephrine tannate/chlorpheniramine tannate
Day Time Liquid Cold	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Day Time Pe	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Dayhist	clemastine fumarate
Dayhist Allergy	clemastine fumarate
Day-Night Sinus Relief	phenylephrine HCl/acetaminophen/doxylamine succinate
Daytime	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Day-Time	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Daytime And Nighttime Cold	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Daytime And Nitetime Sinus	phenylephrine HCl/acetaminophen/doxylamine succinate
Daytime Cold	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Daytime Cold And Cough	acetaminophen/dextromethorphan hbr
Daytime Cold And Flu	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Daytime Cold And Flu Relief	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Daytime Cold-Flu	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Daytime Cold-Flu Relief (Pe)	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Daytime Cold-Flu Softgel	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Daytime Mucus Relief Dm	guaifenesin/dextromethorphan hbr

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Daytime Sinus	phenylephrine HCl/acetaminophen
Daytime Sinus Relief	phenylephrine HCl/acetaminophen
Daytime Sinus-Congestion	phenylephrine HCl/acetaminophen
Daytime-Cold Nighttime-Cld-Flu	diphenhydramine/phenylephrin/dextromethorph/acetaminophen/gg
Daytime-Nighttime	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Daytime-Nighttime Cold-Flu	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Daytime-Nighttime Cough	dextromethorphan hbr/doxylamine succinate
Dec-Chlorphen Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
De-Chlor Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
De-Chlor Dr	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Decon-A	brompheniramine maleate/phenylephrine HCl
Deconamine	chlorpheniramine maleate/pseudoephedrine HCl
Deconamine Sr	chlorpheniramine maleate/pseudoephedrine HCl
Deconex	guaifenesin/phenylephrine HCl
Deconex Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Deconex Dmx	guaifenesin/dextromethorphan hbr/phenylephrine
Deconex Ir	guaifenesin/phenylephrine HCl
Decon-G	guaifenesin/phenylephrine HCl/brompheniramine
Decongestant Cough	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Decorel Forte Plus	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Dehistine	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Delsym Cough-Chest Congest Dm	guaifenesin/dextromethorphan hbr
Delsym Cough-Cold	dextromethorphan hbr/acetaminophen/doxylamine
Delsym Cough-Cold Daytime	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Delsym Cough-Cold Nighttime	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Delsym Multi-Symptom	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Delsym Night Time Cough-Cold	phenylephrine HCl/diphenhydramine HCl
Delsym Nighttime Multi-Symptom	dextromethorphan hbr/acetaminophen/doxylamine
Deltasone	prednisone
Deltuss Dmx	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Deltuss Dmx (Dexchlorphen)	dexchlorpheniramine maleate/p-ephed HCl/dextromethorphan hbr
Deltuss Dp	dexchlorpheniramine maleate/pseudoephedrine HCl
Depo-Medrol	methylprednisolone acetate
Dermacinrx Cinlone-I Cpi	triamcinolone acetonide/lidocaine/prilocaine
Dermacinrx Silapak	triamcinolone acetonide/dimethicone/silicone, adhesive
Dermacinrx Silazone	triamcinolone acetonide/silicones
Dermarest Eczema (Hydrocort)	hydrocortisone
Dermasilkrx Sds	triamcinolone acetonide/dimethicone/silicone, adhesive
Derma-Smoothe/Fs Body Oil	fluocinolone acetonide
Derma-Smoothe/Fs Eczema	fluocinolone acetonide
Derma-Smoothe/Fs Scalp Oil	fluocinolone acetonide/shower cap
Dermasorb Hc Complete Kit	hydrocortisone/skin cleanser combination no.35
Dermasorb Ta Complete Kit	triamcinolone acetonide/emollient combination no.86
Dermatop	prednicarbate
Dermawerx Sds	triamcinolone acetonide/dimethicone/silicone, adhesive
Dermazone	triamcinolone acetonide/silicones
Desgen	guaifenesin/dextromethorphan hbr/phenylephrine
Desgen Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Desgen Dm (Pseudoephedrine)	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Desloratadine	desloratadine
Desonate	desonide

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Desonide	desonide
Desonil	desonide/emollient combination no.3
Desonil + Plus	desonide/emollient combination no.3
Desowen	desonide
Desowen Cream And Lotion	desonide/emollient combination no.30
Desowen Ointment And Lotion	desonide/emollient combination no.30
Desoximetasone	desoximetasone
Desoxycorticosterone Ac (Bulk)	desoxycorticosterone acetate
Despec	guaifenesin/phenylephrine HCl
Despec Dm-G	guaifenesin/dextromethorphan hbr/phenylephrine
Despec Eda Cough-Cold Drops	guaifenesin/dextromethorphan hbr/phenylephrine
Despec Nr	guaifenesin/dextromethorphan hbr/phenylephrine
Despec-Dm (Phenyleph-Dm-Guaif)	guaifenesin/dextromethorphan hbr/phenylephrine
Despec-Dm (Pseudoeph-Dm-Guaif)	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Despec-Exp	guaifenesin/pseudoephedrine HCl/dihydrocodeine
Despec-Pdc	phenylephrine HCl/dihydrocodeine bitartrate/chlorpheniramine
Despec-Tab	guaifenesin/pseudoephedrine HCl
Dex Pc	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Dexamethasone	dexamethasone
Dexamethasone Ac, Micro (Bulk)	dexamethasone acetate, micronized
Dexamethasone In 0.9 % Nacl	dexamethasone sodium phosphate in 0.9 % sodium chloride
Dexamethasone Intensol	dexamethasone
Dexamethasone Sod Phos (Bulk)	dexamethasone sod phosphate
Dexamethasone Sodium Phos (Pf)	dexamethasone sodium phosphate/pf
Dexamethasone Sodium Phosphate	dexamethasone sod phosphate
Dexamethasone, Micronized (Bulk)	dexamethasone, micronized
Dexchlorpheniramine Maleate	dexchlorpheniramine maleate
Dexchlorphen-Pse-Chlophedianol	dexchlorpheniramine maleate/pseudoephedrine HCl/chlophed HCl
Dexodryl	chlorpheniramine tannate/methscopolamine nitrate
Dexpak 10 Day	dexamethasone
Dexpak 13 Day	dexamethasone
Dexpak 6 Day	dexamethasone
Dexphen M	phenylephrine HCl/dexchlorpheniramine mal/methscopolamine
Dexphen W-C	dexchlorpheniramine maleate/phenylephrine HCl/codeine
Dextromethorphan-Guaifenesin	guaifenesin/dextromethorphan hbr
Dex-Tuss	guaifenesin/codeine phosphate
Dhm-Pe	phenylephrine HCl/diphenhydramine HCl
Diabetic Siltussin-Dm	guaifenesin/dextromethorphan hbr
Diabetic Siltussin-Dm Max Str	guaifenesin/dextromethorphan hbr
Diabetic Tussin Dm	guaifenesin/dextromethorphan hbr
Diabetic Tussin Max St	guaifenesin/dextromethorphan hbr
Diabetic Tussin Night Time	dextromethorphan hbr/acetaminophen/diphenhydramine HCl
Dicel	chlorpheniramine tannate/pseudoephedrine tannate
Dicel Cd	brompheniramine maleate/pseudoephedrine HCl/chlophedianol
Dicel Dm	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Dicopanorl	diphenhydramine HCl
Diflorasone	diflorasone diacetate
Dihistine Dh	pseudoephedrine HCl/codeine/chlorpheniramine
Dihydro-Cp	dihydrocodeine bitart/chlorpheniramine mal/pseudoephedrine
Dihydro-Gp	guaifenesin/pseudoephedrine HCl/dihydrocodeine
Dihydro-Pe	phenylephrine HCl/dihydrocodeine bitartrate/chlorpheniramine

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Dimaphen (Pe)	brompheniramine maleate/phenylephrine HCl
Dimaphen Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Dimetane-Dx	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Dimetapp Cold-Allergy (Pe)	brompheniramine maleate/phenylephrine HCl
Dimetapp Cold-Congestion	phenylephrine HCl/diphenhydramine HCl
Dimetapp Dm (Pse)	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Dimetapp Dm Cold-Cough (Pe)	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Dimetapp Long-Acting (Cpm-Dm)	chlorpheniramine maleate/dextromethorphan hbr
Diphedryl	diphenhydramine HCl
Diphedryl Allergy	diphenhydramine HCl
Diphen	diphenhydramine HCl
Diphenhist	diphenhydramine HCl
Diphenhydramine HCl	diphenhydramine HCl
Diphenhydramine In 0.9 % NaCl	diphenhydramine HCl in 0.9 % sodium chloride
Diphenhydramine-Acetaminophen	acetaminophen/diphenhydramine HCl
Diphenhydramine-Phenylephrine	phenylephrine HCl/diphenhydramine HCl
Diprolene	betamethasone dipropionate/propylene glycol
Diprolene Af	betamethasone dipropionate/propylene glycol
Diprosone	betamethasone dipropionate
Dm Max	guaifenesin/dextromethorphan hbr
Dologen	acetaminophen/dexbrompheniramine maleate
Dologen (Phenyltolx-Acetamin)	acetaminophen/phenyltoloxamine citrate
Dologen 325	acetaminophen/dexbrompheniramine maleate
Dologesic (W-Dexbromphenirmn)	acetaminophen/dexbrompheniramine maleate
Dologesic (W-Phenyltoloxamine)	acetaminophen/phenyltoloxamine citrate
Dologesic-Df	acetaminophen/dexbrompheniramine maleate
Dolorex	acetaminophen/phenyltoloxamine citrate
Dometuss G	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifenesin
Dometuss-Dmx	guaifenesin/dextromethorphan hbr/phenylephrine
Donatuss Dc	phenylephrine HCl/dihydrocodeine bitartrate/guaifenesin
Donatuss Xp	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Donatussin	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Donatussin (With Guaifenesin)	chlorpheniramine/phenylephrine/dextromethorphan/guaifenesin
Donatussin Dm	dextromethorphan tannate/phenylephrine tan/dexchlorphen tan
Donatussin Pedi (Reformulated)	guaifenesin/phenylephrine HCl
Donatussin Pediatric	phenylephrine HCl/chlophedianol HCl/guaifenesin
Doubledex	dexamethasone sodium phosphate/pf
Double-Tussin Dm	guaifenesin/dextromethorphan hbr
Doxytex	doxylamine succinate
Dristan Cold	phenylephrine HCl/acetaminophen/chlorpheniramine
Drixoral Cold-Allergy	dexbrompheniramine maleate/pseudoephedrine sulfate
Drymax	pseudoephedrine HCl/chlorpheniramine maleate/methylscopolamn
Drymax Af	chlorpheniramine mal/pseudoephedrine HCl/chlophedianol HCl
Durabac Forte	magnesium salicylate/acetaminophen/phenyltoloxamine/caffeine
Duradryl	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Duraflu	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Duravent Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Duravent Pe	guaifenesin/phenylephrine HCl
Dytan	diphenhydramine tannate
Dytuss	diphenhydramine HCl
Eazze The Pain	acetaminophen/diphenhydramine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Eczema Anti-Itch	hydrocortisone
Ed A-Hist	chlorpheniramine maleate/phenylephrine HCl
Ed A-Hist (New Dosing)	chlorpheniramine maleate/phenylephrine HCl
Ed A-Hist Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Ed A-Hist Pse	triprolidine HCl/pseudoephedrine HCl
Ed Bron Gp	guaifenesin/phenylephrine HCl
Ed Chlorped	chlorpheniramine tannate
Ed Chlorped D	chlorpheniramine maleate/phenylephrine HCl
Ed Chlorped Jr	chlorpheniramine maleate
Ed-Chlorped	chlorpheniramine maleate
Ed-Chlortan	chlorpheniramine maleate
Ed-Chlor-Tan	chlorpheniramine tannate
Effervescent Cold Relief Plus	phenylephrine HCl/acetaminophen/chlorpheniramine
Elestat	epinastine HCl
Elocon	mometasone furoate
Emadine	emedastine difumarate
Embeline	clobetasol propionate
Endacof	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Endacof - Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Endacof Ac	brompheniramine maleate/codeine phosphate
Endacof-C	chlorpheniramine maleate/codeine phosphate
Endacof-Dc	pseudoephedrine HCl/codeine phosphate
Endacof-Dh	brompheniramine maleate/phenylephrine HCl/dihydrocodeine bt
Endacof-Pd	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Endacon	guaifenesin/dextromethorphan hbr/phenylephrine
Endal Cd	chlorpheniramine maleate/phenylephrine HCl/codeine phosphate
Entex Lq	guaifenesin/phenylephrine HCl
Entex Pac	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Entex T	guaifenesin/pseudoephedrine HCl
Entre-B	brompheniramine tannate/phenylephrine tannate
Entre-Cough	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Entre-Cough Tannate	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Entre-Hist Pse	triprolidine HCl/pseudoephedrine HCl
Entre-S	chlorpheniramine/ppseudoephedrine/dextromethorphan tannates
Epifoam	hydrocortisone acetate/pramoxine HCl
Epinastine	epinastine HCl
Epinephrine	epinephrine
Epinephrine HCl (Pf)	epinephrine HCl/pf
Epipen	epinephrine
Epipen 2-Pak	epinephrine
Epipen Jr	epinephrine
Epipen Jr 2-Pak	epinephrine
Episnap	epinephrine
Esacor P	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Exactuss	guaifenesin/dextromethorphan hbr/phenylephrine
Exactuss Tr	guaifenesin/dextromethorphan hbr/phenylephrine
Exall	guaifenesin/carbetapentane cit
Exall-D	pseudoephedrine HCl/carbetapentane citrate/guaifenesin
Exaphen	chlorpheniramine maleate/phenylephrine HCl
Exaphen Ch	chlorpheniramine maleate/phenylephrine HCl/chlophedianol HCl
Exaphex Tr	guaifenesin/phenylephrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Excedrin Pm	acetaminophen/diphenhydramine citrate
Excedrin Sinus Headache	phenylephrine HCl/acetaminophen
Execlear-C	guaifenesin/codeine phosphate
Execlear-Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Exefen Dmx	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Exefen-Ir	guaifenesin/pseudoephedrine HCl
Expectorant Dm	guaifenesin/dextromethorphan hbr
Expectorant Max Strength	dextromethorphan hbr/pseudoephedrine HCl
Expectuss	guaifenesin/carbetapentane cit
Ex-Strength Medi-Tabs Pm	acetaminophen/diphenhydramine HCl
Eye Itch Relief	ketotifen fumarate
Ez Nite Sleep	diphenhydramine HCl
Ez Use Joint-Tunnel-Trigger	triamcinolone acetonide/lidocaine HCl
Fast Mucus Relief Severe Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Fast Mucus Rlf Congest-Cough	guaifenesin/dextromethorphan hbr/phenylephrine
Fenesin Dm Ir	guaifenesin/dextromethorphan hbr
Fenesin Pe Ir	guaifenesin/phenylephrine HCl
Fexofenadine	fexofenadine HCl
Fexofenadine (Bulk)	fexofenadine HCl
Fexofenadine-Pseudoephedrine	fexofenadine HCl/pseudoephedrine HCl
First-Hydrocortisone	hydrocortisone
Flextra Ds	acetaminophen/phenyltoloxamine citrate
Flextra-650	acetaminophen/phenyltoloxamine citrate
Flonase	fluticasone propionate
Flonase Allergy Relief	fluticasone propionate
Flo-Pred	prednisolone acetate
Flowtuss	guaifenesin/hydrocodone bitartrate
Flu And Severe Cold-Daytime	phenylephrine HCl/acetaminophen
Flu And Severe Cold-Nighttime	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Flu And Sore Throat	phenylephrine HCl/acetaminophen/pheniramine
Flu And Sore Throat Relief	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Flu Bp	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Flu Formula Daytime-Nighttime	dextromethorphan hbr/phenylephrine/acetaminophn/dp-hydramine
Flu Hbp	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Flu Relief Bp	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Flu Relief Therapy Cold-Chest	guaifenesin/phenylephrine HCl/acetaminophen
Flu Relief Therapy Daytime	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Flu Relief Therapy Nighttime	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Flu Severe Cold-Congestion	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Fludrocortisone	fludrocortisone acetate
Flunisolide	flunisolide
Fluocinolone	fluocinolone acetonide
Fluocinolone Acet, Micro(Bulk)	fluocinolone acetonide, micronized
Fluocinolone And Shower Cap	fluocinolone acetonide/shower cap
Fluocinonide	fluocinonide
Fluocinonide-E	fluocinonide/emollient base
Fluocinonide-Emollient	fluocinonide/emollient base
Flurandrenolide	flurandrenolide
Flu-Severe Cold-Cough Daytime	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Flu-Severe Cold-Cough Night	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Flutabs	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Fluticasone	fluticasone propionate
Gani-Tuss Dm Nr	guaifenesin/dextromethorphan hbr
Gani-Tuss Nr	guaifenesin/codeine phosphate
G-Bronco-D	guaifenesin/dextromethorphan hbr/phenylephrine
G-Dologen	acetaminophen/dexbrompheniramine maleate
Genac	triprolidine HCl/pseudoephedrine HCl
Genahist	diphenhydramine HCl
Genaphed Plus	chlorpheniramine maleate/pseudoephedrine HCl
Gencontuss	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Genrex 30	phenylephrine HCl/carbetapentane citrate/guaifenesin
Geri-Dryl	diphenhydramine HCl
Geri-Tussin Dm	guaifenesin/dextromethorphan hbr
G-Fenesin Dm	guaifenesin/dextromethorphan hbr
Gilphex Tr	guaifenesin/phenylephrine HCl
Giltuss	guaifenesin/dextromethorphan hbr/phenylephrine
Giltuss Cough-Cold	guaifenesin/dextromethorphan hbr/phenylephrine
Giltuss Ped-C	phenylephrine HCl/codeine phosphate/guaifenesin
Giltuss Pediatric	guaifenesin/dextromethorphan hbr/phenylephrine
Giltuss Tr	guaifenesin/dextromethorphan hbr/phenylephrine
Goody'S Pm	acetaminophen/diphenhydramine citrate
G-P-Tuss Dxp	dextromethorphan hbr/phenylephrine HCl/dexbrompheniramine
G-Supress Dx	guaifenesin/dextromethorphan hbr/phenylephrine
G-Tron	guaifenesin/dextromethorphan hbr
G-Tron Ped	guaifenesin/dextromethorphan hbr/phenylephrine
G-Tusicof	guaifenesin/dextromethorphan hbr/phenylephrine
Guaiasorb Dm	guaifenesin/dextromethorphan hbr
Guaiatussin Ac	guaifenesin/codeine phosphate
Guaicon Dms	guaifenesin/dextromethorphan hbr
Guaifenesin Ac	guaifenesin/codeine phosphate
Guaifenesin Dac	pseudoephedrine HCl/codeine phosphate/guaifenesin
Guaifenesin Dm	guaifenesin/dextromethorphan hbr
Guaifenesin-Dm	guaifenesin/dextromethorphan hbr
Guaifenesin-Dm Nr	guaifenesin/dextromethorphan hbr
Guiadex Dm	dextromethorphan hbr/potassium guaiacolsulfonate
Guiadrine Dx	guaifenesin/dextromethorphan hbr
Guiafen-Pse	guaifenesin/pseudoephedrine HCl
Guiatex Pe	guaifenesin/phenylephrine HCl
Guiatuss Ac	guaifenesin/codeine phosphate
Guiatuss Dm	guaifenesin/dextromethorphan hbr
G-Zyncof	guaifenesin/dextromethorphan hbr
Halac	halobetasol propionate/ammonium lactate
Halobetasol Propionate	halobetasol propionate
Halog	halcinonide
Halonate	halobetasol propionate/ammonium lactate
Halonate Pac	halobetasol propionate/ammonium lactate
Hc Derma-Pax	diphenhydramine HCl/hydrocortisone
Hdc Dm	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Head Congestion Cold Relief	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Head Congestion Day-Night	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Headache Pm	acetaminophen/diphenhydramine HCl
Headache Relief Pm	acetaminophen/diphenhydramine citrate

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Histex	brompheniramine maleate/phenylephrine HCl
Histex (Triprolidine)	triprolidine HCl
Histex Dm	triprolidine HCl/phenylephrine HCl/dextromethorphan hbr
Histex Pd	triprolidine HCl
Histex Pe	phenylephrine HCl/triprolidine HCl
Histex Sr	brompheniramine maleate/pseudoephedrine HCl
Histex-Ac	triprolidine HCl/phenylephrine HCl/codeine phosphate
Hist-Pse	triprolidine HCl/pseudoephedrine HCl
Hycodan (With Homatropin)	hydrocodone bitartrate/homatropine methylbromide
Hycofenix	hydrocodone bitartrate/pseudoephedrine HCl/guaifenesin
Hydramine	diphenhydramine HCl
Hydrocodone Compound	hydrocodone bitartrate/homatropine methylbromide
Hydrocodone-Chlorpheniramine	hydrocodone polistirex/chlorpheniramine polistirex
Hydrocodone-Cpm-Pseudoephed	hydrocodone bitart/chlorpheniramine maleate/pseudoephedrine
Hydrocodone-Homatropine	hydrocodone bitartrate/homatropine methylbromide
Hydrocortisone	hydrocortisone
Hydrocortisone Acet-Aloe Vera	hydrocortisone acetate/aloe vera
Hydrocortisone Acetate	hydrocortisone acetate
Hydrocortisone Acetate-Aloe	hydrocortisone acetate/aloe vera
Hydrocortisone Butyrate	hydrocortisone butyrate
Hydrocortisone Butyr-Emollient	hydrocortisone butyrate/emollient base
Hydrocortisone Hemisucc (Bulk)	hydrocortisone hemisuccinate
Hydrocortisone Plus	hydrocortisone/aloe vera
Hydrocortisone Plus 12	hydrocortisone
Hydrocortisone Valerate	hydrocortisone valerate
Hydrocortisone-Aloe Vera	hydrocortisone/aloe vera
Hydrocortisone-Min Oil-Wht Pet	hydrocortisone/mineral oil/petrolatum,white
Hydrocortisone-Pramoxine	hydrocortisone acetate/pramoxine HCl
Hydrocream	hydrocortisone
Hydromet	hydrocodone bitartrate/homatropine methylbromide
Hydoskin	hydrocortisone
Hydoskin With Aloe	hydrocortisone/aloe vera
Hydro-Tussin Dhc	dihydrocodeine bitart/chlorpheniramine mal/pseudoephedrine
Ibuprofen Cold	ibuprofen/pseudoephedrine HCl
Ibuprofen Cold-Sinus(With Pse)	ibuprofen/pseudoephedrine HCl
Indamix Dm	dextromethorphan tannate/p-ephed tan/dexchlorpheniramine
Infants' Cold	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Infants' Non-Aspirin Cold	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Intense Cold And Flu	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Intense Cough	guaifenesin/dextromethorphan hbr
Intense Cough Reliever	guaifenesin/dextromethorphan hbr
Iophen C-Nr	guaifenesin/codeine phosphate
Iophen Dm-Nr	guaifenesin/dextromethorphan hbr
Itch-X	hydrocortisone
Itch-X Hc	hydrocortisone
Itchy Eye Drops	ketotifen fumarate
J-Cof Dhc	brompheniramine/pseudoephedrine HCl/dihydrocodeine
J-Max	guaifenesin/phenylephrine HCl
J-Max Dhc	dihydrocodeine bitartrate/guaifenesin
J-Tan D	brompheniramine tannate/phenylephrine tannate
J-Tan D Pd	brompheniramine maleate/pseudoephedrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
J-Tan Pd	brompheniramine maleate
Karbinal Er	carbinoxamine maleate
Kenalog	triamcinolone acetonide
Ketotifen Fumarate	ketotifen fumarate
Kidkare Cough/Cold	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Kronofed-A	chlorpheniramine maleate/pseudoephedrine HCl
K-Tan	phenylephrine tannate/pyrilamine tannate
Lagesic	acetaminophen/phenyltoloxamine citrate
Lastacaft	alcaftadine
Levocetirizine	levocetirizine dihydrochloride
Levocetirizine (Bulk)	levocetirizine dihydrochloride
Lexuss 210	chlorpheniramine maleate/codeine phosphate
Lidamantle Hc	lidocaine HCl/hydrocortisone acetate
Lidex	fluocinonide
Lidocaine HCl-Hydrocortison Ac	lidocaine HCl/hydrocortisone acetate
Liquibid D-R	guaifenesin/phenylephrine HCl
Liquibid Pd-R	guaifenesin/phenylephrine HCl
Livetan Dm	dextromethorphan/phenylephrine/diphenhydramine tannates
Locoid	hydrocortisone butyrate
Locoid Lipocream	hydrocortisone butyrate/emollient base
Lodrane	brompheniramine maleate/pseudoephedrine HCl
Lodrane 24 D	brompheniramine maleate/pseudoephedrine HCl
Lodrane D	brompheniramine maleate/pseudoephedrine HCl
Lodrane Er	brompheniramine maleate
Lohist - D	chlorpheniramine maleate/pseudoephedrine HCl
Lohist (Pe & Chlorpheniramine)	chlorpheniramine maleate/phenylephrine HCl
Lohist 12	brompheniramine maleate
Lohist 12D	brompheniramine maleate/pseudoephedrine HCl
Lohist Peb Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Lohist-Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Lohist-Pd	brompheniramine maleate/pseudoephedrine HCl
Lohist-Peb	brompheniramine maleate/phenylephrine HCl
Lohist-Psb	brompheniramine maleate/pseudoephedrine HCl
Lohist-Psb-Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Loradamed	loratadine
Lorata-D	loratadine/pseudoephedrine sulfate
Loratadine	loratadine
Loratadine (Bulk)	loratadine
Lorata-Dine D	loratadine/pseudoephedrine sulfate
Loratadine, Micronized (Bulk)	loratadine, micronized
Loratadine-D	loratadine/pseudoephedrine sulfate
Loratadine-Pseudoephedrine	loratadine/pseudoephedrine sulfate
Lortuss Dm	doxylamine succ/pseudoephedrine HCl/dextromethorphan hbr
Lortuss Ex	pseudoephedrine HCl/codeine phosphate/guaifenesin
Lortuss Lq	doxylamine succinate/pseudoephedrine HCl
Lusair	guaifenesin/phenylephrine HCl
Luxiq	betamethasone valerate
Mapap Cold Formula	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Mapap Pm	acetaminophen/diphenhydramine HCl
Mapap Sinus Max Strength (Pe)	phenylephrine HCl/acetaminophen
Mar-Cof Bp	brompheniramine maleate/pseudoephedrine HCl/codeine

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Mar-Cof Cg	guaifenesin/codeine phosphate
Max Str Non-Drowsy Sinus	pseudoephedrine HCl/acetaminophen
Maxichlor Dm	chlorpheniramine maleate/dextromethorphan hbr
Maxichlor Peh	chlorpheniramine maleate/phenylephrine HCl
Maxichlor Peh Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Maxichlor Pse	chlorpheniramine maleate/pseudoephedrine HCl
Maxichlor Pse Dm	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Maxifed (Ir)	guaifenesin/pseudoephedrine HCl
Maxifed Cd	pseudoephedrine HCl/codeine phosphate/guaifenesin
Maxifed Cdx	pseudoephedrine HCl/codeine phosphate/guaifenesin
Maxifed Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Maxifed Dm (Ir)	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Maxifed Dmx (Ir)	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Maxifed-G (Ir)	guaifenesin/pseudoephedrine HCl
Maxifed-G Cd	pseudoephedrine HCl/codeine phosphate/guaifenesin
Maxifed-G Cdx	pseudoephedrine HCl/codeine phosphate/guaifenesin
Maxiflu Cd	pseudoephedrine HCl/codeine phosphate/acetaminophen/guaifen
Maxiflu Cdx	pseudoephedrine HCl/codeine phosphate/acetaminophen/guaifen
Maxiflu Dm	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Maximum Strength Flu	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Maxiphen	guaifenesin/phenylephrine HCl
Maxiphen Cd	phenylephrine HCl/codeine phosphate/guaifenesin
Maxiphen Cdx	phenylephrine HCl/codeine phosphate/guaifenesin
Maxiphen Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Maxiphen Dmx	guaifenesin/dextromethorphan hbr/phenylephrine
M-Clear	guaifenesin/codeine phosphate
M-Clear Wc	guaifenesin/codeine phosphate
Medent-Pei	guaifenesin/phenylephrine HCl
Medicidin-D	phenylephrine HCl/acetaminophen/chlorpheniramine
Medi-Cortisone	hydrocortisone acetate
Medifin Cp	guaifenesin/acetaminophen
Medi-Phedryl	diphenhydramine HCl
Medi-Tabs Pm	acetaminophen/diphenhydramine HCl
Medi-Tussin Dm	guaifenesin/dextromethorphan hbr
Medi-Tussin Dm Diabetic	guaifenesin/dextromethorphan hbr
Medrol	methylprednisolone
Medrol (Pak)	methylprednisolone
M-End Dm	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
M-End Dmx	dexbromphen-pseudoephedrine-dextromethorphan
M-End Max D	dexbrompheniramine maleate/pseudoephedrine HCl/codeine phos
M-End Pe	brompheniramine maleate/phenylephrine HCl/codeine phosphate
M-End Wc	brompheniramine maleate/pseudoephedrine HCl/codeine
Menstrual Complete	acetaminophen/pyrilamine maleate/caffeine
Menstrual Relief	acetaminophen/pyrilamine maleate/caffeine
Meprolone Unipak	methylprednisolone
Mesehist Dm	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Mesehist Wc	brompheniramine maleate/pseudoephedrine HCl/codeine
Methylprednisol Sod Suc(Bulk)	methylprednisolone sodium succinate
Methylprednisolone	methylprednisolone
Methylprednisolone Acetate	methylprednisolone acetate
Methylprednisolone Sodium Succ	methylprednisolone sodium succinate

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Methylprednisolone, Mic (Bulk)	methylprednisolone, micronized
Midol Complete	acetaminophen/pyrilamine maleate/caffeine
Midol Max St Menstrual	acetaminophen/pyrilamine maleate/caffeine
Midol Pm	acetaminophen/diphenhydramine citrate
Millipred	prednisolone sod phosphate
Millipred Dp	prednisolone
Mintuss Dr	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Mometasone	mometasone furoate
Mometasone Furoate (Bulk)	mometasone furoate
Momexin	mometasone furoate/ammonium lactate
Mucaphed	guaifenesin/phenylephrine HCl
Mucinex Allergy	fexofenadine HCl
Mucinex Cold And Sinus	guaifenesin/phenylephrine HCl/acetaminophen
Mucinex Cold,Flu,Sore Throat	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Mucinex Cough Mini-Melts	guaifenesin/dextromethorphan hbr
Mucinex D	guaifenesin/pseudoephedrine HCl
Mucinex D Maximum Strength	guaifenesin/pseudoephedrine HCl
Mucinex Dm	guaifenesin/dextromethorphan hbr
Mucinex Fast-Max Cold-Flu-Thrt	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Mucinex Fast-Max Cold-Sinus	guaifenesin/phenylephrine HCl/acetaminophen
Mucinex Fast-Max Congest-Cough	guaifenesin/dextromethorphan hbr/phenylephrine
Mucinex Fast-Max Congest-Head	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Mucinex Fast-Max Day-Nite Cold	diphenhydramine/phenylephrin/dextromethorph/acetaminophen/gg
Mucinex Fast-Max Day-Nite Cong	diphenhydramine/phenylephrin/dextromethorph/acetaminophen/gg
Mucinex Fast-Max Day-Nt(Doxyl)	doxylamine/phenylephrine/dextromethorphan/acetaminophen/gg
Mucinex Fast-Max Dm Max	guaifenesin/dextromethorphan hbr
Mucinex Fast-Max Nite (Doxyl)	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Mucinex Fast-Max Nite Cold-Flu	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Mucinex Fast-Max Severe Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Mucinex Fast-Maxsev Cold-Sinus	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Mucinex Fst-Mx Dy-Nt Cold(Dph)	diphenhydramine/phenylephrin/dextromethorph/acetaminophen/gg
Mucinex Sinus-Max D-N (Diphen)	diphenhydramine HCl/phenylephrine HCl/acetaminophen/guaifen
Mucinex Sinus-Max Dy-Nt (Dxyl)	doxylamine/phenylephrine/dextromethorphan/acetaminophen/gg
Mucinex Sinus-Max Nite Congest	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Mucinex Sinus-Max Pressur-Pain	guaifenesin/phenylephrine HCl/acetaminophen
Mucinex Sinus-Max Sev Cong(Dm)	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Mucinex Sinus-Max Sev Congestn	guaifenesin/phenylephrine HCl/acetaminophen
Mucosa Dm	guaifenesin/dextromethorphan hbr
Mucus And Cough Relief	guaifenesin/dextromethorphan hbr
Mucus D	guaifenesin/pseudoephedrine HCl
Mucus Dm	guaifenesin/dextromethorphan hbr
Mucus Dm Max	guaifenesin/dextromethorphan hbr
Mucus Relief Cold And Sinus	guaifenesin/phenylephrine HCl/acetaminophen
Mucus Relief Cold-Flu-Sore Thr	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Mucus Relief Congestion-Cough	guaifenesin/dextromethorphan hbr/phenylephrine
Mucus Relief Cough	guaifenesin/dextromethorphan hbr
Mucus Relief D (Phenylephrine)	guaifenesin/phenylephrine HCl
Mucus Relief D (Pseudoephed)	guaifenesin/pseudoephedrine HCl
Mucus Relief Dm	guaifenesin/dextromethorphan hbr
Mucus Relief Dm Max	guaifenesin/dextromethorphan hbr
Mucus Relief Pe	guaifenesin/phenylephrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Mucus Relief Plus	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Mucus Relief Sev Congest-Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Mucus Relief Severe Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Mucus Relief Sinus	guaifenesin/phenylephrine HCl
Mucus Relief Sinuspressur-Pain	guaifenesin/phenylephrine HCl/acetaminophen
Mucus Rlf Severe Sinus Congest	guaifenesin/phenylephrine HCl/acetaminophen
Multi-Symptom Cold (Pe)	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Multi-Symptom Cold (Pe-Cpm)	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Multi-Symptom Cold Daytime	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Multi-Symptom Cold Night Time	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Multi-Symptom Cold-Cough	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Myci Chlor-Tan	chlorpheniramine tannate
Myci-Gc	guaifenesin/codeine phosphate
Myhist-Dm	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Myhist-Pd	phenylephrine HCl/pyrilamine maleate/chlorpheniramine
Myophen	acetaminophen/phenyltoloxamine citrate
Mytussin Ac	guaifenesin/codeine phosphate
Mytussin Dac	pseudoephedrine HCl/codeine phosphate/guaifenesin
Naldecon Senior Dx	guaifenesin/dextromethorphan hbr
Naldex	dexchlorpheniramine maleate/phenylephrine HCl
Nalex Ac	brompheniramine maleate/codeine phosphate
Naramin	diphenhydramine HCl
Nariz	guaifenesin/phenylephrine HCl
Nasacort	triamcinolone acetonide
Nasacort Aq	triamcinolone acetonide
Nasal Allergy	triamcinolone acetonide
Nasal Allergy Symptom Control	cromolyn sodium
Nasal Decongestant	triprolidine HCl/pseudoephedrine HCl
Nasal Decongestant-Antihist	triprolidine HCl/pseudoephedrine HCl
Nasal Decongest-Antihistamine	triprolidine HCl/pseudoephedrine HCl
Nasal crom	cromolyn sodium
Nasohist	chlorpheniramine maleate/phenylephrine HCl
Nasohist Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Nasonex	mometasone furoate
Nasopen	chlorcyclizine HCl/pseudoephedrine HCl
Nasopen Pe	thonzylamine HCl/phenylephrine HCl
Nasopen-Ch	chlorcyclizine HCl/phenylephrine HCl
Nasotuss	chlorcyclizine HCl/phenylephrine HCl/codeine phosphate
Neo Ac	pyrilamine maleate/pseudoephedrine HCl/codeine phosphate
Neo Dm	dextromethorphan tannate/phenylephrine tannate/br-phenir
Neosporin Anti-Itch	hydrocortisone
Neo-Tuss	guaifenesin/dextromethorphan hbr
Neotuss Plus	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Neotuss-D (Chlorpheniramine)	guaifenesin/dextromethorphan hbr/pseudoephedrine/chlorphenir
Neotuss-D (Improved Formula)	guaifenesin/dextromethorphan hbr/phenylephrine
Neutrahist	chlorpheniramine maleate/pseudoephedrine HCl
Neutrahist Pdx	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Nexafed Sinus Pressure-Pain	pseudoephedrine HCl/acetaminophen
Night Time	dextromethorphan hbr/acetaminophen/doxylamine
Night Time (Doxy-Dm-Acetam)	dextromethorphan hbr/acetaminophen/doxylamine
Night Time Cold	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Night Time Cold And Flu Relief	dextromethorphan hbr/acetaminophen/doxylamine
Night Time Cold Medicine	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
Night Time Cold-Flu	dextromethorphan hbr/acetaminophen/doxylamine
Night Time Cold-Flu Relief	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
Night Time Cough-Sore Throat	dextromethorphan hbr/acetaminophen/doxylamine
Night Time Formula	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
Night Time Pain Medicine	acetaminophen/diphenhydramine HCl
Nighttime Sleep	diphenhydramine HCl
Night-Time	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
Nighttime Allergy Relief	diphenhydramine HCl
Nighttime Cold Medicine	dextromethorphan hbr/acetaminophen/doxylamine
Nighttime Cold-Flu	dextromethorphan hbr/acetaminophen/doxylamine
Nighttime Cold-Flu Relief	dextromethorphan hbr/acetaminophen/doxylamine
Nighttime Cough	dextromethorphan hbr/doxylamine succinate
Nighttime Cough-Cold	phenylephrine HCl/diphenhydramine HCl
Nighttime Pain Plus Sleep	acetaminophen/diphenhydramine HCl
Nighttime Sinus	phenylephrine HCl/acetaminophen/doxylamine succinate
Nighttime Sinus-Congestion	phenylephrine HCl/acetaminophen/doxylamine succinate
Nighttime Sleep Aid (Diphen)	diphenhydramine HCl
Ninjacof	pyrilamine maleate/chlophedianol HCl
Ninjacof-A	pyrilamine maleate/chlophedianol HCl/acetaminophen
Ninjacof-Xg	guaifenesin/codeine phosphate
Nite Time	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
Nite Time Cold-Flu	dextromethorphan hbr/acetaminophen/doxylamine
Nite Time Cold-Flu Formula	dextromethorphan hbr/acetaminophen/doxylamine
Nite Time Cold-Flu Relief	dextromethorphan hbr/acetaminophen/doxylamine
Nite Time Cold-Flu Relief (Pe)	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Nite Time Cold-Flu Relief(Pse)	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
Nite Time Cough	dextromethorphan hbr/doxylamine succinate
Nite Time-D Cold-Flu Relief	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
Nite-Time	dextromethorphan hbr/acetaminophen/doxylamine
Nite-Time Cold-Flu	dextromethorphan hbr/acetaminophen/doxylamine
Nitetime Cough	dextromethorphan hbr/doxylamine succinate
Nitetime Multi-Symptom	dextromethorphan hbr/acetaminophen/doxylamine
Niva-Hist Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Nivanex Dmx	guaifenesin/dextromethorphan hbr/phenylephrine
Noble Formula Hc	hydrocortisone
Nohist	chlorpheniramine maleate/phenylephrine HCl
Nohist Dmx	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Nohist-Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Nohist-Lq	chlorpheniramine maleate/phenylephrine HCl
Nohist-Pdx	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Nohist-Pe	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Non-Asa Ex St Pain/Sleep Aid	acetaminophen/diphenhydramine HCl
Non-Aspirin Allergy Sinus	pseudoephedrine HCl/acetaminophen/chlorpheniramine
Non-Aspirin Allergy Sinus Pm	pseudoephedrine HCl/acetaminophen/diphenhydramine
Non-Aspirin Child'S Cold	pseudoephedrine HCl/acetaminophen/chlorpheniramine
Non-Aspirin Cold	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Non-Aspirin Flu	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Non-Aspirin Nighttime	acetaminophen/diphenhydramine HCl
Non-Aspirin Pain Relief Pm	acetaminophen/diphenhydramine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Non-Aspirin Pm	acetaminophen/diphenhydramine HCl
Non-Aspirin Severe Congest M-S	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Non-Aspirin Sinus	phenylephrine HCl/acetaminophen
Non-Aspirin Sinus Non-Drowsy	pseudoephedrine HCl/acetaminophen
Non-Drowsy Allergy	loratadine
Non-Drying Sinus	guaifenesin/pseudoephedrine HCl
Non-Pseudo Cold Relief	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Norel Ad	phenylephrine HCl/acetaminophen/chlorpheniramine
Norel Cs	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Norel Sr	phenylephrine/acetaminophen/phenyltoloxamine/chlorpheniramin
Nortuss-D.E.	guaifenesin/dextromethorphan hbr/phenylephrine
Nortuss-De	guaifenesin/dextromethorphan hbr/phenylephrine
Nortuss-Ex	guaifenesin/dextromethorphan hbr
Notuss Ac	chlorpheniramine maleate/codeine phosphate
Notuss Dc	pseudoephedrine HCl/codeine phosphate
Notuss-Nx	chlorcyclizine HCl/codeine phosphate
Notuss-Nxd	chlorcyclizine HCl/pseudoephedrine HCl/codeine phosphate
Notuss-Pe	phenylephrine HCl/codeine phosphate
Novacort	hydrocortisone acetate/pramoxine HCl
Novacort (With Aloe)	hydrocortisone acetate/pramoxine HCl/aloe polysaccharide
Novadyne Dh	pseudoephedrine HCl/codeine/chlorpheniramine
Novafed A	chlorpheniramine maleate/pseudoephedrine HCl
Novagesic	acetaminophen/phenyltoloxamine citrate
Novahistine Dh	phenylephrine HCl/dihydrocodeine bitartrate/chlorpheniramine
Noxipak	fluocinolone acetonide/urea/silicone, adhesive
Nu-Copd	guaifenesin/phenylephrine HCl
Nucort	hydrocortisone acetate/aloe vera
Nuzon	hydrocortisone acetate/aloe vera
Nyquil D	dextromethorphan/pseudoephedrine HCl/acetaminophen/doxylamine
Nytol	diphenhydramine HCl
Nyt-Time Sleep	diphenhydramine HCl
Obagi Nu-Derm Tolereen	hydrocortisone
Obredon	guaifenesin/hydrocodone bitartrate
Olopatadine	olopatadine HCl
Olux	clobetasol propionate
Olux-E	clobetasol propionate/emollient base
Olux-Olux-E (100/10)	clobetasol propionate/emollient base
Olux-Olux-E (50/50)	clobetasol propionate/emollient base
Omadryl Da	chlorpheniramine maleate/pseudoephedrine HCl
Omnaris	ciclesonide
Omnihist li La	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Omnihist L.A.	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Onetab Allergy & Sinus	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Onetab Cold & Flu	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Onetab Congestion & Cough	guaifenesin/phenylephrine HCl
Onset Forte	phenylephrine HCl/acetaminophen/chlorpheniramine
Optivar	azelastine HCl
Orapred	prednisolone sod phosphate
Orapred Odt	prednisolone sod phosphate
Ormir	diphenhydramine HCl
Ornex	pseudoephedrine HCl/acetaminophen

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Ornex Maximum Strength	pseudoephedrine HCl/acetaminophen
P Chlor	guaifenesin/phenylephrine HCl/chlorpheniramine
Pain And Sleep	acetaminophen/diphenhydramine HCl
Pain Medicine P.M.	acetaminophen/diphenhydramine citrate
Pain Relief Allergy Sinus	phenylephrine HCl/acetaminophen/chlorpheniramine
Pain Relief Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Pain Relief Cold And Cough	acetaminophen/dextromethorphan hbr
Pain Relief Pm	acetaminophen/diphenhydramine HCl
Pain Relief Pm Rapid Release	acetaminophen/diphenhydramine HCl
Pain Relief Sinus Pe	phenylephrine HCl/acetaminophen
Pain Reliever Allergy Sinus	pseudoephedrine HCl/acetaminophen/chlorpheniramine
Pain Reliever Am/Pm	acetaminophen/diphenhydramine HCl
Pain Reliever Flu	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Pain Reliever Pm	acetaminophen/diphenhydramine HCl
Pain Reliever Pm Ex St	acetaminophen/diphenhydramine HCl
Pain Reliever Pm Ex-Strength	acetaminophen/diphenhydramine HCl
Pain Reliever Sinus	pseudoephedrine HCl/acetaminophen
Palgic	carbinoxamine maleate
Panatuss Dxp (New)	dextromethorphan hbr/phenylephrine HCl/dexbrompheniramine
Panatuss Dxp Pediatric (New)	dextromethorphan hbr/phenylephrine HCl/dexbrompheniramine
Panatuss Ped	dexchlorpheniramine maleate/pseudoephedrine HCl/chlophed HCl
Panatuss Ped Drops	dexchlorpheniramine maleate/pseudoephedrine HCl/chlophed HCl
Pandel	hydrocortisone probutate
Panmist S	guaifenesin/pseudoephedrine HCl
Pataday	olopatadine HCl
Patanase	olopatadine HCl
Patanol	olopatadine HCl
Pazeo	olopatadine HCl
Pbm Allergy	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Pcm La	pseudoephedrine HCl/chlorpheniramine maleate/methylscopolamn
Pdm Gg	guaifenesin/dextromethorphan hbr/phenylephrine
Pe HCl-Cpm-Msn	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Pecgen Dmx	guaifenesin/dextromethorphan hbr
Pecgen Pse	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Pe-Cp-K Guaiacol	potassium guaiacolsulfonate/carbetapentane cit/phenylephrine
Pe-Cpm-Msn	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Pedia Relief	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Pedia Relief Cough-Cold	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Pedia Relief Infant	dextromethorphan hbr/pseudoephedrine HCl
Pediacare Allergy & Cold	phenylephrine HCl/diphenhydramine HCl
Pediacare Cough/Cold	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Pediacare Multi-Symptom Cold	dextromethorphan hbr/phenylephrine HCl
Pediaderm Hc	hydrocortisone/emollient combination no.45
Pediaderm Ta	triamcinolone acetonide/emollient combination no.45
Pediahist Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Pediapred	prednisolone sod phosphate
Pediatex Ps	triprolidine polistirex/pseudoephedrine polistirex
Pediatex Td	triprolidine HCl/pseudoephedrine HCl
Pediatex Tdm	triprolidine HCl/pseudoephedrine HCl/dextromethorphan hbr
Pediatric Cough And Cold	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Pediavent	dexbrompheniramine maleate

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Pe-Hist Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Percogesic	acetaminophen/diphenhydramine HCl
Percogesic Extra Strength	acetaminophen/diphenhydramine HCl
Pharbechlor	chlorpheniramine maleate
Pharbedryl	diphenhydramine HCl
Phenabid	chlorpheniramine maleate/phenylephrine HCl
Phenabid Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Phenadoz	promethazine HCl
Phenagesic	acetaminophen/phenyltoloxamine citrate
Phenagil	chlorpheniramine maleate/phenylephrine HCl
Phenagil Ch	chlorpheniramine maleate/phenylephrine HCl/chlophedianol HCl
Phena-Plus	phenylephrine HCl/pyrilamine maleate/chlorpheniramine
Phena-S	phenylephrine HCl/pyrilamine maleate/chlorpheniramine
Phencarb Gg	phenylephrine HCl/carbetapentane citrate/guaifenesin
Phenclor Tannate Pediatric	phenylephrine tannate/chlorpheniramine tannate
Phenergan	promethazine HCl
Phenflu Cd	phenylephrine HCl/codeine phosphate/acetaminophen/guaifen
Phenflu Cdx	phenylephrine HCl/codeine phosphate/acetaminophen/guaifen
Phenflu Dm	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Phenylephrine Complex	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Phenylephrine-Chlophedianol-Gg	phenylephrine HCl/chlophedianol HCl/guaifenesin
Phenylephrine-Dm-Guaifenesin	guaifenesin/dextromethorphan hbr/phenylephrine
Phenylephrine-Guaifenesin	guaifenesin/phenylephrine HCl
Phenylgesic	acetaminophen/phenyltoloxamine citrate
Phenylhistine	pseudoephedrine HCl/codeine phosphate/guaifenesin
Phenylhistine Dh	pseudoephedrine HCl/codeine/chlorpheniramine
Phenyltoloxamine Pe Cpm	chlorpheniramine mal/phenyltoloxamine cit/phenylephrine HCl
Physicians Ez Use M-Pred	methylprednisolone acetate/bupivacaine HCl
Pluratuss	brompheniramine maleate/phenylephrine HCl/codeine phosphate
Pm Pain Relief	acetaminophen/diphenhydramine HCl
Pm Pain Reliever	acetaminophen/diphenhydramine citrate
Poly Hist Cb	guaifenesin/carbetapentane cit
Poly Hist Dhc	pyrilamine maleate/phenylephrine HCl/dihydrocodeine bt
Poly Hist Dm	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Poly Hist Forte (Cpm)	phenylephrine HCl/pyrilamine maleate/chlorpheniramine
Poly Hist Forte (Doxylamine)	doxylamine succinate/phenylephrine HCl
Poly Hist Forte (Pyrilamine)	phenylephrine HCl/pyrilamine maleate
Poly Hist Nc	pseudoephedrine HCl/codeine phosphate/triprolidine
Poly Hist Pd	phenylephrine HCl/pyrilamine maleate/chlorpheniramine
Poly Tan D	phenylephrine tannate/pyrilamine maleate/dexbromphen tannat
Poly Tan Dm	d-methorphan tan/phenylephrine tan/pyril mal/d-bromphen tan
Poly-650	acetaminophen/phenyltoloxamine citrate
Poly-Hist Dm (Thonzylamine)	thonzylamine HCl/phenylephrine HCl/dextromethorphan hbr
Poly-Tussin	chlorcyclizine HCl/codeine phosphate
Poly-Tussin Ac	brompheniramine maleate/phenylephrine HCl/codeine phosphate
Poly-Tussin D	chlorcyclizine HCl/pseudoephedrine HCl/codeine phosphate
Poly-Tussin Dhc	brompheniramine maleate/phenylephrine HCl/dihydrocodeine bt
Poly-Tussin Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Poly-Tussin Ex	phenylephrine HCl/dihydrocodeine bitartrate/guaifenesin
Poly-Vent Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Poly-Vent Ir	guaifenesin/pseudoephedrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Poly-Vent Plus	guaifenesin/pseudoephedrine HCl/acetaminophen
Pramosone	hydrocortisone acetate/pramoxine HCl
Pramosone E	hydrocortisone acetate/pramoxine HCl/emollient base
Prednicarbate	prednicarbate
Prednisolone	prednisolone
Prednisolone Ac, Micro (Bulk)	prednisolone acetate, micronized
Prednisolone Sodium Phosphate	prednisolone sod phosphate
Prednisolone, Micro (Bulk)	prednisolone, micronized
Prednisone	prednisone
Prednisone Intensol	prednisone
Prednisone Micronized (Bulk)	prednisone micronized
Pre-Hist-D	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Prelone	prednisolone
Preparation H Hydrocortisone	hydrocortisone
Pres Gen	guaifenesin/dextromethorphan hbr/phenylephrine
Pres Gen Pediatric	guaifenesin/dextromethorphan hbr/phenylephrine
Presgen B	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Pressure And Pain	phenylephrine HCl/acetaminophen
Pressure-Pain Pe Plus Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Pressure-Pain Pe Plus Mucus	guaifenesin/phenylephrine HCl/acetaminophen
Pressure-Pain-Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Primatene Asthma	guaifenesin/ephedrine HCl
Pro-C-Dure 5	triamcinolone acetonide
Pro-C-Dure 6	triamcinolone acetonide
Pro-Chlo	pyrilamine maleate/phenylephrine HCl/chlophedianol HCl
Pro-Clear Ac	codeine phosphate/pyrilamine maleate
Pro-Clear Caps	guaifenesin/codeine phosphate
Prohist Cd	triprolidine HCl/phenylephrine HCl/chlophedianol HCl
Prohist Cf	triprolidine HCl/chlophedianol HCl
Prohist Lq	phenylephrine HCl/triprolidine HCl
Prolex Dmx	dextromethorphan hbr/potassium guaiacolsulfonate
Promethazine	promethazine HCl
Promethazine (Bulk)	promethazine HCl
Promethazine In 0.9 % Nacl	promethazine HCl in 0.9 % sodium chloride
Promethazine Vc	phenylephrine HCl/promethazine HCl
Promethazine Vc-Codeine	promethazine/phenylephrine HCl/codeine
Promethazine-Codeine	promethazine HCl/codeine
Promethazine-Dm	promethazine HCl/dextromethorphan hbr
Promethazine-Phenyleph-Codeine	promethazine/phenylephrine HCl/codeine
Promethazine-Phenylephrine	phenylephrine HCl/promethazine HCl
Promethegan	promethazine HCl
Pro-Red Ac (W/ Dexchlorphenir)	dexchlorpheniramine maleate/phenylephrine HCl/codeine
Pro-Red Ac (With Pyrilamine)	pyrilamine maleate/phenylephrine HCl/codeine phosphate
Protid	phenylephrine HCl/acetaminophen/chlorpheniramine
Pse Bpm	brompheniramine maleate/pseudoephedrine HCl
Pse Brom	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Pseudo Cough	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Pseudo Dm Gg	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Pseudo Plus Cold & Allergy	chlorpheniramine maleate/pseudoephedrine HCl
Pseudo-Chlor	chlorpheniramine maleate/pseudoephedrine HCl
Pseudoephed-Chlophedianol-Gg	pseudoephedrine HCl/chlophedianol HCl/guaifenesin

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Pseudoephedrine Gg	guaifenesin/pseudoephedrine HCl
Pseudoephedrine-Codeine	pseudoephedrine HCl/codeine phosphate
Pseudoephedrine-Dm-Guaifenesin	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Pseudoephedrine-Guaifenesin	guaifenesin/pseudoephedrine HCl
Pseudo-Trip	triprolidine HCl/pseudoephedrine HCl
Psorcon	diflorasone diacetate
Pulmari-Gp	guaifenesin/carbetapentane cit
PyriChlor Pe	phenylephrine HCl/pyrilamine maleate/chlorpheniramine
Pyril D	phenylephrine HCl/pyrilamine maleate
Pyril Dm	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Pyrilamine-Phenylephrine	phenylephrine HCl/pyrilamine maleate
Pyrilamine-Phenylephrine-Dm	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Pyril-Chlor-Phen	phenylephrine HCl/pyrilamine maleate/chlorpheniramine
Pyroxate Cold And Congestion	phenylephrine HCl/acetaminophen
Q-Dryl	diphenhydramine HCl
Qflex	acetaminophen/phenyltoloxamine citrate
Qnasl	beclomethasone dipropionate
Q-Tapp	brompheniramine maleate/pseudoephedrine HCl
Q-Tapp Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Q-Tussin Dm	guaifenesin/dextromethorphan hbr
Quartuss	chlorpheniramine/phenylephrine/dextromethorphan/guaifenesin
Quartuss Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Quenalin	diphenhydramine HCl
Rayos	prednisone
Re Dcp	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Recofen D	guaifenesin/dextromethorphan hbr
Recort Plus	hydrocortisone
Re-Drylex	phenylephrine HCl/dexchlorpheniramine mal/methscopolamine
Refenesen Chest Congest & Pain	guaifenesin/acetaminophen
Refenesen Dm	guaifenesin/dextromethorphan hbr
Refenesen Pe	guaifenesin/phenylephrine HCl/acetaminophen
Refresh Eye Itch Relief	ketotifen fumarate
Relagesic	acetaminophen/phenyltoloxamine citrate
Relcof C	guaifenesin/codeine phosphate
Relcof Cpm	chlorpheniramine maleate/methscopolamine nitrate
Relcof Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Relcof Dn Pe	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Relcof Dn Pse	pseudoephedrine HCl/chlorpheniramine maleate/methylscopolamn
Relcof Ir	guaifenesin/phenylephrine HCl
Relcof Pe	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Relcof Pse	pseudoephedrine HCl/chlorpheniramine maleate/methylscopolamn
Relhist	brompheniramine tannate/phenylephrine tannate
Relhist Bp	brompheniramine maleate/phenylephrine HCl
Relhist Dmx	guaifenesin/dextromethorphan hbr/phenylephrine
Reme Hist Dm	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Reme Tussin Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Rescon	dexchlorpheniramine maleate/pseudoephedrine HCl
Rescon Jr	dexchlorpheniramine maleate/phenylephrine HCl
Rescon-Dm	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Rescon-Gg	guaifenesin/phenylephrine HCl
Rescon-Jr	chlorpheniramine maleate/phenylephrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Rescon-Mx	dexchlorpheniramine maleate/phenylephrine HCl
Respa C&C	dextromethorphan hbr/phenylephrine/acetaminophn/dp-hydramine
Respa C&C Ir	dextromethorphan hbr/phenylephrine/acetaminophn/dp-hydramine
Respa-Ar	pseudoephedrine HCl/chlorpheniramine maleate/bellad alk
Respa-Br	brompheniramine maleate
Respahist	brompheniramine maleate/pseudoephedrine HCl
Respahist-Ii	brompheniramine maleate/phenylephrine HCl
Respaire-30	guaifenesin/pseudoephedrine HCl
Resperal-Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Respivent Df	chlorpheniramine maleate/methscopolamine nitrate
Respivent Df 30	chlorpheniramine maleate/methscopolamine nitrate
Respivent-D	pseudoephedrine HCl/methylscopolamine nitrate
Rest Simply Nighttime Sleep	diphenhydramine HCl
Restfully Sleep	diphenhydramine HCl
Rezira	pseudoephedrine HCl/hydrocodone bitartrate
Rhinocort Allergy	budesonide
Rhinocort Aqua	budesonide
Rhinoflex	acetaminophen/phenyltoloxamine citrate
Rhinoflex-650	acetaminophen/phenyltoloxamine citrate
Ritifed	triprolidine HCl/pseudoephedrine HCl
Ri-Tussin Dm	guaifenesin/dextromethorphan hbr
Robafen Ac	guaifenesin/codeine phosphate
Robafen Cf	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Robafen Cf (Phenylephrine)	guaifenesin/dextromethorphan hbr/phenylephrine
Robafen Dm	guaifenesin/dextromethorphan hbr
Robafen Dm Clear	guaifenesin/dextromethorphan hbr
Robafen Dm Cough	guaifenesin/dextromethorphan hbr
Robafen Dm Cough-Chest Congest	guaifenesin/dextromethorphan hbr
Robafen Dm Max	guaifenesin/dextromethorphan hbr
Robitussin Cold, Cough, & Flu	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Robitussin Cold-Flu Day	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Robitussin Cold-Flu Night	dextromethorphan hbr/acetaminophen/doxylamine
Robitussin Cough & Cold	chlorpheniramine maleate/dextromethorphan hbr
Robitussin Cough & Cold Cf Max	guaifenesin/dextromethorphan hbr/phenylephrine
Robitussin Cough And Cold Cf	guaifenesin/dextromethorphan hbr/phenylephrine
Robitussin Cough-Chest Cong Dm	guaifenesin/dextromethorphan hbr
Robitussin Dm Max	guaifenesin/dextromethorphan hbr
Robitussin Dm To Go	guaifenesin/dextromethorphan hbr
Robitussin Long-Acting	chlorpheniramine maleate/dextromethorphan hbr
Robitussin M-S Cold Cf Max	guaifenesin/dextromethorphan hbr/phenylephrine
Robitussin Nighttime Cough Dm	dextromethorphan hbr/doxylamine succinate
Robitussin Ped Cough & Cold	dextromethorphan hbr/pseudoephedrine HCl
Robitussin-Cough-Chest-Cong	guaifenesin/dextromethorphan hbr
Robitussin-Dm	guaifenesin/dextromethorphan hbr
Rompe Pecho Max Multi Symptoms	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Rondec Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Rondex-Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
R-Tanna	phenylephrine tannate/chlorpheniramine tannate
R-Tanna Pediatric	phenylephrine tannate/chlorpheniramine tannate
Ru-Hist D	brompheniramine maleate/phenylephrine HCl
Ru-Hist Forte	phenylephrine HCl/pyrilamine maleate/chlorpheniramine

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Ru-Hist-D (With Pyrilamine)	phenylephrine HCl/pyrilamine maleate
Ru-Tuss	pseudoephedrine HCl/chlorpheniramine maleate/bellad alk
Ru-Tuss Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Rycontuss	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Rydex	brompheniramine maleate/pseudoephedrine HCl/codeine
Rydex Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Rydex G	guaifenesin/pseudoephedrine HCl
Rymed (Dexchlorpheniramine-Pe)	dexchlorpheniramine maleate/phenylephrine HCl
Ryna-12	phenylephrine tannate/pyrilamine tannate
Ryna-12 S	phenylephrine tannate/pyrilamine tannate
Ryna-12X	guaifenesin/phenylephrine tannate/pyrilamine
Rynatan	phenylephrine tannate/chlorpheniramine tannate
Rynatan Pediatric	phenylephrine tannate/chlorpheniramine tannate
Rynatuss	carbetapentane tannate/ephed tan/phenylephrine/chlorphenir
Rynex Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Rynex Pe	brompheniramine maleate/phenylephrine HCl
Rynex Pse	brompheniramine maleate/pseudoephedrine HCl
Ryneze	chlorpheniramine maleate/methscopolamine nitrate
Safe Tussin Dm	guaifenesin/dextromethorphan hbr
Safetussin Cd	dextromethorphan hbr/phenylephrine HCl
Safetussin Pm	dextromethorphan hbr/doxylamine succinate
Sanadermr	triamcinolone acetonide/dimethicone/silicone, adhesive
Scalacort	hydrocortisone
Scalacort Dk	hydrocortisone/salicylic acid/sulfur/shampoo cmb 1
Scalp Relief	hydrocortisone
Scalpicin Anti-Itch	hydrocortisone
Scot-Tussin Dm	chlorpheniramine maleate/dextromethorphan hbr
Scot-Tussin Original	phenylephrine HCl/sodium salicylate/pheniramine/caffeine
Scot-Tussin Senior	guaifenesin/dextromethorphan hbr
Semprex-D	pseudoephedrine HCl/acrivastine
Seradex	brompheniramine maleate/phenylephrine HCl/carbetapentane cit
Seradex-La	brompheniramine maleate/phenylephrine HCl
Sernivo	betamethasone dipropionate
Severe Allergy	acetaminophen/diphenhydramine HCl
Severe Allergy-Sinus Headache	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Severe Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Severe Cold (Diphen-Pe-Acetam)	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Severe Cold And Flu (Pe)	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Severe Cold And Flu Nighttime	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Severe Cold And Flu(Day/Night)	doxylamine/phenylephrine/dextromethorphan/acetaminophen/gg
Severe Cold Cough-Flu	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Severe Cold Formula	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Severe Cold Multi-Symptom	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Severe Cold Pe	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Severe Cold-Congestion	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Severe Congestion And Coughmax	guaifenesin/dextromethorphan hbr/phenylephrine
Severe Sinus	guaifenesin/phenylephrine HCl/acetaminophen
Severe Sinus Congest Alrgy-Cgh	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Severe Sinus Congestion	guaifenesin/pseudoephedrine HCl/acetaminophen
Siladryl Sa	diphenhydramine HCl
Silafed	triprolidine HCl/pseudoephedrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Silazone-li	triamcinolone acetonide/silicones
Sildec (Brompheniramine)	brompheniramine maleate/pseudoephedrine HCl
Sildec Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Sildec Pe-Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Sildec-Pe	chlorpheniramine maleate/phenylephrine HCl
Silphen Cough	diphenhydramine HCl
Siltussin Dm Das	guaifenesin/dextromethorphan hbr
Siltussin-Dm	guaifenesin/dextromethorphan hbr
Simply Sleep	diphenhydramine HCl
Simuc-Dm	guaifenesin/dextromethorphan hbr
Sina-12X	guaifenesin/phenylephrine tannate
Sinuhist	brompheniramine maleate/pseudoephedrine HCl
Sinus And Allergy Pe	chlorpheniramine maleate/phenylephrine HCl
Sinus And Allergy(Pseudoephed)	chlorpheniramine maleate/pseudoephedrine HCl
Sinus And Cold-D	naproxen sodium/pseudoephedrine HCl
Sinus Congestion And Pain	phenylephrine HCl/acetaminophen
Sinus Congestion-Pain(Chlorph)	phenylephrine HCl/acetaminophen/chlorpheniramine
Sinus Congestion-Pain(Guaif)	guaifenesin/phenylephrine HCl/acetaminophen
Sinus Congest-Pain Day-Night	phenylephrine HCl/acetaminophen/chlorpheniramine
Sinus Daytime-Nighttime	phenylephrine HCl/acetaminophen/doxylamine succinate
Sinus Formula Daytime	phenylephrine HCl/acetaminophen
Sinus Headache	pseudoephedrine HCl/acetaminophen
Sinus Headache Degongestant	pseudoephedrine HCl/acetaminophen
Sinus Headache Pe	phenylephrine HCl/acetaminophen
Sinus Maximum Strength	phenylephrine HCl/acetaminophen
Sinus Nighttime	phenylephrine HCl/triprolidine HCl
Sinus Pain Relief	phenylephrine HCl/acetaminophen
Sinus Pain-Pressure (Pe)	phenylephrine HCl/acetaminophen
Sinus Pe Pressure-Pain-Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifenesin
Sinus Relief (Non-Drowsy)	phenylephrine HCl/acetaminophen
Sinus Relief Pressure And Pain	guaifenesin/phenylephrine HCl/acetaminophen
Sinus Relief Severe Congestion	guaifenesin/phenylephrine HCl/acetaminophen
Sinus-Allergy (Phenylephrine)	chlorpheniramine maleate/phenylephrine HCl
Sinutab Sinus Maximum Strength	phenylephrine HCl/acetaminophen
Sinutrol Pe	phenylephrine HCl/acetaminophen/chlorpheniramine
Sinutuss Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Sinuvent Pe	guaifenesin/phenylephrine HCl
Sleep	diphenhydramine HCl
Sleep Aid (Diphenhydramine)	diphenhydramine HCl
Sleep Aid Max Str (Diphenhydr)	diphenhydramine HCl
Sleep li	diphenhydramine HCl
Sleep Tablet (Diphenhydramine)	diphenhydramine HCl
Sleep Time	diphenhydramine HCl
Sleep-Eze 3	diphenhydramine HCl
Sleepgels	diphenhydramine HCl
Sleeping	diphenhydramine HCl
Sleep-Tabs	diphenhydramine HCl
Solu-Cortef	hydrocortisone sod succinate
Solu-Cortef (Pf)	hydrocortisone sodium succinate/pf
Solu-Medrol	methylprednisolone sodium succinate
Solu-Medrol (Pf)	methylprednisolone sodium succinate/pf

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Sominex	diphenhydramine HCl
Sominex Maximum Strength	diphenhydramine HCl
Sonahist	chlorpheniramine maleate/phenylephrine HCl
Sonahist Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Soothing Care (Hydrocortisone)	hydrocortisone
Sorbugen Nr	guaifenesin/dextromethorphan hbr
Sorbutuss	guaifenesin/dextromethorphan hbr/potassium citrate
Staflex	acetaminophen/phenyltoloxamine citrate
Staflex (Bromphenira-Acetamin)	brompheniramine maleate/acetaminophen
Stahist (Reformulated)	chlor-mal/pseudoephedrine HCl/atropine/hyosc sul/scopol hb
Stahist Ad	chlorcyclizine HCl/pseudoephedrine HCl
Status Green (Codeine)	chlorcyclizine HCl/pseudoephedrine HCl/codeine phosphate
Sudafed 12 Hr Pressure-Pain	naproxen sodium/pseudoephedrine HCl
Sudafed 12 Hr Sinus-Pain	naproxen sodium/pseudoephedrine HCl
Sudafed Pe Cold And Cough	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Sudafed Pe Day & Night	phenylephrine HCl/diphenhydramine HCl
Sudafed Pe Nighttime Cold	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Sudafed Pe Pressure+Pain	phenylephrine HCl/acetaminophen
Sudafed Pe Pressure+Pain+Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Sudafed Pe Pressure+Pain+Cough	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Sudafed Pe Pressure+Pain+Mucus	guaifenesin/phenylephrine HCl/acetaminophen
Sudafed Pe Severe Cold	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Sudafed Pe Sinus	guaifenesin/phenylephrine HCl
Sudafed Pe Sinus Headache	phenylephrine HCl/acetaminophen
Sudafed Pe Sinus-Allergy	chlorpheniramine maleate/phenylephrine HCl
Sudafed Triple Action	guaifenesin/pseudoephedrine HCl/acetaminophen
Sudahist	chlorpheniramine maleate/pseudoephedrine HCl
Sudal 12	pseudoephedrine polistirex/chlorpheniramine polacrilex
Sudal 12 Tannate	chlorpheniramine tannate/pseudoephedrine tannate
Sudatex G	guaifenesin/pseudoephedrine HCl
Sudatex-Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Sudogest Cold And Allergy	chlorpheniramine maleate/pseudoephedrine HCl
Sudogest Sinus And Allergy	chlorpheniramine maleate/pseudoephedrine HCl
Suphedrine Pe Cold And Allergy	chlorpheniramine maleate/phenylephrine HCl
Suphedrine Pe Day-Night	diphenhydramine/phenylephrin/dextromethorph/acetaminophen/gg
Suphedrine Pe Sinus Andallergy	chlorpheniramine maleate/phenylephrine HCl
Suphedrine Pe Sinus Headache	phenylephrine HCl/acetaminophen
Suphedrine Severe Cold Max Str	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Supress A	dextromethorphan hbr/phenylephrine HCl/dexbrompheniramine
Supress Dm	guaifenesin/dextromethorphan hbr
Supress Dx	guaifenesin/dextromethorphan hbr/phenylephrine
Supress-Pe	guaifenesin/phenylephrine HCl
Sure Result Tac Pak	triamcinolone acetanide/dimethicone/silicone, adhesive
Su-Tuss Dm	guaifenesin/dextromethorphan hbr
Sympak Am-Pm	guaifenesin/phenylephrine HCl/chlor-mal/methylscopolamn
Sympak Dm	guaifen/dextrometh/phenyleph/chlorpheniramin/methscopolamine
Sympak li	brompheniramine/pseudoeph - chlorphen/phenyleph/methscopolam
Sympak Pdx Am-Pm	chlorpheniramine maleate/phenylephrine HCl/methylscopolamn
Synalar	fluocinolone acetonide
Synalar Cream Kit	fluocinolone acetonide/emollient combination no.65
Synalar Ointment Kit	fluocinolone acetonide/emollient combination no.65

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Synalar Ts	fluocinolone acetonide/skin cleanser comb no.28
Tab Tussin Dm	guaifenesin/dextromethorphan hbr
Tanabid	brompheniramine tannate/phenylephrine tannate
Tanabid Da	brompheniramine tannate/phenylephrine tannate
Tanabid Sr	brompheniramine maleate/phenylephrine HCl
Tannate Dmp-Dex	dextromethorphan tannate/p-ephed tan/dexchlorpheniramine
Tavist Nd	loratadine
Tavist Sinus Max St-Non-Drowsy	pseudoephedrine HCl/acetaminophen
Tavist-1	clemastine fumarate
Tekral	pseudoephedrine HCl/diphenhydramine HCl
Temovate	clobetasol propionate
Temovate E	clobetasol propionate/emollient base
Tenar Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Tenar Pse	guaifenesin/pseudoephedrine HCl
Tension Headache Reliever	acetaminophen/phenyltoloxamine citrate
Texacort	hydrocortisone
Tg 10Peh-380Gfn	guaifenesin/phenylephrine HCl
Tg 10Peh-380Gfn-15Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Tg 45Pse-400Gfn	guaifenesin/pseudoephedrine HCl
Tg 45Pse-400Gfn-15Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Theraflu Cold & Sore Throat	pseudoephedrine HCl/acetaminophen/chlorpheniramine
Theraflu Cold-Cough	dextromethorphan hbr/phenylephrine HCl
Theraflu Cold-Sore Throat (Pe)	phenylephrine HCl/acetaminophen/pheniramine
Theraflu Day-Night Cold &Cough	dextromethorphan hbr/phenylephrine/acetaminophn/dp-hydramine
Theraflu Daytime Cold-Cough	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Theraflu Daytime Severe Cold	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Theraflu Expressmax Cold Day	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Theraflu Expressmax Cold Night	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Theraflu Flu-Chest Congestion	guaifenesin/acetaminophen
Theraflu Flu-Sore Throat	phenylephrine HCl/acetaminophen/pheniramine
Theraflu Flu-Sore Throat Warm	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Theraflu Max St Non-Drowsy	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Theraflu Max-D Severe Cold-Flu	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Theraflu Ms Severe Cold &Cough	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Theraflu Multi Symptom	diphenhydramine HCl
Theraflu Multi-Symptom Cold	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Theraflu Night Severe Cold-Cgh	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Theraflu Nighttime Formula	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Theraflu Nighttime Severe Cold	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Theraflu No-Drowsy Flu/Cld/Cgh	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Theraflu Severe Cold And Cough	guaifenesin/phenylephrine HCl/acetaminophen
Theraflu Severe Cold-Cough	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Theraflu Sinus And Cold	phenylephrine HCl/acetaminophen/pheniramine
Theraflu Warming Relief	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Ticanase	fluticasone propionate/sodium chloride/sodium bicarbonate
Ticaspray	fluticasone propionate/sodium chloride/sodium bicarbonate
Time-Hist Qd	pseudoephedrine HCl/chlorpheniramine maleate/methylscopolamn
TI-Dex Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
TI-Dmx	guaifenesin/phenylephrine HCl
TI-Hist Cd	brompheniramine maleate/phenylephrine HCl/codeine phosphate
TI-Hist Cm	chlorpheniramine maleate/codeine phosphate

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
TI-Hist Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
TI-Hist Pd	brompheniramine maleate/pseudoephedrine HCl
Topicort	desoximetasone
Total Allergy Medicine	diphenhydramine HCl
Trebrom	brompheniramine maleate/phenylephrine HCl/chlophedianol HCl
Triacting Cough & Cold	dextromethorphan hbr/phenylephrine HCl
Triacting Cough & Runny Nose	chlorpheniramine maleate/dextromethorphan hbr
Triacting Cough And sore Throat	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Triacting Expectorant	guaifenesin/pseudoephedrine HCl
Triacting M-Sym Cold/Cough	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Triacting Night Time	chlorpheniramine maleate/dextromethorphan hbr
Triacting Orange	chlorpheniramine maleate/pseudoephedrine HCl
Triall	chlorpheniramine maleate/phenylephrine HCl/methylscopolam
Triamcin Hexacet, Micro (Bulk)	triamcinolone hexacetonide, micronized
Triamcinolone Acetonide	triamcinolone acetonide
Triamcinolone Acetonide (Bulk)	triamcinolone acetonide
Triamcinolone Hexacetone (Bulk)	triamcinolone hexacetonide
Triaminic	phenylephrine HCl/diphenhydramine HCl
Triaminic Allergy	diphenhydramine HCl
Triaminic Chest & Congest (Pse)	guaifenesin/pseudoephedrine HCl
Triaminic Chest-Nasal Congest	guaifenesin/phenylephrine HCl
Triaminic Cold & Cough	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Triaminic Cold- Allergy Pe	chlorpheniramine maleate/phenylephrine HCl
Triaminic Cold And Cough (Pe)	dextromethorphan hbr/phenylephrine HCl
Triaminic Cold And Coughnt(Pe)	phenylephrine HCl/diphenhydramine HCl
Triaminic Cold/Allergy	chlorpheniramine maleate/pseudoephedrine HCl
Triaminic Cough	dextromethorphan hbr/pseudoephedrine HCl
Triaminic Cough/Runny Nose	diphenhydramine HCl
Triaminic Cough-Cold	chlorpheniramine maleate/pseudoephedrine/dextromethorphan
Triaminic Cough-Nasal Congesti	dextromethorphan hbr/pseudoephedrine HCl
Triaminic Cough-Sore Throat	acetaminophen/dextromethorphan hbr
Triaminic Flu-Cough-Fever	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Triaminic Softchews	acetaminophen/dextromethorphan hbr
Triaminiccough-Sorethroat(Pse)	dextromethorphan hbr/pseudoephedrine HCl/acetaminophen
Triaminicin	pseudoephedrine HCl/acetaminophen/chlorpheniramine
Trianex	triamcinolone acetonide
Tricode Ar	chlorpheniramine maleate/pseudoephedrine HCl/codeine
Tricode Gf	pseudoephedrine HCl/codeine phosphate/guaifenesin
Triderm	triamcinolone acetonide
Tri-Dex Pe	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Trigofen	chlorpheniramine maleate/phenylephrine HCl
Trigofen Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Trimeprazine Tartrate (Bulk)	trimeprazine tartrate
Tripelennamine (Bulk)	tripelennamine HCl
Triplex Dm	pyrilamine maleate/phenylephrine HCl/dextromethorphan hbr
Tripohist	triprolidine HCl
Tripohist D	triprolidine HCl/pseudoephedrine HCl
Trip-Pse	triprolidine HCl/pseudoephedrine HCl
Triprolidine HCl	triprolidine HCl
Triprolidine HCl (Bulk)	triprolidine HCl
Triprolidine-Pseudoephedrine	triprolidine HCl/pseudoephedrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Triptifed	triprolidine HCl/pseudoephedrine HCl
Tri-Sila	triamcinolone acetonide/dimethicone/silicone, adhesive
Trispec Dex	guaifenesin/pseudoephedrine HCl
Trispec Dmx	guaifenesin/dextromethorphan hbr
Trispec Dmx Pediatric	guaifenesin/dextromethorphan hbr
Trispec Pse	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Trispec Pse Pediatric	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Trital Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Trymine Cd	triprolidine HCl/pseudoephedrine HCl/chlophedianol HCl
Trymine Cg	guaifenesin/codeine phosphate
Trymine D	triprolidine HCl/pseudoephedrine HCl
Tusdec-Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Tusicof	guaifenesin/dextromethorphan hbr/phenylephrine
Tusnel C	pseudoephedrine HCl/codeine phosphate/guaifenesin
Tusnel Diabetic	guaifenesin/dextromethorphan hbr
Tusnel New Formula	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Tusnel Ped-C	pseudoephedrine HCl/codeine phosphate/guaifenesin
Tusnel Pediatric	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Tusnel-A	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Tusnel-Dm Pediatric	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Tussafed Ex	guaifenesin/dextromethorphan hbr/phenylephrine
Tussanil	chlorpheniramine maleate/phenylephrine HCl
Tusscough Dhc	phenylephrine HCl/dihydrocodeine bitartrate/chlorpheniramine
Tussi Pres-B	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Tussi-12	chlorpheniramine tannate/carbetapentane tannate
Tussi-12 S	chlorpheniramine tannate/carbetapentane tannate
Tussi-12D	carbetapentane tannate/phenylephrine tannate/pyrilamine
Tussi-12D S	carbetapentane tannate/phenylephrine tannate/pyrilamine
Tussicaps	hydrocodone polistirex/chlorpheniramine polistirex
Tussigon	hydrocodone bitartrate/homatropine methylbromide
Tussin Cf	guaifenesin/dextromethorphan hbr/phenylephrine
Tussin Cf Cough-Cold	guaifenesin/dextromethorphan hbr/phenylephrine
Tussin Cf Max	guaifenesin/dextromethorphan hbr/phenylephrine
Tussin Cold Severe Congestion	guaifenesin/pseudoephedrine HCl
Tussin Cold-Congestion	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Tussin Cough Dm	guaifenesin/dextromethorphan hbr
Tussin Cough-Chest Congestion	guaifenesin/dextromethorphan hbr
Tussin Cough-Cold-Flu	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Tussin Dm	guaifenesin/dextromethorphan hbr
Tussin Dm Clear	guaifenesin/dextromethorphan hbr
Tussin Dm Cough	guaifenesin/dextromethorphan hbr
Tussin Dm Cough And Chest	guaifenesin/dextromethorphan hbr
Tussin Dm Max	guaifenesin/dextromethorphan hbr
Tussin Pe	guaifenesin/pseudoephedrine HCl
Tussionex Pennkinetic Er	hydrocodone polistirex/chlorpheniramine polistirex
Tussi-Pres	guaifenesin/dextromethorphan hbr/phenylephrine
Tussi-Pres Pe	guaifenesin/phenylephrine HCl
Tussi-Pres Pediatric	guaifenesin/dextromethorphan hbr/phenylephrine
Tusslin	guaifenesin/dextromethorphan hbr/phenylephrine
Tusso-C	guaifenesin/codeine phosphate
Tusso-Dmr	guaifenesin/dextromethorphan hbr/phenylephrine

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Tusso-Zmr	guaifenesin/carbetapentane cit
Tuzistra Xr	codeine polistirex/chlorpheniramine polistirex
Twinject Autoinjector	epinephrine
Tylenol Allergy M-S Day/Night	phenylephrine/acetaminophen/diphenhydramine/chlorpheniramine
Tylenol Allergy M-S Nighttime	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Tylenol Allergy Multi-Symptom	phenylephrine HCl/acetaminophen/chlorpheniramine
Tylenol Cold And Flu Severe	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Tylenol Cold Head Cong Day-Nig	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Tylenol Cold Head Conges Night	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Tylenol Cold Head Congest Day	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Tylenol Cold Head Congest Sevr	guaifenesin/phenylephrine HCl/acetaminophen
Tylenol Cold Head Congestion	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Tylenol Cold Max Day	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Tylenol Cold M-S Day/Night	dextromethorphan hbr/phenylephrine/acetaminophen/chlorphenir
Tylenol Cold Multi-Sympt Night	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Tylenol Cold Multi-Symptom	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Tylenol Cold Multi-Symptom Day	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Tylenol Cold Severe Congest	pseudoephedrine/dextromethorphan/guaifenesin/acetaminophen
Tylenol Day & Night	acetaminophen/diphenhydramine HCl
Tylenol Pm	acetaminophen/diphenhydramine HCl
Tylenol Pm Extra Strength	acetaminophen/diphenhydramine HCl
Tylenol Severe Allergy	acetaminophen/diphenhydramine HCl
Tylenol Sinus Congestion Pain	phenylephrine HCl/acetaminophen
Tylenol Sinus Severe	guaifenesin/phenylephrine HCl/acetaminophen
Tylenol Sinus Severe Congest	guaifenesin/pseudoephedrine HCl/acetaminophen
Tylenol Sinus-Congest-Pain D/N	phenylephrine HCl/acetaminophen/chlorpheniramine
U-Cort	hydrocortisone acetate/urea
Ultra Caps	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Ultra Dm Free And Clear	guaifenesin/dextromethorphan hbr
Ultra Flu	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Ultra Tuss Safe	guaifenesin/dextromethorphan hbr
Ultrabrom	brompheniramine maleate/pseudoephedrine HCl
Ultrabrom Pd	brompheniramine maleate/pseudoephedrine HCl
Ultravate	halobetasol propionate
Ultravate Pac	halobetasol propionate/ammonium lactate
Ultravate X	halobetasol propionate/lactic acid
Ultrex	dextromethorphan/pseudoephedrine/acetaminophen/chlorphenir
Unisom (Diphenhydramine)	diphenhydramine HCl
Unisom Sleepgels	diphenhydramine HCl
Unisom Sleepmelts	diphenhydramine HCl
Valu-Dryl	diphenhydramine HCl
Valu-Dryl Allergy	diphenhydramine HCl
Valu-Dryl Allergy-Sinus-Head	pseudoephedrine HCl/acetaminophen/diphenhydramine
Valu-Dryl Child'S Allergy	diphenhydramine HCl
Valu-Tapp	brompheniramine maleate/pseudoephedrine HCl
Valu-Tapp Dm	brompheniramine maleate/pseudoephedrine HCl/dextromethorphan
Vanacof	dexchlorpheniramine maleate/pseudoephedrine HCl/chlophed HCl
Vanacof Ape	thonzylamine HCl/phenylephrine HCl/chlophedianol HCl
Vanacof Cd	dexchlorpheniramine maleate/phenylephrine HCl/codeine
Vanacof Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Vanacof Dx	pseudoephedrine HCl/chlophedianol HCl/guaifenesin

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Vanacof G	chlophedianol HCl/guaifenesin
Vanacof Gpe	phenylephrine HCl/chlophedianol HCl/guaifenesin
Vanacof-8	pyrilamine maleate/chlophedianol HCl
Vanacof-Pe	chlorcyclizine HCl/phenylephrine HCl/chlophedianol HCl
Vanahist Pd	triprolidine HCl
Vanatab Dx	pseudoephedrine HCl/chlophedianol HCl/guaifenesin
Vanos	fluocinonide
Vaso	pseudoephedrine HCl/chlorpheniramine maleate/methylscopolamn
Vazobid	brompheniramine maleate/phenylephrine HCl
Vazobid-Pd	brompheniramine maleate/phenylephrine HCl
Vazol	brompheniramine maleate
Vazotab	brompheniramine maleate/phenylephrine HCl
Vazotab (Pyrilamine)	phenylephrine HCl/pyrilamine maleate
Vazotab (Tannate)	brompheniramine tannate/phenylephrine tannate
Vazotan	brompheniramine maleate/phenylephrine HCl/carbetapentane cit
Vazotan (Tannate)	brompheniramine, phenylephrine, and carbetapentane tannates
V-Cof	brompheniramine maleate/phenylephrine HCl/carbetapentane cit
Veramyst	fluticasone furoate
Verdeso	desonide
Veripred 20	prednisolone sod phosphate
V-Hist	brompheniramine maleate/phenylephrine HCl
Vicks 44 Custom Care	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Vicks Children'S Nyquil Cold-C	chlorpheniramine maleate/dextromethorphan hbr
Vicks Dayquil Cold-Flu Relief	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Vicks Dayquil Mucus Control Dm	guaifenesin/dextromethorphan hbr
Vicks Dayquil Severe Cold-Flu	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Vicks Dayquil Sinex	phenylephrine HCl/acetaminophen
Vicks Dayquil-Nyquil	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Vicks Dayquil-Nyquil Cold-Flu	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Vicks Dayquil-Nyquil Severe	doxylamine/phenylephrine/dextromethorphan/acetaminophen/gg
Vicks Dayquil-Nyquil Sinex	phenylephrine HCl/acetaminophen/doxylamine succinate
Vicks Nature Fusion	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Vicks Nature Fusion Cold-Flu	dextromethorphan hbr/acetaminophen/doxylamine
Vicks Nature Fusion Cough-Cong	guaifenesin/dextromethorphan hbr
Vicks Nyquil Cold/Flu (Cpm)	dextromethorphan hbr/acetaminophen/chlorpheniramine maleate
Vicks Nyquil Cold/Flu (Doxyl)	dextromethorphan hbr/acetaminophen/doxylamine
Vicks Nyquil Cold/Flu Liquicap	dextromethorphan hbr/acetaminophen/doxylamine
Vicks Nyquil Cough	dextromethorphan hbr/doxylamine succinate
Vicks Nyquil Nighttime Relief	dextromethorphan hbr/acetaminophen/doxylamine
Vicks Nyquil Severe Cold-Flu	dextromethorphan hbr/phenylephrine/acetaminophen/doxylamine
Vicks Nyquil Sinex	phenylephrine HCl/acetaminophen/doxylamine succinate
Vicks Nyquil Sinus (Pe)	phenylephrine HCl/acetaminophen/doxylamine succinate
Vicks Qlearquil Allergy	loratadine
Vicks Qlearquil Daytime Sinus	phenylephrine HCl/acetaminophen
Vicks Qlearquil Nighttime Sinus	phenylephrine HCl/acetaminophen/doxylamine succinate
Vicks Qlearquil Nighttime Rlf	diphenhydramine HCl
Viravan-P	pyrilamine maleate/pseudoephedrine HCl
Viravan-P (Tannate)	pseudoephedrine tannate/pyrilamine tannate
Viravan-Pdm	pyrilamine maleate/pseudoephedrine HCl/dextromethorphan hbr
Viravan-Pdm (Tannate)	dextromethorphan, pseudoephedrine, & pyrilamine tannates
Virdec	chlorpheniramine maleate/phenylephrine HCl

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Virdec Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Virtussin Ac	guaifenesin/codeine phosphate
Virtussin Dac	pseudoephedrine HCl/codeine phosphate/guaifenesin
Visrx	pseudoephedrine HCl/chlorpheniramine maleate/methylscopolam
Vistra 650	acetaminophen/phenyltoloxamine citrate
Vituz	hydrocodone bitartrate/chlorpheniramine maleate
Wal-Act D Cold And Allergy	triprolidine HCl/pseudoephedrine HCl
Wal-Dryl Allergy	diphenhydramine HCl
Wal-Dryl Severe Allergy-Sinus	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Wal-Dryl-D Allergy And Sinus	phenylephrine HCl/diphenhydramine HCl
Wal-Fex Allergy	fexofenadine HCl
Wal-Fex D 12 Hour	fexofenadine HCl/pseudoephedrine HCl
Wal-Fex D 24 Hour	fexofenadine HCl/pseudoephedrine HCl
Wal-Finate	chlorpheniramine maleate
Wal-Finate-D	chlorpheniramine maleate/pseudoephedrine HCl
Wal-Flu Cold And Sore Throat	phenylephrine HCl/acetaminophen/pheniramine
Wal-Flu Day-Night Cold-Cough	dextromethorphan hbr/phenylephrine/acetaminophen/dp-hydramine
Wal-Flu Night Severe Cold	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Wal-Flu Night Time	phenylephrine HCl/acetaminophen/pheniramine
Wal-Flu Severe Cold	phenylephrine HCl/acetaminophen
Wal-Flu Severe Cold And Cough	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Wal-Flu Severe Cold-Cough	dextromethorphan hbr/phenylephrine HCl/acetaminophen
Wal-Itin	loratadine
Wal-Itin Aller-Melts	loratadine
Wal-Itin D	loratadine/pseudoephedrine sulfate
Wal-Itin D 12 Hour	loratadine/pseudoephedrine sulfate
Wal-Nadol Pm	acetaminophen/diphenhydramine HCl
Wal-Phed	chlorpheniramine maleate/pseudoephedrine HCl
Wal-Phed Pe Cold-Cough	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Wal-Phed Pe Day-Night	diphenhydramine/phenylephrin/dextromethorph/acetaminophen/gg
Wal-Phed Pe Nighttime Cold	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Wal-Phed Pe Pressure+Pain+Cold	phenylephrine HCl/dextromethorphan hbr/acetaminophen/guaifen
Wal-Phed Pe Severe Cold	diphenhydramine HCl/phenylephrine HCl/acetaminophen
Wal-Phed Pe Sinus And Allergy	chlorpheniramine maleate/phenylephrine HCl
Wal-Phed Pe Sinus Headache	phenylephrine HCl/acetaminophen
Wal-Phed Pe Triple Relief	guaifenesin/phenylephrine HCl/acetaminophen
Wal-Profen Cold-Sinus	ibuprofen/pseudoephedrine HCl
Wal-Profen D Cold And Sinus	ibuprofen/pseudoephedrine HCl
Wal-Sleep Z	diphenhydramine HCl
Wal-Som (Diphenhydramine)	diphenhydramine HCl
Wal-Tap	brompheniramine maleate/phenylephrine HCl
Wal-Tap Cold & Allergy	brompheniramine maleate/pseudoephedrine HCl
Wal-Tap Dm	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Wal-Tussin Cough And Cold Cf	guaifenesin/dextromethorphan hbr/phenylephrine
Wal-Tussin Dm	guaifenesin/dextromethorphan hbr
Wal-Tussin Dm Clear	guaifenesin/dextromethorphan hbr
Wal-Vert	loratadine
Wal-Zyr (Cetirizine)	cetirizine HCl
Wal-Zyr (Ketotifen)	ketotifen fumarate
Wal-Zyr D	cetirizine HCl/pseudoephedrine HCl
We Allergy	chlorpheniramine maleate/phenylephrine HCl/methylscopolam

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Westcort	hydrocortisone valerate
Whytederm Tdpak	triamcinolone acetonide/dimethicone/silicone, adhesive
Whytederm Trilasil Pak	triamcinolone acetonide/dimethicone/silicone, adhesive
Xyzal	levocetirizine dihydrochloride
Y-Cof Dm	dextromethorphan hbr/phenylephrine HCl/dexbrompheniramine
Y-Cof Dmx	brompheniramine maleate/phenylephrine HCl/dextromethorphan
Zaditor	ketotifen fumarate
Z-Cof 12 Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Z-Cof 8 Dm	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Z-Cof I	guaifenesin/dextromethorphan hbr/pseudoephedrine HCl
Z-Dex	guaifenesin/dextromethorphan hbr/phenylephrine
Z-Dex 12D	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Z-Dex Pediatric	guaifenesin/dextromethorphan hbr/phenylephrine
Zema-Pak	dexamethasone
Zetonna	ciclesonide
Zflex	acetaminophen/phenyltoloxamine citrate
Zgesic	acetaminophen/phenyltoloxamine citrate
Zoden	guaifenesin/phenylephrine HCl
Zoden Dm	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Zoden Pd	phenylephrine HCl/diphenhydramine HCl
Zodryl Ac 25	chlorpheniramine maleate/codeine phosphate
Zodryl Ac 30	chlorpheniramine maleate/codeine phosphate
Zodryl Ac 35	chlorpheniramine maleate/codeine phosphate
Zodryl Ac 40	chlorpheniramine maleate/codeine phosphate
Zodryl Ac 50	chlorpheniramine maleate/codeine phosphate
Zodryl Ac 60	chlorpheniramine maleate/codeine phosphate
Zodryl Ac 80	chlorpheniramine maleate/codeine phosphate
Zodryl Dac 25	chlorpheniramine maleate/pseudoephedrine HCl/codeine
Zodryl Dac 30	chlorpheniramine maleate/pseudoephedrine HCl/codeine
Zodryl Dac 35	chlorpheniramine maleate/pseudoephedrine HCl/codeine
Zodryl Dac 40	chlorpheniramine maleate/pseudoephedrine HCl/codeine
Zodryl Dac 50	chlorpheniramine maleate/pseudoephedrine HCl/codeine
Zodryl Dac 60	chlorpheniramine maleate/pseudoephedrine HCl/codeine
Zodryl Dac 80	chlorpheniramine maleate/pseudoephedrine HCl/codeine
Zodryl Dec 25	pseudoephedrine HCl/codeine phosphate/guaifenesin
Zodryl Dec 30	pseudoephedrine HCl/codeine phosphate/guaifenesin
Zodryl Dec 35	pseudoephedrine HCl/codeine phosphate/guaifenesin
Zodryl Dec 40	pseudoephedrine HCl/codeine phosphate/guaifenesin
Zodryl Dec 50	pseudoephedrine HCl/codeine phosphate/guaifenesin
Zodryl Dec 60	pseudoephedrine HCl/codeine phosphate/guaifenesin
Zodryl Dec 80	pseudoephedrine HCl/codeine phosphate/guaifenesin
Zotex	guaifenesin/dextromethorphan hbr/phenylephrine
Zotex-12	dextromethorphan tannate/phenylephrine tannate/pyril tan
Zotex-12D	chlorpheniramine maleate/phenylephrine HCl/dextromethorphan
Zotex-C	pyrilamine maleate/phenylephrine HCl/codeine phosphate
Zotex-D	pyrilamine maleate/pseudoephedrine HCl/carbetapentane citrat
Zotex-D (With Dm & Pe)	guaifenesin/dextromethorphan hbr/phenylephrine
Zotex-Ex	guaifenesin/dextromethorphan hbr/phenylephrine
Zotex-Pe	brompheniramine maleate/phenylephrine HCl
Z-Sleep	diphenhydramine HCl
Z-Tuss Ac	chlorpheniramine maleate/codeine phosphate

Appendix G. Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Brand Name	Generic Name
Z-Tuss Dm	guaifenesin/dextromethorphan hbr/phenylephrine
Z-Tuss E	pseudoephedrine HCl/codeine phosphate/guaifenesin
Zutripro	hydrocodone bitart/chlorpheniramine maleate/pseudoephedrine
Zyncof	guaifenesin/dextromethorphan hbr
Zyrtec	cetirizine HCl
Zyrtec Itchy Eye Drops (Keto)	ketotifen fumarate
Zyrtec-D	cetirizine HCl/pseudoephedrine HCl
Zzzquil	diphenhydramine HCl

Appendix H. Specifications Defining Parameters Used in this Request

This request used Cohort Identification and Descriptive Analysis (CIDA) module, version 3.3.2, to assess the ability of prospective surveillance tools to reproduce the known association between ACE inhibitors and angioedema, compared to beta blockers.

Enrollment Requirement: 183 days
Enrollment Gap: 45 days
Age Range: 18-44; 45-54; 55-64; 65+ years
Query Period: January 1, 2015 - Latest Date of Data Available
Coverage Requirement: Medical and Drug Coverage
Propensity Score Matching Ratio: 1:1 Unconditional
Propensity Score Matching Caliper: 0.025
Create Deciles (N=10) for PS stratification
Patient level and Risk-set level data return

	Comparison 1		Comparison 2	
	Exposure of Interest ACE Inhibitors	Comparator of Interest Beta Blockers	Exposure of Interest ACE Inhibitors	Comparator of Interest Beta Blockers
Drug/Exposure:				
Incident with respect to:	Beta Blockers, Aliskiren, Angiotensin Receptor Blockers	ACE Inhibitors, Aliskiren, Angiotensin Receptor Blockers	Beta Blockers, Aliskiren, Angiotensin Receptor Blockers	ACE Inhibitors, Aliskiren, Angiotensin Receptor Blockers
Washout (days)	183	183	183	183
Cohort Definition	First valid exposure only	First valid exposure only	First valid exposure only	First valid exposure only
Episode Gap (days)	14	14	14	14
Exposure Extension Period (days)	14	14	14	14
Minimum Episode Duration (days)	0	0	0	0
Minimum Days Supplied (days)	0	0	0	0
Maximum Episode Duration (days)	60	60	60	60
Episode Truncation by Incident Exposure or Death	Yes	Yes	Yes	Yes
Inclusion/Exclusion:	N/A	N/A	N/A	N/A
Criterion				
Include or Exclude				
Lookback Start				
Lookback End				
Event/Outcome:				
Event/ Outcome	Angioedema	Angioedema	Serious Angioedema	Serious Angioedema
Care Setting/Principal Diagnosis Position (PDX)	IP, ED, AV	IP, ED, AV	IP and ED	IP and ED
Incident with respect to:	Angioedema	Angioedema	Serious Angioedema	Serious Angioedema
Washout (days)	183	183	183	183
Blackout Period	0	0	0	0

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) codes are provided by Optum360. National Drug Codes (NDCs) are checked against First Data Bank's "National Drug Data File (NDDF®) Plus." Care Setting: Inpatient=IP; Emergency Department=ED; Ambulatory Visit=AV

Appendix H. Specifications Defining Parameters Used in this Request

This request used Cohort Identification and Descriptive Analysis (CIDA) module, version 3.3.2, to assess the ability of prospective surveillance tools to reproduce the known association between ACE inhibitors and angioedema, compared to beta blockers.

Enrollment Requirement: 183 days
Enrollment Gap: 45 days
Age Range: 18-44; 45-54; 55-64; 65+ years
Query Period: January 1, 2015 - Latest Date of Data Available
Coverage Requirement: Medical and Drug Coverage
Propensity Score Matching Ratio: 1:1 Unconditional
Propensity Score Matching Caliper: 0.025
Create Deciles (N=10) for PS stratification
Patient level and Risk-set level data return

	Comparison 3		Comparison 4	
	Exposure of Interest ACE Inhibitors	Comparator of Interest Beta Blockers	Exposure of Interest ACE Inhibitors	Comparator of Interest Beta Blockers
Drug/Exposure:				
Incident with respect to:	Beta Blockers, Aliskiren, Angiotensin Receptor Blockers	ACE Inhibitors, Aliskiren, Angiotensin Receptor Blockers	Beta Blockers, Aliskiren, Angiotensin Receptor Blockers	ACE Inhibitors, Aliskiren, Angiotensin Receptor Blockers
Washout (days)	183	183	183	183
Cohort Definition	First valid exposure only	First valid exposure only	First valid exposure only	First valid exposure only
Episode Gap (days)	14	14	14	14
Exposure Extension Period (days)	14	14	14	14
Minimum Episode Duration (days)	0	0	0	0
Minimum Days Supplied (days)	0	0	0	0
Maximum Episode Duration (days)	60	60	60	60
Episode Truncation by Incident Exposure or Death	Yes	Yes	Yes	Yes
Inclusion/Exclusion:				
Criterion	Heart Failure	Heart Failure	Heart Failure	Heart Failure
Include or Exclude	Include	Include	Include	Include
Lookback Start	-183	-183	-183	-183
Lookback End	-1	-1	-1	-1
Event/Outcome:				
Event/ Outcome	Angioedema	Angioedema	Serious Angioedema	Serious Angioedema
Care Setting/Principal Diagnosis Position (PDX)	IP, ED, AV	IP, ED, AV	IP and ED	IP and ED
Incident with respect to:	Angioedema	Angioedema	Serious Angioedema	Serious Angioedema
Washout (days)	183	183	183	183
Blackout Period	0	0	0	0

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) codes are provided by Optum360. National Drug Codes (NDCs) are checked against First Data Bank's "National Drug Data File (NDDF®) Plus." Care Setting: Inpatient=IP; Emergency Department=ED; Ambulatory Visit=AV